GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2015/Elect (G)/150/7 New Delhi, Dt. 29.09.2020

Principal Chief Electrical Engineers
All Zonal Railways, PUs
CAO (R)/DMW
Director General/NAIR,
Directors/All Centralized Training Institutes

Sub: **Implementation of Energy Efficiency Projects in Railway Buildings.**

Ref: **i) Board's letter no. 2015/Elect(G)/150/7 dt. 12.09.17.**
ii) Director (Projects & BD)/EESL's letter no. EESL/BEEP/IR/01/817 dt. 07.08.2020. (copy enclosed)*.

Ministry of Railways had issued directions for implementation of Energy Efficiency Projects in 'A-1', 'A' & 'C' category Railway stations on basis of model Energy Performance Agreement with Central Public Works Department (CPWD) across Indian Railways vide Bd.'s letter dt. 12.09.17.

2. In this reference, a reference has been received from EESL vide its letter under reference (ii) above (copy enclosed) where in addition to certain other matters, certain operational issues have also been highlighted.

3. Accordingly, it is advised to sort out those issues raised by EESL which, inter-alia, include non-issuance of completion certificate on account of AMR meters & pending completion certificate/Payments under the purview of the terms & conditions of the agreement signed with the EESL.

***DA:** As above*

29/09/2020

(Sumit Garg)
Director Elect. Engg. (PS)

Copy to: Director (Projects & BD)/EESL – For information please.

एनर्जी एफिशिएंसी सर्विसेज़ लिमिटेड
(भारत सरकार, विद्युत मंत्रालय के सार्वजनिक क्षेत्र के उपक्रमों का संयुक्त उद्यम)
ENERGY EFFICIENCY SERVICES LIMITED
(A JV of PSUs under the Ministry of Power, Govt. of India)
CIN : U40200DL2009PLC196789

Ref. No.-EESL/BEEP/IR/01/817

Date: August 7th , 2020

To,

Executive Director (EEM)
Indian Railways
Rail Bhawan
New Delhi

Sub: Implementation of Energy Efficiency measures stations and service buildings of Railways Pan India

Dear Sir,

You may be aware that Energy Efficiency Services Limited(EESL), an entity under Ministry of Power, Govt. of India had signed Energy Performance agreement with Indian Railways to implement energy efficiency measures at stations and service buildings of Indian Railways at PAN India basis vide a letter no. **2015/Elect(G)/150/7 dated 03/03/2017**.

EESL commenced the implementation of project from April 2017 on a timebound manner in 124 divisions under 17 zones after signing the Energy Performance Agreement(EPA) at division level. EESL implemented this project in ESCO(Energy Servicing Company) model where the entire investment was done by EESL while the repayment to EESL is to be done by Railway Divisions in 20 quarterly instalments. The repayment is typically effected from the monetized energy saving. The project in most of the location was completed by June, 2018 barring few locations.

We are thankful to Railways board and all the divisions for their whole hearted support during implementation process of this program of national importance. However EESL faced some challenges during the execution of the project and observed few shortcoming in the EPAs, which could not be envisaged when EPAs were signed between EESL and Railways divisions. This resulted in issues like delays in getting the completion certificates, payment and imposition of unlimited penalties on EESL.

While there are some operational issues which EESL is addressing at suitable level, there are certain other long standing issues which require intervention by Railway Board. We would like to put forward the following major issues for your kind consideration and necessary directions.

1. Unlimited Penalties imposed on EESL

As per the note 5, clause no 7.5 in the EPA signed with various divisions of Railways, a penalty of **20 Rs/hour** is to be imposed on EESL if the complaint is not resolved within maximum 72 hours after the written intimation given to EESL. You may be happy to note that EESL has tried to resolve all such complaints within the timelines , however in few cases the same couldn't be attended due to many reasons.

