# Fatehgarh II Transmission Limited

**(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)**

**B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016**

**CIN : U42201DC2026GOI471089**

**Ref: PG_ FIITL/AT/** **Dated: 07.09.2026**

To,

The Secretary,

Central Electricity Regulatory Commission,

7th Floor, Tower B, World Trade Centre,

Nauroji Nagar, New Delhi-110029

Sub : **Petition under Section 63 of the Electricity Act, 2003 for Adoption of Transmission Charges with respect to the Transmission System being established by the Fatehgarh II Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited).**

Sir,

Three copies (1 original + 2 copies) of the application for the above subject matter have been enclosed and e-filing has been done on CERC website. As per the public notice issued on 28.08.2010 by the Hon'ble Commission, the amount of Rs.25,00,000/- (Rupees Twenty Five Lakhs only) for filing the application is being paid through RTGS and in accordance with the Regulations 12(2), CERC Payment of Fees Regulations 2012. Form-1 duly filled in against the aforementioned application is also enclosed herewith.

Electronic Copies of the application are being forwarded to the CTUIL (Nodal Agency) and to the Bid Process Coordinator and DICs & beneficiaries identified by CTUIL as party to the Petition based on the list of the beneficiaries furnished by CTUIL. The complete petition along with Annexures is posted on the website: **www.powergrid.in/subsidiaries**.

Thanking You,

Yours faithfully,

PIJUSH KANTI RAY

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Date: 2026.09.07 18:51:10 +05'30'

**(Pijush Kanti Ray)**

**Project In-charge**

**Fatehgarh II Transmission Limited**

Email : regulatory@powergrid.in

**Enclosures:** As above.

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION**
**NEW DELHI**

**Petition under Section 63 of the Electricity Act, 2003 for adoption of Transmission charges with respect to the Transmission System being established by Fatehgarh II Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)**

**PETITION NO. :**

**Fatehgarh II Transmission Limited**
(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

**Registered office:**
B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi 110 016

**Address for correspondence**:
C/o ED (Commercial & RC), Power Grid Corporation of India Limited,
Floor No. 02, Tower-01, IRCON International Tower,
Plot No. 16, Institutional Area, Sector-32, Gurgaon-122003

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**PETITION NO. :……..…….**

**IN THE MATTER OF**

Petition under Section 63 of the Electricity Act, 2003 for Adoption of Transmission Charges with respect to the Transmission System being established by Fatehgarh II Transmission Limited(a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

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**VERSUS**

**Central Transmission Utility of India Limited**,

Floor No. 02, Tower-01, IRCON International Tower,

Plot No. 16, Institutional Area, Sector-32,

Gurgaon-122003

& Ors. ....**RESPONDENT(S)**

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**FILED BY**

PIJUSH KANTI RAY Digitally signed by PIJUSH KANTI RAY Date: 2026.09.07

**(Pijush Kanti Ray)**
**Project In-charge,**
**Fatehgarh II Transmission Limited**

**Place: Fatehgarh-II**

**Date: 07.09.2026**

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**PETITION NO. :……..…….**

**IN THE MATTER OF**

Petition under Section 63 of the Electricity Act, 2003 for Adoption of Transmission Charges with respect to the Transmission System being established by the Fatehgarh II Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

**Fatehgarh II Transmission Limited**

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**Registered office:** B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi 110 016

**Address for correspondence**: C/o ED (Commercial & RC), Power Grid Corporation of India Limited, Floor No. 02, Tower-01, IRCON International Tower, Plot No. 16, Institutional Area, Sector-32, Gurgaon-122003 …..**PETITIONER**

**VERSUS**

**Central Transmission Utility of India Limited**,

Floor No. 02, Tower-01, IRCON International Tower,

Plot No. 16, Institutional Area, Sector-32,

Gurgaon-122003

**& Ors.** ....**RESPONDENT(S)**

To,

The Secretary

CENTRAL ELECTRICITY REGULATORY COMMISSION

NEW DELHI-110029

Sir,

The petition filed under Section 63 of the Electricity Act, 2003 for Adoption of Transmission Charges with respect to the Transmission System being established by the Fatehgarh II Transmission Limited (A 100% wholly owned subsidiary of Power Grid Corporation of India Limited) for which

transmission charges are determined through transparent process of bidding in accordance with the guidelines issued by the Central Government, may please be registered.

**Petitioner: Fatehgarh II Transmission Limited**

**(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)**

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**Represented by Pijush Kanti Ray**

**Project In-charge**

**Fatehgarh II Transmission Limited**

**Place: Fatehgarh-II**

**Date: 07.09.2026**

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION**
**NEW DELHI**

**PETITION NO. :……..…….**

**IN THE MATTER OF**

Petition under Section 63 of the Electricity Act, 2003 for Adoption of Transmission Charges with respect to the Transmission System being established by the Fatehgarh II Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

## MEMO OF AUTHORISATION

Fatehgarh II Transmission Limited **….. PETITIONER**

I, Pijush Kanti Ray, the petitioner abovenamed do hereby nominate, appoint and constitute, to act, plead and appear on my/our behalf in the aforesaid matter.

1. Pijush Kanti Ray, Project In-charge
2. A Jagannath Rao, Chief General Manager
3. Ashish Agarwal, Sr Dy General Manager
4. Prashant Kumar, Dy General Manager
5. Abhijit Daimari, Dy General Manager

IN WITNESS WHEREOF I/We have set and subscribed my/our hands to this writing on this 7th day of September 2026.

**FILED BY**

PIJUSH KANTI RAY
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Date: 2026.09.07 18:52:21 +05'30'

**(Pijush Kanti Ray)**
**Project In-charge**
**Fatehgarh II Transmission Limited**

**Place: Fatehgarh-II**
**Date: 07.09.2026**

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**PETITION NO. :……..…….**

**IN THE MATTER OF**

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**Central Transmission Utility of India Limited**,
Floor No. 02, Tower-01, IRCON International Tower,
Plot No. 16, Institutional Area, Sector-32,
Gurgaon-122003

**& Ors**. ....**RESPONDENT(S)**

**MEMO OF PARTIES**

**Fatehgarh II Transmission Limited**

**(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)**

**Registered office:** B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi 110 016

**Address for correspondence**: C/o ED (Commercial & RC), Power Grid Corporation of India Limited, Floor No. 02, Tower-01, IRCON International Tower, Plot No. 16, Institutional Area, Sector-32, Gurgaon-122003 ….**PETITIONER**

**VERSUS**

1. **Central Transmission Utility of India Limited**,
   Floor No. 02, Tower-01, IRCON International Tower,
   Plot No. 16, Institutional Area, Sector-32,

Gurgaon-122003

2. **PFC Consulting Limited**
D-Block, REC Corporate Headquarter,
Plot No. I-4, Sector-29, Gurugram (Haryana)-122001

3. **Chandigarh Electricity Department**
UT-Chandigarh, Div-11, Opposite , Transport Nagar,
Industrial Area Phase - I, CHANDIGARH

4. **BSES Rajdhani Power Limited**
AVP (PMG), PMG Office,
2ND Floor B-Block, Nehru Place,
New Delhi-110 019

5. **BSES Yamuna Power Limited**
Asst. Vice President (PMG) , Shakti Kiran Bldg,
Second Floor, Karkardooma
New Delhi-110 032

6. **New Delhi Municipal Council**
AAO (Commercial), 19th Floor, NDMC,
Palika Kendra, Sansad Marg,
New Delhi-110 001

7. **Tata Power Delhi Distribution Ltd.**
Power Management Group, Technology Centre,
Near PP-3 Grid Sub Station, Opp. PP Jewellers,
Netaji Shubhash Place, Pitampura,
New Delhi-110034

8. **Himachal Pradesh State Electricity Board**
PR&ALDC, HPSEB Ltd ,
132 KV S/S Tutu , SHIMLA,
Himachal Pradesh-171011

9. **Haryana Power Purchase Centre**
Shakti Bhawan, Energy Exchange,
PANCHKULA

10. **Power Development Department, Jammu**
SLDC Building, 1st Floor, Gladni ,
Power House Narwal , JAMMU , J&K

11. **Punjab State Power Corporation Limited**
Shed No. T-1A , Thermal Designs ,
Patiala , Punjab-147001

12. **HVDC Dadri, POWERGRID**
B-9, Qutub Institutional Area,
Katwaria Sarai, New Delhi-110016

13. **HVDC Rihand, POWERGRID**
B-9, Qutub Institutional Area,
Katwaria Sarai, New Delhi-110016

14. **Ajmer Vidyut Vitran Nigam Limited**
The Superintending Engineer (Billing),
Rajasthan Urja Vikas Nigam Limited,
132 KV, Sub- Station Building,
Calgiri Road Malviya Nagar,
Jaipur-302017 (Rajasthan)

15. **Jodhpur Vidyut Vitran Nigam Limited**
The Superintending Engineer (Billing),
Rajasthan Urja Vikas Nigam Limited,
132 KV, Sub- Station Building,
Calgiri Road Malviya Nagar,
Jaipur-302017 (Rajasthan)

16. **Jaipur Vidyut Vitran Nigam Limited**
The Superintending Engineer (Billing),
Rajasthan Urja Vikas Nigam Limited,
132 KV, Sub- Station Building,
Calgiri Road Malviya Nagar,
Jaipur-302017 (Rajasthan)

17. **North Central Railway**
DRM Office, Nawab Yusuf Roa,
Prayagraj- 211011

18. **Uttarakhand Power Corporation Limited**
Urja Bhjawan, Kanwali Road,
Dehradun-248001

19. **Uttar Pradesh Power Corporation Limited**
Fund Management, Shakti Bhawan,
14 Ashok Marg, Lucknow, UP

20. **AD Hydro**
AD Hydro Power Limited, Bhilwara Towers,
A-12, Sector-1, Noida-201301

21. **GMR Kamalanga Energy Limited**
25/1 Skip House, Museum Road,
Bangalore - 560025, Karnataka

22. **MB Power (Madhya Pradesh) Ltd.**
239, Okhla Industrial Estate,
Phase –III, New Delhi-110020

23. **HVDC Agra, POWERGRID**
B-9, Qutub Institutional Area,

Katwaria Sarai, New Delhi-110016

24. **HVDC Balia, POWERGRID**
B-9, Qutub Institutional Area,
Katwaria Sarai, New Delhi-110016

25. **HVDC Bhiwadi, POWERGRID**
B-9, Qutub Institutional Area,
Katwaria Sarai, New Delhi-110016

26. **HVDC Kurukshetra, POWERGRID**
B-9, Qutub Institutional Area,
Katwaria Sarai, New Delhi-110016

27. **Northern Indian Railway**
Sr. DEE, TRD, Delhi Division
CENTRAL DELHI

28. **Noida Power Company Limited**
Electric Sub Station Knowledge Park IV,
Greater Noida-201310

29. **Northern Railways**
Sr. DEE/ TRD, DRM Office, Hazratganj
Lucknow – 226001

**….RESPONDENTS**

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**(Pijush Kanti Ray)**
**Project In-charge**
**Fatehgarh II Transmission Limited**

**Place: Fatehgarh-II**

**Date: 07.09.2026**

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION**

**NEW DELHI**

**PETITION NO.:.....**

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Gurgaon-122003
**& Ors.** **....RESPONDENT(S)**

**AFFIDAVIT**

I, Shri Pijush Kanti Ray, son of Surjya Kanta Ray, presently residing at 765/400/220kV Fatehgarh-II Substation, Vill: Sanwta, Bhaniyana Road, P.S. Devikot, Dist. Jaisalmer, Rajasthan -345027 do hereby solemnly affirm and state as follows:

1. I am the Authorised Signatory of the Petitioner Company in the above matter and I am duly authorized by the Petitioner Company to affirm this affidavit. I say that I am conversant with the facts and circumstances of this case.

2. The statements made in paragraphs of the petition, are true to my knowledge and belief based on the information received and I believe them to be true.

SIGNATURE ATTESTED
(SAWAI SINGH)
NOTARY Jaisalmer

PIJUSH KANTI RAY
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Date: 2026.09.07 18:53:16 +05'30'

3. I say that there are no proceedings pending in any court of law/ tribunal or arbitrator or any other authority, wherein the Petitioner is a party and where issues arising and/ or reliefs sought are identical or similar to the issues in the matter pending before the Hon'ble Commission.

PIJUSH KANTI RAY Digitally signed by PIJUSH KANTI RAY Date: 2026.09.07 18:53:46 +05'30'

**DEPONENT**

**Place: Fatehgarh-II**

**Date: 07.09.2026**

SIGNATURE/ATTESTED
(SAWAI SINGH)
NOTARY Jaisalmer

**VERIFICATION:**

I, the Deponent above named hereby solemnly hereby affirm that the contents of my above affidavit are true to my knowledge, no part of it is false and nothing material has been concealed there from. Verified by me on this the 7th day of September, 2026 at Fatehgarh-II.

PIJUSH KANTI RAY Digitally signed by PIJUSH KANTI RAY Date: 2026.09.07 18:54:22 +05'30'

**DEPONENT**

SIGNATURE/ATTESTED
(SAWAI SINGH)
NOTARY Jaisalmer

NOTARY PUBLIC
SAWAI SINGH
Dist. JAISALMER
R.No. 1980
Govt. of Rajasthan

**BEFORE THE CENTRAL ELECTRICITY REGULATORY COMMISSION**
**NEW DELHI**

**PETITION NO.:…….**

**IN THE MATTER OF**

Petition under Section 63 of the Electricity Act, 2003 for Adoption of Transmission Charges with respect to the Transmission System being established by Fatehgarh II Transmission Limited(a 100% wholly owned subsidiary of Power Grid Corporation of India Limited)

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**Central Transmission Utility of India Limited**,
Floor No. 02, Tower-01, IRCON International Tower,
Plot No. 16, Institutional Area, Sector-32,
Gurgaon-122003
**& Ors.** ....**RESPONDENT(S)**

**PETITION**

The Petitioner respectfully submits as under:

1. The Government of India, Ministry of Power, vide notification no. no. S.O. 4967(E) [CG-DL-E-04112025-267371] dated 03.11.2025 notified PFC Consulting Limited(PFCCL) as the Bid Process Coordinator (hereinafter referred to as BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish Inter-State Transmission System scheme - "**Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS**" ("**the Project**") under Tariff Based Competitive Bidding under Section 63

of the Act. Copy of the said notification is enclosed and marked as **Annexure-1**.

**2.** The final scheme of the Project, which was approved in the 33rd NCT meeting dated 16.09.2025, consists of the following elements:

| S. No | Name of the Transmission Element | Scheduled COD | % of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project | Element(s) which are pre required for declaring the commercial operation (COD) of the respective Element |
|---|---|---|---|---|
| 1 | 2 nos. of Synchronous Condensers (SynCon) units* at 400kV level of 765/400/220kV Fatehgarh-II PS along with 2 nos. of 400kV bays<br><br>**1 No. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short circuit contribution at PCC of 1200MVA (Minimum)* | 30 months (**28.02.2029**) | 100% | N.A. |
| **Note :** *POWERGRID shall provide space (free of cost) for 2 Nos. (SynCon) units at Fatehgarh II PS along with 2 Nos. of 400 kV bays* | | | | |

Relevant extracts of the various meetings/forums wherein the project scheme was discussed, culminating with its approval in said NCT meeting are enclosed and marked as **Annexure-2**.

**3.** That a company under the Companies Act 2013 by the name "**Fatehgarh II Transmission Limited**" having its registered office at New Delhi has been incorporated on 06.05.2026 by PFCCL as its wholly owned subsidiary to initiate the activities for execution of the Project and subsequently to act as Transmission Service Provider (TSP) after being acquired by the successful bidder selected through Tariff Based Competitive Bidding process. A copy of the Certificate of Incorporation is enclosed and marked as **Annexure-3** and a copy of the Memorandum of Association and Articles of Association are enclosed and marked as **Annexure-4**.

**4.** BPC initiated the selection of successful bidder to acquire the TSP in accordance with the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by Government of India, Ministry of Power under Section 63 of The Electricity Act, 2003 and as amended from time to time. Copy of the Global Invitation for Qualification as published in the newspapers as furnished by BPC is enclosed and marked as **Annexure-5**.

**5.** That in the RFP documents, the following is stated :-

"*The Transmission Charges shall be payable by the Designated ISTS Customers in Indian Rupees through the CTU as per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations as amended from time to time*…."

Copy of the relevant extract of the RFP document issued by the BPC is enclosed and marked as **Annexure-6**, which are integral part of the RFP bidding documents furnished by BPC for bidding.

**6.** Subsequent to submission of bids and opening of bids, e-Reverse Auction for the project was conducted on 16.07.2026 in accordance with the RfP and the TBCB Guidelines, wherein POWERGRID emerged as the Successful Bidder having quoted the lowest final quoted (uniform) Annual Transmission Charges.

**7.** After completion of the e-Reverse Auction and verification of the bid documents submitted by POWERGRID, the Bid Evaluation Committee ("**BEC**") was constituted under the TBCB Bidding framework evaluated the bids in accordance with the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and the "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by the MoP under Section 63 of the Electricity Act, 2003.

**8.** Thereafter, on 17.07.2026 and 31.07.2026 (revised), the Bid Evaluation Committee issued its Certificate confirming the following:-

***(i)*** the entire bidding process for the Project had been conducted in compliance with the applicable TBCB Guidelines,

*(ii)* POWERGRID, having quoted the lowest Annual Transmission Charges of Rs.1,233.00 million pursuant to the e-Reverse Auction, had emerged as the Successful Bidder, and

*(iii)* the quoted tariff discovered through e-reverse bidding process was acceptable.

A copy of the Bid Evaluation Committee Certificate dated 17.07.2026 and revised Bid Evaluation Committee Certificate dated 31.07.2026 is annexed herewith and marked as **Annexure-7**.

**9.** On 17.07.2026, upon completion of the e-Reverse Auction and evaluation of bids in accordance with the RfP, PFCCL issued the LoI to POWERGRID, declaring it as the Successful Bidder for the Project under Clause 3.6.1 of the RfP, with the Quoted Annual Transmission Charges of Rs.1,233.00 million. Further, a revised LoI was issued by PFCCL on 31.07.2026.

A copy of the LoI dated 17.07.2026 and revised LoI dated 31.07.2026 is annexed herewith and marked as **Annexure-8.**

**10.** As per the provisions 2.15.2 of Request for Proposal (RFP) and the Letter of Intent issued to Power Grid Corporation of India Limited, within 10 days of issuance of Letter of Intent by the BPC, the Successful Bidder is required to inter-alia provide the Contract Performance Guarantee, execute Share Purchase Agreement & the Transmission Service Agreement and acquire the SPV. Vide letter dated 27.08.2026, the BPC in terms of Clause 2.15.2 of RFP extended the date upto 28.08.2026 for completion of activities by the successful bidder. A copy of the relevant extract of the RFP and the letter from BPC is enclosed and marked as **Annexure-9**.

**11.** That the BPC vide letter dated 11.06.2026 had intimated to the bidders that the Tentative Acquisition Price payable by the Selected Bidder for Acquisition of one hundred percent of equity shareholding of **Fatehgarh II Transmission Limited** along with all its related assets and liabilities as **Rs.19,11,30,825/-**. Subsequent to the bidding and during acquisition, the BPC vide letter dated 17.07.2026 intimated the successful bidder, i.e. the Petitioner that the final Acquisition Price would be **Rs. 19,11,30,825/-** with the following break-up:

| S.No. | Description | Amount (in Rs.) |
|---|---|---|
| 1 | PFCCL Management Fees | 15,00,00,000 |
| 2 | GST on PFCCL Management Fees | 2,70,00,000 |
| 3 | Borrowings from PFCCL | 1,40,30,825 |
| 4 | Share Capital | 1,00,000 |
| | **Total** | **19,11,30,825** |

The aforesaid acquisition price of **Rs. 19,11,30,825**/- has been paid on 28.08.2026 to PFCCL. A copy of the aforesaid BPC letters dated 11.06.2026 and 17.07.2026 are enclosed and marked as **Annexure-10.**

**12.** It is submitted that in accordance with the LoI, Power Grid Corporation of India Limited on 26.08.2026 had furnished Contract Performance Guarantee of **Rs.57.00 Crores** (Rupees Fifty Seven Crores Only) in favour of Central Transmission Utility of India Limited (CTUIL). A copy of CPG is enclosed and marked as **Annexure-11.**

**13.** Thereafter, Power Grid Corporation of India Limited has acquired the **Fatehgarh II Transmission Limited** on 28.08.2026 after execution of the Share Purchase Agreement, Transmission Service Agreement and completing all procedural requirements specified in the RFP documents. Copy of the Share purchase agreement and Transmission Service Agreement are enclosed and marked as **Annexure–12 and Annexure-13** respectively.

**14.** The Petitioner shall map Nodal Agency i.e. on the e-portal of this Hon'ble Commission at the earliest as per the procedure in vogue and completion of relevant formalities. The Petitioner is also sending a copy of the present Petition to CTUIL via e-mail. The Petition is also being hosted on the website and is accessible on **www.powergrid.in/subsidiaries**.

That a copy of the Petition is marked to BPC to enable submission of the requisite documents / information by BPC before this Hon'ble Commission regarding the Bidding process undertaken and thereby ensure processing of petition.

That a copy of the Application is marked to Designated ISTS Customers (DICs) and beneficiaries of the Northern Region as party to the Petition based on the list of the beneficiaries furnished by the CTUIL.

**15.** That POWERGRID has acquired the TSP on **28.08.2026** and the same is effective date of the project as per provisions of TSA. The schedule construction period of the project is **30** months. As such, Scheduled COD of the project works out to be **28.02.2029**.

**16.** That **Fatehgarh II Transmission Limited** hereby submits that this petition is filed under Section 63 of the Electricity Act, 2003 for Adoption of Transmission Charges to establish the Project under build, own, operate and transfer basis, which has been determined through transparent process of competitive bidding in accordance with the guidelines issued by the Central Government.

**17.** It is submitted that Section 63 of the Electricity Act, 2003 empowers the Appropriate Commission for Adoption of Transmission Charges.

Keeping in view the above, Hon'ble Commission may kindly adopt the Transmission Charges with respect to the Transmission System being established by the **Fatehgarh II Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited).**

**18. PRAYER**

The Petitioner hereby humbly prays the Hon'ble Commission to:

(a) Admit and allow the present Petition; and

(b) Adopt, under Section 63 of the Electricity Act, 2003, the quoted Transmission Charges of Rs. 1,233.00 million per annum discovered through the TBCB process conducted by REC Power Developement Consulting Limited for the Inter-State Transmission System scheme - "*Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS*" ; and

(c) Take on record and recognize the revised Bid Evaluation Committee Certificate dated 31.07.2026, the revised Letter of Intent dated 31.07.2026, and the Transmission Service Agreement dated 28.08.2026 as constituting final and conclusive proof of compliance with the Tariff Based Competitive Bidding Guidelines and the lawful discovery of the Transmission Charges; and

(d) Direct that recovery of the adopted Transmission Charges shall be in accordance with the Transmission Service Agreement executed for the Project; and

(e) Condone any inadvertent or procedural defects, if any, in the present Petition and permit the Petitioner to place on record such additional documents, clarifications or information as this Hon'ble Commission may require in the interest of justice; and / or

(f) Pass such other order / orders, as may be deemed fit and proper in the facts and circumstances of the case.

**Fatehgarh II Transmission Limited**

**Petitioner**

PIJUSH KANTI RAY
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Date: 2026.09.07 18:54:57 +05'30'

**Represented by Pijush Kanti Ray**

**Project In-charge**

**Fatehgarh II Transmission Limited**

**Place: Fatehgarh-II**

**Date: 07.09.2026**

**FORM-I**

**Particulars**

| | |
|---|---|
| 1. Name of the Petitioner | : Fatehgarh II Transmission Limited<br>(A 100% wholly owned subsidiary of<br>Power Grid Corporation of India Limited) |
| 2. Address of the Petitioner/Applicant | : Fatehgarh II Transmission Limited<br>(A 100% wholly owned subsidiary of Power Grid Corporation of India Limited)<br>Regd. Address:<br>B-9, Qutab Institutional Area,<br>Katwaria Sarai, New Delhi-110 016<br>Address for correspondence:<br>C/o ED (Commercial & RC),<br>Power Grid Corporation of India Limited,<br>Floor No. 02, Tower-01, IRCON International Tower, Plot No. 16, Institutional Area, Sector-32, Gurgaon-122003 |
| 3. Subject Matter | : Petition under Section 63 of the Electricity Act, 2003 for Adoption of Transmission Charges with respect to the Transmission System being established by the Fatehgarh II Transmission Limited (a 100% wholly owned subsidiary of Power Grid Corporation of India Limited) |
| 4. Petition No., if any | : Not yet received |
| 5. Details of generation assets<br>(a) generating station/units<br>(b) Capacity in MW<br>(c) Date of commercial operation | : Not Applicable |

(d) Period for which fee paid

(e) Amount of fee paid

(f) Surcharge, if any

| | |
|---|---|
| 6. Details of transmission assets | : Assets under implementation by |
| (a) Transmission line and sub-stations | Fatehgarh II Transmission Limited |
| (b) Date of commercial operation | |
| (c) Period for which fee paid | |
| (d) Amount of fee paid | |
| (g) Surcharge, if any | |

| | |
|---|---|
| 7. Fee paid for Adoption of tariff for | |
| (a) Generation asset | : No |
| (b) Transmission asset | : Yes |

| | |
|---|---|
| 8. Application fee for licence | : Not Applicable |
| (a) Trading licence | |
| (b) Transmission licence | |
| (c) Period for which paid | |
| (d) Amount of fee paid | |

| | |
|---|---|
| 9. Fees paid for Miscellaneous Application | : Not Applicable |

| | |
|---|---|
| 10. Fees paid for Interlocutory Application | : Not Applicable |

| | |
|---|---|
| 11. Fee paid for Regulatory Compliance petition | : Not Applicable |

| | |
|---|---|
| 12. Fee paid for Review Application | : Not Applicable |

| | |
|---|---|
| 13. Licence fee for inter-State Trading | : Not Applicable |
| (a) Category | |

(b) Period

(c) Amount of fee paid

(d) Surcharge, if any

14. Licence fee for inter-State Transmission : Not Applicable

(a) Expected/Actual transmission charge

(b) Period

(c) Amount of fee calculated as a percentage of transmission charge.

(d) Surcharge, if any

15. Annual Registration Charge for Power Exchange : Not Applicable

(a) Period

(b) Amount of turnover

(c) Fee paid

(d) Surcharge, if any

16. Details of fee remitted

(a) UTR No. : RTGS/ICICR22026090318535702

(b) Date of remittance : 03.09.2026

(c) Amount remitted : **Rs.25,00,000/- (Rupees Twenty Five Lakh only)**

PIJUSH KANTI RAY

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**Signature of the authorized signatory with date**

रजिस्ट्री सं. डी.एल.- 33004/99 REGD. No. D. L.-33004/99

भारत का राजपत्र
The Gazette of India

सी.जी.-डी.एल.-अ.-04112025-267371
CG-DL-E-04112025-267371

असाधारण
EXTRAORDINARY

भाग II—खण्ड 3—उप-खण्ड (ii)
PART II—Section 3—Sub-section (ii)

प्राधिकार से प्रकाशित
PUBLISHED BY AUTHORITY

सं. 4812] नई दिल्ली, सोमवार, नवम्बर 3, 2025/कार्तिक 12, 1947
No. 4812] NEW DELHI, MONDAY, NOVEMBER 3, 2025/KARTIKA 12, 1947

## विद्युत मंत्रालय

## अधिसूचना

नई दिल्ली, 30 अक्तूबर, 2025

**का.आ. 4967(अ).**— विद्युत अधिनियम, 2003 (2003 की सं. 36) की धारा 63 के अंतर्गत परिचालित दिशा-निर्देशों के पैरा 3 के उप-पैरा 3.2 द्वारा प्रदत्त शक्तियों का प्रयोग करते हुए केंद्र सरकार, राष्ट्रीय पारेषण समिति की 33वीं बैठक की सिफारिशों पर संबंधित बोली-प्रक्रिया समन्वयक (बीपीसी) के विवरण के साथ टीबीसीबी मोड के अंतर्गत निम्नलिखित पारेषण स्कीमों को अधिसूचित करती है: -

<table>
<tr><td>क्रम सं.</td><td colspan="3">पारेषण स्कीम का नाम और कार्यक्षेत्र</td></tr>
<tr><td>1.</td><td colspan="3">765/400/220 केवी फतेहगढ़-II पावर स्टेशन पर 2 सिंक्रोनस कंडेनसर (सिंकॉन) यूनिट की स्थापना<br>संभावित कार्यान्वयन समय-सीमा: आवंटन तिथि से 30 महीने<br>बीपीसी: पीएफसी कंसल्टिंग लिमिटेड<br>कार्यक्षेत्र:
<table>
<tr><td>क्रम सं.</td><td>पारेषण घटक का विवरण</td><td>कार्य का कार्यक्षेत्र<br>(सबस्टेशन का प्रकार/कंडक्टर क्षमता/किमी/बे की संख्या आदि)</td></tr>
</table></td></tr>
</table>



PIJUSH KANTI RAY
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| | | |
|---|---|---|
| 1. | • दो 400 केवी बे के साथ 765/400/220 केवी फतेहगढ़-II पावर स्टेशन के 400 केवी स्तर पर 2 सिंक्रोनस कंडेनसर (सिंकॉन) यूनिट*<br>*1 सिंकॉन यूनिट में +300 एमवीएआर/-200 एमवीएआर (न्यूनतम) का सक्रिय समर्थन और 1200 एमवीए (न्यूनतम) के पीसीसी पर शॉर्ट सर्किट योगदान शामिल है (जड़त्व का मान (मेगावाट-सेकंड) आरएफपी दस्तावेज में प्रदान किया जाएगा) | • सिंक्रोनस कंडेनसर यूनिट - 2<br>• 400 केवी बे - 2 |
| टिप्पणी:<br>1. पावरग्रिड फतेहगढ़-II पावर स्टेशन पर 2 (सिंककॉन) यूनिट के लिए दो 400 केवी बे के साथ-साथ स्थान (निःशुल्क) उपलब्ध कराएगा। | | |

2. बोली प्रक्रिया समन्वयक की नियुक्ति, विद्युत मंत्रालय द्वारा इस संबंध में जारी और समय-समय पर संशोधित दिशानिर्देशों में निर्धारित शर्तों के अध्यधीन होगी।

3. बीपीसी तकनीकी विकल्पों के माध्यम से मार्ग के अधिकार (आरओडब्ल्यू) की चौड़ाई में कमी की गणना के लिए सीईए की समिति की रिपोर्ट दिनांक 24.09.2024 के अनुसार आरओडब्ल्यू अनुकूलन सुनिश्चित करेंगे।

4. इसके अलावा, मार्ग को पीएम गति शक्ति पोर्टल पर सत्यापन और भौतिक सर्वेक्षण के बाद ही अंतिम रूप दिया जाना चाहिए।

[फा. सं. 15/3/2018-ट्रांस-पार्ट(4)]

नाओरेम इंद्रकुमार सिंह, अवर सचिव (पारेषण)

## MINISTRY OF POWER

## NOTIFICATION

New Delhi, the 30th October, 2025

**S.O. 4967(E).—** In exercise of the powers conferred by sub-para 3.2 of Para 3 of the Guidelines circulated under Section 63 of the Electricity Act, 2003 (No. 36 of 2003), the Central Government, on the recommendations of 33rd meeting of National Committee on Transmission, hereby notifies the following transmission scheme under TBCB mode, with details of Bid-Process Coordinator (BPC): -

| Sl No. | Name & Scope of the Transmission Scheme | | |
|---|---|---|---|
| 1. | **Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220 kV Fatehgarh-II PS**<br>**Tentative implementation timeframe:** 30 months from the date of allocation<br>**BPC: PFC Consulting Limited**<br>**Scope:** | | |
| | **Sl. No.** | **Description of Transmission Element** | **Scope of work (Type of Substation/Conductor capacity/km/No. of bays etc.)** |
| | 1. | •2 Nos. of Synchronous Condensers (SynCon) units* at 400 kV level of 765/400/220 kV Fatehgarh-II PS along with 2 Nos. of 400 kV | •Synchronous Condenser units- 2 Nos.<br>•400 kV Bay- 2 Nos. |

| | | | |
|---|---|---|---|
| | | bays<br>*1 No. of SynCon unit comprises dynamic support of +300 MVAr/-200 MVAr (Minimum) & Short circuit contribution at PCC of 1200 MVA (Minimum) (Value of inertia (MW-secs) shall be provided in RfP document | |
| | **Note:**<br>1. POWERGRID shall provide space (free of cost) for 2 Nos. (SynCon) units at Fatehgarh- II PS along with 2 Nos. of 400 kV bays | | |

2. The appointment of the Bid Process Coordinator is subject to the conditions laid down in the Guidelines issued by Ministry of Power in this regard, amended from time to time.

3. BPCs shall ensure RoW optimization as per the CEA's Committee report dated 24.09.2024 for calculation of reduction of Right of Way (RoW) Width through Technological Options.

4. Further, the route must be finalised after validation on PM Gati Shakti portal and physical survey.

[F. No. 15/3/2018-Trans-Part(4)]

NAOREM INDRAKUMAR SINGH, Under Secretary (Transmission)

Uploaded by Dte. of Printing at Government of India Press, Ring Road, Mayapuri, New Delhi-110064
and Published by the Controller of Publications, Delhi-110054.

AMIT KUMAR JAISWAL Digitally signed by AMIT KUMAR JAISWAL Date: 2025.11.04 15:40:03 +05'30'

| | | | | | |
|---|---|---|---|---|---|
| | | | (Jhatikara-Bamnauli one ckt out:1407) | | |
| **Both 400kV sections at Jhatikra S/s connected through sectionalizer** | 3x897 (N-1: 1058/ICT) | 2x897 **(N-1: 1058)** | 1286 (Jhatikara-Bamnauli one ckt out:1456) | 588+(2x553) | 2x753 **(N-1: 1332)** |

From the studies, it is envisaged that if both 400kV sections are interconnected through 400kV Sectionalizer at the event of contingency of 765/400kV ICTs (2x1500MVA) or 400kV Jhatikra-Mundka D/c line in section-2, loadings on 765/400kV ICTs in section-2 will be relieved about 150MW (one ICT outage) whereas loading on other ckt of 400V Jhatikra-Mundka line (one ckt outage) will be relieved about 170MW.

CTU vide mail 23.12.24 requested to Power Grid to confirm the space availability for 400kV Bus sectionaliser bay (1 set) at 765/400kV Jhatikra (PG) S/s. Power Grid stated that space is available for 400kV Sectionalization bay (Main bay-1&2) at 765/400kV Jhatikra (PG) S/s. CTU also stated that 765/400kV ICT augmentation (6$^{th}$ 1500MVA, 3$^{rd}$ in section-2 (Mundka section)) shall be taken up progressively along with 400kV corridor requirement. Grid-India and CEA agreed on the proposal.

In view of above following ISTS scheme is agreed:

1. 1 no. 400kV bay (Main+Tie) (2 Breaker) (in Mundka section) at Jhatikara (PG) S/s – implementation schedule : 9 months (best effort 6 months)
2. 400kV Sectionalization bay (1 set) at 765/400kV Jhatikara (PG) S/s to interconnect both 400kV sections at the event of contingency - implementation schedule: 18 months (best efforts 15 months)

## G11. 2 nos. of Synchronous Condensers (SynCon) units in 765/400/220kV Fatehgarh-II PS

It was stated that in the 71$^{st}$ NRPC meeting held on 29.01.24, it was deliberated that RE power is being integrated in fast pace country-wide and to ensure grid stability and provide inertial support in RE complex, requirement of dynamic compensation like Synchronous Condensers needs to be identified separately based on the detailed reactive power planning studies and the Short Circuit Ratios (SCRs) at different locations.

Accordingly, a committee was formed under Chairmanship of Member Secretary, NRPC along with members from CEA, NRPC, NRLDC, NLDC, NTPC, BHEL, CTU and STUs to do futuristic analysis for the requirement of Synchronous Condensers based on the inertia considerations for NR. Subsequently, the Committee conducted various meetings (Apr'24-Dec'24) wherein deliberations were

held on the requirements of Synchronous Condenser including other available technologies. During the committee meetings, presentations by different OEMs viz BHEL, Hitachi and Andritz Hydro were also made, highlighting various technological options available and its suitability under different system requirements.

Committee has concluded that in view of huge RE capacity addition in the Northern Region, particularly in Rajasthan State, and the challenges thereafter like Oscillations in RE complexes, Reactive Power, Inertia & Short Circuit ratio (SCR) requirements must be addressed accordingly. The Committee is in, therefore, consensus of installation of SynCons in RE complexes because of the following advantages of SynCons :

- Enhancement in System Strength/ Short Circuit Ratio (SCR)
- Fast Reactive Power Support during Faults/Transients
- Increased Inertia and Frequency Response
- Damping of Low Frequency Oscillations
- Steady-state Reactive Power Support

A methodology has been adopted to identify optimal location for installation of SynCons, which includes low SCR (<5), proximity of HVDC station, dynamic compensation requirement, real time grid issues etc.

Location of SynCons as close to the generation [220kV] may appear to increase the SCR. However, at the same time at 400kV level its efficacy in supporting the grid will be more. Therefore, a prudent decision for SynCon placement at 220kV or 400kV needs to be taken on case-to-case basis. Based on the selection criteria discussed above, 7 nos. RE pooling stations were identified in RE complexes in Rajasthan for placement of SynCons with implementation schedule of 2026-27 to 2029-30, subject to availability of space at respective station. The committee recommends installation of first SynCon of 2 x+300/-200 MVAr at 400kV level either at Fatehgarh-II (Priority-1) or Fatehgarh-I (Priority-2) Substation with the completion timeline of 2026-2027 at Fatehgarh-II PS. The committee also recommended that CEA/MoP may consider the installation of proposed Syn Cons in TBCB or RTM mode similar to other transmission projects.

Report of Committee on Futuristic analysis for requirement of Synchronous Condensers based on System Strength and Inertia considerations for Northern Region was published in Dec'24 and deliberated in 52th TCC/77$^{TH}$ NRPC meeting held on 27-28$^{th}$ Dec'24.

Grid India observed sustained oscillations on real time basis at Fatehgarh-II PS. Further, M/s POWERGRID vide mail 05.10.24 confirmed the space for 2x(80x95sqm) for installation of 2 nos. 300MVAr SynCon units. Considering NRPC report study results, criteria for selection for installation of SynCons and space availability as discussed above, installation of SynCon of 2 x+300/-200 MVAR at 400kV level of Fatehgarh-II PS is proposed in present meeting.

In view of above following ISTS scheme is agreed

- 2 nos. of Synchronous Condensers (SynCon) units* at 400kV level of 765/400/220kV Fatehgarh-II PS along with 2 nos. of 400kV bays

**** 1 no. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short circuit contribution at PCC of 1200MVA (Minimum) with Minimum H (natural) >3 s***

**----------x----------**

A.5.8 TCC Chairperson stated that, considering the relatively small cost involved and suggested benefits, TWFL installation may be taken up under the O&M budget as it does not qualify as capital expenditure.

A.5.9 RVPNL suggested that if CEA guidelines on TWFL are issued, it would facilitate implementation by state utilities as well.

A.5.10 HVPNL stated that if the technology proves effective in fault detection, it would be beneficial for states too.

A.5.11 MS, NRPC proposed the formation of a subgroup comprising members from CEA, CTU, NRPC, NRLDC, POWERGRID, TSPs, and State Utilities to deliberate further on the proposal.

**NRPC Deliberation**

A.5.12 NRPC forum noted the deliberation held in TCC meeting and Forum was in consonance of the same.

***Decision of Forum***

*Forum directed to formulate a sub-group comprising members from CEA, CTU, NRPC, NRLDC, Powergrid, Indigrid, ATIL, Sterlite, Sekura, RVPNL, PTCUL, HPPTCL and JKPCTL with the following Terms of Reference: -*

- *Formulate criteria to identify critical transmission lines that warrant the installation of TWFL, based on operational importance and reliability considerations.*
- *Evaluate the restoration benefits of TWFL—specifically in terms of fault location and faster restoration—by comparing scenarios with and without TWFL, using data provided by Powergrid for lines where TWFL is already implemented.*

## A.6 Installation of 2 nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS (agenda by CTUIL)

**TCC Deliberation**

A.6.1 CTU representative apprised that in the 71st NRPC meeting held on 29.01.24, it was deliberated that RE power is being integrated in fast pace country-wide and to ensure grid stability and provide inertial support in RE complex, requirement of dynamic compensation like Synchronous Condensers needs to be identified

separately based on the detailed reactive power planning studies and the SCRs at different locations.

A.6.2 Accordingly, a committee was formed under Chairmanship of Member Secretary, NRPC along with members from CEA, NRPC, NRLDC, NLDC, NTPC, BHEL, CTU and STUs to do futuristic analysis for the requirement of Synchronous Condensers based on the inertia considerations for NR.

A.6.3 Committee has concluded that in view of huge RE capacity addition in the Northern Region, particularly in Rajasthan State, and the challenges thereafter like Oscillations in RE complexes, Reactive Power, Inertia & SCR requirements must be addressed accordingly. The Committee is in, therefore, consensus of installation of SynCons in RE complexes because of the following advantages of SynCons :

- Enhancement in System Strength/ Short Circuit Ratio (SCR)
- Fast Reactive Power Support during Faults/Transients
- Increased Inertia and Frequency Response
- Damping of Low Frequency Oscillations
- Steady-state Reactive Power Support

A.6.4 A methodology has been adopted to identify optimal location for installation of SynCons, which includes low SCR (<5), proximity of HVDC station, dynamic compensation requirement, real time grid issues etc.

A.6.5 Based on the selection criteria discussed above, 7 nos. RE pooling stations were identified in RE complexes in Rajasthan for placement of SynCons with implementation schedule of 2026-27 to 2029-30, subject to availability of space at respective station.

A.6.6 The committee recommends installation of first SynCon of 2 x+300/-200 MVAr at 400kV level either at Fatehgarh-II (Priority-1) or Fatehgarh-I (Priority-2) Substation. The committee also recommended that CEA/MoP may consider the installation of proposed Syn Cons in TBCB or RTM mode similar to other transmission projects.

A.6.7 The report of the committee was also presented in 52nd TCC & 77th NRPC Meeting 27-28th Dec'24 and Forum noted the Committee Report and recommended the same for further submission to CEA.

A.6.8 Subsequently, in 36th CMETS-NR meeting held on 15.01.2025 where Scope of Installation of 2 nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS was discussed, Grid-India stated that they observed sustained oscillations on real time basis at Fatehgarh-II PS. Further, M/s Powergrid vide mail dated 05.10.24 confirmed the space for 2x(80x95sqm) for installation of 2 nos. 300MVAr SynCon units at Fatehgarh-II PS.

A.6.9 Considering Committee report recommendations comprising criteria for selection for installation of SynCons, Installation of 2 nos. of Synchronous Condensers (SynCon) units (2x +300/-200 MVAr) at 400kV level of 765/400/220kV Fatehgarh-II PS was agreed in 36th CMETS-NR meeting.

| **Sl. No.** | **Description of Transmission Element** | **Scope of work**<br><br>**(Type of Substation/Conductor capacity/km/no. of bays etc.)** |
|---|---|---|
| 1. | 2 nos. of Synchronous Condensers (SynCon) units* at 400kV level of 765/400/220kV Fatehgarh-II PS along with 2 nos. of 400kV bays<br><br>**1 No. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short circuit contribution at PCC of 1200MVA (Minimum) (Value of inertia (MW-secs) shall be provided in RfP document* | • Synchronous Condenser units- 2 nos.<br><br>• 400kV Bay- 2 nos. |

A.6.10 CTU representative apprised that the estimated cost & timeframe of the Scheme is as below:

- Estimated Cost: Rs. 1160 Cr. (Approx)
- Implementation Timeframe: 30 months from allocation of project.

A.6.11 CTU representative submitted that above proposal may be considered in light of the substantial renewable energy (RE) capacity addition in the Northern Region—particularly in the state of Rajasthan—and the associated challenges such as oscillations in RE complexes, reactive power management, inertia, and short circuit ratio (SCR) requirements, hence appropriate measures needs be taken to address these issues.

A.6.12 TCC forum agreed with the proposal of **Installation of 2 nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS** given the inherent advantages of synchronous condensers (SynCons) in providing inertia, reactive power support, and short circuit strength to the grid.

**NRPC Deliberation**

A.6.13 NRPC forum noted the deliberation held in TCC meeting and Forum was in consonance of the same.

***Decision of Forum***

*Forum approved the proposal of CTU for Installation of 2 nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS at an estimated cost of Rs 1160 Cr. with implementation timeframe of 30 months from allocation of project.*

## A.7 Redundant communication for Narora Atomic Power Plant (NPCIL) (NAPP) (Agenda by CTUIL)

**TCC Deliberation**

A.7.1 CTU apprised that presently NAPP is connected with radial path through UPPTCL OPGW network and no redundant path is available. Connectivity of NAPP (NPCIL) is shown in Figure-1

सत्यमेव जयते

भारत सरकार
**Government of India**
विद्युत मंत्रालय
**Ministry of Power**
केंद्रीय विद्युत प्राधिकरण
**Central Electricity Authority**
विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग- II
**Power System Planning & Appraisal Division-II**

सेवा में /To

As per list of Addresses

**विषय: ट्रांसमिशन पर राष्ट्रीय समिति (एनसीटी) की बत्तीसवीं बैठक के संशोधित कार्यवृत्त ।**

**Subject: Revised minutes of the 32nd Meeting of the National Committee on Transmission (NCT)-reg.**

महोदया (Madam) / महोदय (Sir),

The 32nd meeting of the National Committee on Transmission (NCT) was held 12th August, 2025 at New Delhi. The revised minutes of the meeting are attached herewith.

भवदीय / Yours faithfully

22-8-2025

(बी.एस.बैरवा / B.S. Bairwa)
मुख्य अभियन्ता एवं सदस्य सचिव,(एन.सी.टी.)/
Chief Engineer & Member Secretary (NCT)

प्रतिलिपि / Copy to:

Joint Secretary (Trans), Ministry of Power, New Delhi

***Note :***

*i) Bay(s) required for completion of diameter (GIS) in one-and-half breaker scheme shall also be executed by the TSP.*

*ii) POWERGRID to provide space (free of cost) for 765 kV line along with SLR GIS bays at Srikakulam - The D/c line to be terminated in the future line bays with SLR proposed under the scheme "Inter-Regional Strengthening between SR Grid and ER Grid"*

***iii)*** *POWERGRID to provide space (free of cost) for 2 Nos. of 400kV line bays at Khammam for termination of Khammam-II – Khammam (existing) 400 kV (quad) D/c line*

***iv)*** *TSP of Warangal New S/s (Adani) to provide space (free of cost) for 2 Nos. of 765kV line bays with provision of SLR at Warangal New S/s for termination of Khammam-II – Warangal New 765 kV D/c line*

## 4.6 Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS

4.6.1 Representative of CTUIL stated that, in the 71st NRPC meeting held on 29.01.24, it was deliberated that RE power is being integrated in fast pace country-wide and to ensure grid stability and provide inertial support in RE complex, requirement of dynamic compensation like Synchronous Condensers needs to be identified separately based on the detailed reactive power planning studies and the Short Circuit Ratios (SCRs) at different locations.

4.6.2 He also informed, a committee was formed under Chairmanship of Member Secretary, NRPC along with members from CEA, NRPC, NRLDC, NLDC, NTPC, BHEL, CTU and STUs to do futuristic analysis for the requirement of Synchronous Condensers based on the inertia considerations for NR**.** The Committee is in, therefore, consensus of installation of SynCons in RE complexes because of the following advantages of SynCons:

- Enhancement in System Strength/ Short Circuit Ratio (SCR)
- Fast Reactive Power Support during Faults/Transients
- Increased Inertia and Frequency Response
- Damping of Low Frequency Oscillations
- Steady-state Reactive Power Support

4.6.3 He further stated that, the committee recommends installation of first SynCon of 2 x+300/-200 MVAr at 400 kV level either at Fatehgarh-II (Priority-1) or Fatehgarh-I (Priority-2) Substation.

4.6.4 It was opined that more discussion is required on optimal location of Synchronous condensers and other aspects. Chairperson, NCT directed that a presentation may be arranged on these aspects by NRPC.

## 5 Status of the bids under process by BPCs

5.1 The BPCs (RECPDCL and PFCCL) have made presentations on the status of under bidding schemes. Summary of the same is given below:

सत्यमेव जयते

भारत सरकार

**Government of India**

विद्युत मंत्रालय

**Ministry of Power**

केंद्रीय विद्युत प्राधिकरण

**Central Electricity Authority**

विद्युत प्रणाली योजना एवं मूल्यांकन प्रभाग- II

**Power System Planning & Appraisal Division-II**

सेवा में /To

As per list of Addresses

**विषय: ट्रांसमिशन पर राष्ट्रीय समिति (एनसीटी) की तैंतीसवीं बैठक की कार्यवृत्त ।**

**Subject: Minutes of 33rd Meeting of the National Committee on Transmission (NCT)-reg.**

महोदया (Madam) / महोदय (Sir),

The 33rd meeting of the National Committee on Transmission (NCT) was held on 16th September, 2025 at New Delhi. The minutes of the meeting are attached herewith.

भवदीय / Yours faithfully

26.9.2025

(बी.एस.बैरवा / B.S. Bairwa)

मुख्य अभियन्ता एवं सदस्य सचिव,(एन.सी.टी.)/

Chief Engineer & Member Secretary (NCT)

प्रतिलिपि / Copy to:

Joint Secretary (Trans), Ministry of Power, New Delhi

सेवाभवन, आर.के.पुरम-I, नईदिल्ली-110066 **टेलीफोन**: 011-26732325 **ईमेल**: cea-pspa2@gov.in वेबसाइट: www.cea.nic.in

SewaBhawan, R.K Puram-I, New Delhi-110066**Telephone**: 011-26732325 **Email**: cea-pspa2@gov.in **Website**: www.cea.nic.in

4.3 **Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS**

4.3.1 Representative of CTUIL stated that, to ensure grid stability and provide inertial support in RE complex, requirement of dynamic compensation like Synchronous Condensers, a committee was formed under Chairmanship of Member Secretary, NRPC along with members from CEA, NRPC, NRLDC, NLDC, NTPC, BHEL, CTU and STUs to do futuristic analysis for the requirement of Synchronous Condensers based on the inertia considerations for NR.

4.3.2 The Committee had consensus of installation of SynCons in RE complexes because of the following advantages of SynCons :

- Enhancement in System Strength/ Short Circuit Ratio (SCR)
- Fast Reactive Power Support during Faults/Transients
- Increased Inertia and Frequency Response
- Damping of Low Frequency Oscillations
- Steady-state Reactive Power Support

4.3.3 Further the committee had recommended installation of first SynCon of 2 x+300/-200 MVAr at 400kV level either at Fatehgarh-II (Priority-1) or Fatehgarh-I (Priority-2) Substation.

4.3.4 In the 32nd meeting of NCT held on 12.08.25 and it was opined that more discussion is required on optimal location of Synchronous condensers and other aspects. In this regard, discussions were held in CEA on 12.09.25. Based on the directions, studies were carried out to see the impact of envisaged intra state thermal machines (2400 MW) in south Rajasthan (Chabbra/Kalisindh complex) on short circuit ratio (SCR) of Fatehgarh-II PS. From studies it is envisaged that considering above thermal generation, there will be no appreciable improvement in SCR of Fatehgarh-II S/s. Therefore, 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220 kV Fatehgarh-II PS are required to improve the SCR which will further address the issue Oscillations in RE complexes.

4.3.5 After deliberations, NCT recommended the following for implementation:

A. Summary of the scheme is given below:

| **Sl. No.** | **Description of the scheme** | **Estimated Cost (₹ Crore)** | **Remarks** |
|---|---|---|---|
| 1. | 2 Nos. of Synchronous Condensers (SynCon) units at 400kV level of 765/400/220kV Fatehgarh-II PS along with 2 nos. of 400kV bays<br>**Implementation timeframe:** 30 months | 1157.45 Cr. | Recommended under TBCB with PFCCL as BPC |

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| | from the date of allocation | | |

B. Details of the Scheme:

| Sl. No. | Description of Transmission Element | Scope of work (Type of Substation/Conductor capacity/km/no. of bays etc.) |
|---|---|---|
| 1 | 2 nos. of Synchronous Condensers (SynCon) units* at 400kV level of 765/400/220kV Fatehgarh-II PS along with 2 nos. of 400kV bays<br><br>**1 No. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short circuit contribution at PCC of 1200MVA (Minimum) (Value of inertia (MW-secs) shall be provided in RfP document* | • Synchronous Condenser units- 2 nos.<br>• 400kV Bay- 2 nos. |

***Note :*** *POWERGRID shall provide space (free of cost) for 2 Nos. (SynCon) units at Fatehgarh-II PS along with 2 Nos. of 400 kV bays*

## 5 Communication Schemes

### 5.1 Redundant communication for Narora Atomic Power Plant (NPCIL) (NAPP)

5.1.1 Representative of CTUIL stated that NAPP is connected with radial path through UPPTCL OPGW network, and no redundant path is available, therefore, a redundant communication path for NAPP is needed and that can be created through fiber sharing from UPPTCL OPGW N/w i.e. NAPP – Simbhavli (UP) – Shatabdi Nagar (UP) – Modipuram (UP). At Modipuram (UP) ISTS FOTE is available.

5.1.2 It was further mentioned that UPPTCL has given consent regarding sharing of 2 pairs of fibers on the following UPPTCL links for provide redundant communication to NAPP (NPCIL):

i. Simbhavali (UP) - Shatabdi Nagar (UP)
ii. Shatabdi Nagar (UP) - Modipuram (UP)-having ISTS FOTE

5.1.3 The proposal was agreed in the 78$^{th}$ meeting of NRPC held on 17.03.2025.

5.1.4 After deliberations, the communication scheme **"**Redundant communication for Narora Atomic Power Plant (NPCIL) (NAPP)" was approved for implementation under RTM mode as mentioned below:

सत्यमेव जयते

**GOVERNMENT OF INDIA**
**MINISTRY OF CORPORATE AFFAIRS**

Central Registration Centre

**Certificate of Incorporation**

[Pursuant to sub-section (2) of section 7 and sub-section (1) of section 8 of the Companies Act, 2013 (18 of 2013) and rule 18 of the Companies (Incorporation) Rules, 2014]

I hereby certify that FATEHGARH II TRANSMISSION LIMITED is incorporated on this SIXTH day of MAY TWO THOUSAND TWENTY SIX under the Companies Act, 2013 (18 of 2013) and that the company is Company limited by shares

The Corporate Identity Number of the company is **U42201DC2026GOI471089**

The Permanent Account Number (PAN) of the company is **AAHCF0186C***

The Tax Deduction and Collection Account Number (TAN) of the company is **DELF13685A***

Given under my hand at Manesar this SIXTH day of MAY TWO THOUSAND TWENTY SIX

Signature Not Verified
Digitally signed by
*.mca.gov.in
Date: 2026.05.06 11:10:58 IST

PUSULURU KIRAN

Assistant Registrar of Companies/ Deputy Registrar of Companies/ Registrar of Companies

For and on behalf of the Jurisdictional Registrar of Companies

Registrar of Companies

Central Registration Centre

Disclaimer: This certificate only evidences incorporation of the company on the basis of documents and declarations of the applicant(s). This certificate is neither a license nor permission to conduct business or solicit deposits or funds from public. Permission of sector regulator is necessary wherever required. Registration status and other details of the company can be verified on mca.gov.in

Mailing Address as per record available in Registrar of Companies office:

FATEHGARH II TRANSMISSION LIMITED

First Floor, Urjanidhi, 1, Barakhamba Lane, Connaught Place, New Delhi, Central Delhi- 110001, Delhi

*as issued by Income tax Department

**Form No. INC-34**

**e-AOA (e-Articles of Association)**

[Pursuant to Section 5 of the Companies Act, 2013 and rules made thereunder read with Schedule I]




Form language

(•) English ( ) Hindi

*Refer instruction kit for filing the form*

*All fields marked in * are mandatory*

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| Table applicable to company as notified under schedule I of the Companies Act, 2013 *(F, G, H)* | F |
| Table F / G / H (basis on the selection of above-mentioned field) as notified under schedule I of the companies Act, 2013 is applicable to *(F – a company limited by shares G– a company limited by guarantee and having a share capital H – a company limited by guarantee and not having share capital)* | F - A COMPANY LIMITED BY SHARES |
| The name of the company is | FATEHGARH II TRANSMISSION LIMITED |

| Check if not applicable | Check if altered | Article No. | Description |
|---|---|---|---|
| | | | ***Interpretation*** |
| ☐ | ☑ | | • 1. Interpretationclause In theinterpretation of these Articles unless repugnant to the subject or context- Act TheAct means The Companies Act 2013 as amended from time to time and includes anystatutory modification or re-enactment thereof for the time being in force. Articles of the Company Articles means thearticles of association of a company as originally framed or as altered fromtime to time or applied in pursuance of any previous company law or of thisAct. Auditor(s) Auditor(s) |

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| | | mean and includepersons appointed as such for the time being by the Comptroller Auditor Generalof India. Board or Board of Directors Board or Boardof Directors in relation to a company means the collective body of thedirectors of the company. Books of Account Books of account includesrecords maintained in respect of (i) all sums of money received and expended bya company and matters in relation to which the receipts and expenditure takeplace (ii) all sales and purchases of goods andservices by the company (iii) the assets andliabilities of the company and (iv) the items of costas may be prescribed under section 148 in the case of a company which belongsto any class of companies specified under that section. CapitalCapital means the share capital for the time being raised or authorized to beraised for the purpose of the Company. CompanyShall means FATEHGARH II TRANSMISSION LIMITED DebentureDebenture includes debenture stock bonds or any other instrument of a companyevidencing a debt whether constituting a charge on the assets of the company ornot. Director(s) Director means a directorappointed to the Board of a company under Section 2(34) of the Act. Dividend Dividend includes any interimdividend. FinancialInstitution Financial Institution includes a scheduled bank and any otherfinancial institution defined or notified under the Reserve Bank of India Act1934. GenderWords importing the masculine gender also include the feminine gender. GenerationCompany Generation Company shall mean any entity engaged in the business ofgeneration of electricity. In Writing and Written In writingand Written include printing lithography and other modes of representing orreproducing words in a visible form. Key managerial personnel key managerialpersonnel in relation to a company means (i) the Chief Executive |

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| | | Officer or themanaging director or the manager (ii) the company secretary (iii) the whole-time director (iv) the Chief Financial Officer and suchother officer as may be prescribed. Meeting means Annual General Meeting or ExtraordinaryGeneral Meeting of Members duly called and constituted including an adjourned meeting.In the context of Board of Directors it shall mean the meeting of theDirectors including an adjourned meeting. In the context of Board of Directorsit shall mean the meeting of the Directors including an adjourned meeting. Member Member in relation to a company means (i) thesubscriber to the memorandum of the company who shall be deemed to have agreedto become member of the company and on its registration shall be entered asmember in its register r of members (ii) everyother person who agrees in writing to become a member of the company and whosename is entered in the register of members of the company (iii) everyperson holding shares of the company and whose name is entered as beneficialowner in the records of a depository. MonthMonth means a calendar month. OfficeOffice means the Registered Office of the company for the time being. Paid-upshare capital or share capital paid-up means such aggregate amount of moneycredited as paid-up as is equivalent to the amount received as paid up in respectof shares issued and also includes any amount credited as paid-up in respect ofshares of the company but does not include any other amount received in respectof such shares by whatever name called. PersonsPersons include Corporations and firms as well as individuals. Power Transmission Utility PowerTransmission Utility shall mean any entity engaged in the business of power transmission. ProxyProxy includes Attorney duly constituted under a valid Power of Attorney. Project-In-ChargeA Director of the Company |

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| | | designated as Project In-charge for administratingday to day activities of the Company. PublicCompany Public Company means a company which a. is not a private company and b. has a minimum paid-up share capital as maybe prescribed Providedthat a company which is a subsidiary of a company not being a private companyshall be deemed to be public company for the purposes of this Act even wheresuch subsidiary company continues to be a private company in its articles. RegistrarRegistrar means a Registrar an Additional Registrar a Joint Registrar a DeputyRegistrar or an Assistant Registrar having the duty of registering companiesand discharging various functions under this Act. Register of Members Register of Membersmeans the Register of Members to be kept pursuant to the Act. RelatedParty Section 2(76) of the Act describes related party with reference to a companywhich means (i) adirector or his relative (ii) akey managerial personnel or his relative (iii) afirm in which a director manager or his relative is a partner (iv) aprivate company in which a director or manager is a member or director (v) a public company in which a director ormanager is a director or holds along with his relatives more than two per cent.of its paid-up share capital (vi) anybody corporate whose Board of Directors managing directoror manager is accustomed to act in accordance with the advice directions orinstructions of a director or manager (vii) any person on whose advice directions or instructions a director or manager isaccustomed to act Provided that nothing in sub-clauses(vi) and (vii) shall apply to the advice directions or instructions given in a professionalcapacity (viii) any company which is (A) a holding subsidiary or an associatecompany of such company or (B) a subsidiary of a holding companyto which it is also a subsidiary. (ix) such other person as |

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| | | maybe prescribed. Seal Means the common seal of thecompany for the time being. Securities Exchange Board Securitiesand Exchange Board means the Securities and Exchange Board of India establishedunder section 3 of the Securities Exchange Board of India Act 1992. Securities Securities means thesecurities as defined in clause (h) of section 2 of the Securities Contracts (Regulation)Act 1956. Share Means a share in the sharecapital of a company and includes stock. Share Capital Share Capital meansthe total equity share capital of the Company agreed to be issued and calledthe Authorized Capital of the Company as mentioned in the Memorandum ofAssociation of the Company. Singular Number Words importing thesingular number include where the context admits the plural number andvice-versa. StateElectricity Board State Electricity Board means the Electricity Board orVidyut Board or any other body by whatever name called set up by the StateGovernments under Electricity (Supply) Act 1948 as amended which expressionshall include its success or s administrators authorized representatives andpermitted assigns. Transmission Company Transmission Companyshall mean any entity engaged in the business of transmission of electricity. Year or Financial Year Meaning of Words Yearmeans English calendar year and Financial Year shall have the meaning assignedthereto by Section 2(41) of the Act. Unless the context otherwise requireswords or expressions contained in these regulations shall bear the same meaningas in the Act or any statutory modification there of in force at the date atwhich these regulations become binding on the company. Marginal Notes Marginal Notes are for easeof reference only and shall not affect the construction and interpretation ofthese Articles. Other Expressions Other words or expression containedin these Articles shall |

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| | | | bear the same meaning as a reassigned to them in theAct or any statutory modifications thereof. 2. Table F not to Apply The regulations contained in Table Fin the First Schedule to the Companies Act 2013 shall not apply except to theextent that the same are repeated or contained or expressly made applicable bythese Articles or by the Act but the regulations for the management of theCompany and for the observance of the members thereof and the irrepresentativesshall subject to any exercise of the statutory powers of the Company withreference to the repeal or alteration of or addition to its regulations bySpecial Resolution as prescribed by the said Companies Act 2013 be such ascontained in these Articles. 3.Business Purpose The Company shall beengaged in the business of Transmission of Electricity including constructionoperation maintenance and other related activities. |
| | | | ***Share Capital and Variation of rights*** |
| ☐ | ☑ | II 1 | • 4. Share Capital Increase of capital by the Company and how carried intoeffectThe Authorized Share Capital of the Company is as mentioned in clause V of the Memorandumof Association of the Company. The Company in General Meeting may from time totime by resolution increase its authorized share capital by creation of newshares such increase to be of such aggregate amount and to be divided in toshares of such respective amounts as may be determined by the General Meetingsubject to the provisions of the Act. |
| ☐ | ☑ | 2 | • 5. New Capital same as existing capital Any capital raisedby the creation of new shares shall be considered as part of the originalcapital and shall be subject to the same provisions herein contained withreference to the payment of calls and installments forfeiture lien |

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| | | | surrendertransfer and transmission voting and otherwise. |
| ☐ | ☑ | 3 | • 6. Reduction of Capital The Company may from time to time byspecial resolution reduce its capital which may be paid off either with orwithout extinguishing or reducing liability on shares which is in excess of thewants of the company or canceling such share capital which has been lost or isunrepresented by available assets. |
| ☐ | ☑ | 4 | • 7. Subdivision and consolidation ofshares The Company ingeneral meeting may from time to time sub-divide or consolidate its shares orany of them and exercise any of the other powers conferred by Section 61 of theAct and shall file with the Registrar such notice of exercise of any suchpowers as may be required by the Act. |
| ☐ | ☑ | 5 | • 8. Register and Index of MembersBeneficialowners The Companyshall cause to be kept a Register and also an Index of Members andDebenture-holders in accordance with Sections 88 of the Act. Further aspermissible under Section 88 of the Act the register and Index of beneficial ownersmaintained by a Depository shall be deemed to be the corresponding Register andIndex for the purpose of this Act. |
| ☐ | ☑ | 6 | • 9. Foreign Register of members The Company shall be entitled to keepin any country outside India a Foreign Register of members resident in thatcountry subject to compliance with the provisions of Section 88 of the Act. |
| ☐ | ☑ | 7 | • 10. Shares to be numbereddistinctively Theshares in the capital held otherwise than in the depository mode shall benumbered progressively in sequence and given distinctive number Except and inthe manner here in mentioned no share shall be forfeited or surrendered and |

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| | | | shallcontinue to bear the number which it had originally borne. |
| ☐ | ☑ | | • 11. Share Application Money The Company shall ensure that theshare application money paid is held by it in an account with a ScheduledCommercial Bank (in the name of the Company). 12. Further Issue of Capital(a) Where at any time the Companywishes to raise its subscribed share capital by issue of further shares itshall first offer such shares to its existing shareholders in proportion to theirexisting shareholdings on the date of such issue. Such offer to the existingshareholders shall be in accordance with the provisions of Section 62 of the Act. (b) The Company shall subject to applicableprovisions of the Act and Articles of Association make uniform calls from time totime upon all the Shareholders in respect of the moneys remaining unpaid on theissued share capital within 30 days or such time as the Board may deem fit andappropriate. 13.Shares under control of Directors Subject to the provisions of theseArticles and of the Act the shares including any shares forming part of any increasedcapital of the Company shall be under the control of the Directors who mayallot or otherwise dispose off the shares to such persons in such proportion onsuch terms and conditions and at such times as the Directors may think fit andsubject to the sanction of the Company in General Meeting subject to theprovisions of Sections 52 and section 54 of the Act at a premium or par andsuch option being exercisable for such time and for such consideration as theDirectors think fit. The Board shall cause to be filed the returns as toallotment provided for in Section 39(4) of the Act. 14. Issue of shares for considerationother than cashSubject to these Articles and the provisions of the Act if any the Board mayissue and allot shares in the capital of the Company as payment or inconsideration or as part |

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| | | payment or in part consideration of the purchase or acquisitionof any property or for services rendered to the Company in the conduct of itsbusiness and shares which may be so issued or allotted shall be credited ordeemed to be credited as fully paid up or partly paid up shares.15.Power of Company to Issue Shares The Company in General Meeting maysubject to the provisions of Section 42 62 of the Act provide that any shares (whether forming part ofthe original capital or of any increased capital of the Company) shall beoffered to such persons (whether a Member or not) in such proportion and onsuch terms and conditions of the Act) at a premium or at par or at a discountas such General Meeting shall determine and with full power to give any person(whether a Member or not) the option to call for or be allotted shares of any classof the Company either subject to compliance with the provisions of Sections 52 and54 of the Act at a premium or at par or at discount such option being exercisableat such times and for such consideration as may be directed by such General Meetingor the Company in General Meeting may make any other provisions whatsoever forthe issue allotment or disposal of any shares. 16. Acceptance of shares Any person applying for shares in theCompany followed by an allotment of any shares and subscribers to the Memorandumshall be a shareholder within the meaning of these Articles and every personwhose name is on the Register of Members shall for the purposes of these Articlesbe a Member of the Company.17. Deposit call to be a debtpayable Immediately TheMoney (if any) which the Board shall on the application for allotment of any sharesbeing made by them require or direct to be paid by way of deposit call orotherwise in respect of any shares allotted by them shall I immediately on the insertionof the name of the allottee in the Register of Members as |

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| | | the name of theholder of such shares become a debt due to and recoverable by the Company fromthe allottee thereof and shall be paid by him accordingly.18. Liability of Members Every Member or his heirs executorsor administrators shall pay to the Company the portion of the capital andpremium if any represented by or payable on his share or shares which may forthe time being remain unpaid thereon in such amounts at such time or times andin such manner as the Board shall from time to time in accordance with theCompany regulations require or fix for the payment thereof.19. Share Certificates A certificate issued under the commonseal of the company specifying the shares held by any person shall be primafacie evidence of the title of the person to such shares. (a) Every Member or allottee of shareswho is holding such shares in the physical form shall be entitled without paymentto receive certificate specifying the name of the person in whose favour it is issuedthe shares to which it relates and the amount paid-up thereof. Such certificatesshall be issued only in pursuance of a resolution passed by the Board and onsurrender to the Company of the letter of allotment or the fractional couponsof requisite value save in case of issues against letters of acceptance or of renunciationor in cases of issue of bonus shares. Every such certificate shall be issuedunder the seal of the Company which shall be affixed in the presence of two Directorsand the Secretary or some other person appointed by the Board for the purposeand the two directors and the Secretary or other persons as authorized by theBoard shall sign the share certificate. Provided if the composition of theBoard permits of it at least one of the aforesaid two directors shall be a personother than a Managing or a Whole Time Director. Particulars of every sharecertificate issued shall be entered in the Register of Members |

