

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Copper Valley Electric Association, Inc.

Project No. 13124-015

NOTICE OF AVAILABILITY OF SUPPLEMENTAL
ENVIRONMENTAL ASSESSMENT

(June 20, 2014)

In accordance with the National Environmental Policy Act of 1969 and the Federal Energy Regulatory Commission's (Commission or FERC's) regulations, 18 Code of Federal Regulations (CFR) Part 380 (Order No. 486, 52 Federal Register 47897), the Office of Energy Projects has reviewed Copper Valley Electric Association, Inc.'s application to amend its license for the Allison Creek Hydroelectric Project (FERC Project No. 13124). The 6.5-megawatt (MW) project is located on Allison Creek near Valdez, Alaska. The project does not occupy any federal lands.

The licensee is proposing to amend its powerhouse and tailrace to include a single 6.5 MW turbine generator unit instead of the two smaller 3.25 MW units that were licensed. This amendment would shift the powerhouse location and pivot the tailrace approximately 90 degrees to the north. In addition to the changes to the powerhouse and tailrace, the licensee proposes to shift the transmission line route south and uphill of the original licensed route along the Trans-Alaska Pipeline System right-of-way. In addition the voltage would change from 34.5 kilovolts (kV) to 25 kV. Staff prepared a supplemental environmental assessment (EA) which analyzes the potential environmental effects of the proposed amendment, and concludes that amending the license, with appropriate environmental protective measures, would not constitute a major federal action that would significantly affect the quality of the human environment.

A copy of the EA may be viewed on the Commission's website at <http://www.ferc.gov/docs-filing/elibrary.asp>. Enter the docket number (P-13124) in the docket number field to access the document. You may also register online at <http://www.ferc.gov/docs-filing/esubscription.asp> to be notified via email of new filings and issuances related to this or other pending projects. For assistance, call 1-866-208-3676 or e-mail FERCOnlineSupport@ferc.gov, for TTY, call (202) 502-8659. A copy is also available for inspection and reproduction at the Commission's Public Reference Room located at 888 First Street, NE, Room 2A, Washington, D.C. 20426, or by calling (202) 502-8371.

Kimberly D. Bose,
Secretary.

**SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT
FOR AMENDMENT OF LICENSE**

Allison Creek Hydroelectric Project—FERC Project No. 13124

Alaska



Federal Energy Regulatory Commission
Office of Energy Projects
Division of Hydropower Administration and Compliance
888 First Street, NE
Washington, D.C. 20426

June 2014

SUPPLEMENTAL ENVIRONMENTAL ASSESSMENT

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Washington, D.C.

Allison Creek Hydroelectric Project FERC Project No. 13124 – Alaska

INTRODUCTION

On August 1, 2013, the Federal Energy Regulatory Commission (Commission) issued an original license for the unconstructed Allison Creek Hydroelectric Project No. 13124.¹ On September 27, 2013, Copper Valley Electric Association, Inc. (licensee) filed an application to amend its license for the Allison Creek Hydroelectric Project to modify the penstock design, modify the temporary construction access roads, and construct a penstock/access tunnel. This amendment was approved by the Commission on November 20, 2013² and was supported by an Environmental Assessment (EA) issued concurrently with the order.

On April 11, 2014, the licensee filed another application to amend its license. In its amendment application, the licensee proposes to change the powerhouse and tailrace to accommodate a single 6.5 megawatt (MW) turbine unit instead of the licensed two 3.25 MW units. The licensee is also requesting permission to change the transmission line from 34.5 kilovolts (kV) to 25 kV and to relocate the transmission line route south and uphill of the currently licensed route. As licensed, the project will be constructed on Allison Creek at river mile 1.89, about 10,000 feet upstream of the mouth of Allison Creek and about 2,350 feet downstream of the outlet of Allison Lake near the city of Valdez, Alaska. The project does not occupy any lands of the United States.

This supplemental EA is intended to analyze the environmental impacts of the licensee's most recent April 14, 2014 amendment request and relies, in part, on the EA that was issued by the Commission on November 20, 2013. Only the environmental

¹ Order Issuing Original License, 144 FERC ¶ 62,089.

² Order Amending License, Approving Temporary Penstock Access Route Plan, and Deleting Article 415 (145 FERC ¶ 62,124).

impacts of the changes to the powerhouse, tailrace, and transmission line will be considered in this supplemental EA.

