Note by Prayas (Energy group) on ARR/FPT and Wheeling petitions of TG DISCOMs

TGERC SAC meeting, Hyderabad, 04/03/2025

1. General suggestions

The Retail Supply Tariff order for FY25 was issued only in October 2024 and the Tariff process for FY26 has been is delayed with the DISCOM petitions being filed only in February 2025, instead of November 2024, as specified by the MYT Regulations. Such delays are not healthy and we hope that, in future the DISCOMs would file petitions in time.

On the TGERC website, TGSPDCL filing has only the pdf version of petition and RSB formats, while NPDCL has pdf version and RSB formats in spreadsheet format (Additional information). But the websites of TGSPDCL and TGNPDCL have all the details, including the spreadsheet file of RSB formats. We request Hon'ble TGERC to upload TGSPDCL RSB formats in spreadsheet format on its website.

2. Power Purchase Planning

As per the petitions, there is expected to be 21.4% energy surplus in FY26, most of which DISCOMs plan to sell, as shown in Table 1.

Table 1: Surplus power as per DISCOM petitions

Detail	SP	NP	Total
Energy available MU	88,498	36,566	1,25,064
Energy dispatch MU	71,176	27,143	98,319
Surplus MU	17,322	9,423	26,745
Surplus as % of Available	**19.6**	**25.8**	**21.4**
Surplus sale projected MU	17,228	7,217	24,445
Revenue from Surplus sale Rs Cr	2,768	1,155	3,923
Rs/Unit of surplus sale	**1.61**	**1.60**	**1.60**

Source: Compiled by Prayas (Energy Group) from RSB Form 8 and 10, and ARR petitions of the DISCOMs

Projected annual energy surplus is high at 21.4% of the energy available. DISCOMs hope to sell most of this surplus at a net revenue of Rs.1.60/unit. As indicated by the DISCOMs, short term power purchase from the market would also be needed to meet the supply-demand mismatch during some blocks. This is understandable, but shows the need to improve power purchase planning.

As we had suggested in our submissions in October 2024 during the previous tariff process, there is a need to revisit the power purchase plan of DISCOMs, with better demand forecast. To optimise power purchase cost, it is good to plan for higher proportion of renewable, with required storage for grid balancing and depend on the market, as needed. The Resource Plan order (dated 29/12/2023) and the previous DISCOM petitions did not provide plans for BESS deployment. But the Telangana Clean and Green Energy Policy 2025 envisages 3388 MW of BESS by FY30. DISCOMs are requested to provide any plans they have for BESS deployment. DISCOMs should not enter into long term PPAs with any plants which are not part of an optimised Resource Plan. Market sale and purchase should be optimised to ensure demand-supply balance and optimise costs.

TGGENCO also has to play a significant role in energy transition. Their thermal power plants need to become more flexible and they can also plan renewable energy projects.

3. Agriculture energy consumption estimation

For the past many years, LT-Agriculture consumption is reported to be nearly one-third of the total consumption in Telangana. This is a non-metered free power category and hence better estimation of energy consumption is crucial. DISCOMs have used growth rate to estimate agriculture consumption for FY26. They have not been able to meet the repeated directives by Hon'ble TGERC to meter all agriculture Distribution Transformers. From the previous tariff petition, DISCOMs have been stating that they plan to segregate feeders under RDSS and that would help to improve the estimation of agriculture consumption. But the timeline for feeder segregation is not provided, possibly since the RDSS proposal has to be approved by MoP and then the work has to start in Telangana.

In the Tarif order dated 28/10/2024 (Section 4.1.5, pp108), Hon'ble TGERC has laid out the procedure it has used for agriculture consumption estimation. This procedure calculates the specific consumption (Units/hp/year) of pumpsets in NPDCL and SPDCL, using historical data from FY20 to FY24. The contracted demand has been escalated by 5%/year to derive contracted demand for FY 2024-25. The pump operational period considered is 180 days for both DISCOMs, 12 hours per day for SPDCL and 9 hours per day for NPDCL. This method has merits, but the results are sensitive to the quality of historical data (on consumption and contracted demand), as well as the assumptions on contracted demand growth and hours of pump operation in a year.

We suggest that agriculture consumption could be better estimated using feeder meter data, even before feeder segregation is implemented. All 11 kV feeders in Telangana are reportedly metered. For mixed feeders, non-agriculture consumers are hopefully metered and mapped to the feeder. This metered consumption and expected losses (11 kV feeder, DT and LT lines) could be subtracted from feeder meter reading to arrive at the agriculture consumption.