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| | | against the nameof the person to whom it has been issued indicating the date of issue. Forissue of any further duplicate certificate the Board shall be entitled to chargesuch amount which shall not exceed fifty Rupees per Certificate. (b) A Director may sign a sharecertificate by affixing his signature thereon by means of any machine equipmentor other mechanical means such as engraving in metal or lithography but not bymeans of a rubber stamp. PROVIDED that the Director shall be personallyresponsible for the safe custody of such machine equipment or other materialused for the purpose.20.Renewalof Share Certificates(a)No certificate of any share or shares shall be issued either in exchange for thosewhich are sub-divided or consolidated or in replacement of those which are defacedmutilated torn or old decrepit destroyed or where the pages on the reverse forrecording transfers have been duly utilized unless the certificate in lieu ofwhich it is issued is surrendered to the Company and for issuing such sharecertificate the company may charge such fee as the Board thinks fit not exceedingtwenty rupees per certificate.(b)When a new share certificate has been issued in pursuance of clause (a) of thisArticle it shall state on the face of it and against the stub or counterfoil tothe effect that it is Issued in lieu of share certificate No sub-dividedreplacedonconsolidation. (c)If a share certificate is lost or destroyed a new certificate in lieu thereofshall be issued only with the prior consent of the Board and on such reasonableterms such as furnishing supporting evidence and indemnity and the payment of out-of-pocketexpenses incurred by the Company in investigating evidence produced as theBoard thinks fit. (d)Whenanew share certificate has been issued in pursuance of clause (c) of this Articleit shall state on the face of it and against the stub or counterfoil to theeffect |

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| | | that it is duplicate issued in lieu of share certificate No. and the wordduplicate shall be stamped or printed prominently on the face of the share certificate.(e)Where a new share certificate has been issued in pursuance of clause (a) and orclause(c) of this Article particulars of every such share certificate shall beentered in a Register of Renewed and Duplicate Share Certificates indicating againstthe name(s) of the person(s) to whom the certificate is issued the number anddate of issue of the share certificate in lieu of which the new certificate is issuedand the necessary changes indicated in the Register of Members by suitablecross reference in the Remarks column.(f)All blank forms to be used for issue of share certificates shall be printed andthe printing shall be done only on the authority of are solution of the Board andthe blank forms shall be consecutively machine-numbered and the forms and the blocksengravingsfacsimiles relating to the printing of such forms shall be kept in the custodyof the Secretary or of such other person as the Board may appoint for the purposeand the Secretary or the other person aforesaid shall be responsible forrendering an account of these forms to the Board. (g)The Committee of the Board Company Secretary of the Company or a Director specificallyauthorized by the Board for such purpose shall be responsible for the maintenancepreservation and safe custody of all books and documents relating to the issueof share certificates including the blank forms of share certificates referredto in clause (f). (h)All books referred to in clause(g)shall be preserved in good order for not lessthan thirty years and in disputed cases shall be preserved permanently. 21.Joint holders (a)Where two or more persons are registered as the holders of any share they shallbe treated as a single shareholder and shall be deemed to hold the same asjoint holders with |

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| | | benefits of survivorship subject to the following and other provisionscontained in these Articles. (b)The Company shall be entitled to decline to register more than four persons asthe holders of any share. (c)The Joint holders of any share shall be liable severally as well as jointly forand in respect of all calls and other payments which ought to be made inrespect of such shares. (d)On the death of any such joint holder the survivor or survivors shall be theonly person or persons recognized by the Company as having any title to theshare but the Directors may require such evidence of death as they may deem fitand nothing here in contained shall be taken to release the estate of the deceasedjoint holder from any liability on shares held by him jointly with any otherperson. (e)Delivery of share certificate to any one of such joint holders shall be deemedto be delivery to all of them and any one of such joint holders may giveeffectual discharge and receipts for any dividends or other moneys payable inrespect of such shares and or in respect of any other obligation of the Companytowards them. (f)Only the person whose name stands in the Register of Members as the first ofthe joint holders of any shares shall be entitled to delivery of thecertificate relating to such share or to receive notices from the Company and anynotice given to such person shall be deemed proper notice to all joint holders.(g)Any one of two or more joint holders may vote at any meeting either personallyor by proxy in respect of such share as if he were solely entitled thereto andif more than one of such joint holders be present at any meeting personally orby proxy the holder whose name stands first or higher (as the case may be) onthe Register of Members in respect of such share shall alone be entitled tovote in respect thereof. PROVIDEDalways that a member present at any meeting personally shall be entitled tovote in preference |

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| | | | to a person present by proxy although the name of such personpresent by proxy stands first on the Register of Members in respect of suchshares. 22.Terms and Conditions of Preference Shares Subject to the provisions of section 55 any preferenceshares may with the sanction of an ordinary resolution be issued on the terms thatthey are to be redeemed on such terms and in such manner as the company beforethe issue of the shares may by special resolution determine. |
| | | | ***Lien*** |
| ☐ | ☑ | 9 | • 23. Company to have lien on shares The Company shall have a first and paramountlien upon all shares(other than fully paid up shares) registered in the name ofeach member (whether solely or jointly with others) and upon the sale proceedsthereof for all moneys (whether presently payable or not) called or payable ata fixed time in respect of all such shares (not being fully paid up) for allmoneys presently payable by him or his estate to the Company. Any such lienshall extend to all dividends payable and bonuses declared from time-to-time declaredin respect of such shares. |
| ☐ | ☑ | 10 | • 24. Enforcing lien by sale For the purpose of enforcing such lien theBoard may sell the shares subject thereto in such manner as they shall thinkfit and for that purpose it may cause to be issued a duplicate certificate inrespect of such shares and may authorize one of their Directors to execute atransfer thereof on behalf of and in the name of the Board. No sale shall bemade until notice period for making call as aforesaid have expired and until noticein writing of the intention to sell shall have been made known to theshareholder for default in payment and default has been made by him in the paymentof money called in respect of such shares for thirty days after the |

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| | | | date ofsuch notice. Upon issue of a duplicate certificate or certificates in lieu ofthe original share the certificate or certificates originally issued shall standcancelled and become null and void and the same shall have no effect. |
| ☐ | ☑ | 11 | • 25. Application of proceeds of sale The net proceeds of any such sale shall bereceived by the Company and applied in or towards payment of such part of the amountas is presently payable and the residue if any shall (subject to a like lienfor sums not presently payable as existed upon the shares before sale)be paid tothe person entitled to the shares at the date of the sale. |
| ☐ | ☑ | 12 | • |
| | | | ***Calls on shares*** |
| ☐ | ☑ | 13 | • 26. Directors may make calls The Board may from time to time subject to theterms on which any shares may have been issued and subject to the conditions ofallotment by a resolution passed at a meeting of the Board (and not by resolutionby circulation) make such callas it thinks fit upon the Members in respect ofall moneys unpaid on the shares held by them respectively and each member shallpay the amount of every call so made on him to the person or persons and at thetimes and places appointed by the board. A call may be made payable by installments. |
| ☐ | ☑ | 14 | • 27.Notice of calls Notless than thirty days notice in writing of any call shall be given by the Companyspecifying the time and place of payment and the person or persons to whom suchcall shall be paid. |
| ☐ | ☑ | 15 | • 28.When call made A callshall be deemed to have been made at the time when the resolution of the Board |

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| | | | authorizingsuch call was passed at a meeting of the Board and demand notice is issued. |
| ☐ | ☑ | 16 | • 29. Calls may be revoked or postponed A call may be revoked or postponed at thediscretion of the Board. |
| ☐ | ☑ | 17 | • 30.Directors may extend time TheBoard may from time to time at its discretion extend the time fixed for the paymentof any call and may extend such time as to all or any of the Members forreasons which the Board may consider satisfactory but no Member shall been titledto such extension save as a matter of grace. |
| ☐ | ☑ | | • 31.Calls to carry interestIf any Member fails to pay any call due from him on the day appointed for paymentthereof or any such extension thereof as aforesaid he shall be liable to payinterest on the same from the day appointed for the payment thereof to the timeof actual payment at rate not exceeding 10 per cent per annum as may be decidedby the Board but the Board may in its absolute discretion and in special circumstanceswaive or reduce the levy of interest as deemed appropriate. Sums deemed to becall Any sum which by the terms of issue of a share becomes payable onallotment or at any fixed date whether on account of the nominal value of theshare or by way of premium shall for the purposes of these Articles be deemedto be a call duly made and payable on the date on which by the terms of issuethe same becomes payable and in case of non-payment all the relevant provisionsof these Articles as to payment of interest and expenses forfeiture orotherwise shall apply as if such sum had become payable by virtue of a call dulymade and notified. 32.Sums deemed to becallAny sum which by the terms of issue of a share becomes payable on allotment orat any fixed date whether on account of the nominal value |

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| | 18 | of the share or byway of premium shall for the purposes of these Articles be deemed to be a callduly made and payable on the date on which by the terms of issue the same becomespayable and in case of non-payment all the relevant provisions of theseArticles as to payment of interest and expenses forfeiture or otherwise shallapply as if such sum had become payable by virtue of a call duly made andnotified. 33.Partial payment not to preclude Forfeiture Neither the receipt by the Company of a portion of anymoney which shall from time to time be due from any Member to the Company inrespect of his shares either by way of principal or interest nor any indulgencegranted by the Company in respect of the payment of any such money shallpreclude the Company from there after proceeding to enforce a forfeiture of suchshares as hereinafter provided. 34.Paymentin anticipation of calls may carry interest The Board may if it thinks fit agree to and inanticipation receive from any Member willing to advance the same all of callsmoney or any part of the amounts of his respective shares beyond the sumsactually called up and upon the moneys so paid in advance or upon so much thereoffrom time to time and at any time thereafter as exceeds the amount of the callsthen made upon and due in respect of the shares on account of which such advancesare. made the Board may pay orallow interest at such rate as the Member paying the sum in advance and theBoard agree upon. The Board may agree to repay at any time any amount soadvanced or may at any time repay the same upon giving to the Member threemonths notice in writing. PROVIDED that moneyspaid in advance of calls on any shares may carry interest but shall not confera right to dividend or to participate in profits. (b) No Member paying any suchsum in advance shall be entitled to voting rights in respect of the moneys sopaid by him until |

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| | | | the same would but for such payment become presently payable. |
| | | | ***Transfer of shares*** |
| ☐ | ☑ | 19 | • 35.Register of TransfersThe Company shall maintain a Register of Transfers and therein shall be fairlyand distinctively enter the particulars of every transfer or transmission ofany share in the physical form. |
| ☐ | ☑ | 20 | • 36.Form of transfer Theinstrument of transfer shall be in writing and in such form as prescribed underthe Act. All the provisions of Section 56 of the Act shall be duly compliedwith in respect of all transfers and of the registration thereof. The Companyshall not charge any fee for registration of a transfer of shares or debentures. |
| ☐ | ☑ | 21 | • 37. Instrument of Transfer to be completed and presented to the Company The Instrument ofTransfer duly stamped and executed by the transferor and the transferee shallbe delivered to the Company in accordance with the provisions of the Act. The instrumentof transfer shall be accompanied by the Share Certificate or such evidences theBoard may require to prove the title of transferor and his right to transferthe shares and every registered Instrument of Transfer shall remain in thecustody of the Company until destroyed by order of the Board. Any instrument oftransfer which the Directors may decline to register shall be returned to theperson depositing the same. |
| ☐ | ☑ | | • 38.Transferor deemed to be holderThe transferor shall be deemed to be the holder of such shares until the nameof the transferee shall have entered in the Register of Members in respectthereof. Before the registration of a transfer the certificate or certificatesof the shares must |

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| | 22 | be delivered to the Company along with Transfer Deed. 39.No transfer to insolvent etc.No transfer shall be made to a person of unsound mind or to an insolvent. 40.Closure of Register of MembersDebenture holders The Directors shall have power on givingnot less than seven days previous notice as required by Section 91 of the Actto close the Register of Transfer Register of Members or Register of Debenture holdersor the register of other security holders of the Company for any period orperiods not exceeding in the aggregate forty-five days in each year (but notexceeding thirty days at any one time) as they may determine. 41.Nominationby shareholder Everyshareholder or debenture holder may at any time nominate in the prescribedmanner a person to whom his shares or debenture shall vest in the event of hisdeath as provided in Section 72 of the Act. 42.Title to shares of deceased holder Inthe event there is no nomination the executors or administrators of a deceasedMember or the holder of a Succession Certificate in respect of the shares of a deceasedMember (not being one of two or more joint holders)shall be the only personswhom the Company will be bound to recognize as having any title to the shares registeredin the name of such Member and the Company shall not be bound to recognize suchexecutors or administrators or holders unless such executors administrators orholders shall have first obtained probate or Letters of Administration or SuccessionCertificate as the case may be from a duly constituted Court in India. PROVIDED that the Directorsmay at their absolute discretion dispense with production of Probate Letters ofAdministration or Succession Certificate upon such terms as to indemnity orotherwise as they think fit and may enter the name of the person who claims tobe absolutely entitled to the |

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| | | | shares standing in the name of a deceased Memberas a Member. |
| | | | ***Transmission of shares*** |
| ☐ | ☑ | 23 | • 43. Transmission of Shares Subject to the provisions of the Actany person becoming entitled to any share inconsequence of the death lunacy orinsolvency of any Member or by any lawful means other than by a transfer inaccordance with these Articles may with the consent of the Directors (whichthey shall be under no obligation to give) and upon producing such evidence thathe sustains the character in respect of which he proposes to act under this.Article or of his title as the Directors may require and upon such indemnity asthe Directors may require either be registered as a Member in respect of suchshares or elect to have some person nominated by him and approved by theDirectors registered as a Member in respect of such shares. PROVIDED that if suchpersons shall elect to have his nominee registered he shall testify hiselection by executing in favor of his nominee an instrument of transfer inaccordance with these Articles and until he does so he shall not be freed fromany liability in respect of such shares. |
| ☐ | ☑ | 24 | • 44. Right of Board to decline orsuspend registration (i) Any person becoming entitled to a share inconsequence of the death or insolvency of a member may upon such evidence beingproduced as may from time to time properly be required by the Board and subjectas herein after provided elect either (a) to be registered himselfas holder of the share or (b) to make such transferof the share as the deceased or insolvent member could have made. (ii) The Board shall ineither case have the same right to decline or suspend registration as it wouldhave |

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| | | | had if the deceased or insolvent member had transferred the share before hisdeath or insolvency. |
| ☐ | ☑ | 25 | • 45. The Company not liable fordisregard of notice prohibiting registration of transfer The Company shall incur no liabilityor responsibility whatever inconsequence of its registering or giving effect toany transfer of shares made or purported to be made by any apparent legal ownerthereof (as shown or appearing in register of Members) to the prejudice ofpersons having or claiming any equitable right title or interest to or in the sameshares notwithstanding that the Company may have had notice of such equitableright title or interest or notice prohibiting registration of such transfer andmay have entered such notice or referred to it in any book or attended or giveneffect to any notice which may have been given to it of any equitable righttitle or interest or be under any liability whatsoever for refusing or neglectingso to do though it may have been entered or referred to in some book of theCompany but the Company shall nevertheless be at liberty to regard and attendto any such notice and give effect thereto if the Directors shall so think fit. |
| ☐ | ☑ | 26 | • 46. Rights of successors A person becoming entitled to a shareby reason of the death or insolvency of the holder shall be entitled to thesame dividends and other advantages to which he would have been entitled if he werethe registered holder of the shares except that he shall not before beingregistered as a Member in respect of the shares been titled to exercise anyright conferred by membership in relation to meetings of the Company. PROVIDEDthat the Directors shall at any time give notice requiring any such person toelect to be registered himself or to transfer the shares and if the notice isnot complied within ninety days from the date of issue of the |

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| | | | notice theDirectors may thereafter withhold payment of all dividends bonuses or othermoneys payable in respect of the shares until the requirements of the notice havebeen complied with. |
| ☑ | ☐ | 27 | • In case of a One Person Company on the death of the sole member the person nominated by such member shall be the person recognised by the company as having title to all the shares of the member the nominee on becoming entitled to such shares in case of the members death shall be informed of such event by the Board of the company such nominee shall be entitled to the same dividends and other rights and liabilities to which such sole member of the company was entitled or liable on becoming member such nominee shall nominate any other person with the prior written consent of such person who shall in the event of the death of the member become the member of the company. |
| | | | ***Forfeiture of shares*** |
| ☐ | ☑ | 28 | • 47. If money payable on shares not paid notice to be given to members If any Member failsto pay any call or installment of a call on or before the day appointed for thepayment of the same or any such extension thereof as aforesaid the Board may atany time there after during such time as any part of the call or installment remainsunpaid serve a notice on him requiring him to pay the same together with anyinterest which may have accrued and all expenses that may have been incurred bythe Company by reason of such non-payment. |
| ☐ | ☑ | | • 48. Contents of Notice The notice shall name a further day(not being less than fourteen days from the date of the service of notice) anda place or places on and at which such call or installment and such interest thereon |

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| | | at such rate as the Directors shall determine from the day on which suchcall or installment ought to have been paid and expenses as aforesaid are to bepaid. The notice shall also state that in the event of the non-payment on orbefore the day at or before the time and at the place appointed the shares inrespect of which the call was made or installment is payable shall be liable tobe forfeited. |
| ☐ | ☑ | • 49. In default of payment shares to beForfeited If the requirementof any such notice as aforesaid are not complied with every or any share inrespect of which such notice has been given may at any time thereafter butbefore payment of all calls or installments interest and expenses due inrespect thereof be forfeited by are solution of the Board to that effect. Such forfeitureshall include all dividends declared or any other moneys payable in respect ofthe aforesaid share and not actually paid before the forfeiture. In default ofpayment shares to be Forfeited. |
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| ☐ | ☑ | • 50. Notice of forfeiture to a Member When any share shall have been soforfeited notice of the forfeiture shall be given to the Member in whose nameit stood immediately prior to the forfeiture and an entry of the forfeiturewith the date thereof shall forthwith be made in the Register of Members but noforfeiture shall be in any manner invalid by any omission or neglect to makeany such entry as aforesaid in the Register. |
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| ☐ | ☑ | • 51. Forfeited share to be property ofthe Company and may be sold etc.Any share so forfeited shall be deemed to be the property of the Company andmay be sold re-allotted or otherwise disposed of either to the original holderthereof or to any person upon such terms and in such manner as the Board shallthink fit. |
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| ☐ | ☑ | 33 | • 52. Member still liable to pay callsowing at the time of forfeiture and interest Any members whose shares have been forfeited shallnotwithstanding the forfeiture be liable to pay and shall forthwith pay to theCompany on demand all calls installment interest and expenses owing upon or inrespect of such shares at the time of the forfeiture together with interestaccrued thereon at the time of the forfeiture at such rate as the Board may determineand the Board may enforce the payment thereof if it thinks fit. |
| ☐ | ☑ | | • 53. Effect of forfeiture The forfeiture of a share shall involveextinction at the time of the forfeiture of all interest in and all claims anddemands against the Company in respect of the share and all other rights incidentalto the share except only such of those rights as by these Articles areexpressly saved.54. Evidence of forfeiture A declaration in writing by Chairmanor Managing Director of the Company or by any person duly authorised in thisregard that certain shares in the Company have been duly forfeited on a datestated in the declaration shall be conclusive evidence of the facts thereinstated as against all persons claiming to be entitled to the shares and suchdeclaration and the receipt of the Company for the consideration if any givenfor the shares on the sale or disposition thereof shall constitute a good titleto such shares and the person to whom the shares are sold shall be registeredas the holder of such shares and shall not be bound to see as to theapplication of the purchase money nor shall his title to such shares beaffected by any irregularity or invalidity in the proceedings in reference tosuch forfeiture sale or disposition 55. Validity of sale under Articles offorfeited shares Uponany sale after forfeiture or for enforcing alien in purported exercise of thepowers |

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| | | | herein before given the board may appoint some person to execute aninstrument of transfer of the shares sold and cause the purchasers name to beentered in the Register of Members in respect of the shares sold and thepurchaser shall not be bound to see the regularity of the proceedings or to theapplication of the purchase money and after his name has been entered in the Registerin respect of such shares the validity of the sale shall not be impeached byany person and the remedy of any person aggrieved by the sales hall be indamages only and against the Company exclusively.56.Cancellation of Share Certificatesin respect of forfeited shares Uponany sale re-allotment or other disposal under the provisions of the precedingArticles the certificate or certificates originally issued in respect of the relativeshares shall (unless the same shall on demand by the Company have been(previously) surrendered to it by the defaulting member) stand cancelled andbecome null and void and of no effect and the Directors shall been titled toissue a duplicate certificate or certificates in respect of the said shares tothe person or persons entitled thereto. 57. Power to annulforfeiture TheBoard may at any time before any share so forfeited shall have been soldre-allotted or otherwise disposed of annul the forfeiture thereof upon suchterms and conditions as it thinks fit. |
| | | | ***Alteration of capital*** |
| ☐ | ☑ | | • 58. Alteration of Share Capital The company may from time to time byordinary resolution increase the share capital by such sum to be divided intoshares of such amount as may be specified in the resolution. Subject to theprovisions of section 61 the company may by ordinary resolution the Company mayfrom time to time (a)consolidate and divide all or any of its share capital |

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| | | 35 | into shares of largeramount than its existing shares (b) convert all or any of its fullypaid-up shares into stock and reconvert that stock into fully paid-up shares of any denomination (c) Sub-divide its shares or any of them intoshares of smaller amount than is fixed by the memorandum so however that in thesub-division the proportion between the amount paid and the amount if anyunpaid on each reduced share shall be the same as it was in the case of theshare from which the reduced share is derived. (d) Cancel any shares which as the date ofthe passing of the resolution have not been taken or agreed to be taken by anyperson and diminish the amount of its share capital by the amount of the sharesso cancelled. The resolution whereby any share is sub-dividedmay determine that as between the holders of the shares resulting from suchsub-division one or more of such shares shall have some preference or special advantageas regards dividend capital voting or otherwise over or as compared with theothers or other subject to the provisions of the Act. Subject to the provisionsof Sections 66 of the Act the Board may accept from any member the surrender onsuch terms and conditions as shall be agreed of all or any of his shares. Thecompany may by special resolution reduce in any manner and with and subject toany incident authorised and consent required by law (a) its share capital (b) any capital redemption reserveaccount or (c)any share premium account. |
| ☐ | ☑ | 36 | • |
| ☐ | ☑ | 37 | • |
| ☐ | ☑ | 38 | • |
| | | | ***Capitalisation of profits*** |

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| ☐ | ☑ | | • 59. Capitalization of Profits (1) Any General Meeting of the Companymay resolve that any amounts standing to the credit of the Free Reserve orShare Premium Account or the Capital Redemption Reserve Account or any moneysinvestment or other assets forming part of the undivided profits includingprofits or surplus moneys arising from the realization and (when permitted bythe law) from the appreciation in value of any capital assets of the Companystanding to the credit of the General Reserve or any other Reserve or ReserveFund or any other Fund of the Company or in the hands of the Company andavailable for dividend be capitalized (a) by the issue and distribution ofshares as fully paid-up and to the extent permitted by the Act debentures debenturestockbonds or other obligations of the Company or (b) by crediting share of the Company whichmay have been issued and are not fully paid-up with the whole or any part ofthe sum remaining unpaid thereon PROVIDED that any amounts standing tothe credit of the Share Premium Account or the Capital Redemption Reserve Accountshall be applied only in crediting the payment of capital on shares to beissued to Members as fully paid bonus shares (Further capitalization of reservecreated by the revaluation of assets are not to be used for issuance of BonusShares as per section 63 of the Act). (2) Such issue and distribution undersub-clause (1) (a)of this Article and payment to the credit of unpaid share capitalunder sub-clause (1) (b) of this Article shall be made among and in favour ofthe Members or any class of them or any of them entitled thereto and in accordancewith their respective rights and interests and in proportion to the amount ofcapital paid-up on the shares held by them respectively in respect of which suchdistribution or payment shall be made on the footing that such |

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| | 39 | Members becomeentitled thereto as capital. (3) The Directors shall give effect toany such resolution and for the said purpose the Board may settle anydifficulty which may arise in regard to distribution as it thinks expedientincluding in regard to fractional entitlements and shall apply such profits GeneralReserve other Reserve or any other Fund or account as aforesaid as may berequired for the purpose of making payment in full on the shares or other obligationsof the Company so distributed under subclause (1) (a) of this Article or (asthe case may be) for the purpose of paying in whole or in part the amount remainingunpaid on the shares which may have been issued and are not fully paid-up undersub-clause (1)(b)above. PROVIDED that no such distribution or payment shall bemade unless recommended by the Directors and if so recommended suchdistribution and payment shall be accepted by such Members as aforesaid in fullsatisfaction of their interest in the said capitalized fund. (4) For the purpose of giving effectto any such resolution the Directors may settle any difficulty which may arisein regard to the distribution or payment as aforesaid as they think expedientand in particular they may issue fractional certificates and may fix the valuefor distribution of any specific asset and may determine that any cash payment bemade to any Members on the footing of the value so fixed and may vest any suchcash shares debentures stockbonds or other obligations in trustees upon such trustsfor the persons entitled thereto as may seem expedient to the directors andgenerally may make arrangement for the acceptance allotment and sale of such sharesdebentures debentures stock bonds or other obligations and fractionalcertificates or otherwise as they may think fit. (5) When deemedrequisite a proper contract shall be filed in accordance with the Act and the |

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| | | | Boardmay appoint any person to sign such contract on behalf of the Members entitledas aforesaid. Subject to the provisions of the Act and these Articles in cases wheresome of the shares of the Company are fully paid and others are partly paidsuch capitalization may be effected by the distribution of further shares inrespect of the fully paid shares and by crediting the partly paid shares withthe whole or part of the unpaid liability thereon but so that as between theholders of the fully paid shares and the partly paid shares the sums so appliedin the payment of such further shares and in the extinguishment or diminutionof the liability on the partly paid shares shall be applied pro rata inproportion to the amount then already paid or credited as paid on the existingfully paid and partly paid shares respectively. |
| ☐ | ☑ | 40 | • |
| | | | ***Buy-back of shares*** |
| ☐ | ☑ | 41 | • 60. Buy Back of Shares Notwithstanding anything contained inthese articles but subject to the provisions of sections 68 to 70 and any otherapplicable provision of the Act or any other law for the time being in forcethe company may purchase its own shares or other specified securities |
| | | | ***General meetings*** |
| ☐ | ☑ | 42 | • 61. Annual General Meeting The Company shall in each year hold a GeneralMeeting as its Annual General Meeting in addition to any other meeting in that year.All General Meetings other than Annual General Meetings shall be calledExtraordinary General Meetings. If for any reason beyond the control of theBoard the general meeting (including an Annual General meeting) cannot be heldon the appointed day the Board shall have power |

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| | | | to postpone the General meetingof which a notice should be given to the members. Every member of the Companyshall be entitled to attend either in person or by proxy and the Auditor of theCompany shall have the right to attend and to be heard at any General Meeting whichhe attends on any part of the business which concerns him as Auditor. |
| ☐ | ☑ | | • 62. Extraordinary General Meeting The Board may whenever it thinks fitcall an Extraordinary General Meeting of the Company. The Board shall at the requisitionin writing by a Member or Members holding in the aggregate not less thanone-tenth of such of the paid-up capital of the company on that date andcarries the right of voting in regard to the matter in respect of which therequisition has been made. 63. Requisition of Members to stateobject of Meeting Anyvalid requisition so made by Members must state the object or objects of themeeting proposed to be called and must be signed by the requisitionists anddeposited at the registered office of the company. PROVIDED that such requisition may consistof several documents in like form each signed by one or more requisitionists. 64. On receipt of requisitionDirectors to call meeting and in default requisitionists may do so Upon the receipt of any suchrequisition the Board shall forthwith call an Extraordinary General Meeting andif they do not proceed within twenty-one days from the date of the requisitionbeing deposited at the Registered Office to cause a meeting to be called on aday not later than forty-five days from the date of deposit of the requisitionthe requisitionists or such of their number as represent either a majority invalue of the paid-up share capital held by all of them or one-tenth of such ofthe paid-up share capital of the Company as is referred to in Section 100(2) ofthe Act whichever is less may themselves call the |

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| | | 43 | meeting but in either caseany meeting so called shall be held within three months from the date of thedeposit of the requisition as aforesaid. 65.Meeting called by requisitionists Any meeting called under theforegoing Articles by the requisitionists shall be called in the same manner asnearly as possible as that in which meetings are to be called by the Board. 66. Twenty-one days notice of meetingto be given A generalmeeting of a Company may be called by giving not less than clear twenty-onedays notice either in writing or through electronic mode in such a manner asmay be prescribed Every notice of a meeting shall specify the place date dayand the hour of meeting and shall contain statement of the business to betransacted at such meeting. And The notice of every meeting shall be given toevery member of the Company Legal Representative of any deceased member or theassignee of an insolvent member auditor or auditors of the Company and every directorof the Company and all such persons as are under these Articles entitled to receivenotice from the Company Provided that a general meeting may be called aftergiving shorter notice than that specified in this sub-section if consent inwriting or by electronic mode is accorded thereto (i) in the case of an annual general meetingby not less than ninety -five percent. of the members entitled to vote thereatand (ii) in the case of any other generalmeeting by members of the company (a) holding if the company has a sharecapital majority in number of members entitled to vote and who represent notless than ninety-five per cent. of such partof the paid-up share capital of thecompany as gives a right to vote at the meeting or (b) having if the company has no sharecapital not less than ninety -five percent. of the total voting powerexercisable at that meeting Provided further thatwhere any member of a company is entitled to vote |

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| | | | only on some resolution orresolutions to be moved at a meeting and not on the others those members shallbe taken into account for the purposes of this sub-section in respect of theformer resolution or resolutions and not in respect of the latter . |
| | | | ***Proceedings at general meetings*** |
| ☐ | ☑ | 44 | • 67. Business to be transacted atthe General Meeting and nature thereof In the case of an Annual General Meetingall business to be transacted there at shall be deemed special other than (i) the consideration of the financialstatements and there ports of the Board of Directors and Auditors (ii) the declaration of any dividend (iii) the appointment of Directors inplace of those retiring (i) Theappointment of and the fixing of the remuneration of the Auditors and in thecase of any other meeting all business shall be deemed to be Special Business andthere shall be annexed to the notice of the Meeting an Explanatory statementsetting out all material facts concerning each such item of special business includingin particular the nature of the concern or interest financial or otherwise ifany therein of (i) everyDirector and the Manager (if any) and (ii) everyother key managerial personnel and relatives of the persons mentioned insubclauses (i) and (ii). where any such item of Special Businessrelates to or affects any other company the extent of shareholding interest insuch other company of every promoter director and the manager if any and of everyother key managerial personnel of the Company shall also be set out in thestatement if the extent of such shareholding interest is not less than two percent of the paid-up share capital of that other company and where any item ofbusiness consists of the according of approval to any documents by the meeting thetime and place where the document can be inspected |

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| | | | shall be specified in thestatement aforesaid. The annual general meeting shall be called during businesshours on any day that is not a National Holiday and it is to be held either at theregistered office of the company or at some other place within the city inwhich the registered office of the company is situate. |
| ☐ | ☑ | 45 | • 68. Omission to give notice not to invalidate a resolution passed The accidentalomission to give any such notice as aforesaid to any of the Members or thenon-receipt thereof shall not invalidate any resolution passed at any suchmeeting. |
| ☐ | ☑ | 46 | • 69. Meeting not to transact businessnot mentioned in noticeNo General Meeting Annual or Extraordinary shall be competent to enter upondiscuss or transact any business which has not been mentioned in the notice or noticesupon which it was convened. |
| ☐ | ☑ | | • 70. Body Corporate deemed to bepersonally present A bodycorporate being a Member shall be deemed to be personally present if it isrepresented in accordance with Section 113 of the Act. 71. Quorum at General Meeting No business shall be transacted atany general meeting unless a quorum of members is present at the time when themeeting proceeds to business. Save as otherwise provided herein the quorum forthe general meetings shall be as provided in section 103 of the Companies Act2013.72.. If quorum not present meeting tobe dissolved or adjournedIf at the expiration of half an hour from the time appointed forholding ageneral meeting of the Company a quorum is not present the meeting if convenedby or upon the requisition of Members shall stand dissolved but in any othercase the meeting shall stand adjourned to the same day in the next week or ifthat day is a public holiday until the next succeeding |

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| | | | day which is nota publicholiday at the same time and place or to such other day and at such other timeplace as the Board may determine and if at such adjourned meeting a quorum isnot present at the expiration of half an hour from the time appointed forholding the meeting the Members present shall form the quorum and may transactthe business for which the meeting was called. 73. Chairman of General Meeting The Chairman of the Board shall beentitled to take the Chair at every General Meeting whether Annual or Extraordinary.If at any meeting the Chairman is not present within fifteen minutes of thetime appointed for holding such meeting or he has informed that he shall be unableor unwilling to take the Chair then any one of directors with mutual consentshall so preside at the meeting. If no Director be present or if all the Directorspresent decline to take the Chair then the Members present shall elect one ofthe members to be the Chairman of the Meeting. 74. No Business whilst chair vacant No business shall be discussed at anyGeneral Meeting except the election of a Chairman whilst the Chair is vacant. 75. Chairman with consent may adjourn meeting The Chairman with the consent of the Membersmay adjourn any meeting from time to time and from place to place within thecity town or village in which the Registered Office of the Company is situatedbut no business shall be transacted at any adjourned meeting other than thebusiness left unfinished at the meeting from which the adjournment took place. Notwithstandingthe provision as above in the event of disorder at a validly convened meetingthe Chairman may adjourn the meeting provided that such an adjournment shallnot be a longer period than the Chairman considers necessary to being order atthe meeting and Chairman communicates his decision to those present in so faras it is possible.76.Questions at General Meeting how |

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| | | 47 | Decided Every question submitted to a meetingshall be decided in the first instance unless a poll is demanded on a show ofhands. Before or on the declaration of the result of the voting on anyresolution on a show of hands a poll may be ordered to be taken by the Chairmanof the meeting on his own motion and shall be ordered to be taken by him on ademand made in that Resolution or on which an aggregate sum of not less than fivelakh rupees has been paid up. The demand for a poll may be withdrawn at anytime by the person or persons making the demand. Unless a poll is so demanded adeclaration by the Chairman that are solution has on show of hands been carriedthrough unanimously or by a particular majority or lost and an entry to thateffect in the Minutes Book of the Company shall be conclusive evidence of the factwithout proof of the number or proportion of the votes recorded in favour of oragainst the resolution.77.Chairmans Casting Vote In the case of an equality of votesthe Chairman shall have a casting vote in addition to the vote or votes towhich he may been titled otherwise. 78. Poll to be taken if demanded If a poll is demanded as aforesaidthe same shall be taken at such time (not later than forty-eight hours from thetime when the demand was made) and place in the city or town in which theRegistered office of the Company is for the time being situated as the Chairmanshall direct either at once or after an interval or adjournment and the resultof the poll shall be deemed to be the resolution of the meeting. 79. In which case poll taken without Adjournment Any poll duly demanded on theelection of the Chairman of a meeting or on any question of adjournment shallbe taken at the meeting forthwith.80.Demand for poll not to preventtransaction of other businessThe demand for a poll except on the questions of the election of the Chairmanand of an |

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| | | | adjournment shall not prevent the continuance of a meeting for thetransaction of any business other than the question on which the poll has beendemanded. 81.Minutes of General Meetings(a) The Company shall cause minutes ofthe proceedings of every General Meeting or every resolution passed by postalballot to be kept by making within thirty days of the conclusion of every such meetingconcerned record thereof kept with Minute Book for that purpose with theirpages consecutively numbered. (b) Each page of every such book shallbe initiated or signed and the last page of the record of proceedings of eachmeeting in such book shall be dated and signed by the Chairman of the same meetingwithin the aforesaid period of thirty days or in the event of the death orinability of that Chairman within that period by a Director duly authorised bythe Board for the purpose. (c) In no case the minutes ofproceedings of a meeting shall be attached to any such book as aforesaid bypasting or otherwise. (d) The minutes of each meeting shallcontain a fair and correct summary of the proceedings thereat.(e) All decisions taken and appointmentsof officers made at any meeting aforesaid shall be included in the minutes ofthe meeting. (f)Nothing herein contained shallrequire or be deemed to require the inclusion in any such minutes of any matterwhich in the opinion of the Chairman of the meeting (a) is or could reasonably be regarded as defamatory of any person or (b) is irrelevant or immaterial to the proceedings or (c) is detrimental to the interests of the Company. The Chairman of the meeting shallexercise an absolute discretion in regard to the inclusion or non-inclusion ofany matter in the minutes on the aforesaid grounds.(g) Any such minutes shall be evidenceof the proceedings recorded therein. Where the minutes have been kept inaccordance with section then |

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| | | | until the contrary is proved the meeting shall bedeemed to have aforesaid been duly called and held all appointments ofdirectors key managerial personnel auditors or company secretary in practiceshall be deemed to be valid. No document purporting to be are port of theproceedings of any general meeting of a company shall be circulated or advertisedat the expense of the company unless it includes the matters required to becontained in the minutes of the proceedings of such meeting. The company shallobserve secretarial standards with respect to general and Board meetings specifiedby the Institute of Company Secretaries of India constituted undersection 3 ofthe Company Secretaries Act 1980 and approved as such by the Central Government. (h) The book containing the minutes ofthe proceedings of any general meeting of the Company or of a resolution passedby postal ballot shall be kept at the registered office of the Company andshall be open during business hours to the inspection by any member without anycharge for such period not being less than two hours in each business day areallowed for inspection. |
| ☑ | ☐ | 48 | • In case of a One Person Company the resolution required to be passed at the general meetings of the company shall be deemed to have been passed if the resolution is agreed upon by the sole member and communicated to the company and entered in the minutes book maintained under section 118 such minutes book shall be signed and dated by the member the resolution shall become effective from the date of signing such minutes by the sole member. |
| | | | ***Adjournment of meeting*** |
| ☐ | ☑ | | • 82. Adjournment of Meeting (i) The Chairperson may with theconsent of any meeting at which a quorum is |

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| | | 49 | present and shall if so directed bythe meeting adjourn the meeting from time to time and from place to place. (ii)No business shall be transacted atany adjourned meeting other than the business left unfinished at the meetingfrom which the adjournment took place. (iii)When a meeting is adjourned forthirty days or more notice of the adjourned meeting shall be given as in thecase of an original meeting. (iv) Save as aforesaid and as provided in section103 of the Act it shall not be necessary to give any notice of an adjournmentor of the business to be transacted at an adjourned meeting. |
| | | | ***Voting rights*** |
| ☐ | ☑ | 50 | • 83. Members in arrears not to vote No member shall been titled to voteeither personally or by proxy at any General Meeting or Meeting of a class of shareholderseither upon a show of hands or upon a poll in respect of any shares registeredin his name on which any calls or other sums presently payable by him have notbeen paid or in regard to which the Company has exercised any right of lien. |
| ☐ | ☑ | 51 | • 84. Number of votes to which MemberEntitled Subject tothe provisions of these Articles and without prejudice to any specialprivileges or restrictions as to voting for the time being attached to anyclass of shares for the time being forming part of the capital of the Company everyMember shall be entitled to be present and to speak and vote at such meeting byshow of hand for which the Member present in person shall have one vote. On a polltaken at a meeting of a company a member entitled to more than one vote or hisproxy need not to use all his votes or cast in the same way all the votes heuses. |
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| ☐ | ☑ | 52 | • 85. Votes by a Member entitled to morethan one vote On apoll taken at a meeting of the Company a Member entitled to more than one voteby virtue of his share-holding or his proxy or other person entitled to vote forhim as the case may be need not if he votes use all his votes or cast in thesame way all the votes he uses and he may vote in different manner as he deemsfit. |
| ☐ | ☑ | 53 | • 86. Vote of Member who is a minor If any shareholder be a minor thevote in respect of his share or shares shall be by his guardian or any one ofhis guardians if more than one to be selected in case of dispute by the Chairmanof the meeting. |
| ☐ | ☑ | 54 | • 87. Votes of Joint Members If there be joint registered holdersof any shares the vote of the senior who tenders a vote whether in person or byproxy shall be accepted to the exclusion of the votes of the other jointholders. For this purpose seniority shall be determined by the order in which thenames stand in the register of members. |
| ☐ | ☑ | 55 | • 88. Voting in person or by proxy orRepresentativeSubject to the provisions of these Articles votes may be give neitherpersonally or by proxy. A body corporate being a Member may vote either byproxy or by are presentative duly authorised in accordance with Section 113 ofthe Act and such representative shall be entitled to exercise the same rightsand powers (including the right to vote by proxy) and by postal ballot onbehalf of the body corporate which he represents as that body could exercise ifit were an individual Member of the Company. |
| ☐ | ☑ | | • 89. Votes in respect of shares ofDeceased Any personentitled under the Transmission Clause to transfer any shares may vote at anyGeneral Meeting in respect thereof in the same manner as if he were theregistered |

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| | | 56 | holder of such shares. PROVIDED that forty-eight hours atleast before the time of holding the meeting or adjourned meeting as the casemaybe at which he proposes to vote he shall satisfy the Chairman of his rightto transfer such shares and give such indemnity (if any) as the Chairman mayrequire or the Chairman shall have previously admitted his right to vote atsuch meeting in respect thereof. 90. Time for objection to vote No objection shall be made to thevalidity of any vote except at the meeting or poll at which such vote wastendered and every vote whether given personally or by proxy not disallowed atsuch meeting or poll shall be deemed valid for purposes of such meeting or pollwhatsoever. 91. Chairman of themeeting to be the judge of the validity of any Vote The Chairman of anymeeting shall be the sole judge of the validity of every vote tendered at suchmeeting. The Chairman present at the taking of a poll shall be the sole judgeof the validity of every vote tendered at such poll. |
| | | | ***Proxy*** |
| ☐ | ☑ | 57 | • 92. Appointment of proxy A person can act as proxy on behalfof members not exceeding fifty and holding in the aggregate not more than tenpercent of the total share capital of the company carrying voting rightsProvided that a member holding more than ten percent of the total share capitalof the Company carrying voting rights may appoint a single person as proxy andsuch person shall not act as proxy for any other person or shareholder. Everyproxy shall be appointed in writing under the hand of the Member or if suchMember is a body corporate under the common seal of such corporation or besigned by an appointer or his attorney duly authorised in writing. The proxy soappointed shall not have any right to speak at the meetings. |

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| ☐ | ☑ | 58 | • 93. Deposit of instrument of Proxy etc. The instrument appointing a proxyand the power of attorney or other authority (if any) under which it is signedor a notarized copy of that power or authority shall be deposited at the RegisteredOffice of the Company not later than forty-eight hours before the time for holdingthe meeting at which the person named in the instrument proposes to vote and indefault the instrument of proxy shall not be treated as valid. No instrumentappointing a proxy shall be valid after the expiration of twelve months from thedate of its execution. |
| ☐ | ☑ | 59 | • 94. Form of proxy An instrument appointing a proxyshall be in the form No. MGT-11 as prescribed in the rules made under section105 of the Companies Act 2013. 95.Proxy either for specified meeting or for aperiod An instrumentof proxy may appoint a proxy either for the purpose of a particular meetingspecified in the instrument and any adjournment thereof or it may appoint forthe purpose of every meeting of the Company or of every meeting to be heldbefore a date specified in the instrument and every adjournment of any such meeting. 96. Validity of votesgiven by proxy notwithstanding death of Member A vote given inaccordance with the terms of an instrument of proxy shall be validnotwithstanding the previous death or insanity of the principal or therevocation of the proxy or of the authority under which the proxy was executed orthe transfer of the shares in respect of which the proxy is given. Providedthat no intimation in writing of such death insanity revocation or transfershall have been received by the company at its office before the commencementof the meeting or adjourned meeting at which the proxy is used. |

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| | | | ***Board of Directors*** |
| ☐ | ☑ | 60 | • 97. First Directors Shri Sachin Shukla Shri Harish Bhakuni and Shri Binay Kumar Singh shall be the First Directors of the Company. |
| ☐ | ☑ | 61 | • 98. Management of Affairs The day to day management of the business andaffairs of the Company shall be vested with Project-in-charge under the supervisiondirection control of the Board. The Board may exercise all such powers of theCompany and do all such acts deeds and things as are not prohibited by the Actor any other statute or by the Memorandum of Association of the Company andwithout prejudice to the foregoing shall be responsible for all policy mattersand the supervision direction and control of the conduct of the business affairsoperations of the Company |
| ☐ | ☑ | | • 99. Number and appointment ofDirectors The Board ofDirectors of the Company shall consist of not less than 3 but not more than 15Directors. A Director shall not be required to hold any qualification shares inthe Company. Notwithstanding anything to the contrary contained in theseArticles so long as any moneys remain owing by the Company to a FinancialInstitution or any other person by the Company or the Company has entered intoany agreement or undertaking or arrangement (hereinafter refer as agreement)with Bodies (like State Electricity Board Nigam) or the Board of Directors havedecided to seek nomination on the Board from the beneficiary state or anyFinancial Institution or PFC Consulting Limited or person holds Debentures in theCompany by direct subscription or private placement the Company may agree togrant to such Financial Institution PFC Consulting Limited person or other Bodiesas a condition of such loan or subscription to Debenture or any other |

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| | | 62 | agreementor to a Debenture Trustee the right to appoint from time to time any person orpersons as Director or Directors of the Company (which director or directors isare hereinafter referred to as Nominee Directors) retiring or non-retiringsubject to and on such terms and conditions as the Company may agree with suchFinancial Institutions PFC Consulting Limited Person other Bodies and orDebenture Trustee. The Company shall have a right to remove from office NomineeDirector(s) at the option of the Company in consultation with FinancialInstitutions PFC Consulting Limited Bodies persons or Debenture Trustee. Such NomineeDirector(s) shall not be required to hold any Share qualification in theCompany. Also at the option of the Company such Nominee Director(s) shall notbe liable to retirement by rotation of the Directors. Subject as aforesaid theNominee Director(s) shall been titled to the same rights and privileges and besubject to the same obligations as any other Director of the Company. The NomineeDirector(s) so appointed shall hold the said office only so long as moneysremain owing by the Company to the Financial Institution or so long as theDebenture Trustee hold debenture in the Company or operation of agreement andthe Nominee Directors so appointed in the exercise of the said person shall ipsofactovacate such office immediately the money owing by the Company to the FinancialInstitution or on the Debenture Trustee ceasing to hold Debentures Shares on thesatisfaction of liability of the Company arising out of any Guarantee furnishedby the Financial Institutions or satisfactory completion of term of agreement withBodies. The Nominee Director(s) appointed under this article shall be entitledto receive all notice of and attend all General meeting Board Meeting and ofthe meetings of the Committee of which the |

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| | | | Nominee Director(s) isare member(s)as also the minutes of meetings. The financial institutions Debenture Trustee personsbodies shall also be entitled to receive all such notice and minutes. TheCompany shall pay to the Nominee Director(s) sitting fees and expenses which otherDirector of the Company are entitled but if any other Director(s)shall accruedto Debenture Trustee and same shall accordingly be paid by the Company directlyto the debenture trustee. Any expenses that may incurred by the financialinstitution or such Nominee Director(s) in connection with their appointment orDirectorship shall also be paid or reimbursed by the Company to the financialInstitution or as the case may be to such Nominee Director(s). Provided that ifany such Nominee Director(s) isare an officer of the Financial Institution thesitting fees in relation to such Nominee Director(s) shall also accrue to theFinancial Institute and the same shall accordingly be paid by the Company directlyto that Financial Institution. Provided further that if such NomineeDirector(s) is are an official of any of the Reserve Bank of India the sittingfees in relation to such Nominee Director(s)shall also accrue to Financial Institutionto whom he represents as Nominee Director from Reserve Bank of India and thesame shall accordingly be paid by the Company directly to that FinancialInstitution. Provided also that in the event of the Nominee Director(s) beingappointed as Whole Time Director(s) such Nominee Director(s) shall exercise suchpowers and duties as may be approved by the Lenders or Bodies in consultationwith Board and have such rights as are usually exercised or available to a WholeTime Director in management of the Borrower or Bodies and such NomineeDirector(s) shall be entitled to receive such remuneration fees commission andmoneys |

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| | | | as may be approved by the Lenders or Bodies in consultation with Board. |
| ☐ | ☑ | 63 | • 100. Company may increase the numberof Directors Subjectto Section 149 of the Act the Company may subject to special resolution inGeneral Meeting increase the maximum number of Directors. Further the Company maysubject to the provisions of Section 169 of the Act by passing the ordinaryresolution in the General Meeting of the members may remove any Director beforethe expiration of his period of office and appoint an other person in the placeof director so removed. |
| ☐ | ☑ | 64 | • 101. Appointment of AlternateDirectors In accordancewith Section 161 and other applicable provisions (if any)of the Act the Boardshall have power at any time and from time to time to appoint a person not beinga person holding any alternate directorship for any other Director in theCompany to act as an alternate director for a director(hereinafter called theoriginal Director) during his absence for a period of not less than threemonths from India. |
| ☐ | ☑ | 65 | • 102. Directors power to fill up casualVacancies Casualvacancies among Directors may be filled by the Board of Directors at theirmeeting and any person so appointed shall hold the office as per the provisionof section 161. |
| ☐ | ☑ | | • 103. Appointment of AdditionalDirector Subject tothe provisions of Section 161 and other applicable provisions(if any) of theAct the Board shall have power at any time and from time to time to appoint aperson as an Additional Director but so that the total number of Directorsshall not at any time exceed the maximum number fixed by these Articles. TheAdditional Director so |

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| | | | appointed shall retire from Office at next followingAnnual General Meeting but shall be eligible for election by the company at thatmeeting as a Director. 104.Directors may act notwithstandingany vacancy The continuingDirectors may act notwithstanding any vacancy in their body but if and so longas their number is reduced below the minimum number fixed by Article 100thereof the continuing Directors may act for the purpose of increasing thenumber of Directors to that number or of summoning a General Meeting for that purpose. 105. Remuneration of Directors Subject to the provisions of the Actthe Chairman or Managing Director or any other functional Directors who is arein the whole-time employment of the Company may be paid remuneration either byway of a monthly payment or at a specified percentage of the net profit of the Companyor partly by one way and partly by the other keeping in view the limitingprovisions governing the Managerial remuneration under the provisions of theAct. Subject to the provisions of the Act aDirector who is neither in the whole-time employment nor a Chairman cumManaging Director of the Company may be paid remuneration either- (a) by way of monthly quarterly or annualpayment with the approval of the Central Government or (b) by way of commission if the Company by aspecial resolution authorizes such payment and The sitting fee payable to aDirector (excluding Whole-time Director) for attending a meeting of the Boardor Committee thereof shall be such sum as may be fixed by the Board provided thatthe same shall not exceed Rs. 100000- or such other sum as prescribed in theAct as amended from time to time. Travelling expenses incurred byDirector going out on Company Business. The Board may allow and pay to anyDirector who is not a bona-fide resident of the place where the RegisteredOffice of the Company or where the |

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| | | | meetings of the Board are actually held andwho has to come to such place for the purpose of attending any meeting such sumas the Board may consider fair compensation for travelling boarding lodging andother actual incidental expenses in addition to his fee for attending suchmeeting as specified above. If any Director be called upon to go or reside outof the bonafide place of his residence on the Company business he shall beentitled to be paid and reimbursed any travelling or other actual expensesincurred by him in connection with the business of the Company. 106. When office of Directors tobecome Vacant Subjectto Section 167 of the Act the office of a Director shall become vacant if- (a) he incurs any of thedisqualifications specified in section 164 under the act (b) he absents himself from all the meetingsof the Board of Directors held during a period of twelve months with or withoutseeking leave of absence of the Board (c) he acts in contravention of the provisionsof entering into contracts or arrangements in which he is directly orindirectly interested or (d) he fails to disclose his interestin any contract or arrangement in which he is directly or indirectly interested (e) he becomes disqualified by an orderof a court or the Tribunal (f) he is convicted by a court of anyoffence whether involving moral turpitude or otherwise and sentenced in respectthereof to imprisonment for not less than six months Provided that the office shall be vacatedby the director even if he has filed an appeal against the order of such court (g) he is removed in pursuance of theprovisions of this Act (h) he having been appointed adirector by virtue of his holding any office or other employment in the holdingsubsidiary 107. Directors may contract withCompany Except withthe consent of the Board of Directors given by a resolution at a meeting of theBoard and subject to such conditions the company |

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| | | | shall not enter into anycontract or arrangement with a related party with respect to (a) sale purchase or supply of anygoods or materials (b) selling or otherwise disposing ofor buying property of any kind (c) leasing of property of any kind (d) availing or rendering of any services (e) appointment of any agent forpurchase or sale of goods materials services or property (f) such related partys appointment toany office or place of profit in the company its subsidiary company or associatecompany (g) underwriting the subscription of anysecurities or derivatives thereof of the company. Every contract or arrangemententered as related party transaction shall be referred in the Boards report to theshareholders along with the justification for entering into such contract orarrangement. 108. Disclosure of interest byDirectors 1) Every Director of the Company who isin any way whether directly or indirectly concerned or interested in a contractor arrangement or proposed by Directors interested in a contract or arrangementor proposed contract or arrangement entered into or to be entered into by or onbehalf of the Company shall disclose the nature of his concern or interest at everyfinancial year or whenever there is change in the disclosure of interest. (2) Nothing in sub-clause (1) of this Article shall apply to any contract or arrangemententered into or to be entered into between the Company and any other companywhere any of the Directors of the Company or two or more of the Directorstogether holds or hold not more than two per cent of the paid-up share capitalin the other company. 109.Interested Directors not toparticipate or vote in Boards proceedings An interested director who is in any way whether byhimself or through any of his relatives or firm body corporate or otherassociation of individuals in which he or any of his relatives is a partnerdirector or a |

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| | | | member interested in a contract or arrangement or proposedcontract or arrangement entered into or to be entered into by or on behalf of acompany shall take any part in the discussion of or vote on any contract or arrangemententered into or to be entered into by or on behalf of the Company if he is inany way whether directly or indirectly concerned or interested in such contractor arrangement nor shall his presence count for the purpose of forming a quorumat the time of any such discussion or vote and if he does vote his vote shallbe void. A contract or arrangement entered intoby the company without disclosure or with participation by a director who isconcerned or interested in any way directly or indirectly in the contract or arrangementshall be voidable at the option of the company into by the company. 110. Register of Contracts in whichDirectors are interestedThe company shall keep registers in accordance with Section 189(1) givingseparately the particulars of all contracts or arrangements to which to matterof disclosure of interest by directors and related party transaction applies insuch manner and containing such particulars as may be prescribed and afterentering the particulars such registers shall be placed before the next meetingof the Board and signed by all the directors present at the meeting and shallwithin thirty days of appointment make such disclosure as are necessary for thepurpose of same. The Register shall be kept at the Registeredoffice of the Company and shall be open to inspection at such office shall beopen for inspection at such office during business hours and extracts may be takenthere from and copies thereof as may be required by any member of the companyshall be furnished by the company to such extent in such manner and on paymentof same fee as in the case of the Register of Members of the Company. 111. Director may be Director |

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| | | | of companiespromoted by the CompanyA Director may become a Director of any other company promoted by the Companyor in which it may be interested as a vendor shareholder or otherwise and nosuch Director shall be accountable for any benefits received as Director orshareholder of such a company except in so far as Section 188 of the Act may beapplicable. 112. Register ofDirectors and key managerial personnel and their Shareholding The Company shallkeep at its registered office a Register containing such particulars of itsDirectors and key managerial personnel Manager as maybe prescribed underSection 170 of the Act and shall comply with the provisions of the said Sectionin all respects. The register shall include the details of securities held byeach of them in the company or its holding subsidiary subsidiary of companys holdingcompany or associate companies. |
| | | | ***Proceedings of the Board*** |
| ☐ | ☑ | 67 | • 113. Meetings of Directors The Directors may meet together as aBoard for the dispatch of business from time to time so that at least four suchmeetings shall beheld in every year in such a manner that not more than onehundred and twenty days shall intervene between two consecutive meetings of theBoard. The Directors may adjourn and regulate their meetings as they think fit. |
| ☐ | ☑ | 68 | • 114. Board may appoint Chairman All meetings of the Directors shall bepresided over by the Chairman if present but if at any meeting of the Directorsthe Chairman is not present at the time appointed for holding the same then inthat case the Directors shall choose one of the Directors present to presideover the meeting. |
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| ☐ | ☑ | 69 | • 115. Certain persons not to beappointed Chairman Managing Directors Functional Director The Company shallnot appoint a person as its Chairman Managing Director or Whole-time Directorwho-(a) is an undischarged insolvent orhad at any time been adjudged an insolvent (b) is or has at any time been convictedby a Court of an offence involving moral turpitude. |
| ☐ | ☑ | 70 | • 116. Notice of Directors Meeting A meeting of the Board shall becalled by giving not less than seven days notice in writing to every directorat his address registered with the company and such notice shall be sent byhand delivery or by post or by electronic means. Board may becalled at shorternotice to transact urgent business where at least one independent director ifany shall be present. Every notice convening a meeting of the Board ofDirectors shall set out the agenda of the business to be transacted thereatinsufficient detail provided however that the meeting may consider any otherbusiness with the permission of the chair. |
| ☐ | ☑ | 71 | • 117. When meeting to be convened The Company Secretary or any directorof the Company may as and when directed by the Chairman to do so convene a meetingof the Board by giving a notice in writing to every Director. |
| ☐ | ☑ | 72 | • 118. Quorum at Board Meeting No business shall be transacted atany Board meeting unless a quorum of Board of Director is present at the timewhen the meeting proceeds to business. Save as otherwise provided herein thequorum for the Board meetings shall be as provided in section 174. |
| ☐ | ☑ | | • 119. Questions at Board meetings howto be decided All questionsarising at a Meeting of the Board or any |

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| | | | committee thereof shall be decided bymajority of votes of directors present and in case of equality of votes the Chairpersonshall have a second and casting vote. |
| ☐ | ☑ | 74 | • 120. Committee of Board Subject to the restrictions containedin Section 179 180 and other applicable provisions of the Act and precedingArticles the Board may delegate any of its powers to Committees of the Boardconsisting of such member or members of its body as it may think fit. PROVIDEDthat the Board may from time to time revoke modify and discharge any such Committeeof the Board either wholly or in part. Every Committee of the Board so formedshall in the exercise of the powers so delegated conform to any Policy regulationsthat may from time to time be laid down by the Board. All acts done by any suchCommittee of the Board in conformity with such regulations and in fulfilment ofthe purposes of their appointment shall have the like force and effect as ifdone by the Board. |
| ☐ | ☑ | | • 121. Meeting of Committee how to beGoverned The meetingsand proceedings of any such Committee of the Board consisting of two or moremembers shall be governed by the provisions of the act and guidelines laid downfor regulating the meetings and proceedings of the Directors so far as the sameare applicable there to and are not superseded by any regulations made by Directorsunder the last preceding Article. 122. Resolution by circulation No resolution on matters shall bedeemed to have been duly passed by the Board or by a Committee thereof bycirculation unless the resolution has been circulated in draft together withthe necessary papers if any to all the Directors or members of the Committee asthe case may be at their addresses registered with the company in India by handdelivery orby post or by courier or through such electronic means as |

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| | | | may beprescribed and has been approved by a majority of the directors or members whoare entitled to vote on the resolution. Resolution passed in such circulationshall be made part of the minutes of such meeting.Provided that where not less than one-third ofthe total number of directors of the company for the time being require thatany resolution under circulation must be decided at a meeting the chairpersonshall put the resolution to be decided at a meeting of the Board. 123.Defects in appointment ofDirectors not to invalidate actions taken All acts done by any meeting of the Board or by aCommittee of the Board or by any person acting as a Director shallnotwithstanding that it was subsequently noticed that there was some defect inthe appointment of such Director or persons acting as aforesaid or that they orany of them were disqualified or had vacated office or that the appointment ofany of them had been terminated by virtue of any provisions contained in theAct or these Articles be as valid as if every such person had been duly appointedand was qualified to be a Director and had not vacated his office or hisappointment had not been terminated. PROVIDED that nothing in this Articleshall be deemed to give validity to acts done by a Director after his appointmenthad been noticed by the Company to be invalid or to have terminated. 124. Minutes of proceedings ofmeetings of the Board (a) The Company shall cause minutes ofall proceedings of every meeting of the Board and committee thereof to be keptby making within thirty days of the conclusion of every such meeting record thereofin Minute Book kept for that purpose with their pages consecutively numbered. (b) Each page of every such book shallbe initialled or signed and the last page of the record of proceedings of eachmeeting in such book shall be dated and signed by the Chairman of the saidmeeting or the Chairman of the |

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| | | | next succeeding meeting. The minute books of the Board and committeemeetings shall be preserved permanently and kept in the custody of the companysecretary of the company or any director duly authorized by the Board for thepurpose and shall be kept in the registered office or such place as Board maydecide. The minutes shall also contain- (i) thenames of the Directors present at the meeting And (ii) inthe case of each resolution passed at the meeting the names of the Directors ifany dissenting from or not concurring with the resolution.Nothingdeemed to require the inclusion in any such minutes of any matter which in theopinion of the Chairman of the meeting - i. isor could reasonably be regarded as defamatory of any person. ii. isirrelevant or immaterial to the proceedings or iii. isdetrimental to the interests of the Company. TheChairman shall exercise an absolute discretion in regard to the inclusion ornon-inclusion of any matter in the minutes on the grounds specified in thissub-clause.(c)Minutes of meetings kept inaccordance with the aforesaid provisions shall be evidence of the proceedings recorded therein.<br>125.Powers of Board The Board may exercise all such powers of the Company and do all such acts andthings as it is entitled to do undersection 179 of the Act and rules madethereunder or by the Memorandum or Articles of the Company but shall not decidematters required to be exercised or done by the Company in General Meeting Subjectto these Articles no regulation made by the Company in General Meeting shallinvalidate any prior act of the Board which would have been valid if that regulation had not been so made. Certainpowers of the Board Without prejudice to the general powers conferred by theAct and preceding Article and so as not in any way to limit or restrict those powersand without prejudice to the other powers conferred by these Articles and by |

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| | | | GeneralBody it is hereby declared that the Directors shall have the following powersthat is to say power-(1) to pay and charge to the capital accountof the Company any commission or interest lawfully payable there out under theprovisions of Sections 40 of the Act (2) Subject to Sections 179 and 180 of theAct to purchase or otherwise acquire for the Company any property rights or privilegeswhich the Company is authorised to acquire at or for such price orconsideration and generally on such terms and conditions as they may think fitand in any such purchase or other acquisition to accept such title as theDirectors may believe or may be advised to be reasonably satisfactory (3) At their discretion and subject to theprovisions of the Act to pay for any property rights or privileges acquired byor services rendered to the Company either wholly or partially in cash or inshares bonds debentures mortgages or other securities of the Company and anysuch shares may be issued either as fully paid-up or with such amount creditedas paid-up thereon as may be agreed upon and any such bonds debenturesmortgages or other securities may be either specially charged upon all or anypart of the property of the Company and its uncalled capital or not so charged(4) To secure the fulfillment of any contractor engagement entered into by the Company in the normal course of business bymortgage or charge any of the property of the Company and its uncalled capital forthe time being or in such manner as they may think fit (5) To accept from any Member as far as maybe permissible by law a surrender of his shares or any part thereof on suchterms and conditions as shall be agreed upon (6) To appoint any person to accept and holdin trust for the Company any property belonging to the Company in which it isinterested or for any other purposes and to execute and do all such deeds andthings as may be |

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| | | 75 | required in relation to any such trust and to provide for theremuneration of such trust or trustees (7) To institute conduct defend compound orabandon any legal proceedings by or against the Company or its officers orotherwise concerning the affairs of the Company and also to compound and allowtime for payment or satisfaction of any debts due and of any claim or demand byor against the Company and to refer any differences to arbitration and observeand execute any awards made thereon (8) To act on behalf of the Company in allmatters relating to bankruptcy and insolvency (9) To make and give receipts releases and otherdischarges for moneys payable to the Company and for the claims and demands ofthe Company (10) Subject to applicable provisions of theAct to invest and deal with any moneys of the Company not immediately requiredfor the purposes thereof upon such security (not being shares of this Company)or without security and in such manner as they may think fit and from time totime to vary or realise such investments. Save as provided in Section 187 ofthe Act all investments shall be made and held in the Companys own name (11) To execute in the name and on behalf of theCompany in favour of any Director or other person who may incur or going toincur any personal liability whether as principal or surety for the benefit ofthe Company such mortgages of the Companys property (present and future) asthey think fit and any such mortgage may contain a power of sale and such otherpowers provisions covenants as shall be agreed upon(12) To open account with any bank or banksand to determine from time to time who shall be entitled to sign on the Companysbehalf bills notes receipts acceptances endorsements cheques dividend warrants releasescontracts and documents and to issue the necessary authority for such purpose (13) To |

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| | | | distribute by way of bonus orcommission amongst the staff of the Company on the profits of any particularbusiness or transaction and to charge such bonus or commission as part of the workingexpense of the Company 14) To provide for the welfare of employeesor ex-employees of the Company and their families or connections of suchpersons by building or contributing to the building of houses dwellings orchawls or by grants of money pension gratuities allowances bonus or otherpayments or by creating and from time to time subscribing or contributing toprovident and other funds associations institutions or trusts and by providingor subscribing or contributing towards places of instrument and recreation hospitalsand dispensaries medical and other attendance and other assistance as the Boardshall think fit and to subscribe or contribute or otherwise to assist or to guaranteemoney to charitable benevolent religious scientific national or otherinstitutions or objects which shall have any moral or other claim to support oraid by the Company either by reason of locality of operation or of public andgeneral utility or otherwise(15) Before recommending any dividend to setaside out of the profits of the Company such sums as they may think proper fordepreciation or toa Depreciation Fund or to an Insurance Fund or as a ReserveFund or Sinking Fund or any Special Fund to meet contingencies or to repaydebentures or debenture stock or for special dividends or for equalizingdividends or for repairing improving extending and maintaining any of theproperty of the Company and for such other purposes (including the purposesreferred to in the preceding clause) as the Board may in their absolute discretionthink conducive to the interest of the Company and subject to Section 179 ofthe Act to invest the several sums so set aside or so much thereof as requiredto be |

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| | | | invested upon such investments (other than shares of the Company) as theymay think fit and from time to time to deal with and vary such investments anddispose of and apply and expend all or any part thereof for the benefit of theCompany in such manner and for such purposes as the Board in their absolutediscretion think conducive to the interest of the Company notwithstanding thatthe matters to which the Board apply or upon which they expend the same or any partthereof may be matters to or upon which the capital moneys of the Company mightrightly be applied or expended and to divide the Reserve Fund or division orare serve Fund to another Reserve Fund or division of a Reserve Fund and withfull power to employ the assets constituting all or any of the above fundsincluding the Depreciation Fund in the business of the Company or in thepurchase or repayment of Debentures or debenture stock and without being bound tokeep the same separate from the other assets and without being bound to payinterest on the same with power however to the Board at their discretion to payor allow to the credit of such funds interest at such rate as the Board maythink proper.(16) To appoint and at their discretionremove or suspend such officers such as Executive Director general managersmanagers secretaries assistants supervisors clerks agents and servants etc. forpermanent temporary or special services as they may from time to time think fitand to determine their powers and duties and fix their salaries or emolumentsor remunerations and to require security in such instances and to such amountsas they may think fit. And also from time to time to provide for the managementand transaction of the affairs of the Company in any specified locality inIndia or abroad in such manner as they think fit and the provisions containedin the following sub-clauses shall be without |

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| | | | prejudice to the general powersconferred by this sub clause(17) From time to time and at any time to establishany number of offices and establishment for properly managing the affairs ofthe Company in any specified locality in India or elsewhere and to appoint stafffor such offices and to fix their remuneration18) Subject to the provisions of the Act fromtime to time and at any time to delegate to any such local Board or any memberor members thereof or any managers or agents so appointed or to any other person(s)any of the powers authorities and discretions for the time being vested in theBoard and to authorise the members for the time being of any such local Board orany of them to fill up any vacancies therein and to act notwithstanding vacanciesand any such appointment or delegation under the preceding and this sub-clausemaybe made on such terms and subject to such conditions as the Board may thinkfit and the Board may at any time remove any person so appointed and may annulor vary any such delegation(19) At anytime and from time to time byPower of Attorney under the Seal of the Company to appoint any person orpersons to be the Attorney or Attorneys of the Company for such purposes andwith such powers authorities and discretions (not exceeding those vested in orexercisable by the Board under these presents and excluding the power to make callsand excluding also those which are to be exercised by the Board in itsMeetings) and for such period and subject to such conditions as the Board mayfrom time to time think fit and any such appointment may (if the Board thinksfit) be made in favour of the members or any of the members of any local Boardestablished as aforesaid or in favour of any company or the shareholders directorsnominees or managers or any company or firm or otherwise in favour of anypersons whether appointed |

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| | | | by name or designation by the Board and any suchPower of Attorney may contain such powers for the protection or convenience ofsuch Attorney as the Board may think fit and Board may specifically bestowpowers enabling any such delegate or attorneys to sub-delegate all or any of thepowers authorities and discretions for the time being vested in them (20) Subject to Sections 188 of the Act foror in relation to any of the matters aforesaid or otherwise for the purposes ofthe Company to enter in to such negotiations and contracts and rescind and varysuch contracts and execute and do all such acts deeds and things in the nameand on behalf of the Company as they may consider expedient (21) From time to time to make vary andrepeal bye-laws for the regulations of the business of the Company regulate employmentof its officers and servants by making service Rules and Regulations (22) Maintain proper records at places as perprovisions of the Act and where the Company has a branch office whether in oroutside India the Company shall be deemed to have complied with this Article ifproper Books of Account relating to the transactions effected at the branchoffice are kept at the branch office and proper summarized returns madeup-to-date at intervals of not more than three months are sent by the branchoffice to the Company at its Office or other place in India at which theCompanys Books of Accounts are kept as aforesaid (23) Ensure proper maintenance of the Booksof Account which shall give a true and fair view of the state of the affairs ofthe Company or branch office as the case may be and explain its transactions.The Books of Account and other books and papers shall be open to inspection byany Director during business hours. |
| ☑ | ☐ | | • In case of a One Person Company where the company is having only one director all the businesses to be transacted at the meeting of the Board shall be entered |

