उत्तराखण्ड पावर कारपोरेशन लि0

(उत्तराखण्डसरकारकाउपक्रम)

Uttarakhand Power Corporation Ltd.

(A. Govt. of Uttarakhand Undertaking)
CIN : U40109UR2001SGC025867
Email ID: cgmupcl@yahoo.com, Website: www.upcl.org

No. 7950 /UPCL/Comm/UERC/MTPP **Dated:29/09/2025**

Secretary,
Uttarakhand Electricity Regulatory Commission,
Vidyut Niyamak Bhawan,
Near ISBT, Majra,
Dehradun.

Sub: Submission on information sought vide email dated 16-09-2025 and additional information vide email dated 23-09-2025 on certain aspects w.r.t. UPCL's Presentation Dt. 15-09-2025 on Power Purchase at Commission's office

Sir,

This is in reference to information sought by the Hon'ble Commission vide mail dated 16-09-2025 as well as additional information vide mail dated 23-09-2025 regarding power purchase (500 MW) on medium term basis from coal based thermal plant for a period of 4 years.

The point-wise reply on the information sought on 16-09-2025 is annexed as Annexure 1 and the point-wise reply on the additional information sought on 23-09-2025 is annexed as Annexure 2.

This is for your kind information and further necessary action.

उत्तराखण्ड विद्युत नियामक आयोग, देहरादून
Diary No. 939
Date 29/09/2025

Chairman
Member (Law) 30/9/25
Member (Tech.) 30.09.2025
Secretary

Ajay Kumar Agarwal
Director (Projects)

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Annexure - 1:

Point – wise reply on the queries sought by the Hon'ble Commission vide email dated 16-09-2025

1. **Anticipated growth in Solar Capacity as per the targets of Uttarakhand Solar Policy and consideration of the same in Surplus / Deficit scenario projected by UPCL.**

As per Uttarakhand Solar Policy'2023 the following solar capacities were targeted

Project Categories	Utility Scale Solar	Distributed Solar				Total
		Residential	Commercial & Industrial	Institutional	Agriculture	
Cumulative Target by 2027 (MW)	1100	250	750	350	50	2500

As per policy wordings w.r.t. to table above are as follows,

Quote

"The Government of Uttarakhand recognises that purchase of power from utility-scale solar PV projects in other resource rich regions of the country would be preferred by state utilities because of cost-competitiveness as compared to installations within the state. At the same time, the state also acknowledges that decentralised solar applications across districts could offer flexibility and resilience to its power system and deliver the desired socio-economic benefits by bringing the transition closer to the communities. Hence, this policy emphasises a balanced growth of the solar sector by encouraging the purchase of cheaper solar power from other regions and promoting the adoption and offtake of decentralised solar within the state."

Unquote

The utility scale solar to be arranged by UPCL was initiated and following tie ups have been done-

1) Vanila Solar from SECI (100 MW) - (Commissioned)
2) SJVN Solar (200 MW) - (Commissioned)
3) RTC Hybrid from SECI (30% Solar of 100 MW = 30 MW) - (Commissioned)
4) UJVNL Solar -
   a. 6.25 MW (commissioned)
   b. 38.75 MW (to be commissioned in 2025-26),
   c. Total proposed till FY'29-115 MW (including above said capacities)

Further, UPCL is consistently reviewing the state demand and further contracts/addition in the solar contracts w.r.t. 1100 MW utility scale solar projects shall be taken up as per the demand availability scenario in the state so as to avoid any surplus arrangements especially in the solar hours. It is pertinent to mention that the power portfolio of Uttarakhand is RE dominant and hence faces issues w.r.t. variability of the RE sources. The power generated from solar

plants are dependent on solar irradiance and varies w.r.t. cloud cover variations which impose issues while managing the power portfolio of a comparatively smaller State w.r.t. power consumption. Hence, UPCL will only consider any further engagement with specific solar power as per the power requirements of the State under utility scale solar.

The point of challenge w.r.t. demand pattern of Uttarakhand, variability of RE sources w.r.t. inter-day/intra-day availability as well as seasonal variability is also evident from the RA (Resource Adequacy) studies done by CEA (Central Electricity Authority). As per RA studies, no further solar engagements are recommended till FY'28, post which from solar category only nominal amount of power quantum (100 MW or lesser) solar DREs are recommended to be added each year. Hence, UPCL is under constant review of its demand - supply scenario for further engagement with RE based power.

The findings and recommendations of RA studies done by CEA are as follows:

Uttarakhand: Additional Capacities as per Resource Adequacy Study by CEA												
Source	FY	2024-25	2025-26	2026-27	2027-28	2028-29	2029-30	2030-32	2031-32	2032-33	2033-34	2034-35
Coal	Planned	52	0	0	0	0	0	0	0	0	0	0
	Additional	0	0	0	0	0	1181	0	115	156	212	214
Nuclear	Planned	0	0	0	33	0	33	0	0	0	0	0
Hydro	Planned	0	0	80	0	383	0	624	0	0	0	0
Solar	Planned	246	100	45	0	8	0	0	0	0	0	0
SHP	Planned	15	0	0	13	96	35	17	0	0	0	0
PSP	Planned	200	0	0	0	0	0	0	0	0	0	0
DRE (Hydro)	Planned	5	0	0	45	6	4	0	0	0	0	0
DRE (Solar)	Planned	0	0	0	0	0	0	0	0	0	0	0
	Additional	0	0	0	0	41	70	65	68	78	94	103
Total	Planned	518	100	125	91	493	72	641	0	0	0	0
	Additional	0	0	0	0	41	1251	65	183	234	306	317
STOA		1480	1500	1550	1580	1550	1600	1430	1480	1600	1630	1600

Source:(https://cea.nic.in/wp-content/uploads/resource_adequacy_st/2024/09/Report_on_Resource_Adequacy_Plan_for_Uttarakhand_Upto_2034_35.pdf)

As per RA studies, the STOA value reflects the peak value requirement in terms of MW. The Short Term Open Access(STOA) requirement can be fulfilled through power procurement from markets or bilateral agreements.

The additional capacities of ~ 250 MW MSSY scheme has been considered and details of which has already been presented before the Hon'ble Commission. In this regard, it is also to apprise that the demand has been projected considering FY'25 i.e. latest figures in which majority of distributed solar impact is expected to be considered.

The Hon'ble Commission shall also take a note of inherent characteristic of Solar installations that the availability of the same depends upon uncontrollable weather parameters like solar irradiance and cloud cover. The power fed to the consumer by its own installation decreases with the increasing cloud cover and hence that requirement shifts towards UPCL on real time basis. These many variabilities may only be dealt with merit based RTC power as the same may be surrendered as well as recovered as per requirement of the state, the process of which is in place even today to substitute costly power with cheaper power (mostly in solar hours)

available in the open market. In future, this procurement of cheaper power from exchanges for substitution of costly power (w.r.t. to energy charges) may be reduced as then only costly power will be surrendered with minimal purchases from the exchanges.

The procurement of medium term power shall help UPCL to manage its short term procurement within the limit of 5% of total energy requirement as specified by Hon'ble Commission in the Tariff order dated 11-04-2025 and previous directions given in this regard which is brought out as under:

Power procurement plan, Regulation 73 of the Hon'ble UERC Tariff Regulations, 2024 specifies as follows:

".....Provided that the power procurement plan submitted by the Distribution Licensee may include long-term, medium-term and short-term power procurement sources of power, in accordance with these Regulations. ***However, the distribution licensee should as far as possible, not plan for short-term purchases except for conditions specified in Regulations 75 and should endeavor to meet its requirement from long term and medium term power procurement and make a plan accordingly*****.....*"*

Power Purchase Cost, Clause 4.5 Sub clause 4.5.15 Deficit/(Surplus) Energy in Tariff Order dated 28-03-2024 specifies as follows:

".....it is relevant to refer to the third proviso to Regulation 73(1) of the MYT Regulations, 2021 which is reproduced hereunder: "Provided that the power procurement plan submitted by the Distribution Licensee may include long-term, medium-term and short-term power procurement sources of power, in accordance with these Regulations. However, the distribution licensee should as far as possible, not plan for shortterm purchases except for conditions specified in Regulation 75 and should endeavor to meet its requirement from long term and medium term power procurement and make a plan accordingly." Regulation 75 of MYT Regulations, 2021 lays down conditions under which the distribution licensee can resort to short-term power procurement. However, it has been observed that the Petitioner has been consistently relying continuously on short term procurement, i.e. by way of tender through DEEP Portal or by purchase from exchange. ***The Commission in its past Orders have been warning the Petitioner for its over reliance on short term purchases, however, despite several directions, the Petitioner has failed to tie up atleast 90-95% of its total power requirement on long/medium term basis for which hefty price is being paid by the consumers of the State by way of costlier power purchases/load sheddings when power is not cleared from exchanges. In view of persistent deficit scenario during the Control Period, the Petitioner should put its sincere efforts to procure the deficit energy primarily through long term/medium term procurement process*** *thereby optimizing the cost of power purchase and reliable power keeping minimal reliance on short term/Exchange procurement. Further, the procurement should be done through transparent process of bidding."*

Power procurement plan, Clause 3.6 sub clause 3.6.16 Deficit/(Surplus) Energy of the Hon'ble UERC Tariff Order, dated: 11-04-2025 specifies as follows:

".....In view of persistent deficit scenario during the Control Period, the ***Petitioner should put its sincere efforts to procure the deficit energy primarily***

through long term/medium term procurement process thereby optimizing the cost of power purchase and reliable power, keeping minimal reliance on short term/exchange procurement. The Commission has, therefore, restricted the purchase of power from short term sources to 5% of the total energy availability at State Periphery, in line with the provisions of the MYT Regulations, and considered the procurement of balance deficit power through Medium/Long term sources. The Commission, accordingly, directs the Petitioner to prepare its power procurement in line with the above approach and submit the same to the Commission within one month from the date of this Order....."

2. **Captive generation plants currently installed and expected to be installed in upcoming period and consideration of the same in Surplus/Deficit scenario projected by UPCL.**

In the last five years the growth of captive generation in industrial sector has been as under:

S. No.	Financial Year	Installed Capacity*
1	2018-19	3.6 MWp
2	2019-20	-
3	2020-21	6.55 MWp
4	2021-22	3.05 MWp
5	2022-23	1.06 MWp
6	2023-24	7 MWp
7	2024-25	53.13 MWp
8	2025-26	18.9 MWp
Total		**93.29 MWp**

**Details as per Annexure 1A*

Further, it is to apprise that the captive generation expected to be installed in upcoming period will depend upon many factors like regulatory tariff orders, power market scenario etc. and the same cannot be predicted at this stage.

However, the impact of current installed captive generation has been considered in the baseline year FY'2024-25.

3. **Quantum of demand currently being met through Open Access by the consumers, and expected trend of the same based on past experience, and consideration of the same in Surplus / Deficit scenario projected by UPCL.**

In the last five years the growth of open access consumers who availed open access in industrial sector has been as under:

S. No.	Financial Year	No. of Consumers availed Open Access FY wise	No. of Transactions FY wise	Units procured through Open Access (in MUs)	Units procured through Open Access (in MUs / Day) - Deduced	Units procured through Open Access (in MW / Hour) - Deduced
1	2021-22	48	317	55.83	0.15	6.37

S. No.	Financial Year	No. of Consumers availed Open Access FY wise	No. of Transactions FY wise	Units procured through Open Access (in MUs)	Units procured through Open Access (in MUs / Day) - Deduced	Units procured through Open Access (in MW / Hour) - Deduced
2	2022-23	23	153	18.44	0.05	2.10
3	2023-24	25	189	63.43	0.17	7.24
4	2024-25	29	359	213.36	0.58	24.36
5	2025-26	31	323	208.37	0.57	23.79

#Details as per Annexure 1B

Further, it is to apprise that the open access engagements by the industrial consumers of Uttarakhand and expected in upcoming period will depend upon many factors like regulatory tariff orders, power market scenario etc. and the same cannot be predicted at this stage. It has also been observed that the open access consumers rely upon its engagements through open access in the low price band period of open market i.e. mostly in the solar hours while their reliance shifts to Discom in the peak hours.

However, the impact of current pattern of involvement of open access in Uttarakhand power portfolio has been considered in the baseline year FY'2024-25.

4. **Basis of projecting the demand and availability of each month as per the projections made by UPCL.**

The basis of projections of demand has already been submitted to the Hon'ble Commission in the Procurement Plan of UPCL for upcoming years (vide letter no. 3570 dated: 17-05-2025). The comparative figures of demand projections have been enclosed as Annexure 1C.

5. **Basis of considering the representative data for making the projections and its variations vis-à-vis monthly average (quantum and %age).**

The availability based projections are based upon historical availability being provided by different sources of generation. The projections of availability also incorporate the expected upcoming generation based upon the generation profile of their respective sectors on hourly average of the month basis.

The representative data of hourly demand has been made considering the hourly average of the month. The base line year considered for the same has been taken as FY'2024-25. The gross demand has been projected with a growth of 6%.
The expected source - wise, quantum-wise and month wise details have already been submitted in the presentation made before the Hon'ble Commission.

(The copy of presentation made before the Hon'ble Commission along with details of the availability/demand is enclosed as Annexure 1D)

6. **Projected quantum of energy from BESS from FY'2026-27 onwards, and consideration of the same in surplus/deficit scenario projected by UPCL.**

UPCL has not received the approval of BESS installations in the State till now as such the same has not been considered in the surplus deficit scenario. However, an analysis of utilization probability of the same has already been presented before the Hon'ble Commission in the meeting. The point was discussed in detail that the same may be utilized further for power portfolio optimization from solar hours to non-solar peak hours.

7. **Basis of projecting huge quantum of energy for banking, as banking usually from surplus energy and surplus from medium term procurement is projected to be utilized by UPCL for the purpose of banking. Besides which States does UPCL foresee for banking of power during the months of October and November as per the projections made.**

The details of the banking done in the recent years by UPCL is shown below:

Banking							Banking Return					
Applicant name	Month	Date		No of days	MW	MU	Month	Date		No of days	MW	MU
BYPL	Nov	21-11-2023	30-11-2023	10	100.00	24.00	Jun	21-06-2024	30-06-2024	10	86	20.64
	Dec	01-12-2023	31-12-2023	31	100.00	74.40	Jul	01-07-2024	31-07-2024	31	86	63.98
	Jan	01-01-2024	31-01-2024	31	50.00	37.20	Aug	01-08-2024	31-08-2024	31	86	63.98
	Feb	01-02-2024	29-02-2024	29	100.00	69.60	Sep	01-09-2024	30-09-2024	30	90	64.80
		Total (MU)				**205.20**		Total (MU)				**213.41**
CESC	Nov	21-11-2023	30-11-2023	10	60.00	14.40	Jun	21-06-2024	30-06-2024	10	60	14.40
	Dec	01-12-2023	31-12-2023	31	60.00	44.64	Jul	01-07-2024	31-07-2024	31	60	44.64
	Jan	01-01-2024	31-01-2024	31	60.00	44.64	Aug	01-08-2024	31-08-2024	31	60	44.64
	Feb	01-02-2024	29-02-2024	29	60.00	41.76	Sep	01-09-2024	30-09-2024	30	66	47.52
		Total (MU)				**145.44**		Total (MU)				151.20
HPPCL	Dec	20-12-2023	31-12-2023	12	40.00	11.52	Jul	01-07-2024	31-07-2024	31	50.00	37.20
	Jan	01-01-2024	31-01-2024	31	90.00	66.96	Aug	01-08-2024	31-08-2024	31	50.00	37.20
	Feb	01-02-2024	29-02-2024	29	40.00	27.84	Sep	01-09-2024	30-09-2024	30	51.50	37.08
		Total (MU)				**106.32**		Total (MU)				**111.48**
UPPCL	Feb	05-02-2024	20-02-2024	16	100.00	38.40	Apr	01-04-2024	30-04-2024	30	53.33	38.40
		21-02-2024	29-02-2024	9	50.00	10.80	May	01-05-2024	31-05-2024	31	14.52	10.80
		Total (MU)				**49.20**		Total (MU)				**49.20**
2024-2025												
HPCL	December	01-12-2024	31-12-2024	31	200.00	148.80	July	01-07-2025	31-07-2025	31	280	208.32
	Jan	01-01-2025	31-01-2025	31	300.00	223.20	August	01-08-2025	31-08-2025	31	350	260.40
	Feb	01-02-2025	28-02-2025	28	200.00	134.40	Sept	01-09-2025	29-09-2025	29	245	170.52
	March	01-03-2025	31-03-2025	31	150.00	111.60		30-09-2025	30-09-2025	1	145	3.48
		Total (MU)				**618.00**		Total (MU)				**641.52**
Additional Banking												
UPPCL (06:00 to 10:00 & 18:00 to 21:00)	Jan	01-01-2025	31-01-2025	31	200.00	43.40	July	01-07-2025	31-07-2025	31	150	27.90
	Feb	01-02-2025	15-02-2025	15	200.00	21.00	August	01-08-2025	31-08-2025	31	196.25	36.50
2025-2026												
MPPMCL (Through OTC NAME)	May	10-05-2025	31-05-2025	22	100	52.8	Feb_26	01-02-2026	28/02/2026	28	165	55.44

As per the details above, it could be observed that in the current year UPCL has done banking up to ~ 550 MW in some hours. As the power portfolio of the state is hydro dominant (~50 % of the contracted power portfolio consists of hydro power) which peaks in the monsoon months while drops significantly in the winter months and again starts picking up from month of May/June onwards. Hence, UPCL has been undertaking banking of power for balancing the power portfolio in such a scenario and would endeavour to do so in future also.

