

STATE OF NEW HAMPSHIRE



Passenger Tramway Safety Board



Office: c/o N.H. State Fire Marshal's Office
110 Smokey Bear Blvd., Concord, NH
Mailing Address: 33 Hazen Drive, Concord, NH 03305
603-223-4289, FAX 603-223-4294

Table with 4 columns: Mark Petrozzi (Chairman, Term exp. 6/20/24), Stanley Judge (Member, Term exp. 6/20/23), Kris Blomback (Member, Term exp. 6/20/26), Steve Howell (Member, Term exp. 6/20/25)

NEW HAMPSHIRE PASSENGER TRAMWAY SAFETY BOARD MEETING MINUTES

December 15, 2022

Loon Ski Area, Boyle's Break Room, 60 Loon Mountain Rd, Lincoln

FINAL

Attendees:

Board Members: Mark Petrozzi, Chairman
Kris Blomback
Steve Howell
Stanley Judge

NH DOS: Briggs Lockwood Chief inspector
Scot Woolfenden Inspector
Roxie Beall Administrative Support

Industry: Ross Stevens Stevens Engineering
Erica Dickerman USFS
Bryan Granger Granite Gorge
Keith Kreischer Granite Gorge, PTN

I. Call to Order:

Roxie Beall announced the presence and placement of the recorder.
Chairman Petrozzi called the meeting to order at 10:01 am.

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II. Reading and Approval of Minutes:

Chairman Petrozzi called for the reading and approval of the minutes from the last meeting November 15, 2022.

Motion made by Kris Blomback
Seconded by Steve Howell

Discussion: Corrections on page 4, third paragraph, starting before "Eg" will now read "shut downs; tensioner with redundant sensors that monitors ram pressure".
Additional correction in next to last sentence on page 4 will now read "load rating" instead of load ridden.

All in favor of approving minutes with recommended changes. Unanimous.

III. Old Business:

- A. ANSI B.77.1-2022 Review – Chairman Petrozzi recommends tabling this discussion until the end of the meeting. All agree.

IV. New Business:

- A. Granite Gorge: Applications for construction for reactivation of existing lifts (TRM #s 259, 260, 271 & 277)

Ross Stevens asks Bryan Granger to introduce himself and his project. Granite Gorge Partnership LLC. Will be running as Granite Gorge Mountain Park in Keene. Purchased property and assets in foreclosure sale late summer. Since then has been doing much work to get it up and running, partnering with Ross Stevens and others. He also introduces his general manager Keith Kreischer. Putting new snow making equipment together and new Snow Cat.

Ross Stevens explains that Granite Gorge has four lifts. Borvig Double Chair Lift, 2 Starlift Conveyors and O'Conner Rope Tow. Stevens designed the chair lift and the conveyors originally. Erickson designed the rope tow. Now they are applying

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for registration, and in the process of bringing these current lifts up to the standard of 2017. There's work to do, a punch list of items is listed on the letter. Briggs is aware the wire rope tow needs an emergency shut down circuit in the electric drive. Two conveyors are each getting new hand units with monitors so transition stop device complies with current standards, it's a breakaway. There will also be a hand held switch that mechanics can use at the bottom of the conveyors to hold while working in there.

1) TRM 277 – 60 ft conveyor used for beginning skiers. Ross Stevens explains it is garden variety conveyor with brand new safety circuits to comply with the standards.

Chairman Petrozzi questions 2nd paragraph of Ross Steven's letter dated Dec. 5th, that states limited to design documents provided and does not include the additional conveyor equipment that may be warranted by situations at the site after the installation, including walkways, skirting or railings. Is any of that anticipated.

Ross Stevens states he put that clause in the letter since he does not usually attend a final inspection on a conveyor nor does he get the opportunity to design those features since every situation is different. In this case, they are building a new railing on both sides. Old one was compliant but the railing previously built was in bad shape so they replaced it. Keith Kreischer states they moved the footings for the railings inside current footings to secure them better and to ensure necessary distance required. He states they also replaced some of the deck boards.

Chairman Petrozzi asked for confirmation that conveyor is exact same installation. Nothing else anticipated. Ross Stevens confirms but says it will need skirting dependent upon field conditions, and will get a chance to review that on final walk through.

Stanley Judge states that letter meets requirement of certifying the design components. Subtleties of installation must be met by owner, with inspectors ensuring the railings/skirting that will be added meet the requirements.

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Ross Stevens states one feature he is most concerned about if he doesn't design it, is the snow pit.

Scot Wolfenden asked meaning of check marks on conveyor calculation page. Ross Stevens replies that logically, he believes they mean that our calculations verify those of original manufacturer design.