This method with variations has been used by many states and AP has started doing this recently. Hon'ble TGERC could consider preparing guideline for this method.

The guideline could cover the possible challenges in this method, such as the loss figures to be considered and the quality of metered consumption, as detailed in the following sentences. Energy loss figures could be based on approved figures in DISCOM MYT order. But these need to be fine-tuned based on periodic sample field measurements of actual losses on different types of feeder configurations, depending on length of 11 kV feeder, loading pattern, number of DTs, length of LT network etc. For long and heavily loaded agriculture feeders, loss could be high (observed 6-24% in Maharashtra). Metered consumption is to be subtracted and hence the quality of metered data is to reported. Details such as number of in-valid meter readings and issues with consumer mapping needs to be reported, so as to initiate corrective measures.

As done by the Maharashtra SERC and MPERC, Hon'ble TGERC could also consider setting up a committee with members drawn from SAC, DISCOMs and TGERC to prepare these guidelines through discussions, and if needed, field studies.

4. Addressing the poor financial health of DISCOMs

As per the audited annual reports of DISCOMs and replies to given during the end of control period review for FY19-24, the financial losses of DISCOMs have been increasing over the years. Table 2 gives the details from FY19 to FY24.

Table 2: Mounting financial losses of TG DISCOMs

	DISCOM Annual Loss Rs Cr			DISCOM Cumulative Loss Rs Cr		
FY/DISCOM	**SP**	**NP**	**Total**	**SP**	**NP**	**Total**
2018-29	4,967	3,051	**8,019**	24,362	11,858	**36,220**
2019-20	4,933	1,116	**6,050**	29,309	12,969	**42,279**
2020-21	4,246	2,440	**6,686**	33,555	15,410	**48,965**
2021-22	627	204	**831**	34,182	15,614	**49,796**
2022-23	8,147	2,966	**11,113**	42,330	18,570	**60,899**
2023-24	4,910	1,441	**6,351**	47,239	20,011	**67,250**

Source: Compiled by Prayas (Energy Group) from: Replies to objections on end of control period review for MYT period FY19-24, DISCOM audited annual reports

To focus on the last column (cumulative losses), it can be seen that the figures are very high and increasing. Cumulative loss of Rs. 67,250 Cr as of end FY24 is comparable to the ARR of both DISCOMs (Rs.52,007 Cr approved for FY24, Rs.65,489 Cr as per FY26 petitions).

This increase in cumulative losses is despite the high state subsidy over the years. State subsidy committed for FY25 was Rs. 11,499.52 Cr, which works out to 21% of the ARR (Clause 7.7.4 of RSTO for FY25). The subsidy request for FY26 could be as high as Rs.20,150

Cr, as per the revenue gap given in the petitions, which is about 31% of the ARR. On the other hand, as reported by the DISCOMs, total arrears (greater than Rs.50,000) of both DISCOMs as of 30/9/2024 is Rs. 30,777.66 Cr, nearly half the cumulative losses of FY24.

In the 13th Integrated Rating & Ranking of power distribution utilities by MoP (February 2025), both TG DISCOMs have rating of "C-" compared to "C" in the 12th rating. The main reason for this appears to be the low score on financial sustainability.

DISCOMs have stated that high power purchase cost, extension of uninterrupted power supply and arrears are the reasons for these losses. We request the Hon'ble TGERC to review the financial health of DISCOMs or consider providing policy advice the state government to set up an inter-departmental committee to study the causes of such losses and suggest measures to reduce them over a period of time.

5. **Time of the Day Tariff**

The need to study the possible revision of ToD tariff was mentioned in our submission during the previous tariff process, and as per the RST order of October 2024, DISCOMs had stated that: "*The Discoms will take up the change in the TOD timings in the ensuing filings to balance the demand and supply."* (Section 3.19.2, RST Order dated 28/10/2024). But the current petition suggests continuation of the same ToD tariff. We request the Hon'ble TGERC to consider taking up a study to revise the ToD structure in terms of the ToD time slots, penalty/rebate, design of seasonal ToD and increasing the consumers under the ToD regime.

