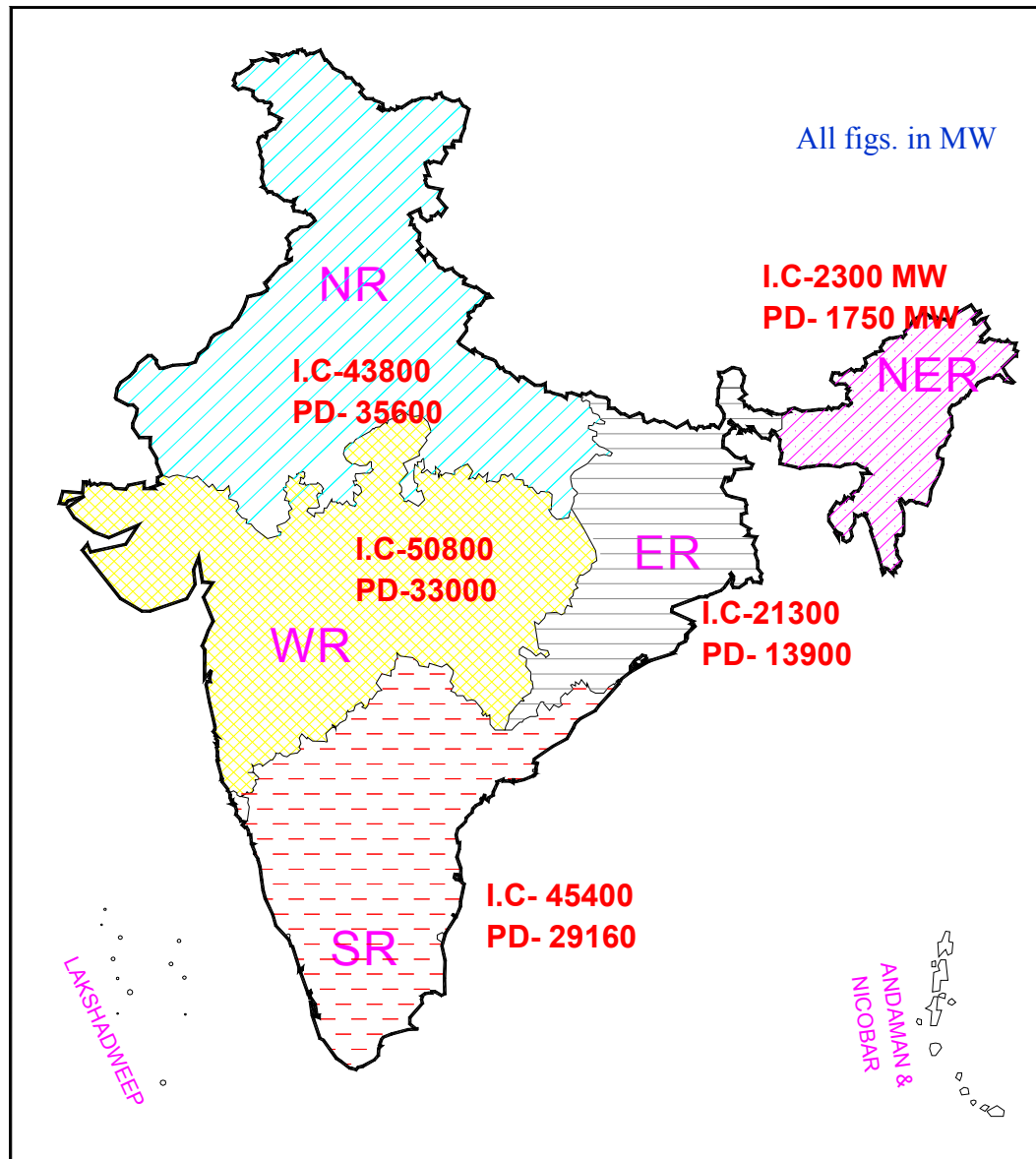


**Grid Connectivity,
MTOA, LTA -
Procedure and Issues**

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Present Scenario



**Five Regional Grids:
ER, NR, WR, SR &
NER**

**Installed Capacity-
about 169,750MW**

**Peak Demand –
120,000MW**

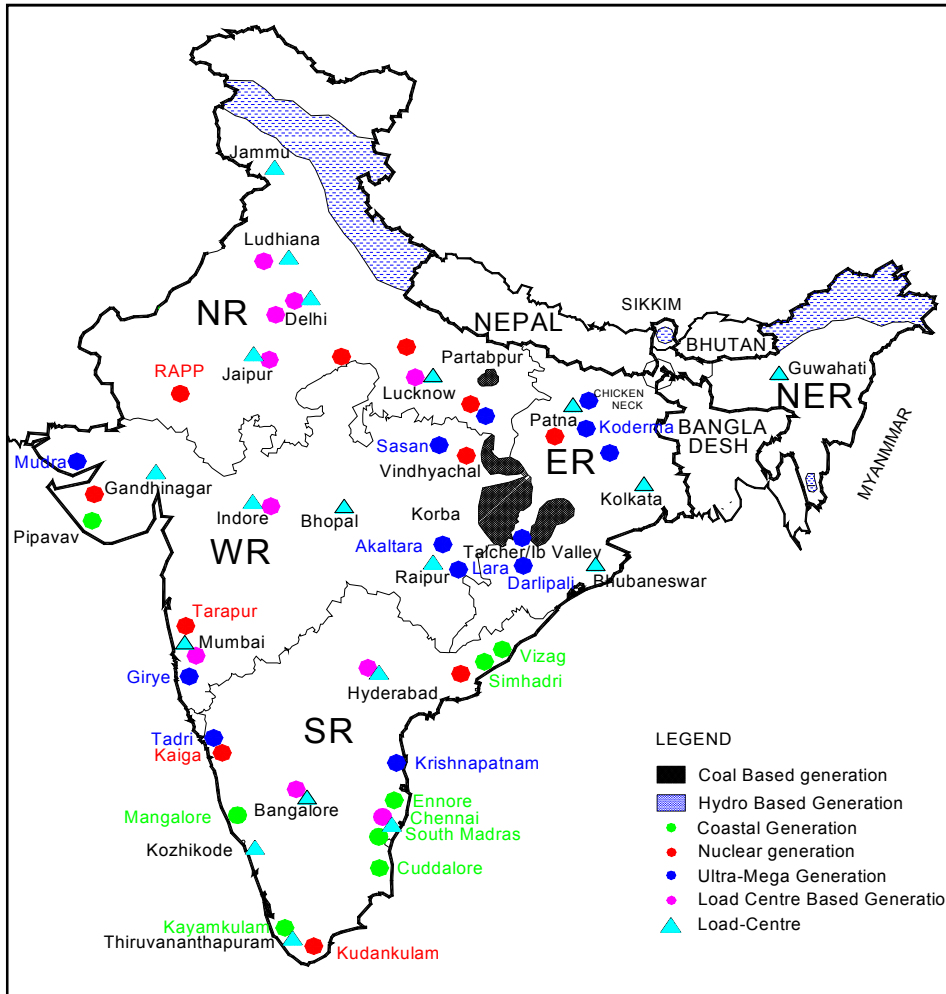
Growth Rate- 8-9% p.a.

Act and Regulatory Provisions

- Generation was de-licensed in the Electricity Act 2003
- Evacuation of power ensured through CERC notification of Long term open access in Jan 2004
- Utilization of ISTS for generation projects was granted by CTU under the regulatory framework

Energy Resources Map

Energy resources (coal, water etc.) unevenly distributed



■ Coal – In Central India

- Chhattisgarh : 58000 MW
- Orissa : 30000 MW
- Jharkhand : 15000 MW
- Madhya Pradesh: 16000 MW