Stanley Judge made a motion to accept the application for reactivation of the 60 ft Starlifts Conveyor NH TRM #277, to include required acceptance test procedure.

Steve Howell seconded.

All in favor. Unanimous.

2) TRM 260 – Rope Tow

Kris Blomback made a motion to accept the application for reactivation of 400 ft O'Connor Wire Rope Tow NH TRM #260, to include acceptance test procedure.

Stanley Judge seconded.

Discussion: Stanley Judge stated for confirmation that this has been non-operational for 2 years. Ross Stevens confirms and states that it will be upgraded to meet current standards. Kris Blomback asked if this was the one with the emergency stop circuit. Ross Stevens states the (VFD?) doesn't have an emergency shut down. Briggs Lockwood asked if it got a new cable/rope this year. Keith Kreischer replied that no, they just needed to take out a 6-8 inch splice.

All in favor. Unanimous.

3) TRM 259 – 300 ft Conveyor used for the snow tubing park.

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This tubing hill conveyor is identical upgrade as 60 ft. conveyor already discussed. Has new railings on both sides.

Stanley Judge made a motion to accept the application for reactivation for the 300 ft. Starlifts Conveyor NH TRM #259, to include acceptance test procedure.

Kris Blomback seconded.

Discussion: Stanley Judge asked if there have been any additions in the drive or technical changes in the lift. Ross Stevens replies this one gets a complete new drive unit; new electric drive, new motors, whole new head unit. Briggs Lockwood adds this was one of the older ones. Keith Kreischer states they will add skirting. Ross Stevens explains that one side of the conveyor is woods, and the other side is tubing park so both side needs railings.

All in favor. Unanimous.

Chairman Petrozzi takes a moment as a side note to explain to Bryan Granger of Granite Gorge that the process isn't just a cursory review and that typically this process is not as streamlined. He explained that in addition to getting the information electronically in advance, it is the relationship that they have with Ross Stevens and the understanding of what Mr. Stevens is certifying in his letters that the Board relies on and has allowed this process to flow as well as it has today.

Side discussion that became part of main discussion (may have missed parts of beginning of discussion. Briggs Lockwood states manufacturer hinged openings have limitations. Requirements aren't in B77. Kris Blomback thought the switch had to be held open when the panels are open. Ross Stevens states he thought the requirement for that may be in the 2022 standard but Starlifts started doing it a year to a year and a half ago. Bryan Granger confirms that they decided to go ahead and spend the money to do it right now.

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4) TRM 271 – Handle Tow Chairlift

Ross Stevens explains that the first application made for this tow was delivered with a whole new electric drive, and variable frequency drive instead of a self-start, neither of which had an emergency shut down.

Briggs Lockwood brought previous design information that was on file for this lift. Ross Stevens checked the profile, reran the calculations and came up with a punch list of what it needs. The new part is they took out the wood, mid station ramp and regraded the area so easier to ski from a trail. They will have to lower the dirt level a little bit. No changes to the towers.

Ross Stevens states that Briggs Lockwood wants safety function analysis done on lift. When they open drive and see what stopping modes are then will retro write the safety related control function analysis at that time.

Ross Stevens states it has 50% downloading.

Vintage (1981) Ontario from a private ski club (Devil's Elbow).

Chairman Petrozzi asks anticipated goal for opening. Bryan Granger and Keith Kreischer agree the realistic goal is to open early January.

Kris Blomback asked where they are on the punch list. Completed are 1, 2, 3, 5, 6, 7, 8, & 10. Still to be completed are 4, 9, 11, 12 & 13.

In regards to Annex F, Briggs Lockwood says original motor room will need sheetrock replaced with some kind of 1 hour fire rating material.

Chair Petrozzi asks if old mid station area (#11) is necessary, or can they just block it off if they don't get it completed in time. Ross Stevens confirms, says vertical clearance was significantly less than 10 ft. so it would have to be fenced off. Keith Kreischer says they are running into a lot of granite, also purchased some tower pads to go in front of barriers.

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Briggs Lockwood asks if there are longer term plans for changing the profile of the towers. Over lifetime of this lift, problems came up as a result of the profile where the chair has to go over a tower with a fairly heavy load, then under the depressed tower to make an unload spot. As chairs went under the depressed tower, the wheel assemblies would have this rhythmic action which caused issues on support tower through the years. Chair Petrozzi asked the distance between them, which Briggs Lockwood estimated is about 30 feet. Solution has been managed by slowing the speed of the lift from 425 down to 300. Long term solution will be to change the profile of the lift which Bryan Granger agrees is a long term plan. Ross Stevens suggests reassessing the speed at the load test because a lot of the problem may have been from lack of qualified maintenance such as sheave misalignment, sheave flexibility and so forth.

