1.0 Applications for Connectivity and Long Term (Open) Access.

Applications for grant of Connectivity and Long Term (Open) Access (LTOA / LTA) have been received by POWERGRID from the following applicants in Jharkhand, Bihar and West Bengal of Eastern Region.

IPP generation projects in Jharkhand Complex.

Sl. No.	Project/Applicant	Unit Size	Ins. Capacity (MW)	LTOA (MW)/Connectivity	Time Frame	Applied for
1	Dumka (CESC)	2x300+1x600	1200	1100	2014-15	LTOA
2	ESSAR St-II	1x600	600	550	2013-14	LTOA
3	Jindal Steel and Power Ltd. (JSPL)	2x660	1320	1320	Jan,2015	Connectivity
4	Inland Power Limited	2x63+2x135	396	360	Mar'13 to Mar'16	Connectivity
		Total	**3516**	**3330**		

IPP generation projects in Bihar Complex.

Sl. No.	Project/Applicant	Unit Size	Ins. Capacity (MW)	LTA/LTOA/Connectivity (MW)	Time Frame	Applied for
1	JAS Infrastructure Capital Pvt Ltd.	2x660	1320	1200	Jan'14	Connectivity & LTA
2	Adhunik Power and Natural Resources	2x660	1320	1000	Dec' 14	Connectivity
3	Arissan Power Ltd	2x660	1320	1320	May'14	Connectivity
4	Kanti Bijlee Utpadan Nigam Limited	2x195	395	121.6	Nov'12	Connectivity & LTA
5	India Power Corporation (Bihar)Ltd	2x660	1320	1320	Jul'15	Connectivity
		Total	**5675**	**4961.6**		

IPP generation projects/Load Centre in West Bengal Complex.

Sl. No.	Project/Applicant	Unit Size	Ins. Capacity (MW)	LTA/Connectivity (MW)	Time Frame	Applied for
1	Himachal EMTA Power Ltd	2x250	500	500	Mar' 14	Connectivity
2	DPSC Ltd.	Load	1000	1000	Jul'14	Connectivity

The status of above projects was discussed in a meeting for Connectivity and Long Term Access held on 29-07-2011 at POWERGRID office, Gurgaon. Keeping in view the progress of above projects, it was decided to discuss following projects in the forthcoming Standing Committee meeting :

2.0 Projects under advanced stage of implementation :

The following projects may be granted connectivity / open access to the Inter State Transmission System along with the transmission system proposed.

- JAS Infrastructure (Bihar) : (IC-1320MW, Connectivity & LTA -1200MW)

  The developer informed that civil works have started at the project site. Regarding development of coal block, it was informed that TOR has already been completed and mining is expected by Jan-2014. It was observed that the project has made good progress; however, works on coal block development needs to be expedited. It was decided that the transmission system for this project shall be evolved and taken up in the next meeting of standing committee in Eastern region for approval of the regional constituents. Upon approval of the transmission system the same would be communicated to Empowered Committee for implementation through competitive bidding route.

  Accordingly, studies have been carried out to evolve a transmission system for evacuation of power from this generation project and following transmission system is proposed :

  Proposed Transmission System

  A number of generation projects are coming up near Banka area. Accodingly, a pooling station need to be established at Banka for pooling of power from the generation projects. However, for evacuation of power from JAS TPS, JAS – Banka 400kV D/c line has been planned which would be LILOed in the Banka pooling station with the development of other generation projects in the vicinity. Another high capacity transmission system has been planned from JAS to Gaya which would be utilized to disperse major power from the generation projects to the beneficiaries.

  - *Transmission system for immediate evacuation of the generation project*
    - JAS TPS – Banka (POWERGRID) 400kV D/c line with triple snowbird conductor
  - *Common Transmission system*
    - Banka – Gaya 400kV D/c (quad)

- Kanti Bijlee Utpadan Nigam Limited (Bihar) : (IC-395MW, Connectivity & LTA-121.6MW)

  No new transmission system is proposed as the Kanti generation project is extension of existing generation project and it is connected with 400/220kV

Muzaffarpur substation of POWERGRID through Kanti-Muzaffarpur(PG) 220kV D/c line. The above transmission system and the transmission system beyond Muzaffarpur would be adequate for evacuation and transfer of desired quantum of 121.6MW from Kanti project to its beneficiaries.

