

# Draft CERC (Terms and Conditions of Tariff) Regulations, 2024

## Public Hearing

# Suggestions on behalf of NLDC/RLDCs

15<sup>th</sup> Feb 2024

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## Deduction of RoE on account of non-availability of FGMO (Para-30(3)(i))

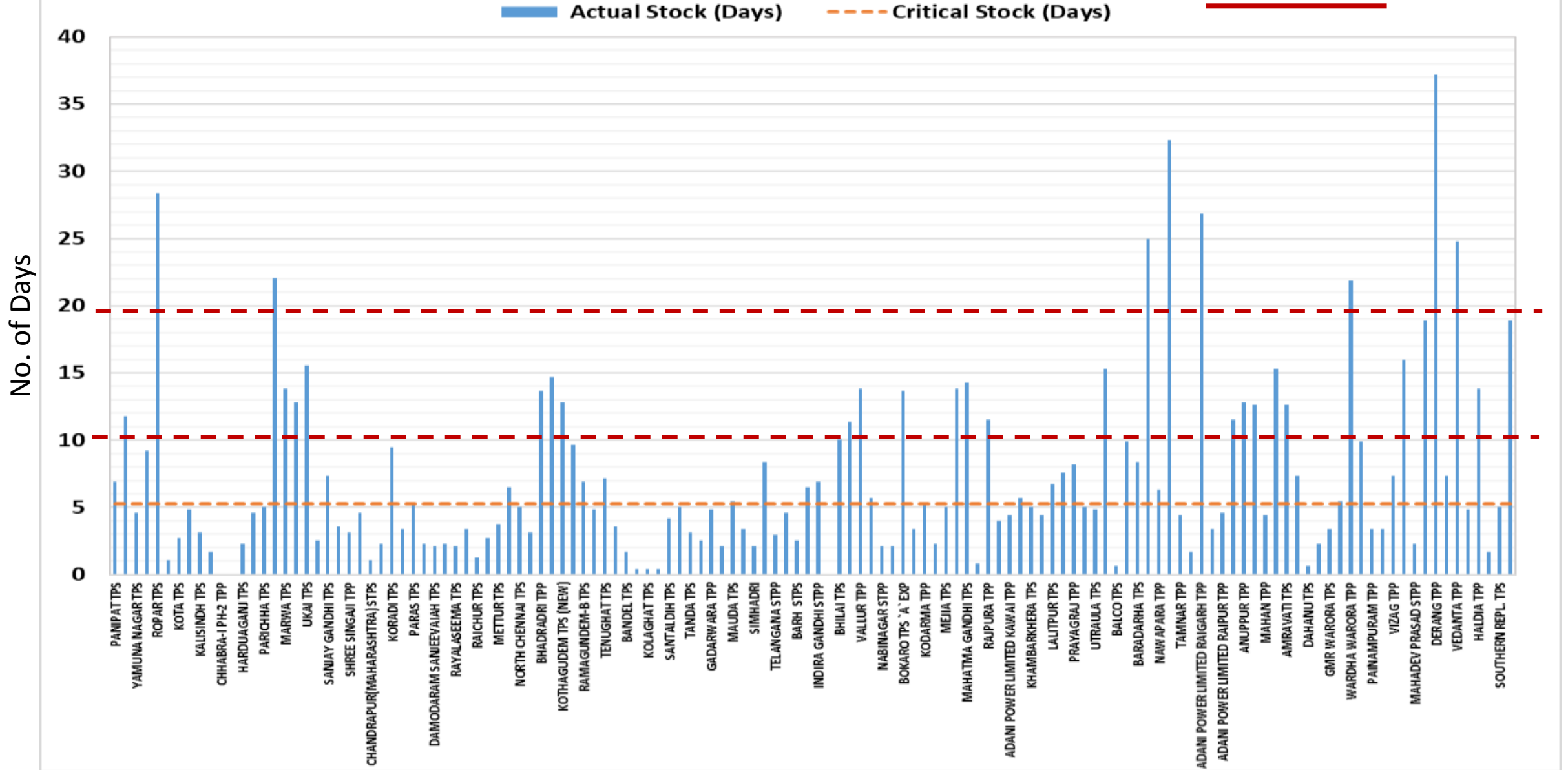
- As per the draft regulation in case of lacking of functional FGMO a new station would get higher amount than an old station, which may not be logical. As per Clause 30.3-(1) & (2) of draft regulation -
  - “i. In case of a new project, the rate of return on equity shall be reduced by 1.00% for such period as may be decided by the Commission if the generating station or transmission system is found to be declared under commercial operation without commissioning of any of the Free Governor Mode Operation (FGMO), data telemetry, communication system up to load dispatch center or protection system based on the report submitted by the respective RLDC;*
  - ii. in case of an existing generating station, as and when any of the requirements under (i) above of this Regulation are found lacking based on the report submitted by the concerned RLDC, the rate of return on equity shall be reduced by 1.00% for the period for which the deficiency continues;”*
- FGMO is a mandated service under IEGC hence, incentivizing only Section 62 generator may have negative impact on Section-63, Merchant plants, IPPs.
  - In existing stations lacking functional FGMO should be treated as violation of IEGC similar to other stations, rather than RoE reduction.
- In future market based PRAS is also envisaged. It would put all generators on equal footing.

