Seattle City Light

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November 4, 2022

KIMBERLY D. BOSE, SECRETARY
FEDERAL ENERGY REGULATORY COMMISSION
888 1ST STREET NE, SUITE 1A
WASHINGTON D.C., 20426

Re: Response to Comments from Scoping Document 1 for the Proposed Surrender and Decommissioning of the Newhalem Creek Hydroelectric Project (P-2705-037)

Dear Ms. Bose,

Seattle City Light (City Light) appreciates the opportunity to respond to comments filed with the Federal Energy Regulatory Commission (FERC) on Scoping Document 1 that was issued by FERC on August 29, 2022, for the proposed license surrender and decommissioning of the Newhalem Creek Hydroelectric Project (Project). City Light is only responding to comments that it has not previously addressed. City Light's past responses can be found in the comment response table included in the Surrender of License Application (Surrender Application) filed with FERC on January 28, 2022, and in the *Response to Intervenor Comments from FERC Notice of Surrender Application* filed with FERC on July 1, 2022.

Comments from the National Park Service (NPS)

- **The short-term and long-term effects of rock scaling and road decommissioning on slope stability associated with hill slope failure and access road at 10U 628747 E, 5391257 N. As part of this assessment, we recommend that a photogrammetric survey of the slide area and surroundings that clearly defines the extent of the unstable area be conducted. We also request that the survey occur before and after the completion of the decommission to assess the effects of the road, decommissioning actions including rock scaling, and any mitigations that may be employed.**

- **The short-term and long-term effects of sediment transport and deposition in Newhalem Creek associated with hill slope failure, rock scaling, and access road at 10U 628747 E, 5391257 N.**

The road providing access to the dam is on land administered by the NPS and is not within the FERC Project Boundary. The road, which continues well beyond the Newhalem Creek Dam, was a former logging road constructed by the U.S. Forest Service (USFS), which administered the land before it was transferred to the NPS in 1968.

The Project was constructed before automobiles were widely used in the U.S. and 18 years before vehicular access was provided via the Skagit Truck Trail in 1939.[1] City Light's planning and construction drawings from 1920 confirm that there was only trail access to the dam. The road was likely constructed by the USFS in 1943 when the Newhalem Creek drainage was selectively harvested to support the World War II effort.[2] The first documented work on the road by City Light was not until 1969, in which a log retaining wall was constructed at the landslide area to stabilize the road for vehicular access to reconstruct the dam and gatehouse. Reconstruction of the dam and gatehouse was the only work documented at the headworks since its construction, although major renovations had been considered between 1948 and 1952. Since 1969, City Light has used the road infrequently but maintained the road by installing culverts, occasionally conducting surface maintenance along the length of the roadway, and constructing retaining walls in the landslide zone; these activities have improved, not diminished the integrity of the roadway.

Failing road conditions are due to slope instability and the original method of road construction. The road crosses through an active landslide, which is part of a much larger, older landslide, and is also positioned upon the older landslide's accumulation zone (see Figure 1 below). Aside from the unstable slope, roadway failure stems from faulty historical construction methods that involved cutting into the upslope side and casting fill on the downslope side without compaction or grading of the roadway surface to produce a more stable slope angle (e.g., 2H:1V), resulting in tension cracks.[3]

Rock scaling as part of the proposed decommissioning project would only target loose rocks with potential to fall during construction. These rocks are likely to fall in the near term regardless of City Light's intervention; thus, scaling would not result in changes to the landscape or effects to Newhalem Creek that would not otherwise naturally occur. The slope will continue to erode regardless of proposed decommissioning activities due to rain exposure on an over-steepened slope and surface water flowing along the head and lateral scarps, which has likely increased due to the 2015 wildfire that burned most trees in the area. The unraveling slope has already affected Newhalem Creek when the mass associated with the larger landslide filled Newhalem Creek for approximately 2,000 linear feet, shifting the creek to the north as a result. The larger landslide may be activated again as Newhalem Creek erodes the toe of the mass (Figure 1).[3]

