GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
RAILWAY BOARD

NO. 2009/Elect(G)/150/13

Dated 21.12.09

General Managers.
All Indian Railways and PUs

Sub: **Incentive/Subsidy for various Renewable Energy projects.**

Ref: **Board's letter no. 2009/Elect(G)/157/13 dt. 5.10.2009 (Minutes of Meeting).**

Railways have commissioned many projects of Renewable Energy Sources on IR in recent past. A meeting with Secretary, Ministry of New and Renewable Energy (MNRE) was held in Board's office on 9.9.09. The copy of Minutes of Meeting is enclosed. As per Minutes of Meeting, Railways are advised to claim subsidy on all on-going projects on Renewable Energy such as:

- Dish-type Solar PV blinkers at level crossings
- Solar water heating systems at hospitals, hostels, rest houses and other establishments
- SPV lighting at all wayside non-electrified stations/establishments
- Solar street lights in various establishments solar cooking systems at base kitchens/other establishments.
- Other Schemes of MNRE for promotion of SPV, Biomass and Wind Energy.

The details of various incentives can be downloaded from MNRE website. The capital subsidy/incentives claimed under various scheme may please be advised to Board's office by Railways so that use of renewable energy sources can be promoted on IR as enshrined in **INDIAN RAILWAYS VISION 2020** document.

Encls: As above.

(R.K.Jain)
Director Elect. Engg.(PS)
Railway Board

Copy to the following for information and necessary action :

CEEs, All Indian Railways and PUs

DG/RDSO Lucknow - He is requested to expedite all the issues entrusted to RDSO.

ED(EM), Sr.ED(RS), ED(PS&EM), RDSO, Lucknow

GOVERNMENT OF INDIA
MINISTRY OF RAILWAYS
(RAILWAY BOARD)

No. 2009/Elect(G)/150/13 **Dated: 05.10.2009**

Secretary,
Ministry of New & Renewable Energy Sources(MNRE),
14, Block, CGO Complex,
Lodhi Road,
New Delhi 110003,

Sub: Minutes of the Meeting with Chairman, Railway Board and Secretary, MNRE and other officials from MNRE and Ministry of Railways held at Railway Board on 9th September, 2009.

Enclosed please find herewith minutes of the Meeting with Chairman, Railway Board and Secretary, MNRE and other officials from MNRE and Ministry of Railways held at Railway Board on 9th September, 2009.

This is for your information and necessary action.

Encls: As above:

(R.K.Jain)
Director Electrical Engineering(PS)
Railway Board
Ph. 23389112
Email: deeps@rb.railnet.gov.in

Copy to:

1. Sr. PPS to CRB for kind information of CRB.

AM/Budget , Adv./L(G), Adv./L(RS), Adv. /RE, ED/L&A,
EDEE(Dev), ED/RE,
DEE(G), DEE(RS), DRE , (in Board's office)

Minutes of the Meeting with Chairman, Railway Board and Secretary, MNRE and other officials from MNRE and Ministry of Railways held at Railway Board on 9th September, 2009.

The list of officials from Ministry of Railways and MNRE who attended the meeting are placed at Annexure.

A meeting with Chairman, Railway Board and Secretary, MNRE and other officials of MNRE and the Board was held at Railway Board on 09.09.2009 regarding introduction of renewable energy for various applications in Indian Railways..

At the outset, Secretary, MNRE gave the background about meetings held over the past few months in this connection with officials of Northern Railway and the Railway Board. Similar meetings have been held with the Defence Ministry as the defence forces and their establishments are also major consumers of conventional energy. Though a few initiatives have been taken by Railways, not much progress has been made on account of inadequate funding and tardy implementation by the Zonal Railways. In order to make a meaningful impact, a Plan of Action needs to be prepared for the Railways to substitute conventional electricity and diesel, where possible, in a phased manner.

A presentation on deployment of renewable energy technologies for various applications in Indian Railways was made by Adviser, MNRE.