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| | | | into minutes book maintained under section 118 such minutes book shall be signed and dated by the director the resolution shall become effective from the date of signing such minutes by the director. |
| | | | ***Chief Executive Officer, Manager, Company Secretary or Chief Financial Officer*** |
| ☐ | ☑ | 77 | • 126. CEO MANAGER CS AND CFOSubject to the provisions of the Act (i) A chief executive officer manager companysecretary or chief financial officer may be appointed by the Board for suchterm at such remuneration and upon such conditions as it may thinks fit and anychief executive officer manager company secretary or chief financial officer soappointed may be removed by means of a resolution of the Board (ii) A director may be appointed as chief executiveofficer manager company secretary or chief financial officer. As per provisionsof the Act or these regulations requiring or authorising a thing to be done by orto a director and chief executive officer manager company secretary or chieffinancial officer shall not be satisfied by its being done by or to the sameperson acting both as director and as or in place of chief executive officermanager company secretary or chief financial officer. |
| ☐ | ☑ | 78 | • |
| | | | ***The Seal*** |
| ☐ | ☑ | | • 127. The Seal its custody and use TheBoard shall provide a Common Seal for the purpose of the Company and shall havepower from time to time to destroy the same and substitute a new Seal in lieuthereof and the Board shall provide for the safe custody of the Seal for thetime being and the seal shall never be used except on the authority of theBoard or by Committee of the Board as |

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| | | | authorised. 128. Deeds how executedEvery deed or other instrument to which the Seal of the Company is required tobe affixed shall unless the same is executed by a duly constituted attorneyissued under the seal be signed by two Directors or one Director and Secretaryor some other person authorised by the Board for the purpose PROVIDED that in respect of the Share Certificatethe Seal shall be affixed in accordance with Article as mentioned above. |
| | | | ***Dividends and Reserve*** |
| ☐ | ☑ | 80 | • 129. Division of profits and dividends inproportion to amount paid- up (a) The profits of the Company subject to anyspecial rights relating thereto created or authorised to be created by theseArticles and subject to the provisions of these Articles shall be divisible amongthe Members in proportion to the amount of capital paid-up or credited aspaid-up on the shares held by them. (b) All dividends shall be apportioned and paidproportionately to the amounts paid or credited as paid on the shares heldduring any portion or portions of the period in respect of which the dividendis paid but if any share is issued on terms providing that it shall rank for dividendfrom a particular date such share shall rank for dividend accordingly |
| ☐ | ☑ | 81 | • 130. The Company in General Meeting maydeclare a dividend Company in General Meeting may declare dividendsto be paid to Members according to their respective rights but no dividendsshall exceed the amount recommended by the Board but the Company in GeneralMeeting may declare a smaller dividend. |
| ☐ | ☑ | | • 131. Dividends only to be paid out of Profits (a) No dividend shall be declared or paid bythe Company for any |

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| | | 82 | financial year except out of its profits for that year arrivedat in the manner set out in Section 123 of the Act. (b) Where owing to inadequacy or absence ofprofits in any financial year any Company proposes to declare dividend out ofthe accumulated profits earned by it in previous years and transferred by thecompany to reserves such declaration of dividend shall not be made except inaccordance with such rules as may be made in that behalf. (c) No dividend shall be declared or paid bya company from its reserves other than free reserves |
| ☐ | ☑ | 83 | • 132. Interim DividendSubject to the provisions ofSection123 the Board may from time to time pay the Memberssuch interim dividend as appear to it to be justified by the profits of theCompany. |
| ☐ | ☑ | 84 | • 133. Capital paid - up in advance to carryInterest Where capital is paid in advance of calls such capitalmay carry interest but shall not in respect thereof confer a right to dividendor participate in profits. |
| ☐ | ☑ | 85 | • 134. Retention of dividends until completionof transfer The Board may retain the dividends payable on shares in termsof Section 126 in respect of which any person is entitled to become a Member oron completion any person under those Articles is entitled to transfer or until suchperson shall become a Member in respect of such shares or shall duly transferthe same. |
| ☐ | ☑ | | • 135. Transfer of shares must be Registered Atransfer of shares shall not pass the right to any dividend declared thereonbefore the registration of transfer. Provided that where any instrument oftransfer of shares has been delivered to the Company for registration and thetransfer of such shares has not been registered by the Company it shallnotwithstanding anything contained in any other |

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| | | 86 | provision of this Act. (a) transfer the dividend in relation to suchshares to the Unpaid Dividend Account referred to in Section 124 of the Actunless the Company is authorised by the registered holder of such shares in writingto pay such dividend to the transferee specified in such instrument of transferand (b) keep in abeyance in relation to suchshares any offer of rights shares under clause (a) of sub-section (1) ofsection 62 of the Actandany issue of fully paid-up bonus shares in pursuance offirst proviso to sub-section (5) of section 123 of the Act. |
| ☐ | ☑ | 87 | • 136. No Member to receive dividend whilstindebted to the Company Companys right of reimbursement Thereon NoMember shall be entitled to receive payment as interest or dividend in respectof his shares whilst any money may be due or owing from him to the Company in respectof such share or shares or otherwise howsoever either alone or jointly with anyperson or persons and the Board may deduct from the interest or dividendpayable to any Member all sums of money so due from him to the Company |
| ☐ | ☑ | | • 137. Dividends how remitted (1) Unless otherwise directed any dividendpayable in cash may be paid by cheque or warrant or in any electronic mode orby a payslip or receipt or in any other manner having the force of a cheque orwarrant sent through the post to the registered address of the Member or personentitled or in case of joint holders to that one of them first named in theRegister in respect of the joint holdings. Every such cheque or warrant shallbe made payable to the order of the person to whom it is sent the Company shallnot be liable or responsible for any cheque or warrant or pay slip or receiptlost in transmission or for any dividend lost to the Member or person entitledthereto by the forged |

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| | | 88 | endorsement of any cheque or warrant or the forged signatureof any pay slip or receipt or the fraudulent recovery of the dividend by anyother means.(2) Notwithstanding anything contained inthese Articles any dividend declared maybe paid by Electronic Clearing Systemthrough any Sponsor Bank after getting registration with the Reserve Bank ofIndia for using this facility and collecting from the members necessary bank mandatein the prescribed format.138. Dividends and call together AnyGeneral Meeting declaring a dividend may on there commendation of the Boardmake a call on the Members of such amount as the meeting may fix but so thatthe call on each Member shall not exceed the dividend payable to him and sothat the call be made payable at the same time as the dividend and the dividendmay if so arranged between the Company and the Member be set off against thecalls.139.Unclaimed dividend Nounclaimed dividend shall be forfeited and all unclaimed dividends shall bedealt within accordance with the provisions of Section 124 and other applicableprovisions of the Act. 140. No interest against Dividend Nodividend shall bear interest against the company. |
| | | | ***Accounts*** |
| ☐ | ☑ | | • 141. Directors to keep true accounts (a) Every company shall prepare and keep atits registered office including its branch office or offices or at such other placein India as the Board thinks fit Books of Accounts and other relevant books andpapers and financial statement for every financial year which give a true and fairview of the state of the affairs of the company in accordance with Section 128of the Act with respect to- (I) all sums of money received and expendedby the Company and the matters in respect of which the receipts and expendituretake |

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| | | 89 | place (ii) all sales and purchases of goods by the Company (i) the assets and liabilities of the Company. (ii) stateof affairs of the company. (b) Where the Board decides to keep all orany of the Books of Account at any place other than the Office of the Companythe Company shall within seven days of the decision file with the Registrar aNotice in writing giving the full address of that other place in accordancewith Section 128 of the Act (c) The company may keep such books ofaccount or other relevant papers in electronic mode in such manner as may beprescribed. (d) The Company shall preserve in good orderthe Books of Account relating to a period of not less than eight financialyears immediately preceding a financial year. The books of account and otherrelevant books and papers maintained in electronic mode shall remain accessiblein India so as to be usable for subsequent reference together with the vouchersrelevant to any entry in such Books of Account. 142.Inspection of accounts or record bymembers No Member (not being a director) shall have any right ofinspecting any account or books or documents of the Company except as conferredby Section 94 of the Act or authorised by the Board or by the company ingeneral meeting. The Board may determine whether and to what extent and at whattime and place and under what conditions or regulations the accounts and booksof the Company or any of them may be open to inspection of the Members.Notwithstanding anything to the contrary contained hereinabove the authorised representativeof Promoters shall have a right to inspect the accounts books plant facilitydocuments records premises equipment and machinery and all other property ofthe Company at convenient time(s) after giving advance notice to the Company. 143. Statement of Accounts to be furnished toGeneral Meeting The Directors shall from |

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| | | | time to time inaccordance with Sections 129 and 134 and other applicable provisions of the Actcause to be prepared and to be laid before the Company in General Meeting suchBalance Sheets Profit and Loss Accounts and Reports as are required by these Sections. 144. Copies shall be sent to each Member Withoutprejudice to the provisions of Section 101 and subject to the provisions ofSection 136 of the Act a copy of the financial statements includingconsolidated financial statements auditors report and every other document requiredby law to be annexed or attached to the Balance Sheet shall at least twenty-onedays before the General Body Meeting at which the same are to be laid beforethe members be sent to the members of the company to every trustee for every holderof any debenture issued by the company and to all persons other than such membersor trustee being the person so entitled to attend the General Body Meeting. 145. Copy of financial statement to be filedwith registrar The Company shall comply with Section 137 ofthe Act as to filing copies of the Balance Sheet and Profit and Loss Accountand documents required to be annexed or attached thereto with the Registrar. |
| | | | ***Winding up*** |
| ☐ | ☑ | | • 146. Procedure for winding up Ifthe Company shall be wound up and the assets available for distribution amongthe members as such shall be insufficient to repay the whole of the paid upcapital such assets shall be distributed so that as nearly as may be the lossesshall be borne by the members in proportion to the capital paid up or whichought to have been paid up at the commencement of the winding-up on the sharesheld by them respectively. And if in a winding-up the assets available fordistribution among the members shall be |

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| | | 90 | more than sufficient to repay the wholeof the capital paid up at the commencement of the winding-up the excess shallbe distributed amongst the members in proportion to the capital at the commencementof the winding-up paid up or which ought to have been paid up on the sharesheld by them respectively. But this Article is to be without prejudice to therights of the holders of shares issued upon special terms and conditions. If the Company shall be wound up whether voluntarily orotherwise the liquidators may with the sanction of a Special Resolution divideamong the contributions in specie or kind any part of the assets of the Companyand may with the like sanction vest any part of the assets of the Company inTrustees upon such trusts for the benefit of the contributories or any of themas the liquidators with the like sanction shall think fit. |
| | | | ***Indemnity*** |
| ☐ | ☑ | 91 | • 147. Officers to be indemnifiedSubject to provisions of the Act every Officer of the company shall beindemnified out of the assets of the Company against any liability incurred byhim in defending any proceedings whether civil or criminal in which judgment isgiven in his favour or in which he is acquitted or in which relief is grantedto him by the court or the Tribunal. Provided that if such person is proved tobe guilty the premium paid on such insurance shall be treated as part of the remuneration. |
| | | | ***Others*** |
| ☐ | ☑ | | • 148. Company not bound to recognize holdingof shares on trust or any interest in shares other than that of registeredholder Except as ordered by a Court of competent jurisdictionor as required by law the Company shall not be bound to recognize holding of anyshare upon any trust and to recognize any equitable contingent |

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| | | | future orpartial interest in any share or any interest in any fractional part of a share(except only as is by these Articles otherwise expressly provided)any right inrespect of a share other than an absolute right thereto in accordance withthese Articles in the person from time to time registered as the holder thereofbut the Board shall be at liberty at their sole discretion to register any sharein the joint names of any two or more persons or the survivor or survivors ofthem. 149. Funds etc. of Company may not be appliedin purchase of shares of the Company The Company shall not give either directly orindirectly and either by means of a loan guarantee the provision of security orotherwise any financial assistance for the purpose of or in connection with thepurchase or subscription made or to be made by any person for purchase of anyshares in the Company except in conformity with the provisions of Section 67 ofthe Act.150. Underwriting and Brokerage Commissionmay be paid Subject to the provisions of Section 40 of the Act theCompany may at any time pay a commission to any person in consideration of his subscribingor agreeing to subscribe for any shares in or debentures of the Company orprocuring or agreeing to procure subscriptions for any shares in or debenturesof the Company but so that the commission shall not exceed in case of sharesfive percent of the price at which the shares are issued and in case ofdebentures two and a half percent of the price at which the debentures are issued.Such commission may be satisfied by payment in cash or by allotment of fully orpartly paid shares or debentures or partly in one way and partly in the other. BrokerageThe Company may also on any issue of shares or debentures pay such brokerage asmaybe lawful. 151.Interest out of Capital Interest maybepaid out of capital Where any shares are issued for the purposeof |

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| | | | raising money to defray the expenses of the construction of any work orbuilding or the provision of any plant which cannot be made profitable for alengthy period the Company may pay interest on so much of that share capital asis for the time being paid up for the period at the rate and subject to theconditions and restrictions provided by the Company Act 2013 and may charge thesame to capital as part of the cost of construction of the work or building orthe provision of plant. 152. Annual Returns TheCompany shall comply with the provisions of Sections 92 of the Act as to the makingof Annual Returns. 153. Borrowing powers Asper the provisions of Section 73 76 179 180 and other applicable provisionsof the Act the Board of Directors may from time to time at its discretion byresolution at a meeting of the Board and subject to the approval of theshareholders in General Meeting accept deposits from Members either in advanceof calls or otherwise and generally raise or borrow or secure the payment ofany sums of money for the purpose of the Company. Provided however where themoneys already borrowed (apart from temporary loans obtained from the Companysbankers in the ordinary due course of business) exceed the aggregate of thepaid-up capital of the Company its free reserves (not being reserves set apartfor any specific purpose) and the securities premium the Board shall not borrowsuch moneys without the consent of the Company in General Meeting. Payment or repayment of borrowed MoneysSubject to the provisions of Article 64 hereof the payment and repayment ofmoneys borrowed as aforesaid may be secured in such manner and upon such termsand conditions in all respects as the Board of Directors may think fit byresolutions passed at a meeting of the Board and in particular by the issue of bondsor debentures of the Company whether unsecured or |

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| | | | secured by a mortgage orcharge over all or any part of the property of the Company (both present andfuture) including its uncalled capital for the time being and debentures andother securities may be made assignable free from any equities between theCompany and the person to whom the same may be issued. Terms of issue of Debentures Anydebentures or other securities may be issued or otherwise and may be issued on conditionthat they shall be convertible into shares of any denomination and with anyprivileges and conditions to redemption surrender drawing allotment of sharesand attending (but not voting) at General Meetings.Debentures with the right to conversion intoor allotment of shares shall be issued only with the consent of the Company inGeneral Meetings accorded by special resolution. Register of charges to be Kept TheBoard shall cause a proper Register to be kept in accordance with the provisionsof Section 85 of the Act of all charges and floating charges affecting theproperty or assets of the Company or any of its undertakings and shall causethe requirements of Sections 77 79 and 81 to 87 (both inclusive)of the Act in thatbehalf to be duly complied with so far as they are required to be complied withby the Board .Register of Debenture holders The Company shall if at any time itissues debentures keep a Register and Index of Debenture holders in accordancewith Section 88 of the Act. The Company shall have the power to keep in any Countryoutside India a Register of Debenture holders residing outside India in suchmanner as may be prescribed. Application to Debentures and other securities Theprovisions of the Articles shall apply mutatis mutandis to debentures bonds or othersecurities issued by the company. 154.Dematerializationof Securities Definitions For the purpose of this Article Depositorymeans a depository as defined in clause (e) of |

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| | | | sub-section (1) of section 2 ofthe Depositories Act 1996. Beneficial Owner means a person or persons whosename is recorded in the Register maintained by a Depository under theDepository Act1996. SEBI means the Securities and Exchange Board of Indiaestablished under section 3 of the Securities Exchange Board of India Act 1992.Securities means the securities as defined in clause (h) of section 2 of the SecuritiesContracts (Regulation) Act 1956 Dematerialization of Securities Notwithstandinganything contained in these Articles the Company shall be entitled todematerialize its existing securities rematerialize its securities held in the Depositoriesand or offer its fresh securities in dematerialized form pursuant to the provisionsof the Depositories Act 1996 and the rules framed there under if any. Optionfor investors Every person subscribing to or holding securities of the Companyshall have the option to receive securities certificates or to hold thesecurities with the Depository. Such a person who is the beneficial owner ofthe securities can at any time optout of the Depository if permitted by the lawin respect of any security in the manner and within the time prescribed issuedto the beneficial owner the required certificate of the securities. If a personopts to hold his securities with a Depository the Company shall intimate suchDepository the details of allotment of the security and on receipt of theinformation the depository shall enter in its records the name of the allotteesas the beneficial owner of the securities. Securities in Depository to be inFungible Form All securities held by a Depository shall be dematerialized andbe in fungible form. Nothing contained in Section 88 89 112 and 186 of the Actshall apply to a Depository in respect of the securities held by it on behalfof the Beneficial Owners. Rights and Liabilities of Beneficial Owner (a )Notwithstanding |

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| | | 92 | anything to the contrarycontained in the Act or these Articles a Depository shall be deemed to be the registeredowner for the purposes of effecting transfer of ownership of security on behalfof the beneficial owners. (b) Save as otherwise provided in (a) abovethe Depository as the registered owner of the securities shall not have anyvoting rights or any other rights in respect of the securities held by it. (c) Every person holding securities of theCompany and whose name is entered as the beneficial owner in the records of theDepository shall be deemed to be a member of the Company. The beneficial owner of securities shall be entitledto all the rights and benefits and be subject to all the liabilities in respectof his securities which are held by a Depository. Service of DocumentsNotwithstanding anything to the contrary contained in the Act or Articles to thecontrary where securities are held in a Depository the records of thebeneficial ownership may be served by such Depository on the Company by meansof electronic mode or by delivery of floppies or discs .Provisions of Articles toapply to shares held in Depository Nothing contained in Section 56 of the Actor these Articles shall apply to a transfer of securities effected by atransferor and transferee both of whom are entered as beneficial owners in therecords of a Depository.Allotment of Securities dealt within a DepositoryNotwithstanding anything in the Act or these Articles where securities are dealtwith by the Depository the Company shall intimate the details thereof to the Depositoryimmediately on allotment of such securities. Distinctive numbers of securities held in thedepository Mode Nothing contained in the Act or these Articles regarding thenecessity of having distinctive numbers on securities issued by the Companyshall apply to securities held with a Depository. Register and Index of Beneficial Owners TheRegister and |

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| | | | Index of Beneficial Owners maintained by a Depository under theDepositories Act 1996 shall be deemed to be the Register and Index of memberand security holder for the purpose of these Articles. 155. Conversion of Shares into Stock andReconversion Shares may be converted into stock and reconverted TheCompany in General Meeting may convert any paid up shares into stock and whenany shares shall have been converted into stock the several holders of suchstock may henceforth transfer their respective interest therein or any part of suchinterest in the same manner and subject to the same regulations as if no suchconversion had taken place or as near thereto as circumstances will admit. The Companymay at anytime reconvert any stock into paid-up shares. Rights of stock holdersThe holders of stock shall according to the amount of stock held by them havethe same rights privileges and advantages as regards dividends voting at meetingsof the Company and other matters as if they held the shares from which thestock arose156. Audit Accounts to be audited TheAuditors of the Company shall be appointed or reappointed by the Comptrollerand Auditor General of India and their remuneration rights and duties shall beregulated by Section 139 to 143 and 145to 148 of the Act. Powers of theComptroller and Auditor General of India The Comptroller and Auditor General ofIndia shall have the powers-(a) to direct the manner in which theCompanys accounts shall be audited by the auditors appointed in pursuance ofArticle hereof and to give such auditors instruction in regard to any matterrelating to the performance of their functions as such. (b) to conduct a supplementary or test auditof the financial statement of the Company by such person or persons as he may authorizein this behalf and for the purposes of such audit to have access at allreasonable times to all accounts |

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| | | | account books vouchers documents and other papersof the Company and to require information or additional information to befurnished to any person or persons so authorized on such matters by such personor persons and in such form as the Comptroller and Auditor General may bygeneral or special order direct. Comments upon or supplement to audit reportby the Comptroller Auditor General of India to be placed before the annualgeneral meeting The auditors aforesaid shall submit a copy of his her auditreport to the Comptroller and Auditor General of India who shall have the rightto comment upon or supplement such audit report in such manner as he may thinkfit. Any such comments upon or supplement to the audit report shall be placedbefore the Annual General Meeting of the Company at the same time and in thesame manner as the audit report.157. Service of Documents Manner of Service of Documents Adocument or notice may be served or given by the Company to any Member eitherthrough speed post registered post or through electronic mode to his registeredaddress or (if he has no registered address in India) to the address if any inIndia supplied by him to the Company for serving documents or notices on him. Noticeis to be sent by the company through its authorized and secured computerprogramme which is capable of producing confirmation and keeping record of suchcommunication addressed to the person entitled to receive such communication atthe last electronic mail address provided by the member. The notice may be sentthrough e-mail as a text or as an attachment to e-mail or as a notificationproviding electronic link or Uniform Resource Locator for accessing such noticethrough in-house facility or its registrar and transfer agent or authorise anythird party agency providing bulk e-mail facility. When notices or documentsserved on Members Where a |

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| | | | document or notice is sent by post service of thedocument or notice shall be deemed to be effected by properly addressingprepaying and posting a notices to him. Explanatory Statement of material factsunder Section 102 need not be advertised but it will be mentioned in the advertisementthat the Statement has been forwarded to the Members. On personal representatives etc. A documentor notice may be served or given by the Company on or to the persons entitledto a share inconsequence of the death or insolvency of a Member by sending itthrough the post in prepaid letter addressed to them by name or by the title ofrepresentative of the deceased or assignee of the insolvent or by any like descriptionat the address (if any)in India supplied for the purpose by the persons claimedto be entitled or until such an address has been so supplied by serving the documentor notice in any manner in which the same might have been given if the death orinsolvency had not occurred. To whom documents or notices must be served orgiven Documents or notices of every General Meeting shall be served or given insame manner as herein before or to (a) every member of the company legalrepresentative of any deceased member or the assignee of an insolvent member (b) the auditor or auditors of the companyand (c) every director of the company. Members bound by documents or notices servedon or given to previous holders Every person who by operation of law transfer or other means whatsoevershall become entitled to any share shall be bound by every document or noticein respect of such share which previously to his name and address being enteredin the Register of Members shall have been duly served on or given to theperson from whom he derives his title to such shares. Documents or notice byCompany and signature thereto Any document |

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| | | | or notice to be served or given bythe Company may be signed by a director or key managerial personnel or anofficer of the company duly authorised by the Board in this behalf. Service of documentor notice by Member All documents or notices to be served or given by Memberson or to the Company or any officer thereof shall be served or given by sendingit to the Company or Officer at the Office by post or through electronic modeunder a certificate of posting orby registered post or through email.158. Secrecy (a) Every Director Manager Auditor Treasurer Trusteemember of a committee officer servant agent accountant or other person employedin the business of the Company shall if so required by the Directors before enteringupon his duties sign a declaration pledging himself to observe strict secrecyrespecting all transactions and affairs of the Company with the customers andthe state of the accounts with individuals and in matters relating thereto andshall by such declaration pledge himself not to reveal any of the matters whichmay come to his knowledge in the discharge of his duties except when requiredso to do by the Directors or by law or by the person to whom such mattersrelate and except so far as may be necessary in order to comply with any of theprovisions in these presents contained. (b) No Member shall be entitled to visit orinspect any work of the Company without the permission of the Directors or torequire discovery of or any information respecting any details of the Companystrading or any matter which is or maybe in the nature of a trade secret mysteryof trade secret process or any other matter which may relate to the conduct ofthe business of the Company and which in the opinion of the Directors it wouldbe in expedient in the interest of the Company to disclose. 159.Copies of Memorandum and Articles of Associationto be sent by the Company |

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| | | | Copies of the Memorandum and Articles of Associationof the Company and other documents referred to in Section 17 of the Act shallbe sent by the Company to every Member at his request within seven days of therequest on payment of such fees as may be prescribed. |

**Subscriber Details**

| S. No. | Subscriber Details | | | | |
|---|---|---|---|---|---|
| | ***Name, Address, Description and Occupation** | **DIN / PAN / Passport number** | ***Place** | **DSC** | **Dated** |
| 1 | PFC Consulting Limited having R/o First Floor, Urjanidhi, 1, Barakhamba Lane, Connaught Place, New Delhi?110001 Through its Authorised representative Sachin Arora S/o Prem Lal Arora R/o F-5, 1903, Supertech, Eco, Village, 1, Noida, Gautam BuddhNagar, Uttar Pradesh 201301. Occupation: Service | A*G*A*4*4* | New Delhi | | 30/04/2026 |
| 2 | Shri Naveen Kumar S/o Jagdish Chander R/o F-024, Assotech Windsor Court Sector 78, Noida, Uttar Pradesh, India 201301 Occupation - Service (As Nominee of PFC Consulting Limited) | 1*4*7*5* | New Delhi | | 30/04/2026 |

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| 3 | Shri Rakesh Mohan S/o Lakshman Singh R/o Flat No. 364, Sunehari Bagh Apartment, Sector-13 Rohini, Rohini sector-14, Northwest Delhi, Delhi - 110085 Occupation: Service (As Nominee of PFCConsulting Limited) | 0*6*4*2* | New Delhi | | 30/04/2026 |
| 4 | Shri Neeraj Singh S/o Dayashankar Singh R/o C-703 F-2 The Crescent Apartment, Sector-50, Noida, Gautam Budha Nagar, Uttar Pradesh - 201301 Occupation - Service (As Nominee of PFC Consulting Limited) | 0*6*3*9* | New Delhi | | 30/04/2026 |
| 5 | Shri Sanjay Kumar Nayak S/o Jagabandhu Nayak R/o K 713, Jalvayu Tower, Sector-56, Gurgaon, Haryana - 122011, Occupation - Service (As Nominee of PFC Consulting Limited) | 0*1*7*9* | New Delhi | | 30/04/2026 |
| 6 | Shri Anubhav Kansal S/o Krishan Bhagwan Kansal B1-304 3rd Floor Tower B1 Ivy County Sector-75 Gautam Buddha Nagar Noida Uttar Pradesh 201301 Occupation - Service (As Nominee of PFC Consulting Limited) | 1*5*8*3* | New Delhi | | 30/04/2026 |
| 7 | Shri Sachin Shukla S/o Raj Kumar Shukla R/o 4th Floor, House No. 6, H1 Block, Goo | 0*6*3*6* | New Delhi | | 30/04/2026 |

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|---|---|---|---|---|---|
| | dEarth City Center, South City II, Gurgaon - 122018, Haryana, India, Occupation - Service (As Nominee of PFC Consulting Limited) | | | | |

| **Signed before me** | | | | | | |
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| **Name Prefix** *(ACA/FCA/ACS/ FCS/ACMA/ FCMA)* | ***Name of the witness** | ***Address, Description and Occupation** | ***DIN / PAN / Passport number / Membership** | ***Place** | **DSC** | **Dated** |
| FCS | Prakash Verma | Address: Plot No-14, Rajbagh Colony, Sahibabad, Near Rajbagh Metro Station and Jain Mandir Road, Ghaziabad-201005, Uttar Pradesh, Description: Company Secretary in Practice, Occupation: CS in Practice | 9*5* | New Delhi | | 30/04/2026 |

# Form No. INC-33

**e-MOA (e-Memorandum of Association)**
[Pursuant to Schedule I (see Sections 4 and 5) to the Companies Act, 2013)]

सत्यमेव जयते

Form language

(•) English ( ) Hindi

*Refer instruction kit for filing the form*

*All fields marked in * are mandatory*

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*** Table applicable to company as notified under schedule I of the Companies Act, 2013**

*(A - MEMORANDUM OF ASSOCIATION OF A COMPANY LIMITED BY SHARES*
*B - MEMORANDUM OF ASSOCIATION OF A COMPANY LIMITED BY GUARANTEE AND NOT HAVING A SHARE CAPITAL*
*C - MEMORANDUM OF ASSOCIATION OF A COMPANY LIMITED BY GUARANTEE AND HAVING A SHARE CAPITAL*
*D - MEMORANDUM OF ASSOCIATION OF AN UNLIMITED COMPANY AND NOT HAVING SHARE CAPITAL*
*E - MEMORANDUM OF ASSOCIATION OF AN UNLIMITED COMPANY AND HAVING SHARE CAPITAL)*

A - MEMORANDUM OF ASSOCIATION OF A COMPANY LIMITED BY SHARES

**Table A/B/C/D/E**

1 The name of the company is

FATEHGARH II TRANSMISSION LIMITED

2 The registered office of the company will be situated in the State of

Delhi

3 (a) The objects to be pursued by the company on its incorporation are:

1. To develop Power System Network

To plan, promote and develop an integrated and efficient power transmission system network in all its aspects including planning, investigation, research, design and engineering, preparation of preliminary, feasibility and definite project reports, construction, operation and maintenance of transmission lines, sub-stations, load dispatch stations and communication facilities and appurtenant works, coordination of integrated operation of state, regional and national grid system, execution of turn-key jobs for other utilities/organizations and wheeling of power in accordance with the policies, guidelines and objectives laid down by the Central Government from time to time.

2. To study, investigate, collect information and data

To study, investigate, collect information and data, review operation, plan, research, design and prepare Report, diagnose operational difficulties and weaknesses and advise on the remedial measures to improve, undertake development of new and innovative product connected with business of the Company as well as modernize existing EHV, HV lines and Sub-Stations.

3. To act as Consultants/ Technical Advisers of public/ private sector enterprises etc.

To act as consultants, technical advisors, surveyors and providers of technical and other services to Public or Private Sector enterprises engaged in the planning, investigation, research, design and preparations of preliminary, feasibility and definite project reports, manufacture of power plant and equipment, construction, generation, operation and maintenance of power transmission system from power generating stations and projects, transmission, distribution and sale of power.

(b) *Matters which are necessary for furtherance of the objects specified in clause 3(a) are

1. To obtain authority etc. to carry out its objects

To obtain license, approvals and authorization from Governmental Statutory and Regulatory Authorities, as may be necessary to carry out and achieve the Objects of the Company and connected matters which may seem expedient to develop the business interests of the Company in India and abroad.

2. To obtain charters, concession etc.

To enter into any arrangement with the Government of India or with any State Government or with other authorities/ commissions, local bodies or

public sector or private sector undertakings, Power Utilities, Financial Institutions, Banks, International Funding Agencies and obtain such charters, subsidies, loans, advances or other money, grants, contracts, rights, sanctions, privileges, licenses or concessions whatsoever (whether statutory or otherwise) which the Company may think it desirable to obtain for carrying its activities in furthering the interests of the Company or its members.

3. To enter into Implementation/ Construction Agreement

To enter into any agreement, contract or any arrangement for the implementation of the power generation, evacuation, transmission and distribution system and network with Power/Transmission Utilities, State Electricity Boards, Vidyut Boards, Transmission Companies, Generation Companies, Licensees, Statutory bodies, other organizations (whether in Private, Public or Joint Sector Undertaking) and bulk consumers of power etc.

4. To carry on the business or purchasing, importing, exporting and trading power

To carry on the business or purchasing, importing, exporting and trading of power subject to the provisions of Electricity Act, 2003 and to supply electric power generated by other plants to distribution companies, trading companies, other generation companies and other Persons, and in this regard execute agreements with Central and State generating authorities, departments or companies, Independent Power Producers and other Persons.

5. To enter into Agreements; etc.

To secure the payments of money, receivables on transmission and distribution of electricity and sale of fuel, as the case may be, to the State Electricity Boards, Vidyut Boards, Transmission Utilities, Generating Companies, Transmission Companies, Distribution Companies, State Governments, Licensees, statutory bodies, other organizations (whether in Private, Public or Joint Sector Undertaking) and bulk consumers of power etc. through Letter of Credits/ESCROW and other security documents.

6. To execute transmission service Agreements

To execute Transmission Service Agreements or other agreements for transmission of power to distribution, trading, and other companies, State Electricity Boards, State Utilities and any other organization and Persons.

7. To co-ordinate with Central Transmission Utility

To coordinate with the Central Transmission Utility for transmission of electricity under the provisions of Electricity Act 2003.

8. To borrow money

Subject to provisions of Sections 73, 179, 180 and other applicable provisions of the Companies Act, 2013 and subject to other laws or directives, if any, of SEBI/RBI, to borrow money in Indian rupees or foreign currencies and obtain foreign lines of credits/ grants/aids etc. or to receive money or deposits from public for the purpose of the Company's business in such manner and on such terms and with such rights, privileges and obligations as the Company may think fit. The

Company may issue bonds/ debentures whether secured or unsecured; bills of exchange, promissory notes or other securities, mortgage or charge on all or any of the immovable and movable properties, present or future and all or any of the uncalled capital for the time being of the Company as the Company may deem fit and to repay, redeem or pay off any such securities or charges.

9. To lend money

To lend money on property or on mortgage of immovable properties or against Bank guarantee and to make advances of money against future supply of goods and services on such terms as the Directors may consider necessary and to invest money of the Company in such manner as the Directors may think fit and to sell, transfer or to deal with the same.

10. To acquire, own, lease or dispose of the property

To own, possess, acquire by purchase, lease or otherwise rights, title and interests in and to, exchange or hire real estate, equipment, Transmission lines, lands, buildings, apartments, plants, equipment, machinery, fuel blocks and hereditaments of any tenure or descriptions situated in India or abroad or any estate or interest therein and any right over or connected with land so situated and turn the same to account in any manner as may seem necessary or convenient for the purpose of business of the Company and to hold, improve, exploit, re-organize, manage, lease, sell, exchange or otherwise dispose of the whole or any part thereof.

11. To deal in Scrips/Govt. Securities

Subject to applicable provisions

of law, to subscribe for, underwrite, or otherwise acquire, hold, dispose of and deal with the shares, stocks, debentures or other securities and titles of indebtedness or the right to participate in profits or other similar documents issued by any Government authority, Corporation or body or by any company or body of persons and any option or right in respect thereof.

12. To create funds and appropriate profits

To create any depreciation fund, reserve fund, sinking fund, insurance fund, gratuity, provident fund or any other fund, for depreciation or for repairing, improving extending or maintaining any of the properties of the Company or for any other purposes whatsoever conducive to the interests of the Company.

13. To purchase or otherwise acquire companies

To acquire shares, stocks, debentures or securities of any company carrying on any business which this Company is entitled to carry on or acquisition of undertaking itself which may seem likely or calculated to promote or advance the interests of the Company and to sell or dispose of or transfer any such shares, stocks or securities and the acquired undertaking.

14. To enter into partnership Agreement or Merge /amalgamate

To enter into partnership or into any agreement for joint working, sharing or pooling profits, joint venture, amalgamation, union of interests, co-operation, reciprocal concessions or otherwise or amalgamate with

any person or company carrying on or engaged in or about to carry on or engaged in any business or transaction in India or abroad which the Company is authorized to carry on or engage in any business undertaking having objects identical or similar to, as are being carried on by this Company.

15. To have agencies and branch offices in India and abroad

To establish and maintain agencies, branch offices and local agencies, to procure business in any part of India and world and to take such steps as may be necessary to give the Company such rights and privileges in any part of the world as deemed proper in the interest of the Company.

16. To promote institutions or other companies

To promote and undertake the formation of any institution or Company or subsidiary company or for any aforesaid objects intended to benefit the Company directly or indirectly and to coordinate, control and guide their activities.

17. (a) To acquire know how and import-export of machinery and tools etc.

To negotiate and enter into agreements and contracts with domestic and foreign companies, persons or other organizations, banks and financial institutions, in relation to the business of the Company including that of technical know-how, import, export, purchase or sale of plant, machinery, equipment, tools, accessories and consumables, financial assistance and for carrying out all or any of the objects of the Company.

(b) To negotiate and enter into

agreements etc.

To negotiate and enter into agreements and contracts for execution of turnkey jobs, works, supplies and export of plant, machinery, tools and accessories etc.

18. To enter into contracts/arrangements in connection with issue of shares/securities.

Upon and for the purpose of any issue of shares, debentures or any other securities of the Company, to enter into agreement with intermediaries including brokers, managers of issue/commission agents and underwriters and to provide for the remuneration of such persons for their services by way of payment in cash or issue of shares, debentures or other securities of the Company or by granting options to take the same or in any other manner as permissible under the law.

19. To enter into contracts of indemnity and/or guarantee

To enter into contracts of indemnity and get guarantee and allocations for the business of the Company.

20. To arrange for Training and Development

To make arrangements for training of all categories of employees and to employ or otherwise engage experts, advisors, consultants etc. in the interest of achieving the Company's objects.

21. To promote conservation, protect environment, theft etc.

To promote conservation and protection of electricity from theft, safety of life and to protect

environments including air, land and water etc.

22. To provide for welfare of employees

To pay and provide for the remuneration, amelioration and welfare of persons employed or formerly employed by the Company and their families providing for pension, allowances, bonuses, other payments or by creating for the purpose from time to time the Provident Fund, Gratuity and other Funds or Trusts. Further to undertake building or contributing to the building or houses, dwellings or chawls by grants of money, or by helping persons employed by the Company to effect or maintain insurance on their lives by contributing to the payment of premium or otherwise and by providing or subscribing or contributing towards educational institutions, recreation, hospitals and dispensaries, medical and other assistance as the Company may deem fit.

23. To take Insurance

To ensure any rights, properties, undertakings, contracts, guarantees or obligations or profits of the Company of every nature and kind in any manner with any person, firm, association, institution or company.

24. To share the profits pay, dividends and provide bonus etc

To distribute among members of the Company dividend including bonus shares out of profits, accumulated profits or funds and resources of the Company in any manner permissible under law.

25. To institute and defend the legal proceedings

To institute, conduct, defend,

compound or abandon any legal proceedings by or against the Company or its officers or otherwise concerning the affairs of the Company and also to compound and to allow time for payment or satisfaction of any debts or recovery due, claims or demands by or against the Company and to refer any claims or demands by or against the Company or any differences arising in execution of contracts to conciliation and arbitration and to observe, comply with and/or challenge any awards preliminary, interim or final made in any such arbitration.

26. To pay and subsequently write off preliminary expenses

To pay out of the funds of the Company all costs, charges, expenses and preliminary and incidental to the promotion, formation, establishment and registration of the Company or other expenses incurred in this regard.

27. To contribute and make donations

Subject to provisions of Companies Act, 2013 to contribute money or otherwise assist to charitable, benevolent, religious, scientific national, defense, public or other institutions or objects or purposes.

28. To open accounts in Banks

To open an account or accounts with any individual, firm or company or with any bank bankers or shrofs and to pay into and withdraw money from such account or accounts.

29. To accept gifts, donations etc.

To accept gifts, bequests, devises and donations from members

and others and to make gifts to members and others of money, assets and properties of any kind.

30. To pursue the objects of the Company as principal, agents, trustee or in any other capacity

To carry out all or any of the objects of the company and do all or any of the above things in any part of the world and either as principal, agent, contractor or trustee or otherwise and either alone or in conjunction with others.

31. To enter into Contracts

To negotiate and/or enter into agreement and contract with individuals, companies, corporations, foreign or Indian, for obtaining or providing technical, financial or any other assistance for carrying on all or any of the objects of the Company and also for the purpose of activating, research, development of projects on the basis of know-how and/or financial participation and for technical collaboration, and to acquire or provide necessary formulate and patent rights for furthering the objects of the company.

32. To contribute towards promotion of trade and industry

To aid pecuniary or otherwise, any association, body or movement having for its object the solution, settlement or surmounting of industrial or labour problems or trouble or the promotion of industry or trade.

33. To take all necessary steps for winding up of the company

Subject to the provisions of Companies Act, 2013 or any amendment or re-enactment thereof in the event of winding

up to distribute among the members in specie any property of the Company or any proceeds of sale on disposal of any property in accordance with the provisions of the Act.

34. To do and perform all coincidental and ancillary acts for the attainment of its objects

To do all such other things as may be deemed incidental or conducive to the attainment of the above Objects or any of them and to carry on any business which may seem to the Company capable of being conveniently carried in connection with any of the Company's Objects or calculated directly or indirectly to enhance the value of or render profitable any of the Company's property or rights.

35. To take up studies and research experiments.

To establish, provide, maintain and conduct or otherwise subsidies research laboratories and experimental workshops for scientific, technical or researches, experiments and to undertake and carry on directly or in collaboration with other agencies scientific and technical research experiments and tests of all kinds and to process, improve and invent new products and their techniques of manufacture and to promote, encourage, reward in every manner studies and research, scientific and technical investigations and inventions of any kind that may be considered likely to assist, encourage and promote rapid advances in technology, economies, import substitution or any business which the Company is authorized to carry on.

36. To evolve scheme for restructuring or arrangement.

Subject to provisions of the

Companies Act, 2013, to evolve scheme for restructuring or arrangement, to amalgamate or merge or to enter into partnership or into any consortium or arrangement for sharing of profits, union of interests, co-operation, joint venture with any Person or Persons, partnership firm/firms, or company or companies carrying on or engaged in any operation capable of being conducted so conveniently in cooperation with the business of the Company or to benefit the Company or to the activities for which the Company has been established.

37. To apply for purchase, or otherwise acquire.

To apply for purchase, or otherwise acquire any trademarks, patents, brevets, inventions, licenses, concessions and the like, conferring any exclusive or nonexclusive or limited rights to use, or any secret or other information as to any invention which may be capable of being used for any of the purposes of the Company, or the acquisition of which may benefit the Company and to use, exercise, develop or grant licenses in respect of or otherwise turn to account the property, rights or information so acquired.

38. To sell, dispose or hive off an undertaking of the Company

To sell, dispose or hive off an undertaking of the Company or any part thereof for such consideration as the Company may think fit and in particular for shares, debentures or securities of any other association, corporation or company.

39. To sell, improve, manage, develop

To sell, improve, manage, develop, exchange, loan, lease or let, under-lease, sub - let, mortgage, dispose of, deal with in any manner, turn to account or otherwise deal with any rights or property of the Company.

40. To outsource parts of its activities

To outsource parts of its activities to achieve higher efficiencies and throughputs in the achievement of its business goals.

4 The liability of the member(s) is limited, and this liability is limited to the amount unpaid if any, on the shares held by them.

5 Every member of the company undertakes to contribute:

(i) to the assets of the company in the event of its being wound up while he is a member, or within one year after he ceases to be a member, for payment of the debts and liabilities of the company or of such debts and liabilities as may have been contracted before he ceases to be a member; and

(ii) to the costs, charges and expenses of winding up (and for the adjustment of the rights of the contributories among themselves), such amount as may be required, not exceeding * [ ] rupees.

(iii) The share capital of the company is [100000] rupees, divided into

| | | | | | |
|---|---|---|---|---|---|
| 10000 | Equity Share | Shares of | 10 | Rupees each | |

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☑ We, the several persons, whose names and address are subscribed, are desirous of being formed into a company in pursuance of this memorandum of association, and we respectively agree to take the number of shares in the capital of the company set against our respective names:

☐ I, whose name and address is given below, am desirous of forming a company in pursuance of this memorandum of association and agree to take all the shares in the capital of the company:

☐ We, the several persons, whose names and addresses are subscribed, are desirous of being formed into a company in pursuance of this memorandum of association:

| Subscriber Details | | | | | |
|---|---|---|---|---|---|
| **S. No.** | ***Name, Address, Description and Occupation** | **DIN / PAN / Passport number** | **No. of shares taken** | **DSC** | **Dated** |
| 1 | Shri Naveen Kumar<br>S/o Jagdish Chander<br>R/o F-024, Assotech Windsor Court Sector78, Noida, Uttar Pradesh, India 201301<br>Occupation - Service<br>(As Nominee of PFC Consulting Limited) | 1*4*7*5* | 100 Equity,0 Preference | | 30/04/2026 |
| 2 | Shri Rakesh Mohan<br>S/o Lakshman Singh<br>R/o Flat No 364, Sunehari Bagh Appartment, Sector-13 Rohini, Rohini sector-14, North West Delhi, Delhi - 110085<br>Occupation -Service<br>(As Nominee of PFC Consulting Limited) | 0*6*4*2* | 100 Equity,0 Preference | | 30/04/2026 |
| 3 | PFC Consulting Limited having R/o First Floor, Urjanidhi, 1, Barakhamba Lane, Connaught Place, New Delhi - 110001 through its Authorised representative Sachin Arora<br>S/o Prem Lal Arora<br>R/o F-5, 1903, Supertech, Eco, Village, 1, Noida, Gautam Buddh Nagar, Uttar Pradesh-201301<br>Occupation-Service | A*G*A*4*4* | 9400 Equity,0 Preference | | 30/04/2026 |
| 4 | Shri Neeraj Singh<br>S/o Dayashankar Singh<br>R/o C-703 F-2, The Crescent Appartment, Sector-50, Noida, Gautam Budha Nagar, Uttar Pradesh - 201301<br>Occupation - Service<br>(As Nominee of PFC Consulting Limited) | 0*6*3*9* | 100 Equity,0 Preference | | 30/04/2026 |
| 5 | Shri Sanjay Kumar Nayak<br>S/o Jagabandhu Nayak<br>R/o K713, Jalvayu Tower, Sector-56, Gurgaon, Haryana - 122011<br>Occupation Service<br>(As Nominee of PFC Consulting Limited) | 0*1*7*9* | 100 Equity,0 Preference | | 30/04/2026 |
| 6 | Shri Anubhav Kansal<br>S/o Krishan Bhagwan Kansal<br>R/o B1-304 3rd Floortower B1 Ivy County Sector-75 Gautam Buddha Nagar Noida Uttar Pradesh 201301<br>Occupation - Service<br>(As Nominee of PFC Consulting Limited) | 1*5*8*3* | 100 Equity,0 Preference | | 30/04/2026 |
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| | | | | | |
|---|---|---|---|---|---|
| 7 | Shri Sachin Shukla<br>S/o Raj Kumar Shukla<br>R/o 4th Floor,House No 6, H1 Block, Good Earth City Center, South City II, Gurgaon - 122018, Haryana, India,<br>Occupation - Service<br>(As Nominee of PFC Consulting Limited) | 0*6*3*6* | 100 Equity,0 Preference | | 30/04/2026 |
| **Total shares taken** | | | 10000 Equity,0 Preference | | |

| **Signed before me** | | | | | |
|---|---|---|---|---|---|
| **Membership type of the witness** ***(ACA/FCA/ACS/FCS/ACMA/FCMA)*** | ***Name of the witness** | ***Address, Description and Occupation** | **DIN / PAN / Passport number / Membership number** | **DSC** | **Dated** |
| FCS | Prakash Verma | Address: Plot No-14, Rajbagh Colony, Sahibabad, Near Rajbagh Metro Station and Jain Mandir Road, Ghaziabad-201005, Uttar Pradesh, India, Description: Company Secretary in Practice, Occupation: Company Secretary in Practice. | 9*5* | | 30/04/2026 |

7 Shri / Smt [ ] [ ] Of [ ] resident of [ ] aged [ ] years shall be the nominee in the event of death of the sole member.

# PFC CONSULTING LIMITED

**(A wholly owned subsidiary of PFC Limited)**
**Regd. Office: First Floor, "Urjanidhi", 1, Barakhamba Lane, Connaught Place, New Delhi – 110001, (India) Fax: 011-23443990**

## GLOBAL INVITATION (THROUGH E-BIDDING ONLY)

### FOR SELECTION OF TRANSMISSION SERVICE PROVIDER ON BUILD, OWN, OPERATE AND TRANSFER (BOOT) BASIS FOR INTER-STATE TRANSMISSION PROJECTS

**PFC Consulting Limited,** a wholly owned subsidiary of Power Finance Corporation Limited (A Government of India Undertaking), invites proposals for setting up of transmission projects on Build, Own, Operate and Transfer (BOOT) basis following single stage two envelope process of "Request for Proposal" (RFP).

Interested bidders may refer to the RFP notification and RFP documents available on the website **https://www.mstcecommerce.com** and **https://www.pfcclindia.com.**

The Bidders may obtain the RFP documents on all working days between 10:30 hrs (IST) and 16:00 hrs (IST) **from 11.02.2026 to one working day prior to bid submission for the project mentioned below** on payment of a non-refundable fee of Rs. 5,00,000/- or USD 7,000 plus applicable GST @18%, from 9th Floor, Wing - A, Statesman House, Connaught Place, New Delhi - 110001, Tel.: 91-11-23443996; Fax: 91-11-23443990; **e-mail: pfccl.itp@pfcindia.com.** The RFP documents can also be downloaded from **https://www.mstcecommerce.com** and **https://www.pfcclindia.com**, however, in such case, interested party can submit Response to RFP only on submission of non-refundable fee of Rs. 5,00,000/- or USD 7,000 plus applicable GST @18% separately. The survey report and clarification to RFP documents shall be issued to those bidders, who have obtained/ purchased RFP documents by paying requisite fee at least one working day prior to bid submission date. Bidders should regularly visit website to keep themselves updated regarding clarifications/ amendments/ time extensions etc., if any. The important timelines in this regard are as follows:

| S. No | Name of Transmission Scheme | Last Date for seeking clarifications (dd/mm/yyyy) | Last Date for submission of response to RFP (dd/mm/yyyy) | Date of opening of Response to RFP (dd/mm/yyyy) |
|---|---|---|---|---|
| 1. | **Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS** | 03/03/2026 | 17/04/2026 up to 15:00 hrs. (IST) | 17/04/2026 up to 15:30 hrs. (IST) |

**Note:** PFC Consulting Limited reserves the right to cancel or modify the process without assigning any reason and without any liability. This is not an offer.

**Bid Process Coordinator**

PFC CONSULTING LTD.

(A wholly owned subsidiary of PFC Ltd.)
(A Govt. of India Undertaking)

**An Initiative of**

**Ministry of Power**
Government of India

**Initiative Partner**

केविप्रा cea

**Central Electricity Authority**

# पीएफसी कंसल्टिंग लिमिटेड

(पीएफसी लिमिटेड की पूर्ण स्वामित्व वाली सहायक कंपनी)

पंजीकृत कार्यालयः प्रथम तल, ''ऊर्जानिधि'' 1, बाराखम्बा लेन, कनाट प्लेस, नई दिल्ली–110001, (भारत)

## वैश्विक आमंत्रण (केवल ई–निविदा के माध्यम से)
## अंतर्राज्यीय पारेषण परियोजना के लिए निर्माण, स्वामित्व, प्रचालन और स्थानांतरण (बूट) आधार पर पारेषण सेवा प्रदाता के चयन हेतु

**पीएफसी कंसल्टिंग लिमिटेड**, पावर फाइनेंस कॉरपोरेशन लिमिटेड (भारत सरकार का उपक्रम) की पूर्ण स्वामित्व वाली सहायक कंपनी ''प्रस्ताव हेतु अनुरोध'' (आरएफपी) के एकल चरण दो लिफाफा प्रक्रिया का पालन करते हुए निर्माण, स्वामित्व, प्रचालन एवं स्थानांतरण (बूट) आधार पर पारेषण परियोजनाओं की स्थापना के लिए प्रस्ताव आमंत्रित करता है।

इच्छुक बोलीदाता वेबसाइट **https://www.mstcecommerce.com** और **https://www.pfcclindia.com** पर उपलब्ध आरएफपी अधिसूचना और आरएफपी दस्तावेज देख सकते हैं।

निविदादाता अ–प्रतिदेय शुल्क रु. 5,00,000/– या यूएसडी (यूएस डॉलर) 7,000 प्लस लागू जीएसटी/18 प्रतिशत का भुगतान करके आरएफपी दस्तावेज 11.02.2026 से निम्नलिखित परियोजना के लिए निविदा जमा तिथि से एक कार्यदिवस पूर्व तक सभी कार्यदिवसों में 10.30 बजे (आईएसटी) से 16.00 बजे (आईएसटी) के बीच 9वां तल, विंग–ए, स्टेट्समैन हाउस, बाराखम्बा रोड, कनॉट प्लेस, नई दिल्ली–110001, फोन नं.: 91–11–23443996 फैक्स : 91–11–23443990, ई–मेलः **pfccl.itp@pfcindia.com** से प्राप्त कर सकते हैं। आरएफपी दस्तावेज **https://www.mstcecommerce.com** तथा **https://www.pfcclindia.com** से भी डाउनलोड किए जा सकते हैं, यद्यपि, ऐसे मामले में इच्छुक पार्टियां आरएफपी के उत्तर जमा करते समय अलग से अ–प्रतिदेय शुल्क रु. 5,00,000/– या यूएसडी 7,000 प्लस लागू जीएसटी/18 प्रतिशत जमा कर सकते हैं। सर्वेक्षण रिपोर्ट एवं आरएफपी दस्तावेजों पर स्पष्टीकरण केवल उन निविदादाताओं को जारी किया जायेगा जो निविदा जमा तिथि से न्यूनतम एक कार्यदिवस पूर्व तक किसी भी कार्यदिवस में अपेक्षित शुल्क का भुगतान करके आरएफपी दस्तावेज खरीद/प्राप्त कर चुके हैं। निविदादाता किसी भी स्पष्टीकरण/संशोधन/समय विस्तार आदि, यदि कोई हो, के बारे में नवीनतम जानकारी हेतु वेबसाइट नियमित रूप से देखते रहें। इस संबंध में महत्वपूर्ण समय–सारणी निम्नानुसार है:

| क्र. सं. | पारेषण योजना का नाम | स्पष्टीकरण प्राप्त करने की अंतिम तिथि दि.दि./मा.मा./व.व. | आरएफपी के उत्तर जमा करने की अंतिम तिथि दि.दि./मा.मा./व.व. | आरएफपी के उत्तर खोलने की तिथि दि.दि./मा.मा./व.व. |
|---|---|---|---|---|
| 1. | **765/400/220केवी फतेहगढ़–II पावर स्टेशन पर 2 सिंक्रोनस कंडेनसर (सिंकॉन) यूनिट की स्थापना** | 03/03/2026 | 17/04/2026 को 15:00 बजे (आईएसटी) तक | 17/04/2026 को 15:30 बजे (आईएसटी) तक |

**नोट :** पीएफसी कंसल्टिंग लिमिटेड बिना कोई कारण बताए और बिना कोई जिम्मेदारी लिए निविदा प्रक्रिया को निरस्त या संशोधित करने का अधिकार रखता है। यह कोई प्रस्ताव नहीं है।

बोली प्रक्रिया समन्वयक
PFC CONSULTING LTD.
(पीएफसी लिमिटेड की पूर्णतः स्वामित्वाधीन सहायक कंपनी)
(भारत सरकार का एक उपक्रम)

**पहलकर्ता**
सत्यमेव जयते
विद्युत मंत्रालय
भारत सरकार

**पहल साझेदार**
केविप्रा CEA
केन्द्रीय विद्युत प्राधिकरण

TSP shall be subject to it obtaining Transmission License from the Commission, which, after expiry, may be further extended by such period as deemed appropriate by the Commission under powers vested with it to amend the conditions of the Transmission License.

The entire bidding process shall be conducted on electronic platform created by MSTC Limited.

The Bid shall be a single stage two envelope bid comprising the Technical Bid and the Financial Bid. The Bidders shall submit the Bid online through the electronic bidding platform. In addition to the online submission, the Bidder with lowest Final Offer will be required to submit original hard copies of Annexure 3, Annexure 4 (if applicable), Annexure 6 (if applicable) and Annexure 14 before issuance of LoI. There shall be no physical submission of the Financial Bid.

The Technical Bid shall be opened first and the Financial Bid of only the bidder who have qualified in the Technical Bid shall be opened. The Financial Bid will comprise of two rounds. In the first round the Initial Offer of the responsive bids would be opened and Quoted Transmission Charges of Initial Offer shall be ranked on the basis of ascending order. The Bidders, in the first fifty per cent of the ranking (with any fraction rounded off to higher integer) or four Bidders, whichever is higher, shall qualify for participating in the electronic reverse auction stage and submit their Final Offer.

6. The objective of the bidding process is to select a Successful Bidder pursuant to this RFP, who shall acquire one hundred percent (100%) of the equity shares of **SPV (UNDER INCORPORATION)**, along with all its related assets and liabilities as per the provisions of the Share Purchase Agreement, at the Acquisition Price to be intimated by the BPC, twenty (20) days prior to the Bid Deadline.

   The **SPV (UNDER INCORPORATION)**, of which one hundred percent (100%) equity shares will be acquired by the Selected Bidder, shall be responsible as the TSP, for ensuring that it undertakes ownership, financing, development, design, engineering, procurement, construction, commissioning, operation and maintenance of the Project, and to provide Transmission Service as per the terms of the RFP Project Documents.

   The TSP shall ensure transfer of all project assets along with substation land, right of way and clearances to CTU or its successors or an agency as decided by the Central Government after 35 years from COD of project at zero cost and free from any encumbrance and liability. The transfer shall be completed within 90 days after 35 years from COD of project failing which CTU shall be entitled to take over the project assets Suo moto.

7. **Commencement of Transmission Service**: The Bidder shall have to commence Transmission Service in accordance with the provisions of the Transmission Service Agreement.

8. **Transmission Charges**: The Transmission Charges shall be payable by the Designated ISTS Customers in Indian Rupees through the CTU as per Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations as amended from time to time. Bidders shall quote the Transmission Charges as per the pre-specified structure, as mentioned in the RFP.

9. **Issue of RFP document:** The detailed terms and conditions for qualification and selection of the Transmission Service Provider for the Project and for submission of Bid are indicated in the RFP document. All those interested in purchasing the RFP document may respond in writing to **General Manager, Tel. +91 11 23443912, Fax +91 11 23443990, Email: pfccl.itp@pfcindia.com** at the address given in para 12 below with a non-refundable fee of **Rs. 5,00,000/- (Rupees Five Lakh Only) or US$ 7000/- (US Dollars Seven Thousand Only)** plus 18% GST, to be paid via electronic transfer to the following Bank Account**:**

Dated: July 31, 2026

## CERTIFICATE BY THE BID EVALUATION COMMITTEE

Sub: **Confirmation of Successful Bidder as Transmission Service Provider to establish "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS"**

It is hereby certified that:

1. The entire bid process has been carried out in accordance with the "Tariff based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for encouraging competition in development of the Transmission Projects" issued by Ministry of Power, Govt. of India under Section 63 of the Electricity Act, 2003 and as amended from time to time.

2. **Power Grid Corporation of India Limited** emerged as the Successful Bidder after the conclusion of e-reverse bidding process with the lowest Quoted Transmission Charges of **Rs.1,233.00 million per annum.** The conclusions recorded in the BEC Certificate dated 17.07.2026 **(Annexure-A)** continue to be valid.

3. The quoted tariff is lower than the revised Levelised Tariff calculated based on CERC norms considering the revised Capital Cost for the Project **'Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS'** as assessed by Cost Committee. The quoted tariff discovered through e-reverse bidding process continues to be acceptable.

| Name of Committee Member | Signature |
|---|---|
| *Sh. Amit Jog*, General Manager, State Bank of India, Commercial Clients Group Regional Office-II, New Delhi - **Chairman** | |
| Sh. D.K. Meena, SE (Operation), NRPC Secretariat - **Member** | |
| Sh. Harvendra Kumar, SE (Procurement –I), RVPN, Jaipur - **Member** | |
| Sh. Bhanwar Singh Meena, Director, PSPA-I Division, CEA- **Member** | |
| Smt. Kavita Jha, Director, , PSETD Division, CEA- **Member** | |
| Sh. Sachin Shukla, Chairman, Fatehgarh II Transmission Limited, New Delhi - **Convener Member** | |

**Enclosure:**

1. ***Annexure-A: BEC certificate* dated 17.07.2026**

*Dated: July 17, 2026*

## CERTIFICATE BY THE BID EVALUATION COMMITTEE

Sub: **Selection of Successful Bidder as Transmission Service Provider to establish "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS"**

It is hereby certified that:

1. The entire bid process has been carried out in accordance with the "Tariff based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for encouraging competition in development of the Transmission Projects" issued by Ministry of Power, Govt. of India under Section 63 of the Electricity Act, 2003 and as amended from time to time.

2. **Power Grid Corporation of India Limited** emerged as the Successful Bidder after the conclusion of e-reverse bidding process with the lowest Quoted Transmission Charges of **Rs.1,233.00 million per annum.**

3. The quoted tariff is lower than the Levelised Tariff calculated based on CERC norms considering the Capital Cost for the Project **'Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS'** as assessed by Cost Committee. The quoted tariff discovered through e-reverse bidding process is acceptable.

| Name of Committee Member | Signature |
|---|---|
| Sh. Amit Jog, General Manager, State Bank of India, Commercial Clients *Group Regional Office-II*, New Delhi - **Chairman** | |
| Sh. D.K. Meena, SE (Operation), NRPC Secretariat - **Member** | |
| Sh. Harvendra Kumar, SE (Procurement –I), RVPN, Jaipur - **Member** | |
| Sh. Bhanwar Singh Meena, Director, PSPA-I Division, CEA- **Member** | |
| Smt. Kavita Jha, Director, , PSETD Division, CEA- **Member** | |
| Sh. Sachin Shukla, Chairman, Fatehgarh II Transmission Limited, New Delhi - **Convener Member** | |

PFC CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)

**In Duplicate**

**Ref. No. 04/26-27/ITP-118/RFP** **17.07.2026**

**To,**

**Mr. Pankaj Pandey, ED (TBCB)**
**Power Grid Corporation of India Limited,**
**"Saudamini" Plot No 2, Sector 29,**
**Gurgaon-122001**

**E-mail:** ppandey@powergrid.in,
tbcb@powergrid.in

**Sub: Independent Transmission Project (ITP) "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS"– Letter of Intent**

Sir,
We refer to:

1. The Request for Proposal document dated 11.02.2026 issued to **'Power Grid Corporation of India Limited'** as regards participation in the international competitive bidding process for Transmission Scheme for **'Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS'**, and as amended till the Bid Deadline including all correspondence / clarifications / amendments exchanged between **'Power Grid Corporation of India Limited'** and PFC Consulting Limited in regard thereto (hereinafter collectively referred to as the "Final RFP");

2. The offer of **'Power Grid Corporation of India Limited'** by way of a Technical Bid pursuant to (1) above submitted on 02.07.2026 in response to the Final RFP.

3. The offer of **'Power Grid Corporation of India Limited'** by way of Financial Bid-Initial Offer submitted on 02.07.2026 in response to the Final RFP.

4. The offer of **'Power Grid Corporation of India Limited'** by way of a Financial Bid-Final Offer Submitted during e-Reverse Auction process concluded on 16.07.2026 in response to the Final RFP.

5. The Technical Bid as in (2) above and the Financial Bid as in (3 & 4) above, hereinafter collectively referred to as the "Bid".

This is to inform you that the process of evaluating bids received pursuant to the Final RFP, including the Bid, has been concluded. We are pleased to inform you that your proposal and offer received by way of the "Bid" has been accepted and **'Power Grid Corporation of India Limited'** is hereby declared as the Successful Bidder as per Clause 3.6.1 of the Final RFP for the above project and consequently, this Letter of Intent (hereinafter referred to as the "LoI") is being issued.

This LoI is based on the Final RFP and you are requested to please comply with the following

a) Acknowledging its issuance and unconditionally accepting its contents and recording "Accepted unconditionally" under the signature of your authorized signatory on each page of the duplicate copy of this letter attached herewith, and returning the same to PFC Consulting Limited within seven (07) days of the date of issuance of LoI. This LoI is issued to you in duplicate.

b) Completion of various activities as stipulated in the Final RFP including in particular Clause 2.15.2, Clause 2.15.3 and Clause 2.15.4 of the Final RFP, within the timelines as prescribed therein.

It may be noted that PFC Consulting Limited has the rights available to them under the Final RFP, including rights under Clause 2.15.5 and Clause 3.6.3 thereof, upon your failure to comply with the aforementioned conditions.

As you are aware, the issuance and contents of this LoI are based on the Bid submitted by you as per the Final RFP including the Transmission charges and other details regarding the Scheduled COD as contained therein. The Quoted Transmission Charges as submitted by you and the Scheduled COD of each transmission Element and the Project as agreed by you in your Bid, as per Annexure 21 and Format-1 of Annexure 8 respectively of the Final RFP is annexed herewith as **Schedule A** and incorporated herein by way of reference.

Yours sincerely,
For PFC Consulting Limited



**(Naveen Kumar)**
**General Manager**

**Enclosures**: Schedule A – Quoted Transmission Charges and the Scheduled COD of each Transmission Element and the Project submitted in your Bid, as per Annexure 21 and Format-1 of Annexure 8 respectively of the Final RFP

**Copy to:**

1. **Chairperson and Managing Director, Power Finance Corporation Limited**, "Urjanidhi", 1, Barakhamba Lane, Connaught Lane, New Delhi – 110 001
2. **Director (Transmission), Ministry of Power**, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001
3. **Chief Engineer (PSPA-I) and Member Secretary (NCT), Central Electricity Authority**, 3rd Floor, Sewa Bhawan, R.K. Puram, New Delhi – 110066
4. **Chief Operating Officer (COO), Central Transmission Utility of India Limited (CTUIL)**, Floors No. 5-10, Tower 1, Plot No. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana – 122001
5. **Secretary, Central Electricity Regulatory Commission**, 6th, 7th & 8th Floors, Tower B, World Trade Centre, Nauroji Nagar, New Delhi- 110029

**SCHEDULE – A**



1. **Quoted Transmission Charges as per Annexure-21-Format For Financial Bid**

**Quoted Transmission Charges: Rs. 1,233.00 million**

**2. Scheduled COD of each transmission Element and the Project as per Format 1 of Annexure-8 of RFP**

| S. No. | Name of the Transmission Element | Tentative Implementation Timeframe | Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project | Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element |
|---|---|---|---|---|
| 1 | 2 nos. of Synchronous Condensers (SynCon) units* at 400 kV level of 765/400/220 kV Fatehgarh-II PS along with 2 nos. of 400 kV bays<br><br>**1 No. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short Circuit contribution at PCC of 1200MVA (Minimum)* | 30 months from the date of allocation | 100% | N.A. |
| Note: POWERGRID shall provide space (free of cost) for 2 Nos. (SynCon) units at Fatehgarh II PS along with 2 Nos. of 400 kV bays | | | | |

**Ref. No. 04/26-27/ITP-118/RFP**

**31.07.2026**

**To,**

**Mr. Pankaj Pandey, ED (TBCB)**
**Power Grid Corporation of India Limited,**
**"Saudamini" Plot No 2, Sector 29,**
**Gurgaon-122001**

**E-mail:** ppandey@powergrid.in,
tbcb@powergrid.in

**Sub: Independent Transmission Project (ITP) "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS"– Revised Letter of Intent**

Sir,
We refer to:

1. The Request for Proposal document dated 11.02.2026 issued to **'Power Grid Corporation of India Limited'** as regards participation in the international competitive bidding process for Transmission Scheme for **'Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS'**, and as amended till the Bid Deadline including all correspondence / clarifications / amendments exchanged between **'Power Grid Corporation of India Limited'** and PFC Consulting Limited in regard thereto (hereinafter collectively referred to as the "Final RFP");

2. The offer of **'Power Grid Corporation of India Limited'** by way of a Technical Bid pursuant to (1) above submitted on 02.07.2026 in response to the Final RFP.

3. The offer of **'Power Grid Corporation of India Limited'** by way of Financial Bid-Initial Offer submitted on 02.07.2026 in response to the Final RFP.

4. The offer of **'Power Grid Corporation of India Limited'** by way of a Financial Bid-Final Offer Submitted during e-Reverse Auction process concluded on 16.07.2026 in response to the Final RFP.

5. The Technical Bid as in (2) above and the Financial Bid as in (3 & 4) above, hereinafter collectively referred to as the "Bid".

6. The Letter of Intent (LoI) issued to **'Power Grid Corporation of India Limited'** on 17.07.2026.

This is to inform you that the process of evaluating bids received pursuant to the Final RFP, including the Bid, has been concluded. We are pleased to inform you that your proposal and offer received by way of the "Bid" has been accepted and **'Power Grid Corporation of India Limited'** is hereby declared as the Successful Bidder as per Clause 3.6.1 of the Final RFP for the above project and consequently, this Letter of Intent (hereinafter referred to as the "LoI") is being issued.

This LoI is based on the Final RFP and you are requested to please comply with the following:

a) Acknowledging its issuance and unconditionally accepting its contents and recording "Accepted unconditionally" under the signature of your authorized signatory on each page of the duplicate copy of this letter attached herewith, and returning the same to PFC Consulting Limited within seven (07) days of the date of issuance of LoI. This LoI is issued to you in duplicate.

b) Completion of various activities as stipulated in the Final RFP including in particular Clause 2.15.2, Clause 2.15.3 and Clause 2.15.4 of the Final RFP, within the timelines as prescribed therein.

It may be noted that PFC Consulting Limited has the rights available to them under the Final RFP, including rights under Clause 2.15.5 and Clause 3.6.3 thereof, upon your failure to comply with the aforementioned conditions.

As you are aware, the issuance and contents of this LoI are based on the Bid submitted by you as per the Final RFP including the Transmission charges and other details regarding the Scheduled COD as contained therein. The Quoted Transmission Charges as submitted by you and the Scheduled COD of each transmission Element and the Project as agreed by you in your Bid, as per Annexure 21 and Format-1 of Annexure 8 respectively of the Final RFP is annexed herewith as **Schedule A** and incorporated herein by way of reference.

