

SOUTHERN POWER DISTRIBUTION COMPANY OF A.P. LIMITED

19-13-65/A, Vidyut Nilayam, Srinivasapuram, Tirupati (www.apspdcl.in)

From

The Chief General Manager, RAC & IPC, APSPDCL, 19-13-65/A, Vidyut Nilayam, Srinivasapuram, Tirupati – 517501. To

Sri. Himanshu Chawla, M/s Power Foundation of India, B-28, Qutab Institutional Area, New Delhi – 110016.

Lr No.CGM/RAC&IPC/SPDCL/TPT/GM/RAC/F:ARR25-26(25) /D.No. 28 /25 dt. -01-2025

Sir.

Sub:- APSPDCL/TPT – RAC - Replies to the views / objections / Suggestions raised by M/s Power Foundation of India on ARR & Tariff Proposals for FY 2025-26 proposals - Regarding.

Ref:- Party's representation received dt.28-12-2024

In response to the views / objections / Suggestions on ARR & Tariff Proposals for FY 2025-26, the reply is furnished as hereunder.

A. Petition for True-Up of FY 2023-24 not filed by AP DISCOMs

- 1) Section 64 of the Electricity Act (Act) mandates the procedure of Tariff Order wherein in sub-section (3) it has been inter-alia mentioned that the appropriate Commission, within 120 days from receipt of an application shall issue the Tariff Order after considering all suggestions and objections received from the public.
- 2) The need for timely issuance of Tariff Orders and True-up Orders has been decided by Hon'ble APTEL in its judgement dtd. 11/11/2011 in OP No. 1 of 2011, as follows:
- "57. This Tribunal has repeatedly held that regular and timely truing-up expenses must be done since:
- (a) No projection can be so accurate as to equal the real situation.
- (b) The burden/benefits of the past years must not be passed on to the consumers of the future.
- (c) Delays in timely determination of tariff and truing-up entails:
- i Imposing an underserved carrying cost burden to the consumers, as is also recognised by para 5.3 (h) (4) of National Tariff Policy.
- ii Cash flow problems for the licensees.

65. In view of the analysis and discussion made above, we deem it fit to issue the following directions to the State Commissions:

- Every State Commission has to ensure that Annual Performance Review, true-up of past expenses and Annual Revenue Requirement and tariff determination is conducted year to year basis as per the time schedule specified in the Regulations.
- ii It should be the endeavour of every State Commission to ensure that the tariff for the financial year is decided before 1st April of the tariff year...
- iii In the event of delay in filing of the ARR, truing-up and Annual Performance Review, one month beyond the scheduled date of submission of the petition, the State Commission must initiate Suo-moto proceedings for tariff determination in accordance with Section 64 of the Act read with clause 8.1 (7) of the Tariff Policy.
- v. Truing up should be carried out regularly and preferably every year...".

3) From above, it is noted that Hon'ble APTEL has even decided that SERCs can also initiate Suo-moto proceedings and collect the data and information and give suitable directions and then determine the tariff even in the absence of the application filed by the utilities by exercising the powers under the

provisions of the Act as well as the Tariff Regulations.

4) Thus, Tariff determination ought to be treated as a time bound exercise. If there is any lack of diligence on the part of the Utilities which has led to the delay, SERCs must play a pro-active role in ensuring the compliance of the provisions of the Act and Regulations made thereunder. Timely issuance of Tariff and True-up Orders that too cost reflective results in timely passing of escalated cost in the power sector supply chain thereby maintaining adequate cash flow with the utilities, thus enabling them to supply uninterrupted quality supply to the consumers. It further avoids Creation of Regulatory Assets, burden of Carrying Cost and Tariff shock at once to the end consumers.

5) It is noted that none of AP DISCOMs have filed Petition for True-Up of FY 2023-24 till date. They have filed only ARR of FY 2025-26. The true-up exercise is delayed by APERC. Last True-up Order issued by APERC is for FY 2020-21 only on 30/03/2022. Till date True-up Orders for FY 2021-22 and FY 2022-23 are pending and now AP DISCOMs have not even filed Petition for True-Up of FY 2023-24 6) Power Foundation of India (PFI) therefore, urges Hon'ble APERC to conduct True-Up of FY 2023-24 on suo-motu basis by 31st March 2025 as mandated by Hon'ble APTEL (stipulated above) along with the ARR of FY 2025-26. This will avoid the issue of creation of Regulatory Assets, burden of Carrying Cost and Tariff shock to the end consumers.

Reply: The licensee has filed the application for true-up of FPPCA for FY 2023-24 before the Hon'ble APERC for recovering the variations in power purchase cost over the approved figures in order to recover the differential power purchase cost variations over and above 40 paise/unit, which was already collected through monthly automatic pass-through on 03-06-2024 and orders were issued by the Honourable APERC on 29-11-2024. In accordance with the Hon'ble APERC 5th amendment Regulation to Regulation No.4 of 2005, the licensee has presented variations in uncontrollable items for the year FY 2023-24 along with ARR for FY 2025-26 (n+2) vide para no.5.9, page no.31 for pass through. At Page No.60, Para No.12 of the ARR filing, the licensee has presented the statement of variations in controllable items of distribution business for FY 2023-24 in accordance with Clause No.10.6 of Regulation No.4 of 2005.

B. Petition for ARR of FY 2025-26 filed by AP DISCOMs

B.1 LONG – TERM POWER PURCHASE QUANTUM AND COST a) NON- COMPLIANCE OF APERC'S TARIFF ORDER DATED 11/03/2024 FOR FY 2024-25

APSPDCL has considered 4 nos. of Generating Stations (NTPC Kudgi, NTECL Vallur, NTPL-Tuticorin & NNTPS-Nyveli) for projecting their Power Purchase requirement for FY 2025-26. However, APERC in its Tariff Order dtd. 11/03/2024 did not approve the Power Purchase from these Stations on account of their expiry of PPA and high-Power Purchase Cost. The relevant extract of the said Tariff Order is as follows:

