



From

Er.K.Nandagopal , B.E.,
Chief Engineer / RAPDRP ,
TANGEDCO,
II Floor, Eastern Wing, N.P.K.R.R.Malligai,
144, Anna Salai, Chennai - 2.

To

Shri.Milind Deore,
Director,
Bureau of Energy Efficiency,
Ministry of Power, Government of India,
4th Floor, Sewa Bhawan,
R.K.Puram, New Delhi-110 006.

Lr.No.CE/RAPDRP/SE/Sch./EE/U/AEE II/F.RDSS-EA /D 261 /21, dt. 09.12.2021

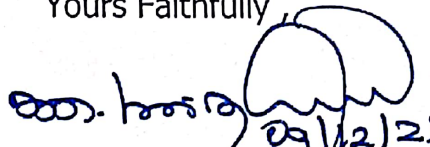
Sir,

Sub: TANGEDCO – Conducting Energy Accounting and Energy Audit in
Electricity Distribution Companies under RDSS Scheme – Report
submission for the quarter July 2021 to Sep 2021- Reg.

Ref : 1 BEE Notification No.18/1/BEE/DISCOM/2021 dated 06.10.21
2. MoP Letter No.11-10/5/2020-EC dated 27.10.2021.

With regard to the references (1) & (2) cited above , the periodic quarterly
energy accounting report for the period of July 2021 to September 2021 is submitted
herewith.

Yours Faithfully


Chief Engineer /RAPDRP
(2/4)

Encl: 1. Report Formats – 7 Sheets.

1) Copy to :The Chief Engineer/Demand Side Management ,Chief Executive Officer
of State Designated Agency,TANGEDCO, Ch-2.(With enclosures)

Encl.: Report Formats – 7 Sheets

2) Copy to the Shmty. Surya Yadav , Project Engineer , BEE , New Delhi .



General Information

1	Name of the DISCOM	TANGEDCO		
2	i) Year of Establishment	1957		
	ii) Government/Public/Private	DIS0020TN		
3	DISCOM's Contact details & Address			
i	City/Town/Village	NPKRR MAALIGAI,144, ANNA SALAI		
ii	District	CHENNAI		
iii	State	TAMILNADU	Pin	600002
iv	Telephone	044-28520131	Fax	
4	Registered Office			
i	Company's Chief Executive Name	SHRI.RAJESH LAKHONI		
ii	Designation	PRINCIPAL SECRETARY/CHAIRMAN AND MANAGING DIRECTOR		
iii	Address	VI FLOOR, TANTRANSCO BUILDING,144, ANNA SALAI		
iv	City/Town/Village	CHENNAI	P.O.	
v	District	CHENNAI		
vi	State	TAMILNADU	Pin	600002
vii	Telephone	044-28520131	Fax	
5	Nodal Officer Details*			
i	Nodal Officer Name (Designated at DISCOM's)	SHRI.K.NANDAGOPAL		
ii	Designation	CHIEF ENGINEER/RAPDRP		
iii	Address	II FLOOR, EASTERN WING,NPKRR MAALIGAI, 144, ANNA SALAI		
iv	City/Town/Village	CHENNAI	P.O.	
v	District	CHENNAI		
vi	State	TAMILNADU	Pin	600002
vii	Telephone	044-28520656	Fax	
6	Energy Manager Details*			
i	Name	R.SRINIVASAN		
ii	Designation	EE/ELECTRICAL	Whether EA or EM	EM
iii	EA/EM Registration No.	23795		
iv	Telephone	28520131 EXT.2237	Fax	
v	Mobile	9445856445	E-mail ID	eeuday@tnebnet.org
7	Period of Information			
	Year of (FY) information including Date and Month (Start & End)	1st July, 2021 - 30th September, 2021		

Performance Summary of Electricity Distribution Companies

1	Period of Information Year of (FY) information including Date and Month (Start & End)	1st July, 2021 - 30th September, 2021	
2	Technical Details		
(a)	Energy Input Details		
(i)	Input Energy Purchase (From Generation Source)	Million kwh	29474.43
(ii)	Net input energy (at DISCOM Periphery after adjusting the transmission losses and energy traded)	Million kwh	28350.65
(iii)	Total Energy billed (is the Net energy billed, adjusted for energy traded))	Million kwh	24483.53
(b)	Transmission and Distribution (T&D) loss Details	Million kwh	3867.12
		%	13.64%
	Collection Efficiency	%	99.82%
(c)	Aggregate Technical & Commercial Loss	%	13.79%