Annexure – 1A

Details of Captive Consumers:

Sl. No.	Division Name	Consumer's Name	Capacity
		FY-2018-19	
1	EDD Roorkee(Rural)	M/s Asahi Glass Ltd.	3.6 MWp
		FY-2020-21	
1	EDD Rural SIDCUL	Prince Pipes and Fittings Ltd.	1050 KWp
2	EDD Roorkee(Rural)	M/s Gold Plus Glass Industry Ltd.	5.5 MWp
		FY-2021-22	
1	EDD Haridwar	M/s Hindustan Unilever Ltd.	2000kWp
2	EDD Sitarganj	M/s Gujrat Ambuja Exports Ltd.	1050kW
		FY-2022-23	
1	EDD Haridwar (Rural)	M/s Panasonic life solutions India Pvt.Ltd.	1057kWP
		FY-2023-24	
1	EDD Laksar	M/s Cavandish Industries Limited.	6.0 MWp
2	EDD Mohanpur	M/s Sara Sae pvt. Ltd.	520 kWp
3	EDD Mohanpur	M/s Sara Sae pvt. Ltd.	275 kWp
4	EDD Mohanpur	M/s Technox Engineering and Services Pvt. Ltd.	200 kWp
		FY-2024-25	
1	EDD Kashipur	M/s Kashi Vishwanath Textile Mill Pvt.ltd.	5100 KWP
2	EDD Laksar	M/s Cavandish Industries Limited.	6.2 MWp
3	EDD Roorkee(Rural)	M/s Asahi Glass Ltd.	2500 Kwp
4	EDD Kashipur	M/s Kashi Vishwanath Textile Mill Pvt.ltd, 5th KM Stone, Ramnagar Road, Kashipur,	5100 KWp
5	EDD Laksar	M/s Cavandish Industries Limited.	6.2 MWp
6	EDD Roorkee (Rural)	M/s Asahi Glass Ltd.	2500 KWp
7	EDD Bazpur	M/s Polyplexcororation .Ltd.	3.17 MWp
8	EDD Rudrapur	M/s Shriram Foundry Pvt. Ltd.	625 KWp
9	EDD Haridwar (Urban)	M/s BHEL Haridwar	6.5 MWp
10	EDD Kichha	M/s Mahindra & Mahindra	386 KWp
11	EDD Sitarganj	M/s Balaji Action Build well Pvt.Ltd.	5.4MWp
12	EDD Khatima	M/s Polyplex Corporation Ltd.	2000KWp
13	EDD Rural SIDCUL	M/s Hero MotoCorp Ltd.	1.95 MWp
14	EDD Vikasnagar	M/s Evincia Renewable Pvt. Ltd.	2000KWp
15	EDD Vikasnagar	M/s Evincia Renewable (Three) Pvt. Ltd.	2000KWp
16	EDD Kashipur	M/s Kashi Vishwanath steel Pvt.ltd.	1500 KWp
		FY-2025-26	
1	EDD Roorkee (Rural)	M/s Asahi Glass Ltd.	1500 KWp
2	EDD Rudrapur	M/s SivantaSpuntexPvt. Ltd.	3400 kVA
3	EDD Vikasnagar	M/s Energy energy sage Pvt. Ltd.	2500KWp
4	EDD Vikasnagar	M/s Evincea Renewable (Six) Pvt. Ltd.	2000 KWp
5	EDD Vikas Nagar	M/s NS Works & Consultancy Pvt. Ltd., 177, NayaGaon Haripur Seemadwar, Dehradun	2500 KWp
6	EDD Laksar	M/s Shree Cement	7.0 MWp

Annexure - 1B

Details of FY-wise consumers who availed Open Access:

Details of Consumers who availed Open Access in Financial Year 2021-22			
S. No.	Name of Consumer who availed open access	No. Of Transaction	Units (in MWh)
1	Air_Liquid_North_India_Pvt_Ltd	6	819.00
2	Alps_Industries_Ltd_Plot_No._1B_Sidcul	10	2782.23
3	Ambuja_Cement_Ltd	12	2359.45
4	Asahi_India_Glass_Ltd	6	1040.80
5	Bahl_Paper_Mills_Limited_(Through_trader_Manikaran_Power_Ltd)	4	208.15
6	Britannia_Industries_Limited	10	393.90
7	BST_Textile_Mills_Pvt_Ltd	15	2173.50
8	Cavendish_Industries_Ltd_(Through_Trader_Manikaran_Power_Ltd)	7	1621.98
9	Ester_Industries_Ltd	15	3823.00
10	Ganesha_Ecosphere_Limited	6	434.40
11	Gold_Plus_Glass_Industry_Limited	14	3157.40
12	Greenpanel_Industries_Limited_Unit_2	2	19.20
13	Hero_Moto_Corp_Ltd	7	260.50
14	Hindustan_Unilever_Ltd	5	925.20
15	Hindustan_Zinc_Limited	2	543.90
16	Hindusthan_National_Glass_&_Industries_Ltd	12	2268.20
17	India_Glycols_Ltd_Dehradun	10	327.10
18	India_Glycols_Ltd_Kashipur	16	8811.05
19	Indian_Toners_and_Developers_Limited	4	136.60
20	ITC_Limited	6	405.10
21	ITC_Limited_PPD_Division	6	334.63
22	Kashi_Vishwanath_Steels_Pvt_Ltd	3	11.50
23	KIE_Engineering_Pvt_Ltd	3	134.00
24	Linde_India_Ltd_Dehradun	4	1601.90
25	Mahalaxmi_Polypack_Pvt_Ltd	5	436.40
26	Manjushree_Technopack_Limited	2	12.00
27	Mantri_Mettallics_Pvt_Ltd_Pantnagar	12	1514.70
28	Munjal_Showa_Limited	3	192.80
29	Nestle_India_Ltd	5	611.60
30	Patanjali_Food_&_Herbal_Park_Pvt_Ltd	5	1562.25
31	PolyPlex_Corporation_Ltd_Bazpur	9	3057.10
32	Polyplex_Corporation_Ltd_Khatima	9	2034.40
33	Radiant_Bar_Ltd	4	524.30
34	Radico_Khaitan_Limited	7	424.80
35	Rana_Industries	6	272.60
36	Rana_Ispat_Pvt_Ltd	3	91.40
37	Rockman_Industries_Ltd	5	439.33
38	Rukmini_Iron_Pvt_Ltd	1	34.00
39	Sahota_Papers_Ltd	4	96.40
40	Sansera_Engineering_Pvt_Ltd	5	399.35
41	Shivam_Autotech_Limited	3	266.70
42	Shriram_Foundary_Pvt_Ltd	12	5678.06
43	SRF_Limited	6	367.95
44	Sundram_Fasteners_Ltd	4	110.10
45	Tata_Motors_Ltd	9	1322.92
46	Tehri_Iron_and_Steel_Industries	5	1295.20
47	TVS_Srichakra_Ltd	4	331.70
48	UltraTech_Cement_Limited_Unit_Roorkee_Cement_Works	4	165.68
Grand Total		**317**	**55834.40**

Details of Consumers who availed Open Access in Financial Year 2022-23			
S. No.	**Name of Consumer who availed open access**	**No. Of Transaction**	**Units (in MWh)**
1	Air_Liquid_North_India_Pvt_Ltd	6	141.00
2	Ambuja_Cement_Ltd	11	708.48
3	Asahi_India_Glass_Ltd	2	33.50
4	Cosmos_Ferrous_Private_Limited	5	39.64
5	Ester_Industries_Ltd	7	816.75
6	Ganesha_Ecosphere_Limited	6	97.01
7	Greenpanel_Industries_Limited_Unit_2	3	69.50
8	Hero_Moto_Corp_Ltd	3	84.75
9	India_Glycols_Ltd_Dehradun	1	26.60
10	India_Glycols_Ltd_Kashipur	16	5433.35
11	Kashi_Vishwanath_Steels_Pvt_Ltd	1	2.40
12	KIE_Engineering_Pvt_Ltd	9	1030.54
13	Manjushree_Technopack_Limited	6	98.40
14	Mantri_Mettallics_Pvt_Ltd_Pantnagar	16	1980.22
15	PolyPlex_Corporation_Ltd_Bazpur	2	489.40
16	Polyplex_Corporation_Ltd_Khatima	6	309.90
17	Radiant_Bar_Ltd	7	459.76
18	Rana_Industries	11	789.38
19	Rana_Ispat_Pvt_Ltd	11	786.18
20	Shriram_Foundary_Pvt_Ltd	13	4505.34
21	Sundram_Fasteners_Ltd	4	89.70
22	UltraTech_Cement_Limited_Unit_Roorkee_Cement_Works	4	204.12
23	Vista_Furnishing_Limited_Haridwar	3	243.45
Grand Total		**153**	**18439.37**

Details of Consumers who availed Open Access in Financial Year 2023-24			
S. No.	**Name of Consumer who availed open access**	**No. Of Transaction**	**Units (in MWh)**
1	Air_Liquid_North_India_Pvt_Ltd	7	522.00
2	Ambuja_Cement_Ltd	11	820.17
3	Asahi_India_Glass_Ltd	11	2596.24
4	Ester_Industries_Ltd	14	6519.75
5	Greenpanel_Industries_Limited_Unit_2	19	5393.40
6	Hero_Moto_Corp_Ltd	1	1.05
7	Hindustan_Unilever_Limited_Haridwar	3	605.65
8	India_Glycols_Ltd_Dehradun	5	202.55
9	India_Glycols_Ltd_Kashipur	23	25198.85
10	KIE_Engineering_Pvt_Ltd	1	33.33
11	Linde_India_Limited	6	5484.55
12	Magic_Wires_Private_Limited	3	7.43
13	Mantri_Mettallics_Pvt_Ltd_Pantnagar	4	150.84
14	PolyPlex_Corporation_Ltd_Bazpur	12	8243.85
15	Polyplex_Corporation_Ltd_Khatima	13	3716.02
16	Radiant_Bar_Ltd	3	41.84
17	Radiant_Bar_Private_Limited	2	92.84
18	Rana_Industries	7	248.19
19	Rana_Ispat_Pvt_Ltd	7	260.17
20	Shree_Aekanya_Steels_LLP	1	1.88

Details of Consumers who availed Open Access in Financial Year 2023-24			
S. No.	Name of Consumer who availed open access	No. Of Transaction	Units (in MWh)
21	Shriram_Foundary_Pvt_Ltd	4	400.92
22	Sundram_Fasteners_Ltd	3	49.18
23	Tehri_Iron_&_Steel_Industries	5	236.00
24	TVS_Srichakra_Ltd	14	1218.80
25	UltraTech_Cement_Limited_Unit_Roorkee_Cement_Works	10	1387.49
Grand Total		**189**	**63432.98**

Details of Consumers who availed Open Access in Financial Year 2024-25			
S. No.	Name of Consumer who availed open access	No. Of Transaction	Units (in MWh)
1	Ambuja Cement Ltd	5	5613.01
2	Asahi_India_Glass_Ltd	19	4840.98
3	Balaji_Action_Buildwell_Private_Limited	9	2384.76
4	Cavendish_Industries_Limited_(IES)	16	13237.67
5	Ester_Industries_Ltd	15	11880.95
6	Galwalia_Ispat_Udyog_Ltd	16	10203.80
7	Gold_Plus_Glass_Industry_Limited	13	9455.20
8	Greenpanel_Industries_Limited_Unit_2	25	12984.56
9	Hindustan Zinc Limited	4	1559.76
10	Hindustan_Unilever_Limited_Haridwar	4	1122.00
11	India_Glycols_Ltd_Dehradun	18	1624.30
12	India_Glycols_Ltd_Kashipur	22	37687.05
13	ITC Limited	8	1962.68
14	ITC Limited PPD	8	1032.29
15	Kashi_Vishwanath_Steels_Private_Limited	15	21870.64
16	Kashi_Vishwanath_Textile_Mill_Private_Limited	16	4349.15
17	Linde_India_Limited	15	19188.30
18	Manjushree_Technopack_Limited	11	1096.22
19	Nestle_India_Limited_Pantnagar	12	2968.20
20	Patanjali_Food_&_Herbal_Park_Private_Limited_Haridwar	12	4810.85
21	PolyPlex_Corporation_Ltd_Bazpur	15	19594.90
22	Polyplex_Corporation_Ltd_Khatima	15	9845.50
23	Radiant_Bar_Private_Limited	4	91.98
24	Rana_Industries	4	53.15
25	Rana_Ispat_Pvt_Ltd	10	54.36
26	Tata_Motors_Limited_Pantnagar	15	932.24
27	Tehri_Iron_&_Steel_Industries	1	84.00
28	TVS_Srichakra_Ltd	15	2508.30
29	UltraTech_Cement_Limited_Unit_Roorkee_Cement_Works	17	10326.92
Grand Total		**359**	**213363.72**

Details of Consumers who availed Open Access in Financial Year (till Aug-2025)			
S. No.	**Name of Consumer who availed open access**	**No. Of Transaction**	**Units (in MWh)**
1	Ambuja Cement Ltd.	5	12394.99
2	Asahi_India_Glass_Ltd	17	1032.80
3	Balaji_Action_Buildwell_Private_Limited	13	14086.08
4	Brijbihari_Concast_Private_Limited_ENE	7	6055.25
5	Cavendish_Industries_Limited_(IES)	13	16156.21
6	Ester_Industries_Ltd	12	16708.10
7	GalwaliaIspatUdyogPvt. Ltd.	16	16074.87
8	Ganesha_Ecosphere_Limited_Rudrapur	7	1513.80
9	Gold_Plus_Glass_Industry_Limited	12	7491.95
10	Greenpanel_Industries_Limited_Unit_2	15	7902.31
11	Hindustan Zinc Limited	5	3854.45
12	India_Glycols_Ltd_Dehradun	12	950.40
13	India_Glycols_Ltd_Kashipur	12	31255.55
14	Kashi_Vishwanath_Steels_Private_Limited	5	14772.51
15	Kashi_Vishwanath_Textile_Mill_Private_Limited	12	3007.50
16	Linde India Ltd.	15	9341.85
17	Manjushree_Technopack_Limited	10	1750.22
18	Nestle_India_Limited_Pantnagar	17	2523.59
19	Patanjali_Food_&_Herbal_Park	14	8647.51
20	PolyPlex_Corporation_Ltd_Bazpur	12	12055.10
21	Polyplex_Corporation_Ltd_Khatima	12	5696.30
22	Prince_Pipes_and_Fittings_Limited_Haridwar	8	2208.35
23	Pure_&_Cure_Healthcare_Pvt_Ltd	1	154.50
24	Rana_Industries	4	972.71
25	Rana_Ispat_Pvt_Ltd	12	20.63
26	Shree_Sidhbali_Industries_Limited	1	95.41
27	Tata_Motors_Limited_Pantnagar	13	358.70
28	Tehri_Iron_&_Steel_Industries	12	1909.54
29	TVS_Srichakra_Ltd	12	1257.80
30	UltraTech_Cement_Limited_Unit_Roorkee_Cement_Works	12	6501.69
31	Uttranchal_Ispat_Private_Limited	5	1615.64
Grand Total		**323**	**208366.28**

Annexure - 1C

Comparative Details of Demand Projections:

Energy Requirement (MU) / Average Demand Particulars	FY'26	FY'27	FY'28	FY'29	FY'30	Average
CEA Projections	19093	20142	21238	22374	23702	21310
CEA % Growth		5.5%	5.4%	5.3%	5.9%	5.55%
UPCL Projections	17676	18538	19549	20674	21919	19671
UPCL % Growth		4.9%	5.5%	5.8%	6.0%	5.53%
50% Step Up McKinsey Projections	20283	21633	22948	24270	25362	22899
50% Step Up McKinsey % Growth		6.7%	6.1%	5.8%	4.5%	5.75%
80% Step Up McKinsey Projections	20908	22585	24182	25766	26954	24079
80% Step Up McKinsey % Growth		8.0%	7.1%	6.6%	4.6%	6.56%
100% Step Up McKinsey Projections	21082	22958	24724	26463	27703	24586
100% Step Up McKinsey % Growth		8.9%	7.7%	7.0%	4.7%	7.08%

Projections Instantaneous Peak Demand (MW)	FY'26	FY'27	FY'28	FY'29	FY'30	Average
Peak Demand	3072	3249	3433	3623	3847	3445
% Growth of Peak Demand as per CEA Projections (%)		5.8%	5.7%	5.5%	6.2%	5.79%
UPCL Projections - Peak Demand (MW)	3013	3162	3311	3510	3721	3343
% Growth of Peak Demand as per UPCL Projections (%)		4.9%	4.7%	6.0%	6.0%	5.42%

**McKinsey has provided only total energy requirement projection*

Annexure - 2:

Point – wise reply on the additional queries sought by the Hon'ble Commission vide email dated 23-09-2025

1. **UPCL is required to analyse the proposed banking scenario considering the surplus/deficit scenario in the neighbouring States and provide an analysis as to how it plans to manage the surplus power arising out of MTPP in certain months of the year.**

   The Commission observed that the State of Haryana and Madhya Pradesh have projected a surplus of around 2919 MUs and 5327 MUs respectively in FY 2025-26. Further, the State of Punjab has projected an average surplus in the range of 200-1400 MW in the months of April and October to March of FY 2025-26.

The Hon'ble Commission has already raised concerns over proposed tentative banking in its previous queries dated 16-09-2025, the reply of which has been submitted including our banking arrangements done in past years (Please refer Annexure 1 of this submission). In the same way, UPCL has considered these transactions for its power portfolio optimization as well as balancing availability of surplus months with deficit months.

Details of Tentative Banking considered as per submission done on Presentation dated 15-09-2025 (Export -ve, Import +ve)														
FY/Months	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar	Max	Min
FY'2025-26									175	275	200	-125	275	-125
FY'2026-27	100	100	150	-275	-350	-375	-300	-175	200	275	150	0	275	-375
FY'2027-28	0	150	150	-150	-250	-250	-150	0	155	200	150	0	200	-250
FY'2028-29	375	575	525	-50	-150	-100	0	0	500	550	400	150	575	-150
FY'2029-30	-150	75	50	-550	-650	-650	-450	0	0	75	-150	-350	75	-650

Note: Above proposed banking is post considering the upcoming plants as per latest information as well as considering the 200 MW RTC power from Singrauli which is expected to commence from FY' 2028-29 however the final allocation of power out of this 200MW will only be available just before the time of COD of the said plant. The same thing has already been informed to the Hon'ble Commission during the presentation done on 15-09-2025. However, it is to inform to the Hon'ble Commission that as per past experience allotment of the central sector plants is distributed among the States and UTs of the region by MoP considering various factors and not according to consent given by the different States. Hence, if the allocation to Uttarakhand from Singrauli will be lesser than consent of 200 MW, the tentative banking would also be changed as per power supply-demand scenario of the State at that point of time.

The Hon'ble Commission has also put efforts to provide the surplus projections of Haryana, Madhya Pradesh and Punjab through which the Hon'ble Commission has informed that the respective states have surplus quantum in FY'2025-26. In this regard, it is to apprise that despite quoted surplus of 2919 MUs, the State of Haryana

has taken power from Uttarakhand itself in the months of July, August and September -25, the details of which are as follows:

Month	Period		MW	MUs
July	01-07-2025	31-07-2025	280	208.32
August	01-08-2025	31-08-2025	350	260.4
Sept	01-09-2025	29-09-2025	245	170.52
Sept	30-09-2025	30-09-2025	145	3.48
Total				**642.72**

Hence, UPCL has been undertaking banking of power for balancing the power portfolio in a scenario with deficit power in some months while surplus power in other months of the year and would endeavour to do so in future also.

2. **UPCL is required to provide a list of emergency/unforeseen circumstances in the past two years, where it was unable to off-take the power. UPCL is required to submit the variation in power quantum and availability in such circumstances (percentage wise also).**

The details regarding variations in availability where UPCL was provided with lesser availability with respect to declared capacity has been annexed as Annexure 2A w.r.t. state generation.

The details for central sector plants have been sought from State Load Despatch Center (SLDC). (Details of communication attached as Annexure 2B).

3. **UPCL is further required to submit as how it plans to utilize the surplus power through MTPP in emergency situations, if so occurs.**

The point has already been discussed in the meeting dated 15-09-2025 in case of unexpected emergency situations where demand drops extensively due to uncontrollable factors, the power from MTPP would firstly tried to be sold on energy exchanges and if the same will not be fruitful due to low market prices the same power would be surrendered as per real time situation and the same is being followed presently also.

The relevant clauses of Grid Code 2023 in this regard have been provided in the Chapter 7 Scheduling and Despatch Code are as follows:

Clause 44, Page No. 129 states

…….."Minimum turndown level for regional entity thermal generating stations:

The minimum turndown level for operation in respect of a unit of a regional entity thermal generating station shall be ***55% of the MCR*** *of the said unit or such other minimum power*

level as specified in the CEA (Flexible Operation of coal based Thermal Generating Units) Regulations, 2023, as amended from time to time, whichever is lower:

Provided that the Commission may fix through an order a different minimum turndown level of operation in respect of specific unit(s) of a regional entity thermal generating station:

Provided further that such generating station on its own option may declare a minimum turndown level below the minimum turndown level specified in this clause:

Provided also that the regional entity thermal generating stations whose tariffs are determined under Section 62 or Section 63 of the Act, shall be compensated for part load operation, that is, for generation below the normative level of operation, in terms of the provisions of the contract entered into by such generating stations with the beneficiaries or buyers, or in the absence of such provision in the contract, as per the mechanism to be specified by the Commission through separate regulations or through Order:

Provided also that till the mechanism of part load compensation is notified by the Commission, the mechanism in this regard already in force under the Central Electricity Regulatory Commission (Indian Electricity Grid Code) Regulations, 2010 shall continue to be in operation." .....

Clause 49, Page No. 155 states

....."Revision of schedules on request of buyers which are GNA grantees:

(a) SLDCs on behalf of intra-state entities, regional entity ESSs as drawee entities, beneficiaries, regional entity buyers or cross-border buying entities may revise their schedules under GNA as per sub-clauses (b) and (c) of this clause in accordance with their respective contracts

Provided that scheduled transactions under T-GNA once scheduled cannot be revised other than in case of forced outage as per clause (7) of this Regulation.

(b) The request for revision of scheduled transaction for 'D' day, shall be allowed subject to the following:

(i) Request of buyers for upward revision of schedule from the generating station whose tariff is determined under Section 62 of the Act shall be allowed starting 2 PM on 'D-1' day, only in respect of the remaining available quantum of un-requisitioned surplus in such generating stations, after finalization of schedules under day ahead market.

(ii) Request of buyers for downward revision of schedule from the generating stations, whose tariff is determined under Section 62 of the Act shall be allowed in any time block subject to the provision relating to SCUC under Regulation 46 of these regulations.

(iii) Request of buyers for upward or downward revision of schedule in respect of the generating stations other than those whose tariff is determined under Section 62 of the Act,

shall be allowed in terms of provisions of the respective contracts between the generating stations and beneficiaries or buyers.

(c) Based on the request for revision in schedule made as per sub-clauses (a) and (b) of this clause, any revision in schedule made in odd time blocks shall become effective from 7th time block and any revision in schedule made in even time blocks shall become effective from 8th time block, counting the time block in which the request for revision has been received by the RLDCs to be the first one.