"By Common Order dated 30.10.2023 in OP Nos 34 to 44 of 2023, the Commission has not approved the PPAs with the said four CGS. The Appeal filed regarding NTPC- Kudgi, NTECL - Vallur PPAs by NTPC before Hon'ble APTEL on APERC Order dated 30.10.2023 is also pending. Keeping in view the consumer's interest in the long term, The Commission passed the Order dated 30.10.2023. Be that as it may, subject to the Hon'ble APTEL judgment in this regard, the Commission is not inclined to include the four CGS viz NTPC Kudgi, NTECL - Vallur, NTPL, and NNTPS in the power procurement for FY2024- 25 in line with its decision in the Order dated 30.10.2023."

ii. The summary of Power Purchase for these 4 nos. of CGS for FY 2025-26 as considered by APSPDCL in its ARR Petition for FY 2025-26 is as follows:

FY 2025-26	Capacity	Despatch	S-700 - 5-1	Cost (Rs. Cr.)			Unit Cost (Rs./kWh		
Stations	MW	MU	FC	vc	Others	Total	FC	vc	Total
NTPC Kudgi Stage-I	971	160	95	78	0	173	5.93	4.87	10.80
NTECL Valluru	607	215	36	81	0	117	1.68	3.78	5.47
NTPL (NLC Tamil Nadu)	404	335	57	138	0	195	1.71	4.12	5.83
NLC NNTPS	404	138	28	37	0	65	2.00	2.70	4.70
Total	2386	848	216	334	0	550	2.54	3.94	6.49

iii. As tabulated above, NTPC Kudgi Stage-I has Generation Cost (including Fixed Cost) of Rs. 10.80/kWh which is even more than the weighted average cost of short term. As submitted in the Tariff Petition, the weighted average cost of short term and market purchases during the period from October-2023 to September-2024 is around Rs 7.50/Unit. APSPDCL has considered Rs. 173 Cr. of Power Purchase from NTPC Kudgi Stage-I. Further, APSPDCL has considered Rs. 550 Cr. of Power from the above said 4 nos. of CGS. This is non- compliance of the Commission's Tariff Order dtd. 30/10/2023 in OP Nos. 34 to 44 of 2023.

iv. Therefore, PFI requests Hon'ble APERC not to consider the above sources in projecting Power Purchase Quantum of AP DISCOMs for FY 2025-26.

Reply: It is to submit that the APDISCOMs have filed appeals in APTEL in matter of non approval of PPA for NTPL & NNTPS and are acting as respondents in the appeal filed by NTPC in the matter of NTPC Kudgi & NTECL Valluru before APTEL. The matters are placed in the list of finals. The matter is under subjudice.

b) REDUCTION IN AVAILABILITY OF HYDRO POWER PLANTS

i APSPDCL in FY 2025-26 has considered reduction of around 13% in Hydro Power Plants in FY 2025-26 vis-à-vis FY 2024-25, as follows :

	FY 20	24-25	FY 202	25-26
Genco Hydel	Allocated Availability (MU)	Required Despatch (MU)	Allocated Availability (MU)	Required Despatch (MU)
Srisailam RCPH	481	465	348	348
NSRCPH	56	54	45	45
NSTPDC PH	35	34	32	32
Upper Sileru	194	193	182	182
Lower Sileru	435	432	413	413
Donkarayi	38	37	36	36
PABM	0	0	2	2
Minihydel(Chettipet)	1	1	1	1
Machkund AP Share	125	125	129	129
TB Dam AP Share	54	53	44	44
Genco Hydel Total	1419	1395	1232	1232

ii. It is pertinent to state that the cost of generation from hydro stations is Rs. 2.04/kWh which is quite lower than the Average Power Purchase Cost (APPC) for FY 2025-26, i.e., Rs. 4.79/kWh. No justification for the reduced availability has been provided in the Tariff Petition. By considering lower availability, APSPDCL has escalated the Power Purchase Cost by Rs. 89.57 Cr. which in turn will be paid by the consumers.

iii. Being cheaper plants, PFI submits to consider the generation from all hydro plants to be at same or higher levels for FY 2025-26 vis-à-vis FY 2024-25.

Reply: The availability of APGENCO Hydel stations is considered as per the projections furnished by APGENCO. The projections of APGENCO hydel stations are based on the ten years monthly average generation

c) PROCUREMENT FROM SEMBCORP P1- 625 MW

APSPDCL has considered 1724 MU of Power Purchase from Sembcorp Energy India Limited (SEIL) P1 (625 MW) in FY 2025-26 against Power Purchase Cost of Rs. 750 Cr at weighted average rate of Rs. 4.63/kWh. However, APERC has not yet approved PPA of SEIL P1 (625 MW) and has mentioned that the DISCOM shall not be receiving any supply of power without prior intimation to and prior approval of the Commission. Relevant extract of the Tariff Order dtd. 11/03/2024 is as follows:

"Further, for the Generating stations included in the sources of supply shown above which either have no Power Purchase Agreements or which have no approval from the Commission for their Power Purchase Agreements and/or whose tariffs are yet to be determined by the Commission, except in the cases where there is an ad-hoc tariff being paid as per the Orders of the Commission, the licensees shall not receive any supply of power without prior intimation to and prior approval of the Commission."

ii. In view of above, PFI submits that the procurement of power from SEIL P1 (625 MW) may be considered by APERC only after approval of the PPA.

Reply:

a) The 660 MW PPA has been prepared and got signed by both the Parties and ready for submitting to Hon'ble APERC for getting approval of the PPA. The APDiscoms are proposed

to take power from 1st March 2025.

b) As per the directions of Hon'ble Commission vide letter dated 07-11-2023, APPCC on behalf of APDiscoms is coordinating with Chief Engineer/ Projects and Chief Engineer/ Planning & Power systems/ APTRANSCO for studying the feasibility of efficient and economical scheme for evacuation of 625 MW power from SEIL Plant 1 through State Network and the proposals are under progress. Advent of new GNA regime, it is also being assessed on the necessity of separate STU or not.

c) The terms & conditions of the present 660 MW PPA have been prepared with utmost care duly considering the financial aspects of APDiscoms to avoid scope for avoidable burdens in future. The Tariff determination is under the purview of APERC only under section 62 of

Electricity Act, 2003.

d) After submitting the signed draft PPA to Hon'ble APERC, APERC may conduct Public hearings on the proposals before approving the PPA as per the procedures in vogue.

e) For FY2025-26, the fixed cost is considered as Rs.1.70/kwh provisionally and Variable cost of Rs. 2.65/kwh is considered tentatively in line with the existing SEIL-P2 capacity.