PROPOSED ACTION

As licensed, the powerhouse would be 65 feet by 65 feet and would contain two 3.25 MW generator units that discharge into a 120 feet long concrete tailrace that exits the powerhouse to the west. This amendment would slightly shift the powerhouse location and would pivot the tailrace approximately 90 degrees to the north. This would allow for a shorter, shallower, and steeper tailrace. The tailrace would still return flow to Allison Creek above the natural salmon barrier known as “The Chutes.” The new powerhouse would be 55 feet by 65 feet and would contain a single 6.5 MW turbine generator unit. The new tailrace would be a 70.5 feet long concrete channel exiting the powerhouse to the north.

The project’s transmission line, as licensed, is a 34.5 kV line that runs for 3.8 miles along the Trans-Alaska Pipeline System (TAPS) right-of-way, including 1 mile of the Solomon Gulch trail. The Solomon Gulch trail is a recreational feature of Copper Valley Electric’s Solomon Gulch Hydroelectric Project (FERC No. 2742). This amendment would change the transmission line to a 25 kV line that would run 3.8 miles south and uphill of the original route along the TAPS right-of-way terminating at the Petro Star refinery. The revised transmission line route would utilize a designated section line utility corridor for a portion of the route. The line would no longer follow the Solomon Gulch trail; however, it would cross the trail at one location. No changes to project operations are proposed.

PRE-FILING CONSULTATION AND PUBLIC COMMENT

Pre-Filing Consultation

Prior to filing the application, the licensee consulted with the Alaska State Historic Preservation Officer (SHPO), National Marine Fisheries Service (NMFS), U.S. Fish and Wildlife Service, and Alaska Department of Fish and Game (Alaska DFG). On May 8, 2013, the SHPO concurred that no historic properties would be affected. The FWS stated that it had no objection to the proposed amendment by email dated March 11, 2014. On April 3, 2014, NMFS replied by email and stated that the proposed license amendment does not pose any risk to salmon or other aquatic resources. The NMFS also pointed out that the new transmission line route reduces the possibility of some sensitive wetland impacts. The NMFS had no objections to the proposed amendment.

Alaska DFG commented in its email dated April 3, 2014, that it had no objection to the amendment and specifically stated it had no concerns with the new alignment of the transmission line or with the change in the footprint and location of the powerhouse.

However, the Alaska DFG requested the single generator powerhouse be designed with a generator water bypass system to maintain immediate flow in the downstream reach in the event of a project shutdown. This would allow for bypass reach ramping and reduce effects on fish in the downstream reach, if the penstock must also be dewatered.

Public Notice

On May 1, 2014, the Commission issued a public notice that the amendment application was accepted for filing and soliciting comments, motions to intervene, and protests. On May 29, 2014, the U.S. Department of the Interior (Interior) filed comments pursuant to the public notice. In its letter, the Interior expressed concerns about the licensee's lack of analysis in support of its license amendment application with regard to potential recreation and aesthetic impacts associated with the new routing of the transmission line. Because the new route is a significant change from the route analyzed in the June 21, 2013 EA issued by the Commission, Interior, recommends that the Commission scope, study, and analyze potential impacts related to the proposed new route as appropriate and that the licensee subsequently revise its April 14, 2014 application for amendment of license. Interior also stated in its letter that it had no comments on the proposed changes to the powerhouse and the tailrace.

In a letter dated June 3, 2014, the licensee responded to the Interior's comments on the revised transmission line route and provided an expanded explanation of the aesthetic and recreational effects of the proposed revised line. Interior's comments and the licensee's responses will be further discussed in the environmental analysis section of this supplemental EA.

ENVIRONMENTAL ANALYSIS

Powerhouse and Tailrace

The environmental impacts of the powerhouse would be essentially the same as those considered during the preparation of the June 21, 2013, EA to support the license. Construction would essentially occur in the same location but the footprint of the new powerhouse would be slightly smaller than the powerhouse originally licensed. The new tailrace would also be about 45.5 feet shorter than the currently licensed tailrace, but it would also be constructed with a higher grade.

The concrete tailrace channel outfall would be constructed about ¼ mile upstream of Dayville Road on the south side of Allison Creek, above the high water mark. A bar grate barrier with 1-inch spacing would be installed across the channel to prevent fish from swimming up the tailrace channel to the turbine. During construction a cofferdam would be utilized and after installation, fish would be removed from behind the cofferdam in accordance with a valid Fish Resource Permit from the Alaska DFG and placed back in the flowing water of the creek.

