

Record Note of Annual Performance Review of TPSODL held on 18.06.2022 at 11:00AM
through video-conferencing in the presence of the Commission

Date of Review : 18th June, 2022

Period of Review : April 2021-March 2022

The performance of TPSODL for the period April 2021-March 2022 of the FY 2021-22 was reviewed by the Commission on 18th June, 2022 at 11:00 AM through video conferencing. Sri Arvind Singh, C.E.O. TPSODL presented the performance of TPSODL and senior officials of TPSODL were present during the review. Number of safety & operational initiatives taken by TPSODL for improving performance was highlighted during the presentation.

TPSODL was vested with operation of Southern part of distribution system of Odisha on January 2020. The performance of TPSODL as indicated in their presentation with regard to the key performance indicators are summarised below:-

<u>ANNUAL PERFORMANCE OF TPSODL (2021-2022)</u>				
BULK SUPPLY	2019-20	2020-21	2021-22	OERC Approval for 2021-22
AVG. DEMAND (MVA)	613.86	599.68	649.82	680.00
Energy input (MU)	3468.63	3599.29	3941.54	4100.00
BST & Tr.Charge bill (Cr.)	739.88	779.20	925.35	
SALE TO CONSUMERS (MU)				
EHT	488.52	438.43	530.86	481.15
HT	269.74	182.09	274.43	230.71
LT	1861.71	2148.43	2193.08	2363.14
TOTAL	2,619.97	2,768.95	2,998.37	3,075.00
% of LT Sales to Total Sales	71.06%	77.59%	73.14%	76.85%
LOSS (%)				
HT (Assumed)	8.00%	8.00%	8.00%	8.00%
LT	24.69%	21.18%	23.41%	23.74%
HT & LT	28.48%	26.27%	27.65%	28.32%
OVERALL	24.47%	23.07%	23.93%	25.00%
BILLING EFFECIENCY (%)				
HT	92.0%	92.0%	92.0%	92.0%
LT	75.3%	78.8%	76.6%	76.3%
HT & LT	71.5%	73.7%	72.3%	71.7%
OVERALL	75.53%	76.93%	76.07%	75.0%
BILLING TO CONSUMERS (Crs.)				
EHT	297.15	278.47	355.75	301.38
HT	178.91	131.48	194.81	142.05
LT	803.41	907.65	1062.15	1079.30
TOTAL	1,279.46	1,317.59	1,612.70	1,522.73
Billing to Govt.Dept & PSU(Crs.)	81.50	106.17	102.85	
COLLECTION RECEIVED (Crs.)				
EHT	297.06	278.44	348.37	298.37
HT	163.58	131.56	201.17	140.63
LT	618.50	788.39	888.03	1068.51
TOTAL	1079.14	1198.39	1437.57	1507.50
Coll. from Govt.Dept & PSU(Crs.)	62.23	99.43	99.43	
COLLECTION EFFICIENCY (%)				
EHT	100%	100%	98%	99%
HT	91%	100%	103%	99%
LT	77%	87%	84%	99%
HT & LT	80%	89%	87%	99%
OVERALL	84.34%	90.95%	89.14%	99.00%
AT & C LOSS (%)				
LT	42.02%	31.54%	35.96%	24.50%
HT & LT	43.06%	34.73%	37.31%	29.04%
OVERALL AT & C Loss	36.29%	30.03%	32.19%	25.75%

Commission's Observations:

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

	As on 31.03.2021	As on 31.03.2022	Increase(↑) / Decrease(↓)
EHT Sale (MU)	438.43	530.86	92.43(↑)
HT Sale (MU)	182.09	274.43	92.34(↑)
LT Sale (MU)	2148.43	2193.08	44.65(↑)
Distribution Loss	23.07%	23.93%	0.86%(↑)
Billing Efficiency	76.93%	76.07%	0.86%(↓)
Collection Efficiency	90.95%	89.14%	1.81%(↓)
AT & C Loss	30.03%	32.19%	2.16%(↑)

From the above table it is observed that there is increase in sale of 92.43 MU(+21.08%), 92.34 MU(+50.48%) & 44.65 MU (+2.07%) MU in EHT, HT & LT category of consumers respectively.