Chair Petrozzi states that procedurally, without a letter, the Board cannot take action on the application as is. Ross Stevens says the application has been submitted with a punch list and an indication that work needs to be done. Briggs Lockwood asks about conditional approval. Chairman Petrozzi agrees. Stanley Judge points out that the request asks to begin the registration process therefore Board can give conditional approval pending receipt of certification on design and construction.

Steve Howell made a motion to accept the application for reactivation of the Borvig Double Chairlift NH TRM #271, contingent upon receipt of design and construction certification.

Kris Blomback seconded.

Stanley Judge wanted to make sure it is on record to say that the decision today meets the intent of the application. Ross Stevens confirms that if on load test day, it all meets approval, he will sign the certification at that time.

All in favor. Unanimous.

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B. Black Mountain: Application for Construction. New low voltage system on Triple Chair TRM 20.

Briggs Lockwood provided background for project whose importance has fluctuated recently based on whether or not project could be completed before the season started. At this point, they decided to put off until next season.

Kris Blomback asks if the double chair is ready to go there. Briggs Lockwood responds that both chairlifts are ready to go, ready for inspections tomorrow. Kris Blomback asked if this drive failed last winter. Briggs Lockwood confirmed that a couple of winters ago, they had failure of a drive in the Triple Chair. Installed an EBD drive. Now they want to do the control system with a brake pump (box with pump in it) and valves for the brakes. Kris Blomback asks for confirmation this does not include the drive. Steve Howell asked about previous drive manufacturer. Briggs Lockwood responded it was a Fincor.

This is a typical Larry Wollum project, who has done a bunch of these in NH. Added an encoder. Low voltage control system with processor so they can monitor rollbacks and overspeeds through the processor now.

Kris Blomback asked if this includes all new wiring on the towers. Briggs Lockwood responds all of that will remain the same. This is just the LBC.

Chair Petrozzi asked if there is a stamped letter, as he noted that the letter from Larry Wollum was not executed properly by Guenther Frankenstein, PE. and letter doesn't mention meeting all ANSI B77 and applicable codes.

Discussion: As discussed at last meeting, design certificate is not required at the application but rather prior to registration.

Steve Howell made a motion to approve the application for construction on Borvig Triple Chair NH TRM # 20, contingent upon items listed on page 5 of the application, specifically to include properly executed certificates of design and construction.

Stanley Judge seconded.

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All in favor. Unanimous.

V. **Old Business Revisited:**
ANSI B.77.1 2022 Standard.

Briggs Lockwood provides Annex F with a list of changes and reminds the Board that Annex F was grandfathered in 2011 with the exception of fuel handling and fire extinguishers. In 2017, the entire standard was adopted without those two sections carved out so the Board needs to decide how/ what to accept in Annex F. Do we keep the "carve out" or accept the changes in full.

Chairman Petrozzi points out that the problem is that since it was accepted in 2017 without exception, there are now insurance inspectors that are finding ski areas out of compliance. Kris Blomback - Is there a mechanism in place to provide a variance if someone is found to be non-compliant until such time that there is a determination about how/what to accept in Annex F.

No one remembers the discussion in 2017 to accept all of Annex F or not.

Erica Dickerman – Are there other Boards (building code, etc.) and who would be AHJ?

Chair Petrozzi – Is it a safety issue? If not, do we want to move forward? What mechanism do we have in place to make exceptions?

Briggs Lockwood – Option 1 –make amendment taking exceptions. Option 2 – address during inspections with timeline for corrections.

Kris Blomback suggests go to State Legal Council to draft verbiage that covers the Board and ski areas due to the administrative/clerical error that was made.

Briggs Lockwood – How do we correct? We want this covered until next round of rulemaking.

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Stanley Judge – Contact Selden, previous chair to see what he recalls for 2011 and 2017 analysis.

Kris Blomback suggests we find 2019 minutes where 2017 Annex F was discussed.

Chair Petrozzi asks if we need to make a blanket exception in a motion to address 2017 shortcoming.

Stanley Judge states 2017 code adopted, 2022 not yet adopted. Which ones are safety related? Are there other items that need to be addressed?

Kris Blomback made a motion to grant an exception until next scheduled meeting, to revert back to Pas 307.01 ANSI Safety Requirements. (b)(1) as adopted with ANSI B77.1-2011 standard.

Steve Howell seconded.

All in favor. Unanimous.

VI. Next Meeting Date:

- Friday, January 27, 2023, 10:00 am, Location TBD, probably Gunstock

VII. Adjournment:

Chairman Petrozzi called for a motion to adjourn.

Motion made by Stanley Judge

Seconded by Steve Howell

All in favor. Meeting adjourned at 12:27 pm.

Respectfully submitted by Roxie Beall, 12/21/22