During project construction, best management practices would be followed to protect Allison Creek. The only work that would be conducted in flowing water is the installation and removal of the cofferdam. Disturbed areas would be stabilized with erosion control blankets and revegetated with native grasses. During in-water construction, daily turbidity monitoring would be conducted by an environmental compliance monitor upstream and downstream of the work area. If downstream turbidity measures greater than 25 Nephelometric Turbidity Units (NTUs) higher than upstream measurements, then related construction activities would be stopped and appropriate protection measures would be taken. Alaska DFG would be notified of any non-compliance event that may affect fish resources. To further protect aquatic species, the licensee would comply with the Commission's December 20, 2013, Order Approving Phase I of the Biotic Monitoring Plan Pursuant to License Article 407.³

On February 7, 2014, the Alaska DFG issued a Fish Habitat Permit for the project. This permit contains additional fish protection and enhancement measures that must be followed by the licensee. Any other environmental impacts of the construction and operation of the powerhouse and tailrace would be similar to those considered in the September 27, 2013 license and associated EA.

Our Analysis

In, its comments, Alaska DFG requested the single generator powerhouse be designed with a generator water bypass system to maintain immediate flow in the downstream reach in the event of a project shutdown. This would allow for bypass reach ramping and reduce effects on fish in the downstream reach, if the penstock must also be dewatered.

The Alaska DFG made a similar 10(j) request during licensing. In the final license order, the Commission concluded that the constant delivery of minimum flows at the project's diversion, required by Article 403, would provide a stable amount of flow to protect fishery resources downstream of the powerhouse. Therefore, an additional failsafe provision for the powerhouse was not needed.⁴ Since there are no changes in this amendment that would alter this determination, we have not incorporated this recommendation. The licensee is still required to comply with article 403, which should provide adequate protection for downstream fisheries.

³ 145 FERC ¶ 62,223.

⁴ Order Issuing Original License, 144 FERC ¶ 62,089.

Transmission Line

The licensed project would be located in a scenic, largely undeveloped area above the south shore of Port Valdez and at the base of the Chugach Mountains. The dramatic natural landscape provides an important scenic backdrop to the Valdez community, and is integral to the multiple recreation and tourism activities occurring in the region, such as boating, fishing, camping, and sightseeing. The project area is most visible from Port Valdez, the city of Valdez, a portion of the Richardson Highway (a designated scenic byway), and from the Solomon Gulch Trail.

The project's transmission line, as licensed, is a 34.5 kV line that runs for 3.8 miles with a 30-foot-wide right-of-way along the TAPS right-of-way, including 1 mile of the Solomon Gulch trail which is a cleared route that runs through a Sitka spruce and mountain hemlock forest, low on the slopes above Dayville Road. The wooden power poles would match the scale and appearance of existing transmission lines associated with the nearby Solomon Gulch Project. The transmission line and poles would be camouflaged by dense vegetation and forest canopy along the TAPS right-of-way which is not visible from Dayville Road. The visual impacts from the licensed transmission line route would be greatest where it follows the Solomon Gulch Trail for approximately 1 mile. See Commission's staff's EA issued June 21, 2013 for a complete description of the anticipated environmental effects of the licensed transmission line.

The proposed new transmission line would be a 25 kV line that would run 3.8 miles with a 30-foot-wide right-of-way, south and uphill while paralleling the licensed route along the TAPS right-of-way. The proposed new transmission line route would utilize a designated section line utility corridor for a portion of the route. The line would no longer follow the Solomon Gulch trail; however, it would cross the trail at one location. The existing environment surrounding the proposed new transmission line route is very similar to the licensed route. A wetland survey was conducted for the new route and no new waters or wetland types were found. Wetlands accounted for 2.29 acres within the proposed new transmission line corridor. The U.S. Army Corps of Engineers issued a wetland permit for the project on October 22, 2013. The licensee is also required to conduct restoration activities and manage invasive species pursuant to the Commission's Order Approving Vegetation Management Plan Pursuant to License Article 410.⁵

The proposed new transmission line route would be farther from previously identified active raptor nests than the licensed line. The proposed new line would also be designed to protect resident and migratory birds similar to the licensed line.

⁵ Issued January 3, 2014 (146 FERC ¶ 62,004).

In its comments, Interior notes that the proposed new transmission line route would run much higher on the mountainside, above the forest and in a new right-of-way that has less vegetation to shield the line from view. Since the licensee is proposing to clear and maintain a new 30-foot-wide right-of-way, Interior says the licensee would be creating a new linear feature that could be visible from the three key Valdez viewpoints (Alaska State Marine Highway Ferry Dock, Valdez Convention and Civic Center, and scenic pullout along Richardson Highway) that were used to analyze the original project's potential impacts.