(d) While finalizing the drawal and despatch schedules, in case any congestion is foreseen in the inter-State transmission system or technical constraints of a generating station, the concerned RLDC shall moderate the schedules as required, under intimation to the concerned regional entities." .....

The relevant clause of the PPA of Medium Term Tender are as follows:

".....10.1 Dispatch of unutilized Contracted Capacity

10.1.1 *In the event the Utility, does not schedule a quantum of power out of its Contracted Capacity before opening of bidding window of power exchange for day ahead collective transactions, the Supplier shall be entitled to sell such un requisitioned power on power exchange under day ahead or real time collective transaction or intraday transaction.*
Provided that in such cases, Utility shall not be entitled to recall full or part of its unrequisitioned capacity.

Provided further that if the Supplier is able to sell the unrequisitioned power, sharing of gain from such sale of such power shall be as per applicable rules issued by the Ministry of Power."

The other relevant clause is as follows:

".....14.1 Despatch of Contracted Capacity
The Utility shall, in accordance with Applicable Laws, issue instructions to the Supplier for production of electricity and despatch thereof to the Grid during such period and in such volume as it may specify in its instructions (the "Despatch"). Provided that the Utility shall not Despatch in excess of the Contracted Capacity, unless mutually agreed between the Parties. For the avoidance of doubt, the Parties agree that the Utility may, in its discretion, direct the Supplier to Despatch on its behalf, all or part of the Contracted Capacity, in favour of the third parties designated by it from time to time on the express understanding that the payment therefore shall be made by the Utility to the Supplier as if the electricity has been Despatched in favour of the Utility.

Pursuant to the provisions of Clause 14.1.1, the [Supplier shall if the Supplier is NOT a Trading Licensee, or Supplier shall cause the Developer to]plan the production and Despatch of electricity and convey its availability for scheduling thereof by the SLDC or RLDC, as the case may be, and shall supply electricity in accordance with the provisions of the Grid Code and the Act.

In the event the Supplier schedules any electricity, produced from Contracted Capacity, for sale to Buyers in breach of this Agreement, the Supplier shall pay Damages equal to the higher of: (a) twice the Fixed Charge; and (b) the entire sale revenue accrued from Buyers. For the avoidance of doubt, no Fixed Charge or any amount in lieu thereof shall be due or payable to the Supplier for and in respect of any electricity sold hereunder.

However, if the Utility does not schedule the full or part of Contracted Capacity, Supplier may sell the same through the power exchange in line with the applicable rules issued by the Ministry of Power, as amended from time to time....."

4. UPCL is required to provide the quantum of power and percentage of the projected demand, which it considers necessary to safely keep as a margin to meet the day to day variation in the demand and availability of the State through short term sources.

In this regard, it is to inform that there is no laid down principle for working out an appropriate safe margin to meet the day to day variations through short term sources at a time frame of Years Ahead basis as there may be a possibility that the deviation may decrease or increase as per real time intraday demand supply scenario / month on month demand supply scenario and other various uncontrollable factors like deferment of CODs, tariffs, government policies, regulatory compulsions, severe weather activities etc.

However, while providing its projections for the upcoming years UPCL has tried to comply with directions of the Hon'ble Commission issued in the Tariff Order dated 11-04-2025 as well as previous orders and comments w.r.t. reducing our reliance on short term (up to a limit of 5% of total energy available at State Periphery) and strengthening the firm availability through medium term and long term procurement so that reliable supply may be ensured for the consumers of the State.

The relevant directions in this regard has been quoted in Annexure 1 of this submission.

As per the additional query in this regard, UPCL wants to apprise that in the light of directions issued by the Hon'ble Commission short term reliance projections have been submitted in the presentation dated 15-09-2025 (provided as per Annexure 1D of this submission). In this presentation UPCL has shown the anticipated month-wise hourly surplus deficit position of the state post considering the upcoming plants as well as proposed medium term power.

Considering the anticipated banking, the optimized scenario of anticipated month-wise hourly surplus deficit position of the state indicates the short term net (Purchase - Sell) purchase of UPCL on an average monthly basis at hourly granularity summary as projected is as under:

Details of Anticipated Short Term Reliance						
FY	No. Of Days	No. of Hours	Net Deficit (MW)	Equivalent Energy (MUs)	Net Energy Requirement (MUs)	Reliance on Short Term (%)
FY'2026-27	365	24	118	1033	18538	6%
FY'2027-28	366	24	146	1282	19549	7%
FY'2028-29*	365	24	57	495	20674	2%
FY'2029-30	365	24	34	302	21919	1%
Year of inclusion of Singrauli consent (200 MW)						

For the sake of scenario wise reliance on short term power analysis, please consider the following details with different allocations from Singrauli Consent of (200 MW)

Details of Anticipated Short Term Reliance@ same tentative banking as shown above					
FY	Reliance on Short Term @ 100 % Singrauli Allocation (%)	Reliance on Short Term @ 50 % Singrauli Allocation (%)	Reliance on Short Term @ 25 % Singrauli Allocation (%)	Reliance on Short Term @ 12.5 % Singrauli Allocation (%)	Reliance on Short Term @ 0 % Singrauli Allocation (%)
FY'2026-27	6%	6%	6%	6%	6%
FY'2027-28	7%	7%	7%	7%	7%
FY'2028-29*	2%	5%	6%	6%	7%
FY'2029-30	1%	4%	6%	7%	7%

As shown in the data above, if the Singrauli allocation would be lower than consent given, UPCL may have to rely on short term in the range of 5 – 7% which could be tried to be reduced through optimization of banking transactions at that time as per demand and availability assessment.

5. **UPCL is required to provide a comparison of rate discovered by it for MTPP vis-à-vis rate discovered in other states at State periphery.**

The information on details of medium term tenders' discovered rates are provided as Annexure 2C.

Source: DEEP (Discovery of Efficient Electricity Price) Portal, Govt. of India
https://www.mstcecommerce.com/auctionhome/ppa/admin/Views/deep_result.jsp

In this regard, it is also to apprise that the details w.r.t. medium term tenders available on open sources does not include details of periphery on which power has to be provided by the generator.

6. **UPCL is required to provide information w.r.t. the month wise base load it projects in upcoming years and available firm sources, State, Central & IPPs to meet the same.**

The information regarding base load requirement (average minimum net demand) of the State as well as availability from different sources has been annexed as Annexure 2D.

7. **UPCL is required to submit as to how it proposes to meet the day to day variation in power in the range of 500 to 600 MW. UPCL is further required to submit the projected increase in these variations in light of proposed procurement through MTPP in upcoming period.**

Considering the demand as well as availability variations projected for upcoming years is based on the past data, the anticipated surplus - deficit scenario of the State on hourly, monthly basis for the upcoming years has been provided, (Please refer UPCL's presentation dated 15-09-2025 annexed as Annexure 1D) and management of variation of power has already been deliberated with the Hon'ble Commission on dated 15-09-2025.

Annexure 2A

Details of Availability Reduction by State Plants

UJVN:

UJVN Hydro Plants Deviation of Actual Schedule w.r.t. Declared Capacity on Day Ahead Basis					
Year	**Month**	**UJVN Hydro Declared Capacity (MW)**	**UJVN Hydro Actual Scheduled (MW)**	**UJVN Hydro Deviation (MW)**	**UJVN Hydro Deviation (%)**
2023	January	393	359	-33	-9%
2023	February	393	365	-27	-7%
2023	March	277	251	-26	-9%
2023	April	366	332	-34	-9%
2023	May	547	496	-51	-9%
2023	June	819	757	-62	-8%
2023	July	907	655	-252	-28%
2023	August	1027	910	-117	-11%
2023	September	895	839	-55	-6%
2023	October	525	479	-47	-9%
2023	November	360	333	-27	-8%
2023	December	354	324	-30	-9%
2024	January	319	289	-30	-9%
2024	February	335	304	-31	-9%
2024	March	362	326	-36	-10%
2024	April	377	348	-29	-8%
2024	May	643	600	-43	-7%
2024	June	757	702	-56	-7%
2024	July	879	754	-125	-14%
2024	August	1048	932	-116	-11%
2024	September	1025	961	-64	-6%
2024	October	589	540	-50	-8%
2024	November	356	333	-23	-6%
2024	December	377	350	-27	-7%
2025	January	311	289	-22	-7%
2025	February	349	329	-21	-6%
2025	March	383	347	-36	-9%
2025	April	442	400	-42	-10%
2025	May	727	664	-62	-9%
2025	June	787	678	-109	-14%
2025	July	1029	914	-115	-11%
2025	August	1025	749	-276	-27%
2025	September	1022	901	-121	-12%
Average					**-10%**

State Solar Plants (whose DC is being provided to UK SLDC with revisions)

State Solar Plants (Reported) Deviation of Actual Schedule w.r.t. Declared Capacity on Day Ahead Basis					
Year	Month	Solar Declared Capacity (MW)	Solar Actual Scheduled (MW)	Solar Deviation (MW)	Solar Deviation (%)
2023	January	40	23	-16	-41%
2023	February	59	52	-7	-12%
2023	March	68	56	-12	-18%
2023	April	64	52	-11	-18%
2023	May	66	50	-16	-24%
2023	June	58	43	-15	-26%
2023	July	36	18	-19	-51%
2023	August	47	28	-19	-41%
2023	September	53	38	-15	-28%
2023	October	51	40	-11	-21%
2023	November	50	40	-10	-20%
2023	December	36	24	-11	-31%
2024	January	25	14	-10	-42%
2024	February	54	42	-12	-23%
2024	March	58	46	-12	-21%
2024	April	64	53	-11	-17%
2024	May	63	54	-9	-14%
2024	June	56	49	-8	-14%
2024	July	42	28	-15	-34%
2024	August	34	25	-9	-27%
2024	September	49	29	-19	-40%
2024	October	53	44	-9	-18%
2024	November	45	36	-9	-20%
2024	December	47	34	-13	-27%
2025	January	40	27	-13	-33%
2025	February	54	44	-11	-19%
2025	March	68	59	-9	-13%
2025	April	64	55	-8	-13%
2025	May	57	44	-13	-23%
2025	June	55	37	-18	-33%
2025	July	50	34	-16	-32%
2025	August	35	18	-17	-48%
2025	September	47	32	-15	-32%
Average					**-27%**

State Sugar Mill Plants:

Sugar Mill Plants Deviation of Actual Schedule w.r.t. Declared Capacity on Day Ahead Basis					
Year	Month	Sugar Mill Declared Capacity (MW)	Sugar Mill Actual Scheduled (MW)	Sugar Mill Deviation (MW)	Sugar Mill Deviation (%)
2023	January	37	35	-3	-8%
2023	February	37	35	-3	-7%
2023	March	37	32	-5	-14%
2023	April	33	26	-8	-23%
2023	May	13	7	-7	-50%
2023	October	10	5	-5	-47%
2023	November	24	19	-5	-20%
2023	December	30	26	-4	-12%
2024	January	30	24	-6	-20%
2024	February	28	18	-9	-33%
2024	March	20	10	-10	-51%
2024	April	7	1	-6	-91%
2024	November	18	13	-5	-28%
2024	December	30	22	-8	-26%
2025	January	24	18	-6	-24%
2025	February	23	17	-6	-27%
2025	March	18	15	-3	-19%
2025	April	15	8	-6	-44%
Average					-30%

Annexure 2C

As per information available on DEEP portal (Details of Medium Term Tender by various Utilities in India)

Source: https://www.mstcecommerce.com/auctionhome/ppa/admin/Views/deep_result.jsp

Details of Medium Term Tenders by various Utilities in India

S. No.	Utility	Ref. No.	Quantity Requisitioned	Description	Booking Quantity	Booking Amount	Allotted Quantity	Discovered price	Type(IPO/RA)	Time of Auction
1	UPCL	UPCL/Medium/Lumpsum Tariff/24-25/RA/197	500.0(MW)	From 18.08.2025:00.00 to 18.08.2029:24.00	150	5.85	150	5.85	RA	30/07/2025 13:00:00 To 30/07/2025 16:03:46
2					350	5.85	350	5.85	RA	
3	GRIDCO	GRIDCO LIMITED/Medium/Lumpsum Tariff/25-26/RA/15	150.0(MW)	From 01.05.2025:00.00 to 30.04.2029:24.00	70	7	70	7	RA	24/04/2025 15:00:00 To 24/04/2025 17:11:26
4					25	7.1	25	7.1	RA	
5	CESC	CESC/Medium/Lumpsum Tariff/24-25/RA/159	200.0(MW)	From 01.04.2025:00.00 to 31.03.2027:24.00	100	5.88	100	5.88	RA	12/02/2025 15:00:00 To 12/02/2025 17:31:13
6					70	5.88	70	5.88	RA	
7	MSEDCL	MAHARASHTRA STATE ELECTRICITY CO LTD/Medium/Lumpsum Tariff/24-25/RA/171	1000.0(MW)	From 01.04.2025:00.00 to 31.03.2030:24.00	100	5.99	100	5.99	RA	12/02/2025 11:00:00 To 12/02/2025 13:00:00
8					100	5.99	100	5.99	RA	
9					100	6.24	100	6.24	RA	
10					540	6.25	540	6.25	RA	
11	TPCL Maharashtra	TPCL/Medium/Lumpsum Tariff/24-25/RA/158	200.0(MW)	From 01.04.2025:00.00 to 31.03.2027:24.00	2.85	0.08	2.85	0.08	IPO	11/02/2025 15:00:00 To 11/02/2025 17:24:29
12					100	5.56	100	5.56	RA	
13					70	5.56	70	5.56	RA	
14					70	5.62	27.15	5.62	RA	
15	GRIDCO	GRIDCO LIMITED/Medium/Lumpsum Tariff/24-25/RA/111	200.0(MW)	From 15.04.2025:00.00 to 14.04.2029:24.00	25	5.48	25	5.48	RA	24/01/2025 15:00:00 To 24/01/2025 17:37:26
16					50	5.48	50	5.48	RA	
17					150	6.083	125	6.083	RA	
18	HPPCL	HARYANA POWER PURCHASE CENTRE(A JOINT FORUM OF UHBVN&DHBVN)/Medium/Lumpsum Tariff/24-25/RA/49	500.0(MW)	From 01.04.2025:00.00 to 31.03.2030:24.00	150	5.39	150	5.39	RA	06/01/2025 13:00:00 To 06/01/2025 16:12:09
19					155	5.39	155	5.39	RA	
20					200	5.39	195	5.39	RA	
21	AEML	AEML/Medium/Lumpsum Tariff/24-25/RA/133	500.0(MW)	From 01.04.2025:00.00 to 31.05.2027:24.00	100	5.58	100	5.58	RA	24/12/2024 15:00:00 To 24/12/2024 17:34:55
22					100	5.58	100	5.58	RA	
23					75	5.58	75	5.58	RA	
24					50	5.58	50	5.58	RA	
25					250	5.98	175	5.98	RA	
26	NPCL	Noida Power Company Limited/Medium/Lumpsum Tariff/24-25/RA/131	50.0(MW)	From 01.04.2025:00.00 to 31.03.2028:24.00	25	5.41	25	5.41	RA	17/12/2024 13:00:00 To 17/12/2024 15:31:37
27					50	5.42	25	5.42	RA	
28	NPCL	Noida Power Company Limited/Medium/Lumpsum Tariff/24-25/RA/75	100.0(MW)	From 01.04.2025:00.00 to 31.03.2028:24.00	25	5.9	25	5.9	RA	03/09/2024 13:00:00 To 03/09/2024 15:20:04
29					25	5.9	25	5.9	RA	
30					10	5.91	10	5.91	RA	
31					50	8	40	8	RA	
32	GRIDCO	GRIDCO LIMITED/Medium/Lumpsum Tariff/24-25/RA/39	200.0(MW)	From 01.07.2024:00.00 to 30.06.2028:24.00	25	6.5	25	6.5	RA	10/06/2024 15:00:00 To 10/06/2024 17:10:07
33					25	6.5	25	6.5	RA	
34					50	6.5	50	6.5	RA	
35					100	6.78	100	6.78	RA	
36	NPCL	Noida Power Company Limited/Medium/Lumpsum Tariff/24-25/RA/21	50.0(MW)	From 01.07.2024:00.00 to 31.03.2026:24.00	20	5.99	20	5.99	RA	21/05/2024 14:00:00 To 21/05/2024 16:54:42
37					20	6.3	20	6.3	RA	
38	HPPCL	HARYANA POWER PURCHASE CENTRE(A JOINT FORUM OF UHBVN&DHBVN)/Medium/Lumpsum Tariff/24-25/RA/8	500.0(MW)	From 01.08.2024:00.00 to 31.07.2029:24.00	110	5.78	110	5.78	RA	01/05/2024 11:00:00 To 01/05/2024 13:13:20
39					127	5.78	127	5.78	RA	
40					140	5.78	140	5.78	RA	
41					150	6.28	123	6.28	RA	
42	UPCL	UPCL/Medium/Lumpsum Tariff/23-24/RA/104	300.0(MW)	From 01.12.2023:00.00 to 31.03.2027:24.00	40	6.48	40	6.48	RA	16/04/2024 13:00:00 To 16/04/2024 15:00:00
43	APDCL	Assam Power Distribution Company Ltd/Medium/Lumpsum Tariff/23-24/RA/161	200.0(MW)	From 01.04.2024:00.00 to 31.03.2026:24.00	100	7.98	100	7.98	RA	19/02/2024 14:00:00 To 19/02/2024 16:00:00
44	KSEBL	KSEBL/Medium/Lumpsum Tariff/23-24/RA/160	300.0(MW)	From 01.02.2024:00.00 to 30.06.2026:24.00	100	7.48	100	7.48	RA	05/02/2024 13:30:00 To 05/02/2024 15:37:48
45					150	7.48	150	7.48	RA	
46	NPCL	Noida Power Company Limited/Medium/Lumpsum Tariff/23-24/RA/101	125.0(MW)	From 01.04.2024:00.00 to 31.03.2029:24.00	95	5.19	95	5.19	RA	From 01.04.2024:00.00 to 31.03.2029:24.00
47	RUVNL	RUVNL/Medium/Lumpsum Tariff/23-24/RA/43	160.0(MW)	From 01.07.2023:00.00 to 30.06.2028:24.00	3.13	1.23	3.13	1.23	IPO	06/10/2023 14:00:00 To 06/10/2023 16:00:00
48					100	5.3	100	5.3	RA	
49					80	6.3	56.87	6.3	RA	
50	BEST	BEST/Medium/Lumpsum Tariff/23-24/RA/73	350.0(MW)	From 01.04.2024:00.00 to 31.03.2031:24.00	125	5.87	125	5.87	RA	27/09/2023 13:00:00 To 27/09/2023 15:07:48
51					100	6.67	100	6.67	RA	
52					150	8.26	125	8.26	RA	

Details of Medium Term Tenders by various Utilities in India

S. No.	Utility	Ref. No.	Quantity Requisitioned	Description	Booking Quantity	Booking Amount	Allotted Quantity	Discovered price	Type(IPO/RA)	Time of Auction
53	PFC (JSPL)	PFC Consulting Limited/Medium/Lumpsum Tariff/23-24/RA/92	240.0(MW)	From 01.10.2023:00.00 to 30.09.2028:24.00	240	5.05	240	5.05	RA	15/09/2023 12:00:00 To 15/09/2023 14:40:53
54	KSEBL	KSEBL/Medium/Coal from Linkage Coal/23-24/RA/56	500.0(MW)	From 15.08.2023:00.00 to 14.08.2028:24.00	303	6.88	303	6.88	RA	04/09/2023 13:30:00 To 04/09/2023 15:37:17
55					100	6.88	100	6.88	RA	
56	NPCL	Noida Power Company Limited/Medium/Lumpsum Tariff/23-24/RA/83	125.0(MW)	From 01.04.2024:00.00 to 31.03.2029:24.00	25	5.2	25	5.2	RA	01/08/2023 13:00:00 To 01/08/2023 15:00:00
57					25	5.2	25	5.2	RA	
58					50	5.2	50	5.2	RA	
59					125	7	25	7	RA	
60	UPCL	UPCL/Medium/Lumpsum Tariff/23-24/RA/42	300.0(MW)	From 01.10.2023:00.00 to 31.03.2027:24.00	100	7.97	100	7.97	RA	19/07/2023 15:00:00 To 19/07/2023 17:07:54
61					160	7.97	160	7.97	RA	
62	PFC (JSPL)	PFC Consulting Limited/Medium/Lumpsum Tariff/23-24/RA/55	240.0(MW)	From 01.08.2023:00.00 to 31.07.2028:24.00	240	5.4	240	5.4	RA	30/06/2023 11:00:00 To 30/06/2023 14:00:13
63	HPPCL	HARYANA POWER PURCHASE CENTRE(A JOINT FORUM OF UHBVN&DHBVN)/Medium/Lumpsum Tariff/22-23/RA/250	1000.0(MW)	From 01.05.2023:00.00 to 01.05.2028:24.00	110	5.79	110	5.79	RA	27/04/2023 12:00:00 To 27/04/2023 14:00:00
64					100	5.79	100	5.79	RA	
65					150	5.79	150	5.79	RA	
66					300	5.79	300	5.79	RA	
67					100	5.79	100	5.79	RA	
68					200	6.8	200	6.8	RA	
69					380	6.8	40	6.8	RA	