The following points emerged from the discussions:

- A Directive may be issued by the Government for mandatory share of 10% energy from renewable energy sources on Indian Railways by 2020, in the context of the NAPCC
- Indian Railways should set up a separate PSU/SPV exclusively for renewable energy or expand an existing PSU to accelerate use of renewable energy sources on IR
- Railways will consider creating a separate corpus or earmark funds for renewable energy in its annual budgets. Levying of a surcharge of a few paise on railway tickets for mobilizing resources could be explored
- MNRE will organize a 3 days' Workshop on Green Buildings for 30 officials from IR towards capacity building. Railways to propose venue and participation
- MNRE can provide technical assistance for developing a Model Plan for deployment of renewable energy in one Division of IR. A one day Seminar will also be organized by the Railway authorities in this connection. Jaipur/Jodhpur Division was proposed for the Model Plan

- Railways should require all new buildings to comply with Four Star rating under the National Rating System GRIHA for Green Buildings. While GRIHA incorporates the provisions of the ECBC, it is more comprehensive
- A proposal for a pilot project on installation of solar photovoltaic panels on one rake for feeding power to the light and fan circuit will be forwarded to MNRE. Modalities will be worked out by Railways & MNRE. DEE(G), Railway Board will coordinate from Railways with MNRE.
- MNRE agreed, in principle, to consider partial support for the SPV component of the IR project for developing battery operated locomotives on Kalka-Shimla NG section. The modalities will be worked out by Railways & MNRE.DEE(RS), Railway Board will co ordinate from Railways with MNRE.
- MNRE agreed to provide technical assistance for a Center of Excellence on Renewable Energy at RDSO, to be developed and funded by Railways
- Research and Development and application of fuel cell technology for IT and Signaling will be discussed between Railways and MNRE
- Northern Railway will take up 100 kW roof top SPV installation at Nizammudin Station. Subsidy will be available from MNRE under the ongoing scheme of MNRE
- Northern Railway will set up a 1 MW solar PV power plant at Ambala Station. Feed-in-tariff from Haryana Govt. shall be tied up by Northern Railway
- MNRE has agreed in training of IR officials abroad and in India on use of Renewable Energy on Rail sector.
- Railway Board will avail subsidy under various ongoing MNRE schemes for deployment of the following systems and devices:

  - Dish-type Solar PV blinkers at level crossings
  - Solar water heating systems at hospitals, hostels, guest houses and other establishments
  - SPV lighting at all wayside, un electrified stations/establishments
  - Solar street lights in various establishments solar cooking systems at base kitchens/other establishments.
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Sh. R.K. Jain DEE(PS) FROM Ministry of Railways and Dr. B. Bandhopadhya, Adviser/MNRE from MNRE will co ordinate in drawing blue prints for use of Renewable Energy sources and development of project. The joint meetings with Ministry of Railways and MNRE will be planned regularly once in three month.

The meeting ended with vote of thanks to the Chair.

Annexure

List of officials from Ministry of Railways and MNRE attended the meeting

Officials from Ministry of Railway

1. Sh. S.S. Khurana, CRB
2. Sh. M.S. Khan, AM/Budget
3. Sh. I.C.Sharma, Adv./L(G)
4. Sh. Kulbhuhsan Adv./L(RS)
5. Sh. S.k.Sharma, Adv/RE
6. Sh. Jagdip Rai ED/L&A
7. Sh. Sudheer Kumar, EDEE(Dev)
8. Smt. Manju Gupta, ED(EEM)
9. Sh. Atul Kumar, ED/RE
10. Sh. R.K.Jain, DEE/PS
11. Sh. Mohit Chandra, DEE/RS
12. Sh. Jaideep, DEE/G
13 Sh. Shalabh Goyal, DRE

Officials from MNRE

1. Sh. Deepak Gupta, Secretary
2. Dr. B. Bandhopadhyay, Adviser
3. Dr. BMS Bist, Adviser
4. Sh. Ajit K. Gupta, Former Adviser
5. Dr. T.C. Tripathi, Former Adviser
6. Dr. B. Bhargava, Director
7. Dr. Ashvini Kumar, Director
8. Dr. A.K. Singhal, Director
9. Dr. A.K. Tripathi, Director