6. **Quality of supply and accidents**

We have repeatedly pointed out, that in addition to providing information in the performance reports section of the petitions, what matters is the trend of these parameters over the years, and analysis of the data to arrive at key aspects that affect the consumers. Analysis of this should provide inputs to tightening the performance benchmarks listed in the SoP Regulations such as time taken to repair failed DT, time taken to replace failed meter or address fuse off calls.

As per REC's Consumer Service Rating report of DISCOMs, for 2023-24, TG DISCOMs have maintained rating of A just as they did in 2022-23. But as shown in the screen short given in Annexure, there is scope for improvement for Connection and Metering, Billing & Collection.

As for electricity accidents, there are many gaps in the reporting of accidents by DISCOMs. Examples include the absence of FY23 accident data of SPDCL, absence of break-up of public/DISCOM staff/contract staff data of NPDCL, absence of cause-wise break-up of accidents (both DISCOMs) and absence of detailed root cause analysis. DISCOMs have stated that negligence by public is a major reason for accidents and listed many measures

undertaken by them to reduce accidents. But as per available data, the number of fatal human accidents do not appear to be reducing. In addition, unfortunately, the DISCOMs are not providing ex-gratia to all the families of those affected by fatal accidents.

DISCOMs had responded that root cause analysis reports are being submitted to TGERC. If so, we request the Hon'ble TGERC to make such reports public. As per the Safety Regulations of CEA, DISCOMs are expected to appoint safety officers. We request the DISCOMs to provide the status on this. Unless a concrete action plan with targets for accident reduction is prepared, there is little chance of accidents reducing in Telangana. We also request that all fatal accident cases should be provided ex-gratia on humanitarian grounds.

7. Agriculture solar under KUSUM C and Distributed Solar plants by SHG

The petitions mention the plan to prepare RFP and float tenders for 4000 MW of solar plants for agriculture feeder solarisation under KUSUM-C. This is a welcome step towards reducing the financial burden on DISCOM, providing quality day time power supply to agriculture pumpsets and encouraging distributed solar, which has many advantages over centralised large solar. While planning these, DISCOMs could take lessons from states like Maharashtra and Rajasthan, which are implementing such projects.

Telangana Green energy policy mentions solar plants of 500 kW to 2 MW capacity by Women Self Help Group /Village Organisations/Farmer organisations. DISCOMs were expected to prepare plans for these. Such distributed projects have many benefits. We request DISCOMs to provide the status on these.

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Annexure: Screen shot from CSRD report for FY24

Grades obtained by DISCOMs and Power Departments for FY2023-24

The finalized data covered 66 DISCOMs, collectively serving approximately 33.4 crore consumers, and these DISCOMs were included in the grading assessment. While several DISCOMs achieved top grades, DISCOMs in lower grade need improvement in specific areas. The table below shows the grades obtained by DISCOMs corresponding to each of the four key parameters.

S. No.	States / UT	DISCOM	Operational Reliability (45 Marks)	Connection and Other Services (10 Marks)	Metering, Billing and Collection (35 Marks)	Fault Rectification and Grievance Redressal (10 Marks)	Final Grade (100 Marks)	Change in Grade from FY23
1	Delhi	BRPL	A+	A+	A	A+	A+	↔
2	Delhi	BYPL	A+	A+	A+	A+	A+	↔
3	Delhi	TPDDL	A+	A	A	A+	A+	↔
4	Maharashtra	AEML	A+	A+	B+	A+	A+	↑
5	Maharashtra	TPCL	A+	A+	A+	A+	A+	↑
6	Uttar Pradesh	NPCL	A+	B+	A+	A+	A+	↔
7	Andhra Pradesh	APCPDCL	A+	B	B+	A+	A	↔
8	Andhra Pradesh	APEPDCL	A+	B+	B+	A	A	↔
9	Andhra Pradesh	APSPDCL	A+	B+	B+	A	A	↔
10	Assam	APDCL	A+	C+	B+	B	A	↑
11	Bihar	NBPDCL	A+	B	B+	A	A	↑
12	Gujarat	DGVCL	A+	A	C+	A+	A	↑
13	Madhya Pradesh	MPPaKVVCL	A+	A	B	A+	A	↑
14	Manipur	MSPDCL (SCS)	A+	B+	A	B+	A	↔
15	Odisha	TPCODL	A+	B	B	A+	A	↑
16	Odisha	TPNODL	A+	B+	B+	A	A	↑
17	Tamil Nadu	TNPDCL	A+	A	B+	A+	A	↔
18	Telangana	TGNPDCL	A+	B+	B+	A+	A	↔
19	Telangana	TGSPDCL	A+	B+	B+	A+	A	↔
20	Uttar Pradesh	KESCO	A	B+	B+	A+	A	↑
21	Uttarakhand	UPCL (SCS)	A	B+	B	A+	A	↑
22	Bihar	SBPDCL	A	C+	B+	A+	B+	↔
23	Goa	Goa PD	A+	B+	C	A	B+	↔
24	Gujarat	MGVCL	A+	A	C	B+	B+	↔
25	Gujarat	PGVCL	A+	B	C	A+	B+	↑
26	Gujarat	UGVCL	A+	B+	C	A+	B+	↔
27	Haryana	DHBVNL	B+	B+	B+	A+	B+	↔
28	Haryana	UHBVNL	B+	B+	B+	A+	B+	↔
29	Karnataka	BESCOM	A+	A+	C+	A	B+	↔
30	Karnataka	CESCOM	A	B+	C+	A+	B+	↔
31	Karnataka	GESCOM	A+	A+	D	A+	B+	↑