## Ramp performance incentive (Para 30.3(iii)) :

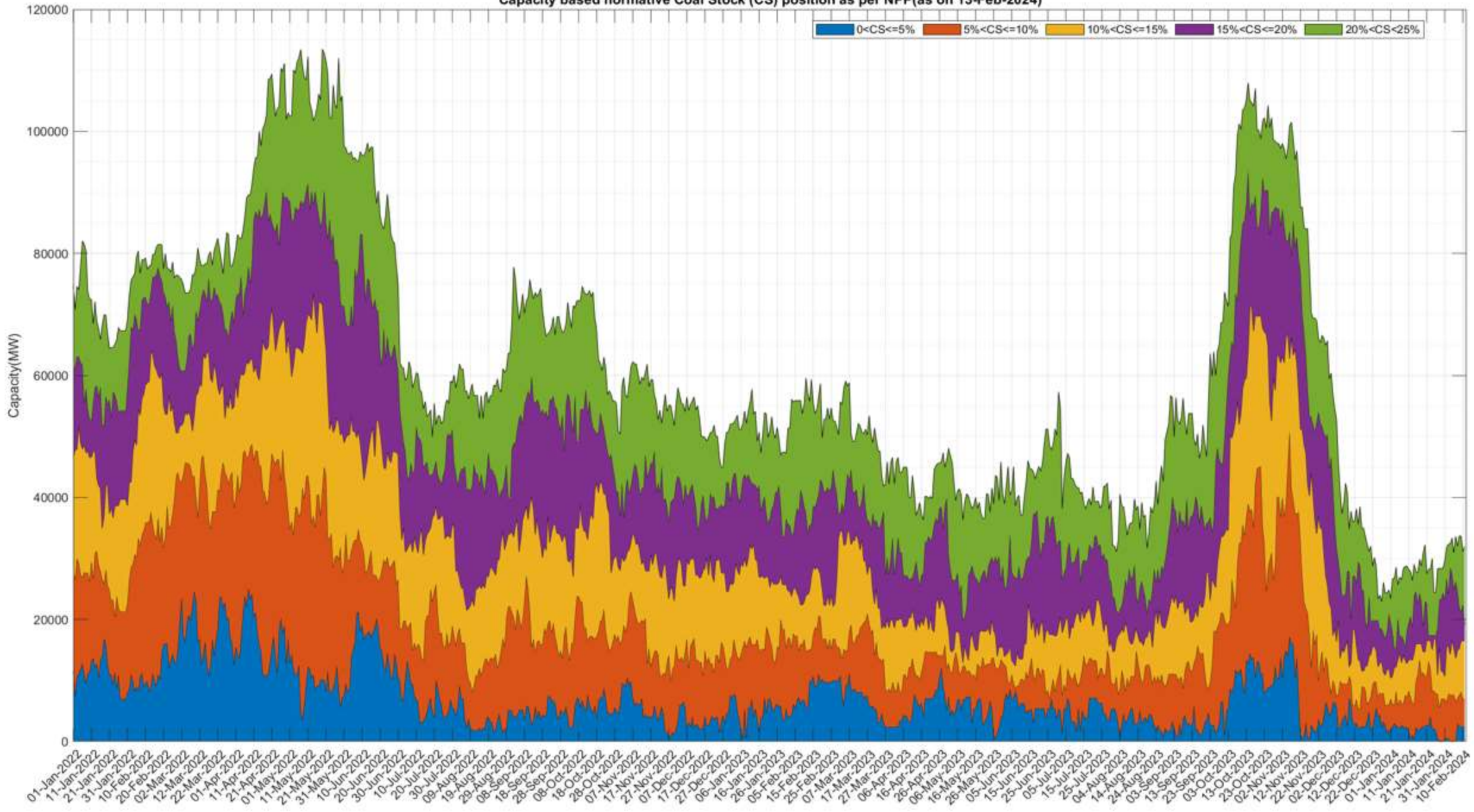
- RoE linked Ramp performance incentive has been a welcome step from Hon'ble Commission in 2019-24 tariff period.
  - It has ensured at least 1% ramp from Sec-62 thermal generators.
  - However, experience has shown that no generators have earned incentive, whereas few generators such as Singrauli, Barh-I, Khstpp-II have lost RoE.
- IEGC & Draft Tariff Regulation both have taken CEA Flexible Regulation as benchmark for higher ramp (>1%).
- Presently, 60 generating units under AGC are providing a higher ramp rate up to 1.5%-2% per minute.
  - Higher ramp rate would mean higher reserves available for despatch under Ancillary Services.
  - Performance based incentives introduced under CERC (Ancillary Services) Regulations, 2022.
- Performance based incentives under Ancillary Services to be suitably reviewed/enhanced for better ramping.