I/We undertake that the information supplied in this Document and Pro-forma is accurate to the best of my knowledge and if any of the information supplied is found to be incorrect and such information result into loss to the Central Government or State Government or any of the authority under them or any other person affected, I/we undertake to indemnify such loss.

Authorised Signatory and Seal



Name of Authorised Signatory: E.K.NANDAGOPAL (2/4)

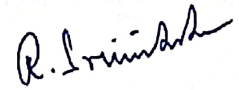
Name of the Designated Consumer: TANGEDCO

Full Address:-

Chief Engineer/ RAPDRP,
II FLOOR, EASTERN WING,
NPKRR MAALIGAI,
144, ANNA SALAI,
CHENNAI 600002

Seal

Signature:-



Name of Energy
Manager*:

R.SRINIVASAN

Registration Number: EA 23795



Form-Details of Input Infrastructure					
1	Parameters	Total	Covered during in audit	Verified by Auditor in Sample Check	Remarks (Source of data)
i	Number of circles	44			
ii	Number of divisions	176			
iii	Number of sub-divisions	707			
iv	Number of feeders	10635 (including 324 Nos. exclusive RE feeders)			
v	Number of DTs	365710			
vi	Number of consumers	31661718			
2	Parameters	66kV and above	33kV	11/22kV	LT
a. i.	Number of conventional metered consumers				28751834
ii	Number of consumers with 'smart' meters				35444
iii	Number of consumers with 'smart prepaid' meters				
iv	Number of consumers with 'AMR' meters	227	330	9696	
v	Number of consumers with 'non-smart prepaid' meters				
vi	Number of unmetered consumers				2874440
vii	Number of total consumers	227	330	9696	31661718
b.i.	Number of conventionally metered Distribution Transformers			49606	
ii	Number of DTs with communicable meters			38270	
iii	Number of unmetered DTs			277834	
iv	Number of total Transformers			365710	
c.i.	Number of metered feeders	2	1275	9358	
ii	Number of feeders with communicable meters	2	1275	9169	
iii	Number of unmetered feeders	0			
iv	Number of total feeders	2	1275	9358	
d.	Line length (ct km)		777915.083		
e.	Length of Aerial Bunched Cables				
f.	Length of Underground Cables		14601.009		

3	Voltage level	Particulars	MU	Reference	Remarks (Source of data)
i	66kV and above, 33 kV, 22 kV, 11 kV	Long-Term Conventional	18,949	Includes Long-Term Conventional, TNGEDCO own generation, Central Generating Station share, IPPs	
		Medium Conventional	209.94		
		Short Term Conventional	107.51		
		Banking	-752.574		
		Long-Term Renewable energy	8680.452		
		Medium and Short-Term RE		Includes power from bilateral/ PX/ DEEP	
		Captive, open access input	1585.074	Captive wheeling & Third Party wheeling by HT consumers (Intra state), Purchase by HT consumers (Inter state) Exchange, Purchase by HT consumers (Inter state) Bilateral	
		purchase through exchange	1110.30		
		Quantum of inter-state transmission loss	415	As confirmed by SLDC, RLDC etc	
		Power procured from inter-state sources	29,889	Based on data from Form 5	
		Power at state transmission boundary	29,474		
ii		Long-Term Conventional			
		Medium Conventional			
		Short Term Conventional			
		Banking			
		Long-Term Renewable energy			
		Medium and Short-Term RE			
		Captive, open access input			
		Sale of surplus power			
		Quantum of intra-state transmission loss	1,124		
		Power procured from intra-state sources	0		
iii		Input in DISCOM wires network	28,351		
iv		Renewable Energy Procurement			
		Small capacity conventional/ biomass/ hydro plants Procurement			
		Captive, open access input			
v		Renewable Energy Procurement			
		Small capacity conventional/ biomass/ hydro plants Procurement			
		Sales Migration Input			
vi		Renewable Energy Procurement			
		Sales Migration Input			
vii		Energy Embedded within DISCOM wires network	0		
viii		Total Energy Available/ Input	28,351		