- Himachal EMTA Power Ltd : (IC-500MW, Connectivity-500MW)

  As informed by the generation developer, the commissioning schedule of the project is Sept.2014. It is noted that the project has made some progress and the transmission system may be discussed in the standing committee of Eastern Region for concurrence of the regional constituents.

  Proposed Transmission System

  – LILO of one ckt of Durgapur-Jamshedpur 400kV D/c line at Himachal EMTA.

  Note : Due to ROW problem the above line would be terminated at DSTPP (Andal-DVC) at present so as to form DSTPP(DVC) – Jamshedpur. One of the circuits of this line is proposed to be LILOed at Himachal EMTA Power Project.

- DPSC Ltd : (Demand-1000MW, Connectivity-1000MW)

  DPSC Ltd. has applied as a bulk consumer for drawl of 1000 MW. Subsequently, on query from the developer, it has been noted that the load growth in the area is expected to be of the order of about 500MW after 4-5 years. The developers requested for modification of the connectivity requirement accordingly to 500MW. However, after detailed discussions, it was opined that the primary responsibility of planning power supply to the distribution licensee in within the purview of the concerned state / STU. Accordingly, the planning for the same needs to be carried out on the advice of STU in West Bengal. It was decided that the applicant may get in touch with the STU to ensure the involvement in the arrangement of facilitating supply of power through ISTS.

  Proposed Transmission System

  – LILO of one ckt of Mejia-Maithon 400kV D/c line at DPSC.

3.0 Other Projects Applied for Connectivity & Open Access

The progress of the other generating projects applied for connectivity and open access as per the table given under para 1.0 need to be reviewed. The transmission system proposed for evacuation of power from these projects are given below :

3.1 Transmission system for immediate evacuation of the generation project

3.11 IPP generation projects in Jharkhand complex

- Essar – II (IC: 600 MW; LTOA : 550MW)
  - No new transmission system is proposed as the evacuation system for Essar-phase-I(1200 MW) project i.e. Essar – Jharkhand Pooling station 400kV D/c (quad moose) line would be adequate for stage-II as well for immediate evacuation of power. However, for evacuation of power beyond Jharkhand pooling point, Transmission System under phase-I of Jharkhand IPPs may be utilised.

- CESC – Dumka (IC: 1200 MW; LTOA : 1100MW)
  - LILO of one ckt of Kahalgaon-Maithon 400kV D/c lines at Dumka
  - Dumka – Banka 400kV D/c line with twin lapwing conductor

- Jindal Steel and Power Ltd (IC: 1200 MW; LTOA : 1100MW)
  - JSPL –Banka 400kV D/c line with twin lapwing conductor

- Inland Power Ltd (IC-396MW, Connectivity-360MW)

  The unit sizes for this project are 2x63 and 2x125. As per the given schedule, the cumulative installed capacity of the generation project would be as follows:

Mar'13	-	63 MW
Mar'14	-	63 MW
Mar'15	-	126 MW
Mar'16	-	126 MW

  The generation project has requested for LILO of Maithon RB-Ranchi 400kV line, however the capacity of the project would become 390MW only at Mar'16. The project is likely to be commissioned at March 2013 with a capacity of 63 MW. The 400kV connectivity requested for is not desirable for generation of such a small quantum. The project may be connected to nearest 220kV Gola substation, which is about 8km away and under construction by DVC through Inland – Gola 220kV D/c line.

3.12 IPP generation projects in Bihar complex

- Adhunik (Bihar) : (IC-1320MW, Connectivity-1000MW)
  - Adhunik – Banka 400kV D/c with high capacity (Triple Snowbird) conductor

- Arissan Power Ltd (Bihar) : (IC-1320MW, Connectivity-1320MW)
  - Arissan – Banka 400kV D/c with high capacity (Triple Snowbird) conductor

- India Power Corporation (Bihar) Ltd (IC-1320MW, Connectivity-1320MW)
  - LILO of one of the Barh-Gorakhpur 400kV D/c line at IPCL project.