कॉरपोरेट ऑफिस / Corporate Office :
पाँचवा एवं छठा तल, कोर–3, स्कोप कॉम्प्लेक्स,
लोधी रोड, नई दिल्ली – 110003
5th & 6th Floor, Core - 3, SCOPE Complex,
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दूरभाष / Phone: 91-11-45801260 फैक्स / Fax 011-45801299

रजिस्टर्ड ऑफिस / Registered Office
चौथा तल, सेवा भवन,
आर० के० पुरम, नई दिल्ली–110066
4th Floor, Sewa Bhawan,
R. K. Puram, New Delhi - 110066
वेबसाईट / Website : www.eeslindia.org

This resulted in penalty amount beyond unacceptable limits. Unfortunately capping of this penalty was inadvertently missed out from both EESL and Railways in EPA. Due to this, some Railways department/divisions have imposed penalties which are more than **100%** of the equipment cost which is financially unviable to EESL. For example , RCF Kapurthala has imposed penalties which are in excess of **10,000%** of cost of equipment.

You may please note that as per clause **17B(Page- 44)** in the **GCC(General Conditions of the contract)** issued by Railway Board on **6th September , 2019**, the penalties shall not be more than **5%** of the contract value or the value of items in question. Various communications/meeting have been done in the past with the concerned railway departments/divisions to cap this penalty as per the GCC. However the divisions have expressed their inability to do so in the absence of direction from the Railway Board or necessary amendment in the EPA.

It is therefore requested that the EPA may please be amended by a general order from the railway board to fix the penalties as per the GCC clause.

2. Non issuance of completion certificate due to AMR meter

In the EPAs there is an option to install AMR meter in the circuits to measure the energy consumption by appliance installed under this project. This option was included subject to technical feasibility and utility. This was also recorded in the **MoM dtd 03.04.2017** for the meeting of EESL and Railways official held on **27th March , 2020(Copy Attached).**

During the execution it was found out that it's not technically feasible to record the energy usage of equipment installed by EESL as other equipment installed by railways are connected to the same circuit. This was conveyed to various railways/departments and most of the department agreed to provide completion certificate without the installation of **AMR meter**. But few departments/Division such as **Firozpur, Bhavnagar** and **Baroda** division are not willing to issue completion certificate failing which EESL is not able to rise the quarterly invoice. Various meeting and discussions were held with these divisions to consider this without accounting the cost of AMR meter(i.e. Rs 30,000 per meter).

We hereby request to kindly omit the provision/Installation of AMR meter from the project scope. Necessary directions may please be issued to all division in this regard

3. Pending Completion Certificate/Payment

With the cooperation of most of the railways divisions/departments we have received completion certificate , raised the invoices and are receiving payment also. But there are some divisions/departments where all work has been completed. However the completion certificate is not being issued due to unsighted reasons by the divisions. In other cases payment are also held up despite the issuance of completion certificate. Please refer Annexure where such issues prevail.

Because of above issues payment worth **INR 30 Cr** is pending, which is affecting EESL financially.

In view of the above its requested that above long standing issues may please be looked into and necessary directions be/amendments to the EPA be given to all the divisions. We would be happy to discuss with you for any clarification in this regards.

Looking forward for your kind intervention and support on above.

Yours sincerely,

(Venkatesh Dwivedi)
Director(Projects & BD)

Copy to:

1. ES to EVC, EESL, 7th Floor, Core-3, Scope Complex, Lodhi Road, 110003
2. MD, EESL , 7th Floor, Core-3, Scope Complex, Lodhi Road, 110003
3. PS to Member (Traction), Railway Board, Rail Bhawan, 256-A, Raisina Road, Rajpath Area, Central Secretariat, New Delhi, Delhi 110001

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2015/Elect(G)/150/7 New Delhi, dt: 03.04.17

Sub: Minutes of meeting for Implementation of Energy Efficiency Projects in Railway stations held on 27.03.17.

Ref: Board's letter no. 2015/Elect(G)/150/7 dt. 17.03.17.

Minutes of the review meeting held on 27.03.17 in Railway Board, New Delhi, for Implementation of Energy Efficiency Projects in Railway stations, is enclosed herewith for kind information and necessary compliance.