4	Voltage level	Energy Sales Particulars	MU	Reference
i	LT Level	DISCOM' consumers	16,824	Include sales to consumers in franchisee areas, unmetered consumers
		Demand from open access, captive		Non DISCOM's sales
		Embedded generation used at LT level		Demand from embedded generation at LT level
		Sale at LT level	16,824	
		Quantum of LT level losses	-16,824	
		Energy Input at LT level	0	
ii	11 kV/22 kV Level	DISCOM' consumers	7,660	Include sales to consumers in franchisee areas, unmetered consumers
		Demand from open access, captive		Non DISCOM's sales
		Embedded generation at 11 kV level used		Demand from embedded generation at 11kV level
		Sales at 11 kV level	7,660	
		Quantum of Losses at 11 kV	0	
		Energy input at 11 kV level	7,660	
iii	33 kV Level	DISCOM' consumers	0	Include sales to consumers in franchisee areas, unmetered consumers
		Demand from open access, captive		Non DISCOM's sales
		Embedded generation at 33 kV or below level		This is DISCOM and OA demand met via energy generated at same voltage level
		Sales at 33 kV level	0	
		Quantum of Losses at 33 kV	24,484	
		Energy input at 33kV Level	24,484	
iv	> 33 kV	DISCOM' consumers	0	Include sales to consumers in franchisee areas, unmetered consumers
		Demand from open access, captive		Non DISCOM's sales
		Cross border sale of energy		
		Sale to other DISCOMs		
		Banking		
		Sales at 66kV and above (EHV)	0	
Total Energy Requirement			24,484	
Total Energy Sales			24,484	

Energy Accounting Summary					
5	DISCOM	Input (in MU)	Sale (in MU)	Loss (in MU)	Loss %
i	LT				
ii	11 Kv				
iii	33 kv				
iv	> 33 kv				
6	Open Access, Captive	Input (in MU)	Sale (in MU)	Loss (in MU)	
i	LT				
ii	11 Kv				
iii	33 kv				
iv	> 33 kv				

Loss Estimation for DISCOM	
T&D loss	3,867
D loss	2,328
T&D loss (%)	13.64%
D loss (%)	9.51%

Note: For the input energy of 28,351 MU, voltage wise details are not available.

For the energy sales of 24,484 MU, voltage wise details are not available.

Period From July 2021 to September 2021																						
S.No	Name of circle	Circle code	Consumer profile									Energy parameters				Losses		Commercial Parameter			AT & C loss (%)	
			Consumer category	No of connection metered (Nos)	No of connection Un-metered (Nos)	Total Number of connections (Nos)	% of number of connections	Connected Load metered (MW)	Connected Load Un-metered (MW)	Total Connected Load (MW)	% of connected load	Billed energy (MU)			% of energy consumption	T&D loss (MU)	T&D loss (%)	Billed Amount in Rs. Crore	Collected Amount in Rs. Crore	Collection Efficiency		
												Input energy (MU)	Metered energy	Unmetered/a assessment energy								Total energy
			Others	35803	0	35803	6%	105597	0	105597.276	7%											
			Sub-total	554349	0	554349	100%	908460.157	0	908460.157	100%	408.217										
43	KALLAKURIC HI		Residential	399014	0	399014	83%	392292	0	392292.41	25%	362.2788										
			Agricultural	0	0	0	0%	0	0	0	0%											
			Commercial/Ir	55112	0	55112	11%	222497	0	222497.16	14%											
			Commercial/Ir	33	0	33	0%	16	0	16.27	0%											
			Others	29476	0	29476	6%	86353	0	86352.82	6%											
			Sub-total	483635	0	483635	100%	701158.66	0	701158.66	100%	362.2788										
44	CUDDALORE		Residential	667197	0	667197	83%	743727	0	743727.1584	48%	643.9248										
			Agricultural	0	0	0	0%	0	0	0	0%											
			Commercial/Ir	98298	0	98298	12%	373354	0	373353.71	24%											
			Commercial/Ir	62	0	62	0%	66	0	65.55	0%											
			Others	39595	0	39595	5%	144226	0	144225.91	9%											
			Sub-total	805152	0	805152	100%	1261372.328	0	1261372.328	100%	643.9248										
76	Total		Residential	22680403	0	22680403	80%	35351468.76	0	35351468.76	54%	28350.16										
			Agricultural	0	0	0	0%	0	0	0	0%											
			Commercial/Ir	4146260	0	4146260	15%	25539200.63	0	25539200.63	39%											
			Commercial/Ir	8965	0	8965	0%	9705.86	0	9705.86	0%											
			Others	1366957	0	1366957	5%	4490930.856	0	4490930.856	7%											
77	At company level		28202585	0	28202585	100%	65391306.1	0	65391306.1	100%	28350.16											

