

127 FERC ¶ 62,122  
UNITED STATES OF AMERICA  
FEDERAL ENERGY REGULATORY COMMISSION

Ketchikan Public Utilities

Project No. 420-069

ORDER GRANTING AMENDMENT OF LICENSE  
FOR ARTICLES 405, 407, 409 AND 413

(Issued May 11, 2009)

On November 11, 2008, Ketchikan Public Utilities (KPU or licensee) filed a request to amend articles 405, 407, 409 and 413 of the license for the Ketchikan Lakes Project. In their amendment application KPU proposes to modify the project operation to: 1) reduce the minimum emergency flow release to Ketchikan Creek required under article 405; 2) define ramping rate limits in terms of plant discharge instead of streamflow, as required under article 407; 3) utilize flow meters instead of a stream gage below the tailrace, as required under article 409; and 4) consult annually with fish and wildlife agency representatives regarding the need for an annual project review meeting as currently required under article 413. The project is located on Ketchikan Creek and Granite Basin Creek, partially within the City of Ketchikan, in Ketchikan Gateway Borough, Alaska.

LICENSE REQUIREMENTS

Article 405

Article 405 requires the licensee to release from the Ketchikan Lakes powerhouse into the project tailrace a minimum flow of 47 cubic feet per second (cfs), except in the event of a plant power trip or for the purpose of protecting the water supply purposes of the project, when the flow may be reduced to 35 cfs.

Article 407

Article 407 specifies that the project be operated to limit ramping rates to obtain the following maximum stage changes in Ketchikan Creek downstream from the project tailrace: (1) February 16 to May 31 - no ramping during the daylight period, except that ramping up to one inch/hour would be permitted when needed to ensure adequate quantity and quality of water for domestic water supply, and two inches/hour maximum at night; (2) June 1 to September 15 - one inch/hour maximum; and (3) September 16 to February 15 - two inches/hour maximum.

In addition, as specified in ordering paragraph (D) of the Order Modifying and Approving Seepage, Flow Monitoring, and Gaging Plans per Articles 402, 403, and 409, issued February 20, 2004,<sup>1</sup> if the minimum flow, as measured by the approved gage, falls below that required under article 405 or the ramping rate, as measured by the approved gage, is exceeded per article 407, the licensee is to file a report with the Commission within 30 days of the incident. The report shall, to the extent possible, identify the cause, severity, and duration of the incident, and any observed or reported adverse environmental impacts resulting from the incident. The report is to also include: 1) operational data necessary to determine compliance with articles 405 or 407, as appropriate; 2) a description of any corrective measures implemented at the time of occurrence and the measures implemented or proposed to ensure that similar incidents do not recur; and 3) comments or correspondence, if any, received from the resource agencies regarding the incident. Based on the report and the Commission's evaluation of the incident, the Commission reserves the right to require modifications to project facilities and operations to ensure future compliance.

#### Article 409

Article 409 requires the licensee to install, operate, and maintain streamflow gages necessary to monitor the minimum flow releases required in article 405, and a gage to monitor the ramping rates required in article 407.

#### Article 413

Article 413 requires the licensee to hold annual meetings with state and federal fish and wildlife agency personnel, and the Forest Service (as required by 4(e) Condition No. 104), for the purpose of discussing project-related matters of interest to the agencies. Within 30 days after the meeting, the licensee is required to file a summary of the meeting with the Commission and the agencies.

### BACKGROUND

#### Temporary Amendment of License Article 407

On March 19, 2007, pursuant to the licensee's request of July 19, 2006, the Commission issued an Order Granting Temporary Amendment of License Article 407.<sup>2</sup> The March 19, 2007 order temporarily amended article 407 to measure ramping rates in

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<sup>1</sup> 106 FERC ¶ 62,144.

<sup>2</sup> 118 FERC ¶62,205.

terms of plant discharge per hour instead of streamflow rise and fall in inches per hour for a 12-month trial period. Under the temporary amendment, the licensee was to limit plant discharge-based ramping rates to obtain certain maximum flow changes in the project tailrace for certain periods.

