

HIMACHAL PRADESH
PUBLIC WORKS DEPARTMENT

Ph No.2842353
e-mail :SE-mec-HP@nic.in



No: PW/MCS/WS/Jakhoo Passenger Ropeway/2022-23/ 3221-29

Dated 10/1/25


To

The Principal Secretary,
Govt .Of Himachal Pradesh
Shimla-171002

Subject : Annual Inspection of Aerial Passenger Ropeway at Jhakoo.

It is submitted that annual inspection of subject cited ropeway was carried out by the ropeway expert committee on 26-12-2024. The minutes of inspection conducted by the ropeway expert committee are enclosed herewith for favour of kind information please.

DA : As above.


Chairman Ropeway Expert Committee
-cum-Superintending Engineer,
Mechanical Circle,HPPWD,Dhali-12

Copy forwarded to followings for necessary action and information please.

1. The Engineer-in-Chief,HPPWD,Shimla-2.
2. The Chief Engineer HPPWD,Shimla-2.
3. The Superintending Engineer 4th Circle,HPPWD, Shimla.
4. The Superintending Engineer Electrical Circle ,Kasumpti-9.
5. The Ropeway Inspector-cum- Executive Engineer,Mechanical Divn,HPPWD,Dhali- He is further requested to ensure the compliance of the necessary corrective measures from the promoter.
6. The Executive Engineer B&R Divn,HPPWD,Divn No-III
7. M/S Jagson PVT.Ltd. Jakhu Passenger Ropeway,Distt,Shimla. & the promoter is further requested to take corrective measures as per the report at once and with intimation of the same to the committee.
8. The IT Section ,Nirman Bhan,HPPWD,Nigam Vihar Simla-2-further requested to please Upload/publish/display the copy of the report on the Departmental web/portal.


Chairman Ropeway Expert Committee
-cum-Superintending Engineer,
Mechanical Circle,HPPWD,Dhali-12

MINUTES OF INSPECTION OF PASSENGER CAR AERIAL ROPEWAY AT JAKHOO DISTT SHIMLA (HP) CONDUCTED BY THE EXPERT COMMITTEE ON DATED: 26.12.2024

The expert committee of the following officers has carried out the inspection of the Passenger Car Aerial Ropeway Jakhoo, Shimla (HP) on dated: 26.12.2024,

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|--|----------|
| 1. Er. C.D. Thakur, Superintending Engineer, Mechanical Circle,
HP.P.W.D Dhalli, Shimla-12. | Chairman |
| 2. Er. Rakesh Kumar, Superintending Engineer, Electrical Circle,
HP.P.W.D, Kasumpati, Shimla-9 | Member |
| 3. Er. Ajay Kumar Soni Superintending Engineer, 4 th Circle, HP.P.W.D
Shimla | Member |
| 4. Dr. Y.S. Negi, Inspector Ropeways cum Executive Engineer,
Mechanical Division, HP.P.W.D, Dhalli, Shimla-12 | Member |
| 5. Er. Praveen Verma, Executive Engineer, B&R Division No. III,
HP.P.W.D, Shimla. | Member |

The expert committee examined in detail the above ropeway and the observations made by the expert committee are as under:

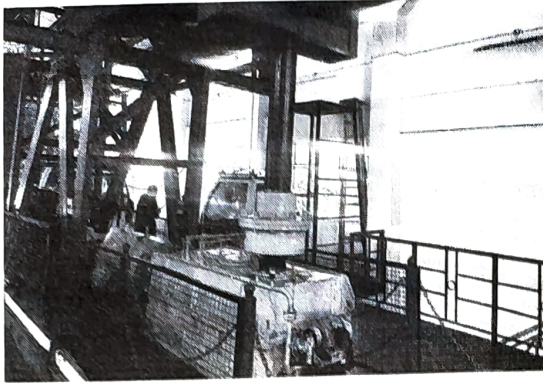
1. RECORD OF MAINTENANCE ACTIVITIES:

The Inspection of the above ropeway was carried out by the Ropeway Expert committee on dated: 26.12.2024 and first of all maintenance registers were checked. It was appraised to the committee that daily routine maintenance is carried out between 08:45 AM to 9:30 AM and after daily routines maintenance the system is allowed for carriage of passengers. Visual inspection of haulage ropes is carried out daily. All maintenance activities out are recorded properly in maintenance log book.

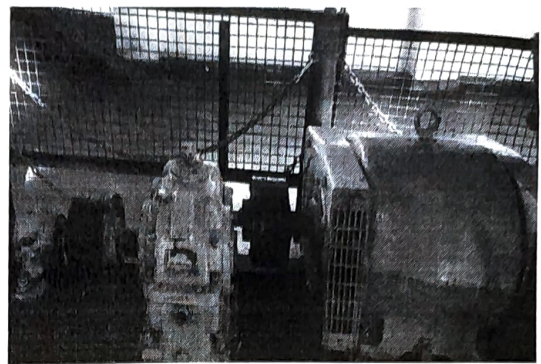
2. HAULAGE SYSTEM AND ITS ALLIED ACCESSORIES:

Magnetic Particle Examination and Ultrasonic Examination of various solid parts including main drive system, rescue system, return sheave shaft, hangers, jaws, gearbox etc. was done on 08.12.2024 by M/s A.L. Engineering Services, Ghaziabad. As per the report parts are satisfactory and can be continued in services. They have also recommended/certified for commercial operation for as period of six months from the date of inspection.