Proposed road decommissioning activities would not worsen road or slope stability, nor create any additional factors that would affect slope stability. In fact, road decommissioning work includes measures that normally improve slope stability under different geological circumstances. Road decommissioning work includes removing the culverts and reshaping the small, ephemeral, and intermittent drainages to re-establish flow. Then, a "rough and loose" restoration technique would be applied to the compacted roadway surface by scooping soil approximately 2 feet deep with an

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[1] USFS 1950. [Page 110, "1939"]: U.S. Mt. Baker National Forest Records. 159 pp. Mt. Baker National Forest. 1950.
[2] Nixon. 1957. *Franklin D. Roosevelt & Conservation 1911-1945*. General Service Administration, National Archives and Records Service, Franklin E. Roosevelt Library, Hyde Park, New York. 1957. Lyle F. Watts, Chief, Forest Service to FDR, June 18, 1943 and Roosevelt to Marvin H. McIntyre, Secretary to the President, June 24, 1943, pp. 575-577.
[3] Golder 2021. Summary of Field Observations and Proposed Additional Investigation of the Newhalem Access Road Debris Slide. Technical Memorandum. Golder Associates, Inc. 2021.

excavator bucket and placing it back onto the roadway in a nonuniform manner. This "rough and loose" methodology encourages natural plant recovery and fosters plant diversity that normally assists in slope stability. This methodology is also a form of "surface roughening," which is an established best management practice to minimize sediment and erosion from construction sites.

Although the road is not within the FERC Project Boundary, City Light believes it is appropriate to decommission the roadway and that the proposed road decommissioning measures are commensurate with City Light's past and proposed level of use. Monitoring the performance of restoration plantings or weed treatments as part of decommissioning is also appropriate. Mapping the slope and monitoring the effects of the slope post-decommissioning is not appropriate, however. City Light is not responsible for the original construction of the road nor the slope that is failing as a result of a naturally occurring process along a roadway that will no longer be used for vehicular access.