f) The Power system studies stated that there will be a deficit of 200 to 500 MW in few hours in a day especially in the summer months during FY 2024-25 and FY 2025-26. Also from the monthly surplus deficit analysis for different time blocks in a day clearly indicates that there is a base load requirement of 700 MW from FY 2026-27. Hence, APDiscoms are planning to procure power from SEIL P1 even though the proposed availability may be surplus in FY 2025-26 during certain time blocks of the day, but at peak hours the unit cost may be higher in the power exchanges than this unit cost.

d) PROCUREMENT FROM SEMBCORP-PLANT-II (125 MW THROUGH OPEN ACCESS)

i APSPDCL has not considered any Power Purchase from SEIL Power Project-2 (125 MW Open Access) in FY 2025-26. However, APERC in Tariff Order dtd. 11/03/2024 has considered 223 MU of Power for FY 2024-25 at a weighted average rate of Rs. 5.98/kWh.

APDISCOMs entered into Power Supply Agreement (PSA) with SEIL-2 on 31/12/2021 for

procurement of 125 MW under Open Access.

Hon'ble APERC issued consent to PSA entered between APDISCOMs and SEIL vide their order No. APERC Order in OP No. 17 of 2022 dated 01/06/2022. As per the PSA, the commencement of Power Supply Agreement is on or before two years i.e. 31/12/2023 from the date of Power Supply Agreement. Hon'ble APERC vide Order dated 12th August 2022, permitted APDISCOMs to procure power through CTU short term open access from M/s Sembcorp-P2, until STU system is commissioned. Accordingly, the procurement of power commenced with effect from 1st February 2023. Further, from 23/01/2024 onwards, APDISCOMs started availing power through AP STU network.

iv. In view of above, PFI notes that there are no obvious reasons for the DISCOM to not to consider the power from the said project. Therefore, the APERC must consider SEIL-2 (125 MW under Open Access) as an approved source and its generation along-with cost to be considered in DISCOMs Power

Purchase Cost for FY 2025-26.

Reply: In terms clause 18.4 of PSA, SEIL-P2 - 125 MW off take is based on confirmation from APDiscoms for each quarter. APDISCOMs will avail the energy from 125 MW from SEIL-P2 based on requirement and rate offered by the generator with the approval of Hon'ble Commission.

e) MISMATCH IN PLF OF GENERATING STATIONS

i APERC in its Tariff Order dtd. 11/03/2024 for ARR of FY 2024-25 has stipulated the following for determining Despatch for the Power Stations:

"As there is a large variation between the normative availabilities and the actual PLFs of intra-state GENCOS for several reasons, the Commission has taken a view to considering the availabilities based

on actual performance for estimation of energy availability from FY2023-24 onwards to reflect the realities and thus to limit variations between estimations and actuals."

ii. In the current Petition, APSPDCL have submitted actuals for FY 2023-24, APR for FY 2024-25 (H1 actuals & H2 projected) and projections for FY 2025-26 pertaining to power purchase cost. From the said information, critical observations have been noticed by PFI in the PLF of major plants as follows:

Plants	Cap.	Cap. Actual FY 2023-24			APR FY 2024-25		ARR FY 2025-26		
	MW	MU	PLF	MU	PLF	MU	PLF	ECR (Rs/kWh)	
APPDCL Stage-I	647	2438	58%	3091	57%	3106	58%	3.80	
Dr. NTTPS	510	2878	65%	2688	62%	2740	65%	4.26	
HNPCL	421	2065	58%	2513	70%	2005	58%	3.54	
APPDCL Stage-II	647	1213	66%	1918	68%	1807	66%	3.20	
Dr. NTTPS-V	324	409	67%	1701	61%	1796	67%	3.34	
SEIL P1 (625MW)	253	714	75%	762	-	1724	75%	2.65	
RTPP Stage-IV	243	1323	57%	1464	65%	1257	57%	4.10	
SEIL P2	202	1506	78%	1629	86%	1461	78%	2.65	
Dr. NTTPS-IV	202	1276	70%	1255	73%	1185	70%	4.01	
RTPP Stage-II	170	1062	45%	465	31%	686	45%	4.40	

iii. It is noted from above table that ASPDCL has considered lower PLF for cheaper Plants, i.e., HNPCL, APPDCL Stage-II and SEIL P2 (500 MW) and higher PLF for comparatively costly plants i.e., Dr. NTTPS and RTPP Stage-II. By doing this, the DISCOM has escalated the Power Purchase Cost which will be borne by the consumers at large.

iv. APSPDCL has submitted that Energy despatch is carried out by the AP State Load dispatch center duly treating State as a control area unit instead of DISCOM to ensure optimization of power purchase cost, economic load dispatch and complying to Must Run status of RE generating plants as per the provisions of the Act and Regulations. However, as per the data shown in the above Table, it might also lead to conclusion that DISCOM has not followed Merit Order principle in projecting its Power Purchase Cost for FY 2025-26.

v. In view of above, it is submitted by PFI that realistic PLF should be considered by APERC for each generating source preferably with Merit Order principle (through monthly Energy Balance) in projecting its Power Purchase Cost for FY 2025-26 for AP DISCOMs.

Reply: The energy availability from SEIL P2 (500MW) is considered at 85%. The energy availability of APGENCO, SDSTPS and HNPCL have been considered based on their past three year performances.. This is inline with the methodology adopted by the Hon'ble Commission in the current year (FY 2024-25) retail supply tariff order. The fixed costs of the stations also have been reduced in proportionate to the reduced availabilities. Past experience indicates that these generators were unable to supply the power they have projected on paper. Further, it is pertinent to mention that the thermal generating stations have to maintain coal stock atleast for 15 days. But it is observed that the same is not met by the above said generating stations and are maintaining the coal stocks for less than 4 to 5 days only. However, the above power purchase projections are estimates only. If these generating stations can supply the energy over and above the estimates for the FY2025-26, APDISCOMs would certainly utilize this energy provided they fit in the merit order dispatch and accordingly APDISCOMs will admit fixed charges in proportionate to the actual availabilities in accordance with the PPA and other regulatory conditions.