Annexure 2D

FY wise Anticipated Surplus Deficit Scenario

Anticipated Surplus - Deficit Scenario FY'27												
Month	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27
Availability	FY'2026-27											
State Hydro	469	610	758	856	937	904	656	378	335	318	354	372
State Gas Based Plants	0	200	150	0	0	0	0	0	50	150	100	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**506**	**838**	**934**	**879**	**963**	**924**	**679**	**407**	**432**	**505**	**499**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	23	22	20	18	21	19	18	20	19	20
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	100	100	150	-275	-350	-375	-300	-175	200	275	150	0
Total External (Central)	**1385**	**1568**	**1682**	**1390**	**1226**	**1192**	**1087**	**1046**	**1368**	**1456**	**1359**	**1228**
Total Availability	**1891**	**2406**	**2616**	**2269**	**2189**	**2116**	**1766**	**1454**	**1800**	**1961**	**1858**	**1642**
Demand	FY'2026-27											
Gross Demand	2059	2532	2703	2379	2298	2249	2072	1797	2044	2082	2006	1852
Total DRE Generation	54	50	51	45	43	65	67	57	59	56	69	77
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	30	28	29	25	25	46	48	41	42	40	49	55
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2006**	**2482**	**2652**	**2334**	**2255**	**2184**	**2005**	**1740**	**1985**	**2026**	**1937**	**1775**
Average Minimum Net Demand	*1712*	*2257*	*2464*	*2162*	*2083*	*1979*	*1700*	*1440*	*1536*	*1572*	*1491*	*1321*
Deficit (+ve)/Surplus (-ve)	**114**	**76**	**36**	**66**	**65**	**67**	**239**	**286**	**185**	**65**	**79**	**133**

Anticipated Surplus - Deficit Scenario FY'28

Month	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28
Availability	**FY'2027-28**											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	200	200	200	0	0	0	0	0	200	300	200	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**684**	**818**	**964**	**853**	**936**	**894**	**663**	**408**	**582**	**655**	**587**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	23	22	20	18	21	19	18	20	19	20
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	0	150	150	-150	-250	-250	-150	0	155	200	150	0
Total External (Central)	**1285**	**1618**	**1682**	**1515**	**1326**	**1317**	**1237**	**1221**	**1323**	**1381**	**1359**	**1228**
Total Availability	**1969**	**2436**	**2645**	**2367**	**2263**	**2212**	**1899**	**1630**	**1905**	**2036**	**1946**	**1642**
Demand	**FY'2027-28**											
Gross Demand	2183	2684	2865	2522	2436	2384	2196	1905	2167	2207	2126	1964
Total DRE Generation	93	86	88	78	75	75	77	66	68	64	80	89
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	70	65	66	59	57	56	58	50	51	48	60	67
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2089**	**2597**	**2777**	**2444**	**2361**	**2309**	**2119**	**1839**	**2099**	**2143**	**2046**	**1875**
Average Minimum Net Demand	***1706***	***2293***	***2521***	***2243***	***2149***	***2079***	***1782***	***1509***	***1628***	***1666***	***1559***	***1378***
Deficit (+ve)/Surplus (-ve)	**121**	**161**	**132**	**77**	**98**	**97**	**220**	**209**	**193**	**107**	**101**	**233**

Anticipated Surplus - Deficit Scenario FY'29												
Month	**Apr-28**	**May-28**	**Jun-28**	**Jul-28**	**Aug-28**	**Sep-28**	**Oct-28**	**Nov-28**	**Dec-28**	**Jan-29**	**Feb-29**	**Mar-29**
Availability	**FY'2028-29**											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	0	0	0	0	0	0	0	0	0	0	0	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**484**	**618**	**764**	**853**	**936**	**894**	**663**	**408**	**382**	**355**	**387**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	111	107	95	87	181	163	157	170	167	170
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	375	575	525	-50	-150	-100	0	0	500	550	400	150
Total External (Central)	**1660**	**2043**	**2145**	**1700**	**1502**	**1536**	**1547**	**1365**	**1807**	**1882**	**1756**	**1529**
Total Availability	**2144**	**2661**	**2909**	**2552**	**2438**	**2430**	**2209**	**1774**	**2189**	**2237**	**2143**	**1943**
Demand	**FY'2028-29**											
Gross Demand	2314	2845	3037	2673	2582	2527	2328	2019	2297	2340	2254	2081
Total DRE Generation	98	91	93	82	79	79	81	70	72	68	84	93
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	75	70	71	63	60	60	62	53	55	52	64	71
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2215**	**2754**	**2944**	**2591**	**2503**	**2448**	**2247**	**1950**	**2225**	**2272**	**2170**	**1988**
Average Minimum Net Demand	***1810***	***2433***	***2674***	***2380***	***2280***	***2205***	***1890***	***1601***	***1726***	***1766***	***1654***	***1463***
Deficit (+ve)/Surplus (-ve)	**72**	**93**	**35**	**39**	**65**	**18**	**37**	**176**	**36**	**35**	**27**	**45**

Anticipated Surplus - Deficit Scenario FY'30												
Month	**Apr-29**	**May-29**	**Jun-29**	**Jul-29**	**Aug-29**	**Sep-29**	**Oct-29**	**Nov-29**	**Dec-29**	**Jan-30**	**Feb-30**	**Mar-30**
Availability	**FY'2029-30**											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	0	0	0	0	0	0	0	0	0	0	0	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**484**	**618**	**764**	**853**	**936**	**894**	**663**	**408**	**382**	**355**	**387**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	168	177	200	192	170	156	181	163	157	170	167	170
Upcoming **Atomic**	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	20	37	37	54	52	54	30	18	15	12	15	15
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	135	0	0	0	0
Upcoming Long Term	539	539	539	539	539	539	539	539	1078	1078	1078	1078
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	-150	75	50	-550	-650	-650	-450	0	0	75	-150	-350
Total External (Central)	**1842**	**2276**	**2335**	**1878**	**1667**	**1648**	**1665**	**1607**	**1949**	**2047**	**1850**	**1672**
Total Availability	**2326**	**2894**	**3099**	**2730**	**2604**	**2542**	**2328**	**2016**	**2332**	**2402**	**2237**	**2086**
Demand	**FY'2029-30**											
Gross Demand	2452	3015	3219	2834	2737	2678	2468	2141	2435	2480	2389	2206
Total DRE Generation	102	96	98	88	85	84	86	73	75	71	87	97
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	77	72	73	65	62	62	64	55	56	53	66	74
Upcoming Hydro DRE	2	3	3	4	4	4	3	2	2	1	2	2
Net Demand	**2350**	**2920**	**3121**	**2746**	**2652**	**2594**	**2382**	**2068**	**2360**	**2409**	**2302**	**2109**
Average Minimum Net Demand	*1929*	*2586*	*2841*	*2528*	*2422*	*2343*	*2012*	*1705*	*1829*	*1871*	*1763*	*1561*
Deficit (+ve)/Surplus (-ve)	**24**	**26**	**22**	**16**	**48**	**52**	**54**	**52**	**28**	**8**	**65**	**23**

Annexure 1D

In compliance of instructions issued By Hon'ble Commission (UERC) through letter dated: 10-09-2025
(Letter No. – UERC/6/TF-533 (C)/2025-26/960)
w.r.t.

Procurement of Coal Based RTC Power on Medium Term Basis for 4 Years (extendable up to 1 Year, if needed) for a quantum of 500 MW

15th Sep' 25

Requirement of Hon'ble Commission w.r.t. 500 MW Coal Based RTC Power on Medium Term Basis

Background - A letter has been received from Hon'ble Commission (UERC) regarding in-principle approval for procurement of 500 MW RTC Power at discovered rate for the period of 4 years (extension of one year if needed) on DEEP Portal against Medium Term Tender invited by UPCL on dated: **22-02-2025** in compliance of direction given by Hon'ble Commission to rely on Medium /Long Term Power Sources and to reduce the reliance on short term power procurement.

The information sought by the Hon'ble Commission (UERC) is as follows:

- Availability & Demand Month-wise depicting peak & off-peak hours vis-à-vis historical figures of the same

&

- Highlighting the months in which transmission constraints may be encountered duly incorporating the generation from upcoming stations of UJVNL

Projected Demand

The demand projections have been provided by Central Electricity Authority (CEA), Govt. of India, in the 20th Electric Power Survey Report (EPS). Further, UPCL has also carried out the same for management of its power portfolio. A working on the demand projections for Uttarakhand State has also been done by M/s McKinsey. A comparative analysis of the same is as follows:

Energy Requirement (MU) / Average Demand Particulars	FY'26	FY'27	FY'28	FY'29	FY'30	Average
CEA Projections	19093	20142	21238	22374	23702	**21310**
CEA % Growth		5.5%	5.4%	5.3%	5.9%	**5.55%**
UPCL Projections	17676	18538	19549	20674	21919	**19671**
UPCL % Growth		4.9%	5.5%	5.8%	6.0%	**5.53%**
50% Step Up McKinsey Projections	20283	21633	22948	24270	25362	**22899**
50% Step Up McKinsey % Growth		6.7%	6.1%	5.8%	4.5%	**5.75%**
80% Step Up McKinsey Projections	20908	22585	24182	25766	26954	**24079**
80% Step Up McKinsey % Growth		8.0%	7.1%	6.6%	4.6%	**6.56%**
100% Step Up McKinsey Projections	21082	22958	24724	26463	27703	**24586**
100% Step Up McKinsey % Growth		8.9%	7.7%	7.0%	4.7%	**7.08%**

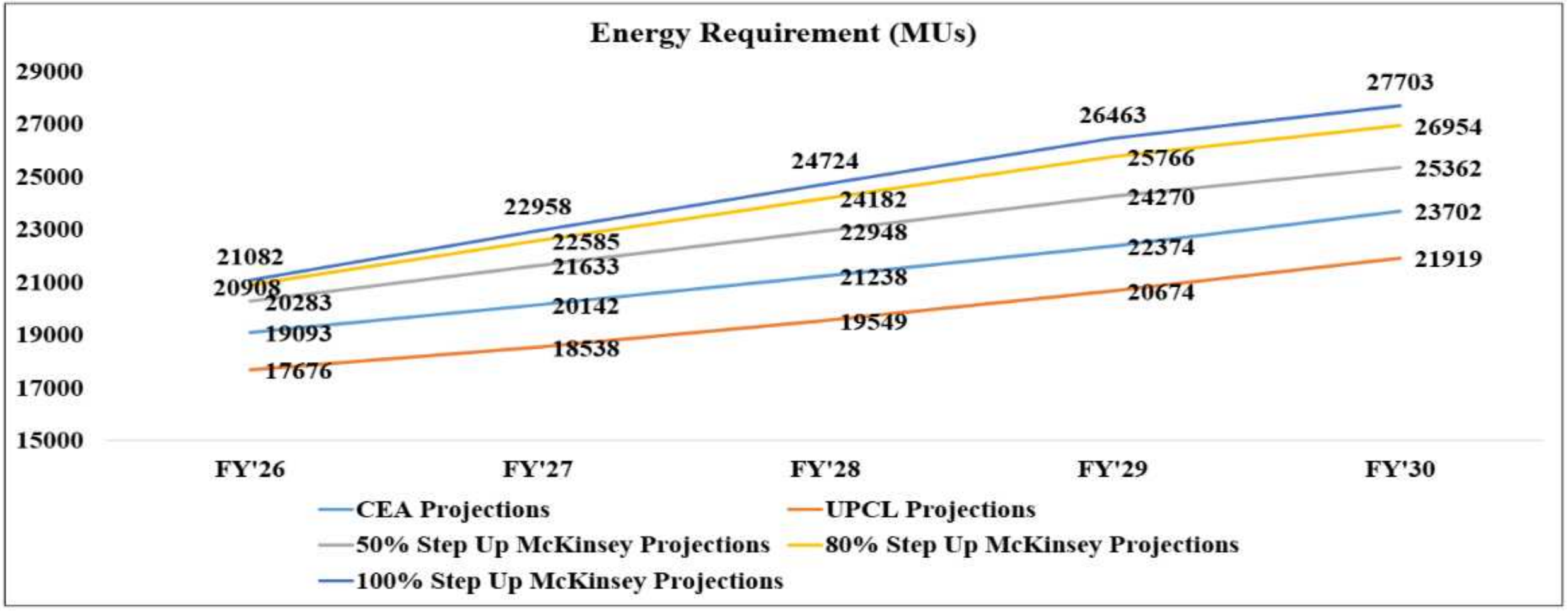
Projected Demand

The demand projections have been provided by Central Electricity Authority (CEA), Govt. of India, in the 20th Electric Power Survey Report (EPS). Further, UPCL has also carried out the same for management of its power portfolio. A working on the demand projections for Uttarakhand State has also been done by M/s McKinsey. A comparative analysis of the same is as follows:

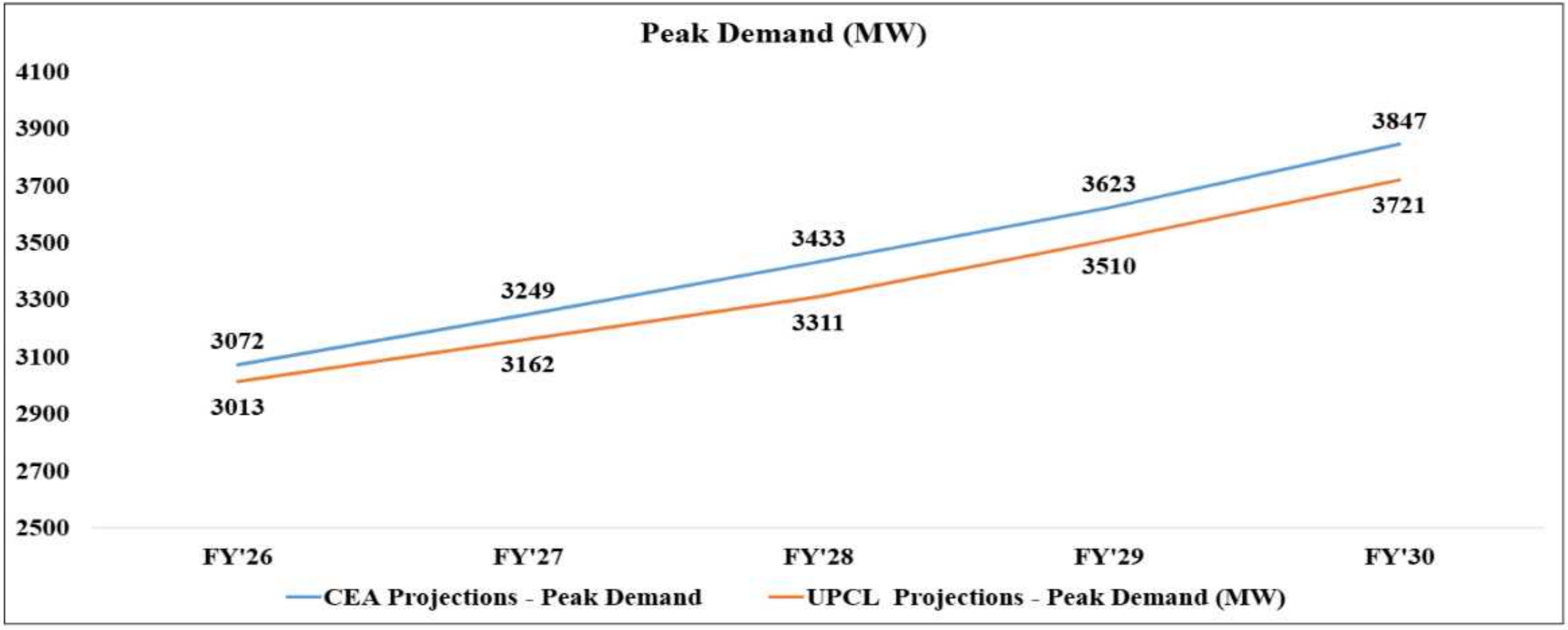
Projections Instantaneous Peak Demand (MW)	FY'26	FY'27	FY'28	FY'29	FY'30	Average
Peak Demand	3072	3249	3433	3623	3847	**3445**
% Growth of Peak Demand as per CEA Projections (%)		5.8%	5.7%	5.5%	6.2%	**5.79%**
UPCL Projections - Peak Demand (MW)	3013	3162	3311	3510	3721	**3343**
% Growth of Peak Demand as per UPCL Projections (%)		4.9%	4.7%	6.0%	6.0%	**5.42%**

**McKinsey has provided only total energy requirement projection*

Projected Demand



Projected Demand



Upcoming Plants' List

S. No.	Name of Plant	Sector	Generator	Installed Capacity	Firm Share %	UPCL Share - MW	COD Expected
1	THDC Khurja	ISGS	THDCIL	660	3.94%	26	30-09-2025
2	SJVN (Solar) Phase 3	ISGS	SJVN	50	100.00%	50	30-09-2025
3	Tehri PSP (1000 MW)_THDC	ISGS	THDCIL	250	20.00%	50	31-10-2025
4	Tehri PSP (1000 MW) THDC	ISGS	THDCIL	250	20.00%	50	30-11-2025
5	Singrauli Consent*	ISGS	NTPC	800	13%	100	05-05-2028
6	Singrauli Consent*	ISGS	NTPC	800	13%	100	05-09-2028
7	Vishnugad Pipalkoti (444 MW)_THDC	ISGS	THDCIL	444	15.99%	71.00	31-03-2029
8	Tapovan Vishnugad (520 MW)_NTPC	ISGS	NTPC	520	15.96%	83.00	31-03-2030
9	Khutani Syama - IPP	ISGS	Shayama Power	21	100.00%	21.00	31-03-2030
Sub Total						**551**	
10	MSSY Phase 2	State	IPP State Solar	50	100.00%	50.00	30-09-2025
11	UJVNL Solar	State	UJVNL Solar	17	100.00%	17.25	31-12-2025
12	MSSY Phase 3	State	IPP State Solar	100	100.00%	100.00	31-08-2026
13	UJVNL Solar	State	UJVNL Solar	45	100.00%	44.75	31-03-2027
14	UJVNL Solar	State	UJVNL Solar	18	100.00%	18.00	31-03-2028
15	Rayat Aglar Pvt. Ltd. (6 MW)	State	Aglar Pvt Ltd	6	100.00%	6.00	31-03-2029
16	UJVNL Solar	State	UJVNL Solar	8	100.00%	8.00	31-03-2029
Sub Total						**244**	
Grand Total						**795**	

The consent given to Singrauli is for 200 MW however the same will depend upon central sector allocation to the State at the time of COD and may be reduced by the competent authority, however the same is considered as 200 MW for analysis purpose