DA: As above.

(Ch. P. Sarathi Reddy)
Director Projects (Electrical)
Mobile: 9958293651
Email: ps.reddy@gov.in

Copy to i) **DG/BEE**, 4th & 5th Floor, IWAI Building, A-13, Sector-1, Noida - 201301.
ii) **MD/EESL**, SEWA Bhavan, R. K. Puram, New Delhi – 110066
iii) **Chief Electrical Engineers**, All Zonal Railways

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Minutes of Meeting held in RAILWAY BOARD on 27.03.17 for Implementation of Energy Efficiency Projects in Railway stations

Participants:-

S.No.	Name	Designation	Organization
1.	Mr. Sudhir Garg	ED/EEM	Railway Board/IR
2.	Mr. K.Thirumurugan	Dy. General Manager(Technical)	EESL
3.	Mr. K.N. Hemant Kumar	Manager	
4.	Mr. Amit Semwal	Engineer	
5.	Mr. Nikhil Prasad	Consultant	UNDP

Following points were discussed in the meeting:-

1. A meeting was convened on 27/03/2017 in the chamber of **Sh. Sudhir Garg, EDEE(M),** Railway Board to expedite the implementation of energy efficiency projects in 'A-1', 'A' & 'C' category Railway stations.

2. EDEE(M) stressed upon the importance of project and requested EESL officials to put in desired efforts to ensure completion of project on stipulated time frame.

3. It was also decided that "energy audits of station complex" which were mentioned in Board's letter no. 2015/Elect (G)/150/7 dt. 03.03.17 should be read as "walk-thorough audit of station complex". The walk-through audit will ensure the verification of inventories submitted by ZRs.

4. EDEE(M) emphasize on detailed energy audit (DEA) of railway stations on sample basis (max. 3) for each zone. An opportunity may be explored to arrange capital for detailed energy audit either grant from BEE or in ESCO model from EESL, if financial feasibility is there.

5. EESL should provide best energy efficiency solutions only for fans, air-conditioners, lights and pumps available in the market to IR.

6. Metering (AMR) also needs to be provided by EESL as per IR metering scheme for railway station/installation in ESCO Model, if financial feasibility is there.

7. Following time-line was proposed:
   - Meeting of EESL with all Zonal head (CEE/CESE) - 15th April, 2017
   - Inventory submission by IR - 21st April, 2017
   - Techno- commercial proposal submission to IR - 30th April, 2017
   - Contract signing with respective Zone/Div -30th May, 2017
   - Tendor/Vendor finalization -15th July, 2017
   - Material Supply - 15th Aug, 2017
   - Installation/work completion -
     - Dec, 2017 for 'A-1 & A' category stations
     - Feb, 2018 for 'C' category station.

8. EDEE(M) emphasis on completion of pre-implementation activities for southern railway zone (i.e. Chennai) as inventory was already received by EESL.

9. Next review meeting is scheduled on 18/04/2017.

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GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2015/Elect(G)/150/7 New Delhi, dt: 03.03.17

General Managers
All Zonal Railways

Sub: Implementation of Energy Efficiency Projects in Railway Stations – finalization of Model Energy Performance Agreement-reg.

Ref: Bd.'s letter no. 2015/Elect(G)/150/7 dt. 02.08.16.

In order to take forward the Energy Conservation measures on Indian Railways in line with the Budget speech of **Hon'ble MR**, it has been decided by **Board (CRB, FC & MTR)** that Railways should enter into agreement with EESL, as per the Model Energy Performance Agreement enclosed herewith, for implementation of energy efficiency project at all **'A-1'**, **'A'** & **'C'** category Railway stations.

2. As per the Agreement, EESL would first undertake energy audits of station complex to develop techno-commercially feasible energy efficiency measures (EEMs). Subsequent to the energy audits, EESL would provide technical and/or financial support for building the project through the ESCO model, wherein the upfront capital cost shall be borne by EESL and the resultant savings from projects will be used to repay for EESL investments on **deemed saving basis**. The agreement will be for five years & payment will be released as per the terms & conditions of the agreement from the non traction electricity bill head of Railways. The agreements shall be finalized wherein modalities of implementation, sharing of energy savings between Railways and EESL, scope of services, etc., shall be worked out subsequent to results of the energy audits.