3.2 Common Transmission system for the generation project

The under construction substation at Banka would be utilized for pooling of power from following projects :

- Dumka(CESC) : Jharkhand : 1200 / 1100 MW
- JSPL : Jharkhand : 1320 MW
- JAS Infra : Bihar : 1320 / 1200 MW
- Adhunik : Bihar : 1320 / 1000 MW
- Arissan : Bihar : 1320 MW

The following transmission system is proposed which would be common for the above generation projects :

– Banka – Gaya 400kV D/c (quad)
– Banka – Muzaffarpur via Darbhanga 400kV D/c line (quad)

4.0 Issues for deliberation

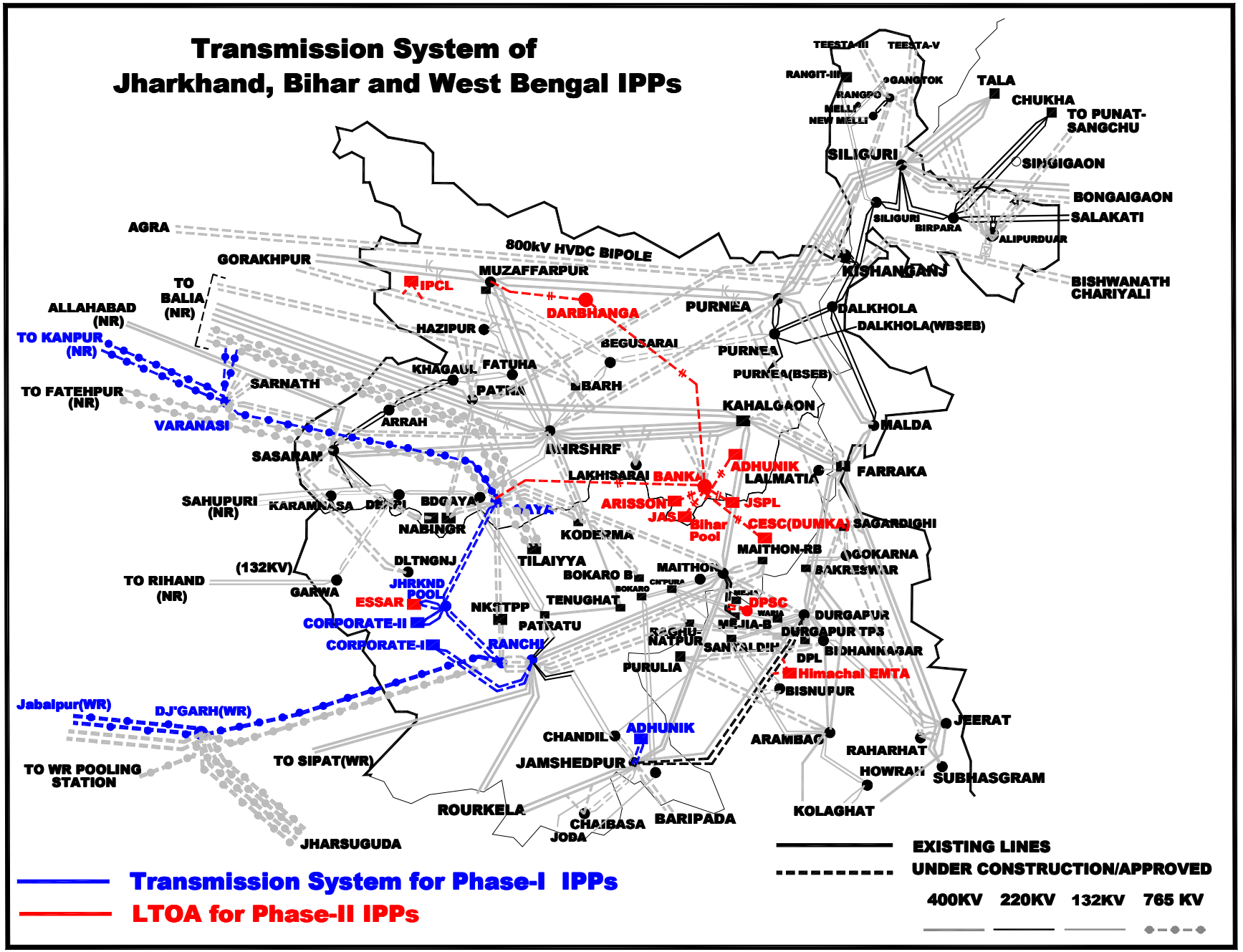
- Connectivity & LTA may be granted to following applicants as per capacity and transmission system explained in para 2.0.