Yours sincerely,
For PFC Consulting Limited

**(Naveen Kumar)**
**General Manager**

**Enclosures**: Schedule A – Quoted Transmission Charges and the Scheduled COD of each Transmission Element and the Project submitted in your Bid, as per Annexure 21 and Format-1 of Annexure 8 respectively of the Final RFP

**Copy to:**

1. **Chairperson and Managing Director, Power Finance Corporation Limited**, "Urjanidhi", 1, Barakhamba Lane, Connaught Lane, New Delhi – 110 001
2. **Director (Transmission), Ministry of Power**, Shram Shakti Bhawan, Rafi Marg, New Delhi-110001
3. **Chief Engineer (PSPA-I) and Member Secretary (NCT), Central Electricity Authority**, 3rd Floor, Sewa Bhawan, R.K. Puram, New Delhi – 110066
4. **Chief Operating Officer (COO), Central Transmission Utility of India Limited (CTUIL)**, Floors No. 5-10, Tower 1, Plot No. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana – 122001
5. **Secretary, Central Electricity Regulatory Commission**, 6th, 7th & 8th Floors, Tower B, World Trade Centre, Nauroji Nagar, New Delhi- 110029

**SCHEDULE – A**



1. **Quoted Transmission Charges as per Annexure-21-Format For Financial Bid**

**Quoted Transmission Charges: Rs. 1,233.00 million**

**2. Scheduled COD of each transmission Element and the Project as per Format 1 of Annexure-8 of RFP**

| S. No. | Name of the Transmission Element | Tentative Implementation Timeframe | Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project | Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element |
|---|---|---|---|---|
| 1 | 2 nos. of Synchronous Condensers (SynCon) units* at 400 kV level of 765/400/220 kV Fatehgarh-II PS along with 2 nos. of 400 kV bays<br><br>**1 No. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short Circuit contribution at PCC of 1200MVA (Minimum)* | 30 months from the date of allocation | 100% | N.A. |
| Note: POWERGRID shall provide space (free of cost) for 2 Nos. (SynCon) units at Fatehgarh II PS along with 2 Nos. of 400 kV bays | | | | |

Only the lowest Initial Offer (s) shall be communicated to all the Qualified Bidders to participate in the e-reverse bidding process. During the e-reverse bidding process only the lowest prevailing bid should be visible to all the bidders on the electronic platform.

## 2.14 Enquiries

Written clarifications on the RFP and other RFP Project Documents as per Clause 2.3 and 2.4 may be sought from:

**General Manager**
**PFC Consulting Limited**
9th Floor, Wing-A, Statesman House,
Connaught Place, New Delhi - 110001
Tel. + 91 11 23443912
Fax + 91 11 23443990
Email: pfccl.itp@pfcindia.com

## 2.15 Other Aspects

2.15.1 The draft of the Transmission Service Agreement has been attached to this RFP. In addition to above, the following documents have also been attached to this RFP:

a) Share Purchase Agreement

When the drafts of the above RFP Project Documents are provided by the BPC, these RFP Project Documents shall form part of this RFP as per **Formats – 1 & 2** of **Annexure 20**.

Upon finalization of the RFP Project Documents after incorporating the amendments envisaged in Clause 2.4 of this RFP, all the finalized RFP Project Documents shall be provided by BPC to the Bidders at least fifteen (15) days prior to the Bid Deadline.

The Transmission Service Agreement and Share Purchase Agreement shall be signed in required number of originals so as to ensure that one (1) original is retained by each party to the Agreement(s) on the date of transfer of SPV.

Note: Kindly check 2.15.2. (b) point from SBDs

2.15.2 Within ten (10) days of the issue of the Letter of Intent, the Selected Bidder shall:

a) Provide the Contract Performance Guarantee in favour of the Nodal Agency as per the provisions of Clause 2.12;

b) Execute the Share Purchase Agreement and the Transmission Service Agreement;

c) acquire, for the Acquisition Price, one hundred percent (100%) equity shareholding of **SPV (UNDER INCORPORATION)** from PFC Consulting Limited, who shall sell to the Selected Bidder, the equity shareholding of **SPV (UNDER INCORPORATION)**, along with all its related assets and liabilities;

Stamp duties payable on purchase of one hundred percent (100%) of the equity shareholding of **SPV (UNDER INCORPORATION)**, along with all its related assets and liabilities, shall also be borne by the Selected Bidder.

Provided further that, if for any reason attributable to the BPC, the above activities are not completed by the Selected Bidder within the above period of ten (10) days as mentioned in this Clause, such period of ten (10) days shall be extended, on a day for day basis till the end of the Bid validity period.

2.15.3 After the date of acquisition of the equity shareholding of **SPV (UNDER INCORPORATION)**, along with all its related assets and liabilities, by the Selected Bidder,

i. the authority of the BPC in respect of this Bid Process shall forthwith cease and any actions to be taken thereafter will be undertaken by the Nodal Agency,

ii. all rights and obligations of **SPV (UNDER INCORPORATION)**, shall be of the TSP,

iii. any decisions taken by the BPC prior to the Effective Date shall continue to be binding on the Nodal Agency and

iv. contractual obligations undertaken by the BPC shall continue to be fulfilled by the TSP.

v. Further, the TSP shall execute the Agreement(s) required, if any, under Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations as amended from time to time.

2.15.4 Within five (5) working days of the issue of the acquisition of the SPV by the Successful Bidder, the TSP shall apply to the Commission for grant of Transmission License and make an application to the Commission for the adoption of Transmission Charges, as required under Section – 63 of The Electricity Act 2003.

2.15.5 If the Selected Bidder / TSP fails or refuses to comply with any of its obligations under Clauses 2.15.2, 2.15.3 and 2.15.4, and provided that the other parties are willing to execute the Share Purchase Agreement and PFC Consulting Limited is willing to sell the entire equity shareholding of **SPV (UNDER INCORPORATION)**, along with all its related assets and liabilities, to the Selected Bidder, such failure or refusal on the part of the Selected Bidder shall constitute sufficient grounds for cancellation of the Letter of Intent. In such cases, the BPC / its authorized representative(s) shall be entitled to invoke the Bid Bond of the Selected Bidder.

2.15.6 If the TSP fails to obtain the Transmission License from the Commission, it will constitute sufficient grounds for annulment of award of the Project.

2.15.7 The annulment of award, as provided in Clauses 2.15.5 and 2.15.6 of this RFP, will be done by the Government on the recommendations of National Committee on Transmission. However, before recommending so, National Committee on Transmission will give an opportunity to the Selected Bidder / TSP to present their view point.

2.15.8 The annulment of the award, under Clause 2.15.5 or 2.15.6 of this RFP, shall be sufficient grounds for blacklisting the bidder, whose award has been annulled, for a period of five years or more, as decided by the National Committee on Transmission, provided that the blacklisting shall be done only after giving the bidder an opportunity for showing cause.

## 2.16 Confidentiality

2.16.1 The parties undertake to hold in confidence this RFP and RFP Project Documents and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

a) to their professional advisors;

PFC CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)

Ref. 04/26-27/ITP-118/RFP

27.08.2026

To,
Mr. Pankaj Pandey, ED (TBCB)
Power Grid Corporation of India Limited,
"Saudamini" Plot No 2, Sector 29,
Gurgaon-122001

E-mail:
ppandey@powergrid.in

**Sub: Inter-State Transmission Scheme "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS"–Regarding extension of LoI.**

Dear Sir,

This is with reference to Letter of Intent (LoI) issued on 31.07.2026 for establishment of subject transmission scheme. The Clause No. 2.15.2 of the RFP document stipulates that within ten (10) days from the issuance of LoI, the selected bidder shall complete all the activities including the acquisition of SPV.

As the SPV scheduled transfer on 28.08.2026, the last date for completion of various activities under Clause No. 2.15.2 of the RFP document is extended from 10.08.2026 (10 days from LoI) to 28.08.2026.

Thanking you,

Yours faithfully,

Nirmala

(Nirmala Meena)
Deputy General Manager

PFC CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)

**Ref. No.: 04/26-27/ITP-118/RFP**

**11 June, 2026**

**To,**
**Mr. Pankaj Pandey, ED (TBCB)**
**Power Grid Corporation of India Limited,**
**"Saudamini" Plot No 2, Sector 29,**
**Gurgaon-122001**

**E-mail:** ppandey@powergrid.in,
tbcb@powergrid.in

**Sub.: Inter-State Transmission Project "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS" – Regarding Provisional Acquisition Price and Revised TSA**

Dear Sir,

In line with the requirement of the RFP document specified at Clause 1.6.2.1 (5), the following may be noted in respect of the Acquisition Price:

"The estimated Acquisition Price payable by the selected Bidder to the PFC Consulting Limited for the acquisition of one hundred percent (100%) of the equity shareholding of **'FATEHGARH II TRANSMISSION LIMITED'**, along with all its related assets and liabilities is **Rs. 19,11,30,825** (Rupees Nineteen Crore Eleven Lakh Thirty Thousand Eight Hundred and Twenty Five Only)."

Further, in terms of provisions of Clause 1.6.2.1 (6) of the RfP document, please find attached a copy of the revised Transmission Service Agreement after incorporating amendments issued till date for the subject mentioned project at **Annexure-I**.

This is for your information and further action please.

Thanking you,

Yours faithfully

**(Naveen Phougat)**
**General Manager**

**Encl: As Above**

PFC CONSULTING LTD.

पीएफसी कंसल्टिंग लिमिटेड
(पावर फाइनेंस कॉर्पोरेशन लिमिटेड की पूर्णतःस्वामित्वाधीन सहायक कंपनी)
PFC CONSULTING LIMITED
(A wholly owned subsidiary of Power Finance Corporation Limited)

**Ref. No. 04/25-26/ITP-118/RFP** **July 17, 2026**

**To,**
**Mr. Pankaj Pandey, ED (TBCB)**
**Power Grid Corporation of India Limited,**
**"Saudamini" Plot No 2, Sector 29,**
**Gurgaon-122001**

**E-mail:** ppandey@powergrid.in,
tbcb@powergrid.in

**Sub.: Inter-State Transmission Scheme "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS"- Regarding submission of CPG and Due Diligence for transfer of SPV.**

Dear Sir,

In line with the provisions of Clause 2.15.2 (a), (b) & (c) of the RFP Document, Contract Performance Guarantee in favour of Nodal Agency i.e. Central Transmission Utility of India Limited (CTUIL) has to be provided, the Share Purchase Agreement has to be executed and the SPV namely, **'Fatehgarh II Transmission Limited'** has to be acquired by the selected bidder i.e., **'Power Grid Corporation of India Limited'** along with all its related assets and liabilities for an Acquisition Price.

It may be noted that the SPV is tentatively scheduled to be transferred on July, 2026. You are therefore requested to arrange for due diligence process accordingly.

It is intimated that the Acquisition Price of the SPV **'Fatehgarh II Transmission Limited'** is **Rs. 19,11,30,825 (Rupees Nineteen Crore Eleven Lakh Thirty Thousand Eight Hundred and Twenty Five Only)** The break-up for this amount is given below:

| S.No. | Description | Amount (in INR) |
|---|---|---|
| 1. | PFCCL Management Fees | 15,00,00,000 |
| 2. | Goods and Service Tax on PFCCL Management Fees | 2,70,00,000 |
| 3. | Borrowings from PFCCL | 1,40,30,825 |
| 4. | Share Capital | 1,00,000 |
| | **Total** | **19,11,30,825** |

The payment of the Acquisition Price may be made as detailed hereunder:

Name : **PFC Consulting Limited**
PFCCL Goods and Service Tax No. : 07AAECP6182F1ZC
PFCCL PAN No. : AAECP6182F
Mode of Payment : RTGS

**Bank Details:**

| **Bank Name** | **ICICI Bank, 9A, Phelps Building, Connaught Place, New Delhi** |
|---|---|
| Name of Account | PFC CONSULTING LIMITED |
| A/C No. | 000705036117 |
| IFSC Code | ICIC0000007 |

It is requested that TDS may be deducted against the above payment as per I.T. rules. Copy of PAN Card and Cheque of the above bank are enclosed herewith.

You are requested to make the above payment as per the details provided above through RTGS at the earliest.

You are requested to provide the Contract Performance Guarantee as per the details provided in RFP documents, at the earliest.

Further, it is requested to provide the Contract Performance Guarantee (CPG) in favour of Nodal Agency i.e. Central Transmission Utility of India Limited (CTUIL) as per the details provided at **Annexure –A** at the earliest.

With kind regards,

Yours sincerely,

**(Naveen Kumar)**
**General Manager**

Annexure –A

## Contract Performance Guarantee (CPG)

**Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS**

| S No. | Name of Nodal Agency | Address | Amount of CPG |
|---|---|---|---|
| 1 | Central Transmission Utility of India Limited | 5th to 10th Floor, Ircon International Tower-1, Sector-32, Gurugram-122001 | Rs. 57 Crore (Rupees Fifty Seven Crore Only) |

ICICI Bank

Date: 26-08-2026
Ref: 2451NDLG00163127

To,
CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED
IRCON INTERNATIONAL TOWER (TOWER-1)
PLOT NO.16 INSTITUTIONAL AREA SECTOR 32

Gurgaon
HARYANA
INDIA
122003

Sub: Issuance of Bank Guarantee

Dear Sir/Madam,

Please find enclosed Bank Guarantee issued by ICICI Bank Limited ("*ICICI Bank*") favoring yourself on behalf of: POWER GRID CORPORATION OF INDIA LTD, SAUDAMINI PLOT NO-2,SECTOR-29, , , GURGAON, HARYANA, INDIA, 122001 ("*Bank Guarantee*") with the tenor and claim period as requested by you. For ease of reference the details have been reproduced as below:

| Bank Guarantee No. & Date of Issue | Expiry Date | Claim Expiry Date | Currency | Amount of Bank Guarantee |
|---|---|---|---|---|
| 2451NDLG00163127 26-08-2026 | 28-05-2029 | 28-05-2030 | INR | 57,00,00,000.00 |

We confirm that the officials who have signed the above Bank Guarantee are authorized to sign such documents on behalf of ICI CI Bank. You may verify genuineness of the Bank Guarantee by writing to us at bgconfirmation@icicibank.com for receiving the confir mation over email.

Alternatively, you may also write to the following address to verify the genuineness of the BG :

ICICI Bank Limited, Trade Finance Operations Group,
ICICI Bank Towers, Survey No.115/27, Tower 3, South Wing, 6th Floor,
Plot No. 12, Nanakramguda, Serilingampally, Hyderabad - 500032, Telangana

In the event of invocation, we request you to please ensure compliance with the terms and conditions of the Bank Guarantee in order to ensure timely payment. You are requested to ensure special care inter alia with respect to the following in the invocatio n claim letter -

- Bank Guarantee Number
- Expiry/Claim Expiry date
- Claim Amount
- Designated Bank branch for submission of invocation claim

Please note that ICICI Bank shall not be liable under the Bank Guarantee post expiry of the claim period as requested by you.

Thanking you,

Yours faithfully,

For ICICI Bank Limited
Authorized Signatory

TARUN VATS
DM-II, 90108399

ICICI Bank Limited ★ Gurgaon ★ M.G Road, DLF Phase III ★ T.M. Banking

SARVESH ASTHANA
Manager-I, 90064227

**Dated 28.08.2026**

# SHARE PURCHASE AGREEMENT

# BETWEEN

# PFC CONSULTING LIMITED

# AND

# FATEHGARH II TRANSMISSION LIMITED

# AND

# POWER GRID CORPORATION OF INDIA LIMITED

PFC CONSULTING LIMITED NEW DELHI

FATEHGARH II TRANSMISSION LTD NEW DELHI

POWER GRID CORPORATION OF INDIA LTD

सत्यमेव जयते

# INDIA NON JUDICIAL

## Government of National Capital Territory of Delhi

**e-Stamp**

| | | |
|---|---|---|
| **Certificate No.** | : | **IN-DL85263945982141Y** |
| Certificate Issued Date | : | 27-Aug-2026 05:17 PM |
| Account Reference | : | IMPACC (IV)/ dl806203/ DELHI/ DL-WSD |
| Unique Doc. Reference | : | SUBIN-DLDL80620371843843812046Y |
| Purchased by | : | PFC CONSULTING LIMITED |
| Description of Document | : | Article 5 General Agreement |
| Property Description | : | Not Applicable |
| Consideration Price (Rs.) | : | 0 (Zero) |
| First Party | : | PFC CONSULTING LIMITED |
| Second Party | : | Not Applicable |
| Stamp Duty Paid By | : | PFC CONSULTING LIMITED |
| Stamp Duty Amount(Rs.) | : | 500 (Five Hundred only) |

Please write or type below this line

This Stamp paper forms part of enclosed Share Purchase Agreement executed between PFC CONSULTING LIMITED, FATEHGARH II TRANSMISSION LTD and POWER GRID CORPORATION OF INDIA LTD.

PFC CONSULTING LIMITED NEW DELHI

FATEHGARH II TRANSMISSION LTD. NEW DELHI

POWER GRID CORPORATION OF INDIA LTD.

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

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# INDIA NON JUDICIAL

## Government of National Capital Territory of Delhi

### e-Stamp

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|---|---|---|
| Certificate No. | : | IN-DL85265104874097Y |
| Certificate Issued Date | : | 27-Aug-2026 05:18 PM |
| Account Reference | : | IMPACC (IV)/ dl806203/ DELHI/ DL-WSD |
| Unique Doc. Reference | : | SUBIN-DLDL80620371843150224483Y |
| Purchased by | : | PFC CONSULTING LIMITED |
| Description of Document | : | Article 5 General Agreement |
| Property Description | : | Not Applicable |
| Consideration Price (Rs.) | : | 0 (Zero) |
| First Party | : | PFC CONSULTING LIMITED |
| Second Party | : | Not Applicable |
| Stamp Duty Paid By | : | PFC CONSULTING LIMITED |
| Stamp Duty Amount(Rs.) | : | 500 (Five Hundred only) |

Please write or type below this line

This stamp paper forms part of enclosed Share Purchase Agreement executed between PFC CONSULTING LIMITED, FATEHGARH II TRANSMISSION LIMITED and POWER GRID CORPORATION OF INDIA LIMITED.

PFC CONSULTING LIMITED NEW DELHI

FATEHGARH II TRANSMISSION LTD. NEW DELHI

POWER GRID CORPORATION OF INDIA LTD.

Statutory Alert:

1. The authenticity of this Stamp certificate should be verified at www.shcilestamp.com or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

सत्यमेव जयते

# INDIA NON JUDICIAL

## Government of National Capital Territory of Delhi

### e-Stamp

| | | |
|---|---|---|
| Certificate No. | : | IN-DL85272551463539Y |
| Certificate Issued Date | : | 27-Aug-2026 05:24 PM |
| Account Reference | : | IMPACC (IV)/ dl806203/ DELHI/ DL-WSD |
| Unique Doc. Reference | : | SUBIN-DLDL80620371847055972339Y |
| Purchased by | : | PFC CONSULTING LIMITED |
| Description of Document | : | Article 5 General Agreement |
| Property Description | : | Not Applicable |
| Consideration Price (Rs.) | : | 0 (Zero) |
| First Party | : | PFC CONSULTING LIMITED |
| Second Party | : | Not Applicable |
| Stamp Duty Paid By | : | PFC CONSULTING LIMITED |
| Stamp Duty Amount(Rs.) | : | 200 (Two Hundred only) |

Please write or type below this line

This stamp paper forms part of enclosed Share Purchase Agreement executed between PFC CONSULTING LIMITED, FATEHGARH II TRANSMISSION LTD, and POWER GRID CORPORATION OF INDIA LIMITED.

PFC CONSULTING LIMITED NEW DELHI

FATEHGARH II TRANSMISSION LTD. NEW DELHI

POWER GRID CORPORATION OF INDIA LTD.

Statutory Alert:

1. The authenticity of this stamp certificate should be verified at www.[illegible] or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website [illegible] invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

# SHARE PURCHASE AGREEMENT

This **SHARE PURCHASE AGREEMENT** ('Agreement') made on August 28, 2026, at New Delhi by and between:

**PFC CONSULTING LIMITED** (a wholly owned subsidiary of Power Finance Corporation Ltd.), a company incorporated under the Companies Act, 1956, with CIN No. U74140DL2008GOI175858, having its registered office at First Floor, "Urjanidhi", 1 Barakhamba Lane, Connaught Place, New Delhi – 110 001, (hereinafter referred to as **"PFCCL"**, which expression shall, unless it be repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **FIRST PART**;

**AND**

**FATEHGARH II TRANSMISSION LIMITED,** a company incorporated under the Companies Act, 2013, with CIN U42201DC2026GOI471089, and having its registered office at, First Floor, Urjanidhi, 1, Barakhamba Lane, Connaught Place, New Delhi, Central Delhi- 110 001, (hereinafter referred to as **"Company"** which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **SECOND PART**;

**AND**

**POWER GRID CORPORATION OF INDIA LIMITED,** a company incorporated under the Companies Act, 1956 with CIN L40101DL1989GOI038121, and having its registered office at B – 9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016, (hereinafter referred to as **"Selected Bidder"** which expression shall, unless repugnant to the context or meaning thereof, be deemed to mean and include its successors and permitted assigns) of the **THIRD PART.**

**WHEREAS:**

A. Ministry of Power vide Gazette Notification No. CG-DL-E-04112025-267371 dated 03.11.2025 had notified PFC Consulting Limited (PFCCL) as the Bid Process Coordinator (BPC) for the purpose of selection of Bidder as Transmission Service Provider (TSP) to establish transmission scheme "**Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220 kV Fatehgarh-II PS**" through Tariff Based Competitive Bidding (TBCB) process.

B. In accordance with the Bidding Guidelines, PFCCL had initiated a Bid Process through issuance of RFP documents for selecting a Successful Bidder to build, own, operate and transfer the Project in accordance with and on the terms and conditions mentioned in the RFP Project Documents (as defined hereinafter).

C. PFCCL has incorporated the Company and PFCCL along with the Nominees hold One hundred percent (100 %) of total issued and paid-up equity share capital of the Company.

D. PFCCL has initiated the development of the Project and has obtained survey report, certain clearances, consents and permits as specified in the RFP regarding the Project.

PFCCL PGCIL 1

E. Pursuant to the said Bid Process, **Power Grid Corporation of India Limited** has been identified as the Selected Bidder vide Letter of Intent dated 31.07.2026 issued by the PFCCL in favor of the Selected Bidder.

F. As envisaged in the RFP, the Shares Seller (as defined hereinafter) has agreed to sell the Sale Shares (as defined hereinafter) to the Selected Bidder and the Selected Bidder has agreed to purchase the Sale Shares from the Shares Seller, subject to and on the terms and conditions set forth in this Agreement.

**NOW THEREFORE, IN CONSIDERATION OF THE MUTUAL COVENANTS AND AGREEMENTS SET FORTH IN THIS AGREEMENT AND FOR OTHER GOOD AND VALUABLE CONSIDERATION, THE PARTIES HEREBY AGREE AS FOLLOWS:**

## 1. DEFINITIONS

1.1 Capitalized terms in this Agreement, unless defined in this Agreement shall, in so far as the context admits, have the same meaning in this Agreement as has been ascribed to them in the Transmission Service Agreement.

1.2 Additionally, the following terms shall have the meaning hereinafter respectively assigned to them herein below:

(i) **"Acquisition Price"** shall mean **INR 19,11,35,596/- (Rupees Nineteen Crore Eleven Lakh Thirty Five Thousand Five Hundred Ninety Six Only)**, which is the aggregate consideration payable by the Selected Bidder towards purchase of the **Sale Shares at par** along with assets and liabilities of the Company as on the Closing Date subject to adjustment as per the audited accounts of the Company as on the Closing Date;

(ii) **"Agreement"** or **"the Agreement"** or **"this Agreement"** shall mean this Share Purchase Agreement and shall include the recitals and/or annexures attached hereto, and the contracts, certificates, disclosures and other documents to be executed and delivered pursuant hereto, if any, and any amendments made to this Agreement by Parties in writing;

(iii) **"Bid Process"** shall mean the competitive bidding process initiated by the Company, by issuance of RFP Documents for selecting a Successful Bidder to build, own, operate and transfer the Project in accordance with and on the terms and conditions mentioned in the RFP Project Documents;

(iv) **"Board"** shall mean the board of directors of the Company

(v) **"Closing Date"** shall mean a mutually agreed date between the Parties falling within the period as mentioned in Clause 2.4 of RFP or on failure of such mutual agreement between the Parties shall be the date falling on the last date of such period;

(vi) **"CTU"** or **"Central Transmission Utility of India Limited"** shall have same meaning as defined in the Electricity Act, 2003;

PFCCL PFC CONSULTING LIMITED NEW DELHI FATEHGARH II TRANSMISSION LTD. NEW DELHI FTTL POWER GRID CORPORATION OF INDIA LTD. PGCIL 2

**(vii)** **"Encumbrance"** shall mean any mortgage, pledge, lien, charge, security assignment, hypothecation, trust, encumbrance or any other agreement having the effect of creating security interest;

**(viii)** **"Letter of Intent"** shall have the meaning ascribed thereto under the RFP;

**(ix)** **"Nominees"** shall mean the Persons, who are named in Annexure A, holding the Sale Shares as nominees of PFCCL.

**(x)** "**Party**" shall mean PFCCL, Company and the Selected Bidder, referred to individually, and "**Parties**" shall mean PFCCL, Company and the Selected Bidder collectively referred to, as relevant;

**(xi)** "**Person**" shall include an individual, an association, a corporation, a partnership, a joint venture, a trust, an unincorporated organization, a joint stock company or other entity or organization, including a government or political subdivision, or an agency or instrumentality thereof, and/or any other legal entity;

**(xii)** **"RFP Project Documents"** shall mean the following documents, referred to collectively:

a) Transmission Services Agreement;

b) this Agreement; and

c) Any other agreement(s) as may be required.

**(xiii)** "**Representations and Warranties**" shall mean the representations and warranties mentioned in **Clause 4** hereto;

**(xiv)** **"Sale Shares"** shall mean 10,000 [Ten Thousand Only] Equity Shares, representing 100 percent of the total issued, subscribed and fully paid-up equity share capital of the Company held by the Shares Seller and Nominees as more particularly described in Annexure A attached hereto;

**(xv)** **"Shares"** shall mean the fully paid-up equity shares of Company, of face value Rs. 10 each;

**(xvi)** "**Shares Seller**" shall mean PFCCL;

**(xvii)** **"Transmission Services Agreement"** or "TSA" means the agreement titled 'Transmission Service Agreement' dated 28.08.2026 entered into between CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED and FATEHGARH II TRANSMISSION LIMITED the TSP pursuant to which the TSP shall build, own, operate and transfer the Project and make available the assets of the Project to Central Transmission Utility of India Limited on a commercial basis, as may be amended from time to time;

**(xviii)** **Transmission Service Provider"** or "TSP" shall mean FATEHGARH II TRANSMISSION LIMITED which has executed the Transmission Service Agreement, and which shall be acquired by the Selected Bidder.

PFCCL PFC CONSULTING LIMITED NEW DELHI FATEHGARH II TRANSMISSION LTD NEW DELHI FIITL PGCIL POWER GRID CORPORATION OF INDIA LTD. 3

**1.3 Interpretation Clause**

Unless the context otherwise requires, the provisions of the TSA relating to the interpretation of the TSA shall apply to this Agreement as if they were set out in full in this Agreement and to this end are incorporated herein by reference.

**2. TRANSFER OF SHARES**

2.1 Subject to the terms and conditions of this Agreement, the Shares Seller agrees to sell and transfer to the Selected Bidder and the Selected Bidder hereby agrees to purchase from the Shares Seller, the Sale Shares of the Company free from Encumbrances with rights and benefits attached thereto in consideration of the Acquisition Price and the covenants, undertakings and the agreements of the Selected Bidder contained in this Agreement.

2.2 The Shares Seller hereby undertakes to cause the Nominees to transfer part of the Sale Shares held by them as Nominees of the Shares Seller to the Selected Bidder and execute any documents required to deliver good title to the Sale Shares to the Selected Bidder.

**3. CLOSING**

3.1 Prior to the Closing Date, the Selected Bidder shall provide to the Shares Seller, valid share transfer forms ("Share Transfer Forms") duly stamped with requisite amount of stamp duty payable on the transfer of Sale Shares.

3.2 On the Closing Date, the Shares Seller shall hand over to the Selected Bidder or its authorised representative, the original share certificates representing the Sale Shares ("Sale Share Certificates") along with the Share Transfer Forms duly executed by the Shares Seller and the Nominees in favour of the Selected Bidder, simultaneously against the Selected Bidder handing over to the Shares Seller demand drafts drawn in favour of the Shares Seller for the Acquisition Price payable to it.

Provided that prior to the handing over of the Sale Share Certificates to the Selected Bidder as mentioned above, the Selected Bidder shall provide satisfactory evidence to PFCCL that on or before the Closing Date, the Selected Bidder has furnished the Performance Bank Guarantee to Central Transmission Utility of India Limited and is in a position to comply with all other requirements of Clause 2.4 of the RFP.

3.3 The Selected Bidder shall immediately upon receiving the Sale Share Certificates and the Share Transfer Forms, duly execute the Share Transfer Forms and duly lodge the Share Transfer Forms and the Sale Share Certificates with the Company. The Selected Bidder may also propose the names of its nominees to be appointed on the Board of the Company and the address outside the jurisdiction of the Registrar of Companies Delhi - II, which would be the new registered office of the Company. The Company shall, upon receipt of the said documents from the Selected Bidder, do the following:

(i) Immediately on the Closing Date convene a meeting of the Board, wherein the Board shall pass the following necessary resolutions:

(a) approving the transfer of the Shares constituting the Sale Shares from the Shares Seller and the Nominees to the name of the **Power Grid**

**Corporation of India Limited and its nominees** and transfer of all assets and liabilities of the Company as on Closing Date;

(b) Approving the **Power Grid Corporation of India Limited and its nominees** as a member of the Company and entering the name of the **Power Grid Corporation of India Limited and its nominees** in the register of members.

(c) Changing the address of the registered office of the Company to the new address, outside the jurisdiction of the Registrar of Delhi - II, as may be provided by the Selected Bidder.

(d) appointing the nominees of the Selected Bidder on the Board and accepting the resignations of the other existing Directors on the Board and the Chair of the meeting which was taken by one of the existing Directors shall be vacated and appointment of a new Chairman who shall be one of the newly appointed Director, for the rest of the meeting.

Pursuant to the acceptance of resignation of the existing Directors and appointment of new Chairman, the newly constituted Board of Directors shall hold a meeting and pass the following resolution:

(a) terminating all the authorizations granted regarding the business and/or operations of the Company or the operations of the bank accounts of the Company, with prospective effect; and

(b) Acknowledging and accepting the terms and conditions as contained in the executed copies of the RFP Project Documents and to abide by the provisions contained therein.

(ii) Enter the name of the **Power Grid Corporation of India Limited and its nominees** as the legal and beneficial owner of the Sale Shares, free of all Encumbrances, in the register of members of the Company;

(iii) Make the necessary endorsements on the Sale Share Certificates, indicating the name of the **Power Grid Corporation of India Limited and its nominees** as the legal and beneficial owner of the Sale Shares evidenced there under;

(iv) Return the original Sale Share Certificates, duly endorsed in the name of the **Power Grid Corporation of India Limited and its nominees,** to the **Power Grid Corporation of India Limited and its nominees,** as the case may be or its authorized representative;

(v) Handover all the statutory registers and records, if any, of the Company to the Selected Bidder.

(vi) Handover certified true copies of the Board resolution passed by the Company as per (i)(a) to (d) of Clause 3.3 (i) to Central Transmission Utility of India Limited.

3.4 The Parties to this Agreement agree to take all measures that may be required to ensure that all the events contemplated in the **Clauses 3.1 to 3.3** above on the Closing Date are completed on the same day.

Notwithstanding the provisions of **Clause 3.3** hereto, all proceedings to be taken and all documents to be executed and delivered by the Parties at the Closing Date shall be deemed to have been taken and executed simultaneously and no proceedings shall be deemed to have been taken nor documents executed or delivered until all have been taken, executed and delivered.

3.5 The Selected Bidder hereby acknowledges and agrees that after the date of acquisition of one hundred percent (100%) of the equity shareholding of the Company, by the Selected Bidder as per Clause 3.3, (a) the authority, rights and obligations of the PFCCL/Company in respect of the Bid Process shall forthwith cease and any actions to be taken thereafter regarding the Bid Process will be undertaken by Central Transmission Utility of India Limited themselves or through their any other authorized representative(s), (b) all rights and obligations of the PFCCL/Company shall be of the Selected Bidder and (c) any decisions taken by the PFCCL/Company prior to the date of its acquisition by the Selected Bidder shall continue to be binding on the Selected Bidder. The Parties hereby agree that this provision shall survive the termination of this Agreement.

3.6 This agreement shall be effective from the date of its signing by the Parties and shall remain in force until all the obligations of the respective Parties under Clause 3.3 hereto are fulfilled.

## 4. REPRESENTATIONS AND WARRANTIES

4.1 The Selected Bidder hereby represents and warrants to the Shares Seller that:

4.1.1 The Selected Bidder has full legal right, power and authority to enter into, execute and deliver this Agreement and to perform the obligations, undertakings and transactions set forth herein, and this Agreement has been duly and validly executed and delivered by the Selected Bidder and constitutes its legal, valid and binding obligations, enforceable against it in accordance with its terms;

4.1.2 The execution, delivery and performance of this Agreement by the Selected Bidder (i) will not violate or contravene any provision of the Memorandum of Association or Articles of the Selected Bidder, (ii) will not violate or contravene any law, statute, rule, regulation, licensing requirement, order, writ, injunction or decree of any court, governmental instrumentality or other regulatory, governmental or public body, agency or authority by which the Selected Bidder are bound or by which any of its and/or their properties or assets are bound, and (iii) except to the extent that the same have been duly and properly completed or obtained, will not require any filing with, or permit, consent or approval of or license from, or the giving of any notice to, any court, governmental instrumentality or other regulatory, governmental or public body, agency or authority, joint venture party, or any other entity or person whatsoever; and

4.1.3 The Selected Bidder is not restricted in any manner whatsoever, including without limitation, on account of any judicial or governmental order, action or proceeding, or any contractual obligation assumed by the Selected Bidder, from purchasing the Sale Shares from the Shares Seller in the manner provided for in this Agreement.

4.2 The Shares Seller hereby represents and warrants to the Selected Bidder that;

4.2.1 The Shares Seller and the Nominees are the legal and beneficial owners of the Sale Shares, free and clear of any Encumbrance and the delivery to the Selected Bidder of the Sale Shares pursuant to the provisions of this Agreement will transfer to the Selected Bidder a good title to the Sale Shares.

4.2.2 The Shares Seller has full legal right, power and authority to enter into, execute and deliver this Agreement and to perform the obligations, undertakings and transactions set forth herein. The execution, delivery and performance of this Agreement will not violate the Memorandum and Articles of Association of the Shares Seller or contravene any contract by which it is bound.

4.2.3 The Shares Seller has obtained requisite authorizations to sell and transfer the Sale Shares to the Selected Bidder. The Shares Seller also represent that it is not prevented from transferring and selling the Sale Shares. Also, to the best of its knowledge, the Sale Shares are not the subject matter of any claim or pending proceeding or threatened by any legal proceeding made by any third party.

4.3 Except as specified in Clause 4.2, above the Shares Seller shall not be deemed to have, made any representation or warranty whatsoever, whether express or implied, in relation to the Sale Shares or Company, including but not limited to any implied warranty or representation as to the business or affairs of the Company.

4.4 The Representations and Warranties are given as at the date of this Agreement except that where a Representation and Warranty is expressed to be made as at another date, the Representation and Warranty is given with respect to that date only.

4.5 Each Representation and Warranty is to be construed independently of the others and is not limited by reference to any other Warranty. The Representations, Warranties and undertakings contained in this **Clause 4** hereto or in any document delivered pursuant to or in connection with this Agreement are continuing in nature and shall survive the Closing Date for one (1) year.

4.6 The Parties represent to each other that all Representations and Warranties provided herein by the respective Party shall be true as of Closing Date.

## 5. OBLIGATIONS OF THE SELECTED BIDDER

The Selected Bidder agrees that the Shares Seller shall not be liable in any manner, nor shall it assume any responsibility or liability whatsoever, in respect of the business of the Company and its operations or activities, arising after Closing Date, to any Person or any authority, central, state, local or municipal or otherwise and the same shall be the sole responsibility of the Selected Bidder.

## 6. MISCELLANEOUS

6.1 NOTICES

a) All notices to be given under this Agreement shall be in writing and in the English language.

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FATEHGARH II TRANSMISSION LTD. NEW DELHI FTTL

POWER GRID CORPORATION OF INDIA LTD. PGCIL

b) All notices must be delivered personally or by registered or speed post or by recognised courier to the addresses below:

| | |
|---|---|
| **Selected Bidder (Lead Member in case of Consortium)** | **Company Secretary**<br>**Power Grid Corporation of India Limited**<br>B – 9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016, India |
| **Name of the Holding Company of the SPV** | **Company Secretary**<br>**PFC Consulting Limited**<br>First Floor, Urjanidhi, 1, Barakhamba Lane, Connaught Place, Central Delhi, New Delhi – 110 001 |
| **Company (Before Closing Date)** | **Project in-charge**<br>**FATEHGARH II TRANSMISSION LIMITED**<br>First Floor, Urjanidhi, 1, Barakhamba Lane, Connaught Place, New Delhi, Central Delhi- 110001 |
| **Company (After Closing Date)** | **FATEHGARH II TRANSMISSION LIMITED**<br>B - 9, Qutab Institutional Area, Katwaria Sarai, New Delhi -- 110 016, India |

c) Any Party may by notice of at least fifteen (15) days to the other Parties change the address and / or addresses to which such notices and communications to it are to be delivered or mailed.

## 6.2 RESOLUTION OF DISPUTES

6.2.1 If any dispute arises between the Parties, in connection with the validity, interpretation, implementation or alleged breach of any provision of this Agreement ("Dispute"), the disputing Parties hereto shall endeavor to settle such Dispute amicably. The attempt to bring about an amicable settlement shall be considered to have failed if not resolved within 60 days from the date of the Dispute.

6.2.2 If the Parties are unable to amicably settle the Dispute in accordance with Clause 6.2.1 within the period specified therein, any of the Parties shall be entitled to within 30 days after expiry of the aforesaid period, refer the Dispute to the Company Secretary of PFCCL and Chief Executive/ Managing Director of the Selected Bidder for resolution of the said Dispute. The attempt to bring about such resolution shall be considered to have failed if not resolved within 30 days from the date of receipt of a written notification in this regard.

6.2.3 In the event the Dispute is not settled in accordance with Clause 6.2.2 above, any Party to the Dispute shall be entitled to serve a notice invoking this Clause and making a reference to a sole arbitrator. If the Parties to the Dispute cannot agree as to the appointment of the

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sole arbitrator within 30 days of receipt of the notice of the Party making the reference, then the Shares Seller along with the Company shall appoint one arbitrator and the Selected Bidder shall appoint one arbitrator and the two arbitrators, so appointed shall appoint a third arbitrator. However, after the Closing Date, in such an event the Shares Seller shall appoint one arbitrator and the Selected Bidder along with the Company shall appoint one arbitrator and the two arbitrators, so appointed shall appoint the third arbitrator.

6.2.4 The place of the arbitration shall be New Delhi. The Arbitration proceedings shall be governed by the Arbitration and Conciliation Act, 1996.

6.2.5 The proceedings of arbitration shall be in English language.

6.2.6 The arbitrator's award shall be substantiated in writing. The arbitrators shall also decide on the costs of the arbitration proceedings. In case the arbitrators have not decided on the costs of the arbitration proceedings, each Party to the Dispute shall bear its own costs, in relation to the arbitration proceedings.

## 6.3 AUTHORISED PERSON

For the purposes of this Agreement, the Selected Bidder is represented by Sh. Arup Kumar Samanta, General Manager, Company Secretariat, POWERGRID, pursuant to an authorization granted to Sh. Arup Kumar Samanta, General Manager, Company Secretariat, POWERGRID through necessary Board resolutions. Further, Sh. Arup Kumar Samanta, General Manager, Company Secretariat, POWERGRID is also authorized by such resolutions to take any decision which may be required to be taken, do all acts and execute all documents which are or may be required by the Selected Bidder for the proper and effective fulfillment of the rights and obligations under this Agreement. Any action taken or document executed by Sh. Arup Kumar Samanta, General Manager, Company Secretariat, POWERGRID shall be deemed to be acts done or documents executed by the Selected Bidder and shall be binding on the Selected Bidder.

## 6.4 RESERVATION OF RIGHTS

No forbearance, indulgence or relaxation or inaction by any Party at any time to require performance of any of the provisions of this Agreement shall in any way affect, diminish or prejudice the right of such Party to require performance of that provision, and any waiver or acquiescence by any Party of any breach of any of the provisions of this Agreement shall not be construed as a waiver or acquiescence of any continuing or succeeding breach of such provisions, a waiver of any right under or arising out of this Agreement or acquiescence to or recognition of rights other than that expressly stipulated in this Agreement.

## 6.5 CUMULATIVE RIGHTS

All remedies of either Party under this Agreement whether provided herein or conferred by statute, civil law, common law, custom or trade usage, are cumulative and not alternative and may be enforced successively or concurrently.

## 6.6 PARTIAL INVALIDITY

If any provision of this Agreement or the application thereof to any person or circumstance shall be invalid or unenforceable to any extent, the remainder of this Agreement and the application of such provision to persons or circumstances other than those as to which it is held invalid or unenforceable shall not be affected thereby, and each provision of this Agreement shall be valid and enforceable to the fullest extent permitted by law. Any invalid or unenforceable provision of this Agreement shall be replaced with a provision, which is valid and enforceable and most nearly reflects the original intent of the unenforceable provision.

## 6.7 TERMINATION

If (i) the Closing does not occur on the Closing Date for any reason whatsoever, or (ii) the Letter of Intent is withdrawn or terminated for any reason, or (iii) due to termination of the TSA by Central Transmission Utility of India Limited in accordance with Article 3.3.2 or Article 13 of the TSA thereof, PFCCL shall have a right to terminate this Agreement forthwith by giving a written notice to the other Parties hereto.

## 6.8 AMENDMENTS

No modification or amendment of this Agreement and no waiver of any of the terms or conditions hereof shall be valid or binding unless made in writing and duly executed by all the Parties.

## 6.9 ASSIGNMENT

This Agreement and the rights and liabilities hereunder shall bind and inure to the benefit of the respective successors of the Parties hereto, but no Party hereto shall assign or transfer its rights and liabilities hereunder to any other Person without the prior written consent of the other Parties, which will not be unreasonably withheld.

## 6.10 ENTIRE AGREEMENT

This Agreement constitutes the entire Agreement between the Parties with respect to the subject matter herein and supersedes and cancels any prior oral or written agreement, representation, understanding, arrangement, communication or expression of intent relating to the subject matter of this Agreement.

## 6.11 COSTS

Each of the Parties hereto shall pay their own costs and expenses relating to the negotiation, preparation and execution of this Agreement and the transactions contemplated by this Agreement.

The Selected Bidder shall be liable to bear and pay the stamp duty and other costs in respect of this Agreement and the Share Transfer Forms.

## 6.12 RELATIONSHIP

None of the provisions of this Agreement shall be deemed to constitute a partnership between the Parties hereto and no Party shall have any authority to bind the other Party otherwise than under this Agreement or shall be deemed to be the agent of the other in any way.

## 6.13 GOVERNING LAW AND JURISDICTION

This Agreement shall be governed by and construed in accordance with the laws of India and shall be subject to the exclusive jurisdiction of the courts of Delhi.

## 6.14 COUNTERPARTS

This Agreement may be executed in counterparts by the Parties and each fully executed counterpart shall be deemed to be original.

## 6.15 CONFIDENTIALITY

The Parties undertake to hold in confidence and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

(a) to their professional advisors;

(b) to their officers, employees, agents or representatives, who need to have access to such information for the proper performance of their activities;

(c) disclosures required under Law;

Without the prior written consent of the other Parties.

Provided that Central Transmission Utility of India Limited and PFCCL may at any time, disclose the terms and conditions of transactions contemplated hereby to any person, to the extent stipulated under the law or the Bidding Guidelines.

## 6.16 INDEMNIFICATION

- The Parties hereby agree that transfer of Sale Shares to the Selected Bidder shall vest all the rights, privileges, licenses, responsibilities, liabilities and other obligations pertaining to the Company in the Selected Bidder.

- The Selected Bidder hereby agrees that the Selected Bidder shall not be entitled to any claims or initiate any legal proceedings, by itself or through the Transmission Service Provider against the Share Sellers, its directors, officers, employees and the subscribers including the members of any committees appointed by them in respect of any actions or decisions taken by any of them up to the Closing Date in furtherance of the Project referred to in recital A of this Agreement.

- Further, the Selected Bidder hereby indemnifies and holds harmless at all times the Share Seller against all losses, damages, charges, and expenses which the Share Seller

may sustain or incur towards contractual obligations with respect to the contracts awarded by the Share Seller or any other liability arising with regard to any action/ activity undertaken by the Share Seller for and on behalf of the Company in furtherance of the Project referred to above or otherwise concerning the Company. All such actions shall be defended by the Selected Bidder either itself or through the TSP at its own cost.

- The Parties hereby agree that the provisions of this clause shall survive the termination of this Agreement.

**IN WITNESS WHEREOF, THE PARTIES HERETO HAVE CAUSED THIS AGREEMENT TO BE DULY EXECUTED AND DELIVERED AS OF THE DAY AND YEAR FIRST ABOVE WRITTEN**

SIGNED AND DELIVERED
BY THE WITHIN NAMED **"PFC CONSULTING LIMITED (PFCCL)"**

BY THE HAND OF **SHRI SACHIN ARORA, COMPANY SECRETARY**

PURSUANT TO THE RESOLUTION PASSED BY THE BOARD OF DIRECTORS ON 06TH AUGUST, 2026

ON THE 28TH DAY OF AUGUST, 2026

IN THE PRESENCE OF:

WITNESS:
NAME, SIGNATURE, DESIGNATION AND ADDRESS:

SIGNED AND DELIVERED
BY THE WITHIN NAMED **"FATEHGARH II TRANSMISSION LIMITED"**

BY THE HAND OF **SHRI SACHIN SHUKLA, CHAIRMAN**

PURSUANT TO THE
RESOLUTION PASSED BY THE BOARD OF DIRECTORS ON 31ST JULY, 2026

ON THE 28TH DAY OF AUGUST, 2026

IN THE PRESENCE OF:

WITNESS:
NAME, SIGNATURE, DESIGNATION AND ADDRESS:

SIGNED AND DELIVERED
BY THE WITHIN NAMED **"POWER GRID CORPORATION OF INDIA LIMITED"**

BY THE HAND OF SHRI SH. ARUP KUMAR SAMANTA, GENERAL MANAGER, COMPANY SECRETARIAT, POWERGRID

PURSUANT TO THE
RESOLUTION PASSED BY THE BOARD OF DIRECTORS ON 19th MARCH 2026

ON THE 28TH DAY OF AUGUST, 2026

IN THE PRESENCE OF:

WITNESS:

NAME, SIGNATURE, DESIGNATION AND ADDRESS:

d. Aditya Mahesh

# TRANSMISSION SERVICE AGREEMENT

FOR

DEVELOPMENT AND OPERATION OF INTER-STATE TRANSMISSION SYSTEM

FOR TRANSMISSION OF ELECTRICITY THROUGH TARIFF BASED COMPETITIVE BIDDING FOR

INSTALLATION OF 2 NOS. OF SYNCHRONOUS CONDENSERS (SYNCON) UNITS AT 765/400/220KV FATEHGARH-II PS

BETWEEN

CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED

(NODAL AGENCY)

AND

FATEHGARH II TRANSMISSION LIMITED

28th AUGUST, 2026

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Bond

# Indian-Non Judicial Stamp
# Haryana Government

Date :01/07/2026

Transmission Service Agreement

Certificate No. G0A2026G1610

GRN No. 154527219

Stamp Duty Paid : ₹ 101
(Rs. Only)

Penalty :₹ 0
(Rs. Zero Only)

**Deponent**

Name: Central Transmission utility of India ltd
H.No/Floor : 2 Sector/Ward : 29 Landmark : Na
City/Village : Gurugram District : Gurugram State : Haryana
Phone : 98******10

Purpose : ARTICLE 5 GENERAL AGREEMENT **to be submitted at Concerned office**

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**THIS TRANSMISISON SERVICE AGREEMENT** (hereinafter referred to as "TSA" or "Agreement" or "the Agreement" or "this Agreement") is made on the ...28th... [Insert day] of...AUGUST...[Insert month] of Two Thousand Twenty Six.

**BETWEEN:**

The **CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED**, a company incorporated under the Companies Act, 2013, having its registered office at **Plot No.2, Sector 29, Gurugram, Haryana 122001, India** & Correspondence address at **Floor No. 5-10, Tower 1, Plot No. 16, IRCON International Tower, Institutional Area, Sector 32, Gurugram, Haryana – 122001, India**, acting as a Nodal Agency (referred to as the "Nodal Agency"), which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the one part;

**AND**

**FATEHGARH II TRANSMISSION LIMITED** incorporated under the Companies Act, 1956/ Companies Act, 2013 (as the case may be), having its registered office at **1st Floor, Urjanidhi, 1, Barakhamba Lane, Connaught Place, New Delhi-110001** (herein after referred to as "Transmission Service Provider" or "TSP" or "ISTS Licensee", which expression shall unless repugnant to the context or meaning thereof include its successors, and permitted assigns) as Party of the other part;

**("Nodal Agency" and "TSP" are individually referred to as "Party" and collectively as the "Parties")**

TILITY OF INDIA

FATEHGARH II TRANSMISSION LTD. NEW DELHI

**AND WHEREAS:**

A) In accordance with the Bidding Guidelines, the Bid Process Coordinator (hereinafter referred to as BPC) had initiated a competitive e-reverse bidding process through issue of RFP for selecting a Successful Bidder to build, own, operate and transfer the Project comprising of the Elements mentioned in Schedule 1 (hereinafter referred to as the Project)

B) Pursuant to the said e-reverse bidding process, the BPC has identified the Successful Bidder, who will be responsible to set up the Project on build, own, operate and transfer basis to provide Transmission Service in accordance with the terms of this Agreement and the Transmission License.

C) The Selected Bidder have submitted the Contract Performance Guarantee and acquired one hundred percent (100%) of the equity shareholding of **FATEHGARH II TRANSMISSION LIMITED**, along with all its related assets and liabilities in terms of the provisions of the Share Purchase Agreement.

D) The TSP has agreed to make an application for a Transmission License to the Commission for setting up the Project on build, own, operate and transfer basis.

E) The TSP has further agreed to make an application to the Commission for the adoption of the Transmission Charges under Section 63 of the Electricity Act, 2003, along with a certification from the Bid Evaluation Committee in accordance with the Bidding Guidelines issued by Ministry of Power, Government of India.

F) The TSP has agreed to execute the agreement(s) required, if any, under Sharing Regulations within fifteen (15) days from the date of grant of Transmission License from the Commission.

G) The TSP agrees to the terms and conditions laid down under Sharing Regulations, for making available the ISTS and charge the Transmission Charges in accordance with the terms and conditions of Sharing Regulations.

H) The billing, collection and disbursement of the Transmission Charges by the CTU to the ISTS Licensee shall be governed as per Sharing Regulations.

I) The terms and conditions stipulated in the Transmission License issued by the Commission to the TSP shall be applicable to this Agreement and the TSP agrees to comply with these terms and conditions. In case of inconsistency between the Transmission License terms & conditions and the conditions of this Agreement, the conditions stipulated in the Transmission License granted by the Commission shall prevail.

NOW, THEREFORE, IN CONSIDERATION OF THE PREMISES AND MUTUAL AGREEMENTS, COVENANTS AND CONDITIONS SET FORTH HEREIN, IT IS HEREBY AGREED BY AND BETWEEN THE PARTIES HERETO AS FOLLOWS:

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

FATEHGARH II TRANSMISSION LTD. NEW DELHI

**ARTICLE: 1**

## 1. DEFINITIONS AND INTERPRETATIONS

### 1.1 Definitions:

1.1.1 The words / expressions used in this Agreement, unless as defined below or repugnant to the context, shall have the same meaning as assigned to them by the Electricity Act, 2003 and the rules or regulations framed there under including those issued / framed by the Commission (as defined hereunder), as amended or re-enacted from time to time or the General Clauses Act, failing which it shall bear its ordinary English meaning.

The words/expressions when used in this Agreement shall have the respective meanings as specified below:

**"Acquisition Price"** shall have the same meaning as defined in the Share Purchase Agreement;

**"Act"** or **"Electricity Act"** or **"Electricity Act 2003"** shall mean the Electricity Act, 2003 and any amendments made to the same or any succeeding enactment thereof;

**"Affiliate"** shall mean a company that either directly or indirectly

i. controls or

ii. is controlled by or

iii. is under common control with

a Bidding Company (in the case of a single company) or a Member (in the case of a Consortium) and "**control**" means ownership by one entity of at least twenty six percent (26%) of the voting rights of the other entity;

**"Availability"** in relation to the Project or in relation to any Element of the Project, for a given period shall mean the time in hours during that period the Project is capable to transmit electricity at its Rated Voltage and shall be expressed in percentage of total hours in the given period and shall be calculated as per the procedure contained in **Appendix –IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024,** attached herewith in Schedule 6;

**"Bid"** shall mean technical bid and financial bid submitted by the Bidder, in response to the RFP, in accordance with the terms and conditions of the RFP;

**"Bid Deadline"** shall mean the last date and time for submission of the Bid in response to RFP, as specified in the RFP;

**"Bidding Company"** shall refer to such single company that has made a Response to RFP for the Project;

**"Bidding Consortium / Consortium"** shall refer to a group of companies that has collectively made a Response to RFP for the Project;

**"Bid Documents"** or **"Bidding Documents"** shall mean the RFP, along with all attachments thereto or clarifications thereof;

**"Bidding Guidelines"** shall mean the "Tariff Based Competitive Bidding Guidelines for Transmission Service" and "Guidelines for Encouraging Competition in Development of Transmission Projects" issued by Government of India, Ministry of Power under Section – 63 of the Electricity Act as amended from time to time;

**"Bid Process Coordinator"** or **"BPC"** shall mean a person or its authorized representative as notified by the Government of India, responsible for carrying out the process for selection of Bidder who will acquire Transmission Service Provider;

**"Bill"** shall mean any bill raised by the CTU on the DICs to recover the Transmission Charges pursuant to the Sharing Regulations;

**"Business Day"** shall mean a day other than Sunday or a statutory holiday, on which the banks remain open for business in the State in which the Nodal Agency's registered office is located and the concerned TSP are located;

**"CEA"** shall mean the Central Electricity Authority constituted under Section -70 of the Electricity Act;

**"Change in law"** shall have the meaning ascribed thereto in Article 12;

**"Commercial Operation Date"** or **"COD"** shall mean the date as per Article 6.2;

**"Commission"** or **"CERC"** shall mean the Central Electricity Regulatory Commission referred to in sub-section (1) of Section 76 of the Electricity Act, 2003 or its successors and assigns;

**"Competent Court of Law"** shall mean the Supreme Court or any High Court, or any tribunal or any similar judicial or quasi-judicial body in India that has jurisdiction to adjudicate upon issues relating to the Project;

**"Connection Agreement"** shall mean the agreement between the CTU or STU or any other concerned parties and the TSP, setting out the terms relating to the connection of the Project to the Inter-connection Facilities and use of the Inter State Transmission System as per the provisions of the IEGC, as the case may be;

**"Consultation Period"** shall mean the period of sixty (60) days or such longer period as the Parties may agree, commencing from the date of issue of a TSP's Preliminary Notice or a Nodal Agency's Preliminary Termination Notice, as provided in Article 13 of this Agreement, for consultation between the Parties to mitigate the consequence of the relevant event having regard to all the circumstances;

**"Consents, Clearances and Permits"** shall mean all authorizations, licenses, approvals, registrations, permits, waivers, privileges, acknowledgements, agreements, or concessions required to be obtained from or provided by any concerned authority for the development, execution and operation of Project including without any limitation for the construction, ownership, operation and maintenance of the Transmission Lines and/or sub-stations;

**"Construction Period"** shall mean the period from (and including) the Effective Date of the Transmission Service Agreement up to (but not including) the COD of the Element of the Project in relation to an Element and up to (but not including) the COD of the Project in relation to the Project;

**"Contractors"** shall mean the engineering, procurement, construction, operation & maintenance contractors, surveyors, advisors, consultants, designers, suppliers to the TSP and each of their respective sub-contractors (and each of their respective successors and permitted assigns) in their respective capacities as such;

**"Contract Performance Guarantee" Contract Performance Guarantee"** shall mean the irrevocable unconditional bank guarantee, or insurance surety bond or Payment on Order Instrument submitted and to be submitted by the TSP or by the Selected Bidder on behalf of the TSP to the Nodal Agency from a bank mentioned in Annexure 17 of the RFP, in the form attached here to as Schedule 8 (for bank guarantee) or Schedule-8A (for insurance surety bond issued by any of the insurance companies authorized by Insurance Regulatory and Development Authority of India), or Schedule-8B (for Payment on Order Instrument issued by PFC/REC/IREDA) in accordance with Article 3 of this Agreement and which shall include the additional bank guarantee or insurance surety bond or Payment on Order Instrument furnished by the TSP under this Agreement;

**"Contract Year",** for the purpose of payment of Transmission Charges, shall mean the period beginning on the COD, and ending on the immediately succeeding March 31 and thereafter each period of 12 months beginning on April 1 and ending on March 31 provided that the last Contract Year shall end on the last day of the term of the TSA;

**"CTU"** or **"Central Transmission Utility"** shall have same meaning as defined in the Electricity Act, 2003;

**"Day"** shall mean a day starting at 0000 hours and ending at 2400 hours;

**"D/C"** shall mean Double Circuit;

**"Designated ISTS Customers"** or **"DICs"** shall have the meaning as described in the Sharing Regulations;

**"Dispute"** shall mean any dispute or difference of any kind between the Parties, in connection with or arising out of this Agreement including any issue on the interpretation and scope of the terms of this Agreement as provided in Article 16;

**"Effective Date"** for the purposes of this Agreement, shall have the same meaning as per Article 2.1 of this Agreement;

**"Electrical Inspector"** shall mean a person appointed as such by the Government under sub-section (1) of Section 162 of the Electricity Act 2003 and also includes Chief Electrical Inspector;

**"Electricity Rules 2005"** shall mean the rules framed pursuant to the Electricity Act 2003 and as amended from time to time;

**"Element"** shall mean each Transmission Line or each circuit of the Transmission Lines (where there are more than one circuit) or each bay of Sub-station or switching station or HVDC terminal or inverter station of the Project, including ICTs, Reactors, SVC, FSC, etc. forming part of the ISTS, which will be owned, operated and maintained by the concerned ISTS Licensee, and which has a separate Scheduled COD as per Schedule 2 of this Agreement and has a separate percentage for recovery of Transmission Charges on achieving COD as per Schedule 5 of this Agreement;

**"Event of Default"** shall mean the events as defined in Article 13 of this Agreement;

**"Expiry Date"** shall be the date which is thirty five (35) years from the COD of the Project;

**"Financial Closure"** shall mean the first Business Day on which funds are made available to the TSP pursuant to the Financing Agreements;

**"Financially Evaluated Entity"** shall mean the company which has been evaluated for the satisfaction of the financial requirement set forth in the RFP;

**"Financing Agreements"** shall mean the agreements pursuant to which the TSP is to finance the Project including the loan agreements, security documents, notes, indentures, security agreements, letters of credit and other documents, as may be amended, modified, or replaced from time to time, but without in anyway increasing the liabilities of the Designated ISTS Customers / Nodal Agency;

**"Financial Year"** shall mean a period of twelve months at midnight Indian Standard Time (IST) between 1st April & 31st March;

**"Force Majeure"** and **"Force Majeure Event"** shall have the meaning assigned thereto in Article 11;

**"GOI"** shall mean Government of India;

**"Grid Code" / "IEGC"** shall mean the Grid Code specified by the Central Commission under Clause (h) of sub-section (1) of Section 79 of the Electricity Act;

**"Independent Engineer"** shall mean an agency/ company, appointed by Nodal Agency in accordance with the Guidelines for Encouraging Competition in Development of Transmission Projects.

**"Indian Governmental Instrumentality"** shall mean Government of India, Government of any State in India or any ministry, department, board, authority, agency, corporation, commission under the direct or indirect control of Government of India or any State Government or both, any political sub-division of any of them including any court or Commission or tribunal or judicial or quasi-judicial body in India but excluding the CTU, TSP and the Designated ISTS Customers;

**"Insurances"** shall mean the insurance cover to be obtained and maintained by the TSP in accordance with Article 9 of this Agreement;

**"Interconnection Facilities"** shall mean the facilities as may be set up for transmission of electricity through the use of the Project, on either one or both side of generating station's / CTU's / STU's / ISTS Licensee's / Designated ISTS Customer's substations (as the case may be) which shall include, without limitation, all other transmission lines, gantries, sub-stations and associated equipment's not forming part of the Project;

**"ISTS Licensee"** shall be the TSP under this Agreement, consequent to having been awarded a Transmission License by the CERC and shall be referred to as the TSP or the ISTS Licensee, as the context may require in this Agreement;

**"Law" or "Laws"** in relation to this Agreement, shall mean all laws including electricity laws in force in India and any statute, ordinance, rule, regulation, notification, order or code, or any interpretation of any of them by an Indian Governmental Instrumentality having force of law and shall include all rules, regulations, decisions and orders of the Commission;

**"Lead Member of the Bidding Consortium" or "Lead Member"** shall mean a company who commits at least 26% equity stake in the Project, meets the technical requirement as specified in the RFP and so designated by other Member(s) in Bidding Consortium;

**"Lenders"** means the banks, financial institutions, multilateral funding agencies, non-banking financial companies registered with the Reserve Bank of India (RBI), insurance companies registered with the Insurance Regulatory & Development Authority (IRDA), pension funds regulated by the Pension Fund Regulatory & Development Authority (PFRDA),mutual funds registered with Securities & Exchange Board of India (SEBI), etc., including their successors and assigns, who have agreed on or before COD of the Project to provide the TSP with the debt financing described in the capital structure schedule, and any successor banks or financial institutions to whom their interests under the Financing Agreements may be transferred or assigned;

Provided that, such assignment or transfer shall not relieve the TSP of its obligations to the Nodal Agency under this Agreement in any manner and shall also does not lead to an increase in the liability of the Nodal Agency;

**"Lenders Representative"** shall mean the person notified by the Lender(s) in writing as being the representative of the Lender(s) or the Security Trustee and such person may from time to time be replaced by the Lender(s) pursuant to the Financing Agreements by written notice to the TSP;

**"Letter of Intent"** or **"LOI"** shall have the same meaning as in the RFP;

**"Member in a Bidding Consortium / Member"** shall mean each company in the Bidding Consortium;

**"Month"** shall mean a period of thirty (30) days from (and excluding) the date of the event;

**"Monthly Transmission Charges"** for any Element of the Project, after COD of the Element till COD of the Project, and for the Project after COD of the Project, shall mean the amount of Transmission Charges as specified in Schedule 5 of this Agreement multiplied by no. of days in the relevant month and divided by no. of days in the year;

**"National Load Despatch Centre"** shall mean the centre established as per sub-section (1) of Section 26 of the Electricity Act 2003;

"**Nodal Agency**" shall mean CTU, which shall execute and implement the Transmission Service Agreement (TSA);

Provided that while taking major decisions, CTU shall consult CEA on technical matters and any other matter it feels necessary.

**"Notification"** shall mean any notification, issued in the Gazette of India;

**"Operating Period"** for any Element of the Project shall mean the period from (and including) the COD of such Element of the Project, up to (and including) the Expiry Date and for the Project, shall mean the period from (and including) the COD of the Project, up to (and including) the Expiry Date;

**"Parent Company"** shall mean an entity that holds at least twenty six percent (26%) of the paid - up equity capital directly or indirectly in the Bidding Company or in the Member in a Bidding Consortium, as the case may be;

**"Payment on Order Instrument"** shall mean Letter of Undertaking from Indian Renewable Energy Development Agency Limited (IREDA) or Power Finance Corporation Limited (PFC) or REC Limited (REC) [the three non-banking financial institutions under Ministry of New & Renewable Energy (MNRE)/ Ministry of Power (MoP), to pay in case situation of default of Transmission Service Provider (TSP) in terms of tender conditions/Power Purchase Agreement (PPA) arises. Such Letter (s) will have same effect as that of a Bank Guarantee issued by any public any public sector bank. Such "Payment on Order instrument" would have terms and conditions similar to that of any Bank Guarantee given by any public sector bank and would promise to pay the Nodal Agency on demand within stipulated time. TSPs can seek such Letter(s) by offering due security to the above mentioned three non-banking financial institutions mentioned above (IREDA, PFC & REC). Nodal Agency shall not accept the instrument of 'Letter of Undertaking' as described above or in any other form, from any other non-banking financial institutions or bank, except IREDA, PFC & REC.

**"Preliminary Termination Notice"** shall mean a Nodal Agency's Preliminary Termination Notice as defined in Article 13 of this Agreement;

**"Project"** shall mean **"Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS"**, as detailed in Schedule 1 of this Agreement;

"**Project Assets**" shall mean all physical and other assets relating to and forming part of the Project including:

(a) rights over the Site for substations, ROW for transmission lines;

(b) tangible & intangible assets such as civil works and equipment including foundations, embankments, pavements, electrical systems, communication systems, relief centres, administrative offices, Sub-stations, software, tower and sub-stations designs etc;

(c) project facilities situated on the Site;

(d) all rights of the TSP under the project agreements;

(e) financial assets, such as receivables, security deposits etc;

(f) insurance proceeds; and

(g) Applicable Permits and authorisations relating to or in respect of the Transmission System;"

**"Project Execution Plan"** shall mean the plan referred to in Article 3.1.3(c) hereof;

**"Prudent Utility Practices"** shall mean the practices, methods and standards that are generally accepted internationally from time to time by electric transmission utilities for the purpose of ensuring the safe, efficient and economic design, construction, commissioning, operation, repair and maintenance of the Project and which practices, methods and standards shall be adjusted as necessary, to take account of:

(i) operation, repair and maintenance guidelines given by the manufacturers to be incorporated in the Project,

(ii) the requirements of Law, and

(iii) the physical conditions at the Site;

(iv) the safety of operating personnel and human beings;

**"Rated Voltage"** shall mean voltage at which the Transmission System is designed to operate or such lower voltage at which the line is charged, for the time being, in consultation with the Central Transmission Utility;

**"Rebate"** shall have the meaning as ascribed to in Article 10.3 of this Agreement;

**"RFP"** shall mean Request For Proposal dated **February 11, 2026** along with all schedules, annexures and RFP Project Documents attached thereto, issued by the BPC for tariff based competitive bidding process for selection of Bidder as TSP to execute the Project, including any modifications, amendments or alterations thereto;

**"RFP Project Documents"** shall mean the following documents to be entered into in respect of the Project, by the Parties to the respective agreements:

a. Transmission Service Agreement,

b. Share Purchase Agreement,

c. Agreement(s) required under Sharing Regulations and

d. Any other agreement as may be required;

**"RLDC"** shall mean the relevant Regional Load Dispatch Centre as defined in the Electricity Act, 2003, in the region(s) in which the Project is located;

**"RPC"** shall mean the relevant Regional Power Committee established by the Government of India for the specific Region(s) in accordance with the Electricity Act, 2003 for facilitating integrated operation of the Power System in that Region;

**"Scheduled COD"** in relation to an Element(s) shall mean the date(s) as mentioned in Schedule 2 as against such Element(s) and in relation to the Project, shall mean the date as mentioned in Schedule 2 as against such Project, subject to the provisions of Article 4.4 of this Agreement, or such date as may be mutually agreed among the Parties;

**"Scheduled Outage"** shall mean the final outage plan as approved by the RPC as per the provisions of the Grid Code;

**"Selected Bid"** shall mean the technical Bid and the Final Offer of the Selected Bidder submitted during e-reverse bidding, which shall be downloaded and attached in Schedule 7 on or prior to the Effective Date;

**"Share Purchase Agreement"** shall mean the agreement amongst **PFC Consulting Limited (PFCCL)**, **FATEHGARH II TRANSMISSION LIMITED** and the Successful

Bidder for the purchase of one hundred (100%) per cent of the shareholding of the **FATEHGARH II TRANSMISSION LIMITED** for the Acquisition Price, by the Successful Bidder on the terms and conditions as contained therein;

**"Sharing Regulations"** shall mean the Central Electricity Regulatory Commission (Sharing of Inter-State Transmission Charges and Losses) Regulations, 2020 and as amended from time to time;

**"Site"** in relation to a substation, switching station or HVDC terminal or inverter station, shall mean the land and other places upon which such station / terminal is to be established;

**"SLDC"** shall mean the State Load Despatch Centre established as per sub-section (1) of Section 31 of the Electricity Act 2003;

**"STU"** or **"State Transmission Utility"** shall be the Board or the Government company, specified as such by the State Government under sub-section (1) of Section 39 of the Electricity Act 2003;

**"Successful Bidder"** or **"Selected Bidder"** shall mean the Bidder selected pursuant to the RFP and who has to acquire one hundred percent (100%) equity shares of **FATEHGARH II TRANSMISSION LIMITED,** along with all its related assets and liabilities, which will be responsible as the TSP to establish the Project on build, own, operate and transfer basis as per the terms of the TSA and other RFP Project Documents;

**"TSP's Preliminary Notice"** shall mean a notice issued by the TSP in pursuant to the provisions of Article 13.3 of this Agreement;

**"Target Availability"** shall have the meaning as ascribed hereto in Article 8.2 of this Agreement;

**"Technically Evaluated Entity"** shall mean the company which has been evaluated for the satisfaction of the technical requirement set forth in RFP;

**"Termination Notice"** shall mean a Nodal Agency's Termination Notice given by the Nodal Agency to the TSP pursuant to the provisions of Articles 3.3.2, 3.3.4, 4.4.2, 5.8, 13.2 and 13.3 of this Agreement for the termination of this Agreement;

**"Term of Agreement"** for the purposes of this Agreement shall have the meaning ascribed thereto in Article 2.2 of this Agreement;

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**"Transmission Charges"** shall mean the Final Offer of the Selected Bidder during the e-reverse bidding and adopted by the Commission, payable to the TSP as per Sharing Regulations;

**"Transmission License"** shall mean the license granted by the Commission in terms of the relevant regulations for grant of such license issued under the Electricity Act;

**"Transmission Service"** shall mean making the Project available as per the terms and conditions of this Agreement and Sharing Regulations;

**"Unscheduled Outage"** shall mean an interruption resulting in reduction of the Availability of the Element(s) / Project (as the case may be) that is not a result of a Scheduled Outage or a Force Majeure Event.