Interior points out that, although the proposed new transmission line would no longer follow the Solomon Gulch trail, it would be visible from long stretches of the trail, from the edge of the forest up to the dam and beyond. While users of the trail encounter non-natural features like the TAPS pipeline, access road, and the Solomon Gulch Project penstock, Interior states that since trail users eventually climb out of the forest and into subalpine and alpine environments, they eventually leave these features behind. Interior concludes that the new higher elevation proposed transmission line would be more intrusive. Aside from where the proposed new line crosses the Solomon Gulch Trail, Interior states the new line may be visible from other vantage points on the trail, both above and below the crossing location, particularly because the new line does not run through a forest. Interior says there is virtually no way to mitigate the appearance of the proposed new transmission line.

In its June 3, 2014, response to Interior, the licensee provides additional aesthetic and recreational analysis of the proposed new transmission line route, following the Recreation and Aesthetic Resources Report that was filed during licensing of the project. The licensee states that the proposed new transmission line is still camouflaged by thick vegetation and has a similar visual impact from the three key Valdez viewpoints that look across the Port of Valdez to Allison Creek. The licensee points out that the Allison Creek Project is located adjacent to the largest industrial complex in Alaska, the Valdez Marine Terminal. In addition, the viewing distance from these three key viewpoints is so great that the visibility of both the licensed and proposed new transmission lines would be very low. The terminus of the proposed new line is the Petro Star refinery which already impacts the view with its industrial complex. The existing transmission line for the nearby Solomon Gulch Project is not visible to the naked eye from these three key viewing sites.

The fourth view point that was analyzed for the licensed transmission line is the view from Allison Point Campground. The Allison Point Campground is the closest recreation area to the project site, located approximately 0.7 mile away. Because there is a steep embankment on the south side of the park the entire view of the licensed and proposed new transmission lines would be blocked.

The final viewpoint which was analyzed prior to licensing is the view from the Solomon Gulch Trail and the TAPS right-of-way. The licensee concludes that the

proposed new line would dramatically improve this viewpoint because the 1 mile stretch of poles that would have followed the trail via the licensed line is eliminated. The proposed new line which would only be visible at one section of the Solomon Gulch Trail where the proposed line would be perpendicular to the Solomon Gulch transmission line. However, the licensee points out that in this area, hikers already see the utility line and poles from Solomon Gulch Project that parallel the penstock. Hikers cross over a bridge and under the penstock and Solomon Gulch transmission line to continue to the lake. Since there are already so many manmade structures in this area, the routing of the proposed new line through this area should not be considered more intrusive. The proposed new line would only be visible from Solomon Gulch Lake if a hiker is standing on the Solomon Gulch Dam looking away from the lake. However the Solomon Gulch poles and lines are already present there and the licensed line would be visible from that location also.

The licensee also states that Interior's comment that hikers "eventually climb out of the forest and into subalpine and alpine environments," is inaccurate because the trail ends at the lake and does not extend into higher elevations.

Our Analysis

We've reviewed Commission staff's original EA issued for this project and staff's EA issued November 20, 2013 for the licensee's previous amendment application. We've also reviewed the Recreation and Aesthetic Resources report that was included in Volume III of the original license application filed on August 25, 2011, Interior's comments and the licensee's response to those comments. We agree with the licensee that the proposed new transmission line would have similar aesthetic and recreation effects as the licensed line. From key viewpoints, the proposed new line would be difficult to see, similar to the licensed line, and routing the line away from a 1 mile stretch of the Solomon Gulch trail could improve aesthetics. We disagree with Interior that additional scoping and studies are warranted for the licensee's proposed changes. We recommend approving the licensee's proposed new transmission line with existing mitigation measures already required by the license.

CONCLUSIONS

The environmental effects of construction and operation of the amended powerhouse and tailrace are not significantly different from those that were already considered and approved in the project license.

Based on our review, the proposed transmission line route would not result in any significant changes in recreation or aesthetics from the route that was previously studied and licensed. For a majority of its length the transmission line would not be visible to recreationists and in the areas where it would be visible the new line would be in character with the other manmade intrusions surrounding it. Implementation of

environmental measures already required by the project license would minimize or avoid identified impacts.

On the basis of our independent analysis, the approval of the proposed amendment to the Allison Creek Hydroelectric Project would not constitute a major federal action significantly affecting the quality of the human environment.

LITERATURE CITED

Copper Valley Electric Association, Inc. 2011. License Application. August, 2011.

Copper Valley Electric Association, Inc. 2014a. Application to Amend License. April 11, 2014.

Copper Valley Electric Association, Inc. 2014b. Letter from Robert Wilkinson, CEO of Copper Valley Electric Association, Inc. Filed June 3, 2014.

Federal Energy Regulatory Commission, 2013. Final Environmental Assessment for Hydropower License, Allison Creek Hydroelectric Project. June 2013.

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Document Content(s)

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