

**Record Note of Annual Performance Review of TPWODL held on 18.06.2022 at 03:00PM  
through video-conferencing in the presence of the Commission**

Date of Review : 18<sup>th</sup> June, 2022

Period of Review : April 2021-March 2022

The performance of TPWODL for the period April 2021-March 2022 of the FY 2021-22 was reviewed by the Commission on 18<sup>th</sup> June, 2022 at 03:00 PM through video conferencing. Sri Gajanan Kale, CEO, TPWODL presented the performance of TPWODL and senior officials of TPWODL were present during the review. Number of safety & operational initiatives taken by TPWODL for improving performance was highlighted during the presentation.

TPWODL was vested with operation of Western part of Distribution System of Odisha on 01-01-2021. The performance of TPWODL as indicated in their presentation with regard to the key performance indicators are as follows:-

<b><u>ANNUAL PERFORMANCE OF TPWODL-As on March-2022</u></b>				
<b>BULK SUPPLY</b>	<b>2019-20</b>	<b>2020-21</b>	<b>2021-22</b>	<b>OERC Approval for 2021-22</b>
<b>AVG. DEMAND (MVA)</b>	1239.00	1422.64	1524.24	
Energy input (MU)	7523.90	7624.82	9313.21	<b>8600.00</b>
BST & Tr.Charge bill (Crs.)	2461.33	2574.19	3394.64	
<b>SALE TO CONSUMERS (MU)</b>				
EHT	1580.23	1305.30	2645.55	<b>1545.88</b>
HT	1929.55	1772.24	1837.87	<b>1953.98</b>
LT	2604.74	2635.96	2872.38	<b>3414.54</b>
<b>TOTAL</b>	<b>6,114.52</b>	<b>5,713.50</b>	<b>7,355.80</b>	<b>6,914.40</b>
<b>% of LT Sale</b>	<b>42.60%</b>	<b>46.14%</b>	<b>39.05%</b>	<b>49.38%</b>
<b>DISTRIBUTION LOSS (%)</b>				
HT (Assumed)	8.00%	8.00%	8.00%	8.00%
LT	26.39%	34.78%	33.14%	24.72%
HT & LT	23.71%	30.24%	29.36%	23.90%
<b>OVERALL</b>	<b>18.73%</b>	<b>25.07%</b>	<b>21.02%</b>	<b>19.60%</b>
<b>BILLING EFFECIENCY (%)</b>				
HT	92.00%	92.00%	92.00%	92.00%
LT	73.61%	65.22%	66.86%	75.28%
HT & LT	76.29%	69.76%	70.64%	76.1%
<b>OVERALL</b>	<b>81.27%</b>	<b>74.93%</b>	<b>78.98%</b>	<b>80.40%</b>
<b>BILLING TO CONSUMERS (Crs.)</b>				
EHT	1083.65	920.98	1820.08	<b>964.14</b>
HT	1106.88	1039.81	1157.76	<b>1204.75</b>
LT	1119.36	1134.00	1390.87	<b>1536.87</b>
<b>TOTAL</b>	<b>3,309.89</b>	<b>3,094.79</b>	<b>4,368.71</b>	<b>3,705.76</b>
<b>COLLECTION RECEIVED (Crs.)</b>				
EHT	1136.02	1016.78	1844.40	<b>954.50</b>
HT	1096.67	1086.99	1162.58	<b>1192.70</b>
LT	676.95	912.51	1041.66	<b>1521.50</b>
<b>TOTAL</b>	<b>2909.65</b>	<b>3016.28</b>	<b>4048.64</b>	<b>3668.70</b>
<b>COLLECTION EFFICIENCY (%)</b>				
EHT	104.83%	110.40%	101.34%	99.00%
HT	99.08%	104.54%	100.42%	99.00%
LT	60.48%	80.47%	74.89%	99.00%
HT & LT	79.67%	91.98%	86.49%	99.00%
<b>OVERALL</b>	<b>87.91%</b>	<b>97.46%</b>	<b>92.67%</b>	<b>99.00%</b>
<b>AT &amp; C LOSS (%)</b>				
LT	55.48%	47.52%	49.93%	25.47%
HT & LT	39.22%	35.84%	38.90%	24.66%
<b>OVERALL</b>	<b>28.56%</b>	<b>26.97%</b>	<b>26.80%</b>	<b>20.40%</b>

### **Commission's Observations:**

The Commission reviewed the compliances of the directions given in last performance review meeting. C.E.O., TPWODL apprised the Commission about the compliances made by TPWODL.