**"Ultimate Parent Company"** shall mean an entity which owns at least twenty six percent (26%) equity in the Bidding Company or Member of a Consortium, (as the case may be) and in the Technically Evaluated Entity and / or Financially Evaluated Entity (as the case may be) and such Bidding Company or Member of a Consortium, (as the case may be) and the Technically Evaluated Entity and / or Financially Evaluated Entity (as the case may be) shall be under the direct control or indirectly under the common control of such entity;

**1.2 Interpretation:**

***Save where the contrary is indicated, any reference in this Agreement to:***

**"Agreement"** shall be construed as including a reference to its Schedules, Appendices and Annexures;

**"Rupee"**, **"Rupees"** and **"Rs."** shall denote lawful currency of India;

**"crore"** shall mean a reference to ten million (10,000,000) and a **"lakh"** shall mean a reference to one tenth of a million (1,00,000);

**"encumbrance"** shall be construed as a reference to a mortgage, charge, pledge, lien or other encumbrance securing any obligation of any person or any other type of preferential arrangement (including, without limitation, title transfer and retention arrangements) having a similar effect;

**"holding company"** of a company or corporation shall be construed as a reference to any company or corporation of which the other company or corporation is a subsidiary;

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**"indebtedness"** shall be construed so as to include any obligation (whether incurred as principal or surety) for the payment or repayment of money, whether present or future, actual or contingent;

**"person"** shall have the meaning as defined in Section 2 (49) of the Act;

**"subsidiary"** of a company or corporation (the holding company) shall be construed as a reference to any company or corporation:

(i) which is controlled, directly or indirectly, by the holding company, or

(ii) more than half of the issued share capital of which is beneficially owned, directly or indirectly, by the holding company, or

(iii) which is a subsidiary of another subsidiary of the holding company,

for these purposes, a company or corporation shall be treated as being controlled by another if that other company or corporation is able to direct its affairs and/or to control the composition of its board of directors or equivalent body;

**"winding-up"**, **"dissolution"**, **"insolvency"**, or **"reorganization"** in the context of a company or corporation shall have the same meaning as defined in the Companies Act, 1956/ Companies Act, 2013 (as the case may be).

1.2.1 Words importing the singular shall include the plural and vice versa.

1.2.2 This Agreement itself or any other agreement or document shall be construed as a reference to this or to such other agreement or document as it may have been, or may from time to time be, amended, varied, novated, replaced or supplemented.

1.2.3 A Law shall be construed as a reference to such Law including its amendments or re-enactments from time to time.

1.2.4 A time of day shall, save as otherwise provided in any agreement or document be construed as a reference to Indian Standard Time.

1.2.5 Different parts of this Agreement are to be taken as mutually explanatory and supplementary to each other and if there is any inconsistency between or among the parts of this Agreement, they shall be interpreted in a harmonious manner so as to give effect to each part.

1.2.6 The tables of contents and any headings or sub-headings in this Agreement have been inserted for ease of reference only and shall not affect the interpretation of this Agreement.

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1.2.7 All interest payable under this Agreement shall accrue from day to day and be calculated on the basis of a year of three hundred and sixty five (365) days.

1.2.8 The words "hereof" or "herein", if and when used in this Agreement shall mean a reference to this Agreement.

1.2.9 The contents of Schedule 7 shall be referred to for ascertaining accuracy and correctness of the representations made by the Selected Bidder in Article 17.2.1 hereof.

**ARTICLE: 2**

## 2. EFFECTIVENESS AND TERM OF AGREEMENT

### 2.1 Effective Date:

This Agreement shall be effective from later of the dates of the following events:

a. The Selected Bidder, on behalf of the TSP, has provided the Contract Performance Guarantee, as per terms of Article 3.1 of this Agreement; and

b. The Selected Bidder has acquired for the Acquisition Price, one hundred percent (100%) of the equity shareholding of **PFC Consulting Limited** in **FATEHGARH II TRANSMISSION LIMITED** along with all its related assets and liabilities as per the provisions of the Share Purchase Agreement. and

c. The Agreement is executed and delivered by the Parties;

### 2.2 Term and Termination:

2.2.1 Subject to Article 2.2.3 and Article 2.4, this Agreement shall continue to be effective in relation to the Project until the Expiry Date, when it shall automatically terminate.

2.2.2 Post the Expiry Date of this Agreement, the TSP shall ensure transfer of Project Assets to CTU or its successors or an agency as decided by the Central Government at zero cost and free from any encumbrance and liability. The transfer shall be completed within 90 days of expiry of this Agreement failing which CTU shall be entitled to take over the Project Assets Suo moto.

2.2.3 This Agreement shall terminate before the Expiry Date in accordance with Article 13 or Article 3.3.2 or Article 3.3.4.

### 2.3 Conditions prior to the expiry of the Transmission License

In order to continue the Project beyond the expiry of the Transmission License, the TSP shall be obligated to make an application to the Commission at least two (2) years before the date of expiry of the Transmission License, seeking the Commission's approval for the extension of the term of the Transmission License up to the Expiry Date.

2.3.1 The TSP shall timely comply with all the requirements that may be laid down by the Commission for extension of the term of the Transmission License beyond the initial term of twenty-five (25) years & upto the Expiry Date and the TSP shall keep the Nodal Agency fully informed about the progress on its application for extension of the term of the Transmission License.

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**2.4 Survival:**

The expiry or termination of this Agreement shall not affect any accrued rights, obligations/ roles and liabilities of the Parties under this Agreement, including the right to receive liquidated damages as per the terms of this Agreement, nor shall it effect the survival of any continuing obligations/ roles for which this Agreement provides, either expressly or by necessary implication, which are to survive after the Expiry Date or termination including those under Articles 3.3.3, 3.3.5, Article 9.3 (Application of Insurance Proceeds), Article 11 (Force Majeure), Article 13 (Events of Default and Termination), Article 14 (Liability & Indemnification), Article 16 (Governing Law & Dispute Resolution), Article 19 (Miscellaneous).

**2.5 Applicability of the provisions of this Agreement**

2.5.1 For the purpose of Availability, Target Availability and the computation of Availability, Incentive, Penalty, the provisions provided in this Agreement shall apply and any future modifications in the relevant Rules and Regulations shall not be applicable for this Project.

2.5.2 For the purposes of this Agreement for ISTS systems developed under the tariff based competitive bidding framework, the provisions relating to the definitions (Availability and COD), Article 3 (Contract Performance Guarantee and Conditions Subsequent), Article 5 (Construction of the Project), Article 6 (Connection and Commissioning of the Project), Article 8 (Target Availability and calculation of Availability), Article 11 (Force Majeure), Article 12 (Change in Law), Article 13 (Event of Default), Article 14 (Indemnification), Article 15 (Assignment and Charges), Articles 16.1, 16.2 and 16.4 (Governing Laws and Dispute Resolution) and Article 17 (representation and warranties of the ISTS Licensee) of this agreement shall supersede the corresponding provisions under Sharing Regulations.

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**ARTICLE: 3**

## 3. CONDITIONS SUBSEQUENT

### 3.1 Satisfaction of conditions subsequent by the TSP

3.1.1 Within ten (10) days from the date of issue of Letter of Intent, the Selected Bidder, shall:

a. Provide the Contract Performance Guarantee, and

b. Acquire, for the Acquisition Price, one hundred percent (100%) equity shareholding of **FATEHGARH II TRANSMISSION LIMITED** from **PFC Consulting Limited**, who shall sell to the Selected Bidder, the equity shareholding of **FATEHGARH II TRANSMISSION LIMITED,** along with all its related assets and liabilities.

c. Execute this Agreement;

The TSP shall, within five (5) working days from the date of acquisition of SPV by the Selected Bidder, undertake to apply to the Commission for the grant of Transmission License and for the adoption of tariff as required under section-63 of the Electricity Act.

The Selected Bidder, on behalf of the TSP, will provide to the **Central Transmission Utility of India Limited** (being the Nodal Agency) the Contract Performance Guarantee for an amount of **Rs.57.00 Crore (Rupees Fifty Seven Crore Only).**

3.1.2 The Contract Performance Guarantee shall be initially valid for a period up to three (3) months after the Scheduled COD of the Project and shall be extended from time to time to be valid for a period up to three (3) months after the COD of the Project. In case the validity of the Contract Performance Guarantee is expiring before the validity specified in this Article, the TSP shall, at least thirty (30) days before the expiry of the Contract Performance Guarantee, replace the Contract Performance Guarantee with another Contract Performance Guarantee or extend the validity of the existing Contract Performance Guarantee until the validity period specified in this Article.

3.1.3 The TSP agrees and undertakes to duly perform and complete the following activities within six (6) months from the Effective Date (except for c) below), unless such completion is affected due to any Force Majeure Event, or if any of the activities is specifically waived in writing by the Nodal Agency:

a. To obtain the Transmission License for the Project from the Commission;

b. To obtain the order for adoption of Transmission Charges by the Commission, as required under Section 63 of the Electricity Act 2003;

c. To submit to the Nodal Agency, CEA & Independent Engineer, the Project Execution Plan, immediately after award of contract(s) and maximum within one hundred and twenty (120) days from the Effective Date. Also, an approved copy each of Manufacturing Quality Plan (MQP) and Field Quality Plan (FQP) would be submitted to Independent Engineer & Nodal Agency in the same time period. The TSP's Project Execution Plan should be in conformity with the Scheduled COD as specified in Schedule 2 of this Agreement, and shall bring out clearly the organization structure, time plan and methodology for executing the Project, award of major contracts, designing, engineering, procurement, shipping, construction, testing and commissioning to commercial operation;

d. To submit to the Nodal Agency, CEA & Independent Engineer a detailed bar (GANTT) chart of the Project outlining each activity (taking longer than one Month), linkages as well as durations;

e. To submit to the Nodal Agency, CEA & Independent Engineer detailed specifications of conductor meeting the functional specifications specified in RFP;

f. To achieve Financial Closure;

g. To provide an irrevocable letter to the Lenders duly accepting and acknowledging the rights provided to the Lenders under the provisions of Article 15.3 of this Agreement and all other RFP Project Documents;

h. To award the Engineering, Procurement and Construction contract ("EPC contract") for the design and construction of the Project and shall have given to such Contractor an irrevocable notice to proceed; and

i. To sign the Agreement(s) required, if any, under Sharing Regulations.

### 3.2 Recognition of Lenders' Rights by the Nodal Agency

3.2.1 The Nodal Agency hereby accepts and acknowledges the rights provided to the Lenders as per Article 15.3 of this Agreement and all other RFP Project Documents.

### 3.3 Consequences of non-fulfilment of conditions subsequent

3.3.1 If any of the conditions specified in Article 3.1.3 is not duly fulfilled by the TSP even within three (3) Months after the time specified therein, then on and from the expiry of such period and until the TSP has satisfied all the conditions specified in Article 3.1.3, the TSP shall, on a monthly basis, be liable to furnish to

**Central Transmission Utility of India Limited (being the Nodal Agency)** additional Contract Performance Guarantee of **Rs.5.70 Crore (Rupees Five Crore and Seventy Lakh Only)** within two (2) Business Days of expiry of every such Month. Such additional Contract Performance Guarantee shall be provided to **Central Transmission Utility of India Limited (being the Nodal Agency)** in the manner provided in Article 3.1.1 and shall become part of the Contract Performance Guarantee and all the provisions of this Agreement shall be construed accordingly. **Central Transmission Utility of India Limited (being the Nodal Agency)** shall be entitled to hold and / or invoke the Contract Performance Guarantee, including such additional Contract Performance Guarantee, in accordance with the provisions of this Agreement.

3.3.2 Subject to Article 3.3.4, if:

(i) the fulfilment of any of the conditions specified in Article 3.1.3 is delayed beyond nine (9) Months from the Effective Date and the TSP fails to furnish additional Contract Performance Guarantee to the Nodal Agency in accordance with Article 3.3.1 hereof; or

(ii) the TSP furnishes additional Performance Guarantee to the Nodal Agency in accordance with Article 3.3.1 hereof but fails to fulfil the conditions specified in Article 3.1.3 within a period of twelve (12) months from the Effective Date,

the Nodal Agency shall have the right to terminate this Agreement, by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this Agreement.

3.3.3 If the Nodal Agency elects to terminate this Agreement as per the provisions of Article 3.3.2, the TSP shall be liable to pay to the Nodal Agency an amount of **Rs.57.00 Crore (Rupees Fifty Seven Crore Only)** as liquidated damages. The Nodal Agency shall be entitled to recover this amount of damages by invoking the Contract Performance Guarantee to the extent of liquidated damages, which shall be required by the Nodal Agency, and the balance shall be returned to TSP, if any.

It is clarified for removal of doubt that this Article shall survive the termination of this Agreement.

3.3.4 In case of inability of the TSP to fulfil the conditions specified in Article 3.1.3 due to any Force Majeure Event, the time period for fulfilment of the condition subsequent as mentioned in Article 3.1.3, may be extended for a period of such Force Majeure Event. Alternatively, if deemed necessary, this Agreement may be terminated by the Nodal Agency by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this

Agreement and the Contract Performance Guarantee shall be returned as per the provisions of Article 6.5.1.

Provided, that due to the provisions of this Article 3.3.4, any increase in the time period for completion of conditions subsequent mentioned under Article 3.1.3, shall lead to an equal increase in the time period for the Scheduled COD. If the Scheduled COD is extended beyond a period of one hundred eighty (180) days due to the provisions of this Article 3.3.4, the TSP will be allowed to recover the interest cost during construction corresponding to the period exceeding one hundred eighty (180) days by adjustment in the Transmission Charges in accordance with Schedule 9.

3.3.5 Upon termination of this Agreement as per Articles 3.3.2 and 3.3.4, the Nodal Agency may take steps to bid out the Project again.

3.3.6 The Nodal agency, on the failure of the TSP to fulfil its obligations, if it considers that there are sufficient grounds for so doing, apart from invoking the Contract Performance Guarantee under para 3.3.3 may also initiate proceedings for blacklisting the TSP as per provisions of Article 13.2 of TSA.

**3.4 Progress Reports**

The TSP shall notify the Nodal Agency and CEA in writing at least once a Month on the progress made in satisfying the conditions subsequent in Articles 3.1.3.

**ARTICLE: 4**

## 4. DEVELOPMENT OF THE PROJECT

### 4.1 TSP's obligations in development of the Project:

Subject to the terms and conditions of this Agreement, the TSP at its own cost and expense shall observe, comply with, perform, undertake and be responsible:

a. for procuring and maintaining in full force and effect all Consents, Clearances and Permits, required in accordance with Law for development of the Project;

b. for financing, constructing, owning and commissioning each of the Element of the Project for the scope of work set out in Schedule 1 of this Agreement in accordance with:

i. the Electricity Act and the Rules made thereof;

ii. the Grid Code;

iii. the CEA Regulations applicable, and as amended from time to time, for Transmission Lines and sub-stations:

- the Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007;
- Central Electricity Authority (Technical Standards for construction of Electrical Plants and Electric Lines) Regulation, 2010;
- Central Electricity Authority (Grid Standard) Regulations, 2010;
- Central Electricity Authority (Safety requirements for construction, operation and maintenance of Electrical Plants and Electrical Lines) Regulation, 2011;
- Central Electricity Authority (Measures relating to Safety and Electricity Supply) Regulation, 2010;
- Central Electricity Authority (Technical Standards for Communication System in Power System Operation) Regulations, 2020.

iv. Safety/ security Guidelines laid down by the Government;

v. Prudent Utility Practices, relevant Indian Standards and the Law;

not later than the Scheduled COD as per Schedule 2 of this Agreement;

c. for entering into a Connection Agreement with the concerned parties in accordance with the Grid Code.

d. for owning the Project throughout the term of this Agreement free and clear of any encumbrances except those expressly permitted under Article 15 of this Agreement;

e. to co-ordinate and liaise with concerned agencies and provide on a timely basis relevant information with regard to the specifications of the Project that may be required for interconnecting the Project with the Interconnection Facilities;

f. for providing all assistance to the Arbitrators as they may require for the performance of their duties and responsibilities;

g. to provide to the Nodal Agency and CEA, on a monthly basis, progress reports with regard to the Project and its execution (in accordance with prescribed form) to enable the CEA to monitor and co-ordinate the development of the Project matching with the Interconnection Facilities;

h. to comply with Ministry of Power Orders No. P45021/2/2017-PP (BE-II)-Part (4) Vol.II dated 19.07.2024 as well as other Guidelines issued by Govt. of India pertaining to this;

i. to procure the products associated with the Transmission System as per provisions of Public Procurement (Preference to Make in India) orders issued by Ministry of Power vide orders No. P45021/2/2017-PP (BE-II)-Part (4) Vol.II dated 19.07.2024 for transmission sector, as amended from time to time read with Department for Promotion of Industry and Internal Trade (DPIIT) orders in this regard (Procuring Entity as defined in above orders shall deemed to have included Selected Bidder and/ or TSP).

Also, to comply with Department of Expenditure, Ministry of Finance vide OM No. F.7/10/2021-PPD (1) dated 23.02.2023, as amended from time to time, regarding public procurement from a bidder of a country, which shares land border with India;

j. to submit to Nodal Agency information in the prescribed format [To be devised by Nodal Agency] for ensuring compliance to Article 4.1 i) above.

k. to comply with all its obligations undertaken in this Agreement.

**4.2 Roles of the Nodal Agency in implementation of the Project:**

4.2.1 Subject to the terms and conditions of this Agreement, the Nodal Agency shall be the holder and administrator of this Agreement and shall inter alia:

a. appoint an Independent Engineer within 90 days of the Effective Date

b. provide letters of recommendation to the concerned Indian Governmental Instrumentality, as may be requested by the TSP from time to time, for obtaining the Consents, Clearances and Permits required for the Project;

c. coordinate among TSP and upstream/downstream entities in respect of Interconnection Facilities; and

d. monitor the implementation of the Agreement and take appropriate action for breach thereof including revocation of guarantees, cancellation of Agreement, blacklisting etc

e. provide all assistance to the Arbitrators as required for the performance of their duties and responsibilities; and

f. perform any other responsibility (ies) as specified in this Agreement.

**4.3 Time for Commencement and Completion:**

a. The TSP shall take all necessary steps to commence work on the Project from the Effective Date of the Agreement and shall achieve Scheduled COD of the Project in accordance with the time schedule specified in Schedule 2 of this Agreement;

b. The COD of each Element of the Project shall occur no later than the Scheduled COD or within such extended time to which the TSP shall be entitled under Article 4.4 hereto.

**4.4 Extension of time:**

4.4.1 In the event that the TSP is unable to perform its obligations for the reasons solely attributable to the Nodal Agency, the Scheduled COD shall be extended, by a 'day to day' basis, subject to the provisions of Article 13.

4.4.2 In the event that an Element or the Project cannot be commissioned by its Scheduled COD on account of any Force Majeure Event as per Article 11, the Scheduled COD shall be extended, by a 'day to day' basis for a period of such Force Majeure Event. Alternatively, if deemed necessary, the Nodal Agency may terminate the Agreement as per the provisions of Article 13.4 by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this Agreement.

4.4.3 If the Parties have not agreed, within thirty (30) days after the affected Party's performance has ceased to be affected by the relevant circumstance, on how long the Scheduled COD should be deferred by, any Party may raise the Dispute to be resolved in accordance with Article 16.

**4.5 Metering Arrangements:**

4.5.1 The TSP shall comply with all the provisions of the IEGC and the Central Electricity Authority (Installation and Operation of Meters) Regulations, 2006 as amended from time to time, with regard to the metering arrangements for the Project. The TSP shall fully cooperate with the CTU / STU / RLDC and extend all necessary assistance in taking meter readings.

**4.6 Interconnection Facilities:**

4.6.1 Subject to the terms and conditions of this Agreement, the TSP shall be responsible for connecting the Project with the interconnection point(s) specified in Schedule 1 of this Agreement. The Interconnection Facilities shall be developed as per the scope of work and responsibilities assigned in Schedule 1 of this Agreement. The Nodal Agency shall be responsible for coordinating to make available the Interconnection Facilities.

4.6.2 In order to remove any doubts, it is made clear that the obligation of the TSP within the scope of the project is to construct the Project as per Schedule-1 of this Agreement and in particular to connect it to the Interconnection Facilities as specified in this Agreement.

**ARTICLE: 5**

## 5. CONSTRUCTION OF THE PROJECT

### 5.1 TSP's Construction Responsibilities:

5.1.1 The TSP, at its own cost and expense, shall be responsible for designing, constructing, erecting, testing and commissioning each Element of the Project by the Scheduled COD in accordance with the Regulations and other applicable Laws specified in Article 4.1 of this Agreement.

5.1.2 The TSP acknowledges and agrees that it shall not be relieved from any of its obligations under this Agreement or be entitled to any extension of time or any compensation whatsoever by reason of the unsuitability of the Site or Transmission Line route(s).

5.1.3 The TSP shall be responsible for obtaining all Consents, Clearances and Permits related but not limited to road / rail / river / canal / power line / crossings, Power and Telecom Coordination Committee (PTCC), defence, civil aviation, right of way / way-leaves and environmental & forest clearances from relevant authorities required for developing, financing, constructing, maintaining/ renewing all such Consents, Clearances and Permits in order to carry out its obligations under this Agreement in general and shall furnish to the Nodal Agency such copy/ies of each Consents, Clearances and Permits, on demand. Nodal Agency shall provide letters of recommendation to the concerned Indian Governmental Instrumentality, as may be requested by the TSP from time to time, for obtaining the Consents, Clearances and Permits required for the Project.

5.1.4 The TSP shall be responsible for:

a) Acquisition of land for location specific substations, switching stations or HVDC terminal or inverter stations. Also, the actual location of Greenfield substations (Switching Stations or HVDC Terminal or Inverter Stations) in the scope of TSP:
   - For Generation Pooling Substation shall not be beyond 3 Km radius of the location proposed by BPC in their survey report.
   - For Load Serving Substation within the scope of TSP shall not be beyond 5 Km radius of the location proposed by the BPC in their Survey Report
   - For an Intermediate Substation shall not be beyond 10 Km radius of the location proposed by the BPC in their Survey Report.

b) final selection of Site including its geo-technical investigation

c) Survey and geo-technical investigation of line route in order to determine the final route of the Transmission Lines;

d) Seeking access to the Site and other places where the Project is being executed, at its own risk and costs, including payment of any crop, tree compensation or any other compensation as may be required.

5.1.5 In case the Project involves any resettlement and rehabilitation, the resettlement and rehabilitation package will be implemented by the State Government authorities, for which the costs is to be borne by the TSP and no changes would be allowed in the Transmission Charges on account of any variation in the resettlement and rehabilitation cost. The TSP shall provide assistance on best endeavour basis, in implementation of the resettlement and rehabilitation package, if execution of such package is in the interest of expeditious implementation of the Project and is beneficial to the Project affected persons.

**5.2 Appointing Contractors:**

5.2.1 The TSP shall conform to the requirements as provided in this Agreement while appointing Contractor(s) for procurement of goods & services.

5.2.2 The appointment of such Contractor(s) shall neither relieve the TSP of any of its obligations under this Agreement nor make the Nodal Agency liable for the performance of such Contractor(s).

**5.3 Monthly Progress Reporting:**

The TSP shall provide to the CEA, Nodal Agency & Independent Engineer, on a monthly basis, progress reports along with likely completion date of each Element with regard to the Project and its execution (in accordance with prescribed form). The Nodal Agency/ CEA shall monitor the development of the Project for its timely completion for improving and augmenting the electricity system as a part of its statutory responsibility.

**5.4 Quality of Workmanship:**

The TSP shall ensure that the Project is designed, built and completed in a good workmanship using sound engineering and construction practices, and using only materials and equipment that are new and manufactured as per the MQP and following approved FQP for erection, testing & commissioning and complying with Indian /International Standards such that, the useful life of the Project will be at least thirty five (35) years from the COD of the Project.

The TSP shall ensure that all major substation equipment / component (e.g. transformers, reactors, Circuit Breakers, Instrument Transformers (IT), Surge Arresters (SA), Protection relays, clamps & connectors etc.), equipment in terminal stations of HVDC installations including Thyristor/ IGBT valves, Converter Transformers, smoothing reactors, Transformer bushings and wall bushings, GIS bus

ducts, towers and gantry structures and transmission towers or poles and line materials (conductors, earthwire, OPGW, insulator, accessories for conductors, OPGW & earthwires, hardware fittings for insulators, aviation lights etc), facilities and system shall be designed, constructed and tested (Type test, Routine tests, Factory Acceptance Test (FAT)) in accordance with relevant CEA Regulations and Indian Standards. In case Indian Standards for any particular equipment/ system/ process is not available, IEC/ IEEE or equivalent International Standards and Codes shall be followed.

**5.5 Progress Monitoring & Quality Assurance:**

5.5.1 The Project Execution Plan submitted by the TSP in accordance with Article 3.1.3 c) shall comprise of detailed schedule of all the equipment/items /materials required for the Project, right from procurement of raw material till the dispatch from works and receipt at the site. Further, it should also include various stages of the construction schedule up to the commissioning of the Project.

5.5.2 Nodal Agency, CEA & Independent Engineer shall have access at all reasonable times to the Site and to the Manufacturer's works and to all such places where the Project is being executed.

5.5.3 Independent Engineer shall ensure conformity of the conductor specifications with the functional specifications specified in RFP.

5.5.4 The Independent Engineer shall monitor the following during construction of the Project:

a) Quality of equipment, material, foundation, structures and workmanship etc. as laid down in Article 5.4 and 6.1.4 of the TSA. Specifically, quality of Sub-station equipment, transmission line material and workmanship etc. would be checked in accordance with the Article 5.4.

b) Progress in the activities specified in Condition Subsequent

c) Verification of readiness of the elements including the statutory clearances & completion of civil works, fixing of all components and finalisation of punch points (if any) prior to charging of the elements

d) Progress of construction of substation and Transmission Lines

5.5.5 The progress shall be reviewed by the Independent Engineer against the Project Execution Plan. The Independent Engineer shall prepare its report on monthly basis and submit the same to Nodal Agency highlighting the progress achieved till the end of respective month vis-à-vis milestone activities, areas of concern, if any, which may

result in delay in the timely completion of the Project. Based on the progress, Nodal Agency and/ or CEA shall issue written instructions to the TSP to take corrective measures, as may be prudent for the timely completion of the Project. In case of any deficiency, the Nodal Agency would be at liberty to take action in accordance with the procedure of this Agreement.

5.5.6 For any delay in commissioning any critical Element(s), as identified in Schedule 1 & Schedule 2 of this Agreement, beyond a period of 45 days shall lead to a sequestration of 10% of the Contract Performance Guarantee.

**5.6 Site regulations and Construction Documents**

The TSP shall abide by the Safety Rules and Procedures as mentioned in Schedule 3 of this Agreement

The TSP shall retain at the Site and make available for inspection at all reasonable times, copies of the Consents, Clearances and Permits, construction drawings and other documents related to construction.

**5.7 Supervision of work:**

The TSP shall provide all necessary superintendence for execution of the Project and its supervisory personnel shall be available to provide full-time superintendence for execution of the Project. The TSP shall provide skilled personnel who are experienced in their respective fields.

**5.8 Remedial Measures:**

The TSP shall take all necessary actions for remedying the shortfall in achievement of timely progress in execution of the Project, if any, as intimated by the Independent Engineer and/ or CEA and/ or the Nodal Agency. However, such intimation by the Independent Engineer and/ or CEA and/ or the Nodal Agency and the subsequent effect of such remedial measures carried out by the TSP shall not relieve the TSP of its obligations in the Agreement. Independent Engineer and/ or CEA and/ or the Nodal Agency may carry out random inspections during the Project execution, as and when deemed necessary by it. If the shortfalls as intimated to the TSP are not remedied to the satisfaction of the CEA and/ or the Nodal Agency, this Agreement may be terminated by the Nodal Agency by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this Agreement.

**ARTICLE: 6**

## 6. CONNECTION AND COMMISSIONING OF THE PROJECT

### 6.1 Connection with the Inter-Connection Facilities:

6.1.1 The TSP shall give the RLDC(s), CTU, / STU, as the case may be, and any other agencies as required, at least sixty (60) days advance written notice of the date on which it intends to connect an Element of the Project, which date shall not be earlier than its Scheduled COD or Schedule COD extended as per Article 4.4.1 & 4.4.2 of this Agreement, unless mutually agreed to by Parties. Further, any preponing of COD of any element prior to Scheduled COD must be approved by the Nodal Agency.

6.1.2 The RLDC / SLDC (as the case may be) or the CTU / STU (as the case may be), for reasonable cause, including non-availability of Interconnection Facilities as per Article 4.2, can defer the connection for up to fifteen (15) days from the date notified by the TSP pursuant to Article 6.1.1, if it notifies to the TSP in writing, before the date of connection, of the reason for the deferral and when the connection is to be rescheduled. However, no such deferment on one or more occasions would be for more than an aggregate period of thirty (30) days. Further, the Scheduled COD would be extended as required, for all such deferments on "day to day" basis.

6.1.3 Subject to Articles 6.1.1 and 6.1.2, any Element of Project may be connected with the Interconnection Facilities when:

a. it has been completed in accordance with this Agreement and the Connection Agreement;

b. it meets the Grid Code, Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 as amended from time to time and all other Indian legal requirements, and

c. The TSP has obtained the approval in writing of the Electrical Inspector certifying that the Element is ready from the point of view of safety of supply and can be connected with the Interconnection Facilities.

d. It has satisfactorily met all the testing requirements as per Articles 6.1.4.

6.1.4 Site Acceptance Test (SAT)/ pre-commissioning tests of all major substation equipment, component, system, facilities shall be successfully carried out before commissioning. The Type tests, FAT and SAT reports should be available at the substation / terminal station of HVDC installations for ready reference of operation and maintenance staff and has to be made available to the Independent Engineer

appointed for quality monitoring or their authorised representatives, as and when they wish to examine the same.

**6.2 Commercial Operation:**

6.2.1 An Element of the Project shall be declared to have achieved COD twenty four (24) hours following the connection of the Element with the Interconnection Facilities pursuant to Article 6.1 or seven (7) days after the date on which it is declared by the TSP to be ready for charging but is not able to be charged for reasons not attributable to the TSP subject to Article 6.1.2.

Provided that an Element shall be declared to have achieved COD only after all the Element(s), if any, which are pre-required to have achieved COD as defined in Schedule 2 of this Agreement, have been declared to have achieved their respective COD.

6.2.2 Once any Element of the Project has been declared to have achieved deemed COD as per Article 6.2.1 above, such Element of the Project shall be deemed to have Availability equal to the Target Availability till the actual charging of the Element and to this extent, TSP shall be eligible for the Monthly Transmission Charges applicable for such Element.

**6.3 Compensation for Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or Natural Force Majeure Event (affecting the Nodal Agency)**

6.3.1 If the TSP is otherwise ready to connect the Element(s) of the Project and has given due notice, as per provisions of Article 6.1.1, to the concerned agencies of the date of intention to connect the Element(s) of the Project, where such date is not before the Scheduled COD, but is not able to connect the Element(s) of the Project by the said date specified in the notice, due to Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency, provided such Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency has continued for a period of more than three (3) continuous or non-continuous Months, the TSP shall, until the effects of the Direct Non Natural Force Majeure Event or of Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency no longer prevent the TSP from connecting the Element(s) of the Project, be deemed to have achieved COD relevant to that date and to this extent, be deemed to have been providing Transmission Service with effect from the date notified, and shall be treated as follows:

a. In case of delay due to Direct Non Natural Force Majeure Event, TSP is entitled for Transmission Charges calculated on Target Availability for the

period of such events in excess of three (3) continuous or non-continuous Months in the manner provided in (c) below.

b. In case of delay due to Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency, TSP is entitled for payment for debt service which is due under the Financing Agreements, subject to a maximum of Transmission Charges calculated on Target Availability, for the period of such events in excess of three (3) continuous or non-continuous Months in the manner provided in (c) below.

c. In case of delay due to Direct Non Natural Force Majeure Event or Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency, the TSP is entitled for payments mentioned in (a) and (b) above, after commencement of Transmission Service, in the form of an increase in Transmission Charges. These amounts shall be paid from the date, being the later of a) the date of cessation of such Indirect Non Natural Force Majeure Event or Natural Force Majeure Event affecting the Nodal Agency and b) the completion of sixty (60) days from the receipt of the Financing Agreements by the Nodal Agency from the TSP.

Provided such increase in Transmission Charges shall be so as to put the TSP in the same economic position as the TSP would have been in case the TSP had been paid amounts mentioned in (a) and (b) above in a situation where the Force Majeure Event had not occurred.

For the avoidance of doubt, it is clarified that the charges payable under this Article 6.3.1 shall be recovered as per Sharing Regulations.

**6.4 Liquidated Damages for Delay in achieving COD of Project:**

6.4.1 If the TSP fails to achieve COD of any Element of the Project or the Project, by the Element's / Project's Scheduled COD or such Scheduled COD as extended under Articles 4.4.1 and 4.4.3, then the TSP shall pay to the Nodal Agency, a sum equivalent to 3.33% of Monthly Transmission Charges applicable for the Element of the Project [in case where no Elements have been defined, to be on the Project as a whole] / Project, for each day of delay up to sixty (60) days of delay and beyond that time limit, at the rate of five percent (5%) of the Monthly Transmission Charges applicable

to such Element / Project, as liquidated damages for such delay and not as penalty, without prejudice to any rights of the Nodal Agency under the Agreement.

6.4.2 The TSP's maximum liability under this Article 6.4 shall be limited to the amount of liquidated damages calculated in accordance with Article 6.4.1 for and up to six (6) months of delay for the Element or the Project.

Provided that, in case of failure of the TSP to achieve COD of the Element of the Project even after the expiry of six (6) months from its Scheduled COD, the provisions of Article 13 shall apply.

6.4.3 The TSP shall make payment to the Nodal Agency of the liquidated damages calculated pursuant to Article 6.4.1 within ten (10) days of the earlier of:

a. the date on which the applicable Element achieves COD; or

b. the date of termination of this Agreement.

The payment of such damages shall not relieve the TSP from its obligations to complete the Project or from any other obligation and liabilities under the Agreement.

6.4.4 If the TSP fails to pay the amount of liquidated damages to the Nodal Agency within the said period of ten (10) days, the Nodal Agency shall be entitled to recover the said amount of the liquidated damages by invoking the Contract Performance Guarantee. If the then existing Contract Performance Guarantee is for an amount which is less than the amount of the liquidated damages payable by the TSP to the Nodal Agency under this Article 6.3 and the TSP fails to make payment of the balance amount of the liquidated damages not covered by the Contract Performance Guarantee, then such balance amount shall be deducted from the Transmission Charges payable to the TSP. The right of the Nodal Agency to encash the Contract Performance Guarantee is without prejudice to the other rights of the Nodal Agency under this Agreement.

6.4.5 For avoidance of doubt, it is clarified that amount payable by TSP under this Article is over and above the penalty payable by TSP under Article 5.5.6 of this Agreement.

### 6.5 Return of Contract Performance Guarantee

6.5.1 The Contract Performance Guarantee as submitted by TSP in accordance with Article 3.1.1 shall be released by the Nodal Agency within three (3) months from the COD of the Project. In the event of delay in achieving Scheduled COD of any of the Elements by the TSP (otherwise than due to reasons as mentioned in Article 3.1.3 or Article 11) and consequent part invocation of the Contract Performance Guarantee

by the Nodal Agency, Nodal Agency shall release the Contract Performance Guarantee, if any remaining unadjusted, after the satisfactory completion by the TSP of all the requirements regarding achieving the Scheduled COD of the remaining Elements of the Project. It is clarified that the Nodal Agency shall also return / release the Contract Performance Guarantee in the event of (i) applicability of Article 3.3.2 to the extent the Contract Performance Guarantee is valid for an amount in excess of **Rs.57.00 Crore (Rupees Fifty Seven Crore Only),** or (ii) termination of this Agreement by the Nodal Agency as mentioned under Article 3.3.4 of this Agreement.

6.5.2 The release of the Contract Performance Guarantee shall be without prejudice to other rights of the Nodal Agency under this Agreement.

**ARTICLE: 7**

## 7. OPERATION AND MAINTENANCE OF THE PROJECT

### 7.1 Operation and Maintenance of the Project:

The TSP shall be responsible for ensuring that the Project is operated and maintained in accordance with the regulations made by the Commission and CEA from time to time and provisions of the Act.

**ARTICLE: 8**

## 8. AVAILABILITY OF THE PROJECT

### 8.1 Calculation of Availability of the Project:

Calculation of Availability for the Elements and for the Project, as the case may be, shall be as per **Appendix –IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024**, as applicable on the Bid Deadline and as appended in Schedule 6 of this Agreement.

### 8.2 Target Availability:

The Target Availability of each Element and the Project shall be **97%.**

Payment of monthly Transmission charges based on actual availability will be calculated as per para 1.2 of Schedule 4 of this Agreement.

In case of hybrid system, availability will be considered separately for AC System, HVDC System and Synchronous Condenser Station and monthly transmission charges based on actual availability shall be paid by categorising the system into AC System, HVDC System or Synchronous Condenser Station (as applicable) and percentage of total transmission charges payable to the TSP for AC System, HVDC System, Synchronous Condenser Station as indicated in Schedule 5 of this Agreement.

If the availability of any Element or the Project is below the Target Availability, for six consecutive months in a Contract Year, the DIC(s) or the Nodal Agency may issue a show cause notice to the TSP, asking them to show cause as to why the Transmission Service Agreement be not terminated, and if no satisfactory cause is shown it may terminate the Agreement. If the Nodal Agency is of the opinion that the transmission system is of critical importance, it may carry out or cause to carry the operation and maintenance of transmission system at the risk and cost of TSP.

**ARTICLE: 9**

## 9. INSURANCES

### 9.1 Insurance:

9.1.1 The TSP shall effect and maintain or cause to be effected and maintained during the Construction Period and the Operating Period, adequate Insurances against such risks, with such deductibles including but not limited to any third party liability and endorsements and co-beneficiary/insured, as may be necessary under

a. any of the Financing Agreements,

b. the Laws, and

c. in accordance with Prudent Utility Practices.

The Insurances shall be taken effective from a date prior to the date of the Financial Closure till the Expiry Date.

### 9.2 Evidence of Insurance cover:

9.2.1 The TSP shall furnish to the Nodal Agency copies of certificates and policies of the Insurances, as and when the Nodal Agency may seek from the TSP as per the terms of Article 9.1

### 9.3 Application of Insurance Proceeds:

9.3.1 Save as expressly provided in this Agreement, the policies of Insurances and the Financing Agreements, the proceeds of any insurance claim made due to loss or damage to the Project or any part of the Project shall be first applied to reinstatement, replacement or renewal of such loss or damage.

9.3.2 If a Natural Force Majeure Event renders the Project no longer economically and technically viable and the insurers under the Insurances make payment on a "total loss" or equivalent basis, the portion of the proceeds of such Insurance available to the TSP (after making admissible payments to the Lenders as per the Financing Agreements) shall be allocated only to the TSP. Nodal Agency and / or concerned Designated ISTS Customers shall have no claim on such proceeds of the Insurance.

9.3.3 Subject to the requirements of the Lenders under the Financing Agreements, any dispute or difference between the Parties as to whether the Project is no longer economically and technically viable due to a Force Majeure Event or whether that event was adequately covered in accordance with this Agreement by the Insurances shall be determined in accordance with Article 16.

### 9.4 Effect on liability of the Nodal Agency / Designated ISTS Customers

9.4.1 The Nodal Agency and / or the Designated ISTS Customers shall have no financial obligations or liability whatsoever towards the TSP in respect of this Article 9.

**ARTICLE: 10**

## 10. BILLING AND PAYMENT OF TRANSMISSION CHARGES

10.1 Subject to provisions of this Article 10, the Monthly Transmission Charges shall be paid to the TSP, in Indian Rupees, on monthly basis as per the provisions of the Sharing Regulations, from the date on which an Element(s) has achieved COD until the Expiry Date of this Agreement, unless terminated earlier and in line with the provisions of Schedule 4 of this Agreement.

**10.2 Calculation of Monthly Transmission Charges:**

The Monthly Transmission Charges for each Contract Year including Incentive & Penalty payment shall be calculated in accordance with the provisions of Schedule 4 of this Agreement.

**10.3 Rebate & Late Payment Surcharge:**

The rebate and late payment surcharge shall be governed as per Sharing Regulations.

**10.4 Disputed Bills, Default in payment by the Designated ISTS Customers & Annual Reconciliation:**

Any Disputed Bill, Default in payment by the Designated ISTS Customers & Annual Reconciliation shall be governed as per Sharing Regulations.

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

FATEHGARH II TRANSMISSION LTD. NEW DELHI

**ARTICLE: 11**

## 11. FORCE MAJEURE

### 11.1 Definitions

11.1.1 The following terms shall have the meanings given hereunder.

### 11.2 Affected Party

11.2.1 An Affected Party means any Party whose performance has been affected by an event of Force Majeure.

11.2.2 Any event of Force Majeure shall be deemed to be an event of Force Majeure affecting the TSP only if the Force Majeure event affects and results in, late delivery of machinery and equipment for the Project or construction, completion, commissioning of the Project by Scheduled COD and/or operation thereafter;

### 11.3 Force Majeure

A 'Force Majeure' means any event or circumstance or combination of events and circumstances including those stated below that wholly or partly prevents or unavoidably delays an Affected Party in the performance of its obligations/ roles under this Agreement, but only if and to the extent that such events or circumstances are not within the reasonable control, directly or indirectly, of the Affected Party and could not have been avoided if the Affected Party had taken reasonable care or complied with Prudent Utility Practices:

**a) Natural Force Majeure Events:**

i. act of God, including, but not limited to drought, fire and explosion (to the extent originating from a source external to the Site), earthquake, volcanic eruption, landslide, flood, cyclone, typhoon, tornado, or exceptionally adverse weather conditions, which are in excess of the statistical measures for the last hundred (100) years; and

ii. epidemic/ pandemic notified by Indian Governmental Instrumentality.

**b) Non-Natural Force Majeure Events:**

i. Direct Non–Natural Force Majeure Events

- Nationalization or compulsory acquisition by any Indian Governmental Instrumentality of any material assets or rights of the Affected Party; or

- the unlawful, unreasonable or discriminatory revocation of, or refusal to renew, any Consents, Clearances and Permits required by the Affected Party to perform their obligations/ roles under the RFP Project Documents or any unlawful, unreasonable or discriminatory refusal to grant any other Consents, Clearances and Permits required for the development/ operation of the Project, provided that a Competent Court of Law declares the revocation or refusal to be unlawful, unreasonable and discriminatory and strikes the same down; or

- any other unlawful, unreasonable or discriminatory action on the part of an Indian Governmental Instrumentality which is directed against the Project, provided that a Competent Court of Law declares the action to be unlawful, unreasonable and discriminatory and strikes the same down.

ii. Indirect Non - Natural Force Majeure Events

- act of war (whether declared or undeclared), invasion, armed conflict or act of foreign enemy, blockade, embargo, revolution, riot, insurrection, terrorist or military action; or

- radio active contamination or ionising radiation originating from a source in India or resulting from any other Indirect Non Natural Force Majeure Event mentioned above, excluding circumstances where the source or cause of contamination or radiation is brought or has been brought into or near the Site by the Affected Party or those employed or engaged by the Affected Party; or

- industry-wide strikes and labour disturbances, having a nationwide impact in India.

**11.4 Force Majeure Exclusions**

11.4.1 Force Majeure shall not include (i) any event or circumstance which is within the reasonable control of the Parties and (ii) the following conditions, except to the extent that they are consequences of an event of Force Majeure:

(a) Unavailability, late delivery, or changes in cost of the machinery, equipment, materials, spare parts etc. for the Project;

(b) Delay in the performance of any Contractors or their agents;

(c) Non-performance resulting from normal wear and tear typically experienced in transmission materials and equipment;

(d) Strikes or labour disturbance at the facilities of the Affected Party;

(e) Insufficiency of finances or funds or the Agreement becoming onerous to perform; and

(f) Non-performance caused by, or connected with, the Affected Party's:

i. negligent or intentional acts, errors or omissions;

ii. failure to comply with an Indian Law; or

iii. breach of, or default under this Agreement or any Project Documents.

(g) Any error or omission in the survey report provided by BPC during the bidding process.

**11.5 Notification of Force Majeure Event**

11.5.1 The Affected Party shall give notice to the other Party of any event of Force Majeure as soon as reasonably practicable, but not later than seven (7) days after the date on which such Party knew or should reasonably have known of the commencement of the event of Force Majeure. If an event of Force Majeure results in a breakdown of communications rendering it unreasonable to give notice within the applicable time limit specified herein, then the Party claiming Force Majeure shall give such notice as soon as reasonably practicable after reinstatement of communications, but not later than one (1) day after such reinstatement.

Provided that, such notice shall be a pre-condition to the Affected Party's entitlement to claim relief under this Agreement. Such notice shall include full particulars of the event of Force Majeure, its effects on the Party claiming relief and the remedial measures proposed. The Affected Party shall give the other Party regular reports on the progress of those remedial measures and such other information as the other Party may reasonably request about the Force Majeure.

11.5.2 The Affected Party shall give notice to the other Party of (i) the cessation of the relevant event of Force Majeure; and (ii) the cessation of the effects of such event of Force Majeure on the performance of its rights or obligations/ roles under this Agreement, as soon as practicable after becoming aware of each of these cessations.

**11.6 Duty to perform and duty to mitigate**

To the extent not prevented by a Force Majeure Event, the Affected Party shall

continue to perform its obligations/ roles as provided in this Agreement. The Affected Party shall use its reasonable efforts to mitigate the effect of any event of Force Majeure as soon as practicable.

**11.7 Available Relief for a Force Majeure Event**

Subject to this Article 11,

(a) no Party shall be in breach of its obligations/ roles pursuant to this Agreement to the extent that the performance of its obligations/ roles was prevented, hindered or delayed due to a Force Majeure Event;

(b) each Party shall be entitled to claim relief for a Force Majeure Event affecting its performance in relation to its obligations/ roles under Articles 3.3.4, 4.4.2 and 6.3.1 of this Agreement.

(c) For the avoidance of doubt, it is clarified that the computation of Availability of the Element(s) under outage due to Force Majeure Event, as per Article 11.3 affecting the TSP shall be as per **Appendix –IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024** as on Bid Deadline. For the event(s) for which the Element(s) is/are deemed to be available as per **Appendix –IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024,** then the Transmission Charges, as applicable to such Element(s), shall be payable as per Schedule 4, for the duration of such event(s).

(d) For so long as the TSP is claiming relief due to any Force Majeure Event under this Agreement, the Nodal Agency may, if it so desires, from time to time on one (1) day notice, inspect the Project and the TSP shall provide the Nodal Agency's personnel with access to the Project to carry out such inspections.

(e) For avoidance of doubt, the TSP acknowledges that for extension of Scheduled COD a period up to one hundred eighty (180) days due to Force Majeure event, no compensation on the grounds such as interest cost, incident expenditure, opportunity cost will be made to the TSP. However, if Scheduled COD is extended beyond a period of one hundred eighty (180) days due to Force Majeure event, the TSP will be allowed to recover the interest cost during construction corresponding to the period exceeding one hundred eighty (180) days by adjustment in the Transmission Charges in accordance with Schedule 9.

**ARTICLE: 12**

## 12. CHANGE IN LAW

### 12.1 Change in Law

12.1.1 Change in Law means the occurrence of any of the following after the Bid Deadline resulting into any additional recurring / non-recurring expenditure by the TSP or any savings of the TSP:

- the enactment, coming into effect, adoption, promulgation, amendment, modification or repeal (without re-enactment or consolidation) in India, of any Law, including rules and regulations framed pursuant to such Law, subject to the provisions under Article 12.1.2;
- a change in the interpretation or application of any Law by any Indian Governmental Instrumentality having the legal power to interpret or apply such Law, or any Competent Court of Law;
- the imposition of a requirement for obtaining any Consents, Clearances and Permits which was not required earlier;
- a change in the terms and conditions prescribed for obtaining any Consents, Clearances and Permits or the inclusion of any new terms or conditions for obtaining such Consents, Clearances and Permits;
- any change in the licensing regulations of the Commission, under which the Transmission License for the Project was granted if made applicable by such Commission to the TSP;
- change in wind zone; or
- any change in tax or introduction of any tax made applicable for providing Transmission Service by the TSP as per the terms of this Agreement.

12.1.2 Notwithstanding anything contained in this Agreement, Change in Law shall not cover any change:

a) Taxes on corporate income; and

b) Withholding tax on income or dividends distributed to the shareholders of the TSP.

**12.2 Relief for Change in Law**

12.2.1 During Construction Period, the impact of increase/decrease in the cost of the Project on the Transmission Charges shall be governed by the formula given in Schedule 9 of this Agreement.

12.2.2 During the Operation Period:

During the operation period, if as a result of Change in Law, the TSP suffers or is benefited from a change in costs or revenue, the aggregate financial effect of which exceeds 0.30% (zero point three percent) of the Annual Transmission Charges in aggregate for a Contract Year, the TSP may notify so to the Nodal Agency and propose amendments to this Agreement so as to place the TSP in the same financial position as it would have enjoyed had there been no such Change in Law resulting in change in costs or revenue as aforesaid.

12.2.3 For any claims made under Articles 12.2.1 and 12.2.2 above, the TSP shall provide to the Nodal Agency documentary proof of such increase / decrease in cost of the Project / revenue for establishing the impact of such Change in Law.

In cases where Change in Law results in decrease of cost and it comes to the notice of Nodal Agency that TSP has not informed Nodal Agency about such decrease in cost, Nodal Agency may initiate appropriate claim.

**12.3 Notification of Change in Law:**

12.3.1 If the TSP is affected by a Change in Law in accordance with Article 12.1 and wishes to claim relief for such Change in Law under this Article 12, it shall give notice to Nodal Agency of such Change in Law as soon as reasonably practicable after becoming aware of the same.

12.3.2 The TSP shall also be obliged to serve a notice to the Nodal Agency even when it is beneficially affected by a Change in Law.

12.3.3 Any notice served pursuant to Articles 12.3.1 and 12.3.2 shall provide, amongst other things, precise details of the Change in Law and its estimated impact on the TSP.

**12.4 Payment on account of Change in Law**

12.4.1 The payment for Change in Law shall be through a separate Bill. However, in case of any change in Monthly Transmission Charges by reason of Change in Law, as determined in accordance with this Agreement, the Bills to be raised by the Nodal Agency after such change in Transmission Charges shall appropriately reflect the changed Monthly Transmission Charges.

**ARTICLE: 13**

## 13. EVENTS OF DEFAULT AND TERMINATION

### 13.1 TSP's Event of Default

The occurrence and continuation of any of the following events shall constitute a TSP Event of Default, unless any such TSP Event of Default occurs as a result of any non-fulfilment of its obligations as prescribed under this Agreement by the Nodal Agency or a Force Majeure Event:

a. After having taken up the construction of the Project, the abandonment by the TSP or the TSP's Contractors of the construction of the Project for a continuous period of two (2) months and such default is not rectified within thirty (30) days from the receipt of notice from the Nodal Agency in this regard;

b. The failure to commission any Element of the Project by the date falling six (6) months after its Scheduled COD unless extended by Nodal Agency as per provisions of this Agreement;

c. If the TSP:

i. assigns, mortgages or charges or purports to assign, mortgage or charge any of its assets or rights related to the Project in contravention of the provisions of this Agreement; or

ii. transfers or novates any of its obligations pursuant to this Agreement, in a manner contrary to the provisions of this Agreement;

Except where such transfer is in pursuance of a Law and

- it does not affect the ability of the transferee to perform, and such transferee has the financial and technical capability to perform, its obligations under this Agreement;
- is to a transferee who assumes such obligations under the Project and this Agreement remains effective with respect to the transferee;

d. If:

i. The TSP becomes voluntarily or involuntarily the subject of any bankruptcy or insolvency or winding up proceedings and such

proceedings remain uncontested for a period of thirty (30) days; or

ii. any winding up or bankruptcy or insolvency order is passed against the TSP; or

iii. the TSP goes into liquidation or dissolution or a receiver or any similar officer is appointed over all or substantially all of its assets or official liquidator is appointed to manage its affairs, pursuant to Law,

Provided that a dissolution or liquidation of the TSP will not be a TSP's Event of Default, where such dissolution or liquidation of the TSP is for the purpose of a merger, consolidation or reorganization with the prior approval of the Commission as per the provisions of Central Electricity Regulatory Commission (Procedure, terms and Conditions for grant of Transmission License and other related matters) Regulations, 2006 or as amended from time to time; or

e. Failure on the part of the TSP to comply with the provisions of Article 19.1 of this Agreement; or

f. the TSP repudiates this Agreement and does not rectify such breach even within a period of thirty (30) days from a notice from the Nodal Agency in this regard; or

g. after Commercial Operation Date of the Project, the TSP fails to achieve monthly Target Availability of 97% for a period of six (6) consecutive months or within a non-consecutive period of six (6) months within any continuous aggregate period of eighteen(18) months except where the Availability is affected by Force Majeure Events as per Article 11; or

h. any of the representations and warranties made by the TSP in Article 17 of this Agreement being found to be untrue or inaccurate. Further, in addition to the above, any of the undertakings submitted by the Selected Bidder at the time of submission of the Bid being found to be breached or inaccurate, including but not limited to undertakings from its Parent Company / Affiliates related to the minimum equity obligation; or

i. the TSP fails to complete / fulfil all the activities / conditions within the specified period as per Article 3; or

j. except for the reasons solely attributable to Nodal Agency, the TSP is in material breach of any of its obligations under this Agreement and such material breach is not rectified by the TSP within thirty (30) days of receipt of notice in this regard from the Nodal Agency; or

k. the TSP fails to take the possession of the land required for location specific substations, switching stations or HVDC terminal or inverter stations and / or fails to pay the requisite price to the parties and / or any State Government authority from whom the land is acquired, within twelve (12) months from the Effective Date.

**13.2 Termination Procedure for TSP Event of Default**

a. Upon the occurrence and continuance of any TSP's Event of Default under Article 13.1 the Nodal Agency may serve notice on the TSP, with a copy to the CEA and the Lenders' Representative, of their intention to terminate this Agreement (a "Nodal Agency's Preliminary Termination Notice"), which shall specify in reasonable detail, the circumstances giving rise to such Nodal Agency's Preliminary Termination Notice.

b. Following the issue of a Nodal Agency's Preliminary Termination Notice, the Consultation Period shall apply and would be for the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant Event of Default having regard to all the circumstances.

c. During the Consultation Period, the Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations/ roles under this Agreement, and the TSP shall not remove any material, equipment or any part of the Project, without prior consent of the Nodal Agency.

Following the expiry of the Consultation Period, unless the Parties shall have otherwise agreed to the contrary or the circumstances giving rise to Nodal Agency's Preliminary Termination Notice shall have ceased to exist or shall have been remedied, this Agreement may be terminated by the Nodal Agency by giving a Termination Notice to the TSP, in writing, of at least seven (7) days, with a copy to CEA and the Lenders' Representative in order to enable the Lenders to exercise right of substitution in accordance with Article 15.3 of this Agreement.

Further, the Nodal Agency may also initiate proceedings to blacklist the TSP & its Affiliates from participation in any RFP issued by BPCs for a period of 5 years.

**13.3 Procedure for Nodal Agency's non-fulfilment of Role**

a. Upon the Nodal Agency not being able to fulfil its role under Article 4.2, the TSP may serve notice on the Nodal Agency, with a copy to CEA and the Lenders' Representative (a "TSP's Preliminary Notice"), which notice shall specify in reasonable detail the circumstances giving rise to such non-fulfilment of role by the Nodal Agency.

b. Following the issue of a TSP's Preliminary Notice, the Consultation Period shall apply.

c. The Consultation Period would be for the Parties to discuss as to what steps shall be taken with a view to mitigate the consequences of the relevant non-fulfilment of role by the Nodal Agency including giving time extension to TSP, having regard to all the circumstances.

d. During the Consultation Period, both Parties shall, save as otherwise provided in this Agreement, continue to perform their respective obligations/ roles under this Agreement.

**13.4 Termination due to Force Majeure**

13.4.1 In case the Parties could not reach an agreement pursuant to Articles 3.3.4 and 4.4.2 of this Agreement and the Force Majeure Event or its effects continue to be present, the Nodal Agency shall have the right to cause termination of the Agreement. In case of such termination, the Contract Performance Guarantee shall be returned to the TSP as per the provisions of Article 6.5.1.

13.4.2 In case of termination of this Agreement, the TSP shall provide to the Nodal Agency the full names and addresses of its Contractors as well as complete designs, design drawings, manufacturing drawings, material specifications and technical information, as required by the Nodal Agency within thirty (30) days of Termination Notice.

**13.5 Termination or amendment due to non-requirement of any Element or Project during construction**

13.5.1 In case any Element or Project, which is under construction, is no longer required due to any reason whatsoever, the Nodal Agency may issue a notice to this effect to the TSP.

13.5.2 Nodal agency may also issue notice to the TSP seeking their response to the proposed termination/ amendment (as the case may be) of the Agreement. The Nodal Agency shall issue copy of such notice to Lenders. In the notice, Nodal Agency

shall also include an assessment of the physical progress made by TSP in the Element/ Project (as the case may be) that is no longer required.

13.5.3 The TSP shall neither carry out further investment nor carry out any work on the Element/ Project (as the case may be) that is no longer required after delivery of the notice.

13.5.4 After taking into account the comments of the TSP, the Nodal Agency may terminate the Agreement or amend it if both Parties agree to the amendment.

**13.6 Revocation of the Transmission License**

13.6.1 The Commission may, as per the provisions of the Electricity Act, 2003, revoke the Transmission License of the ISTS Licensee. Further, in such a case, the Agreement shall be deemed to have been terminated.

**13.7 Termination Payment**

13.7.1 If Agreement is terminated on account of Force Majeure Events, non-requirement of any Element or Project during Construction, Nodal Agency's non-fulfilment of Role & TSP's Event of Default, the TSP shall be entitled for Termination Payment equivalent to valuation of Project Assets. Upon payment, the Nodal Agency shall take over the Project Assets.

**ARTICLE: 14**

## 14. LIABILITY AND INDEMNIFICATION

### 14.1 Indemnity

14.1.1 The TSP shall indemnify, defend and hold the Nodal Agency harmless against:

(a) any and all third party claims, actions, suits or proceedings against the Nodal Agency for any loss of or damage to property of such third party, or death or injury to such third party, arising out of a breach by the TSP of any of its obligations under this Agreement, except to the extent that any such claim, action, suit or proceeding has arisen due to a negligent act or omission, breach of this Agreement or non-fulfilment of statutory duty on the part of Nodal Agency; and

(b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest actually suffered or incurred by the Nodal Agency from third party claims arising by reason of:

i. a breach by the TSP of any of its obligations under this Agreement, (provided that this Article 14 shall not apply to such breaches by the TSP, for which specific remedies have been provided for under this Agreement) except to the extent that any such losses, damages, costs and expenses including legal costs, fines, penalties and interest (together to constitute "Indemnifiable Losses") has arisen due to a negligent act or omission, breach of this Agreement or non-fulfilment of statutory duty on the part of the Nodal Agency, or

ii. any of the representations and warranties of the TSP under this Agreement being found to be inaccurate or untrue.

14.1.2 The Nodal Agency shall, in accordance with the Regulations framed by CERC in this regard, indemnify, defend and hold the TSP harmless against:

(a) any and all third party claims, actions, suits or proceedings against the TSP, for any loss of or damage to property of such third party, or death or injury to such third party, arising out of any material breach by the Nodal Agency of any of their roles under this Agreement, except to the extent that any such claim, action, suit or proceeding has arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the TSP, its Contractors, servants or agents; and

(b) any and all losses, damages, costs and expenses including legal costs, fines, penalties and interest ('Indemnifiable Losses') actually suffered or incurred by the TSP from third party claims arising by reason of:

i. any material breach by the Nodal Agency of any of its roles under this Agreement (provided that, this Article 14 shall not apply to such breaches by the Nodal Agency, for which specific remedies have been provided for under this Agreement), except to the extent that any such Indemnifiable Losses have arisen due to a negligent act or omission, breach of this Agreement or breach of statutory duty on the part of the TSP, its Contractors, servants or agents or

ii. any of the representations and warranties of the Nodal Agency under this Agreement being found to be inaccurate or untrue.

**14.2 Patent Indemnity:**

14.2.1

(a) The TSP shall, subject to the Nodal Agency's compliance with Article 14.2.1 (b), indemnify and hold harmless the Nodal Agency and its employees and officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs, and expenses of whatsoever nature, including attorney's fees and expenses, which the Nodal Agency may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Agreement by reason of the setting up of the Project by the TSP.

Such indemnity shall not cover any use of the Project or any part thereof other than for the purpose indicated by or to be reasonably inferred from the Agreement, any infringement resulting from the misuse of the Project or any part thereof, or any products produced in association or combination with any other equipment, plant or materials not supplied by the TSP, pursuant to the Agreement.

(b) If any proceedings are brought or any claim is made against the Nodal Agency arising out of the matters referred to in Article 14.2.1(a), the Nodal Agency shall promptly give the TSP a notice thereof, and the TSP shall at its own expense take necessary steps and attend such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. The TSP shall promptly notify the Nodal Agency of all actions taken in such

proceedings or claims.

(c) If the TSP fails to notify the Nodal Agency within twenty-eight (28) days after receipt of such notice from the Nodal Agency under Article 14.2.1(b) above, that it intends to attend any such proceedings or claim, then the Nodal Agency shall be free to attend the same on their own behalf at the cost of the TSP. Unless the TSP has so failed to notify the Nodal Agency within the twenty eight (28) days period, the Nodal Agency shall make no admission that may be prejudicial to the defence of any such proceedings or claims.

(d) The Nodal Agency shall, at the TSP's request, afford all available assistance to the TSP in attending to such proceedings or claim, and shall be reimbursed by the TSP for all reasonable expenses incurred in so doing.

14.2.2

(a) The Nodal Agency, in accordance with the Regulations framed by CERC in this regard, subject to the TSP's compliance with Article 14.2.2(b) shall indemnify and hold harmless the TSP and its employees, officers from and against any and all suits, actions or administrative proceedings, claims, demands, losses, damages, costs and expenses of whatsoever nature, including attorney's fees and expenses, which the TSP may suffer as a result of any infringement or alleged infringement of any patent, utility model, registered design, trademark, copyright or other intellectual property right registered or otherwise existing at the date of the Agreement by reason of the setting up of the Project by the TSP.

(b) If any proceedings are brought or any claim is made against the TSP arising out of the matters referred to in Article 14.2.2 (a) the TSP shall promptly give the Nodal Agency a notice thereof, and the Nodal Agency shall at its own expense take necessary steps and attend such proceedings or claim and any negotiations for the settlement of any such proceedings or claim. The Nodal Agency shall promptly notify the TSP of all actions taken in such proceedings or claims.

(c) If the Nodal Agency fails to notify the TSP within twenty-eight (28) days after receipt of such notice from the TSP under Article 14.2.2(b) above, that it intends to attend any such proceedings or claim, then the TSP shall be free to attend the same on its own behalf at the cost of the Nodal Agency. Unless the Nodal Agency has so failed to notify the TSP within the twenty (28) days period, the TSP shall make no admission that may be prejudicial to the defence of any such proceedings or claim.

(d) The TSP shall, at the Nodal Agency request, afford all available assistance to the Nodal Agency in attending to such proceedings or claim, and shall be reimbursed by the Nodal Agency for all reasonable expenses incurred in so doing.

**14.3 Monetary Limitation of liability**

14.3.1 A Party ("Indemnifying Party") shall be liable to indemnify the other Party ("Indemnified Party") under this Article 14 for any indemnity claims made in a Contract Year only up to an amount **Rs.3.80 Crore (Rupees Three Crore and Eighty Lakh Only).**

**14.4 Procedure for claiming indemnity**

14.4.1 Where the Indemnified Party is entitled to indemnification from the Indemnifying Party pursuant to Articles 14.1 or 14.2 the Indemnified Party shall promptly notify the Indemnifying Party of such claim, proceeding, action or suit referred to in Articles 14.1 or 14.2 in respect of which it is entitled to be indemnified. Such notice shall be given as soon as reasonably practicable after the Indemnified Party becomes aware of such claim, proceeding, action or suit. The Indemnifying Party shall be liable to settle the indemnification claim within thirty (30) days of receipt of the above notice.

Provided however that, if:

i. the Parties choose to contest, defend or litigate such claim, action, suit or proceedings in accordance with Article 14.4.3 below; and

ii. the claim amount is not required to be paid/deposited to such third party pending the resolution of the Dispute,

the Indemnifying Party shall become liable to pay the claim amount to the Indemnified Party or to the third party, as the case may be, promptly following the resolution of the Dispute, if such Dispute is not settled in favour of the Indemnified Party.

14.4.2 The Indemnified Party may contest, defend and litigate a claim, action, suit or proceeding for which it is entitled to be indemnified under Articles 14.1 or 14.2 and the Indemnifying Party shall reimburse to the Indemnified Party all reasonable costs and expenses incurred by the Indemnified Party. However, such Indemnified Party shall not settle or compromise such claim, action, suit or proceedings without first getting the consent of the Indemnifying Party, which consent shall not be unreasonably withheld or delayed.

14.4.3 An Indemnifying Party may, at its own expense, assume control of the defence of any proceedings brought against the Indemnified Party if it acknowledges its

obligation to indemnify such Indemnified Party, gives such Indemnified Party prompt notice of its intention to assume control of the defence, and employs an independent legal counsel at its own cost that is reasonably satisfactory to the Indemnified Party.

### 14.5 Limitation on Liability

14.5.1 Except as expressly provided in this Agreement, neither the TSP nor the Nodal Agency nor their respective officers, directors, agents, employees or Affiliates (including, officers, directors, agents or employees of such Affiliates), shall be liable or responsible to the other Party or its Affiliates including its officers, directors, agents, employees, successors, insurers or permitted assigns for incidental, indirect or consequential, punitive or exemplary damages, connected with or resulting from performance or non-performance of this Agreement, or anything done in connection herewith, including claims in the nature of lost revenues, income or profits (other than payments expressly required and properly due under this Agreement), any increased expense of, reduction in or loss of transmission capacity or equipment used therefore, irrespective of whether such claims are based upon breach of warranty, tort (including negligence, whether of the Nodal Agency, the TSP or others), strict liability, contract, breach of statutory duty, operation of law or otherwise.

14.5.2 The Nodal Agency shall have no recourse against any officer, director or shareholder of the TSP or any Affiliate of the TSP or any of its officers, directors or shareholders for such claims excluded under this Article. The TSP shall also have no recourse against any officer, director or shareholder of the Nodal Agency, or any Affiliate of the Nodal Agency or any of its officers, directors or shareholders for such claims excluded under this Article.

### 14.6 Duty to Mitigate

The party entitled to the benefit of an indemnity under this Article 14 shall take all reasonable measures to mitigate any loss or damage which has occurred. If the Party fails to take such measures, the other Party's liabilities shall be correspondingly reduced.

**ARTICLE: 15**

## 15. ASSIGNMENTS AND CHARGES

### 15.1 Assignments:

15.1.1 This Agreement shall be binding upon, and inure to the benefit of the Parties and their respective successors and permitted assigns. This Agreement shall not be assigned by any Party, except as provided in Article 15.3.

### 15.2 Permitted Charges:

15.2.1 Neither Party shall create or permit to subsist any encumbrance over all or any of its rights and benefits under this Agreement.

15.2.2 However, the TSP may create any encumbrance over all or part of the receivables, or the Project Assets of the Project in favour of the Lenders or the Lenders' Representative on their behalf, as security for amounts payable under the Financing Agreements and any other amounts agreed by the Parties.

Provided that:

i. the Lenders or the Lenders' Representative on their behalf shall have entered into the Financing Agreements and agreed in writing to the provisions of this Agreement; and

ii. any encumbrance granted by the TSP in accordance with this Article 15.2.2 shall contain provisions pursuant to which the Lenders or the Lender's Representative on their behalf agrees unconditionally with the TSP to release from such encumbrances upon payment by the TSP to the Lenders of all amounts due under the Financing Agreements.

15.2.3 Article 15.2.1 does not apply to:

a. liens arising by operation of law (or by an agreement evidencing the same) in the ordinary course of the TSP developing and operating the Project;

b. pledges of goods, the related documents of title and / or other related documents, arising or created in the ordinary course of the TSP developing and operating the Project; or

c. security arising out of retention of title provisions in relation to goods acquired in the ordinary course of the TSP developing and operating the Project.

### 15.3 Substitution Rights of the Lenders

15.3.1 The TSP would need to operate and maintain the Project under the provisions of this Agreement and cannot assign the Transmission License or transfer the Project or part thereof to any person by sale, lease, exchange or otherwise, without the prior approval of the Nodal Agency.