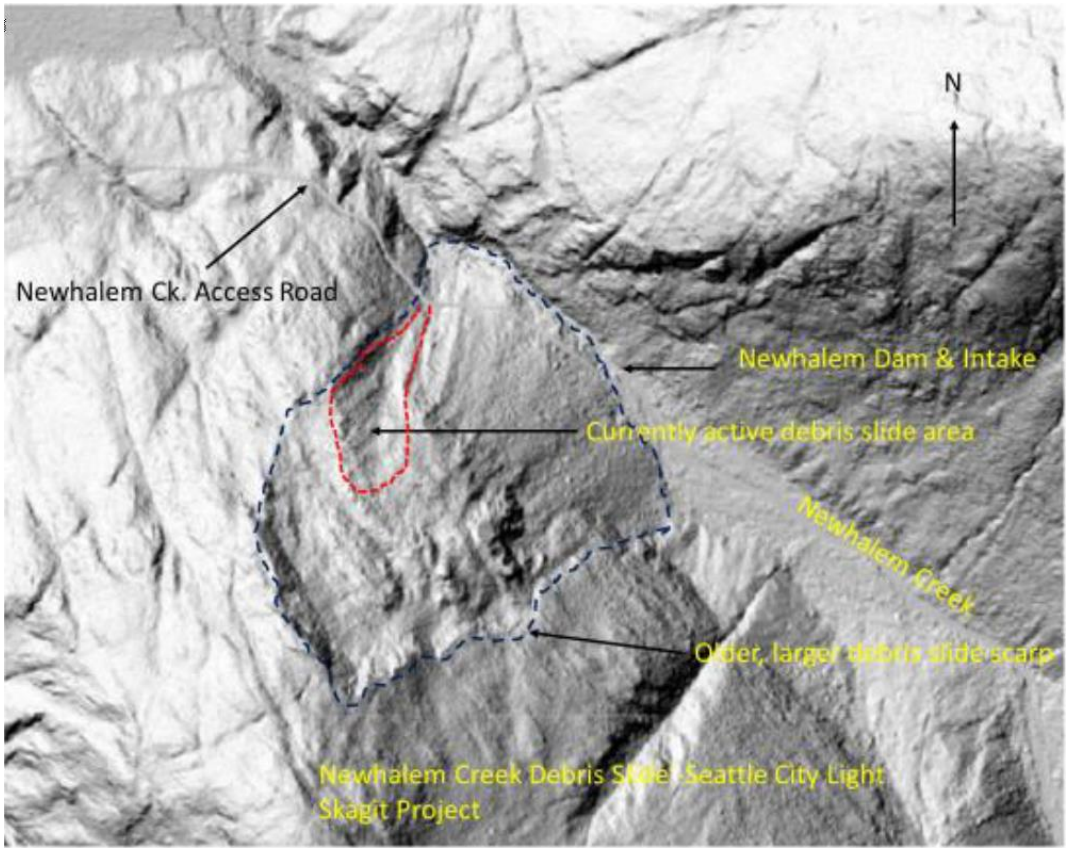

Figure 1. LiDAR hill shade image showing interpreted relationship between smaller, active debris slide area relative to older, larger debris slide area.

- **The effects related to the loss of recreational access to view Newhalem Falls and Newhalem Creek above the falls.**

City Light believes its proposal will not restrict recreational access or enjoyment of the project area. Rather, restricted access during construction will be temporary, and the decommissioned roadway will not diminish recreational amenity. There is currently no physical access to the waterfall due to the steep

terrain and canyon walls on each side of Newhalem Creek in the vicinity of the waterfall. In fact, accessing the waterfall on foot is treacherous and involves wading the high energy, cascading waters of Newhalem Creek or traversing precipitous slopes or canyon walls.

From the road providing access to the dam, limited partial views of the waterfall are available. Before the 2015 wildfire, the waterfall was only visible through narrow slits between the trees from vantages along the cliff edge adjacent to the roadway. Since the wildfire, the topmost portion of the waterfall is visible through the dead trees (Figure 2). The waterfall is not a prominent feature along the roadway. Once forested vegetation recovers from the fire, most of the view will be blocked again.

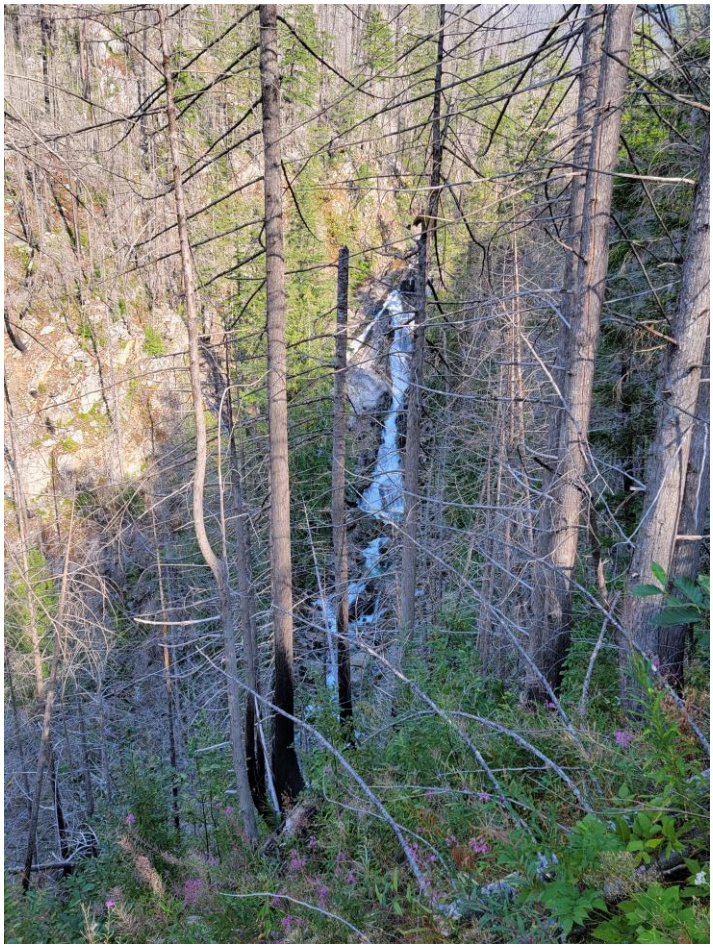

Figure 2. View of the waterfall from the edge of the road at the best vantage point.