1. The sale of energy, distribution loss, Billing & Collection efficiency and AT&C loss relating to business operation of TPWODL for FY 2020-21 & FY 2021-22 are as follows:

	As on 31.03.2021	As on 31.03.2022	Increase / Decrease	(↑↓)
EHT Sale (MU)	1305.297	2645.55	1340.253	↑
HT Sale (MU)	1772.244	1837.873	65.629	↑
LT Sale (MU)	2635.963	2872.378	236.415	↑
Distribution Loss	25.07%	21.02%	4.05	↓
Billing Efficiency	74.93%	78.98%	4.05	↑
Collection Efficiency	97.46%	92.67%	4.79	↓
AT & C Loss	26.97%	26.80%	0.17	↓

From the above table it is observed that there is increase in sale of 1340.253 (103%), 65.629 MU (+3.7%), 236.415 MU (+8.96%) in EHT, HT & LT category of consumers respectively.

2. Focus on Safety aspect, Consumer mapping, energy audit, steps for improving billing & Collection efficiency, load balancing, DT failure mitigation work, load flow study for strengthening of distribution network, creation of Adarsha Bidyut gram in each sub-division, taking the help of womens' self help group, use of drone, introduction of Gyan Kosh training programme etc. and other operational & technical initiatives have been taken by TPWODL for improving performance.
3. TPWODL submitted that the total number of consumers as on 31.03.2022 is 2088825 (113375 no. of consumers added during the FY 2021-22) although number of consumers recorded in FY 2021-22 was 2142094. On enquiring about the reason of such reduction in consumer number by 53269, which is quite unusual, TPWODL clarified that those were Ghost consumers who were present only in Billing.
4. The AT & C loss has decreased to 26.80% in the FY 2021-22 (against 26.97% in previous FY 2020-21). Similarly the collection efficiency has reduced by 4.79% to 92.67% over previous FY.
5. The status of metering of 33 kV & 11 kV feeders are 100%. But, the status of metering of Power & Distribution transformers is very poor. The energy audit has been carried out for 91 Nos. (out of 172 nos.) of 33 kV feeders in operation and energy audit of none of the 11 kV feeders PTs & DTs have been carried out. Only 232 nos. out of 655 nos. of PTs and Only 7023 nos. out of 71402 nos. of DTs are metered and till now energy audit have not been carried out for DTs.

6. C.E.O., TPWODL informed that load flow study of all 11 kV and 33 kV feeders have been completed. The 33 kV feeders are primarily radials and Low voltage issue was found at 33 kV level.
7. C.E.O., TPWODL stated that they will complete all the CAPEX work by 15<sup>th</sup> February 2023.
8. TPWODL is planning to complete the consumer metering work by taking help of external vendor.
9. The employees per thousand consumers i.e. 1.27 are less than the norms decided by the Commission i.e. 1.4 and necessary action may be taken to improve the situation.
10. The SAIFI and SAIDI of divisions under TPWODL are 600 and 424 respectively.
11. The failure of PTs have come down. But burning of DTs, interruptions in 33 kV & 11 kV feeders and no. of Grievances received have gone up drastically over the previous FY 2020-21. 3297 nos. of Distribution transformers have burnt and no. of interruption in 33 kV and 11 kV feeders and no. of grievance received through CHP during the FY 2021-22 are 22619, 314324, 60239 respectively.

**Directives of the Commission:**

1. The Commission direct to provide the following information:
  - (a) Measures being taken to reduce AT&C loss.
  - (b) Actual HT loss based on energy audit
  - (c) Status of printing of electric Bill in Odia and English language
  - (d) Action taken to ensure that Bills are generated on monthly basis.
  - (e) The steps being taken to optimize capital investment and creation of assets.
  - (f) Availability of power supply (in hours/per day)
  - (g) The initiative taken for creation of EV charging station.
  - (h) No. of net metering connections for prosumers of RE and steps being taken to facilitate & assist consumers interested for availing net metering/gross metering/ GNM/VNM facility for promoting renewable generation in the State.
  - (i) Reason behind increase in burning of transformers, interruption in 33 kV & 11 kV feeders and no. of Grievances received through CHP and the action being taken to improve the situation.
2. Details of Present load & energy requirement are to be submitted in following suggested format:

Name of Circle/ Division	Description	Load in MW (Avg. load & Peak load)	Energy requirement in MU
Name of Circle			
Name of Division	1. Name of Sub-Division: (a) Total No. of 33/11kV substations: (b) Average Distance Between Substations: (c) Requirement of 33/11kV substations based on Standardisation of substation MVA capacity (indicate standard substation MVA capacity) (d) Total No. of 11/0.4kV substations: (e) Average Distance Between Substations:		

	(f) Requirement of 11/0.4kV substations based on Standardisation of substation MVA capacity (indicate standard substation MVA capacity)		
	2. Name of Sub-Division: (a) Total No. of 33/11kV substations: (b) Average Distance Between Substations: (c) Requirement of 33/11kV substations based on Standardisation of substation MVA capacity (indicate standard substation MVA capacity) (d) Total No. of 11/0.4kV substations: (e) Average Distance Between Substations: (f) Requirement of 11/0.4kV substations based on Standardisation of substation MVA capacity (indicate standard substation MVA capacity)		
Average Load of DISCOM:			
Peak Load of DISCOM (Time & Month):			