** Note - It shall be mandatory to record the energy supplied separately for each category of consumers which is being provided a separate rate of subsidy in the tariff, by the state government, so that the subsidy due for the electricity distribution company is quarterly calculated by multiplying the energy supplied to each of such category of consumers by the applicable rate of subsidy notified by the state government.

1. In TANGEDCO. Bi-monthly readings are taken for all the LT Non-CT consumers.. Hence, this circle wise quarterly units could not be arrived from the LT billing software for the II Quarter of FY2022
2. Due to COVID 19, the PMC reading was entered for the month of 05/2021. Hence, in the month of 07/2021, readings were taken for the previous four months totally. Hence, circle wise billed energy could not be taken from the LT billing software.

Color	Parameter
	Please enter name of circle
	Please enter circle code
0	Please enter numeric value or 0
	Formula protected

I/We undertake that the information supplied in this Document and Pro-forma is accurate to the best of my knowledge and if any of the information supplied is found to be incorrect and such information result into loss to the Central Government or State Government or any of the authority under them or any other person affected, I/we undertake to indemnify such loss.

Authorised Signatory and Seal

sd...

Name of Authorised Signatory: Er.K.NANDAGOPAL,

Name of the DISCOM: TANGEDCO

Full Address:- Chief Engineer / RAPDRP,
II FLOOR, EASTERN WING, NPKRR MAALIGAI,
144, ANNA SALAI, CHENNAI 600002

Seal

Signature:-

Name of Energy Manager:
Registration Number:

sd...
R.SRINIVASAN
EA 23795

Form-Input energy(Details of Input energy & Infrastructure)

A. Summary of energy input & Infrastructure

S.No	Parameters	Period From July 2021 To September 2021	Remarks (Source of data)
A.1	Input Energy purchased (MU)	29474.43	
A.2	Transmission loss (%)	3.81%	
A.3	Transmission loss (MU)	1123.86	
A.4	Energy sold outside the periphery(MU)	0	
A.5	Open access sale (MU)	5404	
A.6	EHT sale	743	
A.7	Net input energy (received at DISCOM periphery or at distribution point)-(MU)	28350.65	
A.8	Is 100% metering available at 66/33 kV (Select yes or no from list)	Yes	
A.9	Is 100% metering available at 11 kV (Select yes or no from list)	Yes	
A.10	% of metering available at DT	24.03%	
A.11	% of metering available at consumer end	90.92%	
A.12	No of feeders at 66kV voltage level	2	
A.13	No of feeders at 33kV voltage level	1275	
A.14	No of feeders at 11kV voltage level	9358	
A.15	No of LT feeders level	0	No. of feeders not available
A.16	Line length (ckt. km) at 66kV voltage level	154.49	
A.17	Line length (ckt. km) at 33kV voltage level	8909.89	
A.18	Line length (ckt. km) at 11kV voltage level	130336.81	
A.19	Line length (km) at LT level	638513.90	
A.20	Length of Aerial Bunched Cables (KM)	287	
A.21	Length of Underground Cables (KM)	14601.01	** UG cables covers 11kV,22KV,33 KV and LT ; 66KV UG-NIL
A.22	HT/LT ratio	1 : 3.34	