  - JAS Infrastructure (Bihar)
  - Kanti Bijlee Utpadan Nigam Limited (Bihar)
  - Himachal EMTA Power Ltd (West Bengal)
  - DPSC Ltd (West Bengal)

- The above generation projects after making significant progress towards various milestones for development of power projects like acquisition of land, Forest / Environment Closure, Financial Closure, Award of EPC Contract, Release of Advance etc. would need to sign the BPTA and submit the Bank Guarantee for construction of transmission system. The zero date of transmission system implementation would start after fulfillment of above milestones.

- In the last meeting on 29-07-2011, the developer of Essar-II (IC : 600 MW, LTOA : 550 MW) project indicated that they do not intend to avail long term access for this project. The applicant was requested to apply afresh for connectivity as per 2009 regulation of CERC. The developer mentioned that they would review regarding requirement of LTOA and would revert back.

- The other developers should inform regarding any significant progress of the development of projects. Projects which have applied only for connectivity are requested to apply for long term access. The phasing and implementation of transmission system for generation projects would be carried out and the intimation of connectivity / long term access would be issued based on review regarding progress of development of the generation projects.


Transmission System of
Jharkhand, Bihar and West Bengal IPPs
TEESTA-III
TEESTA-V
RANGIT-III
GANGTOK
RANGPO
MELLI
NEW MELLI
TALA
CHUKHA
TO PUNAT-SANGCHU
SILIGURI
SINGIGAON
BONGAIGAON
SALAKATI
SILIGURI
BIRPARA
ALIPURDUAR
AGRA
800kV HVDC BIPOLE
GORAKHPUR
MUZAFFARPUR
KISHANGANJ
BISHWANATH CHARIYALI
TO BALIA (NR)
IPCL
DARBHANGA
PURNEA
DALKHOLA
ALLAHABAD (NR)
HAZIPUR
DALKHOLA(WBSEB)
TO KANPUR (NR)
BEGUSARAI
PURNEA
KHAGAUL
FATUHA
PURNEA(BSEB)
SARNATH
BARH
TO FATEHPUR (NR)
KAHALGAON
ARRAH
MALDA
VARANASI
SASARAM
ADHUNIK
FARRAKA
LAKHISARAI
BANKA
LALMATIA
SAHUPURI (NR)
ARISSON
JSPL
JASI
Bihar Pool
CESC(DUMKA)
SAGARDIGHI
NABINGR
KODERMA
MAITHON-RB
GOKARNA
DLTNGNJ
TILAIYYA
BOKARO B
MAITHON
BAKRESWAR
TO RIHAND (NR)
(132KV)
GARWA
JHRKND POOL
ESSAR
TENUGHAT
DPSC
DURGAPUR
CORPORATE-II
NKSTPP
PATRATU
MEJIA-B
DURGAPUR TPS
CORPORATE-I
RANCHI
NATPUR
BIDHANNAGAR
DPL
PURULIA
Himachal EMTA
BISNUPUR
Jabalpur(WR)
DJ'GARH(WR)
JEERAT
ADHUNIK
CHANDIL
ARAMBAG
RAHARHAT
TO WR POOLING STATION
TO SIPAT(WR)
JAMSHEDPUR
HOWRAH
SUBHASGRAM
ROURKELA
KOLAGHAT
CHAIBASA
BARIPADA
JODA
JHARSUGUDA
Transmission System for Phase-I IPPs
LTOA for Phase-II IPPs
EXISTING LINES
UNDER CONSTRUCTION/APPROVED
400KV
220KV
132KV
765 KV