# Coal Stock (Days) of Non-pithead Domestic coal based Plants

(As on 08-10-23)



Capacity based normative Coal Stock (CS) position as per NPP(as on 13-Feb-2024)

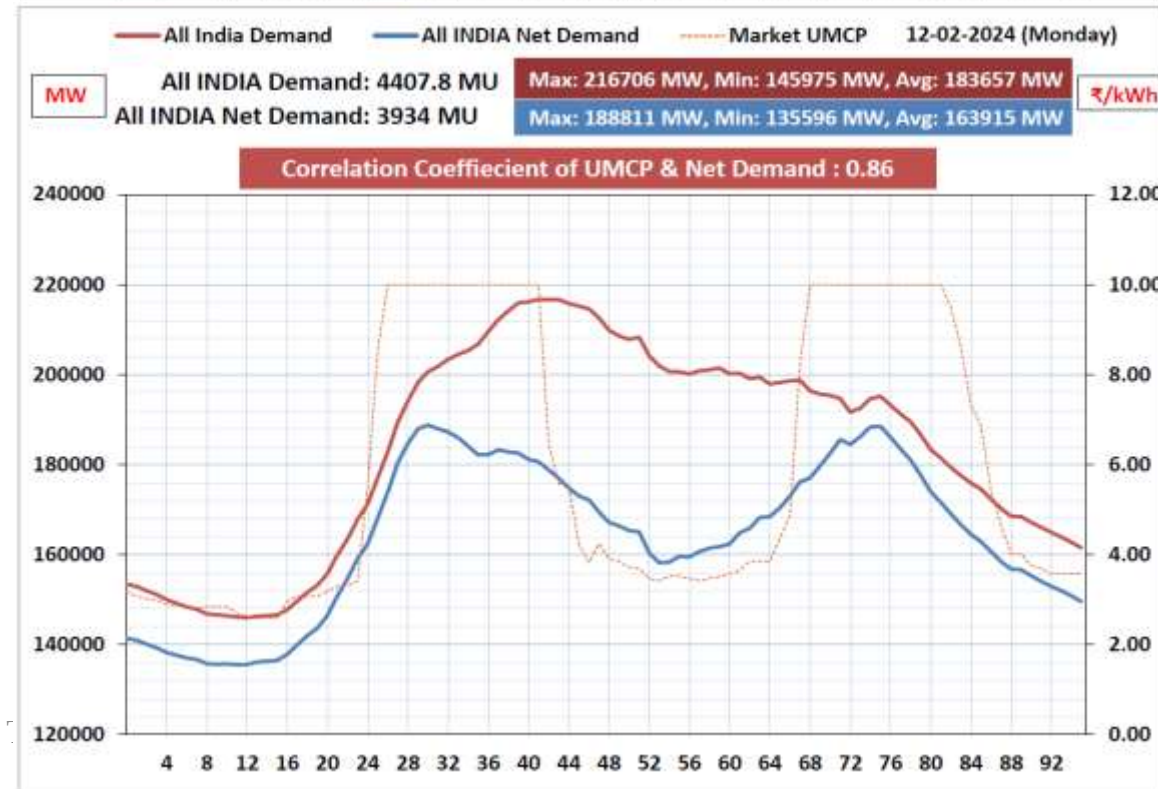
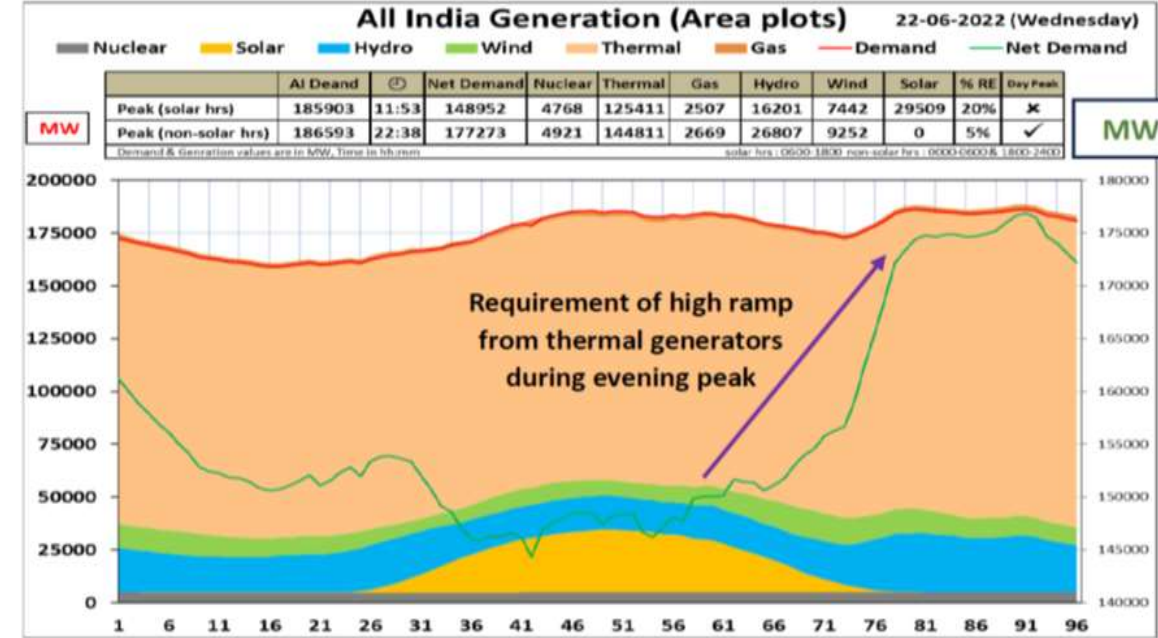