Details of Input Energy Sources

Period From July 2021 To September 2021

A. Generation at Transmission Periphery (Details)

S.No.	Name of Generation Station	Generation Capacity (In MW)	Type of Station Generation (Based- Solid (Coal ,Lignite)/Liquid/Gas/Renewable (biomass- bagasse)/Others)	Type of Contract (in years/months/days)	Type of Grid (Intra-state/Inter-state)	Point of Connection (POC) Loss MU	Voltage Level (At input)	Remarks (Source of data)
1	Kundah PH.I	60.0	Hydro		Intra			
2	Kundah PH.II	175.0	Hydro		Intra			
3	Kundah PH.III	180.0	Hydro		Intra			
4	Kundah PH.IV	100.0	Hydro		Intra			
5	Kundah PH.V	40.0	Hydro		Intra			
6	Kundah PH.VI	30.0	Hydro		Intra			
7	Pvkara PH	59.2	Hydro		Intra			
8	Moyar PH	36.0	Hydro		Intra			
9	Mukurthy Micro	0.7	Hydro		Intra			
10	Pvkara Micro	2.0	Hydro		Intra			
11	Maravakandy	0.8	Hydro		Intra			
12	PUSEPH	150.0	Hydro		Intra			
13	Kadamparai	400.0	Hydro		Intra			
14	Punachi PH	2.0	Hydro		Intra			
15	Sholayar PHI	84.0	Hydro		Intra			
16	Sholayar PHII	25.0	Hydro		Intra			
17	Aliyar PH	60.0	Hydro		Intra			
18	Sarkarpathy PH	30.0	Hydro		Intra			
19	Thirumurthy PH	2.0	Hydro		Intra			
20	Aliyar Mini PH	2.5	Hydro		Intra			
21	Amaravathy PH	4.0	Hydro		Intra			
22	Periyar	168.0	Hydro		Intra			
23	Suruliyar PH	35.0	Hydro		Intra			
24	Vaigai Mini PH	6.0	Hydro		Intra			
25	Kodayar PHI	60.0	Hydro		Intra			
26	Kodayar PHII	40.0	Hydro		Intra			
27	Perunchani MPH	1.3	Hydro		Intra			
28	Papanasam PH	32.0	Hydro		Intra			
29	Servalar PH	20.0	Hydro		Intra			
30	Periyar Vaigai I	4.0	Hydro		Intra			
31	Periyar Vaigai II	4.0	Hydro		Intra			
32	Periyar Vaigai III	2.5	Hydro		Intra			
33	Periyar Vaigai IV	2.5	Hydro		Intra			
34	Mettur Dam PH	50.0	Hydro		Intra			
35	Mettur Tunnel PH	200.0	Hydro		Intra			
36	Barrage PHI	30.0	Hydro		Intra			
37	Barrage PHII	30.0	Hydro		Intra			
38	Barrage PHIII	30.0	Hydro		Intra			
39	Barrage PHIV	30.0	Hydro		Intra			
40	MHPH/B.S	8.0	Hydro		Intra			
41	RBC PH	8.0	Hydro		Intra			
42	Sathanur MPH	7.5	Hydro		Intra			
43	BKB PH I	30.0	Hydro		Intra			
44	BKB PH II	30.0	Hydro		Intra			
45	BKB PH III	30.0	Hydro		Intra			
46	Bavani Barrage 1	10.0	Hydro		Intra			
47	Bavani Barrage 2	10.0	Hydro		Intra			
	Total Hydro	2321.90						
	Thermal							
1	North Chennai TPS I	630.0	Thermal(coal)		Intra			
2	Tuticorin TPS	1050.0	Thermal(coal)		Intra			
3	Mettur TPS Stage I&II	840.0	Thermal(coal)		Intra			
4	NCTPS Stage-II	1200.0	Thermal(coal)		Intra			
5	MTPS Stage-III	600.0	Thermal(coal)		Intra			
	Total Thermal	4320						
	Gas							
1	Basin Bridge	120.000	Thermal(Gas)		Intra			
2	Kovil Kalappal	107.880	Thermal(Gas)		Intra			
3	Vazhuthur Phase I	95.000	Thermal(Gas)		Intra			
4	Vazhuthur Phase II	92.200	Thermal(Gas)		Intra			
5	Kuttalam	101.000	Thermal(Gas)		Intra			
	Central Sector (TNEB SHARE IN MW)							
1	NNTPP	655	Thermal(coal)		Intra			
2	Neyveli TPS 1-Expans	226	Thermal(coal)		Intra			
3	Neyveli TPS 2	469	Thermal(coal)		Intra			
4	Madras APS	331	others		Intra			
5	Kaiga APS	224	others		Inter			
6	Ramagundam NTPC S	524	Thermal(coal)		Inter			
7	Ramagundam NTPC S	131	Thermal(coal)		Inter			
8	ER power	35	others		Inter			
9	Talcher Stage-2 NTPC	496	Thermal(coal)		Inter			
10	Simhadri Stage-2 NTPC	224	Thermal(coal)		Inter			
11	Vallur, NTECL	1064	Thermal(coal)		Intra			
12	Kudankulam NPCIL	1152	Thermal(coal)		Intra			
13	Neyveli TPS 2-Expans	270	Thermal(coal)		Intra			
14	NLC Tamilnadu Power	411	Thermal(coal)		Intra			
15	Kudgi	346	Thermal(coal)		Inter			
	Sub Total	6558.000						
	Private Sector							
1	TAQA Neyveli Power C	250.0			Intra			
1	Trading Purchase Case 1 bidding (LTA & MTOA)	3380.00						
	Installed capacity Details of renewable power							
		MW						
	Wind Mill	8565.90						
	Solar	4511.30						
	Bio Mass	265.59						
	Co-Gen	710.90						

