

Name of SPV: **POWERGRID Bikaner IV Transmission Limited**

(Formerly known as “**Bikaner A Power Transmission Limited**”)

Name of Project: **Transmission system for evacuation of power from Rajasthan REZ Ph-IV (Part-3: 6GW) [Bikaner complex]: Part A**

1. Establishment of 6x1500 MVA, 765/400 kV and 6x500 MVA, 400/220 kV Bikaner-IV Pooling Station along with 2x240 MVar (765 kV) and 2x125 MVar (420kV) Bus Reactors at a suitable location near Bikaner
  - 765/400 kV 1500 MVA ICTs- 6 Nos. (19x500 MVA including one spare unit)
  - 400/220 kV 500 MVA ICTs -6 Nos.
  - 765 kV line bays – 2 Nos. (for 765 kV interconnection with Siwani S/s)
  - 400 kV line bays - 4 Nos. (For LILO of both ckts of Bikaner II PS- Bikaner III PS)
  - 765 kV ICT bays-6 Nos.
  - 400 kV ICT bays- 12 Nos.
  - 220 kV ICT bays- 6 Nos.
  - 240 MVar Bus Reactor-2 Nos. (7x80 MVar, including one spare unit)
  - 765 kV Bus reactor bays-2 Nos.
  - 125 MVar Bus Reactor-2 Nos.
  - 400 kV Bus reactor bays- 2 Nos.
  - 220 kV line bays: 6 Nos. (for RE connectivity)
  - 400 kV line bays (for RE connectivity)- 3 Nos.
  - 400 kV Sectionalizer bay: 1 set
  - 220 kV Sectionalizer bay: 1 set
  - 220 kV BC (2 Nos.) bays and 220 kV TBC (2 Nos.) bays
  - 400 kV bays: 2 Nos. (for STATCOM)
2. STATCOM (2x±300 MVar) along with MSC (4x125 MVar) and MSR (2x125 MVar) at Bikaner-IV PS
3. LILO of both ckts of Bikaner II PS-Bikaner III PS(Quad) direct 400 kV line at Bikaner-IV PS
4. Bikaner-IV PS – Siwani 765 kV D/C line along with 240 MVar switchable line reactor for each circuit at each end
  - 765 kV, 240 MVar switchable line reactors at Bikaner-IV PS end– 2 Nos.
  - 765 kV, 240 MVar switchable line reactors at Siwani S/s end– 2 Nos.
  - Switching equipment for 765 kV, 240 MVar switchable line reactors at Bikaner-IV PS end – 2 Nos.
  - Switching equipment for 765 kV, 240 MVar switchable line reactors at Siwani S/s end – 2 Nos.
5. Siwani– Fatehabad (PG) 400 kV D/C line (Quad)
6. Siwani – Patran (Indi Grid) 400 kV D/C line (Quad) along with 80 MVar switchable line reactor for each circuit at Siwani S/s end
  - 420 kV, 80 MVar switchable line reactors at Siwani S/s end– 2 Nos.

- Switching equipment for 420 kV, 80 MVAR switchable line reactors at Siwani S/s end – 2 Nos.
  - 400 kV GIS duct : 700 m at Patran S/s
7. 2 Nos. 400 kV line bays each at Fatehabad (PG) and Patran (Indi Grid) GIS S/s
- 400 kV line bays at Fatehabad (PG) S/s – 2 Nos.
  - 400 kV GIS line bays at Patran (Indi Grid) S/s – 2 Nos.
8. 2 Nos. 765 kV line bays at Siwani S/s
9. 4 Nos. 400 kV line bays at Siwani S/s