f) ALLOCATION FROM GODAVARI GAS POWER PLANT (GGPP) - 217 MW

i APSPDCL has considered Power Purchase of Rs. 61 Cr of Power from GGPP Plant at the rate of Rs. 11.25/kWh. The Summary of Power Purchase from GGPP is as follows:

FY 2025-26	Capacity	Despatch		Co	st (Rs Cr		Unit	Cost (R	s/kWh)
Stations	MW	MU	FC	vc	Others	Total	FC	vc	Total
Godavari Gas Power Plant (GGPP)	217	54	7	54	О	61	1.29	9.96	11.25

ii. As above, the VC (per kWh) considered for GGPP is Rs. 9.96/kWh which is more than the weighted average cost of short term and market purchases price, i.e., Rs 7.50/kWh for FY 2025-26 (As submitted

in the Tariff Petition, the weighted average cost of short term and market purchases during the period from October-2023 to September-2024 is around Rs 7.50/Unit.). APERC in its Tariff Order dtd. 11/03/2024 for FY 2024-25 did consider the Power from GGPP on account of no APM Gas allocation. The relevant extract of the said Tariff Order is as follows:

"As there is no APM gas allocation, the availability from all the IPP gas including the GGPP owned by

DISCOMS has not been considered for FY2024-25."

iii. APSPDCL submitted that the Hon'ble APERC granted approval to the APDISCOMs' to operate the GGPP using Non-APM gas sourced from IGX or GAIL through short term ahead contracts until March 31, 2024. So, APSPDCL has again requested APERC to permit the State DISCOMs to procure from GGPP in FY 2025-26.

iv. In view of above, PFI submits that there is no basis to consider the Power Procurement from GGPP in FY 2025-26 and same should therefore be disallowed.

Reply: The Godavari Gas Power Plant was owned by APDISCOMs in April, 2016 after the expiry of the PPA and is operated with APM (Administered Pricing Mechanism) gas supplied by M/s.GAIL India Limited. But w.e.f Aug-2022, the supply of APM gas from M/s.GAIL India Limited to GGPP has been stopped as per the guidelines issued by MoPNG to divert the APM gas to PNG and CGD sectors and since then the plant was in shutdown. But owing to grid demand and load congestion during peak summer of 2024, the plant was operated by gas purchased from IGX in the months of APRIL and MAY 2024. Similarly, the permission to procure gas from IGX to operate the units of GGPP for the duration from Jan-June 2025 was sought only for severe deficit of power supply or shortage of power in market during peak load hours/ heavy demand of the grid.

B.2 ENERGY STORAGE

i. India's evolving energy storage policy framework underscores its commitment to enhancing grid flexibility and supporting renewable energy integration. Since 2019, a robust regulatory ecosystem has been crafted to support energy storage deployment through national initiatives around technical standards, legal frameworks, transmission charges, Resource Adequacy (RA) planning, market mechanisms, and financial incentives, as well as state-level initiatives.

ii. In a significant regulatory development, the MoP clarified Legal Status to ESS on January 29, 2022. The order identifies Energy Storage Systems (ESS) as an essential component of the power system under the Electricity Act of 2003, permitting ESS to function as a standalone or integrated element within generation, transmission, or distribution networks. The ESS can be operated by various entities, and standalone ESS projects can be licensed independently and granted connectivity under specific rules,

encouraging broader ESS applications and ownership models.

iii. The Waiver of Inter-State Transmission System (ISTS) Charges for solar, wind (onshore and offshore), and green hydrogen projects was mandated by the Ministry of Power (MoP) on November 23, 2021, with subsequent amendments in November 2021, December 2022, and May and June 2023. This waiver also applies to Hydro Pumped Storage Projects (PSP) and Battery Energy Storage Systems (BESS) commissioned up to June 30, 2025.

iv. The Central Electricity Authority (CEA) on 28/06/2023, has established RA planning guidelines at both national and state levels, an important step forward, and has recently come up with state-wise RA reports with up to 5-year or 10-year RA projections. The CEA Resource Adequacy guidelines also

outline a framework for incorporating ESS in RA planning.

v. Recent national and state government policies have begun to lay a foundation that will support ESS deployment and its integration into RA planning and procurement, electricity markets, and system operations.

vi. The CEA in its Report for Resource Adequacy Plan1 for the State of Andhra Pradesh for the period

from FY 2024-25 to FY 2031-32 has identified that:

Andhra Pradesh is likely to witness an energy deficit ranging from 33 MU to 2814 MU in different years from 2023-24 to 2031-32 with the existing and planned capacity addition.

 Andhra Pradesh is likely to have unserved energy in coming years and needs to contract storage-based capacities for meeting energy requirements other than the planned capacities, owing to the high quantum of renewable based capacity i.e., solar and wind that is planned by Andhra Pradesh.

The quantum of storage-based capacities required to be contracted is about 2222 MW in the year 2027-28 which increases to around 5140 MW in the year 2031-32.

vii. Many DISCOMs in the country have initiated out the bidding process for ESS and for many of them the discovered tariff has also been adopted by respective SERCs. Few such DISCOMs along-with their ESS proposal pertaining to the objective of Energy Arbitrage are as follows:

Category	Energy Storage Tender DISCOMs	Capacity
BESS	GUVNL Phase II (March 2024)	500 MWh
	GUVNL Phase III (June 2024)	1000 MWh
	MSEDCL (August 2024)	600 MWh
	UPPCL (August 2024)	1200 MWh
	GUVNL Phase IV (August 2024)	800 MWh
PSP	MSEDCL (Sept 2024)	24000 MWh

viii. Various SERCs, have approved the Energy Storage based on the proposal received from their DISOCMs. Like, in Delhi, DERC has approved a 20 MW/40 MWh standalone BESS project for their DISCOM on 1/05/2024. On 26/09/2024, MERC approved the procurement of 1000 MW of energy storage from pumped hydro storage (PHS) projects in Maharashtra, with an additional green shoe option of 2000 MW, allowing for potential expansion. The bid results, as outlined in MERC's order, provide a benchmark for competitive energy storage costs in the region. For projects designed to discharge up to 8 hours daily, with a maximum continuous discharge of 5 hours—enabling two cycles per day—the levelized cost of storage is estimated at ₹3.2 per kWh. This price is highly competitive.

ix. Standalone and co-located ESS can play an important role in meeting RA requirements under India's emerging RA framework. Going forward, state-level RA frameworks need to be closely aligned with long -term planning and resource procurement processes to support cohesive implementation.

x. However, in the Tariff Petition for ARR of FY 2025-26, it is noted that none of the AP DISCOMs have

submitted any proposal related to ESS.

xi. In view of the above, PFI submits that Energy Storage is an effective tool for Energy arbitrage for DISCOMs in optimization of their Power Purchase Cost. For instance, in BESS, Batteries can be charged in the off-peak hours and can be discharged in Peak hours, thus, avoiding reliance of DISCOMs on high-cost short term Power from markets or not scheduling the high-cost Power Plants. With steep reduction in Battery prices in CY 2024 and active participation by various DISCOMs, as stipulated above, AP DISCOMs necessitates to also consider Energy Storage as part of their Power Procurement Planning in line with Resource Adequacy Planning formulated by CEA for Andhra Pradesh.