15.3.2 However, in the case of default by the TSP in debt repayments or in the case of default by the TSP as per Article 13 of this Agreement during the debt repayments, the Commission may, on an application from the Lenders, assign the Transmission License to the nominee of the Lenders subject to the fulfilment of the qualification requirements and provisions of the Central Electricity Regulatory Commission (Procedure, terms and Conditions for grant of Transmission License and other related matters) Regulations, 2006 and as amended from time to time.

**ARTICLE: 16**

## 16. GOVERNING LAW AND DISPUTE RESOLUTION

### 16.1 Governing Law:

This Agreement shall be governed by and construed in accordance with the Laws of India. Any legal proceedings in respect of any matters, claims or disputes under this Agreement shall be under the jurisdiction of appropriate courts in Delhi.

### 16.2 Amicable Settlement:

16.2.1 Either Party is entitled to raise any claim, dispute or difference of whatever nature arising under, out of or in connection with this Agreement, including its existence or validity or termination or whether during the execution of the Project or after its completion and whether prior to or after the abandonment of the Project or termination or breach of the Agreement by giving a written notice to the other Party, which shall contain:

(i) a description of the Dispute;

(ii) the grounds for such Dispute; and

(iii) all written material in support of its claim.

16.2.2 The other Party shall, within thirty (30) days of issue of notice issued under Article 16.2.1, furnish:

(i) counter-claim and defences, if any, regarding the Dispute; and

(ii) all written material in support of its defences and counter-claim.

16.2.3 Within thirty (30) days of issue of notice by the Party pursuant to Article 16.2.1, if the other Party does not furnish any counter claim or defense under Article 16.2.2, or thirty (30) days from the date of furnishing counter claims or defence by the other Party, both the Parties to the Dispute shall meet to settle such Dispute amicably. If the Parties fail to resolve the Dispute amicably within thirty (30) days from the later of the dates mentioned in this Article 16.2.3, the Dispute shall be referred for dispute resolution in accordance with Article 16.3.

### 16.3 Dispute Resolution:

All Disputes shall be adjudicated by the Commission.

**16.4 Parties to Perform Obligations:**

Notwithstanding the existence of any Dispute and difference referred to the Commission as provided in Article 16.3 and save as the Commission may otherwise direct by a final or interim order, the Parties hereto shall continue to perform their respective obligations/ roles (which are not in dispute) under this Agreement.

**ARTICLE: 17**

## 17. REPRESENTATION AND WARRANTIES

### 17.1 Representation and warranties of the Nodal Agency

17.1.1 The Nodal Agency hereby represents and warrants to and agrees with the TSP as follows and acknowledges and confirms that the TSP is relying on such representations and warranties in connection with the transactions described in this Agreement:

a. It has all requisite powers and authority to execute and consummate this Agreement;

b. This Agreement is enforceable against the Nodal Agency in accordance with its terms;

c. The consummation of the transactions contemplated by this Agreement on the part of Nodal Agency will not violate any provision of nor constitute a default under, nor give rise to a power to cancel any charter, mortgage, deed of trust or lien, lease, agreement, license, permit, evidence of indebtedness, restriction, or other contract to which the Nodal Agency is a Party or to which the Nodal Agency is bound, which violation, default or power has not been waived;

### 17.2 Representation and Warranties of the TSP:

17.2.1 The TSP hereby represents and warrants to and agrees with the Nodal Agency as follows and acknowledges and confirms that the Nodal Agency is relying on such representations and warranties in connection with the transactions described in this Agreement:

a. It has all requisite powers and has been duly authorized to execute and consummate this Agreement;

b. This Agreement is enforceable against it, in accordance with its terms;

c. The consummation of the transactions contemplated by this Agreement on the part of the TSP will not violate any provision of nor constitute a default under, nor give rise to a power to cancel any charter, mortgage, deed of trust or lien, lease, agreement, license, permit, evidence of indebtedness, restriction, or other contract to which the TSP is a Party or to which the TSP is bound which violation, default or power has not been waived;

d. The TSP is not insolvent and no insolvency proceedings have been instituted, nor threatened or pending by or against the TSP;

e. There are no actions, suits, claims, proceedings or investigations pending or, to the best of the TSP's knowledge, threatened in writing against the TSP at law, in equity, or otherwise, and whether civil or criminal in nature, before or by, any court, commission, arbitrator or governmental agency or authority, and there are no outstanding judgments, decrees or orders of any such courts, commission, arbitrator or governmental agencies or authorities, which materially adversely affect its ability to execute the Project or to comply with its obligations under this Agreement.

17.2.2 The TSP makes all the representations and warranties above to be valid as on the Effective Date of this Agreement.

**ARTICLE: 18**

## 18. INDEPENDENT ENGINEER

### 18.1 Appointment of Independent Engineer

The Nodal Agency shall appoint an agency/ company as Independent Engineer as per framework provided in the Guidelines for Encouraging Competition in Development of Transmission Projects for selection of Independent Engineer.

### 18.2 Roles and functions of Independent Engineer

The role and functions of the Independent Engineer shall include the following:

a. Progress Monitoring as required under this Agreement;

b. Ensuring Quality as required under this Agreement;

c. determining, as required under the Agreement, the costs of any works or services and/or their reasonableness during construction phase;

d. determining, as required under the Agreement, the period or any extension thereof, for performing any duty or obligation during construction phase;

e. determining, as required under the Agreement, the valuation of the Project Assets.

f. Assisting the Parties in resolution of Disputes and

g. Undertaking all other duties and functions in accordance with the Agreement.

### 18.3 Remuneration of Independent Engineer

The fee and charges of the Independent Engineer shall be paid by the Nodal Agency as per terms & conditions of appointment.

### 18.4 Termination of appointment

18.4.1 The Nodal Agency may, in its discretion, terminate the appointment of the Independent Engineer at any time, but only after appointment of another Independent Engineer.

18.4.2 If the TSP has reason to believe that the Independent Engineer is not discharging its duties and functions in a fair, efficient and diligent manner, it may make a written representation to the Nodal Agency and seek termination of the appointment of the

Independent Engineer. Upon receipt of such representation, the Nodal Agency shall hold a tripartite meeting with the TSP and Independent Engineer for an amicable resolution, and the decision of Nodal agency is final. In the event that the appointment of the Independent Engineer is terminated hereunder, the Nodal Agency shall appoint forthwith another Independent Engineer.

**18.5 Authorised signatories**

The Nodal Agency shall require the Independent Engineer to designate and notify to the Nodal Agency up to 2 (two) persons employed in its firm to sign for and on behalf of the Independent Engineer, and any communication or document required to be signed by the Independent Engineer shall be valid and effective only if signed by any of the designated persons; provided that the Independent Engineer may, by notice in writing, substitute any of the designated persons by any of its employees.

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

FATEHGARH II TRANSMISSION LTD. NEW DELHI

**ARTICLE: 19**

## 19. MISCELLANEOUS PROVISIONS

### 19.1 Equity Lock-in Commitment:

19.1.1 The aggregate equity share holding of the Selected Bidder in the issued and paid up equity share capital of **FATEHGARH II TRANSMISSION LIMITED** shall not be less than Fifty one percent (51%) up to a period of one (1) year after COD of the Project.

Provided that, in case the Lead Member or Bidding Company is holding equity through Affiliate/s, Ultimate Parent Company or Parent Company, such restriction as specified above shall apply to such entities.

Provided further, that in case the Selected Bidder is a Bidding Consortium, the Lead Member shall continue to hold equity of at least twenty six percent (26%) upto a period of one (1) year after COD of the Project and any Member of such Bidding Consortium shall be allowed to divest its equity as long as the other remaining Members (which shall always include the Lead Member) hold the minimum equity specified above.

19.1.2 If equity is held by the Affiliates, Parent Company or Ultimate Parent Company of the Selected Bidder, then, subject to the second proviso to Article 19.1.1, such Affiliate, Parent Company or Ultimate Parent Company shall be eligible to transfer its shareholding in **FATEHGARH II TRANSMISSION LIMITED** to another Affiliate or to the Parent Company / Ultimate Parent Company of the Selected Bidder. If any such shareholding entity, qualifying as an Affiliate / Parent Company / Ultimate Parent Company, is likely to cease to meet the criteria to qualify as an Affiliate / Parent Company / Ultimate Parent Company, the shares held by such entity shall be transferred to another Affiliate / Parent Company / Ultimate Parent Company of the Selected Bidder.

19.1.3 Subject to Article 19.1.1, all transfer(s) of shareholding of **FATEHGARH II TRANSMISSION LIMITED** by any of the entities referred to in Article 19.1.1 and 19.1.2 above, shall be after prior written intimation to the Nodal Agency.

19.1.4 For computation of effective Equity holding, the Equity holding of the Selected Bidder or its Ultimate Parent Company in such Affiliate(s) or Parent Company and the equity holding of such Affiliate(s) or Ultimate Parent Company in **FATEHGARH II TRANSMISSION LIMITED** shall be computed in accordance with the example given below:

If the Parent Company or the Ultimate Parent Company of the Selected Bidder A directly holds thirty percent (30%) of the equity in **FATEHGARH II TRANSMISSION LIMITED,** then holding of Selected Bidder A in **FATEHGARH II TRANSMISSION LIMITED** shall be thirty percent (30%);

If Selected Bidder A holds thirty percent (30%) equity of the Affiliate and the Affiliate holds fifty percent (50%) equity in **FATEHGARH II TRANSMISSION LIMITED,** then, for the purposes of ascertaining the minimum equity/equity lock-in requirements specified above, the effective holding of Bidder A in **FATEHGARH II TRANSMISSION LIMITED** shall be fifteen percent (15%), (i.e., 30% x 50%)

19.1.5 The provisions as contained in this Article 19.1 shall override the terms of the consortium agreement submitted as part of the Bid.

19.1.6 The TSP shall be responsible to report to Nodal Agency, within thirty (30) days from the occurrence of any event that would result in any change in its equity holding structure from that which existed as on the date of signing of the Share Purchase Agreement. In such cases, the Nodal Agency would reserve the right to ascertain the equity holding structure and to call for all such required documents / information / clarifications as may be required.

**19.2 Commitment of maintaining Qualification Requirement**

19.2.1 The Selected Bidder will be required to continue to maintain compliance with the Qualification Requirements, as stipulated in RFP Document, till the COD of the Project. Where the Technically Evaluated Entity and/or the Financially Evaluated Entity is not the Bidding Company or a Member in a Bidding Consortium, as the case may be, the Bidding Company or Member shall continue to be an Affiliate of the Technically Evaluated Entity and/or Financially Evaluated Entity till the COD of the Project.

19.2.2 Failure to comply with the aforesaid provisions shall be dealt in the same manner as TSP's Event of Default as under Article 13 of this Agreement.

**19.3 Language:**

19.3.1 All agreements, correspondence and communications between the Parties relating to this Agreement and all other documentation to be prepared and supplied under the Agreement shall be written in English, and the Agreement shall be construed and interpreted in accordance with English language.

19.3.2 If any of the agreements, correspondence, communications or documents are

prepared in any language other than English, the English translation of such agreements, correspondence, communications or documents shall prevail in matters of interpretation.

**19.4 Affirmation**

The TSP and the Nodal Agency, each affirm that:

1. neither it nor its respective directors, employees, or agents has paid or undertaken to pay or shall in the future pay any unlawful commission, bribe, pay-off or kick-back; and
2. it has not in any other manner paid any sums, whether in Indian currency or foreign currency and whether in India or abroad to the other Party to procure this Agreement, and the TSP and the Nodal Agency hereby undertake not to engage in any similar acts during the Term of Agreement.

**19.5 Severability**

The invalidity or enforceability, for any reason, of any part of this Agreement shall not prejudice or affect the validity or enforceability of the remainder of this Agreement, unless the part held invalid or unenforceable is fundamental to this Agreement.

**19.6 Counterparts**

This Agreement may be executed in one or more counterparts, each of which shall be deemed an original and all of which collectively shall be deemed one and the same Agreement.

**19.7 Breach of Obligations/ Roles**

The Parties acknowledge that a breach of any of the obligations/ roles contained herein would result in injuries. The Parties further acknowledge that the amount of the liquidated damages or the method of calculating the liquidated damages specified in this Agreement is a genuine and reasonable pre-estimate of the damages that may be suffered by the non-defaulting Party in each case specified under this Agreement

**19.8 Restriction of Shareholders / Owners Liability**

19.8.1 Parties expressly agree and acknowledge that none of the shareholders of the Parties hereto shall be liable to the other Parties for any of the contractual obligations of the concerned Party under this Agreement.

19.8.2 Further, the financial liabilities of the shareholder(s) of each Party to this Agreement shall be restricted to the extent provided in the Indian Companies Act, 1956 / Companies Act, 2013 (as the case may be).

**19.9 Taxes and Duties:**

19.9.1 The TSP shall bear and promptly pay all statutory taxes, duties, levies and cess, assessed/levied on the TSP, its Contractors or their employees that are required to be paid by the TSP as per the Law in relation to the execution of the Project and for providing Transmission Service as per the terms of this Agreement.

19.9.2 The Nodal Agency shall be indemnified and held harmless by the TSP against any claims that may be made against the Nodal Agency in relation to the matters set out in Article 19.9.1.

19.9.3 The Nodal Agency shall not be liable for any payment of, taxes, duties, levies, cess whatsoever for discharging any obligation of the TSP by the Nodal Agency on behalf of TSP or its personnel, provided the TSP has consented in writing to the Nodal Agency for such work, for which consent shall not be unreasonably withheld.

**19.10 No Consequential or Indirect Losses**

The liability of the TSP shall be limited to that explicitly provided in this Agreement.

Provided that, notwithstanding anything contained in this Agreement, under no event shall the Nodal Agency or the TSP claim from one another any indirect or consequential losses or damages.

**19.11 Discretion:**

Except where this Agreement expressly requires a Party to act fairly or reasonably, a Party may exercise any discretion given to it under this Agreement in any way it deems fit.

**19.12 Confidentiality**

19.12.1 The Parties undertake to hold in confidence this Agreement and RFP Project Documents and not to disclose the terms and conditions of the transaction contemplated hereby to third parties, except:

(a) to their professional advisors;

(b) to their officers, contractors, employees, agents or representatives, financiers, who need to have access to such information for the proper

performance of their activities; or

(c) disclosures required under Law,

without the prior written consent of the other Parties.

Provided that, the TSP agrees and acknowledges that the Nodal Agency, may, at any time, disclose the terms and conditions of the Agreement and the RFP Project Documents to any person, to the extent stipulated under the Law and the Competitive Bidding Guidelines.

**19.13 Order of priority in application:**

Save as provided in Article 2.5, in case of inconsistencies between the terms and conditions stipulated in Transmission License issued by the Commission to the TSP, agreement(s) executed between the Parties, applicable Law including rules and regulations framed thereunder, the order of priority as between them shall be the order in which they are placed below:

- terms and conditions of Transmission License;
- applicable Law, rules and regulations framed thereunder;
- this Agreement;
- Agreement(s), if any, under Sharing Regulations.

**19.14 Independent Entity:**

19.14.1 The TSP shall be an independent entity performing its obligations pursuant to the Agreement.

19.14.2 Subject to the provisions of the Agreement, the TSP shall be solely responsible for the manner in which its obligations under this Agreement are to be performed. All employees and representatives of the TSP or Contractors engaged by the TSP in connection with the performance of the Agreement shall be under the complete control of the TSP and shall not be deemed to be employees, representatives, Contractors of the Nodal Agency and nothing contained in the Agreement or in any agreement or contract awarded by the TSP shall be construed to create any contractual relationship between any such employees, representatives or Contractors and the Nodal Agency.

**19.15 Amendments:**

19.15.1 This Agreement may only be amended or supplemented by a written agreement

between the Parties.

**19.16 Waiver:**

19.16.1 No waiver by either Party of any default or breach by the other Party in the performance of any of the provisions of this Agreement shall be effective unless in writing duly executed by an authorised representative of such Party.

19.16.2 Neither the failure by either Party to insist on any occasion upon the performance of the terms, conditions and provisions of this Agreement nor time or other indulgence granted by one Party to the other Parties shall act as a waiver of such breach or acceptance of any variation or the relinquishment of any such right or any other right under this Agreement, which shall remain in full force and effect.

**19.17 Relationship of the Parties:**

This Agreement shall not be interpreted or construed to create an association, joint venture, or partnership or agency or any such other relationship between the Parties or to impose any partnership obligation or liability upon either Party and neither Party shall have any right, power or authority to enter into any agreement or undertaking for, or act on behalf of, or to act as or be an agent or representative of, or to otherwise bind, the other Party.

**19.18 Entirety:**

19.18.1 This Agreement along with its sections, schedules and appendices is intended by the Parties as the final expression of their agreement and is intended also as a complete and exclusive statement of the terms of their agreement.

19.18.2 Except as provided in this Agreement, all prior written or oral understandings, offers or other communications of every kind pertaining to this Agreement or the provision of Transmission Service under this Agreement to the Nodal Agency by the TSP shall stand superseded and abrogated.

**19.19 Notices:**

19.19.1 All notices or other communications which are required to be given under this Agreement shall be in writing and in the English language

19.19.2 If to the TSP, all notices or communications must be delivered personally or by registered post or facsimile or any other mode duly acknowledged to the addressee below:

(i) **Powergrid Corporation of India Limited (Selected Bidder)**

| | | Corporate Address | Business Address |
|---|---|---|---|
| Address | : | Plot No. 2, Sanskamini, Sec-29, Gurugram Haryana - 122001 | NWR, RHQ, 3rd, 4th floor, REIL House, Shepra path Mansarovar Jaipur, RJ - 302020 |
| Attention | : | EDC(TBCB) | Sh. P K. Ray. |
| Email | : | tbcb@powergrid.in | PKray@powergrid.in |
| Fax. No. | : | – | |
| Telephone No. | : | 0124 - 2822123. | 9971399123 |

19.19.3 If to the Nodal Agency, all notices or communications must be delivered personally or by registered post or facsimile or any other mode duly acknowledged to the addresses below:

(i) **Central Transmission Utility of India Limited (Nodal Agency)**

| | | |
|---|---|---|
| Address | : | 5th to 10th Floor, IRCON International Tower, Tower No-1, Plot No-16, Sector-32, Gurugram Haryana: 122003 |
| Attention | : | Ramachandra, Sr GM |
| Email | : | ramachand@powergrid.in |
| Fax. No. | : | |
| Telephone No. | : | 9910378128 |

19.19.4 All notices or communications given by facsimile shall be confirmed by sending a copy of the same via post office in an envelope properly addressed to the appropriate Party for delivery by registered mail. All notices shall be deemed validly delivered upon receipt evidenced by an acknowledgement of the recipient, unless the Party delivering the notice can prove in case of delivery through the registered post that the recipient refused to acknowledge the receipt of the notice despite efforts of the postal authorities.

19.19.5 Any Party may by notice of at least fifteen (15) days to the other Party change the address and/or addresses to which such notices and communications to it are to be delivered or mailed.

**19.20 Fraudulent and Corrupt Practices**

19.20.1 The TSP and its respective officers, employees, agents and advisers shall observe the highest standard of ethics during the subsistence of this Agreement. Notwithstanding anything to the contrary contained in the Agreement, the Nodal Agency may terminate the Agreement without being liable in any manner whatsoever to the TSP, if it determines that the TSP has, directly or indirectly or through an agent, engaged in corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice in the Bid process. In such an

event, the Nodal Agency shall forfeit the Contract Performance Guarantee of the TSP, without prejudice to any other right or remedy that may be available to the Nodal Agency hereunder or subsistence otherwise.

19.20.2 Without prejudice to the rights of the Nodal Agency under Clause 19.20.1 hereinabove and the rights and remedies which the Nodal Agency may have under this Agreement, if a TSP is found by the Nodal Agency to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practice during the Bid process, or after the issue of Letter of Intent (hereinafter referred to as LoI) or after the execution of the agreement(s) required under Sharing Regulations, the Nodal Agency may terminate the Agreement without being liable in any manner whatsoever to the TSP. Further, the TSP & its Affiliates shall not be eligible to participate in any tender or RFP issued by any BPC for an indefinite period from the date such TSP is found by the Nodal Agency to have directly or indirectly or through an agent, engaged or indulged in any corrupt practice, fraudulent practice, coercive practice, undesirable practice or restrictive practices, as the case may be.

**19.20.3** For the purposes of this Clause 19.20, the following terms shall have the meaning hereinafter respectively assigned to them:

(a) **"corrupt practice"** means (i) the offering, giving, receiving, or soliciting, directly or indirectly, of anything of value to influence the actions of any person connected with the Bid process (for avoidance of doubt, offering of employment to or employing or engaging in any manner whatsoever, directly or indirectly, any official of the BPC who is or has been associated or dealt in any manner, directly or indirectly with the Bid process or the LoI or has dealt with matters concerning the RFP Project Documents or arising there from, before or after the execution thereof, at any time prior to the expiry of one year from the date such official resigns or retires from or otherwise ceases to be in the service of the BPC, shall be deemed to constitute influencing the actions of a person connected with the Bid Process); or (ii) engaging in any manner whatsoever, whether during the Bid Process or after the issue of the LoI or after the execution of the RFP Project Documents, as the case may be, any person in respect of any matter relating to the Project or the LoI or the RFP Project Documents, who at any time has been or is a legal, financial or technical adviser of the BPC in relation to any matter concerning the Project;

(b)"**fraudulent practice**" means a misrepresentation or omission of facts or suppression of facts or disclosure of incomplete facts, in order to influence the Bid process;

(c) "**coercive practice**" means impairing or harming, or threatening to impair or harm, directly or indirectly, any person or property to influence any person's participation or action in the Bid process;

(d) "**undesirable practice**" means (i) establishing contact with any person connected with or employed or engaged by the BPC with the objective of canvassing, lobbying or in any manner influencing or attempting to influence the Bid process; or (ii) having a Conflict of Interest; and

(e) "**restrictive practice**" means forming a cartel or arriving at any understanding or arrangement among Bidders with the objective of restricting or manipulating a full and fair competition in the Bid process;

**19.21 Compliance with Law:**

Despite anything contained in this Agreement but without prejudice to Article 12, if any provision of this Agreement shall be in deviation or inconsistent with or repugnant to the provisions contained in the Electricity Act, 2003, or any rules and regulations made there under, such provision shall be deemed to be amended to the extent required to bring it into compliance with the aforesaid relevant provisions as amended from time to time.

**IN WITNESS WHEREOF, THE PARTIES HAVE CAUSED THIS AGREEMENT TO BE EXECUTED BY THEIR DULY AUTHORISED REPRESENTATIVES AS OF THE DATE AND PLACE SET FORTH ABOVE.**

1. For and on behalf of TSP

FATEHGARH II TRANSMISSION LTD. NEW DELHI

.....

[Signature, Name, Designation and Address]

2. For and on behalf of **Central Transmission Utility of India Limited (Nodal Agency)**

.....

KAMAL KUMAR JAIN
Senior General Manager
CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED
(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड की पूर्ण स्वामित्व कंपनी)
(A wholly owned subsidiary of POWERGRID)
5th-10th Floor, Ircon International Tower-1, Plot No.-16, Sector-32, Gurugram-122003

[Signature, Name, Designation and Address]

**WITNESSES:**

1. For and on behalf of

: **BPC**

.....

[Signature]

Anshul Sheora, Advocate

[Insert, Name, Designation and Address of the Witness]

2. For and on behalf of

: **Nodal Agency**

.....

[Signature]

DEEPAK KRISHNAN
Chief Manager
सेंट्रल ट्रांसमिशन यूटिलिटी ऑफ इंडिया लिमिटेड
CENTRAL TRANSMISSION UTILITY OF INDIA LIMITED
(पावर ग्रिड कॉर्पोरेशन ऑफ इंडिया लिमिटेड की पूर्ण स्वामित्व कंपनी)
(A wholly owned subsidiary of POWERGRID)
5th-10th Floor, Ircon International Tower-1, Plot No.-16, Sector-32, Gurugram-122003

[Insert Name, Designation and Address of the Witness]

# SCHEDULES

## Schedule: 1

## Project Description and Scope of Project

### A. Description of the Transmission Scheme

The transmission scheme comprises "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220 kV Fatehgarh-II PS".

As per the discussion of 71st NRPC meeting held on 20.01.2024, it was deliberated that RE power is being integrated at very fast pace and the to ensure grid stability and provide inertial support in RE Complex a committee of members from CEA, NRPC, NRLDC, CTU and STU was constituted to do the futuristic analysis for requirement of Synchronous Condensers based on the inertia considerations for Northern Region.

Subsequently, various committee meetings were held highlighting various technological options available and suitability of SynCons under different system requirements. Further, a methodology was adopted to identify the optimal location for installation of SynCons, which includes low SCR (<5), proximity of HVDC station, dynamic compensation requirement, real time grid issues etc. Based on above criterion committee recommended SynCons at various RE pooling stations in Rajasthan incl. SynCon at Fatehgarh-II S/s. Grid India in 36th CMETS-NR meeting also highlighted that they have observed sustained oscillations on real time basis at Fatehgarh-II PS.

The scheme includes the installation of 2 Nos. of Synchronous Condenser (SynCon) units (each unit of +300/-200 MVAr) at 400 kV level of 765/400/220 kV Fatehgarh-II PS along with the 2 Nos. of 400 kV bays.

Above scheme has been discussed and agreed in 36th CMETS-NR meeting held on 15.01.2025, 55th TCC & 80th NRPC meeting held on 17-18th July 2025. Further, the transmission scheme was also discussed in 32nd NCT meeting held on 12th Aug'25 and later agreed in 33rd NCT meeting held on 16th September 2025. Subsequently, Ministry of Power, Government of India, vide its Gazette notification dated 03.11.2025 declared the establishment of "Installation of 2 Nos. of Synchronous Condensers (SynCon) units at 765/400/220kV Fatehgarh-II PS" through tariff based competitive bidding route.

CENTRAL TRANSMISSION UTILITY OF INDIA LTD. ★ सीटीयू CTU

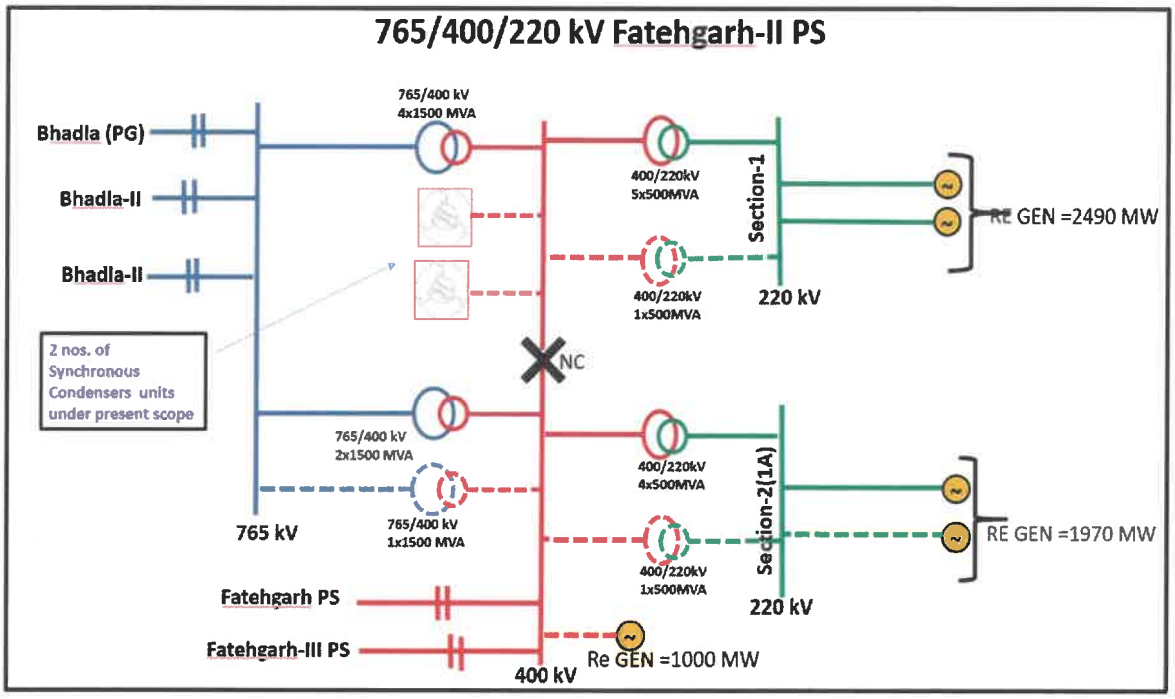
FATEHGARH II TRANSMISSION LTD. ★ NEW DELHI

## B. Detailed Scope of Work

| S. No. | Name of Transmission Element | Scheduled COD in months from Effective Date |
|---|---|---|
| | 2 nos. of Synchronous Condensers (SynCon) units* at 400kV level of 765/400/220 kV Fatehgarh-II PS along with 2 nos. of 400kV bays.<br>Synchronous Condenser units- 2 Nos.<br>400kV Bay- 2 Nos.<br><br>**1 No. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short Circuit contribution at PCC of 1200MVA (Minimum)* | 30 months (28.02.2029) |
| Notes:<br>*POWERGRID shall provide space (free of cost) for 2 Nos. (SynCon) units at Fatehgarh II PS along with 2 Nos. of 400 kV bays* | | |

## C. Transmission Grid Map

Transmission Grid Map indicating the location of the Project is as below.



**LOCATION DETAILS OF EXISTING / PLANNED SUBSTATIONS**

a) **Fatehgarh-II PS :** *26°42'18.4" N, 71°16'34.4" E*

**Note**: *It is to clarify that coordinates/location of S/s indicated is approximate nearby control room building. Exact coordinates for the corresponding bays/gantry for termination of the respective line shall be finalized by the bidder in coordination with site.*

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**Annexure - A**

## SPECIFIC TECHNICAL REQUIREMENTS FOR SUBSTATION

Extension of **765/400/220 kV Fatehgarh-II PS** shall be Air Insulated Switchgear (AIS) type generally conforming to the requirements of CEA (Technical Standards for Construction of Electrical Plants and Electric Lines) Regulations 2022, as amended from time to time.

Other CEA Regulations/guidelines as amended up to date and MoP guidelines, as applicable, shall also be followed.

### A.1.0 Salient features of Substation Equipment and Facilities

The design and specification of substation equipment are to be governed by the following factors:

### A.1.1 Insulation Coordination

The system design parameters for substations/switchyards shall be as given below:

| S. No. | Description of parameters | Extn. of 765/400/220 kV Fatehgarh-II PS |
|---|---|---|
| | | 400 kV System |
| 1. | System Operating Voltage | 400 kV |
| 2. | Maximum voltage of the system (rms) | 420 kV |
| 3. | Rated Frequency | 50 Hz |
| 4. | No. of Phases | 3 |
| 5. | Corona Extinction Voltage | 320 kV |
| 6. | Max. radio interference voltage for frequency between 0.5 MHz and 2 MHz | 1000 micro-volts at 266 kV rms |
| 7. | Minimum creepage distance for insulator string/ longrod insulators/ outdoor bushings | 13020 mm (31 mm/kV) |
| 8. | Minimum creepage distance for switchyard equipment | 10500 mm (25 mm/kV) |
| 9. | Max. fault current | 63 kA |
| 10. | Duration of fault | 1 Sec |

### A.1.2 Switching Scheme

The switching schemes, as mentioned below, shall be adopted at various voltage levels of substation/switchyard:

| Substation | 400 kV side |
|---|---|
| **Extn. of 765/400/220kV Fatehgarh-II PS** | One and half breaker |

***Notes: -***

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*(i) For one and half breaker switching scheme, any double circuit line consisting of two numbers of feeders and originating from the same transmission or generating switchyard shall not be terminated in one diameter.*

*(ii) A diameter in one and half breaker scheme is a set of 3 circuit breakers with associated isolators, earth switches, current transformers etc. for controlling 2 (two) numbers of feeders.*

*(iii) In one and half breaker scheme, both main bay and tie bay shall be completed for controlling a feeder. Further, all associated interconnection work shall also be in the present scope of TSP.*

***(iv) Augmentation of Fatehgarh-II PS :***

*For installation of 2 Nos. Synchronous Condenser, one unit shall be installed in existing diameter and second unit shall be installed in new diameter at Fatehgarh-II PS. Accordingly, one number of main bay (bay No. 409) and one number half diameter consisting of Main and associated Tie Bay (412- Main Bay & 411- Tie Bay) shall be constructed under present scope at Fatehgarh-II PS. Bidder may refer the existing single line diagram (SLD) of Fatehgarh-II PS attached with the RfP.*

*Additionally, the designated space (approx. 90 m * 140 m) available for installation of 2 (two) Nos. synchronous condensers is highlighted in red in the GA layout of Fatehgarh-II PS attached with the RfP.*

*Further, all associated interconnection work shall also be in the present scope of TSP.*

### A.2.0 Substation Equipment and facilities (Voltage level as applicable):

The switchgear shall be designed and specified to withstand operating conditions and duty requirements. All equipment shall be designed considering the following capacity.

| S. No. | Description of bay | Extn. of 765/400/220 kV Fatehgarh-II PS |
|---|---|---|
| | | 400 kV |
| 1. | Bus Bar | As per existing |
| 2. | Synchronous Condenser Bay | 3150 A |

### A.2.1 400 kV AIS Substation equipment (as applicable)

#### A.2.1.1 Circuit Breakers (AIS)

The circuit breakers and accessories shall conform to IEC: 62271-100, IEC: 62271-1 and shall be of SF6 Type. The circuit breakers shall be of class C2-M2 (as per IEC) with regard to restrike probability during capacitive current breaking and mechanical endurance. The rated break time shall not exceed 40 ms for 400 kV circuit breakers. 400 kV Circuit breakers shall be provided with single phase and three phase auto reclosing. Each breaker would have two sets of trip circuits which would be connected to separate DC supplies for greater reliability. The short line fault capacity shall be same as the rated capacity, and this is proposed to be achieved without use of opening resistors. The controlled switching device shall be provided in Circuit breakers of switchable line reactor bay and in Main and Tie bay

circuit breakers of line with non-switchable line reactors, Bus Reactors and Transformers of voltage class 400 kV and above.

### A.2.1.2 Isolators (AIS)

The Isolators shall comply with IEC 62271-102 in general. 400 kV Isolators shall be double break type. All Isolators and earth switches shall be motor operated. Earth switches shall be provided at various locations to facilitate maintenance. Isolator rated for 400 kV shall be of extended mechanical endurance class - M2 as per IEC-62271-102. Main blades and earth blades shall be interlocked, and interlock shall be fail safe type. 400 kV earth switch for line isolator shall be suitable for induced current switching duty as defined for Class-B.

### A.2.1.3 Current Transformers (AIS)

Current Transformers shall comply with IEC 61869 in general. All ratios shall be obtained by secondary taps only. Generally, Current Transformers (CT) for 400 kV shall have six cores (four for protection and two for metering). The burden and knee point voltage shall be in accordance with the requirements of the system including possible feeds for telemetry. The Accuracy class for the protection core shall be PX and for the metering core it shall be 0.2S. The rated burden of cores shall be closer to the maximum burden requirement of metering and protection system (not more than 20 VA for metering core) for better sensitivity and accuracy. The instrument security factor shall be less than five (5) for CTs upto 400 kV voltage class.

### A.2.1.4 Capacitive Voltage Transformers (AIS)

Capacitive Voltage transformers shall comply with IEC 61869 in general. These shall have three secondaries out of which two shall be used for protection and one for metering. Accuracy class for protection cores shall be 3P and for metering core shall be 0.2. The Capacitive voltage transformers on lines shall be suitable for Carrier Coupling. The Capacitance of CVT for 400 kV shall be of 4400/8800 pF depending on PLCC requirements. The rated burden of cores shall be closer to the maximum burden requirement of metering and protection system (not more than 50 VA for metering core) for better sensitivity and accuracy.

### A.2.1.5 Surge Arresters (AIS)

336 kV Station High (SH) duty gapless type Surge Arresters with thermal energy (Wth) of minimum 12 kJ/kV conforming to IEC 60099-4 in general shall be provided for 420 kV systems. Other characteristics of Surge arrester shall be chosen in accordance with system requirements. Surge Arresters shall be provided at line entrances, near transformers and reactor so as to achieve proper insulation coordination. Surge Arresters shall be provided with porcelain/ polymer housing fitted with pressure relief devices. A leakage current monitor with surge counter shall be provided with each surge arrester.

### A.2.2 Protection Relaying and Control System

All main protective relays shall be numerical type with IEC 61850 communication interface and should have interoperability during integration of numerical relays to communicate over IEC61850 protocol with RTU/SAS/IEDs of different OEMs. All numerical relays shall have built in disturbance recording feature.

The protection circuits and relays shall be electrically and physically segregated into two groups each being independent and capable of providing uninterrupted protection even in the event of one of the protection groups failing, to obtain redundancy, and to take protection systems out for maintenance while the equipment remains in service.

**a) Bus bar Protection**

The high-speed low impedance type bus bar differential protection, which is essential to minimize the damage and maintain system stability at the time of bus bar faults, shall be provided for 400 kV. Duplicated bus bar protection is envisaged for 400 kV bus-bar protection. Bus bar protection scheme shall be such that it operates selectively for each bus and incorporate necessary features required for ensuring security. The scheme shall have complete bus bar protection for present as well as envisaged future bays i.e. input / output modules for future bays for the bus section under present scope shall also be provided.

Bus Bar protection system for new substation shall be de-centralized (distributed) type. In case, the bus section is provided, then each side of bus section shall have separate set of bus bar protection schemes.

Peripheral Units (PUs) shall be provided by the respective bay owners.

For existing substations, the existing bus bar protection shall be augmented as per requirement.

**b) Local Breaker Back up Protection**

This shall be provided for each 400 kV circuit breakers and will be connected to de-energize the affected stuck breaker from both sides.

*Notes:*

1. *LBB and REF relays shall be provided separately from transformer differential relay.*
2. *LBB relay may also be provided as built-in protection function of distributed bus bar protection scheme; however, in such case separate LBB relay shall be provided for tie bays (in case of One and Half breaker scheme).*
3. *Over fluxing and overload protection can be provided as built-in feature of differential relay.*
4. *In 400 kV switchyard, if spare bay of half diameter is identified as future, Tie CB relay panel shall be with Auto-reclosure feature.*

**A.2.3 Substation Automation System**

**a)** For all the new substations, state of art Substation Automation System (SAS) conforming to IEC-61850 shall be provided. The distributed architecture shall be used for Substation Automation System, where the controls shall be provided through Bay Control Units. The Bay Control Unit is to be provided bay wise for voltage level 220 kV and above. All Bay Control Units as well as protection units are normally connected through an Optical fiber high speed network. The control and monitoring of circuit

breaker, dis-connector, re-setting of relays etc. can be done from Human Machine Interface (HMI) from the Control Room.

The functions of control, annunciation, disturbance recording, event logging and measurement of electrical parameters shall be integrated in the Substation Automation System.

In the existing substations with a Substation Automation System (SAS), SynCon Station control and monitoring shall be integrated with SAS at the main Sub-station by the TSP. SynCon Station's SCADA shall be connected with SAS through a Gateway and the database, configuration etc of the main substation. SAS shall be upgraded to incorporate SynCon Station events, alarms, Controls (both switchgear and control functions of SynCon Station like the setting of parameters etc.) so that SynCon Station can be effectively monitored and controlled from main substation SAS and shall be monitored from Load Dispatch Center (RLDC).

### A.3.0 Substation Support Facilities

Certain facilities required for the operation and maintenance of substations as described below shall be provided at the new substation. In existing substation, these facilities have already been provided and will be extended/ augmented as per requirement.

### A.3.1 Fire Fighting System

At existing substations, the fire-fighting systems as available shall be extended to meet the additional requirements.

### A.3.2 Illumination

Normal and emergency AC and DC illumination shall be provided adequately in the control room and other buildings of the substation. The switchyard shall also be provided with adequate illumination.

The lighting of the entire control room building, fire-fighting pump house, other building (if any) and switchyard shall be done by LED based low power consumption luminaries.

### A.3.3 Control Concept

All the EHV circuit breakers in substation/switching stations shall be controlled and synchronized from the switchyard control room/remote control center. All the isolators shall have control from remote/local whereas the earth switches shall have local control only.

### A.4.0 General Facilities

a) Line Gantry/Towers are envisaged for bays under the present scope only.

b) Bay extension works at existing substation shall be executed by TSP in accordance with the requirements/provisions mentioned above. However, interface points shall be considered keeping in view the existing design/arrangement at the substation.

c) TSP has to arrange for construction power and water on its own.

d) All outdoor steel structures including anchor/foundation bolts shall be fully galvanized. The weight of the zinc coating shall be at least 610 gm/$m^2$ and 900 gm/$m^2$ for coastal/ creek regions (if applicable).

e) In 400 kV switchyard, if spare bay of half diameter is identified as future, all the equipment for Tie and Future Bay shall be designed considering the current rating of line bay i.e. 3150 A.

f) All electrical equipment shall be installed above the Highest Flood Level (HFL) and where such equipment is not possible to be installed above Highest Flood Level, it shall be ensured that there is no seepage or leakage or logging of water.

## A.5.0 EXTENSION OF EXISTING SUBSTATION

The following drawings/details of existing substation is attached with the RFP documents for further engineering by the bidder.

| Sl. No. | Drawing Title | Drawing No./Details | Rev. No. |
|---|---|---|---|
| **A.** | **Fatehgarh-II PS** | | |
| 1.0 | Single Line Diagram | PGCIL-FTH-II-SLD-00 | -- |
| 2.0 | General Arrangement | PGCIL-FTH-II-ELE-LAY-00 | -- |
| 3.0 | Visual Monitoring System | Make : SPARSH<br>Model: SS-ES313P-20-33X | |
| 4.0 | Bus Bar Protection | Siemens | |
| 5.0 | Substation Automation System (SAS) | Siemens | |

Bidders shall follow the RfP for scope of work. Actual site conditions may be different due to other schemes being executed or subsequent revisions by the developer. Thus, bidders are advised to visit the substation sites and acquaint themselves for details such as:

(i) Actual site conditions, Layout, Topography
(ii) Infrastructure such as roads, cable trench, drainage
(iii) Soil investigation
(iv) Fire hydrant layout
(v) SAS architecture and IO list
(vi) Boundary
(vii) Design philosophy etc.

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**Annexure - B**

## SPECIFIC TECHNICAL REQUIREMENTS FOR SYNCHRONOUS CONDENSER

### 1. INTRODUCTION

This technical specification for Synchronous Condenser Stations consists of Synchronous Condenser (SynCon) units alternatively referred to as Synchronous Compensator where a SynCon unit consists of one synchronous condenser along with associated step-up transformer (s), cooling systems, flywheels (if applicable), auxiliary system and all associated switchgears.

Synchronous Condenser shall provide Inertia, Short Circuit support, continuous and dynamic supply of reactive power (capacitive and inductive) support for the regulation and stabilization of the voltage of 400 kV at Point of Common Coupling (PCC) under normal and transient conditions. The station shall operate in the leading and lagging MVAr region, as required to meet the specified inertia, short circuit requirements and reactive power capability curve and dynamic performance criteria.

The SynCon primarily shall be designed for continuous operation under varying grid conditions. The SynCon shall be equipped with a digital AVR (Automatic Voltage Regulator), Under/Over Excitation Limiters (UEL/OEL), V/Hz protection, and high inertia flywheels (if applicable) to enhance transient stability and damping.

The SynCon Station may consist of multiple identical synchronous condenser units, each operating in parallel and connected to the 400 kV HV bus (PCC), as per the design and space available. The minimum size of a syncon unit shall be 100 MVAr. The design shall ensure compliance with grid code requirements, and the provision of inertia and fault current to support reliable and stable system operation.

### 1.1 Definitions

For the purpose of this specification, the following definitions / abbreviations are used:

**PCC (Point of Common Coupling):** Point of Common Coupling (herein also called as Point of Interconnection (POI) is the connection point between the Synchronous Condenser (SynCon) Station/plant (HV Side of step-up transformer) and ISTS at which performance requirements are defined.

**Reference Voltage (Vref):** The voltage set-point at the PCC where SynCon is expected to regulate voltage by injecting or absorbing reactive power while maintaining system stability.

**MV (Medium Voltage):** The voltage level at the low-voltage side of the step-up transformer, where SynCon and associated equipment are connected.

**SynCon (Synchronous Condenser):** SynCon is a DC-excited Synchronous machine that runs at no load and is used to control reactive power, which improves voltage stability and power factor in electrical grids

In the entire document the notion synchronous condenser refers to the synchronous machine installed in the **Synchronous Condenser unit**. The synchronous condenser shall be connected to the step-up transformer via the generator circuit breaker by an Isolated Phase Bus duct.

Following convention is used in this specification to define the reactive power output of the *Synchronous condenser unit*:

a) The notion **capacitive reactive power** (indicated as "+ MVAr") is used when the Synchronous condenser unit is injecting reactive power to the grid, i.e. when the synchronous condenser is operating in the overexcited capability range.
b) The notion **inductive reactive power** (indicated as "- MVAr") is used when the Synchronous condenser unit is absorbing reactive power from the grid, i.e. when the synchronous condenser is operating in the under excited capability range.

**SynCon Unit (Synchronous Condenser Unit):** In the entire document *Synchronous condenser unit* refers to the full scope of equipment working as one system at PCC. It includes but is not limited to:

(i) Synchronous Condenser and its auxiliaries.
(ii) Excitation System (Static/Brushless)
(iii) Flywheel and its auxiliaries, if option chosen
(iv) Step-up Transformers
(v) Generator Circuit Breaker (GCB)
(vi) Unit Transformer (Auxiliary Transformers)
(vii) Isolated Phase Bus Duct (IPBD) connecting Generator and Step-up Transformer
(viii) Lube Oil System
(ix) Auxiliary Power Supply (medium voltage/ low voltage)
(x) Equipment for control and protection of the equipment supplied under the specifications.
(xi) Reactive Power Oscillation Damper (RPOD)
(xii) Cooling System
(xiii) Other auxiliary systems required for power operation of the Synchronous Condenser.
(xiv) SynCon starting system (SFC/Pony motor)

**AVR (Automatic Voltage Regulator):** A digital control system associated with each SynCon Unit responsible for regulating the field excitation to maintain the terminal voltage or reactive power output, always fully redundant, this is channel A and B in terms of control and power circuits, with hot standby and automatic switch functionalities. AVR shall include functionalities like:

**(a) UEL (Under Excitation Limiter):** A protective function or control logic that prevents the SynCon from operating in unstable or under-excited regions of the capability curve, avoiding excessive reactive power absorption.
**(b) OEL / OVEL (Over Excitation Limiter):** A protection system that limits the field current to prevent thermal damage to the field winding during overexcited operation (i.e., high reactive power generation).

**Flywheel:** A rotating mechanical mass connected to the SynCon shaft to increase its inertia and provide additional damping and system strength benefits.

**Step-up Transformer:** A Transformer connecting the SynCon (MV side) to the ISTS (400 kV side i.e. PCC), designed to match voltage levels and system impedance characteristics.

**Capability Curve:** The operational envelope of the SynCon showing the permissible limits of reactive power generation or absorption with respect to voltage at PCC and stator current.

**Lagging Operation:** Operation in which the SynCon absorbs capacitive reactive power (under-excited operation).

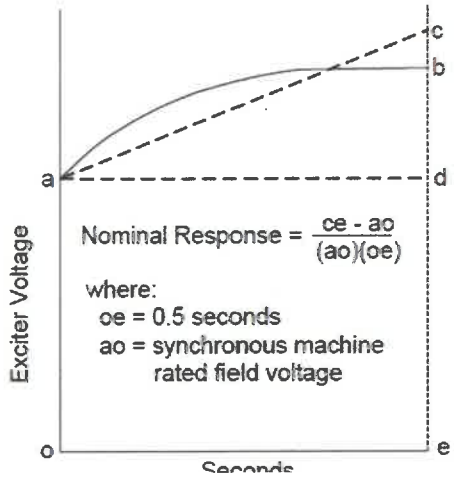
**Leading Operation:** Operation in which the SynCon generates capacitive reactive power (over-excited operation).

**Response Time:** The duration from a step change in control signal until the voltage changes by 90% of its final change, before any overshoot.

**Settling Time:** The duration from a step change in control signal input until the SynCon output settles to within ±5% of required control output.

**Overshoot:** The maximum system output minus the final settled value, divided by the actual change in system output (i.e., from its initial value to the final settled value), when the final settled value is within the defined settling band, expressed as a percentage.

**Excitation response ratio:** It is called the excitation system nominal response and defined as the rate of increase of the excitation system output voltage determined from the excitation system voltage response curve, divided by the rated field voltage. This rate, if maintained constant (curve ac), would develop the same voltage-time area as obtained from the response (curve ab) over the first half-second interval (unless a different time interval is specified). The RR is a measure of the speed of response for the excitation system, the higher the RR, the faster the response




Response ratio

**Reactive power oscillation damper (RPOD):** A reactive power oscillation damper (RPOD) implemented through control strategy designed to damp low-frequency electromechanical oscillations (typically 0.2–2 Hz) in power systems by modulating the SynCon reactive power output (Q) in response to system oscillations. When equipped with an excitation control system and a power oscillation damping (POD) controller, it can also actively damp oscillations in the grid by modulating its reactive power.

## 1.2 APPLICABLE STANDARDS

Unless otherwise specified herein, the plant shall be in accordance with the latest edition and amendments of Indian Electricity Grid Code (IEGC), CEA Technical Standards, appropriate International Electrotechnical Commission (IEC) and Institute of Electrical and Electronics Engineers (IEEE) standards and their amendment thereof. In particular, the plant shall comply with the following Standards (as applicable):

CEA (Technical Standards for Connectivity to the Grid) and as amended time to time

IEC 60034 - Rotating Electrical Machines

IEC 60255-27 - Measuring relays and protection equipment (Product safety requirements)

IEEE C50.13 - Cylindrical-rotor 50 Hz and 60 Hz Synchronous Generators 10 MVA and Above

IEEE 115-Guides for Test Procedures for Synchronous Machines

IEEE 43 - Recommended Practice for Testing Insulation Resistance of Electrical Machinery

IEEE C37.013 - IEEE Standard for AC High-Voltage Generator Circuit Breakers Rated on a Symmetrical Current Basis

IEEE 421.5-2016 (IEEE Recommended Practice for Excitation System Models for Power System Stability Studies)

IEEE Std 1110-2019 - IEEE Guide for Synchronous Generator Modeling Practices and Parameter Verification

IEEE PES TR (2020) - Dynamic Performance and Application of Synchronous Condensers for Renewable Integration. (A technical report (not standard), but it explicitly describes the use of reactive power modulation for oscillation damping, with control block examples).

## 2. SCOPE OF WORK

The scope of works comprises the design, supply, factory testing, delivery, installation, commissioning and testing of the synchronous condenser unit (s), each of which comprises the key elements, but not limited to, the following:

(a) One XX MVA synchronous condenser (or as close as possible to this size) including rotor, stator, shaft, bearings, and base frame in case of cylindrical rotor or stator frame sole plates in case of salient pole solution, Excitation System & Voltage Regulating Equipment including Automatic Voltage Regulator (AVR), Power System Stabilizer (QSS) and Field Circuit Breakers for steady-state and dynamic voltage support

(b) Instrumentation, Monitoring and Control Systems including local and remote monitoring, diagnostic tools, and condition monitoring systems

(c) Slip Rings and Carbon Dust Extraction System (if static excitation system)

(d) One bank of three single phase transformer or three phase transformer XX MVA, xx / 400 kV step up transformer (size and secondary voltage to be finalised by the supplier, in accordance with the size of the offered synchronous condenser units) along with one spare (spare can be common for all the SynCon units), with secondary winding(s), complete with bushing CTs. Spare shall be of same rating as that of the main 1-ph or 3-ph transformer.

The synchronous condensers step-up transformers are to have continuous ratings that support sustained operation at all operating points on the reactive power capability curve

(e) 400 kV side bay equipment

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(f) Bus duct (isolated) between the power transformer and the synchronous condenser

(g) Medium voltage generator circuit breaker complete with disconnectors, surge arresters, earth switches and instrument transformers (voltage to be confirmed by the supplier, in accordance with the size of the synchronous condenser units)

(h) Protection Systems including differential, overcurrent, under/overvoltage, out-of-step, loss-of-excitation, and backup protections.

(i) Static frequency converter (SFC) as per requirement

(j) Pony motor (s) for start-up (if required) and associated variable frequency drives

(k) Fly wheel (s) for increased inertia (as per requirement)

(l) One station transformer for auxiliary supplies in case one independent source of Auxiliary Power is a Station Transformer (this will be in common to all SynCon units)

(m) Unit Transformer (Auxiliary Transformers)

(n) LV auxiliary supply complete with back up supply

(o) LV surge arresters

(p) Control, SCADA and protection systems housed in a dedicated room inside the synchronous condenser building

(q) Fire walls and enclosures - as required by the fire and oil/water containment, or noise mitigations

(r) Any other equipment for completion of the complete installation of the synchronous condenser

(s) SynCon Building (PEB - Pre-Engineered Building) – (Common machine hall for SynCons of all the SynCon Station is acceptable to reduce the requirement of the number of EOT Crane.)

Each equipment shall be type tested. Further, in respect of type test, CEA's 'Guidelines for the Type Tests for Major Equipment of Power Sector' shall be followed.

**2.1 System Studies and Compliance**

The TSP shall be responsible for conducting system studies including steady-state, transient stability, dynamic simulations, and electromagnetic transient studies to evaluate the impact of Synchronous Condenser operation on the grid.

The Grid data required for the studies shall be provided by CTU.

All study files and reports shall be documented and submitted to **CEA/CTU/GRID-INDIA** as per regulatory requirements.

SynCon unit shall be designed to operate at rated MVAr capacity upto an ambient temperature of 40° C. Beyond ambient temperature of 40° C, TSP shall provide the derating curve, however, derating rate shall not be more than 1% of rated MVAr per degree Centigrade. There shall not be any impact on rated Short circuit current and Inertia due to increase in ambient temperature beyond 40° C. OEM/TSP shall submit temperature to MVAr derating curves (continuous & time limited). The SynCon shall be designed to support grid operation within a voltage range of ±10% and a frequency range of **47.5 Hz to 52.5 Hz at the PCC**.

**2.1.1 System Studies**

The TSP/supplier of Synchronous Condensers unit shall carry-out system studies in order to verify and demonstrate that the synchronous condensers units shall meet the specified performance requirements.

Load flow studies shall be performed in the initial stage to determine the optimal synchronous condensers units operating point for different system conditions.

The TSP/supplier of Synchronous Condensers unit shall perform studies to determine and confirm the design ratings and requirements of all plant and material to be supplied under this RfP.

The TSP/Supplier Synchronous Condensers may also refer IEEE Std 1110-2019 - IEEE Guide for Synchronous Generator Modelling Practices and Parameter Verification

System studies shall be performed as per the requirement. Studies are required to demonstrate that the synchronous condensers units shall meet all specified performance criteria.

When performing the designs, the following shall be considered:

1. All modes of operation specified in these specifications; and
2. The worst-case system conditions up to and including first contingency outage in the network.

The load flow and dynamic file shall be provided to the TSP in PSS/E 36 or newer version format.

PSS/E files are provided based on the data available at the time of issuance of RfP. TSP is required to validate the data before carrying out simulation. However, clarification, if any, may be sought before the bid submission. CEA/CTU shall endeavour to give clarification to the extent possible. In case of any discrepancy observed/non-availability of data for any of the machines and other control devices, typical values may be used in the studies with the intimation to CEA/CTU. The final tuning of generic parameters for various applicable scenarios shall be under the scope of TSP of the subject cited project. TSP after SPV transfer shall do the final tuning in consultation with CEA, CTU and Grid-India and share the converged dynamic files with CEA, CTUIL & Grid-India.

RMS & EMT Models shall be submitted in the format stipulated by CTUIL/ Grid-India.

### 2.1.2 Steady state operation study

The TSP/Supplier of Synchronous Condensers unit shall carry out such electrical studies and basic design studies as are required to design the synchronous condensers units. They shall perform design and verification studies to ensure adequate design and operation of the system.

This study comprises the verification of the design of the synchronous condenser units with respect to the steady-state performance. The steady-state operating points of the synchronous condenser units shall be simulated at the specified voltage range.

The main purpose of the steady state studies shall be:

1) Confirm short circuit capability including transformer
2) Confirm design of transformer OLTC and control settings
3) Demonstrate reactive capability including transformer under range of operating conditions

The operating points shall be represented as voltage/MVAR diagram. The load flow study points shall be also graphically included to determine the reactive power capability chart for the synchronous condenser units as built at the high voltage side of the step-up transformers. Additionally, steady-state voltages, currents and power through main components shall be demonstrated. The worst-case stresses of the individual components which occur on the operating points are input parameters for the component specification.

In addition to above, following test as per relevant International Standard shall also be carried out.

(a) No-Load Saturation Curve (Open-Circuit Characteristic, OCC)-Plot generated voltage vs. field current at rated speed — defines excitation requirements and saturation.

(b) Short-Circuit Characteristic (SCC)- Plot armature current vs. field current at rated speed with terminals shorted — used with OCC to compute synchronous reactance.

(c)Excitation System Performance Test (Steady-State)-Measure field current, voltage, and reactive power under rated voltage conditions.

(d) V-Curve (for Synchronous Condenser)-Plot stator current vs. field current at constant terminal voltage; determines stability margin and reactive power range.

(e)Reactive Capability Curve Test (for Condenser)-Determine leading and lagging VAR capability vs. field current and stator current limits.

TSP shall also submit Negative sequence impedance value.

### 2.1.3 Transient and stability study

Transient and stability studies shall be used to demonstrate the synchronous condenser unit control system performance, and, if applicable, to optimize the controller parameters of synchronous condenser unit during system disturbances, such as major faults or voltage changes at the PCC. Such studies shall be performed using the PSS/E and PSCAD software applying dynamic simulations, using a full PSS/E and PSCAD case. List of contingencies performed is attached in **Annexure-C**.

The transient and stability studies shall be analysed in the following cases. These studies should demonstrate compliance with the relevant Performance requirements as per network configuration:

1. Analysis of the synchronous condensers unit's system response to step changes in the point of common coupling voltage or in the reference voltage, which can be performed in a single machine infinite bus case as relevant for the scenario.
2. Analysis of the synchronous condenser unit system response for faults for a range of system short-circuit power levels, to demonstrate compliance.
3. The following fault scenarios shall be analysed:
   a) A range of three-phase faults as specified (e.g. different duration, fault locations, retained voltage, network configuration).
   b) A range of unbalanced faults as specified (e.g. different duration, fault locations, retained voltage, network configuration).
   c) Control for the synchronous condenser units according to the requirement, i.e. Q-Control or U-Control

4. Analysis of the synchronous condenser unit system response for frequency disturbances.

5. V/Hz study and demonstration of stable operation of the V/Hz limiter

The design shall ensure the adequacy of the synchronous condensers units in order to ensure stability during system transient, dynamic and fault conditions. This is inclusive of synchronous condenser units' response time (rise time and settling time) and of the synchronous condensers units' behaviour and contribution to the system's recovery from faults and network disturbances.

### 2.1.4 Small signal stability studies

1. **Voltage Step/impulse response—**

+/- 5% step tests for Voltage control set points and then quantify rise time, overshoot, settling time for relevant control loops, and obtain frequency response (gain/phase margins) for critical control loops.

2. **Off-line frequency sweep (transfer function) tests for AVR and PSS:**

Frequency response of the excitation system to be assessed over a frequency bandwidth of at least **0.01 – 10.0 Hz** by injecting sinusoidal signals with the specific bandwidth into the control blocks. The gain and phase variations with frequency of each measured transfer function are then compared with those obtained from the model

3. **Controller interaction studies** — evaluate interaction between synchronous condenser control loops (AVR, PSS/filter, reactive control, power/frequency control) and other nearby plant controllers (conventional generators, HVDC/FACTS, large converter plants). Include frequency-domain (Bode/Nyquist) and time-domain cross-validated tests as required.

4. **Oscillation Rejection Test:** This is a control and response sensitivity test. It is expected that SynCon model maintains a stable operation for all voltage modulated frequencies and for measured responses to be consistent with the changes.

Grid voltage shall be modulated at following modulation frequencies through model playback or similar feature in SMIB model:

(a) 0.1 Hz
(b) 0.3 Hz
(c) 0.6 Hz
(d) 0.9 Hz
(e) 1 Hz
(f) 2 Hz
(g) 3 Hz
(h) 4 Hz
(i) 8 Hz
(j) 10 Hz
(k) Or any other frequency based on requirement

### 2.1.5 Software simulation models

The TSP shall provide the latest PSCAD (V 5.0 or above) and PSSE simulation model(s) (V36.0 or above) and parameters to CEA/CTU/GRID-INDIA along with detailed documentation for the purpose of future simulation to adequately represent and model the proposed SynCon system in the respective software:

For the simulation of SynCon unit in the PSS/E file (load flow and dynamic) and PSCAD (Transient), a model for SynCon unit is required for the study. TSP will share SynCon unit models with CEA, CTU and Grid-India along with detailed documentation for the above study purposes and simulations.

For PSS/E, both Generic and User-defined models shall be shared by the TSP with the CEA, CTU and Grid-India. Generic model (PSS/E) response shall be benchmarked with user-defined model (PSS/E and PSCAD) to the extent possible by the TSP. Generic models can be shared by the CEA, CTU and Grid-India with the concerned stakeholders/external party(ies) e. g. STUs etc. on need basis. For User Defined model (UDM), confidentiality shall be maintained by the CEA, CTU and Grid-India.

Both UDM (PSCAD and PSS/E) and Generic model (PSCAD and PSS/E) shall be provided by OEMs to CEA/CTU/GRID-INDIA without any NDA (Non-Disclosure Agreement). RMS & EMT Models shall be submitted in the format stipulated by CTUIL/GRID-INDIA.

Model documentation shall include the following details of the model:

a) The transfer function block diagram must include all functional controllers and physical plant that materially affect the performance of the model.
b) Instructions on how the model should be set up and used.
c) The models of the controllers and items of SynCon unit must be easily identifiable.
d) Dynamic data must be provided as 'per unit' quantities on the machine megavolt amperes (MVA) base.
e) Shortest time constant (name, use and identifiable in the control block diagram) confirmed for both PSS/E models and also PSCAD models.

Model quality test of EMT & PDT model:

f) The submitted EMT & RMS (UDM) model shall be the representative of SynCon unit I with actual controls.
g) The EMT & RMS model should work appropriately within the PCC SCR range of 3 to 10 and X/R range of 3 to 14.
h) The applicable protections shall be appropriately modelled in the UDM Models.
i) EMT model should work appropriately on a range of simulation time step within 10-20us.
j) PDT (RMS) model work appropriately with a simulation time step of 1ms to 10 ms.
k) Submitted EMT model should have pre-compiled libraries and there should not be any need for loading dependent library/other files.
l) EMT model should initialize and complete the flat run in 5 sec. PSCAD & PSS/E models must allow stable initialisation and steady state run up to 5 minute.
m) Models must be initialised successfully for the entire intended plant operating range i.e reactive power set point from minimum to rated.
n) PSCAD models must have snapshot capability.
o) For User Define Model (UDM) EMT of SynCon unit, the complete model shall not be

black-boxed and there shall be a full visibility/accessibility of passive components. TSP may black box the control/other parts wherein their Intellectual Property (IP) rights are involved.

p) For UDM models, TSP shall submit the schematics/block diagrams and its descriptions.
q) The RMS & EMT model used guide should contain the description of each parameter.
r) The range of parameters shall be mentioned in the PSS/E and PSCAD model user guide.
s) TSP shall specify the configurable and non-configurable parameters in the model user guide (PSS/E and PSCAD) for both Generic as well as UDM.
t) Model structure to be contained within its own module block including its plots.
u) PSCAD transformer model should include transformer specific saturation data where available (and not default model library provided settings)
v) EMT Models shall be compatible with

- Intel 15 Update 5 and newer (64-bit) and Visual Studio 2015 and newer
- Model should works across a range of time steps and does not require a specific time step
- These models must not be dependent on a specific Intel Visual FORTRAN version and should not have dependencies on additional external commercial software.

TSP shall fulfil and submit the technical connection data including models/data sheets etc. as per Grid India First Time Energization process & CTUIL Connection details process.

### 2.2 Functional Requirements

The Synchronous Condenser unit shall:

- Provide dynamic and steady-state reactive power support (both capacitive and inductive).
- Contribute to voltage stability, grid inertia, and short-circuit strength.
- Assist in damping of power oscillations and mitigation of sub-synchronous oscillations, if any.
- Assist in damping of reactive power oscillations and mitigation of oscillations, if any.
- Be capable of continuous operation during worst-case voltage and frequency conditions.

#### 2.2.1 Design Considerations

- The Synchronous Condenser shall be designed with inertia specified to enhance system strength and frequency stability.
- Dedicated & coordinated control systems shall be provided in case of multiple SynCon units to ensure selective operation and avoid simultaneous tripping under common disturbances.

## 3 REQUIREMENT, RATINGS AND DESIGN INFORMATION

### 3.1 SynCon building

The SynCon station shall have independent building (PEB type) including a separate control room different from the main control room building of the main Substation. The building shall comprise of SynCons unit(s), EoT crane, control room, LT Switchgear room, Battery room, workshop space, Document/Library and general facilities etc. Adequate space shall be provided for smooth unloading and maintenance purposes of all the equipment in the SynCon building.

The SynCon Building shall comprise of following facilities:

1. Control & Relay Panel room
2. Excitation Room
3. ACDB & DCDB room
4. Battery room
5. Service Room cum workshop space
6. Conference room
7. SynCon unit(s)
8. Lobby
9. Corridor with minimum width of 1600 mm
10. Portico
11. Toilet facilities
12. Provision of shaft for electrical, sanitary, water supply facilities
13. Other facilities as per functional requirement of building
14. AHU Room

## 4. Ambient Condition

The following environmental data shall be considered (Table-1):

Table 1

| Sr. No. | System Parameters | Values |
|---|---|---|
| 1 | Max/min Ambient temperature (dry bulb one-hour average)<br>Max dry bulb 24 hr. average | 50 deg C max<br>0 (Zero) deg C min<br>40 deg C |
| 2 | Relative Humidity (%, max) | 100 |
| 3 | Average annual rainfall | As per rainfall map of IMD |
| 4 | Iso-keraunic level | As applicable |
| 5 | Wind Zone | As per National Building Code 2016 |
| 6 | Seismic Level | As per Seismic zone of the site |
| 7 | Altitude above sea level | <1000 m |
| 8 | Pollution level (IEC 60815) | Heavy |

## 5. POWER SYSTEM REQUIREMENTS

The following AC Power System characteristics apply at the point of connection i.e. point of common coupling in this case (PCC). SynCon Station operation is required within the parameter value and duration given in following table:

Table 2

| Sl. No | Power System Characteristic | Value | unit |
|---|---|---|---|
| 1. | Nominal ac system voltage, line-to-line | 400 | kV |

| Sl. No | Power System Characteristic | Value | unit |
|---|---|---|---|
| 2. | Maximum continuous ac system voltage, line-to-line | 440 | kV |
| 3. | Minimum continuous ac system voltage, line-to-line | 360 | kV |
| 4. | Maximum short-term ac system voltage, line-to-line | As per HVRT Table | |
| 5. | Maximum duration of item 4 | | |
| 6. | Minimum short-term ac system voltage, line-to-line | As per LVRT Curve | |
| 7. | Maximum duration of item 6 | | |
| 8. | Nominal ac system frequency | 50 | Hz |
| 9. | Maximum continuous ac system frequency | 52.5 | Hz |
| 10. | Minimum continuous ac system frequency | 47.5 | Hz |
| 11. | Lightning Impulse Withstand Voltage (LIWV) | 1550 | kV peak |
| 12. | Switching Impulse Withstand Votlage (SIWV) | 1175 | kV peak |
| 13. | Power Frequency Withstand Voltage | 630 | kV |
| 14. | 1) Maximum three-phase fault current<br>a) for performance requirements<br>b) for rating of SynCon<br><br>2) X/R (Positive/Negative Seq)*<br>3) X/R (Zero Seq)*<br>4) Clearing time - normal<br>5) Clearing time – backup | <br>1 a) 63<br>1 b) 63<br><br>2) 30<br>3) 8.5<br>4) 0.10<br>5) 0.75 | <br>kA<br>kA for 1s<br><br><br><br>s<br>s |
| 15. | Maximum three-phase fault current (with IBR Contribution & without Syncon)*<br>Maximum three-phase fault current (without IBR contribution & without Syncon)* | 53<br>45.7 | kA<br>kA |
| 16. | Minimum three-phase fault current (without IBR Contribution & without Syncon)* with depleted system#<br>-for performance requirements<br>-for safe operation | <br>48.6<br>40.2 | <br>kA<br>kA |
| 17. | Maximum single-phase fault current (with IBR Contribution & without Syncon)*<br>Maximum single-phase fault current (without IBR contribution & without Syncon)* | 40.9<br>33.6 | kA<br>kA |
| 18. | Minimum single-phase fault current (without IBR contribution & without Syncon)* with depleted system# | 29.4 | kA |
| 19. | Power System Phase Rotation | **CCW** | |
| 20. | Rated voltage at SynCon terminals (to be selected by the Contractor) | **xx** | kV |
| 21. | Capacitive capability on PCC at 1.0 p.u. voltage | **+300** | MVAr |
| 22. | Inductive capability on PCC at 1.0 p.u. voltage | **-200** | MVAr |
| 23. | Capacitive & Inductive capability on PCC at different Voltages (p.u.) | **See below capability diagram** | |
| 24. | HV Side rated Voltage (at PCC) | **400** | kV |
| 25. | Voltage variation at unit step-up transformer high-voltage side (for normal operation) | **±10** | % |
| 26. | Stored Energy - Inertia at Machine Terminal | **>3000** | MWs |

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| Sl. No | Power System Characteristic | Value | unit |
|---|---|---|---|
| 27. | Short Circuit Contribution (SCC) on PCC at 1.0 p.u. voltage (calculation of SCC as per section 6) | **>1200** | MVA |
| 28. | SynCon rated power factor | **Zero** | |
| 29. | Rated frequency | **50** | Hz |
| 30. | Maximum Overspeed shall not be more than % (of rated speed) | **20** | % |
| 31. | Sub transient ratio xq''/xd'' | **< 1.1** | |
| 32. | Start-up and synchronization time (Contractor may offer lower times based on the SFC rating selected and overall Inertia of the SynCon & Flywheel) | **30** | Minutes |
| 33. | Shut-down time to complete standstill | **45** | Minutes |
| 34. | Stator winding connection | **Wye** | |
| 35. | Neutral Grounding | **High resistance grounding through Neutral Grounding Transformer with secondary loading Resistor** | |
| 36. | Sound pressure level (SPL) when measured at approximately 1 m distance from the Synchronous condenser surface during normal operation at rated ratings & ambient conditions. | **≤ 90** | **dB (A)** |
| 37. | THD of L-L voltages | **≤ 3%** | |
| 38. | **Temperature rise over 40°C cold air**<br>Stator winding (installed RTDs)<br>Rotor winding (resistance method) | <br>**85**<br>**90** | <br>K<br>K |
| 39. | **Unbalanced load**<br>Maximum value for continuous operation ($I_2/I_n$)<br>Maximum short term unbalanced load $(I_2/I_n)^2.t$ | <br>**10**<br>**20** | <br>%<br>s |

*values calculated as per studies

# Depleted system- one ckt of 400kV Fatehgarh-II-Fatehgarh D/c & 400kV Fatehgarh-II-Fatehgarh-III D/c, 1x1500MVA 765/400kV ICT & 2x500 MVA 400/220kV ICT out simultaneously.

