



ଓଡ଼ିଶା ବିଦ୍ୟୁତ ଶକ୍ତି ସଂଚାରଣ ନିଗମ ଲିଃ.

ODISHA POWER TRANSMISSION CORPORATION LIMITED

(A Govt. of Odisha Undertaking)

PSC PROCEEDING HELD ON DATED 13.01.2026**Memorandum No: 14/2026****Members Present:**

Sri B. B. Mehta, Director (SLDC)	Member
Sri P. K. Pattnaik, Director (Operation)	Member
Sri P. K. Dash, Director (Projects)	Member
Sri S. K. Sahoo, Director (Finance)	Member
Sri U. K. Gupta, CGM (Finance),	Member
Sri L.K. Panda, CGM(O&M)	Member
Sri A.C. Jena, CGM(Projects)	Member
Sri R. K. Panigrahi, CGM (CPC),	Member-Convener

Sub: Replacement of Old Isolators and Mechanism Boxes under Substation Primary Equipment Up-gradation Project at various Grid Substations / Switching Stations of OPTCL.

Details of Proposals:

1	Back Ground: Odisha Power Transmission Corporation Limited (OPTCL) is in the process of modernizing its transmission infrastructure to ensure reliable, efficient, and future-ready grid operations across the State. A large number of existing conventional Grid Substations and Switching Stations are equipped with ageing primary equipment, including isolators and their associated operating mechanism boxes, which have been in service for several decades. With the ongoing implementation of STAMS Phase-I, advanced IT and telecom systems such as communication panels, VMS, and RAS have been installed at 187 Grid Substations. To fully leverage the benefits of STAMS and enable centralized and regional remote operation, it is essential that primary equipment at non-SAS substations is upgraded and made compatible with SAS and automation requirements. In this context, a proposal for Substation Primary Equipment Up-gradation was formulated and placed before the Procurement Sub-Committee (PSC) for consideration. Based on further deliberations and directions of the competent authority, the scope was rationalized to focus on replacement of old isolators and mechanism (MOM) boxes, leading to the present proposal
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2	Present Constraint:	The following constraints are presently observed in the State Transmission System: - A significant number of isolators and mechanism boxes have deteriorated due to prolonged service life, leading to worn-out contacts, misalignment, corrosion, and frequent operational issues. - Several isolators are still operated through manual mechanism boxes, restricting remote operation and limiting integration with SAS and STAMS infrastructure. - Increased risk of operational failure and unsafe switching operations, affecting system reliability and personnel safety. - Complete replacement of all isolators would involve substantial capital expenditure, which is presently constrained due to pending approval of the larger substation up-gradation project. - Delay in primary equipment up-gradation may adversely affect the realization of benefits envisaged under STAMS Phase-I.
3	Proposal:	Detailed Proposal The approved proposal envisages replacement and up-gradation of isolators and mechanism boxes at selected Grid Substations / Switching Stations of OPTCL, with the following scope:: - Replacement of old and severely deteriorated isolators, limited to 5% of the total isolator requirement, where damage to isolator arms, male and female contacts, and structural components is beyond economical repair. - Replacement of Manual Operating Mechanism (MOM) boxes with motorized mechanism boxes for the remaining isolators, enabling reliable remote and automated operation. - Procurement of new isolators and mechanism boxes conforming to OPTCL's latest technical specifications, ensuring compatibility with SAS and STAMS systems. - Execution of the works through open tendering to be conducted by CPC, OPTCL, as per prevailing procurement norms The total estimated cost of the proposal is ₹30.41 Crore, worked out based on the revised scope and prevailing rates.

Observations of PSC:

After detailed examination of the Memorandum, system requirements, and revised scope of work, the Committee observed that:

- Replacement of deteriorated isolators and mechanism boxes is **technically justified and operationally critical** for ensuring safe and reliable substation operation.
- The revised approach of **limited isolator replacement (5%) and focused replacement of mechanism boxes** is a **cost-effective solution**, balancing operational necessity and financial prudence.
- As elaborated by Dir (Opns), the proposal will facilitate **SAS compliance and remote operation**, thereby enabling effective utilization of STAMS Phase-I infrastructure.

Recommendations of PSC:

Based on the above observations and deliberations, the **PSC recommended** for according **administrative Approval** for the proposal for **Replacement of Old Isolators and Mechanism Boxes** under the Substation Primary Equipment Up-gradation Project at an estimated cost of **₹ 30.41 Crore**.

However, all actions shall be taken up after getting approval from OERC.

Director (SLDC)

Director (Projects)

Director (Operation)

Director (Finance)

CGM (Finance)

CGM (O&M)

CGM (Projects)

CGM (CPC)