Reply: APDISCOMs are in the process of establishing BESS system and identifying the strategic locations.

B.3 WORKING CAPITAL REQUIREMENTS FOR THE AP DISCOMS

i It has been observed by PFI from the Audited Accounts of the AP DISCOMs that they are paying huge Interest on Working Capital (IoWC) loans. APSPDCL has paid Rs 1,880 Cr of actual IoWC in FY 2023-24. The Summary of Working Capital taken by the AP DISCOMs and interest paid thereon in FY 2023-24 is as follows:

(Rs. Cr.)

Particulars	APCPDCL	APSPDCL	APEPDCL
Working Capital	10,116	16,300	
Interest on Working Capital	1,259	1,880	524

(Source: Audited Accounts of AP DISCOMs for FY 2023-24)

ii. However, APERC in Tariff Order dtd. 11/03/2024 for determination of Tariff for FY 2024-25 has determined the IoWC as NIL for APCPDCL and APEPDCL and nominal Rs 1.30 Cr for APSPDCL. The relevant extract of the said Tariff Order is as follows:

"As per clause 10.5 of the 6th Amendment to APERC Regulation 4 of 2005 which was issued after the filing date, the Working Capital requirement for Supply Business for the year shall be considered as

being equal to One and a half months (45 days) of expected PP cost for the ensuing year plus 60 days of average FPPCA amount of the current year, Minus Amount held as security deposit from retail supply consumers as of 31st March of the current year. Accordingly, based on the information available with the Commission, and considering the interest rate for working capital as 1% above the Interest on Debt taken by DISCOMs for FY 2024-25 in their respective MYT Filings, the allowable interest on the working capital requirement in Supply Business for FY 2024-25 is worked out as shown below to be allowed as part of ARR of DISCOMs for FY 2024-25.

SI.No	Item/DISCOM	SPDCL	CPDCL	EPDCL	TOTAL
1	45 Days of PP Cost including Transmission & LDC	2074.88	1145.87	2151.43	5372.18
2	Average FPPCA for previous Year for 60 Days @ (Average Rate till December-2023)	472.99	258.79	478.34	1210.11
3	Opening Balance of Amount held in Security Deposit	2534.46	1667.75	2845.79	7048.00
4	Working Capital Requirement for Retail Supply Business: (1+2-3)	13.41	-263.10	-216.03	-465.71
5	Interest rate considered	9.67%	11.80%	10.05%	
6	Interest on Working Capital for Retail Supply Business	1.30	0.00	0.00	1.30

iii. As above, the Hon'ble Commission determines the IoWC as per the applicable Regulatory Provisions and allowed only Rs 1.3 Cr IoWC in FY 2024-25.

iv. Further, it has been noticed that there is a huge outstanding subsidy amount payable by the State Govt. which is making the AP DISCOMs dependent on huge working capital loans resulting in a burden of interest thereof. In this regards, several Stakeholders raised their objections and submitted to the Hon'ble Commission that the DISCOMs are dependent on huge Working Capital loans for meeting their finances. Relevant extract of the Tariff Order dtd. 11/03/2024 is as follows:

"ii. Sri. B.Tulasidas, Kandarapu Murali & others stated that there is a huge outstanding subsidy amount of Rs.22,234.60 Crs payable by the State Govt. This is making the DISCOMs to depend on huge working capital loans resulting in a burden of interest. The Commission may take steps such that timely subsidy is released from the GoAP. Further, during the public hearings, some objectors stated that payment of reasonable interest in case of delay in disbursement of advance subsidy by the GOAP may be fixed by the Commission.

iii. During the hearings, Sri. M. Venugopala Rao stated that the three DISCOMS have shown a subsidy due up to September 2023 as Rs.22,234.60 crore from the GoAP. Even though the State Govt is issuing a commitment letter before issuing of tariff order, in reality, they are not paying the subsidy in advance or in time. He requested the Commission to explore the possibility of getting the commitment of GoAP in a legally binding and irrevocable way, with a stipulation that, for the delay in providing the agreed subsidy in time, it should also pay reasonable interest to the DISCOMS for the delayed period. Otherwise, the DISCOMs have to take loans for working capital, bear the burden of interest thereon and incur losses. If the burden of interest on working capital is allowed as a pass-through to be collected from the consumers, it would be tantamount to penalising them for the failure of commission or omission of the GoAP.

v. Further, Sections 61 (d) of the Act stipulates that appropriate Commission to specify Tariff Regulations considering various parameters including safeguarding of consumers' interest and at the same time, recovery of the cost of electricity in a reasonable manner. Also, Electricity (Second Amendment) Rules, 2023 dtd. 26/07/2023 stipulates that the prudent costs incurred by the distribution licensee for creating the assets for development and maintenance of distribution system should be allowed. The relevant extract of the said Rules is as follows:

"(4) All the prudent costs incurred by the distribution licensee for creating the assets for development and maintenance of distribution system in accordance with sub-section (1) of section 42 of the Act shall be passthrough:"

vi. In view of the above, PFI requests the Hon'ble APERC to consider amending the applicable Regulatory provisions and allow actual interest on Working Capital for the DISCOMs considering the fact that there is huge outstanding subsidy payable to the AP DISCOMs for which the DISCOMs are compelled to take short term Working Capital that may be attributable to payment to

GENCOs/TRANSCO/creation of assets etc. Such interest on Working Capital is a prudent cost incurred by the DISCOMs which if not allowed will become financial losses to the stressed DISCOMs.