3. The present status and action plan in stages for 100% metering (with smart meters having prepayment feature) for all category of consumers, Power Transformers (PTs), Distribution Transformers (DTs), feeders/lines in each Division and time frame for implementation matching with guideline & time line of Ministry of Power, Govt. of India. A suggested format with typical example is given below:

Sl. No.	Name of Division (Circle & District)	No. of existing meters	No. of meters already replaced with smart meters in terms of % of total requirement	Target (in %) for 100% installation of smart meters for Industrial consumers, Govt. establishment, other types of consumers, etc.					Action Required/ Action being taken
				22-23	23-24	24-25	25-26	26-27	
1	A (Circle: Cuttack & Dist. Cuttack)	<b>33kV:</b> (a) PTs: (b) Lines/feeders: (c) HT Consumers: (d) Total: <b>11kV:</b> (a) DTs: (b) Lines/feeders: (c) LT Consumers (Industrial, Govt. Establishment, Other type Consumers): (d) Total:	Nil (%)	10%	30%	50%	75%	100%	

4. The present status and action plan in stages for 100% agricultural feeder separation indicating time frame for implementation. A suggested format with typical example is given below:

Sl. No.	Name of Sub-Division/Section (Division, Circle & District)	No. of agriculture feeders	No. of Agricultural feeders already separated in terms of % of total Agricultural feeders	Target (in %) for 100% segregation of Agriculture feeder					Action Required/ Action being taken
				22-23	23-24	24-25	25-26	26-27	
1	A	33 kV: 11 kV: 0.4 kV:	10%	30%	60%	100%			Identification of Agriculture feeder is in process

5. The present status and the action plan in the stages for 100% distribution asset mapping and consumer indexing/mapping (GIS mapping) indicating the Sub-Division/Section (Division, Circle & District) and time frame for implementation. A suggested format with typical example is given below:

Sl. No.	Name of Sub-Division/Section (Division, Circle & District)	Present status of implementation of Distribution Asset (substations & lines) mapping		Target (in %) for 100% Asset mapping				
		No. of lines and substations	Coverage (in %)	22-23	23-24	24-25	25-26	26-27
1	A	<b>33kV:</b> (a) No. of lines: 10 (b) No. of PSS: 5 <b>11kV:</b> (a) No. of lines: 10 (b) No. of DSS: 5	Nil Nil	10 30	40 70	70 100	100%	

Sl.No.	Name of Sub-Division/Section (Division, Circle & District)	Present status of implementation of consumer mapping & indexing		Target (in %) for 100% consumer mapping & indexing				
		Type of consumer (Industrial/ Commercial/ Domestic/ Others)	Coverage (in %)	22-23	23-24	24-25	25-26	26-27
1	A	Ind – Comm – Dom – Other -	Nil Nil Nil Nil	20% 10% 10% 10%	60% 40% 40% 30%	100% 70% 60% 50%	100% 80% 70%	100% 100%

6. The list of diagnostic tools available in different circles for Condition Based Maintenance (CBM) of distribution assets and requirement of additional diagnostic tools for catering to all Divisions in the area of the operation of the DISCOMs.
7. Progress in the direction of implementation of 100% protection system for over head lines, cables & transformers (PT/DT) on HV & LV side etc; 100% SCADA & Automation system, AMI covering peak management, outage management, etc, creation of Central Control Centre and measures for cyber security, etc giving the implementation schedule.
8. Steps being taken to improve billing and collection efficiency by resolving billing related issues covering generation of bill with monthly billing cycle as per OERC supply code, bi-lingual bills (English/Odia), resolution of bill related issues of consumers, collection of outstanding dues, establishment of consumers service/call centre, etc.
9. Steps being taken for safety of human being and equipment – Covering earthing; fencing; cradling; protection of transformers (PT&DT) & lines/cables; Personal Protection Equipment (PPE); maintenance of minimum electrical safety clearance.  
(Indicate name of substation/line where required action has been taken)
10. The Status of availability of Trolley mounted sub-station and transformer for use under contingency situation/natural calamities for early restoration of Power Supply.
11. The status of normal maintenance spares and spares/material bank for meeting natural calamities, particularly cyclone.  
(Indicate strategic location identified with list of items/materials)
12. To conduct energy audit of 33 kV & 11 kV feeders, PTs & DTs in stages (starting with 33 kV feeders & PTs) and to find out actual HT loss.
13. It may be clarified as to why there is an substantial increase in the expense under R&M (from Rs 16.72 Cr to Rs 46.33 Cr) and A&G (from Rs 13.37 Cr to Rs 22.41 Cr ) expenses for the month February to March FY 2021-22.
14. It may be clarified as to why the BSP payment for month of March 2022 is shown substantially less than February 2022.
15. It may be clarified as to why less amount (to the tune of Rs.150 Cr.) has been remitted to GRIDCO although the past arrears collected was about Rs 217 Cr.

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