## 6. Technical Requirements

### 6.1 General Requirements

a) Under design maximum ambient temperature conditions, all the SynCon units in a SynCon Station, combinedly, shall have a nominal reactive power capability of not less than +300 MVAr at 0.9 p.u. voltage and -200 MVAr at 1.1 p.u. voltage, as measured at PCC, including all tolerances for components for the equipment installed inside the building such as the synchronous condensers, the pony motor, the fly wheel and the generator circuit breaker and for the equipment installed outdoor such as the step-up power transformers, the TEWAC cooling system, the station

transformers, the isolated phase bus duct etc. The expected availability of the synchronous condenser unit shall be not less than 97%.

a) Indicative schematic diagram of a SynCon unit and typical capability curve of a SynCon Station (+300 MVAr/ - 200 MVAr) are given below

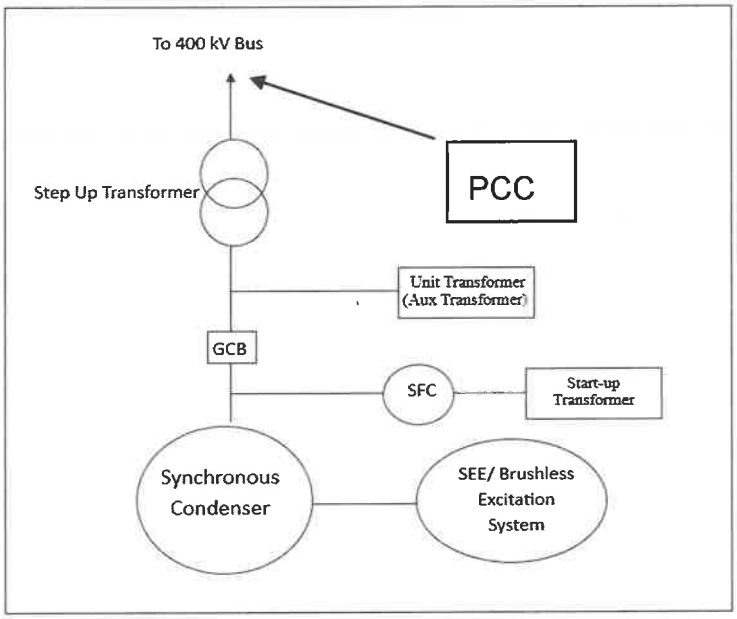
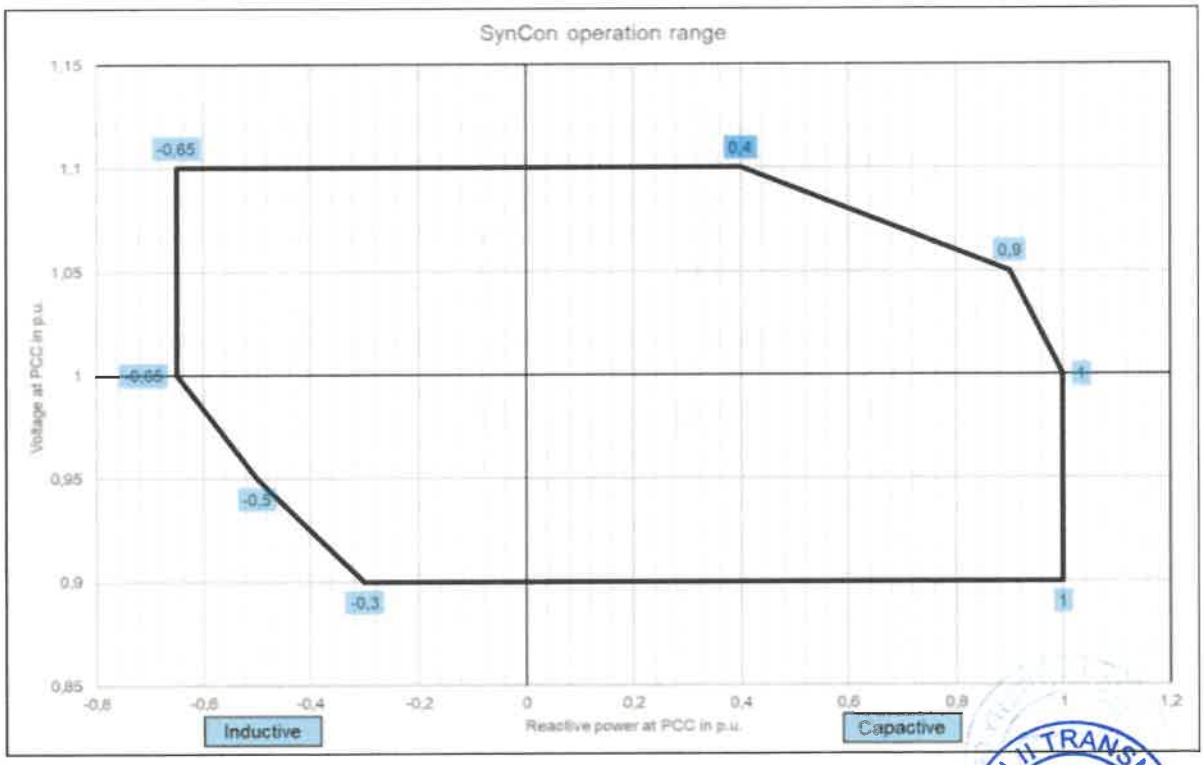



*Figure-1: Conceptual Indicative Schematic diagram of SynCon Unit*




*Note: On x-axis, the base rating is taken as 300 MVAr*

*Figure-2: Capability Curve of SynCon Station*

b) The Terminal Voltage of SynCon shall be in the range of 10 kV to 28 kV.
c) Insulation of SynCon shall be thermal class F for Stator and Rotor Winding as per relevant International Electrotechnical Commission with temperature rise limited corresponding to thermal class B insulation.
d) The construction of the generator shall be such that the rotor poles and stator coils can be handled out or in without removal of the rotor and without disturbing the upper bearing bracket in case of vertically installed SynCon.

## 6.2 Voltage and Frequency

The synchronous condenser unit shall cope with voltage and frequency variation and stay in connection with the system for at least the minimum times as per Central Electricity Authority (Technical Standards for Connectivity to the Grid) Regulations, 2007 and amendments.

The following ranges of voltage and frequency are applicable:

1) Nominal voltage shall be 400 kV (1.0 p.u.) phase to phase

2) Minimum continuous voltage of 0.9 p.u.

3) Maximum continuous voltage of 1.1 p.u.

4) Max negative sequence voltage during normal operation of 1% measured at the HV side of the step-up transformer over a 10-minute averaging period

5) Nominal frequency of 50 Hz

6) Maximum continuous frequency of 52.5 Hz

7) Minimum continuous frequency of 47.5 Hz.

The synchronous condenser unit shall be capable of withstanding frequency variation and maintain continuous uninterrupted operation for frequency ranges of 47.5 Hz to 52.5 Hz within a voltage range of ±10%. Further, the Synchronous Condensers Unit shall be capable of **unrestricted** and uninterrupted continuous operation for the following frequency ranges.

**Table: Frequency Variations Withstand Requirements for Unrestricted Operation**

| Sl. No. | Frequency Range (Hz) | Duration |
|---|---|---|
| 1. | 49.5 to 50.5 | Continuous |
| 2. | 49.0 to 49.5 | 10 Minutes |
| 3. | 50.5 to 51 | 10 Minutes |
| 4. | 47.5 to 49 | 5 Minutes |
| 5. | 51 to 52.5 | 5 Minutes |

The Synchronous Condenser Units shall be capable of continuous uninterrupted operation for Rate of Change of Frequency (ROCOF) up to 4Hz/second for 0.25 seconds and 3Hz/second for 1 second. Rate of change of frequency (ROCOF) is calculated as the average rate of change for multiple calculated system frequencies for a time period of

greater than or equal to 0.1 second The measurement of the rate of change of frequency shall not react to the sudden changes in the waveform of voltage caused by disturbance in the system i.e. during fault occurrence or clearance.

*Provided that Frequency should be calculated over a window of time. Instantaneous calculated frequency should not be used for protection; this calculation should occur over a time window. Typical window/filtering lengths are three to five cycles (60–100 ms).*

The SynCon Station shall continue to absorb reactive power (rated reactive power up to 1.1 p.u., and inherent reactive power beyond 1.1 p.u.) during HVRT Conditions as per the following Table-3.:

Table-3

| **Nominal Voltage (pu)** | **Minimum time for remaining connected to the Grid and providing reactive power support (absorption)** |
|---|---|
| V > 1.50 | Instantaneous trip |
| 1.50 ≥ V > 1.30 | 100 milli seconds |
| 1.30 ≥ V > 1.10 | 10 seconds |
| V ≤ 1.10 | Continuous |

[#] 1 pu = 400 kV (3 phase RMS voltage at POI)

SynCon Station may be tripped if the respective temporary over voltages as mentioned above persist for more than its respective mentioned duration.

The SynCon Station shall continue to inject reactive power (rated reactive power down up to 0.9 p.u., and inherent reactive power below 0.9 p.u.) during LVRT Conditions as per the following Curve (Figure-3) for the specified time):

$V_T$: Actual Voltage; $V_n$: Nominal Voltage

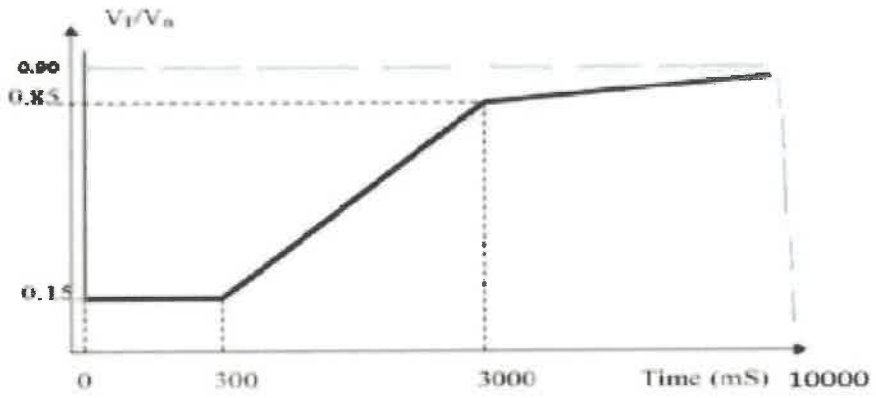



***Figure-3: LVRT Curve***

The synchronous condenser Station shall remain connected to the grid for a series of up to 10 voltage disturbance below 0.9 p.u within any 5-minute period as per the LVRT capability.

Provided that during such period synchronous condenser Station shall remain connected for at least 06 voltage disturbance below 0.5 p.u.

Provided further that during the multiple LVRT conditions, the SynCon Station shall meet the performance requirements specified in LVRT conditions.

TSP shall include the simulation tests to demonstrate the LVRT & HVRT compliance of SynCon and shall include the following simulations tests in the study reports on both Generic and UDM of PDT (RMS) and EMT models as per **Annexure-C:**

**Validation of AVR & PSS response:**

In order to validate the AVR and PSS response, TSP shall carry out the testing of such controller(s) either through Hardware In Loop (HIL) test or in a laboratory as applicable. Based on the AVR controller response (open loop and closed loop) and PSS response received from HIL, the TSP shall benchmark such results with simulation-based results.

**6.3 Continuous Ratings**

1) The Synchronous Condensers Units shall be capable of operating continuously without tripping at the Voltage level from 0.9 p.u. to 1.1 p.u. at PCC in the specified ambient conditions.
   There are additional requirements for operation for periods of time beyond the 0.9 and 1.1 p.u. Voltage as described in Table 3. The Synchronous Condenser Units shall confirm that they are capable of operating in accordance with these requirements.
   For the Voltage under 0.9 p.u. SynCon Units shall be capable to operate as per Figure-3.
2) The supplier of Synchronous Condensers shall select the nominal operating voltage for the low voltage side of the step-down transformers, to optimize the design of the Synchronous Condensers Unit(s)
3) The nominal continuous operating capability of SynCon Station shall be no less than 300 MVAr capacitive at 0.9 p.u. to no less than 200 MVAr inductive at 1.1 p.u. voltage as measured at PCC, including all tolerances for components upto designed temperature. Component tolerances shall be considered, when designing against the requirement for continuous rating and considering design ambient temperature conditions. Beyond design maximum ambient temperature, TSP shall provide the derating curve, however, derating rate shall not be more than 1% of rated MVAr per degree Centigrade. OEM/TSP shall submit temperature to MVAr derating curves (continuous & time limited). There shall not be any impact on rated short circuit current and Inertia due to increase in ambient temperature beyond design maximum ambient temperature.
4) The Synchronous Condensers Units shall be capable of continuous uninterrupted operation for system frequencies in the ranges of 47.5 Hz to 52.5 Hz.
5) The voltage reference for the voltage control at the point of connection should be continuously (or using steps of negligible size) controllable in the interval 0.9 p.u. to 1.1 p.u.

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6) The Supplier of Synchronous Condensers shall confirm that the synchronous condensers will be rated and capable to operate for all the frequency ranges listed.

### 6.4 Voltage and reactive power control

Voltage and reactive power control capabilities shall be as per requirement specified. The Synchronous Condenser unit shall be able to control the reactive power and voltage at the PCC by the excitation system and by use of unit step up transformer on-load tap changer (OLTC) regulation range as appropriate.

## 7. SHORT CIRCUIT CONTRIBUTION

The Synchronous condenser unit for project /substation shall be able to supply a short circuit power (Short-circuit power must be calculated according to IEC 60909-0:2016, using saturated sub-transient reactance and transformer impedance).

Calculation of short circuit contribution (SCC) shall be done according to following formula:

$$SCC = \frac{S_{SC}}{(X_d" + \frac{S_{SC}}{S_T} u_k)}$$

$S_{SC}$ = rated S [MVA] of SynCon

$S_T$ = rated S [MVA] of transformer

$X_d"$ = subtransient direct − axis reactance (saturated) in p.u.

$u_k$ = $unit\ step - up\ transformer$ impedance in p.u.

## 8. SYNCHRONOUS CONDENSER DESIGN AND CONSTRUCTION FEATURES

The Synchronous condenser unit installed shall be based on either salient pole (or) non-salient pole with air-cooling or water cooling. Hydrogen-cooled SynCon will not be accepted.

### 8.1 General Design Requirements

The synchronous condenser shall be totally enclosed water-air cooled (TEWAC) with air-water heat exchangers connected to a closed water-cooling system shall also be provided (as per system requirements).

The pipework shall be marked with colours and arrows to show which fluid is circulating which way in the respective pipe.

All necessary auxiliaries (lube oil system, cooling system), foundation plates and bolts, covers, air and oil coolers with adjacent piping shall be included (if applicable).

Suitable arrangement shall be mounted inside the synchronous condenser enclosure to prevent condensation during shut-down periods.

Sensors, detectors, and instrumentation necessary for supervision and control shall be installed.

Detectors to provide signals for the speed measurement shall be installed. These detectors are also used for overspeed protection.

A vibration monitoring/protection system shall be provided.

Relative shaft vibration - monitoring; absolute bearing casing vibration – protection shall also be provided.

The synchronous condenser shall be designed for continuous operation and 10,000 starts/stops in its lifetime (35 years).

**8.2 Inertia Requirement**

If the specified inertia requirements as mentioned in the Table-2 cannot be achieved with the rotor only, the TSP shall consider the installation of an additional flywheel.

**8.3 Stator**

**8.3.1 Stator Frame and Core**

The stator frame shall be of welded construction and equipped with suitably arranged braces to ensure structural rigidity. The interior of the stator casing/stator frame partly forms the cooling ducts and therefore the braces in the stator frame shall be arranged in such a manner that an optimum air flow will be obtained.

For easier transportation (if required) the stator casing/stator frame can be split up into two sections. The sections of the iron core and of the stator casing shall be clamped together by means of liberally dimensioned bolts. Care will be taken to avoid vibrations at the insulated joints.

The stack of laminations shall form the active part of the Synchronous condenser and shall be made of silicon alloy steel sheets. The segments shall be coated with an insulating varnish of good thermal and mechanical properties on both sides and stacked interleaved.

The core shall be clamped between non-magnetic pressure plates. A certain number of through bolts to be provided for an adequate and permanent compression of the active core. The compression fingers integrated in the pressure plates, distributing the pressure over the whole surface of the core uniformly.

The pressure fingers, plates and the core beams shall be designed to give stable and equal distributed pressure on the lamination.

The enclosure shall have openings to inspect the core and the windings.

All steelworks shall be thoroughly protected against corrosion.

Welded steel constructions shall follow relevant ISO standards.

**8.3.2 Stator Core Tests**

Before the stator winding is installed, the stator core shall be subjected to stator core loop test with high flux density (minimum 1T).

**8.3.3 Stator Winding**

The stator winding shall be three-phase with 6 terminals brought out from the synchronous condenser enclosure. Neutral of SynCon star point shall be earthed in NGT panel through dry type distribution transformer with secondary loaded with a resistor.

All material inside the slot and the winding insulation shall be of thermal class F. No kind of magnetic material, such as for slot wedges, is permitted within the slots.

The winding must be capable of being easily substituted by removing a few adjacent coils or bars (as applicable). The end windings must be suitably braced and supported by rings of non-magnetic materials to withstand any forces caused by short circuit at the terminals of the machine in grounded or ungrounded operation.

The stator winding insulation shall be made of thermosetting epoxy resin impregnated mica tape system and shall be equipped with corona protection systems suitable for the selected rated voltage.

**8.4 Rotor**

The shaft shall be forged of steel and sufficiently rigid. It shall have an ample margin of strength and be provided with a forged coupling to Flywheel or other (if applicable) and specified in the technical specification.

For cylindrical rotor design, the shaft shall be machined from a single alloy steel forging to give the required mechanical, metallurgical and magnetic characteristics. Rotor shall have an adequate margin between critical speed and the operating range of speed to ensure smooth running.

The rotor shaft and rotor itself shall be designed to withstand all the operating conditions as well as overspeed.

For salient pole construction, poles shall have claws to fit in matching claw slots accurately machined on the rim/ Rotor body. The pole along with field coil shall be properly secured in the slots and wedged there properly.

The rotor assembly shall be of such design that the assembling and dismantling can easily be done at site.

**8.5 Damper Winding**

A low resistance damper winding made of full-length copper rods or copper rotor wedges shall be provided on all the poles to dampen rotor oscillations. They shall be short circuited at the ends by a completely electrically connected ring on either side. The damper windings shall be strong enough to withstand all the electrical and mechanical stresses occurring during operation.

All contacts shall either be brazed or safely pressed by means of bolts and elastic elements. Contact surfaces of pressed contacts shall be protected against oxidization and corrosion, i.e. by appropriate galvanization.

**8.6 Collector rings and brushes (if applicable)**

The collector rings shall be insulated from the shaft system by epoxy glass laminations and spaced sufficiently apart and the brushes arranged to eliminate the possibility of accidental short circuit while changing or adjusting the brushes. The brush gear for the collector shall be mounted on insulated studs from the top of the exciter brush gear housing. The slip ring housing shall have sufficient space for maintenance purposes. There

shall be provision for the replacement of brushes while the machine is in operation, without interrupting the excitation or normal operation of the machine.

Carbon dust collection system shall be provided to remove carbon dust generated from carbon brushes. The filters used shall be metallic and washable type having high efficiency. The piping should be routed in a way to optimize spaces.

**8.7 Rotor Winding/ Poles**

The rotor winding shall have an insulation that fully conforms to thermal class 155 or higher.

For salient pole type construction, the field poles shall be of laminated construction and the material used shall be of high strength. On both ends, end plates of high-grade steel shall bebe fitted. The pole core and the pole end plates shall be clamped together by screwed bolts. The insulation materials used shall provide sufficient mechanical strength.

**8.8 Instrumentation**

All temperature sensors shall be Resistance Temperature Detectors (RTDs) of preferably duplex type (alternatively suitable nos. of single element RTDs with spares in place of duplex RTDs are also acceptable) and be wired to a terminal box with shielded cables.

**8.8.1 Stator winding/Core**

Detection / measurements shall be provided by means of RTDs; i.e. at least 3 (three) active RTDs and 1 (one) spare RTD per phase and per circuit distributed between phases and circuits around the stator bore, located between the upper and lower bar in the same slot; at least 3 (three) RTDs in the core located at each end and in the middle.

**8.8.2 Rotor winding**

Rotor winding temperature shall be measured using either the resistance method or through RTDs as per IEC 60034-1.

In case of RTDs, Sufficient number (at least 12) of preferably duplex type RTDs (alternatively suitable nos. of single element RTDs with spares in place of duplex RTDs are also acceptable) shall be provided, distributed as per OEM design to monitor the temperature.

**8.9 Terminal Boxes**

Terminal boxes shall be of weatherproof construction to eliminate entry of dust, vermin and water with a degree of protection IP54. The terminal boxes on the SynCon shall be suitable to connect cable size required.

The phase terminal of the windings shall be brought out of stator frame by appropriate means and interfaced to insulated phase bus of adequate size & capacity. The leads on the neutral side shall be brought out of the stator frame and shorted through a suitable size bus bar. Provision shall be made on the main (Phase) side & neutral side of the SynCon for mounting of required no of CTs for AVR, control, protection & metering.

The phase terminals or a fitted cubicle shall be suitable for IPB termination. Insulated protective cage cover connection between stator and bus duct for line terminals shall be provided for safety of O&M and personnel.

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A suitable neutral grounding cubicle shall be fitted to the neutral terminals. The cubicle shall allow for installation of all required CTs, neutral earthing via neutral earthing transformer and resistor.

Terminal boxes shall be provided for termination of the following signals/ terminals:

- Instrumentations
- Space heaters
- Temperature detectors

**8.10 Bearings**

The bearings shall be designed for the weight of the rotor of the synchronous condenser as well as for additional loads owing to abnormal service conditions.

The bearing pedestals may be a cast or welded structure, in any case providing the required strength and stiffness. To avoid the formation of shaft currents one pedestal is insulated from the foundation frame, pipe connections, etc. Suitable protection shall be provided to avoid the escape of oil and oil vapor via the shaft.

If the grid connection is tripped the synchronous condenser bearings shall be fed by the emergency DC pump from oil supply system until the synchronous condenser is on standstill (0 rpm).

The bearings shall withstand a defined overspeed of 10% during start-up.

A central oil mist extractor shall be present in the oil system to evacuate oil mist from the bearing housing.

The TSP shall ensure complete protection, control, and measurement for the bearing's safety and diagnosis, consisting of RTDs, at least one triple element (or two dual element) per bearing, to monitor bearing metal temperature.

**8.11 Lube oil system**

The flood lubricating system of the bearings shall be separately mounted. The oil plant shall comprise the bearing/oil container, the oil/water cooler for frictional heat dissipation, the flood-lubrication pump, as well as all necessary fittings, pipes, filters and supervisory instruments.

**8.12 Lube oil pumps**

A high-pressure oil system shall be provided for the bearing to avoid mixed friction at a low speed. A high-pressure pump with non-return valve shall take the oil from the sump and presses it between the lower part of the bearing and the shaft. The arrangement in the shell of the oil-jacked bearing ensures that no pressurized oil can infiltrate between the bearing lining and the shell.

The lube oil system shall have redundant (2 x 100%) oil pumps to supply lube oil to the bearings. They shall be fed by AC power supply. An automatic change-over from main to back-up AC pump shall occur in case of loss of lube oil pressure.

An emergency DC pump of sufficient capacity shall pump the oil until the synchronous condenser has come to a complete standstill in case of the grid connection is tripped. The DC pump shall be fed from the station battery.

**8.13 Cooling system**

To reduce the complexity of the synchronous condenser unit, the synchronous condenser shall be air-cooled. H2-cooling is not permissible.

Extraction of losses shall be via water-to-air heat exchangers (TEWAC cooling scheme). The secondary cooling system i.e water to air heat exchanger, shall be a redundant type such that it shall be possible to take out 10% (minimum one number) of the cooler module (fan unit) of secondary cooling system without affecting the rated performance of SynCon unit.

In case of Water cooled Stator Winding, Stator water cooling System shall be closed loop type with 2x100% AC motor driven circulating water pumps, 2x100% de-mineralised water heat exchangers, 2x100% filters, one mixed bed de-mineraliser and one alkalizer unit (as applicable).

The scope of this system shall include but is not limited to:

a) a Pump skid with all relevant components and measurement devices
b) a Set of outdoor coolers (chillers).
c) an Expansion tank (installed on the pump skid)
d) a Refill unit (installed on the pump skid)
e) Connecting pipe system including pipe supports and interface flange connections
f) a Cooling system cabling, excluded cabling to the outdoor coolers and the outdoor temperature sensor.
g) an outdoor temperature sensor
h) all necessary foundation bolts for the cooling system and piping
i) Junction boxes for termination of control cables

The water-cooling system shall be connected to:

- the heat exchangers of the synchronous condenser to evacuate the heat generated by the machine.
- (if applicable) the fly-wheel's heat extraction system

The use of the coolant shall be adapted on the environmental condition listed in this specification.

The coolant shall be a mixture of ethylene or propylene glycol and water (with corrosion inhibitors as additives). If ambient conditions allow (ambient air permanently above freezing point) water with corrosion inhibitors can be used.

### 8.14 Monitoring sub-systems

Following On-Line monitoring sub-systems shall be provided for Synchronous Condenser:

#### 8.14.1 Vibration Monitoring System

A continuous on-line vibration monitoring system complete with sensors, input/output module, control/processor unit, relays, junction boxes, cabling and associated accessories for measuring, monitoring and data acquisition of shaft vibration/run-out shall be provided.

The systems should be fully integrated with control system (SCADA) to facilitate shutdown and alarming, trending the values in SCADA for diagnosis.

#### 8.14.2 Shaft Current online Monitoring of Synchronous condenser

A suitable shaft current online monitoring of Synchronous Condenser shall be provided to detect transient current in the synchronous condenser shaft.

### 8.15 Flywheel system (if applicable)

The flywheel shall be coupled to the synchronous condenser rotor.

The design shall enable a safe emergency run-down in case of total power loss (grid black-out). The required bearing lubrication during emergency run down shall be ensured by battery-powered DC pump, defined, and sized depending on unit specific parameters.

The main components of the flywheel assembly are the forged flywheel body and shall be coupled to synchronous condenser either directly or by means of attached shafts. The whole flywheel shall be supported by pedestal bearings.

The safe operation of the flywheel shall be covered by the standard protection concept for rotating power generation equipment, including overspeed, bearing temperatures and vibration limits.

**8.16 Bearing and Shaft Vibration Measurement / Protection System**

Two Proximity sensors (90º apart) and necessary provisions for the monitoring of shaft vibration amplitudes shall be installed on each bearing. The vibration measurement system for the bearing shall be integrated with the vibration system provided for SynCon.

At least two accelerometers per bearing shall be installed to monitor bearing casing vibration.

## 9. EXCITATION SYSTEM

### 9.1 General

Microprocessor based excitation system with thyristor control shall be provided to suit the Synchronous condenser characteristics. The excitation system shall comply with the requirements of IEC 60034-3 unless otherwise specified.

The excitation system may be offered as either:

- **Static Excitation System (SEE)** using controlled power electronic converters, **or**
- **Brushless Excitation System (BES)** using a shaft-mounted AC exciter and rotating rectifier assembly.

In case of SEE, the AC power required for the excitation shall be tapped from the SynCon terminal, stepped down by means of excitation transformers and rectified by fully controlled thyristor bridges and then fed to the SynCon field thereby controlling the voltage output. In case of Brushless Excitation System, the excitation power shall be supplied by a shaft-mounted AC exciter after rectification through a rotating diode bridge. The offered excitation system shall be capable of delivering desired synchronous condenser terminal voltage and reactive power within the specified limits during all the steady-state and transient operating conditions. Any change in the SynCon terminal voltage shall be sensed by the voltage regulator which shall automatically control the field excitation to restore the setpoint. The temperature of the field shall be determined by the resistance method.

### 9.2 Static Excitation System (SEE)

In case of SEE, it shall consist of following:

a) Excitation transformer.

b) A Set of Thyristor converters (fully redundant Thyristor bridges) of suitable numbers shall be provided. Power thyristor converter shall be fully controlled three phase, full wave bridge type with fast and high ceiling performance. The

converter shall have 'N+1' redundancy where N is the number of bridges required to deliver rated excitation current and the ceiling voltage or current and '+1' provides redundancy such that the failure of one power section does not lead to any operational limitations.

c) Facilities to ensure excitation power supply during starting

d) Field breaker and field discharge and suppression equipment.

**9.3 Brushless Excitation System:**

In case of BEE, it shall consist of following:

(a) Shaft-mounted three-phase AC exciter with stationary field and rotating armature

(b) Rotating rectifier assembly using high-reliability diodes with surge protection and with either complete bridge as redundant or at least one redundant parallel branch in each of the six arms of the bridge.

(c) No slip rings or brushes for main field current supply.

(d) Field flashing equipment shall be provided for voltage build-up and recovery under low residual conditions.

(e) Monitoring of rotating rectifier health via indirect measurement of exciter current, voltage, and unbalance detection.

(f) High ceiling performance with minimum 160% ceiling field voltage.

**9.4 Regulator and sequencer**

TSP shall provide Digital Controller and AVR having automatic voltage regulator mode (AVR) and field current regulator mode (Manual Mode), as well as the required sequencing and communication to the plant control system. It shall be according to following.

- Number of independent regulators: 2 (full N+1 redundancy, completely doubled hardware)
- Voltage Controller of PID-type/ PI type,
- Manual (field current) regulator, common hardware with AVR
- Bump less switch between voltage regulator and field current regulator
- Digital sequencer as part of the software
- Digital setpoint interface
- Synchronous condenser voltage and current sensing: 1 or 3-phase measurement.
- Reactive load compensation: raising/falling characteristic selectable
- Field current limitation including:

  + Maximum limiter undelayed

  + Maximum limiter delayed

  + Minimum limiter undelayed

- Stator current limitation
- Over fluxing (Volts/Hertz) limiter
- Reactive power regulator
- Automatic generator voltage
- Thyristor conduction supervision via AC thyristor current measurement or detection of field voltage shape
- Soft start-up (provides smooth SynCon voltage increase according to required ramp)
- Interface to control system via suitable protocol.

- Power System Stabilizer
- Provision to connect to LAN and NTP time server.
- All Alarms and messages with timestamp.
- Fault recorder which records and stores curves in case of alarms or trips.

Auxiliary power supply to excitation control and protection shall include suitable redundancy such that failure of one auxiliary source shall not affect excitation system operation.

***Operation and monitoring*:**

Following Local operation and monitoring shall be provided via touch panel integrated in the front door of the control cabinet. Local operation Touch panel shall be Password protected.

- excitation ON/OFF
- setpoint RAISE/LOWER
- AUTO, MANUAL selection
- Voltage-/reactive power regulator or power factor regulator selection
- Alarms acknowledgement
- Indication shall include:
  - Measurement Values (SynCon Voltage and Current, Field current, SynCon active power, SynCon reactive power, SynCon power factor, etc.)
  - Event and Alarm lists
  - Other local functions

All alarms of the excitation system are stored and indicated on SOE list in correct time sequence. Furthermore, the two alarms "Excitation Alarm" and "Excitation Trip" are wired to the terminal strip for external use.

Further included components:

- 1 precision Shunt for field current sensing
- All MCBs with supervision contact
- Real measuring, analogue Meters in regulators cabinet front door, for field current, field voltage, stator current and stator voltage
- 4-20 mA signal for remote indication of excitation current
- 4-20 mA signal for remote indication of excitation voltage

**9.5 Closed-Loop Control**

The set points will be adjusted via the automatic follow-up function.

Each automatic channel shall have its own manual controller for field current control and its own voltage and current transformer for the processing of the SynCon terminal voltage and terminal current.

The excitation system shall provide three modes of operation:

- Manual mode: the excitation current is modified locally via the Human Machine Interface (HMI) installed in the excitation panel, the automatic voltage control functions and the limiters are deactivated (test mode or commissioning mode).
- Automatic Mode local: The automatic voltage control is active and the control setpoint for the terminal voltage control shall be modified via the HMI screen installed in the excitation panel.
- Automatic Mode remote: The automatic voltage control is active and the control setpoint for the terminal voltage control shall be modified via plant operation and control interface.

The excitation system shall be electrically and thermally capable of delivering continuously up to 110 % of the rated field current required at design ambient temperature.

The initial response ceiling voltage of the excitation system shall be adequate to meet the step response conditions as verified by Contractor/TSP - Synchronous Condensers design. The SEE shall be able to deliver a ceiling field voltage of minimum *160%* of the rated field voltage (field voltage applicable at rated field current, rated SynCon terminal voltage and defined rated reactive power rating of the SynCon).

The limiting functions of the automatic channel ensure that the SynCon is operated within its capability limits during grid operation. The following limiting and control functions shall be included:

- Stator current limitation
- Maximum field current limitation (field forcing)
- Over excitation limitation (field current)
- Under excitation limitation
- V/f limitation

The excitation system shall be provided with strategic spare parts.

The Excitation System shall have following step response characteristics:

| | Description | Time |
|---|---|---|
| Response time | The duration from a step change in control signal until the voltage changes by 90% of its final change, before any overshoot. | Minimum 1 sec |
| Settling time | With the Syncol Unit unsynchronised following a disturbance equivalent to a 5% step change in the sensed Syncol Unit terminal voltage | Maximum 1.5 sec |
| | With the Syncol Unit | Maximum 2.5 sec |
| | Following any disturbance which causes an excitation limiter to operate. | Maximum 5sec |

## 9.6 Power System Stabilizers

Power System Stabilizers (PSS) are used to enhance damping of power system oscillations through excitation control(s). TSP shall implement PSS controls in line with IEEE Standards

421. The PSS controller shall have configurable range of frequency (to damp) to have a flexibility during the operation phase.

**9.7 Power Supply**

In case of SEE, the excitation transformer shall be connected to SynCon isolated phase bus duct between generator circuit breaker and unit step up transformer or shall be supplied from the MV-busbar system. The excitation transformer shall be a three-phase, two-winding converter transformer. In the case of a Brushless Excitation System, the SynCon shall be provided with a shaft-mounted Permanent Magnet Generator (PMG) to supply independent power to the Excitation System, while the main rotor field excitation power shall be derived from the shaft-mounted AC exciter through rotating rectifiers.

**9.8 Operating Aspects**

The communication interface between the Excitation System and the plant operating control system shall have redundant connection.

Signal exchange to the Excitation System shall comprise all commands for Excitation System and SFC operation and the set-point values for different Excitation System closed loop controls. The opposite direction from the Excitation System to the Synchronous Condenser unit control system shall include the feedback signals, actual values, and several alarm signals.

An operator control panel shall be installed on the front door of the control cabinet. Local or remote operation can be selected by using the key switch at the control cabinet door.

The operator control panel shall provide all required software tools to configure, maintain, and troubleshoot the excitation systems.

**10. STARTING SYSTEM**

The machine starting system shall be supplied as a complete system including all equipment, control and power part, hardware and software, to perform, control and supervise the actual start-up process.

The static frequency converter (SFC) shall be provided to accelerate the synchronous condenser from any speed to the nominal speed, so as to allow the synchronous condenser units connection to the network. Specifically, if any synchronous condenser is freewheeling (e.g. following a trip), the synchronous condenser shall be able to be accelerated by the SFC, without the need of having the synchronous condenser come to a complete rest. In addition to this the drive shall have the capability to decelerate the synchronous condenser following GCB opening.

The synchronous condenser, the excitation system, the start-up system, the start supply transformer etc. shall not be overloaded in any respect; thermally, over fluxed, high currents / voltages or torque etc.

The normal start sequence duration shall be approximatively 30 min. (estimated time, required starting time< 30min) from the first rotation to required overspeed for successful synchronization.

At standstill, at the initialization of a sequence, the excitation shall be activated and supplying an excitation current to the rotor winding of the machine.

The SFC equipment will increase the frequency of the compensator until a running speed required for successful synchronization is achieved.

At this running speed of the SFC equipment, excitation is disconnected, and the exciting system of the compensator shall be activated.

The compensator achieves rated voltage and is synchronized into the grid.

If the synchronizing is unsuccessful, 2 further attempts shall be allowed.

**11. Noise Levels**

The overall noise level of the Synchronous Condensers Units yard shall be no greater than 85 dB(A) when measured at a distance of one metre and at a height of 1.5 metre from any equipment except SynCon. In case of SynCon, the noise level when measured at approximately 1 m distance from the Synchronous condenser surface during normal operation at rated ratings & ambient conditions shall not be more than 90 dB(A).

**12. Step-up Power Transformer**

The TSP shall provide single phase step-up transformers to operate as 3- phase bank with one unit as a common spare for stepping up the voltage from a suitable medium voltage value to 400 kV system as required for replacing any one of the faulty phase units. Alternatively equivalent 3-ph transformer can also be provided, in which case spare transformer of same rating shall also be provided.

TSP can have a common spare as mentioned above for all such SynCon Units whose Step up Transformer rating is same.

Step up Transformer shall conform to CEA's "Standard Specifications and Technical Parameters for Transformers and Reactors (66 kV and above voltage class)" as amended up to date available on CEA website.

The Transformer shall be designed with the aim to achieve operation according to the overall performance requirements of the SynCon Station. The transformer should be designed and rated to carry complete capacitive and inductive reactive loading as specified for SynCon Station as well as harmonic currents associated with the most onerous operating conditions of SynCon Station, without loss of life.

The transformer shall be designed in accordance with the most up-to-date experience in SynCon application and shall incorporate the latest improvements of design currently employed in the industry. The Comprehensive design review of the Transformer of SynCon Station shall be carried out by the TSP.

**12.1 General Requirements**

The Step-up Power transformer shall be designed electrically and mechanically for operating conditions peculiar to SynCon Station operation, which shall include, but not be limited to the following:

a) The transformer and all its accessories like Bushings, CTs etc. shall be designed to withstand without damage, the thermal and mechanical effects of any external short circuit to earth and of a short circuit across the terminals of any winding for a period of 3 seconds. The short circuit level of the 400 kV system to which the transformer shall be connected, will be as per the maximum short circuit level of the main substation. Short Circuit level of the Transformer shall be as per the Short Circuit level of the respective Substation. Short circuit level for HV bushing shall be 63 kA for 1 Sec.

b) The transformer shall be capable of being loaded in accordance with IEC 60076 or the overload conditions as specified whichever is the worst. There shall be no limitation imposed by bushings during its terminal fault.

c) The transformer shall be capable of withstanding the mechanical stresses caused by symmetrical or asymmetrical faults on any winding.

d) All protection class Current Transformers in the transformer shall be of PX/PS type. Other details of these Current Transformers shall be as per protection/metering requirements and shall be decided during detailed engineering. However, the parameters of the Winding Temperature Indicator (WTI) of Current Transformer for each winding shall be as per the Transformer manufacturer.

e) Transformers shall be capable of operating under natural cooled conditions up to the specified load. The forced cooling equipment shall come into operation by pre-set contacts of winding temperature indicator and the transformer shall operate as a forced cooling unit initially as Oil Natural Air Forced (ONAF) up to a specified load and then as Oil Forced Air Forced (OFAF). Cooling shall be so designed that during total failure of power supply to cooling fans and oil pumps, the transformer shall be able to operate at full load for at least ten (10) minutes without the calculated winding hot spot temperature exceeding 140° (degree) Celsius. Transformers fitted with two coolers, each capable of dissipating 50 percent of the heat due to losses at the continuous maximum rating, shall be capable of operating for 20 minutes in the event of failure of the oil circulating pump or blowers associated with one cooler without the calculated winding hot spot temperature exceeding 140° degree Celsius at continuous maximum rating.

f) The transformer shall be free from any electrostatic charging tendency (ECT) under all operating conditions when all oil circulation systems are in operation. In general, the oil flow speed shall not exceed 1.0 m/sec within winding in the oil flow system of the transformers. The manufacturer shall ensure that there is no electrostatic charging tendency in the design.

The Technical Parameters of the Transformer shall be as below

Table 4

| Sl. No. | Description | Unit | Technical Parameters |
|---|---|---|---|
| 1.1 | Rated Capacity | | |
| | HV | MVA | To meet the performance requirement and ratings of SynCon. The transformer shall be suitable for 100% reactive loading |
| | MV | MVA | |
| 1.2 | Voltage ratio (Line to Line) | | XX (*)/400 kV |
| 1.3 | Single / Three Phase Design | | Single phase/Three phase |
| 1.4 | Applicable Standard | | IEC 60076 |
| 1.5 | Rated Frequency | Hz | 50 |

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| Sl. No. | Description | Unit | Technical Parameters |
|---|---|---|---|
| 1.6 | Cooling and Percentage Rating at different cooling | | ONAN/ONAF/(OFAF or ODAF): 60% / 80%/100%<br>OR<br>ONAN/ONAF1/ONAF2: 60% /80%/100%<br>OR<br>OFAF (with 5 x 25% unit cooler if required) |
| 1.7 | Impedance at 75°C (in percentage) | | |
| | HV–MV | | To suit the design requirements. |
| 1.8 | Tolerance on Impedance (HV-MV) | % | As per IEC |
| 1.9 | Service | | Outdoor |
| 1.10 | Duty | | Continuous Reactive loading |
| 1.11 | Overload Capacity | | IEC-60076-7 |
| 1.12 | Temperature rise over 50 °C ambient Temp | | |
| i) | Top oil measured by thermometer | $^0$C | 50 |
| ii) | Average winding measured by resistance Method | $^0$C | 55 |
| 1.13 | Windings | | |
| i) | System Fault level | | |
| | HV | kA | 63 |
| | MV | kA | To suit the design requirements. |
| ii) | Lightning Impulse withstand Voltage | | |
| | HV | kVp | 1425 |
| | MV | kVp | * |
| | Neutral | kVp | 170 |
| iii) | Switching Impulse withstand Voltage | | |
| | HV | kVp | 1175 |
| iv) | One Minute Power Frequency withstand Voltage | | |
| | HV | kVrms | 630 |
| | MV | kVrms | * |
| | Neutral | kVrms | 70 |
| v) | Neutral Grounding | | Solidly grounded |
| vi) | Insulation | | |
| | HV | | Graded |
| | MV | | Uniform |
| vii) | Tan delta of winding | % | < 0.5 |
| 1.14 | Vector Group (3 – ph) (unless specified differently elsewhere) | | YNd* |
| 1.15 | Tap Changer | | * |
| 1.16 | Bushing | | |
| i) | Rated voltage | | |
| | HV | kV | 420 |
| | MV | kV | * |

| Sl. No. | Description | Unit | Technical Parameters |
|---|---|---|---|
| | Neutral | kV | 36 |
| ii) | Rated current (Min.) | | |
| | HV | A | * |
| | MV | A | * |
| | Neutral | A | * |
| iii) | Lightning Impulse withstand Voltage | | |
| | HV | kVp | 1550 |
| | MV | kVp | * |
| | Neutral | kVp | 170 |
| iv) | Switching Impulse withstand Voltage | | |
| | HV | kVp | 1175 |
| v) | One Minute Power Frequency withstand | | |
| | Voltage | | |
| | HV | kVrms | 750 |
| | MV | kVrms | * |
| | Neutral | kVrms | 77 |
| vi) | Minimum total creepage distances | | |
| | HV | mm/kV | 31 |
| | MV | mm/kV | 31 |
| | Neutral | mm/kV | 31 |
| vii) | Tan delta of bushings at ambient temperature# | | |
| | HV | % | ≤ 0.5 |
| | MV | % | |
| viii) | Max Partial discharge level at Um | | |
| | HV | pC | 10 |
| | MV | pC | 10 |
| | Neutral | | - |
| 1.17 | Max Partial discharge level at 1.58 * Ur /√3 | pC | 100 |
| 1.18 | Max Noise level at rated voltage and at principal tap at no load and all cooling Active | dB | 80 |
| 1.19 | **Maximum Permissible Losses of** | | |
| | **Transformers** | | |
| i) | Max. No Load Loss at rated voltage and Frequency | kW | To suit the design requirements. |
| ii) | Max. Load Loss at maximum continuous current and at 75° C | kW | To suit the design requirements. |
| iii) | Max. Auxiliary Loss at rated voltage and Frequency | kW | To suit the design requirements. |

***Notes:***

1. *No external or internal Transformers / Reactors are to be used to achieve the specified HV/MV impedances.*

2. *The criteria for Transformer losses shall be "Copper Loss (Load Loss) > Iron Loss (No Load Loss) > Cooler Loss (Auxiliary Loss)".*

*(*) marked parameters shall be decided based on SynCon manufacturer's requirement*

*# Tan δ value of OIP/RIP/RIS condenser bushing shall be 0.005 (max.) in the temperature range of 10°C to 40°C. If tan delta is measured at a temperature beyond above mentioned limit, necessary correction factor as per IEEE shall be applicable. The measured Tan δ value at site should not exceed by 0.001 w.r.t. factory results (measured at approx. similar temperature conditions) during warrantee period.*

**13. Generator Circuit Breaker**

The Circuit Breaker shall in general be of G2/M2 class and comply to IEC/IEEE 62271-37-013:2021. They shall satisfy the General Technical Requirements and shall be designed to operate in the environmental conditions specified in this specification.

**14. Bus duct**

(a) The generator bus duct shall comply with the requirements of the latest versions of relevant Indian Standards or International Electrotechnical Commission standards.

(b) The bus duct shall be designed to carry maximum continuous current under normal site conditions without exceeding temperature rise limits. Based on these requirements standard size of bus duct as per relevant Indian Standards or International Electrotechnical Commission standards shall be used.

(c) Generator bus duct shall be segregated or isolated phase type. Bus duct rated more than 3150 Amperes shall be isolated phase type. The isolated phase ducts shall be preferred over the segregated phase bus ducts. The bus duct rated more than 6000 Amp shall be continuous isolated phase type.

(d) A hot air blowing system or air pressurization system shall be provided to prevent moisture deposition in case of isolated phase busducts while space heaters may be provided in case of other bus ducts.

**15. Selection of Insulation Levels**

**15.1 Surge Arrestors**

Protective levels of arresters connected to the 400 kV AC Bus Bars of the SynCon Station shall be coordinated with the insulation and surge arrester Characteristics of the 400 kV AC systems to which the SynCon Station is to be connected. The specification and characteristics of the surge arresters installed in 400 kV AC system is given in Substation specification. The front of wave (FWWL), lightning impulse (LIWL) and switching impulse (SIWL) withstand levels shall be determined by the following margins:

a) A SIWL at least 1.15 times the switching impulse protection level.
b) A LIWL which is an IEC standard level corresponding to the SIWL and shall be at least 1.25 times the lightning impulse protection level.
c) A FWWL which is at least 1.25 times the front of wave protection level.

In addition to above minimum basic requirement the various insulations level of 400 kV equipment shall be as below. The SynCon Station equipment, Step-up Transformers etc. shall be co- ordinated accordingly.

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| | SIWL | LIWL |
|---|---|---|
| All equipment other than Transformer Bushing and winding | 1175 kVp | 1550 kVp |

**15.2 Air clearances**

The air clearances shall be determined by the TSP based on the required withstand levels for all waveforms in order to limit the probability of flashover within the SynCon Station to a target value of one flashover in 15 years.

**15.3 Switchyard**

The air clearances for switchyard equipment shall be equal to or greater than minimum values as specified in IEC-60071. Altitude correction factor (if any) shall also be considered as per IEC.

**15.4 Leakage distances**

The Creepage/leakage distance across insulation shall be determined by the TSP and shall be adequate to ensure that under condition of heavy pollution, the probability of a flash over of an insulator does not exceed one in 15 years. However, the leakage distance for all AC insulators for outdoor installation shall not be less than 25 mm/kV of the maximum operating phase to earth rms voltage at the insulator. The leakage distance of equipment connected to 400 kV systems shall not be less than 10500 mm.

Specific creepage distance for outdoor bushings, insulator strings and long rod insulators shall be minimum 31mm/kV.

**16. PROTECTION SYSTEM**

The synchronous condenser unit shall have a protection system with necessary back-ups to protect the equipment from critical failures and faults. The protection systems shall be secure and reliable to minimize any damage due to faults in the system. Protection relays shall be numerical type.

The mechanical protection (overtemperature, vibration) should be implemented in SynCon control panel system.

**16.1 General Protection Concept**

The function of the protective equipment is the detection of faults and the minimization of further damages. The selected protective system must ensure that faults are detected fast, selectively acted upon, and announced to the owner of the station. The protection system must ensure correct behavior during normal operation of the synchronous condenser unit even in case of faults outside the protected zone. The protective systems shall be independent of other equipment according to the protection philosophy.

The protection equipment must be designed with a comprehensive monitoring function to provide a high level of reliability and to avoid unnecessary shutdowns due to protection equipment malfunction. The monitoring system must elicit an alarm and block protection in case of internal defects.

A redundancy concept of the protection system design shall apply to the SynCon and the machine transformer consistently throughout by duplicating all the essential components. All implemented protection functions shall be doubled in the main A and main B protection relays. The redundancy starts with separate instrument transformer cores and

continues through the protection relays and trip signal, which must pass through separate DC voltage paths to switchgear with 2 circuit-breaker trip coils. All protection zones shall have overlapping zones by using different CT's or CT cores. The protection relays shall be mounted in separate panels for A and B protection.

The auxiliary transformers shall be protected with overcurrent protection function.

**16.2 Protection zones**

The protection system for the synchronous condenser unit must be divided into various protection zones:

- Protection for the high voltage side of machine transformers
- Protection for the machine transformer included the isolated phase bus
- Protection for the synchronous condenser
- Protection for the MV/Auxiliary transformer

For the main protection zones common tripping relays must be used for protection A and B.

All types of faults that shall be detected by the protection system.

- Heavy short circuit faults (2 / 3 phase- and double earth fault) based on differential (ANSI 87) and overcurrent measuring (ANSI 50/51) principle.
- Single earth faults at the SynCon side of the transformer and IPB system by displacement voltage detection without selection where the fault happened.

**16.3 Protection Functions**

**A. Minimum Synchronous Condenser Protection Functions**

| Function | Main A | Main B |
|---|---|---|
| Biased SynCon Differential Protection (87 G) | Y | Y |
| 95% Stator Earth Fault Protection (64 G1) | Y | N |
| 100% Stator Earth Fault Protection (64 G2) | N | Y |
| Loss of Field Protection (40G) | Y | Y |
| Backup Impedance Protection (21G) G)(21GProtection) | Y | Y |
| Overvoltage Protection (59G) | Y | Y |
| Negative Phase Sequence Current Protection (46G) | Y | Y |
| Under Frequency Protection (81G) | Y | Y |
| Overload Protection for SynCon (51G) | Y | Y |
| Rotor Earth Fault Protection (64R) | Y | Y |
| Under Excitation Protection | Y | Y |
| Bearing Current Protection (50SC) | Y | Y |
| SynCon Pole slipping protection (98G) | Y | Y |
| Excitation System Overcurrent Protection (50/51 EXE) | Y | Y |
| Dead machine (27/50G) | Y | Y |

**B. Step Up Transformer Protection Functions**

| Function | Main A | Main B |
|---|---|---|
| Step-up transformer differential protection (87T) | Y | Y |
| Restricted earth fault protection | Y | Y |
| Overcurrent Protection | Y | Y |

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| Function | Main A | Main B |
|---|---|---|
| Over fluxing Protection | Y | Y |
| Back- up earth fault protection on Step-up transformer HV neutral (51NGT) | Y | Y |
| Buchholz Protection | Y | N |
| Pressure relief valve (PRV) Protection | N | Y |
| LV Winding Temperature Protection | N | Y |
| HV Winding Temperature Protection | Y | N |
| Oil temperature Protection (49) | Y | Y |

**C. Unit Transformer Protection Functions (Auxiliary Transformers)**

| Function | Main A | Main B |
|---|---|---|
| Restricted earth fault protection (64) | Y | Y |
| Instantaneous over current protection (50) | Y | Y |
| IDMT over current protection (51) | Y | Y |
| Back up Earth Fault Protection | Y | Y |
| Buchholz Protection | Y | N |
| Pressure relief valve (PRV) Protection | N | Y |
| LV Winding Temperature Protection | Y | N |
| HV Winding Temperature Protection | N | Y |
| Oil temperature Protection (49) | Y | Y |

**D. Pony Motor Protection Functions (if applicable)**

| Function | Main A | Main B |
|---|---|---|
| Overcurrent | Y | N |
| Overload / Thermal Protection | Y | N |
| Undercurrent Protection | Y | N |
| No of Starts Limiter | Y | N |

**E. Generator Circuit Breaker**

| Function | Main A | Main B |
|---|---|---|
| Current Checked Circuit Breaker Failure Protection | Y | N |
| Trip Circuit Supervision | Y | Y |
| Synchronizing | Y | N |

**F. Breaker Failure Protection**

a) High voltage circuit breaker

Each trip to the high voltage circuit breaker must simultaneously initiate a breaker failure start in the high voltage feeder protection system. This signal must be integrated in the high voltage feeder protection relay, which executes the breaker failure protection.

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b) Generator circuit breaker

In case the generator circuit breaker does not open after a trip command, the breaker failure function in the SynCon protection relay must send an inter-trip signal to the high voltage circuit breaker.

The start of the breaker failure protection shall be realized over a signal from the trip relays to a binary input to the protection relays. This ensures that all trip signals will start the breaker failure function. The breaker failure protection supervises the current and the auxiliary contacts of the circuit breaker.

**Generator Circuit Breaker Control**

The control of the generator circuit breaker and the related disconnectors/earthing switches shall be implemented in synchronizing device.

**Interlocking**

The electrical interlocking shall be implemented in the software logic of the control device. The interlocking shall be realized with hardwired release signals. The release signal of the earthing switch and disconnector to and from the HV switchgear will be send as electrical signal. The earthing switch on the SynCon side must be interlocked with a release signal from the SynCon control system (it is only possible to close the earthing switch if the SynCon is stopped).

**Synchronizing the SynCon**

For the Synchronous condenser synchronizing a synchronizing relay shall be used. This synchronizing relay must work as a synchronizer. The synchronization of the SynCon to the grid shall be part of the start sequence of the SynCon control. In the synchronization step, synchronizing device monitor the voltage, the frequency, and the phase angle on both sides of the generator circuit breaker. The synchronization device will send increase or decrease commands to the excitation system until the Synchronous condenser voltage matches the grid voltage. If the voltage, frequency, and phase angle are within the set limits the close command to the generator circuit breaker will be issued by the synchronizing device.

**16.4 Control and Protection SFC-MV Switchgear**

The control of the medium voltage feeder for the SFC can be implemented in multifunctional control & protection relays.

**16.5 Control of Auxiliary System**

The control of the auxiliary system shall be implemented in the SynCon control panel.

**16.6 Voltage Regulator for the Tap Changer**

The control of the voltage regulator of the Main Transformer (On Load Tap-Changer) and monitor auxiliary transformer (Off Load Tap-Changer) shall be implemented in a SynCon control panel.

**16.7 Communication and Time Synchronization**

**Communication to Control System**

The protection and control devices shall be connected to the plant control system through an optical Ethernet communication network configured in a ring or other redundant

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topology. Communication shall be based on the IEC 61850 standard. All protection and control signals, including trip signals, shall be transmitted to and processed within the plant control system and shall be displayed and monitored through the HMI system..

Time synchronization must be realized over the same interface. Time synchronization to protection devices shall be over network time protocol. TSP shall follow CEA (Cyber Security in Power Sector) Guidelines, 2021.

**16.8 Specific Requirement for Phasor Measurement Units (PMUs)**

TSP shall supply, install and commission required No. of Phasor Measurement Units (PMUs) as per the "Guidelines on Unified Philosophy for placement of PMUs in Indian Grid" issued vide CEA letter No. CEA-PS-14-12/9/2024-PSETD Division dated 19.03.2025 for the SynCon. The PMUs shall be provided with LAN switch and shall connect with LAN switch of control room of respective substations/ generating stations with Fibre Optic cable. The PMUs shall be connected with the FOTE at Substation/ generating stations for onwards data transmission to the PDC (Phasor Data Concentrator) located at respective RLDC. Configuration work in existing PDC at RLDC for new PMU integration shall be done by respective RLDC, however all the necessary support in this regard shall be ensured by TSP. The maintenance of all the PMUs and associated equipment shall be the responsibility of TSP.

Note: Existing Station owner/s to provide necessary support to integrate different equipment and applications of new extended bays with the existing substation e.g. Communication (through FOTE), Voice etc. for smooth operation and monitoring of new added grid elements.

**16.9 Fault Recorder**

**Devices**

The integral fault recorder function of the protection relay shall be used for recording of the current, the voltage and the trip signals during a fault in the electrical system.

If a trip occurs anywhere within the system, all fault recorders of all protection relays shall be triggered by a hardwired binary signal. This ensures that all relevant binary and analogue signals of the whole system will be recorded in case of a fault.

For testing and monitoring purpose, a manual trigger of the fault recorders must be foreseen.

**Data Storage**

The transfer of the fault/ disturbance records should be performed over the communication interface and the IEC61850 protocol.

**Fault Analyses**

Evaluation and analyses of the fault records take place on the engineering workstation.

**16.10 Generator Disturbance Recorder (DR)**

a) One No. microprocessor-based Disturbance Recorder (DR) shall be provided for each synchronous condenser to record graphic form of instantaneous values of voltage and current in all three phases and neutral, open and closed positions of relay contacts and breaker during disturbances.

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b) It shall have the facility for slow and fast scan to record transient and dynamic performance of the system.

c) Both slow and fast scan facility shall have atleast 8 analog and 16 digital inputs.

d) The slow scan facility shall be provided with the following minimum features

- The input shall be MW, MVAR, field voltage, frequency and generator terminal voltage etc. Any transducers, if required for interfacing, shall be provided.
- It shall be suitable to record the frequency excursions and response of generator field and governor control on system fluctuations.
- It shall have options to select the scan rate in the range having a min. of 10Hz suitable to facilitate capture of low frequency waveforms in the range of 0.5 - 3Hz.
- The non-volatile memory shall be suitable for recording for a minimum of 15 minute at scan rate corresponding to selected pre-fault zone of recording.

e) The fast scan facility shall be provided with the following minimum features

- The input shall be voltages and current etc. Any transducers, if required for interfacing, shall be provided.
- It shall have scan rate of 1000 Hz or better for sampling each of the analog channel having fundamental frequency of 50 Hz. The frequency response for these channels shall be DC on the lower side to 500 Hz or better on the upper side. Any interposing devices provided shall be suitable for this frequency response.
- The pre and post fault recording time shall be atleast 200 ms and 5s respectively.

f) All external and internal faults in the DR equipment such as power supply fail, printer faults, paper exhausting, processor failure, memory failure etc. are to be indicated by means of light emitting diodes on the front of the panel of restitution unit. The DR shall be provided with a MMI (man machine interface) through a PC with VDU, keyboard and printer.

g) The internal clock of the system shall be synchronized through the GPS. The output shall be in IEEE/ COMTRADE format. The format shall be compatible for dynamic protection Relay Test Kit Necessary interfacing and software for analysis shall also be provided.

h) The amplitude resolution of the analog channels shall not be less than 16 bit and event resolution for digital channels shall be 1ms or better.

**16.11 Metering**

Operational Metering

The unit operational metering is measured by multifunction meter and linked to synchronous condenser control system for operation and control purposes.

**16.12 SynCon Station Auxiliary Power Supply**

The auxiliary supply of SynCon Station shall conform with the system requirements relating to reliability, availability, and redundancy, performing continuously to help ensure that the complete SynCon Station operates as per the requirements. SynCon Station

Auxiliary supply including all necessary switchgear (viz. AC/DC, lighting boards etc.) shall be completely separate from the main 765/400/220 kV substation auxiliary supply, all loads of SynCon station shall be fed from this supply. The auxiliary supply provides power to the excitation system, starting system, controllers, cooling system, station supplies, and various other essential and non-essential loads. All essential loads are connected to the DC system of the SynCon Station which is also to be provided separately from the DC system of the main 765/400/220 kV substation.

The auxiliary supply system shall be able to provide a stable supply for the SynCon Station during system faults such as single-phase faults, phase-to-phase faults, and three-phase faults and LVRT (Low Voltage Ride Through) to allow continuous operation of the SynCon Station during these transient events.

Auxiliary Supply System of SynCon Station shall be fed from two independent sources as per CEA (Technical Standards for Connectivity to the Grid) Regulations, 2007. In addition to this one emergency incomer from DG set shall also be there. DG set of SynCon Station shall be separate from DG set of Main Substation.

**16.13 Power and control cables, and cabling**

(i) For essential auxiliaries, the power and control cables shall be of fire survival type. All other Power and control cables shall be of flame retardant low smoke (FRLS) type.

(ii) Cables to be directly buried shall be essentially armoured type.

(iii) Flame retardant low smoke cables and fire survival cables shall meet test requirements as per relevant American Society of Testing and Materials, International Electrotechnical Commission, Institute of Electrical and Electronics Engineers and Swedish Standards.

(iv) Derating factors for site ambient and ground temperatures, grouping and soil resistivity shall be considered while determining the size of cables.

(v) Cable installation shall be carried out as per relevant IS and other applicable standards.

(vi) Power cables and control cables shall be laid on separate tiers. The laying of different voltage grade cables shall be on different tiers according to the voltage grade of the cables with higher voltage grade cables in topmost tier and control cables in bottommost tier.

(vii) All cables associated with one unit shall preferably be segregated from cables of other units.

(iv) Cable routes for one set of auxiliaries of same unit shall be segregated from the other set.

**16.14 Fire Protection System for SynCon Station:**

Necessary fire protection for SynCon units and Step-up Transformer shall be required. The main features of these protections are as under.

**A) Fire Detection and Alarm System:**

Suitable fire detection system using smoke detectors and/or heat detectors shall be provided in SynCon Station for all room and areas. These smoke fire detection systems shall be connected to a separate Fire annunciation system clearly identifying the zone.

**B) Hydrant System:**

The hydrant system shall be extended from fire-fighting system of the substation in the yard. Suitable number of hydrants shall be provided for protection of SynCon Station equipment in the yard namely Step-up Transformers etc. as applicable for the station. Further suitable number of hydrants shall also be provided for SynCon Station building

**HVW System:**

HVW (High Velocity Water) Spray system shall be provided for Step-up transformers. The tapping for HVW system shall be done from nearby transformer/Reactor or any other suitable point of the main substation fire-fighting line.

Fire protection system shall be provided in accordance with the Central Electricity Authority (Measures relating to Safety and Electric Supply) Regulations, 2023.

**17. VISUAL MONITORING SYSTEM FOR WATCH AND WARD OF SynCon STATION**

Visual monitoring system (VMS) for effective watch and ward of SynCon station premises covering the areas of entire switchyard, SynCon building, Step-up Transformer, Cooling Towers and Main gate, shall be provided. The TSP shall design, supply, erect, test and commission the complete system including cameras, Digital video recorder system, mounting arrangement for cameras, cables, LAN Switches, UPS and any other items/accessories required to complete the system.

System with Colour IP Cameras for VMS surveillance would be located at various locations including indoor areas and outdoor switchyard. The VMS data partly/completely shall be recorded (minimum for 15 days) and stored on network video recorder.

Features of VMS system shall be as those specified for main substation. The number of cameras and their locations shall be decided in such a way that any location covered in the area can be scanned. The cameras shall be located in such a way to monitor at least:

a) Step-up Transformers.
b) SynCon Cooling System, Electrical and Mechanical Auxiliary area.
c) Entrance to SynCon Station.
d) All other Major Equipments (such as CB, CT, VT, SA etc.)

The cameras can be mounted on structures, buildings or any other suitable mounting arrangement.

Advisory on deployment of CCTV issued by Ministry of Electronics and Information Technology (MEITY) shall be followed.

**18. Spares, Special Tools and Tackles**

Considering high technology proprietary equipment of the SynCon TSP shall ensure necessary spares are procured to maintain the necessary reliability and availability of SynCon Station. Further all necessary special tools and tackles required for erection, testing, commissioning and maintenance of equipment shall also be taken.

**19. Losses**

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**19.1 Calculation of losses**

The TSP must guarantee total losses of less than 2% of highest reactive power output of SynCon Station at PCC for complete Synchronous Condenser Station, under the following conditions:

a) At 40°C ambient temperature for specified Short Circuit Contribution at Point of Common Coupling
b) Specified rated frequency & voltage at Point of Common Coupling

The TSP shall calculate the total losses of the Synchronous Condenser Unit at each operating point specified below which must meet the guaranteed total losses mentioned above. The calculation of guarantee total losses shall include losses of all the components up to the PCC including losses of the synchronous condenser, flywheel (if applicable), IPB, transformer and the relevant auxiliary systems like pumps, fans, excitation system, building HVAC etc., whether conducting currents or not, based on the above assumptions.

The operating points shall be as follows:

i) Maximum Capacitive Output.
ii) Maximum Inductive Output; and
iii) Zero MVAr Output.

The actual losses shall be measured during SAT.

**19.2 Loss measurement**

**Procedure according to IEC 60034-2-2 using the retardation method**:

Losses will be determined by measurement of partial losses using retardation method according to the ITP and as specified in IEC 60034-2.1, chapter 7.1.1, method 2-1-2C: Summation of separate losses without a full load test. Short circuit test for the determination of the additional load losses to be applied for one type of synchronous machine per plant.

**20. Availability and Reliability**

**20.1 Availability**

The percentage availability of Synchronous Condenser is defined as follows:

$$\%\ Availability = \frac{Total\ time\ SynCon\ is\ able\ to\ Perfrom\ specified\ Duty}{Total\ time\ Period} x\ 100$$

Synchronous Condenser shall be considered to be available for service only if it is able to perform the whole of the specified duty. Operation with limited control functions or within a limited range of outputs (any parameters i.e. Inertia, Short Circuit MVA and Capacitive and Inductive MVAr) due to a subsystem failure shall be treated as unscheduled servicing downtime. The period basis for availability calculation shall be 12 months (365 days).

The total time period during which the SynCon Station is not able to perform the specified duty shall include Planned Outage hours (POH), Maintenance Outage Hours (MOH) and Forced Outage Hours (FOH).

**Planned Outage** (POH = Planned Outage Hours) is the state where the Equipment is unavailable due to Planned Maintenance activities (Scheduled Routine Maintenance,

Scheduled Annual and Biennial Maintenance, Small Revisions and Major Revisions) that require the shutdown of the Equipment. Such activities leading to a Planned Outage.

**Unplanned Outage**

**Unplanned Outage** is the state where the Equipment is unavailable but is not in the Planned Outage state.

The Unplanned Outage can be due to **Forced Outage Hours** (FOH = Forced Outage Hours) or due to **Maintenance Outage Hours** (MOH = Maintenance Outage Hours)

Forced Outage is considered as an outage that requires removal of the Equipment from the Available State **immediately** or **within 7 days maximum**.

Maintenance Outage is considered an outage that **does not require immediate removal** from the Available State but requires the Equipment to be removed from the Available State **before the next Planned Outage**. This is scheduled **at least 7 days in advance** (otherwise it's classified as FOH).

**20.2 Reliability**

In the assessment of reliability, the following events shall also be considered to constitute a SynCon Station outage:

i) A SynCon Station shut down.

ii) A reduction of SynCon Station capacity (any parameters i.e. Inertia, Short Circuit MVA and Capacitive and Inductive MVAr) due to an outage of any component of SynCon Station

The calculated reliability of the complete SynCon Station shall be equal to or exceed the following design target values.

| | Design target for SynCon Station | Max acceptable Guaranteed value for SynCon Station |
|---|---|---|
| Total Number of Forced Outages | 3 | 5 |

Here definition of Forced Outage shall be considered as same as given in the "20.1 Availability".

The period basis for availability calculation shall be 12 months (365 days).

**21. Training on Synchronous Condenser**

As a part of project, it shall be under the scope of TSP to provide the training regarding design, manufacturing, construction, testing, control & protection aspects of Synchronous Condenser at Manufacturer's works and training on operation & maintenance at some commissioned Project of the manufacturer for at least 10 man-months to officials from CEA/CTU/Grid India in addition to its own manpower for the project.