Reply: Under the purview of Hon'ble APERC

B.4 RENEWABLE PURCHASE OBLIGATION (RPO) FOR FY 2025-26

i APERC in its Order dtd. 27/06/2024 in the matter of "Approval of Load Forecasts and Resource Plans (Distribution Plans, Power Procurement Plans & Transmission Plans), Comments on the State Electricity Plan for the 5th Control Period (FY 2024-25 to FY 2028-29) & Indicative Forecasts and Plans for the 6th Control Period (FY 2029-30 to FY 2033-34)" stipulated the following:

"Despite the MoP trajectory on RPO under the NTP 2016, the RPO trajectory specified by the APERC under Section 86 (1) (e) of the Electricity Act, 2003 is binding on the Respondent DISCOMS. The Central Government notification under the Energy Conservation Act 2001 is also binding on the Respondent DISCOMS. The RPO trajectory specified by the APERC and the Renewable Energy Consumption (RCO) specified by the central government will coexist and the Respondent DISCOMS have to comply with the higher of these two trajectories to comply with the law."

ii. APERC provided the following trajectory of RPO from FY 2024-25 to FY 2026-27:

Year Wind RE		MNRE Not	ification dtr		APERC Regulation	
	Wind RE	Hydro RE	Distributed RE	Other RE	Total RE	No. 5 of 2022
2024-25	0.67%	0.38%	1.50%	27.35%	29.91%	20%
2025-26	1.45%	1.22%	2.10%	28.24%	33.01%	22%
2026-27	1.97%	1.34%	2.70%	29.94%	35.95%	24%
2027-28	2.45%	1.42%	3.30%	31.64%	38.81%	-
2028-29	2.95%	1.42%	3.90%	33.10%	41.36%	-
2029-30	3.48%	1.33%	4.50%	34.02%	43.33%	-

iii. As can be seen from the above table, AP DISCOMs need to procure a cumulative 33.01% Renewable Power for FY 2025-26 for fulfilling RPO mandate. The ARR filing for FY 2025-26 of APSPDCL shows contracted RE capacity as follows:

TYPE OF NCE PROJECT	Capacity Contracted (MW)	SPDCL Share (MW)
Biomass power projects including Co-gen	21.50	8.69
Bagasse Co generation	44.00	17.79
Mini hydel power projects	11.05	4.47
Industrial waste based power projects	17.16	6.94
Municipal waste	30.15	12.19
Solar including JNNSM-Ph-I & II Bundled Solar	3755.63	1518.78
Wind	3636.45	1470.58
Total	7515.94	3039.44

Planned dispatch for FY 2025-26 as per filling:

Source	Despatch (MU)
Genco-Thermal Total	8355.59
Genco Hydel Total	1231.75
Joint Sector-TOTAL	4967.47
CGS TOTAL	4847.49
IPP TOTAL	5960.71
NCE TOTAL	7424.12
SHORTTERM & Swapping TOTAL	158.25
TOTAL	32945.39

iv. Projected sales for FY 2025-26 as per ARR filing are 29574.08 MU. Hydel dispatch is 1231.75 MU. Net sales for RPO = (29574.08-1231.75) MU i.e., 28,342.33 MU. RE despatch has been filed as 7,424.12 MU. RE Power required for 33.01% RPO compliance is 9,355.80 MU. However, in the Tariff Petition for ARR of FY 2025-26, APSPDCL has considered RE procurement of only 7,424.12 MU leading to shortfall of 1,931.68 MU.

v. In view above, PFI submits that being RE rich State, APDISCOMs should actually procure more than the RPO mandate rather they are not even meeting the minimum requirements of RPO compliance. This matter has to be taken seriously by APERC as the non-compliance of RPO targets may lead to non-fulfilment of the steps initiated by the country in achieving the NDC target of 500 GW of RE by 2030 and Net Zero by 2070. RE States like AP have a critical role to play in Energy Transition. Thus, penalty as mandated in the MoP notification dated 20/10/2023 or as stipulated in the APERC Regulations should be levied to DISCOM for not meeting RPO compliance in the past True-ups and even in

subsequent True-ups. Further, a road map to be developed by DISCOM and approved by APERC for meeting the RPO in subsequent Financial Years.

Reply: The RE procurement proposed for FY 2025-26 is 7424.12 MU which is 26%. As the same is in excess of APERC target, the objector suggestion for levy of penalty to the DISCOM for not meeting RPPO compliance in subsequent true-ups is not justified.

B.5 PM Surya Ghar - Muft Bijli Yojna and Demand Side Management

PM Surya Ghar: Muft Bijli Yojana, the world's largest domestic rooftop solar initiative, is transforming India's energy landscape with a bold vision to supply solar power to one crore households by March 2027. By March 2025, installations under the scheme are expected to exceed 10 lakh, with the numbers doubling to 20 lakh by October 2025, reaching 40 lakh by March 2026, and ultimately achieving the target of one crore by March 20272. The scheme is projected to add 30 GW of solar capacity through rooftop installations in the residential sector, significantly contributing to India's renewable energy goals.

ii. Through this rooftop solar scheme many domestic consumers will have Net metering connections which will have a sizeable impact on the domestic category sales. However, in the Tariff Petition for ARR of FY 2025-26, it is noted that none of the AP DISCOMs have submitted any proposal related to

PM Surva Ghar - Muft Bijli Yojna.

iii. Further, the AP DISCOMs have also not submitted any proposal related to Demand Side Management (DSM) initiatives. DSM is a strategic approach to energy conservation that seeks to manage consumer demand for energy rather than simply supply it. It is a coordinated set of activities and programs undertaken by electric utilities, developers, government agencies, and end-use customers to ensure that electric power service can be delivered to consumers at the lowest cost consistent with reliable supply. DSM also seeks to promote energy conservation and peak load reduction through voluntary or mandatory actions taken by the above-mentioned participants.

iv. In view of above, PFI submits that Sales forecast for AP DISCOMs in ARR of FY 2025-26 may be done considering the impact of PM Surya Ghar – Muft Bijli Yojna and Demand Side Management (DSM)

initiatives.