The NDT test of haulage rope of 40 mm dia. (6x19) was conducted by M/s A.L. Engineering Services, Ghaziabad on 08.12.2024 and in their observation report they have recommended further continuance of this haulage rope in the installation and have suggested to conduct the next NDT before 07.06.2025.



MAIN DRIVE SHAFT



RESCUE ENGINE

3. ROPE TENSIONING SYSTEM AND STEEL STRUCTURE:

The committee inspected the Rope tensioning system and other structures at Upper Terminal, Lower Terminal and intermediate towers and found all the anchorages and structure work found in satisfactory condition. The NDT of the tension rope of 30m dia (6x19 stranded construction) was conducted by M/s A.L Engineering Services Gaziabad on dated: 08.12.2024 and in their observation report, they have recommended further continuance of this tension rope in the installation for a period of six months and to conduct its next NDT before June 2025.

4. ELECTRICAL INSTALLATION:

The Integrity and Earthing of all electrical installations such as cable installations, DG Set 250 KVA, Transformer 500 KVA, RMU 15 KV. APFC panel, Earthing pits etc. were checked and serviced by M/S A.L. Engineering Services, Ghaziabad on dated: 07.12.2024 to 08.12.2024 and were found to be in satisfactory condition and can be continued for commercial operation subject to all routine check-ups.

The committee has inspected following electrical installations and devices:-

- a) The D.C. drive panel was checked for its various operations and the performance found satisfactory and its test report is valid upto June 2025.
- b) The main console Panel (HMI) with drive (Mitsubishi) FX-64 M, Testing of PLC and AC drive, checked for various parameters such as power cable, phase monitoring, shock protection, safety alarm, etc. and found in satisfactory working condition. The same has been maintained by A.R.L. Engineering services and has been certified safe upto June 2025.
- c) The D.G. set was also checked and found satisfactory.
- d) The Electrical system, Electrical panels testing was conducted & found satisfactory.
- e) Lighting arrestor & connected earthing system is also found in safe working condition.

5. SAFETY AND BRAKES:

- a) Committee inspected the emergency brake system & service brake system and found it working satisfactory. The Ropeway was also checked by operating the same on rescue engine which was also found Satisfactory.

6. SAFETY AND BRAKES:

- a) Committee inspected the emergency brake system & service brake system and found it working satisfactory at all check points simultaneously the ropeway brakes were tested with rescue engine.
- b) All fire extinguishers were checked and found satisfactory.

7. COMPLIANCE FOR PREVIOUS CORRECTIVE MEASURES:

- a) The promoter has got executed the reparation work of the clutch and transmission system of Rescue Engine as per the directions of Expert Committee.
- b) The Non Destructive Tests of Haulage & Tension Ropes have also been conducted on six month basis as per the directions of Expert Committee.


8. CORRECTIVE MEASURES TO BE TAKEN:

- The basement of civil structures and the foundation of towers need to be properly plastered/concreted so as to avoid seepage of water in these structures.
- The provision for separate emergency drive must be incorporated with independent shaft to the ropeway.
- The trimming of tree branches close to tower no.1 must be done with action taken report at the earliest.
- The committee directed the promoter to procure genuine spare parts from ropeway manufacturer only during the preventive maintenance and the ropeway inspector should be informed in advance for carrying out repair/tests etc.
- The committee also directed the promoter to get painted the steel and civil structure at certain points (especially at tower 1 and tower 2) where the gloss of paint has been lost.
- The NDTs for civil structures may be got done once in three years instead of five years by the reputed agency in the presence of one of the Civil Engineering Member from this department with information and compliance to the expert committee.
- The servicing/check of fire fighting equipments be executed and fire audit report maybe got done and submitted to the committee.
- The committee also directed the promoter to conduct NDT tests of Main Drive Shaft/sheave and execution of proper lubrication in the haulage system, drive shaft's main supporting ends etc. and the compliance be submitted to the committee.
- All wiring system at connecting points must be properly insulated upon checking and the compliance of the same be communicated to the committee.
- The committee also directed that both worm wheels must be visually as well as daily inspected regarding uneven circular motion and the release of track rope alongwith all haulage system and the compliance submitted to the committee.

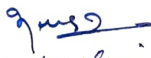



- The operating/working staff engaged in the ropeway should be made to follow uniform/dress codes.

9. CONCLUSION:-

From the above drive tests, traversing of cabins (to and fro), different modes of power drives earthing system, haulage system, brake system, control system, the counter weights etc. and details of various test reports the ropeway has been observed fit for passenger carriage subject to attentiveness of future maintenance to up keep the ropeway as per the standard SOPs and codes.


Er. Praveen Verma
 Executive Engineer
 B&R Division No.III
 HP.P.W.D, Shimla

(Member)


~~Er. Deepak Raj Chauhan~~
Er. Deepak Raj Chauhan
 Superintending Engineer
 4th Circle (B&R)
 HP.P.W.D, Shimla
(Member)

Dr. Yashwant Singh Negi
 Inspector Ropeways-cum
 Executive Engineer
 Mechanical Division
 HP.P.W.D, Dhalli, Shimla-12
(Member)

Er. Rakesh Kumar
 Superintending Engineer
 Electrical Circle
 HP.P.W.D, Kasumpati, Shimla-9
(Member)

Er. C.D. Thakur
 Superintending Engineer
 Mechanical Circle
 HP.P.W.D Dhalli, Shimla-12
(Chairman)