Existing Plants' List

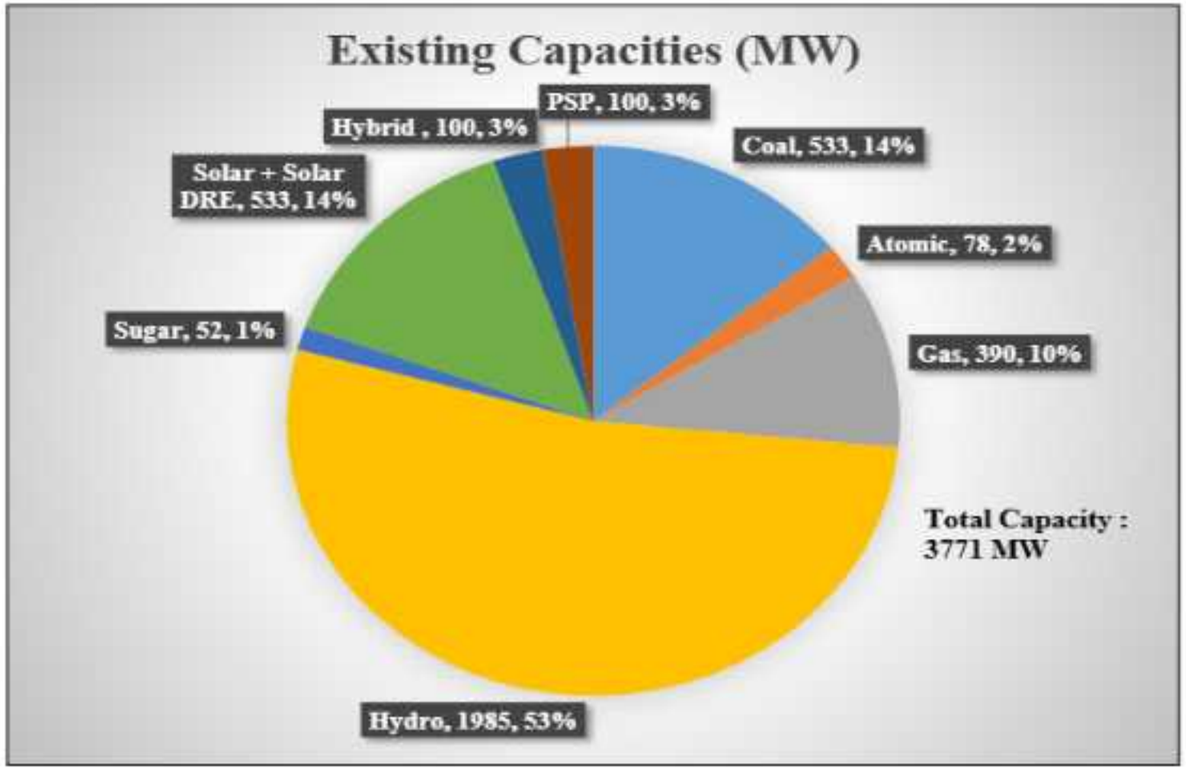
Details of Existing Capacities			
S. No.	Plant Name	Source	UPCL Share (MW)
1	Singrauli	Central Coal	96
2	Unchahar-I	Central Coal	36
3	Unchahar-2	Central Coal	15
4	Unchahar-3	Central Coal	13
5	Unchahar-4	Central Coal	31
6	Dadri II	Central Coal	6
7	Rihand-1 STPS	Central Coal	39
8	Rihand-2 STPS	Central Coal	34
9	Rihand-3 STPS	Central Coal	39
10	Kahalgaon-II	Central Coal	28
11	JhajjarAravali	Central Coal	10
12	Tanda-II	Central Coal	38
13	Meja-II	Central Coal	23
14	Sasan	Central Coal	99
15	THDC Khurja	Central Coal	26
Total Central Coal (MW)			**533**
1	NPCIL NAPP	Central Atomic	22
2	NPCIL RAPP-II	Central Atomic	24
3	NPCIL RAPP-U7 & U8	Central Atomic	32
Total Atomic (MW)			**78**
1	Anta Gas	Central Gas	16
2	Auraiya Gas	Central Gas	25
3	Dadri Gas	Central Gas	28
4	Internal Gas (GAMA+SEPL)	State Gas	321
Total Gas (MW)			**390**
1	RBNS Sugar Mill	State Sugar	19
2	Uttam Sugar Mills	State Sugar	20
3	Dhanashree Agro/Lakshmi Sugar Mills	State Sugar	13
Total Sugar (MW)			**52**

Details of Existing Capacities			
S. No.	Plant Name	Source	UPCL Share (MW)
1	Salal	Central Hydro	8
2	Tanakpur	Central Hydro	19
3	Chamera I	Central Hydro	19
4	Chamera II	Central Hydro	10
5	Chamera III	Central Hydro	9
6	Uri I	Central Hydro	17
7	Dhauliganga	Central Hydro	45
8	Dulhasti	Central Hydro	16
9	Sewa II	Central Hydro	5
10	Uri II	Central Hydro	10
11	Parbati III	Central Hydro	21
12	Kishnaganga	Central Hydro	9
13	NathpaJhakri	Central Hydro	28
14	Rampur Equity Power	Central Hydro	44
15	Tehri HEP I	Central Hydro	147
16	Koteshwar	Central Hydro	71
17	Singrauli SHEP (HYDRO)	Central Hydro	0.23
18	Koldam (Hydro)	Central Hydro	48
19	GreenkoBudhil Hydro Power Pvt Ltd	Central Hydro	70
20	Vishnu Pravag	Central Hydro	48
21	GVK Srinagar (Alaknanda)	Central Hydro	40
22	Parbati II	Central Hydro	18
Total Central Hydro (MW)			**702**
24	Dhakrani	State Hydro	25
25	Dhalipur	State Hydro	38
26	Chibro	State Hydro	180
27	Khodri	State Hydro	90
28	Kulhal	State Hydro	24
29	Ramganga	State Hydro	198
30	Tiloth	State Hydro	90
31	Chilla	State Hydro	144
32	Khatima	State Hydro	41
33	Vyasi Hydro Power Project	State Hydro	120
34	MB-II (Dharasu)	State Hydro	304
35	Mohd. Pur	State Hydro	9
36	Pathri	State Hydro	20
Total State Hydro (MW)			**1283**

Existing Plants' List

Details of Existing Capacities			
S. No.	Plant Name	Source	UPCL Share (MW)
1	Madhav Infra	State Solar	12
1	Devishi Renewal Energy	State Solar	13
2	Devishi Solar Power	State Solar	13
3	Eminet Solar Power	State Solar	13
4	Sunworld Energy Pvt. Ltd.	State Solar	13
5	Ballupur Solar Power Pvt. Ltd.	State Solar	10
6	Chudiala Solar Power Project Pvt. Ltd.	State Solar	10
7	Shakumbhari Solar Power Project Pvt. Ltd.	State Solar	10
8	Bindookharak Solar Power Project Pvt. Ltd.	State Solar	5
9	Bhagwanpur Solar Projects Pvt. Ltd.	State Solar	5
10	Haridwar Solar Projects Pvt. Ltd.	State Solar	10
11	Haridwar Solar Projects Pvt. Ltd.	State Solar	10
Total State Solar (MW)			**122**
12	RSVPL_FTG3 (Vanila)	Central Solar	100
13	SJVN (Solar) Phase 1	Central Solar	100
14	SJVN (Solar) Phase 2	Central Solar	50
15	SJVN (Solar) Phase 3	Central Solar	50
Total Central Solar (MW)			**300**
1	SECI RTC Solar Gujrat	Central Hybrid	100
Total Central Hybrid (MW)			**100**
1	THDC – PSP Unit 1	Central PSP	50
2	THDC – PSP Unit 2	Central PSP	50
Total Central PSP (MW)			**100**

Details of Existing Capacities			
S. No.	Plant Name	Source	UPCL Share (MW)
1	MSSY Phase I	State Solar DRE	83
2	UJVN Solar	State Solar DRE	27.8
Total Hydro DRE			**111**



Generation Profiles Considered

Sector/Source	FY - 2026-27	FY - 2027-28	FY - 2028-29	FY - 2029-30
Central Coal	84%	84%	84%	84%
Central Gas	As per requirement			
Central Atomic	85%	85%	85%	85%
Central Hydro	44%	44%	44%	44%
Central Solar	27%	27%	27%	27%
Central Hybrid	80%	80%	80%	80%
Central PSP (Import)	28%	28%	28%	28%
Central PSP (Export)	-35%	-35%	-35%	-35%
State Gas	As per requirement			
State Hydro	46%	45%	45%	45%
State Solar	20%	20%	20%	20%
State Bagasse	17%	17%	17%	17%
State Solar DREs	23%	23%	23%	23%
State Hydro DREs	46%	45%	45%	45%

Assumptions & Considerations

The submission is divided into two scenarios namely Scenario 1 and Scenario 2

Scope: Nov -25 to Nov – 29 (Medium Term Tender tentative tenure)

- Scenario 1 :

Demand: Projections of Central Electricity Authority have been considered by deducing demand from Energy Requirement figures provided in the 20th Electric Power Survey Report.

All the upcoming plants have been considered as per latest available information (including consent provided to Singrauli (200 MW).

- Scenario 2 :

Demand: Projections of UPCL have been considered.

Availability: All the upcoming plants have been considered as per latest available information (including consent provided to Singrauli (200 MW).

The consent given to Singrauli is for 200 MW however the same will depend upon central sector allocation to the State at the time of COD and may be reduced by the competent authority, however the same is considered as 200 MW for analysis purpose

Other Considerations

- The availability is based upon historical generation profiles of the plants, Atomic Plants and Hybrid plants availability has been considered as Normative 85% and 80 % due to fuel constraints in atomic plants and contractual obligation of Hybrid plant
- The availability projections of UJVNL plants is as per UJVNL projections provided on MU basis
- CEA projections are deduced from Energy Requirement as per demand profile of the State at its periphery
- The demand projections by UPCL is being done projecting the gross demand of the State at 6% w.r.t. demand of 2024 – 25 and the expected availability from the upcoming DREs has been reduced from the same to get a Net Demand for which the UPCL will have to do the arrangement of power

The consent given to Singrauli is for 200 MW however the same will depend upon central sector allocation to the State at the time of COD and may be reduced by the competent authority, however the same is considered as 200 MW for analysis purpose

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

FY	FY'2025-26 (Remaining)				
Estimated Surplus/Deficit	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26
Actual Availability from Proposed Medium Term (MW)	330	450	450	450	450
Actual Availability from Long Term (MW)	0	0	0	0	0
Tentative Banking (MW)	0	175	190	150	-125
State Gas	0	0	0	0	0
UA Considered	0	0	0	0	0
00:00-01:00	266	234	289	285	520
01:00-02:00	254	211	264	254	492
02:00-03:00	249	196	246	235	498
03:00-04:00	260	217	261	235	562
04:00-05:00	200	119	150	78	369
05:00-06:00	182	224	239	191	280
06:00-07:00	45	210	227	242	76
07:00-08:00	109	175	145	225	-137
08:00-09:00	326	330	33	53	-53
09:00-10:00	251	305	282	193	-75
10:00-11:00	291	389	491	381	135
11:00-12:00	176	192	221	198	38
12:00-13:00	87	84	69	69	-35
13:00-14:00	100	58	14	25	-25
14:00-15:00	236	184	99	95	57
15:00-16:00	385	399	273	214	212
16:00-17:00	347	333	181	160	212
17:00-18:00	385	331	176	106	220
18:00-19:00	-184	-159	-147	-88	-67
19:00-20:00	-317	-124	100	1	-73
20:00-21:00	-118	39	249	129	152
21:00-22:00	-102	-67	170	97	154
22:00-23:00	-41	-31	138	101	230
23:00-24:00	227	266	365	328	513
Average RTC	151	171	189	159	177
Average RTC (MUs)	112	123	141	118	119
Average Deficit (MW)	230	226	204	169	278
Average Deficit (MUs)	131	139	145	109	146
No. of Hours (Deficit)	19	20	23	23	17
Average Morning Peak Hours Deficits (MW)	160	238	135	173	76
Average Evening Peak Hours Deficits (MW)	0	39	173	76	153
Average Peak Hours' Deficits (MW)	80	139	154	125	114

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

FY	FY'2026-27											
Estimated Surplus/Deficit	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27
Actual Availability from Proposed Medium Term (MW)	450	450	450	450	450	450	450	450	450	450	450	450
Actual Availability from Long Term (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking (MW)	0	200	200	-300	-350	-400	-300	-175	250	300	150	50
State Gen	100	100	100	0	0	0	0	0	100	100	100	0
UA Considered	0	0	0	0	0	0	0	0	0	0	0	0
00:00-01:00	82	71	58	134	79	375	586	490	185	217	326	478
01:00-02:00	152	182	216	178	118	326	589	475	159	190	292	447
02:00-03:00	388	157	300	233	179	299	568	470	141	170	271	453
03:00-04:00	413	148	279	167	134	271	566	481	165	186	272	524
04:00-05:00	408	171	225	169	132	79	394	377	76	84	126	336
05:00-06:00	376	260	132	147	125	54	233	354	205	196	265	261
06:00-07:00	306	183	47	108	131	45	-47	221	229	227	358	83
07:00-08:00	82	7	-91	17	14	-23	-28	278	199	172	183	-144
08:00-09:00	60	-43	-157	-17	-18	-110	38	465	327	50	-11	-91
09:00-10:00	76	-157	-174	-53	-38	-98	106	382	258	258	82	-146
10:00-11:00	148	-105	-65	37	56	96	300	469	309	418	226	33
11:00-12:00	93	-94	-71	4	34	69	258	335	87	113	18	-82
12:00-13:00	9	-74	-74	9	1	33	245	238	-30	-52	-124	-165
13:00-14:00	16	38	3	64	36	74	287	257	-54	-111	-172	-155
14:00-15:00	121	207	116	156	157	211	456	417	93	-13	-87	-61
15:00-16:00	247	358	261	295	225	334	686	595	343	188	55	118
16:00-17:00	301	348	240	264	156	234	647	540	315	135	39	153
17:00-18:00	424	356	223	259	214	303	717	611	349	177	30	198
18:00-19:00	195	306	215	218	244	180	-9	-17	-142	-128	-133	-62
19:00-20:00	-12	265	108	264	243	116	-209	-165	-117	105	104	-71
20:00-21:00	39	257	158	291	228	87	-101	27	37	242	219	145
21:00-22:00	-32	220	143	257	194	53	48	33	-86	144	169	136
22:00-23:00	-32	113	131	228	135	115	130	114	-64	91	157	200
23:00-24:00	72	65	93	116	111	390	465	456	224	304	375	476
Average RTC	164	135	97	148	120	146	289	329	134	140	127	128
Average RTC (MUs)	122	97	72	106	90	109	208	245	96	104	94	86
Average Deficit (MW)	191	195	164	164	134	178	356	368	206	183	188	269
Average Deficit (MUs)	120	115	88	112	91	112	227	243	115	114	100	125
No. of Hours (Deficit)	21	19	18	22	22	21	19	22	18	20	19	15
Average Morning Peak Hours Deficits (MW)		-	-	-	-	-	38	321	282	149	270	83
Average Evening Peak Hours Deficits (MW)	32	232	151	282	209	110	48	30	37	164	164	140
Average Peak Hours' Deficits (MW)	32	232	151	282	209	110	43	176	146	157	217	111
Consolidated Peak Hours' Deficits (MW)	153											
Average 24 Hours' Deficits (MW)	219											
Total Deficit (MUs)	1663											
Net RTC Deficit (MUs)	1429											
Energy Requirment (MUs)	18538											
Additional Short Term %	7.71%											

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

FY	FY'2027-28											
Estimated Surplus/Deficit	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28
Actual Availability from Proposed Medium Term (MW)	450	450	450	450	450	450	450	450	450	450	450	450
Actual Availability from Long Term (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking (MW)	50	200	200	-175	-250	-250	-200	-100	225	200	100	0
State Gas	200	200	200	0	0	0	0	0	200	300	200	0
UA Considered	0	0	0	0	0	0	0	0	0	0	0	0
00:00-01:00	65	134	137	170	131	376	618	498	198	208	375	618
01:00-02:00	132	240	287	209	167	323	607	481	171	179	340	585
02:00-03:00	359	209	367	258	224	293	584	474	152	157	318	591
03:00-04:00	384	199	343	189	176	263	581	486	177	175	220	668
04:00-05:00	383	222	285	191	175	73	413	388	95	78	182	482
05:00-06:00	369	316	192	172	172	54	265	377	240	205	339	417
06:00-07:00	302	229	94	127	175	50	1	265	292	262	463	256
07:00-08:00	53	29	-64	17	36	-26	10	320	268	221	295	24
08:00-09:00	-8	-51	-154	-34	-14	-121	58	404	383	93	92	60
09:00-10:00	-32	-191	-194	-94	-53	-117	110	395	293	285	155	-11
10:00-11:00	11	-159	-108	-20	21	70	292	468	326	421	273	150
11:00-12:00	-56	-155	-122	-65	-9	41	244	324	90	97	49	25
12:00-13:00	-145	-136	-126	-60	-46	2	230	221	-34	-78	-103	-65
13:00-14:00	-133	-13	-38	-3	-10	45	275	243	-59	-140	-153	-55
14:00-15:00	-13	176	90	99	125	193	454	413	98	-36	-60	46
15:00-16:00	136	353	265	262	217	323	698	606	365	180	94	238
16:00-17:00	228	372	270	255	170	233	672	567	357	145	100	291
17:00-18:00	389	401	270	269	252	311	762	658	412	209	120	355
18:00-19:00	199	366	279	249	300	199	50	25	-79	-88	-23	112
19:00-20:00	7	341	187	310	310	132	-156	-134	-61	141	200	98
20:00-21:00	51	335	241	338	294	101	-56	55	86	272	305	309
21:00-22:00	-28	296	226	302	257	63	86	53	-50	162	241	293
22:00-23:00	-36	186	214	272	197	123	163	129	-38	97	218	350
23:00-24:00	58	135	175	155	169	393	492	467	243	300	430	621
Average RTC	111	160	130	149	143	142	311	348	164	148	190	269
Average RTC (MUs)	83	116	97	107	107	106	224	256	118	110	142	187
Average Deficit (MW)	196	252	231	214	188	174	348	366	236	194	248	314
Average Deficit (MUs)	94	141	118	119	111	110	238	252	132	121	142	204
No. of Hours (Deficit)	16	18	17	18	19	21	22	23	18	20	20	21
Average Morning Peak Hours Deficits (MW)	-	-	-	-	-	-	23	380	314	192	283	113
Average Evening Peak Hours Deficits (MW)	39	305	230	294	272	124	68	44	86	192	249	203
Average Peak Hours' Deficits (MW)	39	305	230	294	272	124	45	202	200	192	266	158
Consolidated Peak Hours' Deficits (MW)	194											
Average 24 Hours' Deficits (MW)	246											
Total Deficit (MUs)	1781											
Net RTC Deficit (MUs)	1680											
Energy Requirment (MUs)	19649											
Additional Short Term %	8.44%											

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

FY	FY'2028-29											
Estimated Surplus/Deficit	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28	Oct-28	Nov-28	Dec-28	Jan-29	Feb-29	Mar-29
Actual Availability from Proposed Medium Term (MW)	450	450	450	450	450	450	450	450	450	450	450	450
Actual Availability from Long Term (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking (MW)	575	575	525	-50	-150	-100	0	0	500	550	400	150
State Gen	0	0	0	0	0	0	0	0	0	0	0	0
UA Considered	0	0	0	0	0	0	0	0	0	0	0	0
00:00-01:00	52	104	84	97	86	282	369	340	77	102	223	411
01:00-02:00	116	207	229	132	118	226	356	321	48	71	185	376
02:00-03:00	342	172	307	177	172	193	331	314	27	47	162	383
03:00-04:00	368	160	279	104	121	161	327	326	53	66	165	465
04:00-05:00	369	184	217	106	120	-28	162	234	-22	-24	33	282
05:00-06:00	368	282	125	91	123	-41	24	237	141	118	208	227
06:00-07:00	304	194	26	47	128	-40	-230	145	221	201	359	84
07:00-08:00	48	-13	-136	-65	-14	-119	-227	201	205	176	196	-152
08:00-09:00	-18	-94	-228	-115	-65	-217	-187	366	312	44	-15	-125
09:00-10:00	-48	-239	-268	-177	-105	-214	-140	257	208	225	35	-207
10:00-11:00	-12	-209	-184	-106	-34	-31	35	320	227	343	136	-60
11:00-12:00	-83	-205	-198	-151	-65	-62	-16	169	-21	4	-99	-193
12:00-13:00	-176	-185	-201	-148	-103	-103	-33	60	-152	-182	-261	-289
13:00-14:00	-165	-57	-109	-87	-66	-57	14	82	-179	-247	-315	-280
14:00-15:00	-39	140	26	20	77	98	202	259	-16	-139	-217	-173
15:00-16:00	117	325	207	188	173	233	455	461	262	85	-55	28
16:00-17:00	219	346	216	184	128	147	436	434	268	65	-37	94
17:00-18:00	387	374	212	197	212	227	539	539	343	148	-2	170
18:00-19:00	206	341	221	178	265	124	-169	-96	-150	-143	-131	-61
19:00-20:00	17	327	137	248	279	54	-384	-266	-139	81	86	-78
20:00-21:00	58	321	193	277	263	21	-288	-82	0	207	185	127
21:00-22:00	-27	279	178	238	224	-20	-152	-91	-148	85	109	103
22:00-23:00	-40	165	165	208	161	36	-79	-20	-147	6	76	153
23:00-24:00	49	111	125	85	130	302	246	313	127	200	281	418
Average RTC	101	126	68	72	97	49	66	201	64	64	54	71
Average RTC (MUs)	75	91	50	52	72	36	48	149	46	48	41	48
Average Deficit (MW)	201	237	173	152	163	162	269	283	168	120	163	237
Average Deficit (MUs)	91	125	88	80	86	63	108	161	78	71	68	103
No. of Hours (Deficit)	15	17	17	17	17	13	13	19	15	19	15	14
Average Morning Peak Hours Deficits (MW)	-	-	-	-	-	-	0	237	246	140	277	84
Average Evening Peak Hours Deficits (MW)	43	286	179	230	238	43	0	0	0	124	127	115
Average Peak Hours' Deficits (MW)	43	286	179	230	238	43	0	119	123	132	202	100
Consolidated Peak Hours' Deficits (MW)	141											
Average 24 Hours' Deficits (MW)	194											
Total Deficit (MUs)	1121											
Net RTC Deficit (MUs)	756											
Energy Requirment (MUs)	20674											
Additional Short Term %	3.66%											

