

**O/o Comptroller and Auditor General of India**

**PRESS RELEASE**

**New Delhi; 21.7.17**

**CAG's Report - Union Government (Railways) on 'Electrification Projects in Indian Railways' laid in Parliament;**

**Delays noticed in processing the proposals, assigning the projects, approval of detailed estimates, execution of agreements, and completion of RE projects**

Comptroller and Auditor General of India's Report No. 22 of 2017 - Union Government (Railways) on 'Electrification Projects in Indian Railways' has been laid on the table of both houses of Parliament today.

Indian Railways (IR) runs 9,212 freight and 13,313 passenger trains over its vast network of 66,687 Route Kilometers (RKM) and carries more than 1,000 million tonnes of freight traffic per year and about 22 million passengers every day. These trains are hauled either by diesel locomotives or electric locomotives. The total expenditure on energy/fuel (on BG routes) during 2015-16 was ₹ 23,699 crore, of which expenditure on cost of diesel was 56 *per cent* and the cost of electricity was 44 *per cent* in 2015-16. As on 31 March 2016, 27,999 (42.40 *per cent*) out of 66,687 Route Kilometers (RKMs) have been electrified across IR. During the last five years, 1165 to 1730 RKMs have been electrified, and ₹ 678 crore to ₹ 1668 crore spent on Railway Electrification (RE) projects annually.

Ministry of Railways has taken new initiatives for accelerating the pace of RE. The present capacity of IR to carry out the electrification projects is 2,000 RKMs annually. Ministry has drawn up (August 2016) an Action Plan for RE of 24,400 RKMs of BG network during 2016-17 to 2020-21. Central Organisation for Railway Electrification (CORE) is a specialized agency which was set up for RE in 1979. In addition, RE projects were also entrusted to Rail Vikas Nigam Limited (RVNL), a Railway Public Sector Undertaking. In a recent development, in order to achieve the target of 24400 RKM by 31 March 2021, IR has decided to assign RE projects to Indian Railway Construction Organization (IRCON), Rail India Technical and Economic Services Limited (RITES) (Railways' PSUs) and Power Grid Corporation of India Limited (PGCIL) (a PSU under the Ministry of Power) having expertise in laying the transmission lines in India and abroad.

The Report include the analysis of approval process for taking up RE Projects, identification of implementing agency and project planning for ensuring timely commencement of the projects. Audit examined the execution of RE Projects whether this was done following best practices of project management and for timely

execution of projects. Audit also analysed the post project utilisation of the completed RE Projects. Audit selected 14 completed projects, 15 ongoing projects and seven new projects for detailed examination.

### **Major Audit findings**

- The objective of saving time for deciding whether or not to take up a section for RE is not being fulfilled due to delays in processing the proposals and preparation of abstract estimates, which was up to 59 months in 24 projects. Variations of six *per cent* to 62 *per cent* between the abstract and detailed estimates indicated that the system of abstract estimates was hardly adding value to the process. The percentage variation was more than 40 *per cent* in respect of Karepalli-Bhadrachalam, Shakurbasti-Rohtak, Jhansi-Kanpur, Barauni-Katihaar-Guwahati and Guntakal-Kallur projects. **(Para 3.1)**
- Delays were noticed in assigning the RE projects to agencies by Railway Board after inclusion of the RE project in the Annual Works Programme. There were delays up to 337 days in 17 projects in case of CORE and in case of RVNL the delays were up to 202 days in six projects. Further delays were also noticed in assigning project to their Chief Project Directors by CORE and RVNL, which was up to 229 days and 40 days respectively. **(Para 3.3)**
- There were delays in the approval of the detailed estimates upto 35 months in 27 projects assigned to CORE and upto 18 months in seven projects assigned to RVNL. **(Para 3.4)**
- Audit noticed that e-tendering system which help in reducing tender processing period significantly were not adopted in CORE or RVNL. The time taken for the issue of NIT after sanction of detailed estimates was up to 3177 days in 24 projects assigned to CORE and up to 915 days in 12 tenders in seven projects assigned to RVNL. It is evident that the tenders were processed without giving due regard to the objective of completion of project in time. Audit further noticed that for execution of a project, high significant number of contracts was awarded by CORE. In Barabanki-Gorakhpur-Barauni project, only 116 contracts were awarded. **(Para 4.2.1, 4.2.2)**
- While accepting tender, assessment of solvency/financial soundness of the firm were not done by CORE. Further, assessment of likely impact of the workload of the firm on its ability to complete the work was not made by the tender committees of CORE, whereas it was considered during assessment by RVNL. **(Para 4.3)**

- There were significant delays in execution of agreements by both CORE and RVNL after issue of Letter of Acceptance to the firms. The maximum time taken was 798 days in Ujjain-Indore and Dewas-Maksi project and 661 days in Barabanki-Gorkhpur-Barauni project. The delays had a consequential impact on the execution and completion of the work. **(Para 4.4)**

- There were substantial time and cost overruns due to delays in completion of RE projects. On an average, 16 completed projects got delayed by 35.12 months. Cost overrun up to 76.62 *per cent* was noticed in 14 projects out of the 16 completed projects. In 10 ongoing projects, the targeted date of completion was over 21 months to 57 months back. Due to delay in completion of the projects, projected savings of ` 3006 crore in respect of 21 projects could not be achieved.

**(Para 4.5.1)**

- Audit noticed that a number of extensions were granted by CORE and RVNL for completion of projects. In respect of 21 projects, executed by CORE, 2026 extensions for 8190 months were granted, which increased the time of execution of the contracts by more than two times. Similarly, for six projects executed by RVNL, 30 extensions for 208 months were granted by RVNL, which increased the period of execution of the contracts by almost 74.02 *per cent* in these projects. Audit further noticed that extensions were granted to the contractors in a routine manner. 1446 extensions were granted without mentioning the clause under which these were allowed. The reasons for extensions included non-availability of material for foundation, delay in receipt of material, non-completion of Traction sub-station (TSS), non-deployment of sufficient manpower etc. on contractor account and delay in handing over of land for depot/TSS, yard-remodeling of section, delay of work by Engineering Department, change in scope of work, non-approval of drawing, non-completion of transmission line, non-supply of material etc. on Railway account. **(Para 4.5.2.1)**

- The mechanism available to the Railway administration to ensure timely completion of projects was through levy of liquidated damages (LD), levy of penalty and termination, which was not being used effectively. LD was not imposed in most of the cases of extensions and only token penalty was recovered from the defaulting contractors. As assessed by Audit, against leviable LD of ` 250.28 crore, only ₹ 0.93 crore was recovered by CORE and as against ₹29 crore, only ₹ 4.66 crore was recovered by RVNL in form of LD and token penalty. **(Para 4.5.3)**

- To undertake works on sections, a 'block' (part of the section) is provided by Operating Department to the implementing agency, which is to be utilized for

execution of work. During this time, the traffic on the section is suspended partly/completely as per requirement. Audit noticed that no benchmark for utilization of block has been prescribed by the Railway administration for RE Projects. **(Para 4.8)**

- A number of balance activities such as completion of work of transmission lines, completion of work of TSS, electrification of sidings, activities in yard attributable to implementing agencies for Railway electrification were yet to be completed in 16 out of 17 completed RE projects despite CRS sanction. Many of these balance activities were critical for effective project utilisation of the electrified sections. **(Para 5.1)**
  - There were instances of sub-optimal utilization of the electrified sections. In 11 electrified sections, only up to 59 *per cent* trains were being run with electric traction. The shortfall in achievement of projected savings with respect to present utilisation was ₹ 404.05 crore in 14 projects. **(Para 5.2)**
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