## Linking generator availability with fuel stock (Para-62(1)):

- Working capital factors maintaining normative coal stocks
- Availability calculations are based on day ahead availability (DC) which doesn't capture the on-site fuel stock position.
- During periods of continuous high demand, DC is often revised in real time due to less fuel stock.
- **For maintaining resource adequacy in all time horizon, ensuring adequate fuel stock becomes necessary.**
- Generator availability may be suitably linked to Day ahead availability (one day) and rolling week ahead weekly availability (with suitable weightage) for fixed cost recovery.

# Generation Availability : Peak-Off peak declaration by RLDC (Para 62(3))

- Peak & Off-Peak hour declaration by RLDCs
- Different peak and off-peak for different regions.
- Less significance of regional boundaries due to national level grid integration.
- **Guidelines for Resource Adequacy Planning Framework for India** mandates DISCOMS to tie-ups to meet estimated requirement of their **contribution towards meeting coincident national peak.**
- Peak and Off-Peak declaration of NLDC should be considered based on All India peak Net Load.





# Reliability of HVDC elements (Appendix-IV)

## Sample HVDC outage data...

- As per current draft regulation additional 12 hours outage shall be considered in addition to the actual outage for more than 2 tripping in a year.
  - No such provision is there for HVDC system.
  - For new assets one year of stabilization period may be allowed

	2022	2023
800 KV HVDC Kurukshetra(PG) Pole-1	6	3
800 KV HVDC Kurukshetra(PG) Pole-2	4	8
800 KV HVDC Kurukshetra(PG) Pole-3	7	6
800 KV HVDC Kurukshetra(PG) Pole-4	9	9
800 KV HVDC Agra(PG) Pole-1	1	1
800 KV HVDC Agra(PG) Pole-2	1	2
800 KV HVDC Agra(PG) Pole-3	0	2
800 KV HVDC Agra(PG) Pole-4	3	0
500 KV HVDC Mahindergarh(APL) Pole-1	0	5
500 KV HVDC Mahindergarh(APL) Pole-2	0	6

# Reliability of STATCOMS (Appendix-IV)

- STATCOMs and SVCs NATAF calculation should be separately mentioned.
- Large number of STATCOMs planned as part of RE corridors
- To determine the STATCOM performance, transmission licensee should be made responsible for furnishing high resolution data from field to RLDCs/NLDC.
  - Failure to submit data within 24 hours related to dynamic compensation provided by STATCOM subsequent to an event should render it deemed unavailable
- Non-performance should be considered as deemed unavailable for 24 hours on each occasion

## Start-up time of generators (additional suggestions):

- Generator startup time is an important attribute of thermal flexibility. The same could be incentivized. It is important for the LDCs that generators quickly respond to the start up instructions for adequacy of supply in the grid.
- Considering the large scale renewable integration in India, it is important that the generators coming out of cold reserve must be on bar well within revival time in accordance to CERC Regulations & Approved Procedures.
  - Median value of the startup times furnished by the Ancillary Services Providers in different categories could be used as a benchmark.
- A lumpsum amount incentive may be provided to such generators which successfully comply to 90% instances of the start up instructions by the LDCs within the benchmark time in a year.

Thanks...