■ Hydro – In North Eastern & Northern Himalayan region

■ Coastal based

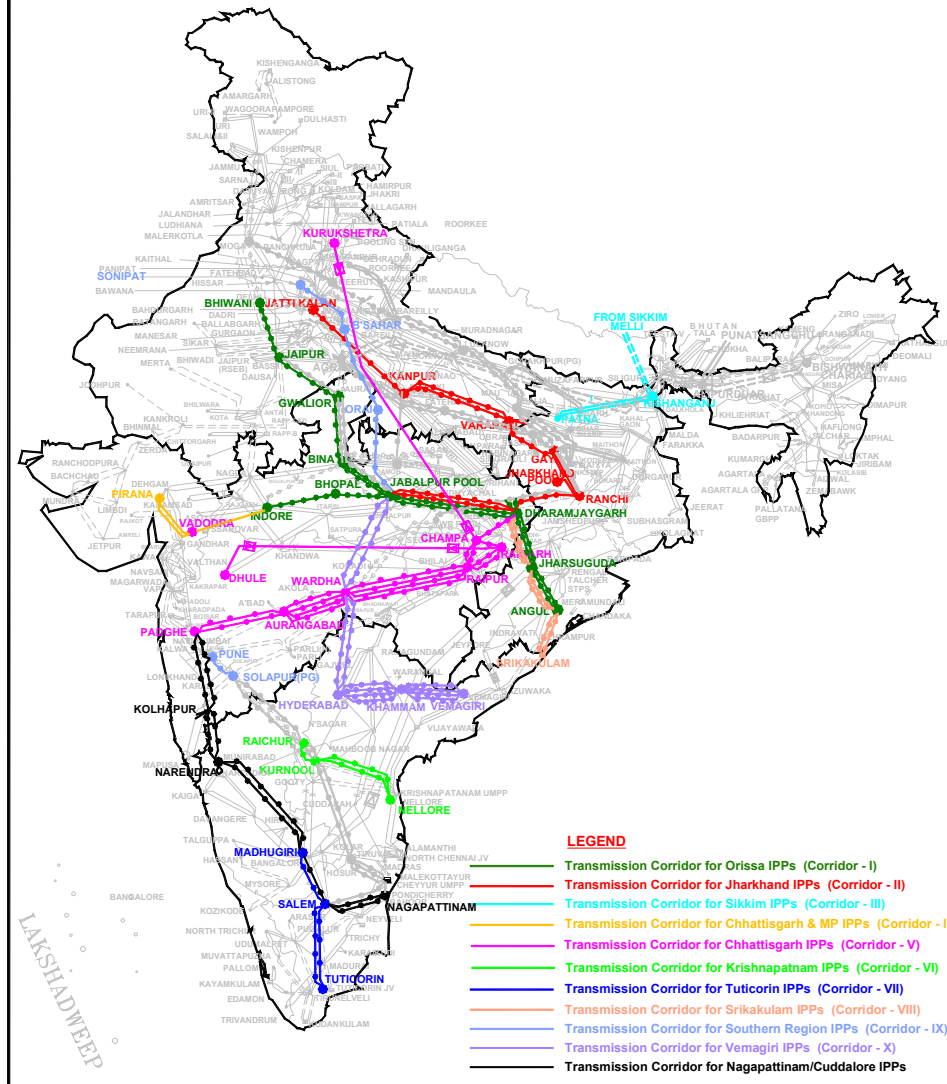
- Andhra Pradesh: 24000 MW
- Tamil Nadu : 10000 MW
- Gujarat : 11000 MW

Transmission Corridors for IPPs

Sl. No.	Cluster/Corridor	No. of IPPs	Installed Capacity (MW)	LTOA Granted (MW)
1	Orissa	7	10090	6080
2.	Jharkhand	5	4540	4084
3,	Sikkim	9	2358	2358
4	Bilaspur+MP	6	4370	4160
5.	Chattisagrh	13	15485	15185
6.	Krishnapatnam	4	4600	3072
7.	Tuticorin	2	2600	2045
8.	Srikakulam	2	3960	3760
9.	Cuddlore/Nagapattinam	3	3570	2987
10.	Vemagiri	4	5400	5150
11.	Common Transmission system for SR IPP			
	Total	55	56973	48881

High Capacity Transmission Corridor

PROPOSED HIGH CAPACITY TRANSMISSION CORRIDORS UNDER VARIOUS IPP'S



CERC approval for implementation

- Regulatory approval was sought for implementation of the transmission system
 - ❖ Based on grant of Open access
 - ❖ Generation developers signing the BPTA
 - ❖ Submission of bank guarantee