Pedestrian access to the limited, partial waterfall viewpoints along the roadway will not be prevented by road decommissioning. City Light will continue to maintain the road up to approximately 840 feet in elevation as identified in the Surrender Application, because it is a muster point for the Skagit River Hydroelectric Project's Emergency Action Plan (EAP). The EAP muster point is only 0.4 miles from the best view of the waterfall along the road (Figures 2 and 3). Recreationists would be free to park at the EAP location and walk this short distance to view the waterfall without having to traverse the landslide. Views of the waterfall beyond the landslide are not striking, as one is looking over the water and not seeing depth or the water "falling".

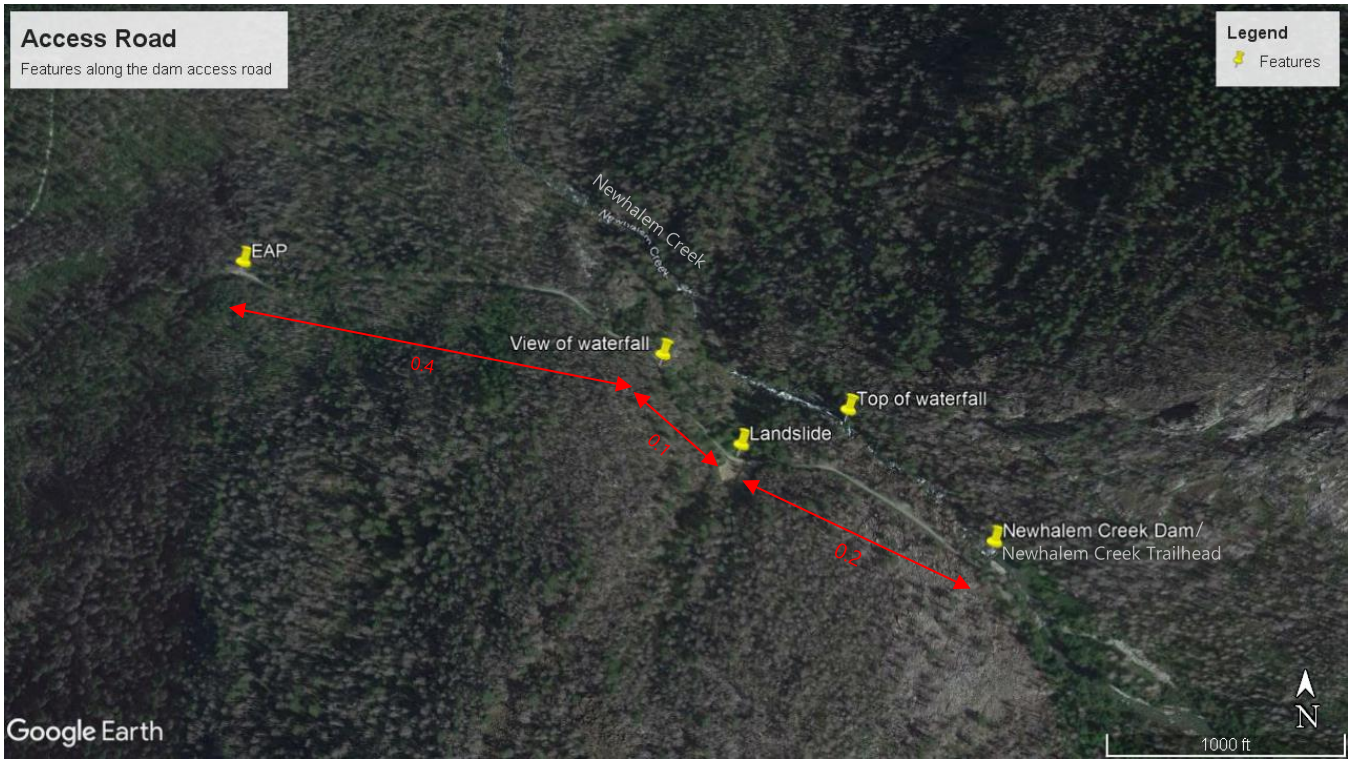

Figure 3. Recreational and waterfall viewing opportunities along the road near the dam.

Recreational opportunities above the waterfall comprise the Newhalem Creek Trail, which follows the former USFS road, beginning near the dam and following the creek upstream for 4.5 miles. The trail is not designated by the NPS but has been maintained in the past by volunteers with the Washington Trails Association (WTA). The WTA indicates that the trail has not been maintained in years, however. The trail is not heavily used, either, as the last trip report from WTA is from August of 2021, and is described by WTA as overgrown and difficult to hike or navigate. The landslide currently prevents 0.2 miles of vehicular access between the landslide and the dam/trailhead. In fact, WTA indicates that the trail starts just before the landslide. Thus, after the road is decommissioned, recreationists using the Newhalem Creek Trail would have to walk 0.5 miles farther from the EAP muster point. It is unlikely that hikers accessing these heavily overgrown areas beyond the diversion dam would be significantly affected by an additional 0.5 mile of walking.