S. No.	States / UT	DISCOM	Operational Reliability (45 Marks)	Connection and Other Services (10 Marks)	Metering, Billing and Collection (35 Marks)	Fault Rectification and Grievance Redressal (10 Marks)	Final Grade (100 Marks)	Change in Grade from FY23
32	Kerala	KSEBL	A+	B+	C	A	B+	↔
33	Madhya Pradesh	MPMaKVVCL	A	A	B	B	B+	↔
34	Madhya Pradesh	MPPoKVVCL	A	A	C+	A+	B+	↔
35	Maharashtra	BEST	A+	A	C	D	B+	↑
36	Maharashtra	MSEDCL	A+	A	C	A	B+	↑
37	Meghalaya	MePDCL (SCS)	A	B+	B	B+	B+	*
38	Odisha	TPSODL	A+	B+	C+	C	B+	↑
39	Odisha	TPWODL	A+	A	C+	A+	B+	↔
40	Punjab	PSPCL	A+	C+	B	B+	B+	↔
41	Tripura	TSECL (SCS)	A+	B	C+	B+	B+	↑
42	Uttar Pradesh	DVVNL	B	A	B	A+	B+	↑
43	West Bengal	WBSEDCL	A+	A	C+	A	B+	↔
44	Chandigarh	CED	A	B+	C	D	B	↔
45	Chhattisgarh	CSPDCL	A+	B+	D	A	B	↔
46	Karnataka	HESCOM	A	D	C+	B+	B	↔
47	Karnataka	MESCOM	B+	A+	C	A	B	↔
48	Kerala	TCED	A+	C+	C	C+	B	*
49	Ladakh	Ladakh PDD (SCS)	A+	B	D	C+	B	↔
50	Lakshadweep	Lakshadweep ED (SCS)	A	C+	C	D	B	*
51	Puducherry	PED	A+	B+	D	D	B	↔
52	Rajasthan	AVVNL	B+	B	C	A+	B	↓
53	Rajasthan	JdVVNL	A+	D	C	A+	B	↔
54	Rajasthan	JVVNL	B	C+	C+	B	B	↔
55	Uttar Pradesh	MVVNL	C+	B+	C+	A+	B	↔
56	Uttar Pradesh	PuVVNL	B	B+	C	C+	B	↔
57	Uttar Pradesh	PVVNL	C+	B+	B	A+	B	↑
58	Andaman & Nicobar Islands	A&N PD (SCS)	B	B	D	B	C+	↓
59	Arunachal Pradesh	Arunachal PD (SCS)	B	B+	D	C+	C+	↑
60	Himachal Pradesh	HPSEBL	C+	B+	C	B+	C+	↔
61	Jammu & Kashmir	KPDCL (SCS)	B	B	C	B+	C+	↑
62	Jharkhand	JBVNL	B+	D	D	C	C+	↑
63	Mizoram	Mizoram PD (SCS)	A	B	C	D	C+	↔
64	Sikkim	Sikkim PD (SCS)	B	C+	C+	D	C+	↔
65	Jammu & Kashmir	JPDCL (SCS)	C	C+	D	B+	C	↑
66	Nagaland	Nagaland PD (SCS)	B	C	D	D	C	*