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

FY	FY'2029-30											
Estimated Surplus/Deficit	Apr-29	May-29	Jun-29	Jul-29	Aug-29	Sep-29	Oct-29	Nov-29	Dec-29	Jan-30	Feb-30	Mar-30
Actual Availability from Proposed Medium Term (MW)	450	450	450	450	450	450	450	135	0	0	0	0
Actual Availability from Long Term (MW)	539	539	539	539	539	539	539	539	1078	1078	1078	1078
Tentative Banking (MW)	-150	75	50	-550	-650	-650	-450	0	0	75	-150	-350
State Gas	0	0	0	0	0	0	0	0	0	0	0	0
UA Considered	0	0	0	0	0	0	0	0	0	0	0	0
00:00-01:00	0	34	74	76	66	310	380	207	50	54	250	385
01:00-02:00	63	135	215	106	94	251	366	186	20	21	210	348
02:00-03:00	289	96	290	146	146	217	339	178	-2	-4	185	355
03:00-04:00	316	84	260	68	92	184	335	190	26	17	188	443
04:00-05:00	316	110	195	70	91	-5	173	104	-41	-67	62	263
05:00-06:00	328	214	103	60	99	-13	37	110	137	90	253	210
06:00-07:00	267	124	3	17	109	-5	-219	20	224	185	421	69
07:00-08:00	6	-90	-161	-94	-34	-85	-204	85	207	162	251	-177
08:00-09:00	-57	-167	-250	-142	-81	-179	-160	266	329	36	44	-140
09:00-10:00	-87	-311	-287	-202	-121	-174	-115	154	224	225	93	-222
10:00-11:00	-56	-281	-201	-131	-48	7	56	208	233	334	183	-82
11:00-12:00	-129	-274	-213	-177	-79	-24	4	50	-24	-19	-62	-222
12:00-13:00	-228	-254	-216	-173	-119	-68	-16	-66	-164	-216	-234	-323
13:00-14:00	-218	-120	-121	-109	-80	-20	32	-45	-194	-286	-291	-315
14:00-15:00	-86	84	20	2	71	141	227	137	-25	-175	-191	-206
15:00-16:00	74	273	205	175	166	278	488	342	261	56	-25	2
16:00-17:00	179	294	215	171	119	191	471	316	271	42	2	75
17:00-18:00	346	317	205	179	200	269	572	422	350	126	34	147
18:00-19:00	159	274	207	156	247	166	-158	-227	-160	-167	-88	-83
19:00-20:00	-31	264	127	234	268	90	-384	-405	-145	67	136	-93
20:00-21:00	9	261	187	265	252	56	-285	-211	-1	198	237	119
21:00-22:00	-83	217	172	224	210	12	-140	-216	-159	68	153	91
22:00-23:00	-100	97	159	193	144	65	-69	-146	-166	-25	112	133
23:00-24:00	-8	42	117	64	112	329	254	185	105	160	311	395
Average RTC	53	59	54	49	80	83	83	77	57	37	93	49
Average RTC (MUs)	39	43	40	36	60	62	60	57	41	27	69	33
Average Deficit (MW)	196	172	162	130	146	171	267	186	188	115	174	217
Average Deficit (MUs)	71	91	83	68	77	77	116	95	76	57	88	94
No. of Hours (Deficit)	12	17	17	17	17	15	14	17	13	16	15	14
Average Morning Peak Hours Deficits (MW)	-	-	-	-	-	-	0	124	254	128	238	69
Average Evening Peak Hours Deficits (MW)	-9	223	170	216	224	78	0	0	0	111	176	106
Average Peak Hours' Deficits (MW)	-9	223	170	216	224	78	0	62	127	119	207	87
Consolidated Peak Hours' Deficits (MW)	125											
Average 24 Hours' Deficits (MW)	177											
Total Deficit (MUs)	991											
Net RTC Deficit (MUs)	566											
Energy Requirment (MUs)	21919											
Additional Short Term %	2.58%											

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

Month	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26
Availability			**FY'2025-26**		
State Hydro	375	331	331	366	374
State Gas Based Plants	0	0	0	0	0
State Solar	18	21	16	25	27
State Sugar Mills	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0
Total Internal (State)	**404**	**378**	**367**	**411**	**416**
Central Coal	382	367	398	390	398
Central Atomic	60	60	60	60	60
Central Gas	0	0	0	0	0
Central Hydro	178	145	119	151	152
Central Solar	60	56	62	64	73
Central Hybrid	80	80	80	80	80
Upcoming Central Coal	19	18	20	19	20
Upcoming Atomic	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0
Upcoming Central Solar	12	11	12	13	15
Upcoming Central PSP (Import)	56	74	74	74	74
Upcoming Central PSP (Export)	-70	-93	-93	-93	-93
Upcoming Medium Term	330	450	450	450	450
Upcoming Long Term	0	0	0	0	0
Unallocated Quota	0	0	0	0	0
Banking	0	0	0	-83	0
Tentative Banking	0	175	190	150	-125
Total External (Central)	**1106**	**1343**	**1371**	**1276**	**1103**
Total Availability	**1510**	**1721**	**1739**	**1688**	**1519**
Demand			**FY'2025-26**		
Gross Demand	1696	1928	1965	1892	1748
Total DRE Generation	35	36	37	46	51
Solar DRE (84MW)	16	17	16	20	22
Upcoming Solar DREs	18	19	21	26	29
Upcoming Hydro DRE	0	0	0	0	0
Net Demand	**1661**	**1893**	**1928**	**1846**	**1697**
Deficit (+ve)/Surplus (-ve)	**151**	**171**	**189**	**159**	**177**

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

Month	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27
Availability	FY'2026-27											
State Hydro	469	610	758	856	937	904	656	378	335	318	354	372
State Gas Based Plants	100	100	100	0	0	0	0	0	100	100	100	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**606**	**738**	**884**	**879**	**963**	**924**	**679**	**407**	**482**	**455**	**499**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	23	22	20	18	21	19	18	20	19	20
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	0	200	200	-300	-350	-400	-300	-175	250	300	150	50
Total External (Central)	**1285**	**1668**	**1732**	**1365**	**1226**	**1167**	**1087**	**1046**	**1418**	**1481**	**1359**	**1278**
Total Availability	**1891**	**2406**	**2616**	**2244**	**2189**	**2091**	**1766**	**1454**	**1900**	**1936**	**1858**	**1692**
Demand	FY'2026-27											
Gross Demand	2108	2591	2763	2436	2353	2303	2122	1840	2093	2132	2054	1897
Total DRE Generation	54	50	51	45	43	65	67	57	59	56	69	77
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	30	28	29	25	25	46	48	41	42	40	49	55
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2055**	**2541**	**2712**	**2392**	**2310**	**2238**	**2055**	**1783**	**2034**	**2076**	**1985**	**1820**
Deficit (+ve)/Surplus (-ve)	**164**	**135**	**97**	**148**	**120**	**146**	**289**	**329**	**134**	**140**	**127**	**128**

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

Month	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28
Availability	**FY'2027-28**											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	200	200	200	0	0	0	0	0	200	300	200	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**684**	**818**	**964**	**853**	**936**	**894**	**663**	**408**	**582**	**655**	**587**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	23	22	20	18	21	19	18	20	19	20
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	50	200	200	-175	-250	-250	-200	-100	225	200	100	0
Total External (Central)	**1335**	**1668**	**1732**	**1490**	**1326**	**1317**	**1187**	**1121**	**1393**	**1381**	**1309**	**1228**
Total Availability	**2019**	**2486**	**2695**	**2342**	**2263**	**2212**	**1849**	**1530**	**1975**	**2036**	**1896**	**1642**
Demand	**FY'2027-28**											
Gross Demand	2223	2732	2913	2569	2481	2428	2237	1941	2207	2248	2166	2000
Total DRE Generation	93	86	88	78	75	75	77	66	68	64	80	89
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	70	65	66	59	57	56	58	50	51	48	60	67
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2130**	**2645**	**2825**	**2491**	**2406**	**2353**	**2160**	**1874**	**2139**	**2184**	**2086**	**1911**
Deficit (+ve)/Surplus (-ve)	**111**	**160**	**130**	**149**	**143**	**142**	**311**	**345**	**164**	**148**	**190**	**269**

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

Month	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28	Oct-28	Nov-28	Dec-28	Jan-29	Feb-29	Mar-29
Availability	**FY'2028-29**											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	0	0	0	0	0	0	0	0	0	0	0	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**484**	**618**	**764**	**853**	**936**	**894**	**663**	**408**	**382**	**355**	**387**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	111	107	95	87	181	163	157	170	167	170
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	375	575	525	-50	-150	-100	0	0	500	550	400	150
Total External (Central)	**1660**	**2043**	**2145**	**1700**	**1502**	**1536**	**1547**	**1365**	**1807**	**1882**	**1756**	**1529**
Total Availability	**2144**	**2661**	**2909**	**2552**	**2438**	**2430**	**2209**	**1774**	**2189**	**2237**	**2143**	**1943**
Demand	**FY'2028-29**											
Gross Demand	2342	2878	3069	2707	2614	2558	2357	2044	2325	2369	2282	2107
Total DRE Generation	98	91	93	82	79	79	81	70	72	68	84	93
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	75	70	71	63	60	60	62	53	55	52	64	71
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2244**	**2787**	**2976**	**2624**	**2535**	**2479**	**2275**	**1975**	**2254**	**2301**	**2198**	**2014**
Deficit (+ve)/Surplus (-ve)	**101**	**126**	**68**	**72**	**97**	**49**	**66**	**201**	**64**	**64**	**54**	**71**

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

Month	Apr-29	May-29	Jun-29	Jul-29	Aug-29	Sep-29	Oct-29	Nov-29	Dec-29	Jan-30	Feb-30	Mar-30
Availability	**FY'2029-30**											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	0	0	0	0	0	0	0	0	0	0	0	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**484**	**618**	**764**	**853**	**936**	**894**	**663**	**408**	**382**	**355**	**387**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	168	177	200	192	170	156	181	163	157	170	167	170
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	20	37	37	54	52	54	30	18	15	12	15	15
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	135	0	0	0	0
Upcoming Long Term	539	539	539	539	539	539	539	539	1078	1078	1078	1078
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	-150	75	50	-550	-650	-650	-450	0	0	75	-150	-350
Total External (Central)	**1842**	**2276**	**2335**	**1878**	**1667**	**1648**	**1665**	**1607**	**1949**	**2047**	**1850**	**1672**
Total Availability	**2326**	**2894**	**3099**	**2730**	**2604**	**2542**	**2328**	**2016**	**2332**	**2402**	**2237**	**2086**
Demand	**FY'2029-30**											
Gross Demand	2481	3049	3251	2867	2769	2710	2497	2166	2463	2509	2417	2232
Total DRE Generation	102	96	98	88	85	84	86	73	75	71	87	97
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	77	72	73	65	62	62	64	55	56	53	66	74
Upcoming Hydro DRE	2	3	3	4	4	4	3	2	2	1	2	2
Net Demand	**2379**	**2953**	**3153**	**2779**	**2684**	**2625**	**2411**	**2093**	**2388**	**2438**	**2330**	**2135**
Deficit (+ve)/Surplus (-ve)	**53**	**59**	**54**	**49**	**80**	**83**	**83**	**77**	**57**	**37**	**93**	**49**

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

BESS capacity of 500 MWh to 665 MWh has also been proposed from Apr-27 for which utilization factor is as follows:

FY	FY'2027-28											
Months	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28
BESS considered for 665 MWh												
Non Peak Surplus (MWh)	348	463	394	148	65	0	0	0	93	254	316	119
BESS Charging Req	665	665	665	665	665	665	665	665	665	665	665	665
Charging Utilization Factor	52%	70%	59%	22%	10%	0%	0%	0%	14%	38%	48%	18%
Peak Hour Deficits (MWh)	258	1524	1148	1471	1359	619	205	1211	1029	1151	1595	1152
Non Peak BESS Discharging Avl.	565	565	565	565	565	565	565	565	565	565	565	565
Discharging Utilization Factor	46%	100%	100%	100%	100%	100%	36%	100%	100%	100%	100%	100%
Charging Utilization Factor	28%											
Disharging Utilization Factor	90%											
BESS considered for 500 MWh												
Non Peak Surplus (MWh)	348	463	394	148	65	0	0	0	93	254	316	119
BESS Charging Req	500	500	500	500	500	500	500	500	500	500	500	500
Charging Utilization Factor	70%	93%	79%	30%	13%	0%	0%	0%	19%	51%	63%	24%
Peak Hour Deficits (MWh)	164	1524	1148	1471	1359	619	205	1211	1029	1151	1595	1152
Non Peak BESS Discharging Avl.	425	425	425	425	425	425	425	425	425	425	425	425
Discharging Utilization Factor	39%	100%	100%	100%	100%	100%	48%	100%	100%	100%	100%	100%
Charging Utilization Factor	37%											
Disharging Utilization Factor	91%											

Charging Cycle considered from 10:00 hrs to 16:00 hrs for maximum utilization of Solar Power

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

BESS capacity of 500 MWh to 665 MWh has also been proposed from Apr-27 for which utilization factor is as follows:

FY	FY'2028-29											
Months	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28	Oct-28	Nov-28	Dec-28	Jan-29	Feb-29	Mar-29
BESS considered for 665 MWh												
Non Peak Surplus (MWh)	475	655	692	492	269	253	48	0	368	568	948	994
BESS Charging Req	665	665	665	665	665	665	665	665	665	665	665	665
Charging Utilization Factor	71%	98%	100%	74%	40%	38%	7%	0%	55%	85%	100%	100%
Peak Hour Deficits (MWh)	282	1432	894	1149	1190	236	0	712	738	794	935	315
Non Peak BESS Discharging Avl.	565	565	565	565	565	565	565	565	565	565	565	565
Discharging Utilization Factor	50%	100%	100%	100%	100%	42%	0%	100%	100%	100%	100%	56%
Charging Utilization Factor	64%											
Disharging Utilization Factor	79%											
BESS considered for 500 MWh												
Non Peak Surplus (MWh)	475	655	692	492	269	253	48	0	368	568	948	994
BESS Charging Req	500	500	500	500	500	500	500	500	500	500	500	500
Charging Utilization Factor	95%	100%	100%	98%	54%	51%	10%	0%	74%	100%	100%	100%
Peak Hour Deficits (MWh)	282	1432	894	1149	1190	236	0	712	738	794	935	315
Non Peak BESS Discharging Avl.	425	425	425	425	425	425	425	425	425	425	425	425
Discharging Utilization Factor	66%	100%	100%	100%	100%	56%	0%	100%	100%	100%	100%	74%
Charging Utilization Factor	73%											
Disharging Utilization Factor	83%											

Charging Cycle considered from 10:00 hrs to 16:00 hrs for maximum utilization of Solar Power

Anticipated Surplus Deficit Scenario 1: All upcoming plants considered with CEA deduced Demand Projections

BESS capacity of 500 MWh to 665 MWh has also been proposed from Apr-27 for which utilization factor is as follows:

FY	FY'2029-30											
Months	Apr-29	May-29	Jun-29	Jul-29	Aug-29	Sep-29	Oct-29	Nov-29	Dec-29	Jan-30	Feb-30	Mar-30
BESS considered for 665 MWh												
Non Peak Surplus (MWh)	717	928	752	590	326	112	16	111	407	697	803	1148
BESS Charging Req	665	665	665	665	665	665	665	665	665	665	665	665
Charging Utilization Factor	100%	100%	100%	89%	49%	17%	2%	17%	61%	100%	100%	100%
Peak Hour Deficits (MWh)	169	1113	852	1073	1121	389	0	371	761	717	1242	278
Non Peak BESS Discharging Avl.	565	565	565	565	565	565	565	565	565	565	565	565
Discharging Utilization Factor	30%	100%	100%	100%	100%	69%	0%	66%	100%	100%	100%	49%
Charging Utilization Factor	70%											
Disharging Utilization Factor	76%											
BESS considered for 500 MWh												
Non Peak Surplus (MWh)	717	928	752	590	326	112	16	111	407	697	803	1148
BESS Charging Req	500	500	500	500	500	500	500	500	500	500	500	500
Charging Utilization Factor	100%	100%	100%	100%	65%	22%	3%	22%	81%	100%	100%	100%
Peak Hour Deficits (MWh)	169	1113	852	1073	1121	389	0	371	761	717	1242	278
Non Peak BESS Discharging Avl.	425	425	425	425	425	425	425	425	425	425	425	425
Discharging Utilization Factor	40%	100%	100%	100%	100%	92%	0%	87%	100%	100%	100%	66%
Charging Utilization Factor	75%											
Disharging Utilization Factor	82%											

Charging Cycle considered from 10:00 hrs to 16:00 hrs for maximum utilization of Solar Power

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

FY	FY'2025-26				
Estimated Surplus/Deficit	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26
Availability from Proposed Medium Term (MW)	330	450	450	450	450
Availability from Long Term (MW)	0	0	0	0	0
Tentative Banking (MW)	0	175	275	200	-125
State Gas	0	0	0	0	0
UA Considered	0	0	0	0	0
00:00-01:00	266	234	204	235	520
01:00-02:00	254	211	179	204	492
02:00-03:00	249	196	161	185	498
03:00-04:00	260	217	176	185	562
04:00-05:00	200	119	65	28	369
05:00-06:00	182	224	154	141	280
06:00-07:00	45	210	142	192	76
07:00-08:00	109	175	60	175	-137
08:00-09:00	326	330	-52	3	-53
09:00-10:00	251	305	197	143	-75
10:00-11:00	291	389	406	331	135
11:00-12:00	176	192	136	148	38
12:00-13:00	87	84	-16	19	-35
13:00-14:00	100	58	-71	-25	-25
14:00-15:00	236	184	14	45	57
15:00-16:00	385	399	188	164	212
16:00-17:00	347	333	96	110	212
17:00-18:00	385	331	91	56	220
18:00-19:00	-184	-159	-232	-138	-67
19:00-20:00	-317	-124	15	-49	-73
20:00-21:00	-118	39	164	79	152
21:00-22:00	-102	-67	85	47	154
22:00-23:00	-41	-31	53	51	230
23:00-24:00	227	266	280	278	513
Average RTC (MW)	151	171	104	109	177
Average RTC (MUs)	108	128	77	73	132
Average Deficit Only (MW)	230	225	143	134	278
Average Deficit Only (MUs)	131	139	89	79	146
No. of Hours (Deficit)	19	20	20	21	17
Average Morning Peak Hours Deficits (MW)	160	238	101	123	76
Average Evening Peak Hours Deficits (MW)	0	39	88	63	153
Average Peak Hours' Deficits (MW)	80	139	94	93	114

