Himachal Pradesh
Public Works Department

No: PW/MCD/WS/Dharamshala Ropeway/2024-25 2849-56 Dated : 10/12/24

To

The Secretary (PW)
Govt. of Himachal Pradesh
Shimla-171002

Subject: Inspection report of Aerial Passenger Ropeway between Dharamshala and Mcleodganj.

It is intimated that inspection of subject cited ropeway was carried out by the Expert Committee on 30-11-2024. The minutes of inspection conducted by the Expert Committee are enclosed herewith for favour of kind information please.

DA : As above

Chairman Expert Commitee
Cum- Superintending Engineer,
Mechanical Circle. HPPWD,
Dharamshala.

Copy along with copy of inspection report is forwarded to –

1. The Engineer-in-Chief, HPPWD, Shimla-2 for kind information please.
2. The Superintending Engineer, 5th Circle HPPWD, Palampur for information.
3. The Superintending Engineer, Electrical Circle, HPPWD Dharamshala for information.
4. The Inspector Ropeway cum Executive Engineer, Mechanical Division, HPPWD, Dharamshala. He is requested to ensure the compliance of corrective measures from the promoter.
5. The Executive Engineer, B&R Division, HPPWD Dharamshala for information.
6. I.T. Cell O/o Engineer-in-Chief HPPWD Shimla with a request to upload the same on official website.
7. M/s Dharamshala Ropeway Ltd. Dharamshala for information and the necessary corrective measures may be taken as per the inspection report enclosed

Chairman Expert Committee
Cum- Superintending Engineer,
Mechanical Circle. HPPWD,
Dharamshala.

MINUTES OF THE ANNUAL INSPECTION OF AERIAL PASSENGER ROPEWAY BETWEEN DHARAMSHALA AND MCLEODGANJ CONDUCTED ON 30.11.2024 BY THE EXPERT COMMITTEE:-

The Ropeway Expert committee conducted the inspection of Aerial Passenger Ropeway between Dharamshala and McLeodganj on dated:-30.11.2024 & the following members were present:-

1. Er. B.P. Sharma	Superintending Engineer, Mechanical Circle, HP.P.W.D, Dharamshala.	**(Chairman)**
2. Er. B.M. Thakur	Superintending Engineer, 5th Circle, HP.P.W.D, Palampur.	**(Member)**
3. Er. Sanjay Kumar	Superintending Engineer, Electrical Circle, HP.P.W.D, Dharamshala.	**(Member)**
4. Er. Ankaj Sood	Executive Engineer, B&R Division, HP.P.W.D, Dharamshala.	**(Member)**
5. Er.Rohit Raj Kiran	Inspector Ropeway -cum- Executive Engineer, Mechanical Division, HP.P.W.D, Dharamshala.	**(Member Secretary)**

The Expert committee has carefully inspected the various Mechanical, Civil and Electrical components of the passenger ropeway and the observations of the committee are as under:-

MECHANICAL SYSTEM:-

1. **Daily routine maintenance of Ropeway**:- As per the Maintenance Log Books / Registers of U.T.P, L.T.P, intermediate towers and other components inspected by the committee, the routine maintenance of ropeway is being carried out regularly and found properly maintained.

2. **Carriage hangers and cabins**:- Cabins and hangers were visually inspected and found in good condition. The NDT (Magnetic Particle Testing) was got conducted by the promoter for at least 20% of LPA Grips (i.e. of Cabin No. 7,8,9 & 10) in the presence of the Inspector Ropeway - cum - Executive Engineer, Mechanical Division, HP.P.W.D, Dharamshala through M/s Satyakiran Engineers Private Limited, New Delhi with Megnaflux MPT machine on dated:- 08.10.2024 as scheduled / advised by the OEM. As per their test report no recordable flaw indications were found.

3. **Haulage rope:-** The haulage rope of 42 mm diameter was visually inspected and its splicing portion was checked thoroughly and dimensions at certain tuck points were measured physically with the help of vernier caliper and were found within tolerance limit (i.e. 42.85 mm Horizontal & 43.70 mm Vertical). The NDT of haulage rope was carried out by the team of Council of Scientific and Industrial Research (CSIR – CIMFR), Dhanbad on dated:-16.04.2024. As per their detailed report, no abnormal deviation in quantitative and qualitative analysis has been found during investigation and thus they have recommended further continuation of haulage rope installation till March – April 2025 (i.e. Next date of recommended NDT inspection). The condition of rope was also found satisfactory after visual inspection.

4. **Haulage Rope Tensioning System:-** The Haulage Rope tensioning system at LTP was inspected and found in satisfactory condition.