The analysis of recreational effects should recognize that the active landslide is preventing vehicular access to the dam and beyond, not the act of decommissioning. Regardless, pedestrian access will not be affected since a relatively flat bench will remain in place of the roadway. The Hilfiker retaining wall will also remain, leaving a bench for pedestrians to cross the landslide rather than a steep, unstable slope if removed. If loss of vehicular access is of concern, however, City Light can limit road decommissioning to only those 0.2 miles beyond the landslide, in which case there would be no effects to vehicular or pedestrian recreational access from road decommissioning.

- **The effects of leaving the penstock and maintaining the clearing around this structure on the spread of invasive plants, forest humidity, and the increased potential for wildfire ignition and spread.**

As provided in the Surrender Application, vegetation maintenance outside the immediate footprint of the penstock would cease, which would result in the restoration of the penstock corridor to forested habitat (Figure 4). City Light anticipates trimming vegetation within 3 feet of the penstock to allow clearance for hand painting every 10 to 20 years. During this activity, soil disturbance would be prevented; thus, it is unlikely that weeds would be introduced or re-established, as weeds are uncommon in this area and would be treated during decommissioning in accordance with the Invasive Plant Management Plan. The nominal area affected by vegetation trimming around the penstock will allow the forest canopy to extend over the penstock, retaining forest humidity (Figure 4). Only a small amount of biomass would be generated. Similar to trail maintenance techniques, the branches would be lopped and scattered so that the branches are dispersed and would quickly rot. Thus, hand painting the penstock every 10-20 years would not increase the potential for wildfire.