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

FY	FY'2026-27											
Estimated Surplus/Deficit	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27
Availability from Proposed Medium Term (MW)	450	450	450	450	450	450	450	450	450	450	450	450
Availability from Long Term (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking (MW)	100	100	150	-275	-350	-375	-300	-175	200	275	150	0
State Gas	0	200	150	0	0	0	0	0	50	150	100	0
UA Considered	0	0	0	0	0	0	0	0	0	0	0	0
00:00-01:00	44	12	-7	52	24	298	550	455	246	153	286	489
01:00-02:00	101	123	150	98	66	251	544	440	222	127	253	458
02:00-03:00	342	100	235	154	127	225	524	435	204	107	233	464
03:00-04:00	368	92	214	91	84	197	522	446	227	123	234	534
04:00-05:00	362	114	166	92	82	6	349	340	136	18	85	344
05:00-06:00	325	201	78	68	73	-22	184	311	257	124	217	265
06:00-07:00	251	127	-13	28	77	-34	-100	169	270	144	298	79
07:00-08:00	27	-50	-150	-63	-39	-102	-80	226	236	82	121	-146
08:00-09:00	9	-101	-218	-98	-72	-189	-13	415	365	-39	-71	-92
09:00-10:00	26	-214	-232	-134	-93	-178	56	334	301	173	25	-143
10:00-11:00	99	-162	-124	-44	2	17	251	425	356	338	175	39
11:00-12:00	46	-146	-130	-77	-20	-9	210	292	139	38	-30	-73
12:00-13:00	-36	-133	-137	-72	-53	-44	198	198	24	-123	-167	-153
13:00-14:00	-29	-22	-62	-18	-19	-5	241	218	2	-180	-213	-143
14:00-15:00	75	146	51	72	99	131	407	375	147	-82	-130	-50
15:00-16:00	198	293	197	210	167	252	634	551	394	116	10	126
16:00-17:00	250	287	179	179	98	152	594	493	362	59	-10	157
17:00-18:00	372	294	168	175	157	221	660	558	389	93	-23	199
18:00-19:00	147	243	157	135	187	95	-68	-69	-102	-213	-191	-65
19:00-20:00	-69	202	60	177	183	32	-264	-212	-73	22	49	-73
20:00-21:00	-16	194	104	204	168	4	-154	-17	84	161	166	146
21:00-22:00	-84	156	87	171	135	-29	-3	-8	-34	68	121	140
22:00-23:00	-82	61	70	142	78	36	80	75	-8	20	113	208
23:00-24:00	23	4	31	35	55	312	418	418	283	237	334	486
Average RTC (MW)	114	76	36	66	65	67	239	286	185	65	79	133
Average RTC (MUs)	82	56	26	49	49	49	178	206	137	49	53	99
Average Deficit Only (MW)	170	156	130	122	104	149	378	359	232	116	170	276
Average Deficit Only (MUs)	92	82	58	65	58	67	199	215	144	68	76	128
No. of Hours (Deficit)	18	17	15	17	18	15	17	20	20	19	16	15
Average Morning Peak Hours Deficits (MW)		-	-	-	-	-	0	270	290	113	210	79
Average Evening Peak Hours Deficits (MW)	-21	171	96	166	150	28	0	0	84	84	112	143
Average Peak Hours' Deficits (MW)	-21	171	96	166	150	28	0	135	187	98	161	111
Consolidated Peak Hours' Deficits (MW)	107											
Average 24 Hours' Deficits (MW)	197											
Total Deficit (MUs)	1253											
Net RTC Deficit (MUs)	1033											
Energy Requirment (MUs)	18538											
Additional Short Term %	5.57%											

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

FY	FY'2027-28											
Estimated Surplus/Deficit	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28
Availability from Proposed Medium Term (MW)	450	450	450	450	450	450	450	450	450	450	450	450
Availability from Long Term (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking (MW)	0	150	150	-150	-250	-250	-150	0	155	200	150	0
State Gas	200	200	200	0	0	0	0	0	200	300	200	0
UA Considered	0	0	0	0	0	0	0	0	0	0	0	0
00:00-01:00	86	136	134	98	87	333	530	368	237	176	293	586
01:00-02:00	138	241	282	139	124	282	520	352	211	148	258	554
02:00-03:00	371	212	363	189	182	253	498	346	192	126	237	560
03:00-04:00	397	202	339	122	135	224	495	357	216	144	238	635
04:00-05:00	395	226	287	123	133	33	326	257	132	45	98	448
05:00-06:00	377	317	199	103	130	12	175	242	271	167	249	379
06:00-07:00	306	233	95	57	130	5	-93	122	313	214	364	212
07:00-08:00	57	32	-62	-53	-8	-70	-82	177	286	168	194	-20
08:00-09:00	0	-48	-155	-105	-59	-165	-34	353	402	40	-8	19
09:00-10:00	-23	-188	-190	-166	-98	-161	19	256	316	234	59	-50
10:00-11:00	21	-156	-106	-92	-24	26	202	332	353	375	180	114
11:00-12:00	-45	-146	-119	-136	-54	-3	155	190	120	55	-40	-9
12:00-13:00	-132	-134	-128	-131	-90	-41	142	89	-1	-116	-188	-96
13:00-14:00	-120	-12	-41	-75	-55	1	186	111	-25	-176	-237	-86
14:00-15:00	-2	176	87	26	78	147	364	279	131	-72	-146	14
15:00-16:00	146	350	263	187	169	277	606	470	395	141	7	203
16:00-17:00	236	372	271	181	123	186	579	429	383	103	10	254
17:00-18:00	396	399	277	196	205	264	665	513	433	161	26	315
18:00-19:00	212	364	282	176	253	150	-48	-118	-58	-137	-121	68
19:00-20:00	11	341	203	234	260	84	-252	-272	-37	93	105	56
20:00-21:00	56	334	250	262	245	54	-150	-82	112	226	212	269
21:00-22:00	-21	293	233	227	209	17	-6	-81	-19	121	151	255
22:00-23:00	-27	196	216	198	149	78	72	-3	-4	59	132	315
23:00-24:00	67	136	176	83	123	350	403	336	280	266	346	588
Average RTC (MW)	121	161	132	77	98	97	220	209	193	107	101	233
Average RTC (MUs)	87	120	95	57	73	70	163	151	144	79	70	173
Average Deficit Only (MW)	204	253	233	153	161	146	349	294	266	153	175	308
Average Deficit Only (MUs)	98	141	119	81	85	83	184	167	148	95	92	181
No. of Hours (Deficit)	16	18	17	17	17	19	17	19	18	20	18	19
Average Morning Peak Hours Deficits (MW)	-	-	-	-	-	-	0	217	334	141	279	115
Average Evening Peak Hours Deficits (MW)	46	306	237	219	223	77	0	0	112	147	156	162
Average Peak Hours' Deficits (MW)	46	306	237	219	223	77	0	109	223	144	217	139
Consolidated Peak Hours' Deficits (MW)	162											
Average 24 Hours' Deficits (MW)	225											
Total Deficit (MUs)	1474											
Net RTC Deficit (MUs)	1282											
Energy Requirment (MUs)	19549											
Additional Short Term %	6.56%											

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

FY	FY'2028-29											
Estimated Surplus/Deficit	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28	Oct-28	Nov-28	Dec-28	Jan-29	Feb-29	Mar-29
Availability from Proposed Medium Term (MW)	450	450	450	450	450	450	450	450	450	450	450	450
Availability from Long Term (MW)	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking (MW)	375	575	525	-50	-150	-100	0	0	500	550	400	150
State Gas	0	0	0	0	0	0	0	0	0	0	0	0
UA Considered	0	0	0	0	0	0	0	0	0	0	0	0
00:00-01:00	34	71	47	64	55	252	342	319	54	79	200	389
01:00-02:00	83	173	190	100	88	196	330	301	26	49	163	354
02:00-03:00	314	138	267	146	142	165	305	294	6	26	140	360
03:00-04:00	342	127	241	74	92	133	301	305	31	44	143	441
04:00-05:00	342	151	184	76	91	-56	136	212	-45	-48	9	258
05:00-06:00	338	248	97	60	93	-71	-5	212	113	91	180	200
06:00-07:00	271	163	-8	16	97	-71	-261	115	187	167	324	53
07:00-08:00	14	-46	-169	-96	-45	-150	-257	171	169	138	160	-182
08:00-09:00	-48	-128	-264	-148	-96	-248	-216	337	276	7	-50	-154
09:00-10:00	-77	-271	-299	-210	-137	-246	-169	229	175	189	2	-235
10:00-11:00	-40	-241	-216	-138	-66	-62	7	294	196	311	107	-85
11:00-12:00	-110	-231	-229	-184	-97	-93	-43	144	-49	-25	-127	-216
12:00-13:00	-202	-219	-238	-180	-135	-133	-60	37	-179	-208	-286	-311
13:00-14:00	-191	-91	-146	-120	-98	-88	-13	59	-205	-273	-339	-301
14:00-15:00	-66	106	-11	-15	44	66	173	235	-42	-165	-242	-196
15:00-16:00	88	287	172	153	139	200	425	436	234	58	-81	3
16:00-17:00	189	312	184	149	95	114	405	407	237	36	-65	67
17:00-18:00	357	338	187	163	179	194	506	508	308	114	-32	142
18:00-19:00	182	305	191	144	230	90	-203	-126	-185	-178	-165	-92
19:00-20:00	-15	292	120	212	244	20	-416	-293	-171	47	54	-108
20:00-21:00	27	286	170	241	229	-13	-319	-108	-31	175	154	99
21:00-22:00	-58	243	152	203	190	-53	-181	-115	-176	55	81	76
22:00-23:00	-69	142	135	173	127	5	-107	-43	-172	-21	51	128
23:00-24:00	19	77	93	52	97	271	219	291	103	176	257	395
Average RTC (MW)	72	93	35	39	65	18	37	176	36	35	27	45
Average RTC (MUs)	52	69	25	29	48	13	28	127	27	26	18	34
Average Deficit Only (MW)	186	203	162	127	131	142	286	258	151	104	135	212
Average Deficit Only (MUs)	78	107	73	63	69	51	98	147	66	55	57	92
No. of Hours (Deficit)	14	17	15	16	17	12	11	19	14	17	15	14
Average Morning Peak Hours Deficits (MW)	-	-	-	-	-	-	0	208	210	104	242	53
Average Evening Peak Hours Deficits (MW)	13	254	154	195	204	10	0	0	0	92	96	88
Average Peak Hours' Deficits (MW)	13	254	154	195	204	10	0	104	105	98	169	70
Consolidated Peak Hours' Deficits (MW)	115											
Average 24 Hours' Deficits (MW)	175											
Total Deficit (MUs)	955											
Net RTC Deficit (MUs)	495											
Energy Requirment (MUs)	20674											
Additional Short Term %	2.40%											

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

FY	FY'2029-30											
Estimated Surplus/Deficit	Apr-29	May-29	Jun-29	Jul-29	Aug-29	Sep-29	Oct-29	Nov-29	Dec-29	Jan-30	Feb-30	Mar-30
Availability from Proposed Medium Term (MW)	450	450	450	450	450	450	450	135	0	0	0	0
Availability from Long Term (MW)	539	539	539	539	539	539	539	539	1078	1078	1078	1078
Tentative Banking (MW)	-150	75	50	-550	-650	-650	-450	0	0	75	-150	-350
State Gas	0	0	0	0	0	0	0	0	0	0	0	0
UA Considered	0	0	0	0	0	0	0	0	0	0	0	0
00:00-01:00	-17	1	37	42	35	280	353	186	28	32	227	363
01:00-02:00	29	101	176	74	64	222	340	166	-2	-1	187	326
02:00-03:00	261	62	250	114	116	188	314	158	-24	-26	163	332
03:00-04:00	290	51	221	38	63	155	310	170	4	-6	166	420
04:00-05:00	289	77	162	40	62	-34	147	83	-65	-91	38	238
05:00-06:00	296	180	75	28	69	-43	9	85	109	62	225	184
06:00-07:00	234	93	-32	-15	77	-36	-250	-10	190	151	386	38
07:00-08:00	-28	-123	-195	-126	-65	-116	-234	55	171	124	214	-208
08:00-09:00	-86	-200	-286	-174	-113	-210	-190	237	294	-1	9	-169
09:00-10:00	-117	-344	-318	-235	-153	-206	-144	126	190	189	60	-249
10:00-11:00	-84	-313	-233	-164	-80	-24	28	182	202	302	153	-107
11:00-12:00	-157	-300	-245	-210	-111	-55	-24	26	-53	-48	-90	-246
12:00-13:00	-255	-288	-253	-206	-150	-99	-43	-89	-190	-243	-259	-346
13:00-14:00	-244	-155	-158	-143	-111	-51	5	-68	-219	-312	-315	-337
14:00-15:00	-113	50	-17	-32	37	108	198	113	-51	-201	-216	-229
15:00-16:00	46	236	170	140	132	245	457	316	233	28	-51	-23
16:00-17:00	150	260	183	136	85	158	440	289	240	12	-26	48
17:00-18:00	316	281	179	145	167	236	539	391	315	92	3	118
18:00-19:00	135	238	177	122	214	131	-192	-257	-195	-202	-122	-114
19:00-20:00	-64	230	111	198	233	56	-417	-432	-178	33	104	-123
20:00-21:00	-23	226	165	229	217	22	-316	-237	-32	165	206	90
21:00-22:00	-114	180	147	189	176	-21	-169	-240	-187	38	125	64
22:00-23:00	-129	75	129	158	110	33	-97	-169	-192	-51	87	108
23:00-24:00	-38	8	85	31	80	298	227	163	81	136	287	372
Average RTC (MW)	24	26	22	16	48	52	54	52	28	8	65	23
Average RTC (MUs)	17	19	16	12	36	37	40	37	21	6	44	17
Average Deficit Only (MW)	205	138	151	112	114	164	259	171	171	105	155	208
Average Deficit Only (MUs)	61	73	68	52	60	64	104	82	64	42	74	84
No. of Hours (Deficit)	10	17	15	15	17	13	13	16	12	13	17	13
Average Morning Peak Hours Deficits (MW)	-	-	-	-	-	-	0	146	218	138	203	38
Average Evening Peak Hours Deficits (MW)	-39	190	146	179	190	44	0	0	0	79	145	77
Average Peak Hours' Deficits (MW)	-39	190	146	179	190	44	0	73	109	108	174	57
Consolidated Peak Hours' Deficits (MW)	103											
Average 24 Hours' Deficits (MW)	163											
Total Deficit (MUs)	829											
Net RTC Deficit (MUs)	302											
Energy Requirment (MUs)	21919											
Additional Short Term %	1.38%											

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

Month	Nov-25	Dec-25	Jan-26	Feb-26	Mar-26
Availability			**FY'2025-26**		
State Hydro	375	331	331	366	374
State Gas Based Plants	0	0	0	0	0
State Solar	18	21	16	25	27
State Sugar Mills	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0
Total Internal (State)	**404**	**378**	**367**	**411**	**416**
Central Coal	382	367	398	390	398
Central Atomic	60	60	60	60	60
Central Gas	0	0	0	0	0
Central Hydro	178	145	119	151	152
Central Solar	60	56	62	64	73
Central Hybrid	80	80	80	80	80
Upcoming Central Coal	19	18	20	19	20
Upcoming Atomic	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0
Upcoming Central Solar	12	11	12	13	15
Upcoming Central PSP (Import)	56	74	74	74	74
Upcoming Central PSP (Export)	-70	-93	-93	-93	-93
Upcoming Medium Term	330	450	450	450	450
Upcoming Long Term	0	0	0	0	0
Unallocated Quota	0	0	0	0	0
Banking	0	0	0	-83	0
Tentative Banking	0	175	275	200	-125
Total External (Central)	**1106**	**1343**	**1456**	**1326**	**1103**
Total Availability	**1510**	**1721**	**1824**	**1738**	**1519**
Demand			**FY'2025-26**		
Gross Demand	1696	1928	1965	1892	1748
Total DRE Generation	35	36	37	46	51
Solar DRE (84MW)	16	17	16	20	22
Upcoming Solar DREs	18	19	21	26	29
Upcoming Hydro DRE	0	0	0	0	0
Net Demand	**1661**	**1893**	**1928**	**1846**	**1697**
Deficit (+ve)/Surplus (-ve)	**151**	**171**	**104**	**109**	**177**

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

Month	Apr-26	May-26	Jun-26	Jul-26	Aug-26	Sep-26	Oct-26	Nov-26	Dec-26	Jan-27	Feb-27	Mar-27
Availability	FY'2026-27											
State Hydro	469	610	758	856	937	904	656	378	335	318	354	372
State Gas Based Plants	0	200	150	0	0	0	0	0	50	150	100	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**506**	**838**	**934**	**879**	**963**	**924**	**679**	**407**	**432**	**505**	**499**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	23	22	20	18	21	19	18	20	19	20
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	100	100	150	-275	-350	-375	-300	-175	200	275	150	0
Total External (Central)	**1385**	**1568**	**1682**	**1390**	**1226**	**1192**	**1087**	**1046**	**1368**	**1456**	**1359**	**1228**
Total Availability	**1891**	**2406**	**2616**	**2269**	**2189**	**2116**	**1766**	**1454**	**1800**	**1961**	**1858**	**1642**
Demand	FY'2026-27											
Gross Demand	2059	2532	2703	2379	2298	2249	2072	1797	2044	2082	2006	1852
Total DRE Generation	54	50	51	45	43	65	67	57	59	56	69	77
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	30	28	29	25	25	46	48	41	42	40	49	55
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2006**	**2482**	**2652**	**2334**	**2255**	**2184**	**2005**	**1740**	**1985**	**2026**	**1937**	**1775**
Deficit (+ve)/Surplus (-ve)	**114**	**76**	**36**	**66**	**65**	**67**	**239**	**286**	**185**	**65**	**79**	**133**

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

Month	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28
Availability	FY'2027-28											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	200	200	200	0	0	0	0	0	200	300	200	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**684**	**818**	**964**	**853**	**936**	**894**	**663**	**408**	**582**	**655**	**587**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	23	22	20	18	21	19	18	20	19	20
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	0	150	150	-150	-250	-250	-150	0	155	200	150	0
Total External (Central)	**1285**	**1618**	**1682**	**1515**	**1326**	**1317**	**1237**	**1221**	**1323**	**1381**	**1359**	**1228**
Total Availability	**1969**	**2436**	**2645**	**2367**	**2263**	**2212**	**1899**	**1630**	**1905**	**2036**	**1946**	**1642**
Demand	FY'2027-28											
Gross Demand	2183	2684	2865	2522	2436	2384	2196	1905	2167	2207	2126	1964
Total DRE Generation	93	86	88	78	75	75	77	66	68	64	80	89
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	70	65	66	59	57	56	58	50	51	48	60	67
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2089**	**2597**	**2777**	**2444**	**2361**	**2309**	**2119**	**1839**	**2099**	**2143**	**2046**	**1875**
Deficit (+ve)/Surplus (-ve)	**121**	**161**	**132**	**77**	**98**	**97**	**220**	**209**	**193**	**107**	**101**	**233**

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

Month	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28	Oct-28	Nov-28	Dec-28	Jan-29	Feb-29	Mar-29
Availability	FY'2028-29											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	0	0	0	0	0	0	0	0	0	0	0	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**484**	**618**	**764**	**853**	**936**	**894**	**663**	**408**	**382**	**355**	**387**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	19	20	111	107	95	87	181	163	157	170	167	170
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	450	450	450	450	450
Upcoming Long Term	0	0	0	0	0	0	0	0	0	0	0	0
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	375	575	525	-50	-150	-100	0	0	500	550	400	150
Total External (Central)	**1660**	**2043**	**2145**	**1700**	**1502**	**1536**	**1547**	**1365**	**1807**	**1882**	**1756**	**1529**
Total Availability	**2144**	**2661**	**2909**	**2552**	**2438**	**2430**	**2209**	**1774**	**2189**	**2237**	**2143**	**1943**
Demand	FY'2028-29											
Gross Demand	2314	2845	3037	2673	2582	2527	2328	2019	2297	2340	2254	2081
Total DRE Generation	98	91	93	82	79	79	81	70	72	68	84	93
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	75	70	71	63	60	60	62	53	55	52	64	71
Upcoming Hydro DRE	0	0	0	0	0	0	0	0	0	0	0	0
Net Demand	**2215**	**2754**	**2944**	**2591**	**2503**	**2448**	**2247**	**1950**	**2225**	**2272**	**2170**	**1988**
Deficit (+ve)/Surplus (-ve)	**72**	**93**	**35**	**39**	**65**	**18**	**37**	**176**	**36**	**35**	**27**	**45**