The transmission scheme is under various stages of implementation

Above was developed based on CERC notification, Jan 2004

Regulatory frame work - August 2009

- Who can apply
 - Connectivity
 - Generating station incl captive with installed capacity – 250 MW & above (Modified in Sept 2010 to 50MW above for hydro/renewables)
 - Bulk Consumer – 100 MW and above
 - Medium Term Open Access (MTOA) and Long Term Access (LTA)
 - a generating station including captive,
 - a consumer
 - an Electricity Trader or
 - a distribution licensee

Changes in Regulatory frame frame work ...

contd

- **Generating station including captive cannot seek LTA or MTOA without first seeking connectivity to ISTS.**
- **The grant of connectivity shall not entitle an applicant to interchange any power with the grid unless it obtains LTA, MTOA or STOA.**

Non-refundable Application Fees

Sl. No	Quantum of Power to be injected/offtaken into/from ISTS	Connectivity	LTA	MTOA
1	Upto 100 MW	2	2	1
2	More Than 100 MW less than 500 MW	3	3	2
3	More Than 500 MW less than 1000 MW	6	6	3
4	More than 1000 MW	9	9	4

Processing Time

Nature of Application	Time Limit beginning last day of month in which application was received
Connectivity	60 days
LTA	120 days - where no augmentation is required
	180 days - where augmentation of system is required
MTOA	40 days

Applicability -

- Period of applicability
 - LTA – 12 years or more ; upto 25 years
 - MTOA – 3 months to 3 years
- Applications for LTA or MTOA to be processed on first-come-first-served basis

Grid Connectivity

- Construction of Dedicated lines not required for large sized power plants (**Thermal - 500 MW and 50 MW hydro/renewable**)
- Applications to contain details such as
 - geographical location of the applicant
 - quantum of power to be interchanged (injected/drawn)
 - any other details as prescribed by CTU
- **Any material change in the location of the applicant or change, by more than 100 MW, in the quantum of power to be interchanged shall require filing of fresh application.**
- **CTU to process the application and carry out the necessary interconnection study**
- While granting Connectivity, CTU has to specify
 - name of pooling station/substation where connectivity is to be made
 - name of line to be looped in and looped out
- A generating station granted connectivity to the grid shall be allowed to inject infirm power into the grid for testing -after obtaining permission of the concerned Regional Load Despatch Centre.

Long Term Access

- Application for LTA to contain details such as
 - Name of entities & quantum of power
 - Applicant may indicate initially target region(s) and quantum, however, **exact destination of power or source of supply has to be firmed up and notified to CTU at least 3 years prior to the intended date of availing LTA** for augmentation of transmission system.
 - **Fresh application shall be made**, in cases where there is
 - any material **change in location** of the applicant or
 - **change by more than 100 MW** in the quantum of power to be interchanged using the inter-State transmission system or
 - **change in the region from which electricity is to be procured or to which supplied**
 - **The applicant shall submit** any other information sought by CTU to plan ISTS in a holistic manner.

Long Term Access . . . Continued

- **The application to be accompanied with BG of Rs. 10,000/- per MW of total power to be transmitted.**
 - BG to be kept valid till execution of BPTA when system augmentation is required or till operationalization of LTA when augmentation is not required.
 - BG may be encashed if application is withdrawn by applicant or LTA is relinquished prior to operationalisation of LTA when system augmentation is not required
 - BG shall be discharged when the applicant submit construction stage BG

Medium Term Open Access

- MTOA shall be granted if existing / Under construction transmission have margins to accommodate the resultant power flows. **No augmentation shall be carried out to the transmission system for the sole purpose of granting medium-term open access.**
- Application for MTOA to contain
 - Point of injection & drawl (beneficiary should be known)
 - Quantum of power
 - Any other details

Issues

- Ensuring commitment of either parties (Jan 2004 regulation)
- ✓ BPTA was signed and BG was submitted

In the new regulation (Aug 2009) :

Readiness of the generation is more critically monitored for aspects like land under possession, water , coal , environmental

Developers should realistically bring out the factual position so that an adequate transmission proposal can be evolved and taken further after examination from various aspects.

Any under-provision or over-provision of transmission network leads to Grid operational problems like congestion, over-voltage situation – Ultimately causing constraints in generation or ensuring power availability to consumer.

As per IEGC ; Generation developers have apply for signing of connection agreement also ensure approval under Sec 68 of Act from Govt of India is obtained

Thank You