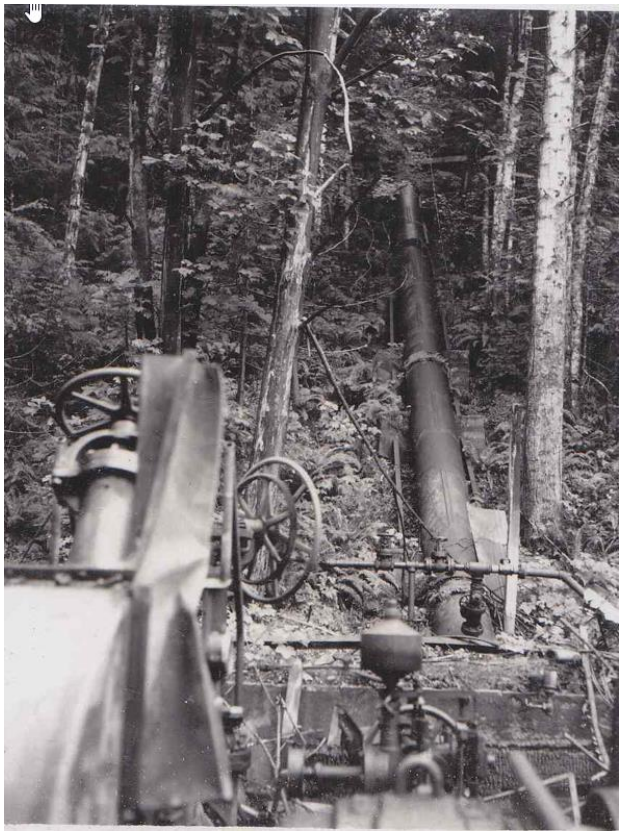

Figure 4. Forested habitat present along the penstock corridor in 1969, prior to the saddle replacement project and more intensive vegetation practices.

- **Comments regarding the potential for headcutting.**

The NPS requested City Light collect additional information that would help to determine the risk that head cutting poses to the stream. City Light collected this suggested information and is incorporating it into the Final Geomorphology Report that will be provided to intervening parties for review and filed with FERC.

- **Additionally, the NPS requires a permit for SCL to access the project area through NPS lands. This permit requirement should be reflected in the plan.**

City Light anticipates obtaining all necessary permits required by applicable law.

Comments From Parties Regarding Relocation of the Powerhouse

Two intervenors suggested that moving the powerhouse and other historic properties to City Light-owned land in Newhalem could "maintain the historic integrity of the Project." However, if moved, the National Park Service provides in *National Register Bulletin 15 How to Apply the National Register Criteria for Evaluation: 29* that a property can only retain its significance under very limited conditions. In general, "…significance is embodied in locations and settings as well as in the properties themselves. Moving a property destroys the relationships between the property and its surroundings and destroys associations with historic events and persons." The powerhouse and penstock are significant in part because they retain integrity of location, setting, feeling, and association, all of which would be eliminated if they were to be moved. In addition, placing these large structures in Newhalem, which is also part of the Skagit River and Newhalem Creek Hydroelectric Projects Historic District, would alter the defining characteristics of the historic townsite. Moving a historic building or structure is not consistent with best management practices for historic properties.

Comments from Washington Department of Fish and Wildlife Regarding Mitigation for Power Tunnel

The power tunnel is closed on both ends, preventing wildlife and human access, and has been since it became operational in 1921. It currently does not provide an entrance for bats. The adit, on the other hand, does provide wildlife access. The adit is a 218-foot excavated tunnel containing the penstock that connects to the power tunnel on the downstream end via a concrete plug. In the Surrender Application, City Light provided that the adit would be gated at the opening to allow for small wildlife access such as bats.

City Light believes it unnecessary to survey the tunnel for bat habitat since the tunnel will remain accessible to bats regardless of whether habitat is present or not. The existing hydroelectric project has no effect on bats, and neither will the Project if the preferred alternative is selected. If the "full removal" alternative is selected, and bats are present, they would be disturbed while the penstock is being removed. Lastly, if bats were utilizing the adit, conditions could not be managed to improve habitat because bat use within caves is highly dependent upon temperature, which is an existing condition that cannot be easily manipulated.

Seattle City Light

City Light looks forward to continuing to work with FERC, resource agencies, Tribes, and other interested parties on the license surrender and decommissioning plan for the Project. Should you have any questions, please contact me at 206-386-4571 or the Project Manager, Shelly Adams, at (206) 684-3117.

Sincerely,

Chris Townsend (Nov 4, 2022 13:50 MDT)

Chris Townsend
Director Natural Resources & Hydro Licensing
Seattle City Light

Cc: Diana Shannon, FERC
Mark Ivy, FERC

SCL Response to Scoping Document 1 Comments

Final Audit Report 2022-11-04

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