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

Month	Apr-29	May-29	Jun-29	Jul-29	Aug-29	Sep-29	Oct-29	Nov-29	Dec-29	Jan-30	Feb-30	Mar-30
Availability	FY'2029-30											
State Hydro	446	590	737	829	910	874	640	379	335	318	342	372
State Gas Based Plants	0	0	0	0	0	0	0	0	0	0	0	0
State Solar	28	28	27	23	26	20	23	18	21	16	25	27
State Sugar Mills	10	0	0	0	0	0	0	12	27	21	20	15
Upcoming State Hydro	0	0	0	0	0	0	0	0	0	0	0	0
Total Internal (State)	**484**	**618**	**764**	**853**	**936**	**894**	**663**	**408**	**382**	**355**	**387**	**414**
Central Coal	393	415	468	450	397	364	423	382	367	398	390	398
Central Atomic	60	60	60	60	60	60	60	60	60	60	60	60
Central Gas	0	0	0	0	0	0	0	0	0	0	0	0
Central Hydro	197	367	371	533	512	534	293	178	145	119	151	152
Central Solar	79	68	74	66	55	67	66	60	56	62	64	73
Central Hybrid	80	80	80	80	80	80	80	80	80	80	80	80
Upcoming Central Coal	168	177	200	192	170	156	181	163	157	170	167	170
Upcoming Atomic	0	0	0	0	0	0	0	0	0	0	0	0
Upcoming Central Hydro	20	37	37	54	52	54	30	18	15	12	15	15
Upcoming Central Solar	16	14	15	13	11	13	13	12	11	12	13	15
Upcoming Central PSP (Import)	32	23	32	32	32	74	74	74	74	74	74	74
Upcoming Central PSP (Export)	-41	-29	-41	-41	-41	-93	-93	-93	-93	-93	-93	-93
Upcoming Medium Term	450	450	450	450	450	450	450	135	0	0	0	0
Upcoming Long Term	539	539	539	539	539	539	539	539	1078	1078	1078	1078
Unallocated Quota	0	0	0	0	0	0	0	0	0	0	0	0
Banking	0	0	0	0	0	0	0	0	0	0	0	0
Tentative Banking	-150	75	50	-550	-650	-650	-450	0	0	75	-150	-350
Total External (Central)	**1842**	**2276**	**2335**	**1878**	**1667**	**1648**	**1665**	**1607**	**1949**	**2047**	**1850**	**1672**
Total Availability	**2326**	**2894**	**3099**	**2730**	**2604**	**2542**	**2328**	**2016**	**2332**	**2402**	**2237**	**2086**
Demand	FY'2029-30											
Gross Demand	2452	3015	3219	2834	2737	2678	2468	2141	2435	2480	2389	2206
Total DRE Generation	102	96	98	88	85	84	86	73	75	71	87	97
Solar DRE (84MW)	23	21	22	19	19	18	19	16	17	16	20	22
Upcoming Solar DREs	77	72	73	65	62	62	64	55	56	53	66	74
Upcoming Hydro DRE	2	3	3	4	4	4	3	2	2	1	2	2
Net Demand	**2350**	**2920**	**3121**	**2746**	**2652**	**2594**	**2382**	**2068**	**2360**	**2409**	**2302**	**2109**
Deficit (+ve)/Surplus (-ve)	**24**	**26**	**22**	**16**	**48**	**52**	**54**	**52**	**28**	**8**	**65**	**23**

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

FY	FY'2027-28											
Estimated Surplus/Deficit	Apr-27	May-27	Jun-27	Jul-27	Aug-27	Sep-27	Oct-27	Nov-27	Dec-27	Jan-28	Feb-28	Mar-28
BESS considered for 665 MWh												
Non Peak Surplus (MWh)	299	448	394	434	223	44	0	0	26	365	611	190
BESS Charging Req	665	665	665	665	665	665	665	665	665	665	665	665
Charging Utilization Factor	45%	67%	59%	65%	34%	7%	0%	0%	4%	55%	92%	29%
Peak Hour Deficits (MWh)	278	1528	1185	1097	1117	383	0	652	1114	862	1025	878
Non Peak BESS Discharging Avl.	565	565	565	565	565	565	565	565	565	565	565	565
Discharging Utilization Factor	49%	100%	100%	100%	100%	68%	0%	100%	100%	100%	100%	100%
Charging Utilization Factor	38%											
Disharging Utilization Factor	85%											
BESS considered for 500 MWh												
Non Peak Surplus (MWh)	299	448	394	434	223	44	0	0	26	365	611	190
BESS Charging Req	500	500	500	500	500	500	500	500	500	500	500	500
Charging Utilization Factor	60%	90%	79%	87%	45%	9%	0%	0%	5%	73%	100%	38%
Peak Hour Deficits (MWh)	164	1528	1185	1097	1117	383	0	652	1114	862	1025	878
Non Peak BESS Discharging Avl.	425	425	425	425	425	425	425	425	425	425	425	425
Discharging Utilization Factor	39%	100%	100%	100%	100%	90%	0%	100%	100%	100%	100%	100%
Charging Utilization Factor	49%											
Disharging Utilization Factor	86%											

Charging Cycle considered from 10:00 hrs to 16:00 hrs for maximum utilization of Solar Power

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

FY	FY'2028-29											
Estimated Surplus/Deficit	Apr-28	May-28	Jun-28	Jul-28	Aug-28	Sep-28	Oct-28	Nov-28	Dec-28	Jan-29	Feb-29	Mar-29
BESS considered for 665 MWh												
Non Peak Surplus (MWh)	610	783	840	637	395	376	116	0	474	671	1075	1109
BESS Charging Req	665	665	665	665	665	665	665	665	665	665	665	665
Charging Utilization Factor	92%	100%	100%	96%	59%	57%	17%	0%	71%	100%	100%	100%
Peak Hour Deficits (MWh)	208	1268	768	973	1020	115	0	623	631	590	773	228
Non Peak BESS Discharging Avl.	565	565	565	565	565	565	565	565	565	565	565	565
Discharging Utilization Factor	37%	100%	100%	100%	100%	20%	0%	100%	100%	100%	100%	40%
Charging Utilization Factor	74%											
Disharging Utilization Factor	75%											
BESS considered for 500 MWh												
Non Peak Surplus (MWh)	610	783	840	637	395	376	116	0	474	671	1075	1109
BESS Charging Req	500	500	500	500	500	500	500	500	500	500	500	500
Charging Utilization Factor	100%	100%	100%	100%	79%	75%	23%	0%	95%	100%	100%	100%
Peak Hour Deficits (MWh)	208	1268	768	973	1020	115	0	623	631	590	773	228
Non Peak BESS Discharging Avl.	425	425	425	425	425	425	425	425	425	425	425	425
Discharging Utilization Factor	49%	100%	100%	100%	100%	27%	0%	100%	100%	100%	100%	54%
Charging Utilization Factor	81%											
Disharging Utilization Factor	77%											

Charging Cycle considered from 10:00 hrs to 16:00 hrs for maximum utilization of Solar Power

Anticipated Surplus Deficit Scenario 2: All upcoming plants considered with UPCL Demand Projections

FY	FY'2029-30											
Estimated Surplus/Deficit	Apr-29	May-29	Jun-29	Jul-29	Aug-29	Sep-29	Oct-29	Nov-29	Dec-29	Jan-30	Feb-30	Mar-30
BESS considered for 665 MWh												
Non Peak Surplus (MWh)	853	1056	906	755	452	229	67	157	513	804	931	1287
BESS Charging Req	665	665	665	665	665	665	665	665	665	665	665	665
Charging Utilization Factor	100%	100%	100%	100%	68%	34%	10%	24%	77%	100%	100%	100%
Peak Hour Deficits (MWh)	135	948	729	896	950	242	0	291	654	512	1045	192
Non Peak BESS Discharging Avl.	565	565	565	565	565	565	565	565	565	565	565	565
Discharging Utilization Factor	24%	100%	100%	100%	100%	43%	0%	52%	100%	91%	100%	34%
Charging Utilization Factor	76%											
Disharging Utilization Factor	70%											
BESS considered for 500 MWh												
Non Peak Surplus (MWh)	853	1056	906	755	452	229	67	157	513	804	931	1287
BESS Charging Req	500	500	500	500	500	500	500	500	500	500	500	500
Charging Utilization Factor	100%	100%	100%	100%	90%	46%	13%	31%	100%	100%	100%	100%
Peak Hour Deficits (MWh)	135	948	729	896	950	242	0	291	654	512	1045	192
Non Peak BESS Discharging Avl.	425	425	425	425	425	425	425	425	425	425	425	425
Discharging Utilization Factor	32%	100%	100%	100%	100%	57%	0%	69%	100%	100%	100%	45%
Charging Utilization Factor	82%											
Disharging Utilization Factor	75%											

Charging Cycle considered from 10:00 hrs to 16:00 hrs for maximum utilization of Solar Power

Points to be Noted

- Banking : The banking shown in the Scenarios is tentative in nature and the same will depend upon willingness of other States.
- The quantum may also vary depending upon variables of demand and availability as per real time scenario.
- The banking will be tried to be done through direct communication and utilizing the OTC platforms.
- In case of lesser banking w.r.t. tentative banking, any surplus thus created would be tried to be sold on energy exchanges / would be surrendered as per prevalent exchange rates.
- State Gas quantum has been considered for maintaining the limit of Short Term dependence within range of 5% of total energy availability as per Hon'ble Commission's direction in Tariff Order dated: 11 - 04 – 2025.

Tentative* Historical Data

Month	Apr-24	May-24	Jun-24	Jul-24	Aug-24	Sep-24	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Apr-25	May-25	Jun-25	Jul-25
Availability	FY'2024-25												FY'2025-26			
State Hydro	365	623	718	739	862	889	495	317	361	299	340	343	435	669	770	946
State Gas Based Plants	140	195	220	143	23	0	0	0	0	0	0	0	158	76	106	164
State Solar	27	26	25	20	22	19	18	17	17	16	22	28	28	26	23.12	20.7
State Sugar Mills	0	0	0	0	0	0	0	14	25	21	20	16	6	0	0	0
Total Internal (State)	**532**	**844**	**963**	**903**	**907**	**908**	**513**	**347**	**403**	**336**	**382**	**387**	**627**	**771**	**899**	**1130**
Central Coal	472	454	443	428	364	341	445	495	530	561	550	554	571	568	526	383
Central Atomic	46	54	47	35	27	27	45	46	51	50	45	25	50	40	33	31
Central Gas	5	1	1	0	0	0	0	0	0	0	0	0	9	2	1	1
Central Hydro	222	373	401	522	491	482	275	182	165	136	171	176	245	387	431	531
Central Solar	27	28	28	26	20	26	25	24	22	25	25	29	41	43	47	58
Central Hybrid	24	40	50	61	47	51	36	40	37	47	47	48	53	56	61	77
Total Central Firm Share	625	747	801	909	870	853	569	527	514	520	540	558	646	750	806	930
Unallocated Quota	171	204	169	162	78	73	256	260	292	298	298	275	322	345	293	151
Banking	-53	-15	-50	-200	-200	-199	0	0	191	341	221	144	0	65	0	-318
Tender	0	0	0	0	0	0	146	144	108	314	334	168	0	0	0	0
IEX/PXIL (Net Purchases)	517	404	455	264	314	300	304	329	240	17	-50	68	253	69	117	215
Total External (Central)	**1259**	**1341**	**1375**	**1136**	**1062**	**1027**	**1276**	**1260**	**1344**	**1490**	**1342**	**1212**	**1221**	**1229**	**1215**	**978**
Total Availability	**1791**	**2185**	**2337**	**2038**	**1970**	**1935**	**1789**	**1607**	**1747**	**1826**	**1725**	**1599**	**1848**	**2000**	**2115**	**2108**
Demand	FY'2024-25												FY'2025-26			
Actual Demand	1833	2252	2401	2118	2045	2001	1844	1600	1819	1863	1785	1649	1853	2086	2211	2125
Deficit (+ve)/Surplus (-ve)	**42**	**67**	**64**	**80**	**75**	**66**	**55**	**-7**	**72**	**37**	**60**	**50**	**5**	**86**	**96**	**17**

- Data formulated from Comm Data (Billed Energy), may have variation w.r.t. Scheduled Energy
- Unallocated Quota Power Bills as well as Schedules are not bifurcated, however efforts have been made to deduce the same from % allocation from different plants, actual unallocated quota in availability may have variations

Transmission Constraints

पावर ट्रॉंसमिशन कारपोरेशन ऑफ उत्तराखण्ड लि०
(उत्तराखण्ड सरकार का उपक्रम)
CIN:-U40101UR2004SGC028675
मुख्य अभियन्ता, प्रान्तीय भार निस्तारण केन्द्र कार्यालय
विद्युत भवन, नजदीक-आईएसबीटी बस्तिया, सहारनपुर रोड, माजरा, देहरादून-248002
दूरभाष नं0 0135-2645768 फैक्स नं0 0135-2645758 email:- sldc1@rediffmail.com

Letter No. 202 /SLDC/CE/SO-CERC/2025-26 Dated: 11-07-2025

Director (Project)
UPCL, Gabar Singh Bhawan,
Kanwali Road, Dehradun.

By e-mail/speed post

Subject: Regarding increasing the Total Transfer Capability (TTC)/Available Transfer Capability (ATC) of the transmission network.

This is in reference to your office Letter No. 4202/UPCL/D(P)/TTC/SLDC/Comm dated 23.06.2025 and meeting dated 10.07.2025 held at Hon'ble Commission office. PTCUL and SLDC has already provided their replies to UPCL vide Letter No. 4097/MD/PTCUL/MD.UPCL dated 03.12.2024 and Letter No. 441/SLDC/CE/SO-CERC/2024 dated 16.10.2024 (**Annexure-1**) and intimated the factual position of Total Transfer Capacity(TTC)/Available Transfer Capacity(ATC). PTCUL vide above mentioned letter also intimated about the projects being taken up to increase ATC/TTC limit.

TTC/ATC of July 2025 approved by NLDC is enclosed herewith for your reference (**Annexure-2**). The details of maximum schedules and maximum drawals in the month of December 2024 and January 2025 (**Annexure-3**) wherein power was scheduled upto 2272 MW i.e. above TTC/ATC limit (1700/1600 MW) and drawal was allowed by NRLDC accordingly without any curtailments.

Also, Hon'ble CERC vide its Order dated 29.09.2023 approved "Detailed Procedure for Allocation of Transmission Corridor for Scheduling under GNA and TGNA" and according to which the the 'Bid Area' is defined as *"Bid Area' is defined as the largest geographical area within which market participants are able to exchange energy without capacity allocation."* Uttarakhand falls under bid area N2 as per the documents (**Annexure-4**) available on Power Exchange's website under which UP, Delhi and Rajasthan falls in Bid Area 'N2' along with Uttarakhand.

Encls.: As above.

(Anupam Singh)
(Chief Engineer)

Copy: Secretary, Uttarakhand Electricity Regulatory Commission, Vidyut Niyamak Bhawan, Near ISBT, PO-Majra, Dehradun-248171.

पावर ट्रॉंसमिशन कारपोरेशन ऑफ उत्तराखण्ड लि०
(उत्तराखण्ड सरकार का उपक्रम)
CIN: U40101UR2004SGC028675
प्रबन्ध निदेशक कार्यालय
विद्युत भवन, नजदीक-आईएसबीटी बस्तिया, सहारनपुर रोड, माजरा, देहरादून-248002
दूरभाष नं0 0135-2645744 फैक्स नं0 0135-2645480 email:-md.ptcul@rediffmail.com

No. 4097 /MD/PTCUL/ M.D.-UPCL Date: 03.12.2024

Managing Director,
UPCL, Gabar Singh Bhawan,
Kanwali Road, Dehradun.

By e-mail/speed post

Subject: Regarding increasing the Total Transfer Capability (TTC)/Available Transfer Capability (ATC) of the transmission network.

Kindly refer your office letter no. 5614/UPCL/MD/TTC/SLDC/Comm dated 08.11.2024 vide which UPCL has requested to increase the TTC/ATC limit and take up the matter with NRLDC / PGCIL.

PTCUL has already conveyed to UPCL vide letter no. 441/SLDC/CE/SO-CERC/2024-25 dated 16.10.2024 (Annexure-1) under copy endorsed to Secretary, UERC, Dehradun that SLDC has already taken up with NRLDC regarding the TTC for the month of December, 2024 & January, 2025 i.e. 1800 MW and 1944 MW, respectively in line with methodology approved by NLDC.

Kindly find enclosed details of maximum schedules and maximum drawls in the month of January, 2024 (Annexure-2) wherein power was scheduled above the TTC/ATC limit (Annexure-3) and drawl was allowed, accordingly. TTC/ATC of December, 2024 approved by NLDC is enclosed herewith for your reference (Annexure-4). Similarly, maximum schedules and drawls allowed in the month of November, 2024 is above the TTC/ATC limit as per details enclosed herewith as per (Annexure-5).

PTCUL is on it's way to increase the existing TTC/ATC limits and taken up following projects on priority in line with the GO bearing reference no. 553/I(2)/2024/05-05/2024 dated 02.09.2024.

S.N.	Transmission Constraints	Remedial Measures being taken by PTCUL
1.	2x315 MVA ICTs at 400 kV Kashipur are not (N-1) compliant	Procurement of 500 MVA, 400/220 kV ICT at Kashipur S/s is under way and also taken up with PGCIL in line with the deliberations of 50th TCC meeting held on 29 June, 2024.
2.	High loading of 220 kV Roorkee(PG)-Roorkee(UK)	DPR of 400/220 kV S/s, Ramnagar (Roorkee) is approved by PTCUL BoD. Investment approval at Hon'ble UERC is in process.
3.	High loading of 220 kV Bareilly-Pantnagar	DPR of 400/220 kV Khurpia Farm S/s is approved by PTCUL BoD. Investment approval at Hon'ble UERC is in process.

www.ptcul.org

Submissions from PTCUL, verifies that Uttarakhand has drawn ~2300 MW power in the past irrespective of ATC/TTC limit of the State.

In the meeting held on 10-07-2025 under chairmanship of Hon'ble Commission (UERC), official from PTCUL has shown confidence in augmenting ATC/TTC limit by 2027-28.

In view of this, State Gas machines are not considered for FY'29 and FY'30.

Transmission Constraints

Max Central Schedule Expected Considering Surplus Deficit	Apr	May	Jun	Jul	Aug	Sep	Oct	Nov	Dec	Jan	Feb	Mar
FY'26								1662	1971	1934	1846	1498
State Gas Machines Considered								0	0	0	0	0
FY'27	1786	1927	1914	1648	1547	1566	1777	1780	2057	1956	1903	1627
State Gas Machines Considered	0	2	1.5	0	0	0	0	0	0.5	1.5	1	0
FY'28	1710	2115	2007	1831	1724	1746	1932	1910	2062	1967	1968	1760
State Gas Machines Considered	2.0	2.0	2.0	0.0	0.0	0.0	0.0	0.0	2.0	3.0	2.0	0.0
FY'29	2046	2492	2383	1995	1883	1904	2082	2050	2428	2438	2326	1901
State Gas Machines Considered	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
FY'30	2190	2676	2570	2164	2047	2068	2240	2196	2603	2616	2492	2048
State Gas Machines Considered	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0

Constraints are as per consideration of Medium Term (Nov-25 to Nov-29) as well as Long Term quantum (Apr-29 to Mar-30)

The deficits post consideration of MT & LT tenders are also considered to be met through Interstate Central Drawl hence figures are anticipated maximum quantum of drawl

Further, as per submission from PTCUL, "market participants are able to exchange energy without capacity allocation" for same bid area. Uttarakhand lies under N2 region in which Uttar Pradesh, Rajasthan and Delhi. Uttarakhand is already involved with Uttar Pradesh in Banking.

Thank you

Request for Information on Point No. 2 sought by Hon'ble Commission (UERC)– Reference Mail dated 23 September 2025 (Annexure 2.B)

From: Chief Engineer Commercial, UPCL (cgmupcl@yahoo.com)

To: uksldcmis@ptcul.org; sldc1@rediffmail.com; uksldcso@ptcul.org

Cc: se_sldc@ptcul.org; preetisldc@gmail.com

Date: Thursday 25 September, 2025 at 03:48 pm IST

Sir,

In reference to the mail received from Hon'ble Commission dated 23 September 2025, wherein the Hon'ble Commission has sought information under Point No. 2 (as below), it is requested to kindly provide the 15 min. block - wise details of **Central Entitlement Revision 5 on Day-Ahead** basis and the **Final Revision of Entitlement of the Day** for the period **April 2023 to August 2025**.

Point No. 2 as sought by Hon'ble Commission:-

"2. UPCL is required to provide a list of emergency/unforeseen circumstances in the past two years, where it was unable to off take the power. UPCL is required to submit the quantum of variation in power requirement and availability in such circumstances (percentage wise also)."