5. **Driving arrangement:-** The ropeway components at lower and upper terminal i.e. driving shaft, driving sheaves and transmission sheaves etc. including others driving arrangement were found properly operational and in order. The promoter has replaced the drive sheave liner with the new one as a preventive measure after an operation of 6780 Hrs. on dated:- 28.07.2024. Also, drive sheave bearing oil was replaced on dated:- 03.08.2024 and return sheave bearing oil was replaced on dated 05.08.2024. During routine daily inspection being carried out by the promoter 26 liters of Bearing oil was replaced in drive sheaves and 7 liters of bearing oil was replaced in return sheaves by the promoter on dated:- 04.08.2024 & 05.08.2024 respectively. Also, 1 no. Moxa router in Leit drive (at LTP) was not working properly the same was replaced by the promoter on dated:- 06.09.2024 & 1 no. tyre conveyor (28 no. at LTP) was found malfunctioning, the same was immediately replaced by the promoter on dated:- 24.09.2024. As per the maintenance log books / registers the preventive maintenance is being carried out by the promoter as per requirement from time to time.

6. **Rescue Engine:-** The technical staff was asked to check engine oil level, condition of air filter, fuel pre filter, water separator, heat exchanger, battery water level etc. Thereafter, rescue engine was started and ropeway system was operated on rescue engine at 2200 rpm and was found working satisfactorily.

7. **Live rescue:-** A mock drill/rescue operation was conducted by the Promoter between intermediate tower no. 2 & 3 on dated:- 19.11.2024 for getting familiarized with the functioning of ropeway, rescue equipments and demonstration of rescue in case of handling any emergent situation and preparedness of the promoter to deal with / handle any emergent situation. The committee inspected the rescue equipments, which were found to be in good condition.

8. **Braking System:-** The functioning of braking system was checked by operating the Ropeway and applying the service brake and emergency brake, which were found to be working satisfactorily.

ELECTRICAL INSTALLATION

1. **Diesel Generating Set:-** The Diesel Generating set (2No.) coupled with Cumin engine of 650 KVA & 62.5KVA capacity respectively, manufactured by M/s Sudhir Diesel Generator set have been installed and put in use. The services of Generator set are required during power failure. These DG sets are maintained through AMC by the Ropeway operator properly. To check the backup of DG system the Generator set was started and ropeway system was made to run on it and found working satisfactorily.

2. The Electronic and EI components including electrical control panels, Scada control system, Main Drive motor (514 KW) limit switches were visually inspected & found to be in order and the test reports were checked and were found satisfactory. As per maintenance log books / registers of various electrical equipments, they were found to be properly maintained & in working order.

3. **Fire Fighting Arrangements:-** Adequate number of fire extinguishers have been provided at the lower and upper terminal station including other fire fighting equipments like fire hydrant, fire alarm etc. which have been inspected by the authority of Himachal Pradesh Fire Department and Fire safety certificate is valid upto 16-08-2025.

Overall the electrical equipments were found well maintained and in good working condition.

CIVIL COMPONENTS:-

1. **Civil Structures:-** As per the visual inspection the Civil Structures i.e. station towers, intermediate towers, equipment support structure at both the stations were visually inspected and found to be intact & safe and in good condition.

2. **Foundations:-** As per the visual inspection the foundation of all the towers and all other structure at starting point and at the top seems to be intact and safe. No disorder or crack has been seen in the Civil Structures.

CORRECTIVE MEASURES:-

The minors defects noticed during inspection were explained to the representative of the promoter and was directed to rectify the same at the earliest, which are as under:-

1. Special attention be paid to periodic diameter and laylength measurements of the rope. If any abnormality is noticed, the rope may be replaced immediately.

2. The branches of various trees nearing along the alignment of rope way may be trimmed / lopped after following all codal formalities and compliance be conveyed to Inspector Ropeway.

3. The committee inspected the Tower No. 4 and the slopes near its foundation. The matter regarding their stabilization may be pursued & expedited with the concerned authority. The corrective measures suggested by the team of IIT Bombay as per their inspection report dated:- 10.08.2024 may be taken at the earliest under intimation to this office / Inspector Ropeway

Keeping in view of the above, the expert committee is of the opinion that the Aerial Passenger Ropeway is fit for Public traffic.

Er.Rohit Raj Kiran
Inspector Ropeways -cum-
Executive Engineer,
Mechanical Division,
HP.P.W.D, Dharamshala.
(Member Secretary)

Er. Ankaj Sood,
Executive Engineer,
B&R Division,
HP.P.W.D, Dharamshala.
(Member)

Er. Sanjay Kumar
Superintending Engineer,
Electrical Circle,
HP.P.W.D, Dharamshala.
(Member)

Er. B.M. Thakur
Superintending Engineer
5th Circle,
HP.P.W.D, Palampur.
(Member)

Er. B.P. Sharma
Superintending Engineer,
Mechanical Circle,
HP.P.W.D, Dharamshala
(Chairman