- Focus on Safety aspect, Consumer mapping, energy audit, steps for improving billing & Collection efficiency, load flow study for strengthening of distribution network and other operational & technical initiatives have been taken by TPSODL for improving performance.
- TPSODL submitted that 45,399 number of consumers have been added during FY 2021-22. The total number of consumers as on 31.03.2022 is 23,86,112.
- The AT & C loss has increased to 32.19% in the FY 2021-22 (against 30.03% in previous FY 2020-21). Similarly the collection efficiency has reduced by 1.81% to 89.14% over previous FY.
- The status of outstanding arrear under different category of consumers (as on 31.03.2022) is as follows:

STATUS OF ARREAR 2021-2022 (April' 21 to March'22)									
CATEGORY	Arrears as on 1.04.1999	Arrears as on 1.04.2021	Billing for the period Apr 21- Mar 22	Collection Against			Adjustmen ts	(Rs. In Crores)	
				Current dues Apr 21- Mar 22 against '4'	Arrear during Apr 21-Mar 22 against '3'	Total Collection		Arrear for the period Apr 21- Mar 22	Arrears as on 31.03.2022
				5	6	7=5+6		8=4-5	10=3+4-7
(i) EHT	4		356	348		348		7	7
(ii) HT	57	32	180	180	6	186		0	26
(iii) LT	110	1330	974	760	78	838		214	1466
TOTAL	171	1362	1510	1289	84	1373	4	221	1499
(i) Govt &	18	35	88	47	3	50	13	38	60
(ii) Govt &		-1	15	16		15			-1
Total Govt &	18	34	103	63	3	65	13	38	59
GRAND TOT	189	1396	1613	1352	87	1438	17	259	1558

- The burning of transformers (1514 nos.), interruption in 11 kV feeders (87889 nos.) and grievance received through CHP have increased during the FY over the previous FY 2020-21.
- The SAIFI and SAIDI of divisions under TPSODL are 148 and 6272 respectively.

8. Metering Status of TPSODL is as follows

METER REPLACEMENT FOR THE FY 2021-22(April to March)												
DESCRIPTION		TARGET	OPENING BALANCE	METER RECEIVED DURING THE PERIOD			TOTAL METERS AVAILABLE	STATUS OF INSTALLATION DURING THE PERIOD				CLOSING BALANCE
				NEW	REPAIR	TOTAL		NEW METER INSTALLED	REPLACEMENT	ENERGY AUDIT METER	TOTAL	
1	2	3	4	5	6	7	8	9	10	11	12	13
Single Ph.	DISTCO.	300,000	31,637	347,065		347,065	378,702	76,300	272,565	-	348,865	29,837
	PARTY	-	-	-		-	-	-	-	-	-	-
3 Ph.-LT		20,000	60	4,528		4,528	4,588	4,028	-	-	4,028	560
3 Ph.-HT												
TOTAL		320,000	31,697	351,593	-	351,593	383,290	80,328	272,565	-	352,893	30,397

Metering of Power & Distribution transformers is very poor. 95 nos. out of 116 nos. of 33 kV feeders in operation are metered and energy audit has been carried out for 69 Nos. of feeders. Similarly, 715 nos. out of 881 nos. of 11 kV feeders have been metered and energy audit for 274 nos. of 11 kV feeders have been carried out. only 524 no. out of 55959 nos. of DTs are metered and till now energy audit have not been carried out for DTs.

9. On enquiry about the reduction in collection efficiency compared to last year, C.E.O. TPSODL informed that due to Covid-19 and transfer of MBC work to a new team, the collection efficiency has reduced.
10. The C.E.O., TPSODL explained about safety initiatives taken up by TPSODL and also informed that they have started Surakhya Rath for Public awareness about Safety.
11. TPSODL has planned for pre paid metering system for Government offices. They have also started initiatives for Rural Digital Literacy.
12. The C.E.O., TPSODL also explained about the Energy audit and transfer of 100% consumers to Customer Information System.
13. TPSODL has successfully completed integration of HES, MDM and CIS for implementation of prepaid metering.
14. The employees per thousand consumers i.e. 0.84 are less than the norms decided by the Commission i.e. 1.4 and necessary action may be taken to improve the situation.

Commission's directions:

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 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
 - (i) Clarification as to why in the details of Govt. outstanding the opening outstanding balance as on 01.04.2021 is shown as negative.

- (j) Clarification regarding increase in the expenses of salaries and terminal benefits paid during FY 2021-22 in comparison to FY 2020-21.
- (k) Reason behind increase in burning of transformers, interruption in 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)	33kV: (a) PTs: (b) Lines/feeders: (c) HT Consumers: (d) Total: 11kV: (a) PTs: (b) DTs: (c) Lines/feeders: (d) LT Consumers (Industrial, Govt. Establishment, Other type Consumers): (e) 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:

6.

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
1	A	33kV: (a) No. of lines: 10 (b) No. of PSS:5	Nil	10	40	70	100%	
		11kV: (a) No. of lines: 10 (b) No. of DSS: 5	Nil	30	70	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
1	A	Ind –	Nil	20%	60%	100%		
		Comm –	Nil	10%	40%	70%	100%	
		Dom –	Nil	10%	40%	60%	70%	
		Other -	Nil	10%	30%	50%	70%	100%

7. 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.
8. 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.
9. 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.
10. 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)

11. The Status of availability of Trolley mounted sub-station and transformer for use under contingency situation/natural calamities for early restoration of Power Supply.
12. 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)