Reply: It is very early to incorporate the impact of PM Surya Ghar in sales forecast, as the scheme PM Surya Ghar is in its nascent stage. Hence, the PM Surya Ghar scheme will not bring significant impact on sales volume at this juncture. Further, the Hon'ble APERC recently issued a Regulation No.7 of 2024 for the advancement and implementation of cost-effective Demand side management initiatives in Andhra Pradesh state. In accordance with the said regulation, the APSPDCL will formulate a dedicated cell and submit a proposal on Demand side management before Hon'ble APERC in due course.

C. Other Issues pertaining to non-alignment with the MoP Rules C.1. RENEWABLE PURCHASE OBLIGATION (RPO) FOR FY 2025-26

a) In the matter of RPO, APERC vide its Order dtd. 27/06/2024 in the matter of "Approval of Load Forecasts and Resource Plans (Distribution Plans, Power Procurement Plans & Transmission Plans), Comments on the State Electricity Plan for the 5th Control Period (FY 2024-25 to FY 2028-29) & Indicative Forecasts and Plans for the 6th Control Period (FY 2029-30 to FY 2033-34)" stipulated the following:

"Despite the MoP trajectory on RPO under the NTP 2016, the RPO trajectory specified by the APERC under Section 86 (1) (e) of the Electricity Act, 2003 is binding on the Respondent DISCOMS. The Central Government notification under the Energy Conservation Act 2001 is also binding on the Respondent DISCOMS. The RPO trajectory specified by the APERC and the Renewable Energy Consumption (RCO) specified by the central government will coexist and the Respondent DISCOMS have to comply with the higher of these two trajectories to comply with the law."

b) APERC has provided the following trajectory of RPO from FY 2024-25 to FY 2026-27:

		APERC Regulation				
Year	Wind RE Hydro RE Distributed Other RE	Total RE	No. 5 of 2022			
2024-25	0.67%	0.38%	1.50%	27.35%	29.91%	20%
2025-26	1.45%	1.22%	2.10%	28.24%	33.01%	22%
2026-27	1.97%	1.34%	2.70%	29.94%	35.95%	24%
2027-28	2.45%	1.42%	3.30%	31.64%	38.81%	-
2028-29	2.95%	1.42%	3.90%	33.10%	41.36%	-
2029-30	3.48%	1.33%	4.50%	34.02%	43,33%	

c) It is noted that APERC has indirectly adopted RPO trajectory as specified by MoP by mentioning the phrase "higher of these two trajectories". It is suggested that APERC should amend the Regulations and specify only one RPO trajectory like other SERCs which is strictly as per Gol notification dated 20/10/2023 as amended from time to time.

Reply: Under the purview of Hon'ble APERC

C.2. WHEELING CHARGES (ELECTRICITY (SECOND AMENDMENT) RULES, 2024 DTD. 17/01/2024)

a) As per MoP Electricity (Second Amendment) Rules, 2024 dtd. 17/01/2024, Wheeling Charges to be determined as:

Wheeling Charge = Annual Revenue Requirement towards wheeling / Energy wheeled during the year. b) As above, the Rules stipulates to determine Wheeling Charges on the basis of Energy wheeled only. However, APERC in Order dtd. 27/09/2024 (Wheeling Tariffs for Distribution Business) has determined the Wheeling Charges for FY 2025-26 using different methodology as discussed in subsequent paragraphs.

c) Wheeling ARR is divided into two components. The first component consists of employees' and A&G expenses (Human Assets), and the second component consists of the remaining part of the ARR, which is linked to the physical assets of the DISCOMS. The wheeling ARR attributable to the physical asset is shared among the consumers, each voltage-wise, based on the actual asset utilization. The Wheeling ARR attributable to Employee & Admin expenses (human assets) is shared based on the number of consumers and their sales at each voltage level in the total consumers and sales handled by the wheeling network and the sales and consumer mix are given equal weightage. So, APERC has also taken into consideration the number of consumers for determining Wheeling ARR.

d) PFI submits that APERC may consider determination of Wheeling ARR as per prevailing practice by other SERCs wherein no. of consumers is not given weightage. Thereafter, as per MoP Rules, stipulated above, Wheeling Charges may be determined by dividing Wheeling ARR with Energy wheeled during the year.

Reply: Under the purview of Hon'ble APERC

C.3. REVENUE GAP (ELECTRICITY (AMENDMENT) RULES, 2024 DTD. 10/01/2024)

a) MoP vide Electricity (Amendment) Rules, 2024 dtd. 10/01/2024 has specified the following with regard to Revenue Gap between approved Annual Revenue Requirement and estimated Annual Revenue from approved tariff:

"23. Gap between approved Annual Revenue Requirement and estimated annual revenue from approved tariff— The tariff shall be cost reflective and there shall not be any gap between approved Annual Revenue Requirement and estimated annual revenue from approved tariff except under natural calamity conditions:

Provided that such gap, Created if any, shall not be more than three percent of the approved Annual Revenue Requirement.

b) The Rules have clearly specified that the tariff shall be cost reflective and there shall not be any gap between approved Aggregate Revenue Requirement and Estimated Annual Revenue from approved tariff except under natural calamity conditions. And if at all, the Gap is Created it shall not be more than 3% percent of the approved Annual Revenue Requirement.

c) It is noted from the Tariff Petition of the DISCOM that for ARR of FY 205-26 there is a Revenue Gap of Rs. 2974 Cr., Rs. 4848 Cr. & Rs. 6861 Cr. at existing Tariff for APCPDCL, APEPDCL & APSPDCL respectively which is 23%, 21% & 30% of their respective ARR.

d) Hon'ble APTEL in its judgement dated 11/11/2011 in OP 1 of 2011 has laid the significance of cost reflective tariff as follows:

"56. It is to be pointed out in this context, that the legislative intent in enacting the Act, 2003 is to secure effective Regulations characterised by tariff rationalisation with timely cost reflective tariff determination

based on the principles set out in Section 61 read with the National Tariff Policy. ..."

e) Section 62 of the Act empowers SERCs to determine the Tariff on cost plus basis for the utilities regulated by them engaged in generation, transmission and distribution of electricity. Section 63 empowers SERCs to adopt the Tariff discovered through transparent process of bidding. Determination of cost-reflective tariff of Distribution Licensees by SERCs plays a significant role as it lays the

foundation of routing revenue up the supply chain.

