

No. 11/64/2014-PG
Government of India
Ministry of Power

Shram Shakti Bhawan, Rafi Marg,
New Delhi, 16th December, 2019

OFFICE ORDER

**Subject: Establishment of Renewable Energy Management Centre (REMC) at
Telangana and Energy Management Centre (EMC) at South Andaman.**

In continuation of this Ministry's Office Memorandum No.11/66/2014-PG dated 11.09.2017 (**Annexure-I**), sanction of the President is hereby conveyed for Establishment of Renewable Energy Management Centre (REMC) at Telangana and Energy Management Centre (EMC) at South Andaman from the cost saving of earlier approved scheme of 11 REMCs in Southern Region, Western region and Northern Region including NLDC as part of Green Energy Corridor Scheme.

2. The awarded estimated cost of earlier sanctioned 11 Nos. of REMC project and the estimated cost for establishment of REMC at Telangana and EMC at South Andaman, are Rs.140 crore & Rs.41.1crore respectively. The detailed breakup of cost is at **Annexure-II & III respectively**. The other contents of the earlier Sanction order dated 11.9.2017, in respect of establishment of 11 Nos. of REMCs shall remain unchanged. Further, considering increasing RE penetration in other states, in case of cost savings out of original allocation of Rs. 409 crore, establishment of more REMCs in other RE resource rich States may be under taken.

3. REMC's main function as brought out in earlier sanction dated 11.9.2017, shall remain unchanged. The same shall be forecasting & Scheduling and real time tracking of RE generation. REMC shall closely coordinate with respective Load Despatch Center and shall be integrated with existing Supervisory Control & Data Acquisition System (SCADA) for RE generation dispatch. REMC shall provide forecasting system to help system operators to better manage grid operation so as to ensure power system security and stability.

4. EMC's main function shall be monitoring, operation and management of conventional generation as well as solar generation through deployment of State-of – art monitoring, forecasting and resource management system. This will help grid operator/Electricity Deptt. of Andman & Nicobar Island to effectively manage power system operations with economy, reliability & security.

5. Power Grid Corporation of India Ltd. (PGCIL) shall be the implementing agency for EMC in South Andaman and REMC in Telangana. Upon commissioning, EMC/REMC shall be handed over to the respective owners i.e. Electricity Department (ED), Andaman & Nicobar and SLDC, Telangana respectively. The commissioning schedule is 15 months from the date of placement of award/contract.

6. The scheme also includes Annual Maintenance, forecasting and communication services as under:-

- i. **South Andaman EMC:-** Annual Maintenance (5 years after 1 year of warranty), Forecasting Service (2 years), communication services (2 yrs internet & 6 yrs local intra net).
- ii. **REMC, Telangana:-** Annual Maintenance (6 years after 1 year of warranty) and Forecasting & Weather Service (4 years).

7. The expected life cycle of the control centre infrastructure is generally 6-7 years, therefore, after lapse of contract period i.e. 6-7 years , fresh investment of capital cost may be required. However, provision for extension of AMC for further 2 years on same terms & conditions may also be kept in the contract.

8. REMC System shall mainly cover Hardware and Software components. Hardware components broadly include Servers (SCADA, Forecasting & Scheduling, Web and Storage), Network devices (Routers, Firewall and Switches), Video Projection system etc. Software component includes SCADA & HMI, Forecasting & Scheduling, Historian, web server application softwares etc. Project also covers services for forecasting & weather, Annual maintenance charges, project management consultancy charges and applicable taxes & duties etc. However, additional Scope in EMC at South Andaman as Compared to REMC is as under:

- i. RTU for Data Acquisition
- ii. Communication system
- iii. DMS- Application Software
- iv. Auxiliary power supply design
- v. Air-conditioning system including Precision ACs etc.
- vi. Civil work for EMC establishment.

9. The activities related to training like designing of training modules for REMC operation, System software, Application software (including RE forecasting & scheduling) & System hardware, its detailed contents, defining detailed learning objective, hands-on training etc. shall be coordinated by PGCIL so as to ensure owner(s) to get substantial and in depth knowledge about REMC system & operations. Based on approved technical specification, provision of 600 mandays training is kept for each REMC-Telangana and EMC at South Andaman in the contract.

10. The Project Management Consultancy (PMC) being paid to PGCIL in respect of 11 REMCs sanctioned on 11.9.2017 is 10%. Therefore PMC for establishment of REMC at Telangana is kept as 10%. However, for establishment of EMC at South Andaman, it is kept as 12%. The PMC is applicable on hardware & software components along with installation & commissioning and training.

11. The terms & procedure of payment for REMC/EMC is scheduled in three parts i.e. initial advance, progressive payment upto commissioning and post commissioning (services & AMC). Payment towards civil works for EMC Andaman shall be based on Andaman, Administration requirement.

