



Abstract

Energy Department – Tamil Nadu Innovation Initiatives (TANII) – State Innovation Fund – comprehensive condition monitoring techniques for lightning arresters of EHV / HV substations using Third harmonic leakage current, measurement, Infra Red Thermography in live conditions and off line HV watt loss test - project at total cost of Rs. 170 Lakhs for the year 2018-2019 – Round I – Administrative Sanction – orders – Issued.

Energy (A1) Department

G.O (Ms) No.63

Dated: 25.09.2018

விளம்பி வருடம் புரட்டாசி 9,
திருவள்ளூர் ஆண்டு 2049

Read:

1. From the Member Secretary, SPC, D.O. letter no 4000/SPC (PC)/2017, dated 14.11.2017.
2. From the Director / Generation, TANGEDCO, letter no. CE/IC, R&D/SE/ R&D/ EE/ R&D/ F.LAS TANII/ D.No. 648/17, dated 28.11.2017 addressed to Member Secretary, SPC.
3. From the Member Secretary, SPC, Letter no. 4000/SPC (PC)/2017, dated 12.02.2018.
4. From the Chief Engineer (i/c) IC, R&D, TANGEDCO, letter no. CE/ IC, R&D/ SE/ R&D/EE3/ R&D/F.LAS TANII/D.No. 189/18, dated 05.05.2018

ORDER:-

In the letter first read above, the Member Secretary, State Planning Commission has invited new Innovative Proposals, to be eligible for funding under the State Innovation Fund, which fulfills the eligibility criteria and adheres to the guidelines permitted under Tamil Nadu Innovation Initiatives (TANII).

2. The Director/ Generation, TANGEDCO in the letter received 2nd read above has submitted the proposal titled " Comprehensive condition monitoring techniques for lightning arresters of EHV/ HV substations using Third harmonic leakage current measurement, Infra Red Thermography in live conditions and off line HV watt loss test" which fulfills the eligibility criteria and adheres to the

guidelines prescribed under Tamil Nadu Innovation Initiatives (TANII) directly to Member Secretary, State Planning Commission.

3. In the letter third read above, the Member Secretary, State Planning Commission has stated that the State Planning Commission has appraised one proposal received from Energy Department and the recommendation is as follows:-

Comprehensive condition monitoring techniques for lighting arresters of EHV/HV substations using Third harmonic leakage current measurement, Infra Red Thermography in live conditions and off line HV watt loss test

The TANGEDCO proposed this comprehensive diagnostic and evaluation method of lighting arresters to avoid/protect the equipment from failure due to overvoltage, by monitoring the condition of the lightning arresters. TANGEDCO stated that this comprehensive system is not tried anywhere in India so far. The proposed cost of Rs.180.00 lakhs is for the procurement of equipment to carryout tests on live equipment and documentation of test results. Testing of Lightning arresters in 100 Nos of EHV/HV substations, identifying of suspicious arresters based on the test results and suggesting remedial action wherever necessary will be carried out in the 2nd & 3rd year.

The State Planning Commission recommended the project at an outlay of Rs.170.00 lakhs for the equipment cost under TANII and the documentation cost of Rs.10.00 lakhs to be met by TANGEDCO. The above scheme recommended for the year 2018-19 (Round-I) by the State Planning Commission for implementation is as follows: -

Sl. No.	Name of the Scheme	Cost of the project			
		1 st year	2 nd year	3 rd year	Total
		(Rs. in lakhs)			
	TANGEDCO				
1.	Comprehensive condition monitoring techniques for lighting arresters of EHV/HV substations using Third harmonic leakage current measurement, Infra Red Thermography in live conditions and off line HV watt loss test	170.00	0.00	0.00	170.00
	Total	170.00	0.00	0.00	170.00

4. The Government after careful consideration accord Administrative and Financial sanction for a sum of Rs.170 lakhs (Rupees one hundred and seventy lakhs only) towards comprehensive condition monitoring techniques for lighting

arresters of EHV/HV substations using Third harmonic leakage current measurement , Infra Red Thermography in live conditions and off line HV watt loss test. The cost of Rs.10 Lakhs (Rupees ten Lakhs only) towards documentation charge for implementing the TANII LAS projects will be met from TANGEDCO's fund.

5. The expenditure sanctioned in para (4) above shall be debitible under the following head of account:-

"2801- Power 05- Transmission and Distribution 052- Machinery and Equipment State's Expenditure JA – comprehensive condition monitoring Techniques for lightning Arrester at Sub-stations under State Innovation Fund 09- Grants – in – Aid 03 – Grants of Specific Schemes" [DPC 2801 – 05- 052 – JA - 0933]

6. The above expenditure shall be adjusted by deducting under the following head of account opened under Demand No. 14 HOD 02

"2801 – Power 05 – Transmission and Distribution 902 – Deduct – Amount met from State Innovation Fund State's Expenditure JA – comprehensive condition monitoring Techniques for lightning Arrester at Sub-stations under State Innovation Fund 30- Inter – Account Transfers" [DPC 2801 – 05 -902 – JA - 3008]

and contra debiting J Reserve Funds (b) Reserve Funds not Bearing Interest – 8229 00 Development and Welfare Funds – 200 – other Development and Welfare Fund – BE – State Innovation Fund,
[DPC 8229 – 00 – 200 – BE – 000E] Receipts
[DPC 8229 – 00 – 200 – BE – 0006] outgo

7. The Chief Electrical Inspector to Government is authorized to incur the expenditure sanctioned in para 4 above and he is requested to send the utilization certificate in due course to Government. He is also requested to follow the usual procedure / orders in force during the implementation of the project.

8. This order issues with the concurrence of Finance Department vide its U.O. No. 44656/PW.II/2018, dated 17.09.2018.

(BY ORDER OF THE GOVERNOR)

Md. NASIMUDDIN,
PRINCIPAL SECRETARY TO GOVERNMENT.

To
The Chairman and Managing Director,
TANGEDCO, Chennai-2.

The Accountant General –I, Chennai – 18.
The Accountant General (Audit), Chennai – 18.
The Pay and Accounts Officer (South), Chennai – 35.
The Chief Electrical Inspector to Government (I/c), Chennai – 32.
The Energy (Bills) Department, Chennai-09.
The Finance (PW-II/ BG-I/II) Department, Chennai-09.
The PD & SI Department, Chennai -09.

Copy to:-

The Senior P.A. to Hon'ble Minister (Electricity, Prohibition & Excise),
Chennai-9.
The Principal Private Secretary to Principal Secretary to Government,
Energy Department, Chennai-9.
✓ Energy (C) Department, Chennai -09.
SF/SC.

//Forwarded/By Order//

con. fin. 27.9.18
Section Officer

S.S.
27.9.18