f) Hon'ble Supreme Court's in its judgement in PTC India Vs. CERC dated 15/03/2010 has ruled that the term "tariff" includes within its ambit not only the fixation of rates but also the rules and regulations relating to it. Through Sections 61 and 62 of the Act, the Appropriate Commission shall determine the actual tariff in accordance with the provisions of the Act, including the terms and conditions which may be specified by the Appropriate Commission under Section 61 of the said Act. Under the 2003 Act, it becomes clear from Section 62 with Section 64, that although tariff fixation is legislative in character, the same under the Act is made appealable vide Section 111. These provisions, namely, Sections 61, 62 and 64 indicate the dual nature of functions performed by the Regulatory Commissions, viz, decision-making and specifying terms and conditions for tariff determination.

g) Similarly, Hon'ble APTEL vide its judgment dated 04/09/2012 in Appeal No. 94 of 2012 has stated that the term 'Regulate' has got a wider scope and implication not merely confined to determination of tariff. Section 61 and 79 not only deal with the tariff but also deal with the terms and conditions of tariff.

The terms and conditions necessarily include all terms related to tariff.

h) Further, Tariff Policy, 2016, also states that in terms of the Section 61(g) of the Act, the Appropriate Commission shall be guided by the objective that the tariff progressively reflects the efficient and prudent cost of supply of electricity.

i) In view of above, PFI submits before APERC to determine cost-reflective Tariff for FY 2025-26 as per

the principles stipulated in MoP rules dated 10/01/2024.

Reply: In accordance with the directions of GoAP vide Go.Rt.No.161, dt.15-11-2021, the APSPDCL has proposed full cost tariff with zero gap.

C.4. TIME OF DAY (ELECTRICITY (RIGHTS OF CONSUMERS) AMENDMENT RULES, 2023 DTD. 14/06/2023)

a) Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023 stipulates that every consumer category except Agriculture should have Time of Day (TOD) Tariff with effect from 01/04/2025 and shall be made effective immediately after installation of Smart Meters, for the consumers with Smart Meters.

b) Further, the Rules also stipulates that ToD Tariff for Commercial and Industrial consumers during peak period of the day shall not be less than 1.20 times the normal tariff and for other consumers, it shall not be less than 1.10 times the normal tariff. Further ToD during Off-peak hours should be at least 20% less than the normal tariff (not more than 80% of the normal tariff).

c) It is to be noted that the AP DISCOMs have not proposed ToD for Domestic consumers, where Smart Meters have been installed, for FY 2025-26. Secondly, the DISCOM has proposed the following Tariff for Industrial consumers in Off-peak, Peak and Normal hours:

Hours/Voltage	11 kV	33 kV	132 kV	220 kV
Normal	6.30	5.85	5.40	5.35
Off-peak	5.55	5.10	4.65	4.60
(% wrt Normal)	88%	87%	86%	86%
Peak	7.80	7.35	6.90	6.85
(% wrt Normal)	124%	126%	128%	128%

d) It is noted from table above that the tariff in Off-peak hours for Industrial consumers is more than 80% of Normal Tariff which is against the Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023.

e) DISCOMs have also not submitted the status of ToD in their area (tariff category wise). Therefore, the actual implementation of Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023 related to ToD cannot be ascertained.

f) Further, for Commercial consumers the DISCOM has proposed the following Tariff:

Hours/Voltage	11 kV	33 kV	132 kV	220 kV
Normal	7.65	6.95	6.70	6.65
Peak	8.65	7.95	7.70	7.65
(% wrt Normal)	113%	114%	115%	115%

- a) It is noted from table above that the tariff in Peak hours for Commercial consumers is nearly equal to 120% of Normal Tariff which is more or less in line with the Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023.
- b) However, DISCOM has not proposed any Off-peak Tariff for Commercial consumers which is non-compliance of the Consumer Rules formulated by MoP.
 - c) PFI observes that the cost of power purchase during peak hours is quite high. Time of Day (ToD) Tariff is an important Demand Side management (DSM) measure to flatten the load curve and avoid such high cost peaking power purchases. Accordingly, in ToD Tariff regime peak hour consumption is charged at higher rates which reflect the higher cost of power purchase during peak hours. At the same time, a rebate is being offered on consumption during off-peak hours. This is also meant to incentivise consumers to shift a portion of their loads from peak time to off-peak time, thereby improving the system load factor and flatten the load curve. The ToD Tariff is aimed at optimizing the cost of power purchase, which constitutes over 80% of the Tariff charged from the consumers. It also assumes importance in the context of propagating and implementing DSM and achieving energy efficiency.
- d) Introduction of higher peak hour Tariff would initially generate additional revenue which would compensate for the reduction in revenue on account of lower Tariff during offpeak hours. In the long run, this would provide signals to the consumers to reduce load during peak hours and, wherever possible, shift this consumption to off-peak hours. Any loss of revenue to the utility on account of shifting of load from peak to off-peak hours in the long run would by and large get compensated by way of reduction of off-peak surplus to the extent of increase in off-peak demand.
- e) The ToD Tariff would thus have immediate as well as long term benefits for both, consumers as well as the utility and contribute towards controlling the rise in power purchase costs
- f) Thus, PFI requests APERC to formulate ToD tariff for all eligible consumers in line with the MoP Electricity (Rights of Consumers) Amendment Rules, 2023 dtd. 14/06/2023 as amended from time to time.

Reply: Under the purview of Hon'ble APERC

Further, it is to inform that, the Honorable APERC is conducting public hearings on ARR filings for FY 2025-26 in Hybrid mode (in-person and through video conference). The morning session 10:30 AM to 01:00 PM will be in-person and the afternoon session from 02:00 PM to 04:30 PM will be through video conference. The hearings will be held in respect of all the three DISCOMs on 07-01-2025 (Tuesday) & 08-01-2025 (Wednesday) at 'A' Convention Center, Brundavan Colony, Vijayawada and 10-01-2025 (Friday) from 10.30 AM to 1.00 PM and from 2.00 PM to 4.30 PM at Hon'ble APERC Office, Kurnool.

Yours faithfully

Chief General Manager / RAC & IPC

Copy submitted to the Secretary, APERC, Vidyut Niyantrana Bhavan, Adjacent to 220/132/33/11 KV AP Carbides Sub Station, Dinnedevarapadu Road, Kurnool -02.