3. A model agreement as per EESL contract with CPWD is attached as **Annexure** for reference to finalize the agreement between Railways and EESL. The modalities of implementation, scope of services and project specific parameters like connected load, electricity tariff etc. will have to be finalized and mutually agreed upon between the Railways and EESL in the Final Agreement. The assets required to be replaced may be finalized with concurrence of **FA&CAO** and approval of **General Manager**.

4. Close monitoring of works and the saving shall be carried out by zonal railways and progress/feedback in this regard should be sent to Board's office on monthly basis. Released railway assets will be gainfully utilized by Railways.

5. EESL PMC fees shall be capped at a maximum of 9.25% of the equipment related cost under the project.

6. This issues with the approval of **Board (MTR, FC & CRB)**.

Encl: As above.

03/03/17

(Punit Agrawal)
Director Elect. Engg. (PS)
Railway Board

No.2015/Elect(G)/150/7 New Delhi, dt: 03.03.17

Copy to:

i) FA&CAO, All Zonal Railways.

ii) Deputy Comptroller and Auditor General of India/Railways, Room No. 224, Rail Bhawan, New Delhi.

For Financial Commissioner/Railways

Copy to:

Managing Director, Energy Efficiency Services Ltd. (EESL).

03/03/17

(Punit Agrawal)
Director Elect. Engg. (PS)
Railway Board

For the purpose of this Clause, the contract value of the works shall be taken as value of work as per contract agreement including any supplementary work order/contract agreement issued. Provided also, that the total amount of liquidated damages under this condition shall not exceed 5% of the contract value or of the total value of the item or groups of items of work for which a separate distinct completion period is specified in the contract.

S.No.	Duration of extension of time under Clause 17-B	Rate of Liquidated Damages
(i)	Up to Twenty percent of original period of completion including period of extension of DOC granted under Section 17A(i)	As decided by Engineer, between 0.01% to 0.10% of contract value for each week or part of the week
(ii)	Above Twenty percent but upto Thirty percent of original period of completion including period of extension of DOC granted under Section 17A(i)	0.20% of contract value for each week or part of the week
(iii)	Above Thirty percent but upto Forty percent of original period of completion including period of extension of DOC granted under Section 17A(i)	0.30% of contract value for each week or part of the week
(iv)	Above Forty percent of original period of completion including period of extension of DOC granted under Section 17A(i)	0.50% of contract value for each week or part of the week

Provided further, that if the Railway is not satisfied that the works can be completed by the Contractor and in the event of failure on the part of the contractor to complete the work within further extension of time allowed as aforesaid, the Railway shall be entitled without prejudice to any other right or remedy available in that behalf, to appropriate the contractor's Security Deposit and rescind the contract under Clause 62 of these Conditions, whether or not actual damage is caused by such default.

17 C Bonus for Early Completion of Work: In case of open tenders having value more than Rs 20 crore and original period of completion 12 months or more, when there is no reduction in original scope of work by more than 10%, and no extension granted on either railway or Contractor's account, Contractor shall be entitled for a bonus of 1% for each 30 days early completion of work. The period of less than 30 days shall be ignored while working out bonus. The maximum bonus shall be limited to 3% of original contract value. The completion date shall be reckoned as the date of issuance of completion certificate by engineer.

18.(1) Illegal Gratification: Any bribe, commission, gift or advantage given, promised or offered by or on behalf of the Contractor or his partner or agent or servant or anyone on his behalf, to any officer or employee of the Railway or to any person on his behalf in relation to obtaining or execution of this or any other contract with the Railway shall, in addition to any criminal liability which he may incur, subject Contractor to the rescission of the contract and all other contracts with the Railway and to the payment of any loss or damage resulting from