LD & GO

(Details of Consumers)							
Summary of Energy							
Period From July 2021 to September 2021							
S.No	Type of Consumers	Category of Consumers (EHT/HT/LT/Others) and Tariff	Voltage Level (In Voltage)	No of Consumers	Total Consumption (In MU)	Remarks (Source of data)	
I High Tension Supply							
1	Registered factories, Textiles, Tea Estate, Software Industries etc.	HT / IA		6893	7394.81	From TANGEDCO / Revenue Wing	
2	Railway Traction	HT / IB		37	277.22		
3	Govt. Educational Institutions, Govt. Hospitals, Water supply etc.	HT / IIA		910	412.11		
4	Private Educational Institutions, Cinema Theaters & Studios	HT / IIB		298	58.2		
5	Commercial and all categories not covered in other HT categories	HT / III		2032	690.79		
6	Lift Irrigation and Co-operative Soc.for Agriculture	HT / IV		41	12.77		
7	HT Temporary Supply for construction & other purpose	HT / V		39	13.6		
II. Low Tension Supply							
1	Domestic , Hand Loom etc.	LT / IA		22663479	11269.138		
2	Huts in Village panchayats, TAHDCO etc.	LT / IB		0	98.22		
3	LT Bulk supply for railway, defence colonies	LT / IC		4147	3.403		
4	Public Lighting and Public Water Supply & Sewerage	LT / IIA		757136	840.823		
5	Government and aided Educational Instn., Govt. Hospitals	LT / IIB (1)		78038	43.562		
6	Private Educational Instn., Govt. Hospitals	LT / IIB (2)		17445	37.658		
7	Actual place of public worship, Mutts and Religious	LT / IIC		149808	37.396		
8	Cottage and Tiny Industries	LT / IIIA (1)		236651	111.535		
9	Powerloom etc.	LT / IIIA (2)		160598	288.913		
10	Industries not covered under L.T.Tariff IIIA(1) & IIIA(2)	LT / IIIB		346135	2177.423		
11	Agriculture and Govt.seed farm etc.	LT / IV		2187476	3659.34		
12	Commercial and all categories not covered in other LT categories	LT / V		3397393	2224.238		
13	Temp.supply other than Domestic and Lavis	LT / VI		356715	84.078		
Due to COVID 19, the PMC reading was entered for the month of 05/2021. Hence, in the month of 07/2021, readings were taken for the previous four months totally. Hence, billed energy includes PMC.							