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**ANNEXURE-C**

**Contingency Cases for Fatehgarh-II SYNCON**

**A) N-1 Contingency**

**Contingency at 765 kV level**

1. Three Phase Fault close to 765 kV bus of Fatehgarh-II PS followed by tripping of one circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (1st D/c) (fault persist for 100 ms)
2. Single Phase to Ground Fault close to 765 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (1st D/c)
3. Three Phase Fault close to 765 kV bus of Bhadla-II PS followed by tripping of one circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (1st D/c) (fault persist for 100 ms)
4. Single Phase to Ground Fault close to 765 kV bus of Bhadla-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (1st D/c)
5. Three Phase Fault close to 765 kV bus of Fatehgarh-II PS followed by tripping of one circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (2nd D/c) (fault persist for 100 ms)
6. Single Phase to Ground Fault close to 765 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (2nd D/c)
7. Three Phase Fault close to 765 kV bus of Bhadla-II PS followed by tripping of one circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (2nd D/c) (fault persist for 100 ms)
8. Single Phase to Ground Fault close to 765 kV bus of Bhadla-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (2nd D/c)
9. Three Phase Fault close to 765 kV bus of Fatehgarh-II PS followed by tripping of one circuit of Fatehgarh-II PS–Bhadla (PG) 765 kV D/c line (fault persist for 100 ms)
10. Single Phase to Ground Fault close to 765 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS–Bhadla (PG)765 kV D/c line
11. Three Phase Fault close to 765 kV bus of Bhadla (PG) followed by tripping of one circuit of Fatehgarh-II PS–Bhadla (PG)765 kV D/c line (fault persist for 100 ms)
12. Single Phase to Ground Fault close to 765 kV bus of Bhadla (PG) followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS–Bhadla (PG)765 kV D/c line

**Contingency at 400 kV level**

13. Three Phase Fault close to 400 kV bus of Fatehgarh-II PS followed by tripping of one circuit of Fatehgarh-II PS –Fatehgarh-III (Sec-1) 400 kV D/c line (fault persist for 100 ms)

14. Single Phase to Ground Fault close to 400 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS –Fatehgarh-III (Sec-1) 400 kV D/c line

15. Three Phase Fault close to 400 kV bus of Fatehgarh-III (Sec-1) followed by tripping of one circuit of Fatehgarh-II PS –Fatehgarh-III (Sec-1) 400 kV D/c line (fault persist for 100 ms)

16. Single Phase to Ground Fault close to 400 kV bus of Fatehgarh-III (Sec-1) followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS –Fatehgarh-III (Sec-1) 400 kV D/c line

17. Three Phase Fault close to 400 kV bus of Fatehgarh-II PS followed by tripping of one circuit of Fatehgarh-II PS –Fatehgarh-I 400 kV D/c line (ch. at 765 kV level) (fault persist for 100 ms)

18. Single Phase to Ground Fault close to 400 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS –Fatehgarh-I 400 kV D/c line (ch. at 765 kV level)

19. Three Phase Fault close to 400 kV bus of Fatehgarh-I followed by tripping of one circuit of Fatehgarh-II PS –Fatehgarh-I 400 kV D/c line (ch. at 765 kV level) (fault persist for 100 ms)

20. Single Phase to Ground Fault close to 400 kV bus of Fatehgarh-I followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. tripping of one circuit of Fatehgarh-II PS –Fatehgarh-I 400 kV D/c line (ch. at 765 kV level)

**B) N-1-1 Contingency**

**Contingency at 765 kV level**

21. Case 1 + Single Phase Fault close to 765 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and successful re-closure (dead time 1 second) of 2nd circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (1st D/c)

22. Case 3 + Single Phase Fault close to 765 kV bus of Bhadla-II followed by single pole opening (100 ms) of the faulted phase and successful re-closure (dead time 1 second) of 2nd circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (1st D/c)

23. Case 5 + Single Phase Fault close to 765 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and successful re-closure (dead time 1 second) of 2nd circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (2nd D/c)

24. Case 7 + Single Phase Fault close to 765 kV bus of Bhadla-II followed by single pole opening (100 ms) of the faulted phase and successful re-closure (dead time 1 second) of 2nd circuit of Fatehgarh-II PS–Bhadla-II 765 kV D/c line (2nd D/c)

25. Case 9 + Single Phase Fault close to 765 kV bus of Fatehgarh-II PS (Sec-2) followed by single pole opening (100 ms) of the faulted phase and successful re-closure (dead time 1 second) of 2nd circuit of Fatehgarh-II PS–Bhadla (PG) 765 kV D/c line

26. Case 11 + Single Phase Fault close to 765 kV bus of Bhadla (PG) followed by single pole opening (100 ms) of the faulted phase and successful re-closure (dead time 1 second) of 2nd circuit of Fatehgarh-II PS–Bhadla (PG) 765 kV D/c line

**Contingency at 400 kV level**

27. Case 13+ Single Phase Fault close to 400 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. 2nd circuit of Fatehgarh-II PS –Fatehgarh-III (Sec-1) 400 kV D/c line

28. Case 15+ Single Phase Fault close to 400 kV bus of Fatehgarh-III (Sec-1) followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. 2nd circuit of Fatehgarh-II PS –Fatehgarh-III (Sec-1) 400 kV D/c line

29. Case 17+ Single Phase Fault close to 400 kV bus of Fatehgarh-II PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. 2nd circuit of Fatehgarh-II PS –Fatehgarh-I 400 kV D/C line (ch. at 765 kV level)

30. Case 19+ Single Phase Fault close to 400 kV bus of Fatehgarh-I PS followed by single pole opening (100 ms) of the faulted phase and unsuccessful re-closure (dead time 1 second) followed by 3-pole opening (100 ms) of the faulted line i.e. 2nd circuit of Fatehgarh-II PS –Fatehgarh-I 400 kV D/c line (ch. at 765 kV level)

**Contingency at 400 kV and 220 kV level (Generation)**

31. Three phase fault close to 220 kV Fatehgarh-II PS bus with Tripping of 500MW generation at 220KV Fatehgarh-II PS bus

32. Three phase fault close to 400 kV Fatehgarh-II PS PS bus, with Tripping of 1000MW generation at 400 kV Fatehgarh-II PS bus

33. Three phase fault close to 400 kV Fatehgarh-I PS PS bus, with Tripping of 1200MW generation at 400 kV Fatehgarh-I PS bus

**Contingency of STATCOM**

34. Outage of one unit of STATCOM (±300MVAr, 2x125MVAr MSC, 1X125MVAr MSR)

**Note:**

1. In the 'N-1-1' as stated above, if there is a temporary fault, the system shall not lose the second element after clearing of fault but shall successfully survive the disturbance.

2. In case of permanent fault, the system shall lose the second element as a result of fault clearing and thereafter, shall asymptotically reach to a new steady state without losing synchronism. In this new state, the system parameters (i.e. voltages and line loadings) shall not exceed emergency limits, however, there may be requirement of load shedding / rescheduling of generation so as to bring system parameters within normal limits.
3. All contingency cases to be performed in all study files provided by BPC to respective TSP

**Simulation tests to demonstrate the LVRT & HVRT compliance of other requirements of Syncon**

| Test No. | PCC Target Voltage (pu) | Duration of voltage dip (sec) | Pre - fault Reactive Power dispatch (pu) | Nature of voltage dip | To be done in PSCAD (Generic & UDM) | To be done in PSS/E (Generic & UDM) |
|---|---|---|---|---|---|---|
| 1 | 1 | No | 1.0 (Under excited) | Flat run (60s) | Yes | Yes |
| 2 | 1 | No | 0.1 (Under excited) | Flat run (60s) | Yes | Yes |
| 3 | 1 | No | 1.0 (Over excited) | Flat run (60s) | Yes | Yes |
| 4 | 1 | No | 0.1 (Over excited) | Flat run (60s) | Yes | Yes |
| **LVRT** | | | | | | |
| 5 | 0.85 | 3.0 | 1.0 (Under excited) | Balanced Three phase | Yes | Yes |
| 6 | 0.5 | 1.65 | | | Yes | Yes |
| 7 | 0.15 | 0.3 | | | Yes | Yes |
| 8 | 0.85 | 3.0 | | Unbalanced (LL) | Yes | No |
| 9 | 0.5 | 1.65 | | | Yes | No |
| 10 | 0.15 | 0.3 | | | Yes | No |
| 11 | 0.85 | 3.0 | | Unbalanced (LG) | Yes | No |
| 12 | 0.5 | 1.65 | | | Yes | No |
| 13 | 0.15 | 0.3 | | | Yes | No |
| 14 | 0.85 | 3.0 | 0.5 (Under excited) | Balanced Three phase | Yes | Yes |
| 15 | 0.5 | 1.65 | | | Yes | Yes |
| 16 | 0.15 | 0.3 | | | Yes | Yes |
| 17 | 0.85 | 3.0 | | Unbalanced (LLG) | Yes | No |
| 18 | 0.5 | 1.65 | | | Yes | No |
| 19 | 0.15 | 0.3 | | | Yes | No |
| 20 | 0.85 | 3.0 | | Unbalanced (LG) | Yes | No |
| 21 | 0.5 | 1.65 | | | Yes | No |
| 22 | 0.15 | 0.3 | | | Yes | No |
| 23 | 0.85 | 3.0 | 0.25 (Under excited) | Balanced Three phase | Yes | Yes |
| 24 | 0.5 | 1.65 | | | Yes | Yes |
| 25 | 0.15 | 0.3 | | | Yes | Yes |
| 26 | 0.85 | 3.0 | | Unbalanced (LLG) | Yes | No |
| 27 | 0.5 | 1.65 | | | Yes | No |
| 28 | 0.15 | 0.3 | | | Yes | No |
| 29 | 0.85 | 3.0 | | Unbalanced (LG) | Yes | No |
| 30 | 0.5 | 1.65 | | | Yes | No |
| 31 | 0.15 | 0.3 | | | Yes | No |

| Test No. | PCC Target Voltage (pu) | Duration of voltage dip (sec) | Pre - fault Reactive Power dispatch (pu) | Nature of voltage dip | To be done in PSCAD (Generic & UDM) | To be done in PSS/E (Generic & UDM) |
|---|---|---|---|---|---|---|
| 32 | 0.85 | 3.0 | 1.0 (Over excited) | Balanced Three phase | Yes | Yes |
| 33 | 0.5 | 1.65 | | | Yes | Yes |
| 34 | 0.15 | 0.3 | | | Yes | Yes |
| 35 | 0.85 | 3.0 | | Unbalanced (LL) | Yes | No |
| 35 | 0.5 | 1.65 | | | Yes | No |
| 36 | 0.15 | 0.3 | | | Yes | No |
| 37 | 0.85 | 3.0 | | Unbalanced (LG) | Yes | No |
| 38 | 0.5 | 1.65 | | | Yes | No |
| 39 | 0.15 | 0.3 | | | Yes | No |
| 40 | 0.85 | 3.0 | 0.5 (Over excited) | Balanced Three phase | Yes | Yes |
| 41 | 0.5 | 1.65 | | | Yes | Yes |
| 42 | 0.15 | 0.3 | | | Yes | Yes |
| 43 | 0.85 | 3.0 | | Unbalanced (LL) | Yes | No |
| 44 | 0.5 | 1.65 | | | Yes | No |
| 44 | 0.15 | 0.3 | | | Yes | No |
| 45 | 0.85 | 3.0 | | Unbalanced (LG) | Yes | No |
| 46 | 0.5 | 1.65 | | | Yes | No |
| 47 | 0.15 | 0.3 | | | Yes | No |
| 48 | 0.85 | 3.0 | 0.25 (Over excited) | Balanced Three phase | Yes | Yes |
| 49 | 0.5 | 1.65 | | | Yes | Yes |
| 50 | 0.15 | 0.3 | | | Yes | Yes |
| 51 | 0.85 | 3.0 | | Unbalanced (LLG) | Yes | No |
| 52 | 0.5 | 1.65 | | | Yes | No |
| 53 | 0.15 | 0.3 | | | Yes | No |
| 54 | 0.85 | 3.0 | | Unbalanced (LG) | Yes | No |
| 55 | 0.5 | 1.65 | | | Yes | No |
| 56 | 0.15 | 0.3 | | | Yes | No |
| **HVRT** | | | | | | |
| Test No. | PCC Target Voltage (pu) | Duration of voltage swell (sec) | Pre - fault Reactive Power dispatch (pu) | Nature of voltage dip | To be done in PSCAD (Generic & UDM) | To be done in PSS/E (Generic & UDM) |
| 57 | 1.5 | 0.1 | 1.0 (Over excited) | Balanced Three phase | Yes | Yes |
| 58 | 1.3 | 10 | | | Yes | Yes |
| 59 | 1.1 | Continuous | | | Yes | Yes |
| 60 | 1.5 | 0.1 | | Single phase | Yes | No |
| 61 | 1.3 | 10 | | | Yes | No |
| 62 | 1.1 | Continuous | | | Yes | No |
| 63 | 1.5 | 0.1 | 0.5 (Over excited) | Balanced Three phase | Yes | Yes |
| 64 | 1.3 | 10 | | | Yes | Yes |
| 65 | 1.1 | Continuous | | | Yes | Yes |
| 66 | 1.5 | 0.1 | | Single phase | Yes | No |
| 67 | 1.3 | 10 | | | Yes | No |
| 68 | 1.1 | Continuous | | | Yes | No |
| 69 | 1.5 | 0.1 | 0.25 (Over excited) | Balanced Three phase | Yes | Yes |
| 70 | 1.3 | 10 | | | Yes | Yes |

| Test No. | PCC Target Voltage (pu) | Duration of voltage dip (sec) | Pre - fault Reactive Power dispatch (pu) | Nature of voltage dip | To be done in PSCAD (Generic & UDM) | To be done in PSS/E (Generic & UDM) |
|---|---|---|---|---|---|---|
| 71 | 1.1 | Continuous | | | Yes | Yes |
| 72 | 1.5 | 0.1 | | Single phase | Yes | No |
| 73 | 1.3 | 10 | | | Yes | No |
| 74 | 1.1 | Continuous | | | Yes | No |
| 75 | 1.5 | 0.1 | 1.0 (Under excited) | Balanced Three phase | Yes | Yes |
| 76 | 1.3 | 10 | | | Yes | Yes |
| 77 | 1.1 | Continuous | | | Yes | Yes |
| 78 | 1.5 | 0.1 | | Single phase | Yes | No |
| 79 | 1.3 | 10 | | | Yes | No |
| 80 | 1.1 | Continuous | | | Yes | No |
| 81 | 1.5 | 0.1 | 0.5 (Under excited) | Balanced Three phase | Yes | Yes |
| 82 | 1.3 | 10 | | | Yes | Yes |
| 83 | 1.1 | Continuous | | | Yes | Yes |
| 84 | 1.5 | 0.1 | | Single phase | Yes | No |
| 85 | 1.3 | 10 | | | Yes | No |
| 86 | 1.1 | Continuous | | | Yes | No |
| 87 | 1.5 | 0.1 | 0.25 (Under excited) | Balanced Three phase | Yes | Yes |
| 88 | 1.3 | 10 | | | Yes | Yes |
| 89 | 1.1 | Continuous | | | Yes | Yes |
| 90 | 1.5 | 0.1 | | Single phase | Yes | No |
| 91 | 1.3 | 10 | | | Yes | No |
| 92 | 1.1 | Continuous | | | Yes | No |

**Effectiveness of PSS**

| Test No. | Pre - fault Reactive Power dispatch (pu) | Nature of fault | PSS (In service/Wo service) | To be done in PSCAD (Generic & UDM) | To be done in PSS/E (Generic & UDM) |
|---|---|---|---|---|---|
| 93 | 1.0 (Under excited) | 3-phase bolted | With PSS | Yes | Yes |
| 94 | | | W/o PSS | Yes | Yes |
| 95 | 1.0 (Over excited) | | With PSS | Yes | Yes |
| 96 | | | W/o PSS | Yes | Yes |

**Excitation System Limiter Testing**

| Test No. | Target Voltage (pu) | Pre - fault Reactive Power dispatch (pu) | Description |
|---|---|---|---|
| 97 | -5% step of Vref | 0.1 (Under excited) (Within the generator's capability curve) | OEL & UEL models to be considered |
| 98 | +5% step of Vref | 0.1 (Over excited) (Within the generator's capability curve) | OEL & UEL models to be considered |

99. Excitation System Step Response Testing (Open & Close loop)

100. RoCof Testing (ROCOF) up to 4 Hz/second for 0.25 seconds

101. RoCof Testing (ROCOF) up to 3 Hz/second for 1 second

102. Impedance/frequency scan for a frequency range of 0-2500Hz (on SMIB)

103. Oscillation Rejection Test (on SMIB) for 0.1, 0.3, 0.6, 0.9, 1.0,2.0, 3, 4, 8 & 10 Hz

**Schedule: 2**

**Scheduled COD**

**[Note: As referred to in the definition of "Element", "Scheduled COD", and in Articles 3.1.3 (c), 4.1 (b) and 4.3 (a) of this Agreement]**

| S. No. | Name of the Transmission Element | Scheduled COD in months from Effective Date | Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project | Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element |
|---|---|---|---|---|
| 1 | 1 nos. of Synchronous Condensers (SynCon) units* at 400 kV level of 765/400/220 kV Fatehgarh-II PS along with 2 nos. of 400 kV bays<br><br>*1 No. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short Circuit contribution at PCC of 1200MVA (Minimum) | 30 months (28.02.2029) | 100% | N.A. |
| Note: POWERGRID shall provide space (free of cost) for 2 Nos. (SynCon) units at Fatehgarh II PS along with 2 Nos. of 400 kV bays | | | | |

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

FATEHGARH II TRANSMISSION LTD. NEW DELHI

**Schedule: 3**

**Safety Rules and Procedures**

**[Note: As referred to in Articles 5.6 of this Agreement]**

1. **Site Regulations and Safety:**

The TSP shall establish Site regulations within sixty (60) days from fulfilment of conditions subsequent, as per Prudent Utility Practices setting out the rules to be observed till expiry of the Agreement at the Site and shall comply therewith.

Such Site regulations shall include, but shall not be limited to, rules in respect of security, safety of the Project, gate control, sanitation, medical care, and fire prevention, public health, environment protection, security of public life, etc.

Copies of such Site regulations shall be provided to the Nodal Agency and the CEA for the purpose of monitoring of the Project.

2. **Emergency Work:**

In cases of any emergency, the TSP shall carry out all necessary remedial work as may be necessary.

If the work done or caused to be done by any entity, other than the TSP, the TSP shall, reimburse the actual costs incurred, to the other Party carrying out such remedial works.

3. **Site Clearance:**

In the course of execution of the Agreement, the TSP shall keep the Site reasonably free from all unnecessary obstruction, storage, remove any surplus materials, clear away any wreckage, rubbish and temporary works from the Site, and remove any equipment no longer required for execution of the Agreement. After completion of all Elements of the Project, the TSP shall clear away and remove all wreckage, rubbish and debris of any kind from the Site, and shall leave the Site clean and safe.

4. **Watching and Lighting:**

The TSP shall provide and maintain at its own expense all lighting, fencing, and watching when and where necessary for the proper construction, operation, maintenance / repair of any of the Elements of the Project, or for the safety of the owners and occupiers of adjacent property and for the safety of the public, during such maintenance / repair.

**Schedule: 4**

**Computation of Transmission Charges**

## 1.1 General

The Monthly Transmission Charges to be paid to the TSP for providing Transmission Service for any Contract Year during the term of the Agreement shall be computed in accordance with this Schedule and paid as per Sharing Regulations.

Illustration regarding payment of Transmission Charges under various scenarios (considering definitions of Contract Year, Expiry Date & Monthly Transmission Charges above) is as below: -

**Illustration-1: In case the Project Elements achieve COD as per Schedule**

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

| Element No. | Completion Schedule in Months | Scheduled CoD of the Element | Actual CoD of the Element | % Charges recoverable on Scheduled CoD of the Element |
|---|---|---|---|---|
| Element 1 | 28 | 1-Feb-2018 | 1-Feb-2018 | 25% |
| Element 2 | 38 | 1-Dec-2018 | 1-Dec-2018 | 75% |

Tariff Payable as follows:

| Transmission Charges for Element 1 | | | Transmission Charges for Element 2 | | |
|---|---|---|---|---|---|
| 1-Feb-18 to 31-Mar-18 | 140 X 25% X ((28+31)/365) | 5.65 | | -- | 0.00 |
| 1-Apr-18 to 30-Nov-18 | 140 X 25% X (244/365) | 23.39 | | -- | 0.00 |
| 1-Dec-18 to 31-Mar-19 | 140 X 100% X (121/365) | | | | 46.41 |
| 2 | 140 X 100% X 1 | | | | 140 |
| 3 | 140 X 100% X 1 | | | | 140 |
| 4 | 140 X 100% X 1 | | | | 140 |
| 5 | 140 X 100% X 1 | | | | 140 |
| ..... | | | | | |
| ..... | | | | | |
| 36 (1-Apr to 30-Nov) | 140 X 100% X (244/365) | | | | 93.59 |

**Illustration-2: In case of extension of Scheduled COD as per Article 4.4.1 & 4.4.2 of this Agreement**

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

| Element No. | Completion Schedule in Months | Scheduled CoD of the Element | Actual CoD of the Element | % Charges recoverable on Scheduled CoD of the Element |
|---|---|---|---|---|
| Element 1 | 20 | 1-Feb-2018 | 1-Jul-2018 | 25% |
| Element 2 | 28 | 1-Oct-2018 | 1-Dec-2018 | 75% |

Tariff Payable as follows:

| **Transmission Charges for Element 1** | | | **Transmission Charges for Element 2** | | |
|---|---|---|---|---|---|
| 1-Feb-18 to 31-Mar-18 | -- | 0.00 | | -- | 0.00 |
| 1-Apr-18 to 30-Jun-18 | -- | 0.00 | | -- | 0.00 |
| 1-Jul-18 to 30-Nov-18 | 140 X 25% X (153/365) | 14.67 | | -- | 0.00 |
| 1-Dec-18 to 31-Mar-19 | 140 X 100% X (121/365) | | | | 46.41 |
| 2 | 140 X 100% X 1 | | | | 140 |
| 3 | 140 X 100% X 1 | | | | 140 |
| 4 | 140 X 100% X 1 | | | | 140 |
| 5 | 140 X 100% X 1 | | | | 140 |
| ..... | | | | | |
| ..... | | | | | |
| 36 (1-Apr to 30-Nov) | 140 X 100% X (244/365) | | | | 93.59 |

**Illustration-3: In case of delay in achieving COD of Project & all individual Elements (COD of the Project achieved in Contract Year 1)**

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

| Element No. | Completion Schedule in Months | Scheduled CoD of the Element | Actual CoD of the Element | % Charges recoverable on Scheduled CoD of the Element |
|---|---|---|---|---|
| Element 1 | 20 | 1-Feb-2018 | 1-Dec-2018 | 25% |
| Element 2 | 28 | 1-Oct-2018 | 1-Dec-2018 | 75% |

Tariff Payable as follows:

| **Transmission Charges for Element 1** | | | **Transmission Charges for Element 2** | | |
|---|---|---|---|---|---|
| 1-Feb-18 to 31-Mar-18 | -- | 0.00 | | -- | 0.00 |
| 1-Apr-18 to 30-Sept-18 | -- | 0.00 | | -- | 0.00 |
| 1-Oct-18 to 30-Nov-18 | -- | 0.00 | 1-Oct-18 to 30-Nov-18 | -- | 0.00 |
| 1-Dec-18 to 31-Mar-19 | 140 X 100% X (121/365) | | | | 46.41 |
| 2 | 140 X 100% X 1 | | | | 140 |
| 3 | 140 X 100% X 1 | | | | 140 |
| 4 | 140 X 100% X 1 | | | | 140 |
| 5 | 140 X 100% X 1 | | | | 140 |
| ..... | | | | | |
| ..... | | | | | |
| 36 (1-Apr to 30-Nov) | 140 X 100% X (244/365) | | | | 93.59 |

**Illustration-4: In case of delay in achieving COD of Project & all individual Elements (COD of the Project achieved in Contract Year other than Contact Year 1)**

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

| Element No. | Completion Schedule in Months | Scheduled CoD of the Element | Actual CoD of the Element | % Charges recoverable on Scheduled CoD of the Element |
|---|---|---|---|---|
| Element 1 | 38 | 1-Oct-2019 | 1-May-2020 | 25% |
| Element 2 | 38 | 1-Oct-2019 | 1-May-2020 | 75% |

Tariff Payment to be paid as:

| Transmission Charges for Element 1 | | | Transmission Charges for Element 2 | | |
|---|---|---|---|---|---|
| 1-Oct-19 to 31-Mar-20 | -- | 0.00 | 1-Oct-19 to 31-Mar-20 | -- | 0.00 |
| 1-Apr-20 to 30-Apr-20 | - | 0.00 | 1-Apr-20 to 30-Apr-20 | - | 0.00 |
| 1-May-20 to 31-Mar-21 | 140 X 100% X (335/365) | | | | 128.49 |
| 2 | 140 X 100% X 1 | | | | 140 |
| 3 | 140 X 100% X 1 | | | | 140 |
| 4 | 140 X 100% X 1 | | | | 140 |
| 5 | 140 X 100% X 1 | | | | 140 |
| ..... | | | | | |
| ..... | | | | | |
| 36 (1-Apr to 30-Apr) | 140 X 100% X (30/ 365) | | | | 11.51 |

**Illustration5: In case of delay in achieving COD of Element but Project COD achieved on time**

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

| Element No. | Completion Schedule in Months | Scheduled CoD of the Element | Actual CoD of the Element | % Charges recoverable on Scheduled CoD of the Element |
|---|---|---|---|---|
| Element 1 | 20 | 1-Feb-2018 | 1-Jul-2018 | 25% |
| Element 2 | 30 | 1-Dec-2018 | 1-Dec-2018 | 75% |

Tariff Payable as follows:

| Transmission Charges for Element 1 | | | Transmission Charges for Element 2 | | |
|---|---|---|---|---|---|
| 1-Feb-18 to 31-Mar-18 | -- | 0.00 | | -- | 0.00 |
| 1-Apr-18 to 30-Jun-18 | -- | 0.00 | | -- | 0.00 |

| | | | | | |
|---|---|---|---|---|---|
| 1-Jul-18 to 30-Nov-18 | 140 X 25% X (153/365) | 14.67 | | -- | 0.00 |
| 1-Dec-18 to 31-Mar-19 | 140 X 100% X (121/365) | | | | 46.41 |
| 2 | 140 X 100% X 1 | | | | 140 |
| 3 | 140 X 100% X 1 | | | | 140 |
| 4 | 140 X 100% X 1 | | | | 140 |
| 5 | 140 X 100% X 1 | | | | 140 |
| ..... | | | | | |
| ..... | | | | | |
| 36 (1-Apr to 30-Nov) | 140 X 100% X (244/365) | | | | 93.59 |

**Illustration-6: In case of early commissioning of Project**

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

| Element No. | Completion Schedule in Months | Scheduled CoD of the Element | Actual CoD of the Element | % Charges recoverable on Scheduled CoD of the Element |
|---|---|---|---|---|
| Element 1 | 38 | 1-Oct-2019 | 1-Jul-2019 | 25% |
| Element 2 | 38 | 1-Oct-2019 | 1-Jul-2019 | 75% |

Tariff Payment to be paid as:

| **Transmission Charges for Element 1** | | **Transmission Charges for Element 2** |
|---|---|---|
| 1-July-19 to 31-Mar-20 | 140 X 100% X (274/365) | 105.09 |
| 2 | 140 X 100% X 1 | 140 |
| 3 | 140 X 100% X 1 | 140 |
| 4 | 140 X 100% X 1 | 140 |
| 5 | 140 X 100% X 1 | 140 |
| ..... | | |
| ..... | | |
| 36 (1-Apr to 30-Jun) | 140 X 100% X (91/365) | 34.91 |

**Illustration-7: In case of early commissioning of an element**

Quoted Transmission Charges: **Rs. 140 Million**

Completion Schedule:

| Element No. | Completion Schedule in Months | Scheduled CoD of the Element | Actual CoD of the Element | % Charges recoverable on Scheduled CoD of the Element |
|---|---|---|---|---|
| Element 1 | 38 | 1-Oct-2019 | 1-Apr-2019 | 25% |
| Element 2 | 38 | 1-Jul-2019 | 1-Jul-2019 | 75% |

Tariff Payment to be paid as:

| **Transmission Charges for Element 1** | | | **Transmission Charges for Element 2** | | |
|---|---|---|---|---|---|
| 1-Apr-2019 to 30-Jun-19 | 140 X 25% X (91/365) | 8.72 | 1-Apr-2019 to 30-Jun-19 | -- | 0.00 |
| 1-July-19 to 31-Mar-20 | 140 X 100% X (274/ 365) | | | | 105.09 |
| 2 | 140 X 100% X 1 | | | | 140 |
| 3 | 140 X 100% X 1 | | | | 140 |
| 4 | 140 X 100% X 1 | | | | 140 |
| 5 | 140 X 100% X 1 | | | | 140 |
| ..... | | | | | |
| ..... | | | | | |
| 36 (1-Apr-30-Jun) | 140 X 100% X (91/365) | | | | 34.91 |

The Transmission Charges shall be payable on monthly basis as computed above.

**1.2 Computation of Monthly Transmission Charges**

The Monthly Transmission Charges for any month m in a Contract Year n shall be calculated as below:

**For AC System:**

a. If Actual Transmission System Availability for the month m of contract year n is greater than or equal to 98% and less than or equal to 98.5%;

Monthly Transmission Charges MTC(m) = Tmn *1

a. If Actual Transmission System Availability for the month m of contract year n exceeds 98.5% and less than or equal to 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 98.5%)

c. If Actual Transmission System Availability for the month m of contract year n is greater than 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (99.75% / 98.5%)

d. If Actual Transmission System Availability for the month m of contract year n is less than 98%and greater than or equal to 95.00%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 98%)

e. If Actual Transmission System Availability for the month m of contract year falls below 95%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 98%) - 0.02 * (Tmn * (AA/ 95%)

**For DC System:**

a. If Actual Transmission System Availability for the month m of contract year n is greater than or equal to 95% and less than or equal to 96%;

Monthly Transmission Charges MTC(m) = Tmn *1

b. If Actual Transmission System Availability for the month m of contract year n exceeds 96% and less than or equal to 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 96%)

c. If Actual Transmission System Availability for the month m of contract year n is greater than 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (99.75% / 96%)

d. If Actual Transmission System Availability for the month m of contract year n is less than 95% and greater than or equal to 92.00%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 95%)

e. If Actual Transmission System Availability for the month m of contract year falls below 92%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 95%) - 0.02 * (Tmn * (AA/ 92%)

**For Synchronous Condenser Station:**

If Actual Transmission System Availability for the month m of contract year n is greater than or equal to 97% and less than or equal to 98.5

Monthly Transmission Charges MTC(m) = Tmn *1

If Actual Transmission System Availability for the month m of contract year n exceeds 98.5% and less than or equal to 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 98.5%)

If Actual Transmission System Availability for the month m of contract year n is greater than 99.75%;

Monthly Transmission Charges MTC(m) = Tmn * (99.75% / 98.5%)

If Actual Transmission System Availability for the month m of contract year n is less than 97% and greater than or equal to 95.00%

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 97%)

If Actual Transmission System Availability for the month m of contract year falls below 95%;

Monthly Transmission Charges MTC(m) = Tmn * (AA/ 97%) - 0.02 * (Tmn* (AA/ 95%))

where:

- AA is the actual Availability, as certified by RPC, as per procedure provided in Schedule 6.
- m is the month in Contract Year 'n'
- Tmn= Transmission Charges for the month 'm' in Contract Year 'n' = (=Transmission Charge/ no. of days in the Year n)* no. of days in month m

Provided, no Transmission Charges shall be paid during the period for which the RLDC has not allowed the operation of the Element/Project due to the failure of the TSP to operate it as per the provisions of the Grid Code.

**1.3 RLDC Fee & Charges**

The payment of RLDC fee & charges, in accordance with relevant regulations of CERC, shall be the responsibility of the TSP.

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

FATEHGARH II TRANSMISSION LTD. NEW DELHI

**Schedule: 5**

**Quoted Transmission Charges**

**[Quoted Transmission Charges from Annexure - 21 of the RFP of the Selected Bidder to be inserted here]**

**[To be incorporated from the Bid of the Selected Bidder submitted during the e-reverse auction after its selection]**

**Quoted Transmission Charges: Rs. 1233.00 Million Per Annum**

**Proportionate Transmission Charges payable for each Element of the Project:**

| S. No. | Name of the Transmission Element | Scheduled COD in months from Effective Date | Percentage of Quoted Transmission Charges recoverable on Scheduled COD of the Element of the Project | Element(s) which are pre-required for declaring the commercial operation (COD) of the respective Element |
|---|---|---|---|---|
| 1 | 2 nos. of Synchronous Condensers (SynCon) units* at 400 kV level of 765/400/220 kV Fatehgarh-II PS along with 2 nos. of 400 kV bays<br><br>*1 No. of SynCon unit comprises dynamic support of +300MVAr/-200MVAr (Minimum) & Short Circuit contribution at PCC of 1200MVA (Minimum) | 30 months (28.02.2029) | 100% | N.A. |
| Note: POWERGRID shall provide space (free of cost) for 2 Nos. (SynCon) units at Fatehgarh II PS along with 2 Nos. of 400 kV bays | | | | |

**Schedule: 6**

**Appendix –IV to Central Electricity Regulatory Commission (Terms and Conditions of Tariff) Regulations, 2024**

## Procedure for Calculation of Transmission System Availability Factor for a Month

1. Transmission system availability factor for nth calendar month ("TAFPn") shall be calculated by the respective transmission licensee, verified by the concerned Regional Load Dispatch Centre (RLDC) and certified by the Member-Secretary, Regional Power Committee of the region concerned, separately for each AC and HVDC transmission system and grouped according to sharing of transmission charges. In the case of the AC system, transmission System Availability shall be calculated separately for each Regional Transmission System and inter-regional transmission system. In the case of the HVDC system, transmission System Availability shall be calculated on a consolidated basis for all inter-state HVDC systems.

2. Transmission system availability factor for nth calendar month ("TAFPn") shall be calculated by considering the following:

   i) **AC transmission lines**: Each circuit of AC transmission line shall be considered as one element;

   ii) **Inter-Connecting Transformers (ICTs):** Each ICT bank (three single- phase transformers together) shall form one element;

   iii) **Static VAR Compensator (SVC):** SVC, along with SVC transformer, shall form one element;

   iv) **Bus Reactors or Switchable line reactors:** Each Bus Reactors or Switchable line reactors shall be considered as one element;

   v) **HVDC Bi-pole links:** Each pole of the HVDC link, along with associated equipment at both ends, shall be considered as one element;

   vi) **HVDC back-to-back station:** Each block of the HVDC back-to-back station shall be considered as one element. If the associated AC line (necessary for the transfer of inter-regional power through the HVDC back-to-back station) is not available, the HVDC back-to-back station block shall also be considered unavailable;

   vii) **Static Synchronous Compensation ("STATCOM"):** Each STATCOM shall be considered as a separate element.

3. The Availability of the AC and HVDC portion of the Transmission system shall be calculated by considering each category of transmission elements as under:

**TAFPn (in %) for AC system:**

$$= \frac{(o \times AVo) + (p \times AVp) + (q \times AVq) + (r \times AVr) + (u \times AVu)}{(o + p + q + r + u)} \times 100$$

Where,

| | | |
|---|---|---|
| o | = | Total number of AC lines. |
| AVo | = | Availability of o number of AC lines |
| p | = | Total number of bus reactors/switchable line reactors |
| AVp | = | Availability of p number of bus reactors/switchable line reactors |
| q1 | = | Total number of ICTs |
| AVq | = | Availability of q number of ICTs |
| r | = | Total number of SVCs |
| AVr | = | Availability of r number of SVCs |
| u | = | Total number of STATCOM |
| AVu | = | Availability of u number of STATCOM |

**TAFMn (in %) for HVDC System:**

$$= \frac{\sum_{x=1}^{x} Cxbp\,(act) \times AVxbp + \sum_{y=1}^{t} Cy\,(act)btb \times AVybtb}{\sum_{x=1}^{s} Cxbp + \sum_{y=1}^{t} Cy\,btb} \times 100$$

Where

| | | |
|---|---|---|
| Cxbp(act) | = | Total actual operated capacity of $x^{th}$ HVDC pole |
| Cxbp | = | Total rated capacity of $x^{th}$ HVDC pole |
| AVxbp | = | Availability of $x^{th}$ HVDC pole |
| Cybtb(act) | = | Total actual operated capacity of $y^{th}$ HVDC back-to-back station block |
| Cybtb | = | Total rated capacity of $y^{th}$ HVDC back-to-back station block |
| AVybtb | = | Availability of $y^{th}$ HVDC back-to-back station block |
| s | = | Total no of HVDC poles |
| t | = | Total no of HVDC Back to Back blocks |

4. The availability for each category of transmission elements shall be calculated based on the weightage factor, total hours under consideration and non-available hours for each element of that category. The formulae for calculation of the Availability of each category of the transmission elements are as per **Appendix-V**. The weightage factor for each category of transmission elements shall be considered as under:

   (a) For each circuit of the AC line – The number of sub-conductors in the line multiplied by ckt-km;

   (b) For each HVDC pole- The rated MW capacity x ckt-km;

   (c) For each ICT bank – The rated MVA capacity;

   (d) For SVC- The rated MVAr capacity (inductive and capacitive);

   (e) For Bus Reactor/switchable line reactors – The rated MVAr capacity;

   (f) For HVDC back-to-back stations connecting two Regional grids- Rated MW capacity of each block; and

   (g) For STATCOM – Total rated MVAr Capacity.

5. The transmission elements under outage due to the following reasons shall be deemed to be available:

   i. Shut down availed for maintenance of another transmission scheme or construction of new element or renovation/upgradation/additional capitalization in an existing system approved by the Commission. If the other transmission scheme belongs to the transmission licensee, the Member Secretary, RPC may restrict the deemed availability period to that considered reasonable by him for the work involved. In case of a dispute regarding deemed availability, the matter may be referred to the Chairperson, CEA, within 30 days.

   ii. Switching off of a transmission line to restrict over-voltage and manual tripping of switched reactors as per the directions of the concerned RLDC.

   iii. Shut down of a transmission line due to the Project(s) of NHAI, Railways and Border Road Organization, including for shifting or modification of such transmission line or any other infrastructure project approved by Ministry of Power. Member Secretary, RPC may restrict the deemed availability period to that considered reasonable by him for the work involved; Provided that apart from the deemed availability, any other costs involved in the process of such shutdown of transmission line shall not be borne by the DICs.

   Provided that such deemed availability shall be considered only for the period for which DICs are not affected by the shutdown of such transmission line.

6. For the following contingencies, the outage period of transmission elements, as certified by the Member Secretary, RPC, shall be excluded from the total time of the element under the period of consideration for the following contingencies:

   i) Outage of elements due to force majeure events beyond the control of the transmission licensee. However, whether the same outage is due to force majeure (not design failure) will be verified by the Member Secretary, RPC. A reasonable restoration time for the element shall be considered by the Member Secretary, RPC, and any additional time taken by the transmission licensee for restoration of the element beyond the reasonable time shall be treated as outage time attributable to the transmission licensee. Member Secretary, RPC may consult the transmission licensee or any expert for estimation of reasonable restoration time. Circuits restored through ERS (Emergency Restoration System) shall be considered as available;

   ii) Outage caused by grid incident/disturbance not attributable to the transmission licensee, e.g. faults in a substation or bays owned by another agency causing an outage of the transmission licensee's elements, and tripping of lines, ICTs, HVDC, etc., due to grid disturbance. However, if the element is not restored on receipt of direction from RLDC while normalizing the system following grid incident/disturbance within reasonable time, the element will be considered not available for the period of outage after issuance of RLDC's direction for restoration;

   iii) The outage period which can be excluded for the purpose of sub-clause (i) and (ii) of this clause shall be declared as under:

      a. Maximum up to one month by the Member Secretary, RPC;

      b. Beyond one month and up to three months after the decision at RPC;

      c. Beyond three months by the Commission for which the transmission license shall approach the Commission along with reasons and steps taken to mitigate the outage and restoration timeline.

7. Time frame for certification of transmission system availability: (1) The following schedule shall be followed for certification of availability by the Member Secretary of the concerned RPC:

- Submission of outage data along with documentary proof (if any) and TAFPn calculation

by Transmission Licensees to RLDC/ constituents
– By the 5th of the following month;

- Review of the outage data by RLDC / constituents and forward the same to respective RPC – by 20th of the month;
- Issue of availability certificate by respective RPC – by the 3rd of the next month.

## Appendix-V

## FORMULAE FOR CALCULATION OF AVAILABILITY OF EACH CATEGORY OF TRANSMISSION ELEMENTS

**For AC transmission system**

AVo(Availability of o no. of AC lines) = $\frac{\sum_{i=1}^{o} Wi(Ti - TNAi)/Ti}{\sum_{i=1}^{o} Wi}$

AVq(Availability of q no. of ICTs) = $\frac{\sum_{k=1}^{q} Wk(Tk - TNAk)/Tk}{\sum_{k=1}^{q} Wk}$

AVr(Availability of r no. of SVCs) = $\frac{\sum_{l=1}^{r=1} Wl(Tl - TNAl)/Tl}{\sum_{l=1}^{r} Wl}$

AVp(Availability of p no. of Switched Bus reactors) = $\frac{\sum_{m=1}^{p} Wm(Tm - TNAm)/Tm}{\sum_{m=1}^{p} Wm}$

AVu(Availability of u no. of STATCOMs) = $\frac{\sum_{n=1}^{u} Wn(Tn - TNAn)/Tn}{\sum_{n=1}^{u} Wn}$

$AV_{xbp}$(Availability of an individual HVDC pole) = $\frac{(Tx - TN)}{Tx}$

$AV_{ybtb}$ (Availability of an individual HVDC Back-to-back Blocks) = $\frac{(Ty - TNAy)}{Ty}$

**For the HVDC transmission system**

For the new HVDC commissioned but not completed twelve months:

For first 12 months: [($AV_{xbp}$ or $AV_{ybtb}$)x95%/85%], subject to a ceiling of 95%.

Where,

| | | |
|---|---|---|
| o | = | Total number of AC lines; |
| AVo | = | Availability of o number of AC lines; |
| p | = | Total number of bus reactors/switchable line reactors; |
| AVp | = | Availability of p number of bus reactors/switchable line reactors; |
| q | = | Total number of ICTs; |
| AVq | = | Availability of q number of ICTs; |
| r | = | Total number of SVCs; |
| AVr | = | Availability of r number of SVCs;. |
| U | = | Total number of STATCOM; |
| AVu | = | Availability of u number of STATCOMs; |
| *Wi* | = | Weightage factor for *i*th transmission line; |
| *Wk* | = | Weightage factor for *k*th ICT; |
| *Wl* | = | Weightage factors for inductive & capacitive operation of *l*th SVC; |
| Wm | = | Weightage factor for mth bus reactor; |
| Wn | = | Weightage factor for nth STATCOM. |

| | |
|---|---|
| *Ti*, , *Tk*, *Tl*, , | The total hours of $i^{th}$ AC line, $k^{th}$ ICT, $l^{th}$ SVC, $m^{th}$ Switched Bus Reactor |
| *Tm*, *Tn*, *Tx*, *Ty* | & $n^{th}$ STATCOM, $x^{th}$ HVDC pole, $y^{th}$ HVDC back-to-back blocks during the period under consideration (excluding time period for outages not attributed to transmission licensee for the reasons given in Para 5 of the procedure) |
| $T_{NAi}$ ,$T_{NAk}$ $T_{NAl}$, $T_{NAm}$, | The non-availability hours (excluding the time period for outages not attributable to transmission licensee taken as deemed availability as $T_{NAn}$, $T_{NAx}$, $T_{NAy}$ per Para 5 of the procedure) for $i^{th}$ AC line, $k^{th}$ ICT, $l^{th}$ SVC , $m^{th}$ Switched Bus Reactor, $n^{th}$ STATCOM, $x^{th}$ HVDC pole and $y^{th}$HVDC back-to-back block. |

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**Schedule: 7**

**Entire Bid (both financial bid and technical bid) of the Selected Bidder to be attached here**

Bid dated 02.07.2026 and 16.07.2026 shall be an integral part of this Agreement.

**Schedule: 8**

**Contract Performance Guarantee**

**(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution. Foreign entities submitting Bids are required to follow the applicable law in their country.)**

In consideration of the FATEHGARH II TRANSMISSION LIMITED , Urjanidhi, First Floor, Barakhamba Lane- 1, Connaught Place, New Delhi, Central Delhi- 110001, Delhi agreeing to undertake the obligations under the Transmission Service Agreement dated .....and the other RFP Project Documents and the Nodal Agency and the PFC Consulting Limited, agreeing to execute the *RFP Project Documents* with the Selected Bidder, regarding setting up the Project, the ..... [Insert name and address of the bank issuing the guarantee and address of the head office] (hereinafter referred to as "Guarantor Bank") hereby agrees unequivocally, irrevocably and unconditionally to pay to ..... (being the Nodal Agency) at .....[Insert the Place from the address of the Nodal Agency indicated in the TSA] forthwith on demand in writing from the Nodal Agency or any Officer authorized by it in this behalf, any amount up to and not exceeding Rupees ..... Crores (Rs. .....) only [Insert the amount of the bank guarantee] on behalf of FATEHGARH II TRANSMISSION LIMITED.

This guarantee shall be valid and binding on the Guarantor Bank up to and including .....and shall not be terminable by notice or any change in the constitution of the Bank or the term of the Transmission Service Agreement or by any other reasons whatsoever and our liability hereunder shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed with or without our knowledge or consent, by or between parties to the respective agreement.

Our liability under this Guarantee is restricted to Rs. ..... Crores (Rs. .....) only. Our Guarantee shall remain in force until ..... [Insert the date of validity of the Guarantee as per Article 3.1.2 of this Agreement]. The Nodal Agency, shall be entitled to invoke this Guarantee up to three hundred sixty five (365) days of the last date of the validity of this Guarantee.

The Guarantor Bank hereby expressly agrees that it shall not require any proof in addition to the written demand from ..... (in its roles as the Nodal Agency), made in any format, raised at the above mentioned address of the Guarantor Bank, in order to make the said payment to Nodal Agency.

The Guarantor Bank shall make payment hereunder on first demand without restriction or conditions and notwithstanding any objection by

..... [Insert name of the Selected Bidder], ..... [Insert name of the TSP] and / or any other person. The Guarantor Bank shall not require Nodal Agency to justify the invocation of this BANK GUARANTEE, nor shall the Guarantor Bank have any recourse against Nodal Agency in respect of any payment made hereunder.

**THIS BANK GUARANTEE** shall be interpreted in accordance with the laws of India.

The Guarantor Bank represents that this BANK GUARANTEE has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor Bank in the manner provided herein.

**THIS BANK GUARANTEE** shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor Bank.

**THIS BANK GUARANTEE** shall be a primary obligation of the Guarantor Bank and accordingly Nodal Agency shall not be obliged before enforcing this BANK GUARANTEE to take any action in any court or arbitral proceedings against **FATEHGARH II TRANSMISSION LIMITED** or the Selected Bidder, as the case may be, to make any claim against or any demand on **FATEHGARH II TRANSMISSION LIMITED** or the Selected Bidder, as the case may be, or to give any notice to **FATEHGARH II TRANSMISSION LIMITED** or the Selected Bidder, as the case may be, or to enforce any security held by the Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against **FATEHGARH II TRANSMISSION LIMITED** or the Selected Bidder, as the case may be.

The Guarantor Bank acknowledges that this BANK GUARANTEE is not personal to Nodal Agency and may be assigned, in whole or in part, (whether absolutely or by way of security) by Nodal Agency to any entity to whom the Nodal Agency is entitled to assign its rights and obligations under the Transmission Service Agreement.

The Guarantor Bank hereby agrees and acknowledges that Nodal Agency shall have a right to invoke this Bank Guarantee either in part or in full, as it may deem fit.

Notwithstanding anything contained hereinabove, our liability under this Guarantee is restricted to Rs. ..... Crores (Rs. .....) only and it shall remain in force until .....[Date to be inserted on the basis of Article 3.1.2of the Transmission Service Agreement], with an additional claim period of three hundred sixty five (365) days thereafter. This BANK GUARANTEE shall be extended from time to time for such period, as may be desired by FATEHGARH II TRANSMISSION LIMITED. We are liable to pay the guaranteed amount or any part thereof under this Bank Guarantee only if Nodal Agency serves upon us a written claim or demand.

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

FATEHGARH II TRANSMISSION LTD. NEW DELHI

**In witness where of:**

Signature .....

Name: .....

Power of attorney No.: .....

**For:**

..... [Insert Name of the Bank]

**Banker's Seal and Full Address, including mailing address of the Head Office**






## SCHEDULE 8A: FORMAT FOR SURETY INSURANCE CONTRACT

**(To be on non-judicial stamp paper of appropriate value as per Stamp Act relevant to place of execution.**

**Foreign entities submitting Bids are required to follow the applicable law of India)**

In consideration of the.....[Insert name of the SPV or Selected Bidder on behalf of SPV or Lead Member in case of the Consortium, with address] (hereinafter referred to as the 'Principal Debtor' for the purposes of this Surety Insurance Contract as provided in Section 126 of the Indian Contract Act, 1872) having been selected to undertake the Transmission Project on the terms and conditions contained in the Transmission Service Agreement dated ...../ to be executed as per the Model Transmission Service Agreement provided along with the Request for Proposal ('RFP') and other RFP Project Documents, subject to the condition of providing a Performance Bank Guarantee or a Surety Insurance Contract guaranteeing/insuring the due performance of the obligations under the Transmission Service Agreement, to the Central Transmission Utility of India Limited ('CTUIL') [herein after referred to as the Nodal Agency], the [Insert name and address of the Insurance Company issuing the Surety Insurance Contract and address of the head office] (hereinafter referred to as "Surety") hereby agrees unequivocally, irrevocably, absolutely and unconditionally, without demur, to pay to the Nodal Agency at [Insert Place and Address of the Nodal Agency indicated in Transmission Service Agreement, or to the designated Bank Account of the Nodal Agency, namely.....] forthwith on demand in writing from the Nodal Agency, or any Officer authorized by it in this behalf, intimated to the Surety at the address mentioned above, any amount as may be decided by the Nodal Agency not exceeding Rupees .....Crores (Rs.....) only [Insert the amount of the Surety Insurance Contract]

The Surety hereby acknowledges, accepts and confirms that the Surety has received from the Principal Debtor, by way of premium the entire consideration for the Surety to execute, in favour of the Nodal Agency, this Surety Insurance Contract, as extended by the Surety from time to time and assuming the obligation to pay to the Nodal Agency the amount in terms hereof, without any requirement for payment of any other consideration to the Surety by the Principal Debtor, or otherwise.

This Surety Insurance Contract shall be valid and binding on the Surety, as the principal obligation of the Surety to pay on demand by the Nodal Agency, and shall not be terminable by notice or any change in the constitution of the Surety or the term of the Transmission Service Agreement or by any other reasons whatsoever and the liability hereunder of the Surety shall not be impaired or discharged by any extension of time or variations or alternations made, given, or agreed (with or without the knowledge or consent of the Surety) by or between the Principal Debtor and the Nodal Agency.

The liability of the Surety under this Surety Insurance Contract is restricted to Rupees ..... Crores (Rs ) only. The Surety Insurance Contract shall remain in force until [Insert the date of validity of the Surety Insurance Contract]. The Nodal

Agency shall be entitled to invoke this Surety Insurance Contract up to three hundred sixty five (365) days after the last date of the validity of this Surety Insurance Contract.

The Surety hereby expressly agrees that it shall not require any proof except for the written demand from the Nodal Agency, containing the statement that the contractor has failed to meet its contractual obligations raised at the above mentioned address of the Surety (address of Surety office should be a place in NCR only) and the Surety shall pay the amount without reference to the Principal Debtor.

Any such demand made by the Nodal Agency on the Surety shall be conclusive and binding not withstanding any difference between the Nodal Agency and the Principal Debtor or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Surety undertakes not to revoke this guarantee during its currency without previous consent of the Nodal Agency and further agrees that the Surety Insurance Contract herein contained shall continue to be enforceable till the Nodal Agency discharges this contract or till the expiry of tenor(including Claim period) whichever is earlier.

The Surety shall make payment hereunder within two (02) working days on first demand without restriction or conditions and notwithstanding any objection by the Principal Debtor, namely, ..... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person. The Surety shall not require the Nodal Agency to justify the invocation of this Surety Insurance Contract, nor shall the Surety have any recourse against the Nodal Agency in respect of any payment made hereunder.

**This SURETY INSURANCE CONTRACT** shall be interpreted in accordance with the laws of India.

This SURETY INSURANCE CONTRACT is being executed by the Surety in terms of the IRDAI (Surety Insurance Contract) Guidelines, 2022 and the Surety hereby acknowledges, accepts and confirms that this Surety Insurance Contract shall be a Contract of Guarantee as provided under Section 126 of the Indian Contract Act, 1872 and further shall be covered by Section 14(3) (b) of the Insolvency and Bankruptcy Code, 2016 (as amended) shall be enforceable as such.

The Surety represents that this Surety Insurance Contract has been established in such form and with such content that it is fully enforceable in accordance with its terms as against the Surety in the manner provided herein.

This SURETY INSURANCE CONTRACT shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Surety.

In order to give effect to this surety Bond, the Nodal Agency shall be entitled to act as if the surety insurer were the principal debtor and any change in the constitution of the contractor and/or the surety insurer, whether by their absorption with any other body or corporation or otherwise, shall not in any way or manner affect the liability or obligation of the surety insurer under this surety Bond.

This SURETY INSURANCE CONTRACT shall be a primary obligation of the Surety as a Principal to pay on demand by the Nodal Agency and the Nodal Agency shall not be

obliged before enforcing this Surety Insurance Contract to take any action in any court or arbitral proceedings against the Principal Debtor, namely, ..... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be, to make any claim against or any demand on the Principal Debtor, namely, ..... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be, or to give any notice to Principal Debtor, namely..... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or ... ..... [Insert name of the TSP] and/or any other person, as the case may be, or to enforce any security held by the Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against the Principal Debtor, namely, ..... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be.

The Surety acknowledges that this Surety Insurance Contract is not personal to the Nodal Agency and may be assigned, in whole or in part, (whether absolutely or by way of security) by Nodal Agency to any entity to whom the Nodal Agency is entitled to assign its rights and obligations under the Transmission Service Agreement Provided that any such assignment shall be in compliance with the relevant provisions of the Insurance Act 1938

The Surety hereby agrees and acknowledges that the Nodal Agency shall have a right to invoke this Surety Insurance Contract either in part or in full, as it may deem fit. In case of invocation of this Surety Insurance Contract in part, besides making payment for the part of Surety Insurance Contract invoked, surety at the request of nodal agency shall amend the value of Surety Insurance Contract to the extent of balance amount.

The Surety undertakes not to revoke this Surety Contract during its currency, except with the previous express consent of the Nodal Agency in writing and declares and warrants that it has the power to issue this Surety Contract and the undersigned has full powers to do so on behalf of the Surety

In witness where of:

FATEHGARH II TRANSMISSION LTD. NEW DELHI

Signature.....

Name: .....

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

Power of attorney No/ Employee No. as applicable. :.....

For:

..... [Insert Name of the Surety- Insurance Company]

Banker's Seal and Full Address, including mailing address of the Head Office

Notes:

1. The Stamp Paper should be in the name of the Executing Insurance Company.

**SCHEDULE 8B: FORMAT FOR ISSUANCE OF PAYMENT ON ORDER INSTRUMENT**

Dear Sir,

1. Indian Renewable Energy Development Agency Limited ('IREDA")/PFC/REC has sanctioned a non-fund based limit loan of Rs. (Rupees..... Only) to M/s. ..... [Insert name of SPV or selected Bidder] under the Loan Agreement executed on ..... to execute Transmission System Projects.

2. In consideration of the .....[Insert name of the SPV or Selected Bidder on behalf of SPV or Lead Member in case of the Consortium, with address] for the purposes of this Payment on Order Instrument ("POI") having been selected to undertake the Transmission Project on the terms and conditions contained in the Transmission Service Agreement dated ...../ to be executed as per the draft of the Model Transmission Service Agreement provided along with the Request for Proposal („RFP") and other RFP Project Documents, subject to the condition of providing a POI guaranteeing the due performance of the obligations under the Transmission Service Agreement to the Nodal Agency/Central Transmission Utility of India Limited („CTUIL"), the.....[Insert name and address of the non-banking financial institutions(IREDA/PFC/REC) issuing the POI and address of the head office] (hereinafter referred to as "Guarantor") hereby agrees unequivocally, irrevocably, absolutely and unconditionally, without demur, to pay to the Nodal Agency at .....[Insert Place and Address of the Nodal Agency indicated in Transmission Service Agreement, or to the designated Bank Account of the Nodal Agency, namely.....] forthwith on demand in writing from the Nodal Agency, or any Officer authorized by it in this behalf, intimated to the Guarantor at the address mentioned above, any amount as may be decided by the Nodal Agency not exceeding Rupees....Crores (Rs ) only [Insert the amount of Payment on Order Instrument]

3. At the request of .....and on behalf of M/s. ....., [Insert name of SPV or selected Bidder] this Payment on Order Instrument (POI) for an amount of Rs ..... (Rupees .....) is being issued with IREDA/PFC/REC assuming the obligations to remit such amount to CTUIL from the sanctioned loan.

4. This Payment on Order Instrument comes into force immediately and IREDA/PFC/REC confirms that it has sufficient amount out of the sanctioned loan and shall maintain the required amount to pay under this Payment on Order Instrument, during the validity and claim period of this Payment on Order Instrument.

5. This POI has been issued by IREDA/PFC/REC utilizing the credit limit of M/s.....[Insert name of SPV or selected Bidder] IREDA/PFC/REC confirms that its liability to pay under this Payment on Order Instrument shall be primary and independent of whether at the time of

invocation of Payment on Order Instrument, the sanctioned funds are available or not and notwithstanding, the status of M/s. ..... [Insert name of SPV or selected Bidder] at the relevant time and to whether IREDA/PFC/REC is able to recover the amount advanced by it to the said developer.

6. IREDA/PFC/REC and M/s. [Insert name of SPV or selected Bidder] hereby acknowledges, accepts and confirms that this Payment on Order Instrument shall be a Contract of Guarantee as provided under Section 126 of the Indian Contract Act, 1872 and further shall be covered by Section 14(3) (b) of the Insolvency and Bankruptcy Code, 2016 (as amended) shall be enforceable as such.

7. IREDA/PFC/REC liability under this POI is restricted to Rupees Crores (Rs.....) only. This POI shall remain in force until..... [Insert the date of validity of the POI]. The Nodal Agency shall be entitled to invoke this POI up to three hundred sixty-five (365) days after the last date of the validity of this POI. This POI shall be extended from time to time for such period, as may be desired by the TSP.

8. The Guarantor hereby expressly agrees that it shall not require any proof except for the written demand from the Nodal Agency, raised at the above-mentioned address of the Guarantor (address of Guarantor office should be in NCR only) and the Guarantor shall pay the amount to the Nodal Agency without reference to the TSP.

9. Any such demand made by the Nodal Agency on the Guarantor shall be conclusive and binding not withstanding any difference between the Nodal Agency and the TSP or any dispute pending before any Court, Tribunal, Arbitrator or any other authority. The Guarantor undertakes not to revoke this guarantee during its currency without previous consent of the Nodal Agency and further agrees that the POI herein contained shall continue to be enforceable till the Nodal Agency discharges this contract or till the expiry of tenure or (including Claim period) whichever is earlier.

10. The Guarantor shall make payment hereunder within two (02) working days on first demand without restriction or conditions and notwithstanding any objection or disputes raised by the TSP, namely, ..... [Insert name of SPV], or [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person. The Guarantor shall not require the Nodal Agency to justify the invocation of this POI, nor shall the Guarantor have any recourse against the Nodal Agency in respect of any payment made hereunder.

11. This POI shall be interpreted in accordance with the laws of India.

12. The Guarantor represents that this POI Contract has been established in such

form and with such content that it is fully enforceable in accordance with its terms as against the Guarantor in the manner provided herein.

13. This POI shall not be affected in any manner by reason of merger, amalgamation, restructuring, liquidation, winding up, dissolution or any other change in the constitution of the Guarantor.

14. This POI Contract shall be a primary obligation of the Guarantor as a Principal to pay on demand by the Nodal Agency and the Nodal Agency shall not be obliged before enforcing this POI Contract to take any action in any court or arbitral proceedings against the TSP, namely, ..... [Insert name of SPV], or[Insert name of the Selected Bidder], or [Insert name of the TSP] and/or any other person, as the case may be to make any claim against or any demand on the TSP, namely, ..... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be, or to give any notice to TSP, namely..... [Insert name of SPV], or..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be, or to enforce any security held by the Nodal Agency or to exercise, levy or enforce any distress, diligence or other process against the TSP, namely, ..... [Insert name of SPV], or ..... [Insert name of the Selected Bidder], or ..... [Insert name of the TSP] and/or any other person, as the case may be.

15. The Guarantor acknowledges that this POI Contract is not personal to the Nodal Agency and may be assigned, in whole or in part, (whether absolutely or by way of security) by Nodal Agency to any entity to whom the Nodal Agency is entitled to assign its rights and obligations under the Transmission Service Agreement.

16. The Guarantor hereby agrees and acknowledges that the Nodal Agency shall have a right to invoke this POI Contract either in part or in full, as it may deem fit. In case of invocation of this POI Contract in part, besides making payment for the part of POI Contract invoked, Guarantor at the request of Nodal Agency shall amend the value of POI Contract to the extent of balance amount.

IN WITNESS WHERE OF the non- banking financial institutions through its authorized officer, has set its hand and stamp on this..... day of.....at.....

Signature..... Name:
..... Power of
attorney No.: ..... For:

.....[Insert Name of the non- banking financial institutions Company]

Seal and Full Address, including mailing address of the Head Office

**Schedule: 9**

**Methodology for determining the Relief Under Force Majeure Event & Change in Law during Construction Period**

The relief in the form of revision in tariff due to Force Majeure Event leading to extension of Scheduled COD for a period beyond one hundred eighty (180) days and/ or Change in Law during the construction period shall be as under:

$\Delta T = [(P \times d)] \div [1-(1+ d)^{(-n)}]$

Where,

$\Delta T$ = Change in Transmission Charges for each year

P = Sum of cumulative increase or decrease in the cost of the Project due to Change in Law and interest cost during construction corresponding to the period exceeding one hundred eighty (180) due to Force Majeure Event leading to extension of Scheduled COD for a period beyond one hundred eighty (180) days

n = number of years over which the Transmission Charges has to be paid

d = Discount rate as notified by the CERC, applicable on the Bid Deadline

The increase in Transmission Charges as stated above shall be applicable only if the value of increase in Transmission Charges as calculated above exceeds 0.30% (zero point three percent) of the quoted Transmission Charges of the TSP.

CENTRAL TRANSMISSION UTILITY OF INDIA LTD.

PIJUSH KANTI RAY

Digitally signed by PIJUSH KANTI RAY
Date: 2026.09.07 18:56:32 +05'30'

FATEHGARH II TRANSMISSION LTD. NEW DELHI

सत्यमेव जयते

# INDIA NON JUDICIAL

## Government of National Capital Territory of Delhi

₹100

**e-Stamp**

| | | |
|---|---|---|
| **Certificate No.** | : | **IN-DL62588968024260Y** |
| Certificate Issued Date | : | 27-Jul-2026 03:32 PM |
| Account Reference | : | IMPACC (IV)/ dl1074803/ DELHI/ DL-SWD |
| Unique Doc. Reference | : | SUBIN-DLDL1074803309829930994 37Y |
| Purchased by | : | FATEHGARH II TRANSMISSION LIMITED |
| Description of Document | : | Article Others |
| Property Description | : | Not Applicable |
| Consideration Price (Rs.) | : | 0 (Zero) |
| First Party | : | FATEHGARH II TRANSMISSION LIMITED |
| Second Party | : | Not Applicable |
| Stamp Duty Paid By | : | FATEHGARH II TRANSMISSION LIMITED |
| Stamp Duty Amount(Rs.) | : | 100 (One Hundred only) |

सत्यमेव जयते

NOTARY
Dhan Singh Nagar
Advocate
R. No.-16726
New Delhi, INDIA
Expiry Date
31-1-2030
GOVT. OF INDIA

Please write or type below this line

IN-DL62588968024260Y

# General Power of Attorney

Know all men by these presents, we **Fatehgarh II Transmission Limited** (hereinafter referred to as FIITL which expression shall unless repugnant to the context or meaning thereof, include its successors, administrators, and assigns) having its Registered Office at B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi – 110 016 do hereby constitute, appoint and authorize Shri Pijush Kanti Ray, Project Incharge of FIITL residing at 765/400/220kV Substation, Bhaniyana Road, Sanwta (Devikot), Jaisalmer - 345027 as our true and lawful attorney, to do in our name and our behalf, all of the acts or things hereinafter mentioned, that is to say:-

**Statutory Alert:**
1. The authenticity of this Stamp certificate should be verified at 'www.shcilestamp.com' or using e-Stamp Mobile App of Stock Holding. Any discrepancy in the details on this Certificate and as available on the website / Mobile App renders it invalid.
2. The onus of checking the legitimacy is on the users of the certificate.
3. In case of any discrepancy please inform the Competent Authority.

1. To constitute, and defend legal cases, sign and verify plaints, written statements, petitions and objections, memorandum of appeal, claims, affidavits, applications, re-applications and pleadings of all kinds and to file them in Central Electricity Regulatory Commission (CERC), State Electricity Regulatory Commissions (SERCs), Appellate Tribunal for Electricity (ATE) , Civil, Criminal or Revenue courts, Arbitration, Labour Court, Industrial Tribunal, High Court and Supreme Court, whether having original or appellate jurisdiction and before Government or Local Authorities or Registration Authorities, Tax Authorities, Tribunals, etc.

2. To appear, before various Courts / Tribunals / CERC / SERCs / Appellate Tribunal for Electricity.

3. To appoint any Advocate, Vakil, Pleader, Solicitor or any other legal practitioner as Attorney to appear and conduct case proceedings on behalf of the company and to sign Vakalatnama.

4. To compromise, compound or withdraw cases from any Court / Tribunal / CERC / SERCs / Appellate Tribunal for Electricity.

5. To file petitions/applications or affidavits before the Supreme Court / High Court / CERC / SERCs / Appellate Tribunal for Electricity and to obtain the copies of documents, papers, records etc.

6. To file and receive back documents, to deposit and withdraw money from Courts, Tribunal, Registrar's Office and other Government or Local Authorities and to issue valid receipts thereof.

7. To apply for and obtain refund of stamp duty or court fee, etc.

8. To issue notices and accept service of any summons, notices or orders issued by any Court / Tribunal / CERC / SERCs / Appellate Tribunal for Electricity on behalf of the Company.

9. To execute deeds, agreements, bonds and other documents and returns in connection with the affairs of the company and file them or cause to be filed for Registration, whenever necessary.

10. To issue Project Authority Certificate(s) in respect of contracts for Load Despatch & Communication Systems, Transmission Systems etc. and to lodge claims with the Railways, Transporters, Shipping Agents and Clearing Agents and to settle/compromise such claims.

11. To lodge claims with the Insurance companies, to settle/compromise such claims and on satisfactory settlement thereof, to issue letters of subrogation/power of attorney in favour of Insurance companies.

12. To execute, sign and file applications, undertakings, agreements etc. to or with the Central / State Government(s) / Body(ies) to obtain 'right of way' or any of other Right(s) / Privilege(s) etc.

13. To execute, sign and file applications, undertakings, agreements, bills, documents etc. to or with the Central / State Government(s) / Body(ies) and other authorities / entities including Central Transmission Utility (CTU)/Power System Operation Corporation Limited (POSOCO) / Central Electricity Authority (CEA)/ CERC with respect to Commissioning

NOTARY Bhim Singh Nagar R. No.-16726 New Delhi, INDIA Expiry Date 31-1-2030 GOVT. OF INDIA

of the Project, realization of Transmission charges, to obtain 'right of way' or any of other Right(s) / Privilege(s) etc.

14. To execute Transmission Service Agreement (TSA) with Central Transmission Utility of India Limited (CTUIL)

15. To execute Consultancy, Funding and other Agreements.

16. To act as administrator for e-filing process with CERC and other Statutory authorities.

17. Generally to do all lawful acts, necessary for the above mentioned purposes.

The Company hereby agrees to ratify and confirm all and whatsoever the said Attorney shall lawfully do execute or perform or cause to be done, executed or performed in exercise of the power or authority conferred under and by virtue of this Power of Attorney.

.....

Signed by the within named
**Fatehgarh II Transmission Limited**
through the hand of
Duly authorized by the Board to issue such Power of Attorney

**Dated this** 28th **day of** August **, 2026**

**Accepted**

.....

Signature of Attorney
**Name:** Shri Pijush Kanti Ray
**Designation:** Project Incharge, **Fatehgarh II Transmission Limited**
**Address:** 765/400/220kV Substation, Bhaniyana Road, Sanwta (Devikot), Jaisalmer - 345027

**Attested**

.....

(Signature of the Executant)
**Name:** Abhay Kumar
**Designation:** Chairman
**Address:** B-9, Qutab Institutional Area, Katwaria Sarai, New Delhi - 110 016

.....

**Signature and Stamp of Notary of the place of execution**

**WITNESS**

ATTESTED
NOTARY PUBLIC
DELHI

NOTARY
Dhan Singh Nagar
Advocate
R. No.-16726
New Delhi, INDIA
Expiry Date
31-1-2030
GOVT. OF INDIA

28 AUG 2026

PIJUSH KANTI RAY
Digitally signed by PIJUSH KANTI RAY
Date: 2026.09.07 18:56:55 +05'30'