On November 17, 2008, the licensee filed its final report on the temporary amendment of article 407, which incorporated the licensee's proposed changes to the license article requirements based on the data and its consultation with the resource agencies.

## LICENSEE'S PROPOSAL

### Article 405

The licensee proposes to change the article 405 requirements to reduce the minimum emergency flow to 30 cubic feet per second (cfs). Article 405 would be modified as follows:

The licensee shall release from the Ketchikan Lakes powerhouse into the project tailrace a minimum flow of 47 cfs, except in the event of a plant power trip or for the purpose of protecting the water supply purposes of the project, when the flow may be reduced to 30 cfs. These minimum flows are for the protection of the fish resources in lower Ketchikan Creek, and shall be measured by flowmeters installed on the penstocks at the powerhouse.

If the minimum flow falls below that required under this article, KPU shall notify the Alaska Department of Fish & Game, the U.S. Fish & Wildlife Service and the National Marine Fisheries Service within 72 hours of the incident.

This flow may be temporarily modified if required by operation emergencies beyond the control of the licensee, and for short periods upon agreement between the licensee and the ADF&G, FWS, and NMFS. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

### Article 407

The licensee proposes to define ramping rate limits in terms of plant discharge. Article 407 would be modified as follows:

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The licensee shall limit plant discharge-based ramping rates to obtain the following maximum flow changes in the project tailrace for the following periods:

February 28 to May 31

During the daylight period, a plant discharge rate of 15 cubic feet per second (cfs)/hour, except that ramping up to 30 cfs/hour would be permitted when needed to ensure adequate quantity and quality of water for domestic water supply;

During the night period, a plant discharge rate of 35 cfs/hour when tailrace flow is less than 85 cfs;  
 55 cfs/hour when tailrace flow is at least 85 cfs, but less than 140 cfs;  
 65 cfs/hour when tailrace flow is at least 140 cfs, but less than 205 cfs;  
 75 cfs/hour when tailrace flow is at least 205 cfs, but less than 280 cfs;  
 80 cfs/hour when tailrace flow is 280 cfs or greater.

June 1 to September 15

The following plant discharge rates will apply.  
 15 cfs/hour when tailrace flow is less than 65 cfs;  
 20 cfs/hour when tailrace flow is at least 65 cfs, but less than 85 cfs;  
 25 cfs/hour when tailrace flow is at least 85 cfs, but less than 110 cfs;  
 30 cfs/hour when tailrace flow is at least 110 cfs, but less than 140 cfs;  
 32 cfs/hour when tailrace flow is at least 140 cfs, but less than 172 cfs;  
 34 cfs/hour when tailrace flow is at least 172 cfs, but less than 205 cfs;  
 36 cfs/hour when tailrace flow is at least 205 cfs, but less than 242 cfs;  
 38 cfs/hour when tailrace flow is at least 242 cfs, but less than 280 cfs;  
 40 cfs/hour when tailrace flow is 280 cfs or greater.

September 16 to February 27

The following plant discharge rates will apply.  
 35 cfs/hour when tailrace flow is less than 85 cfs;  
 55 cfs/hour when tailrace flow is at least 85 cfs, but less than 140 cfs;  
 65 cfs/hour when tailrace flow is at least 140 cfs, but less than 205 cfs;  
 75 cfs/hour when tailrace flow is at least 205 cfs, but less than 280 cfs;  
 80 cfs/hour when tailrace flow is 280 cfs or greater.

If the ramping rate is exceeded per this article, the licensee shall notify the Alaska Department of Fish and Game (ADF&G), National Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (FWS) within 72 hours of the incident.

These ramping rates may be temporarily modified if required by operation emergencies beyond the control of the licensee, and for short periods upon agreement between the licensee and the ADF&G, FWS, and NMFS. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

#### Article 409

The licensee proposes to measure ramping rates and minimum flow releases by use of ultrasonic flow meters installed on the powerhouse penstocks for which the licensee would monitor and record the data, instead of the gaging station on Ketchikan Creek below the tailrace (station BTR). Article 409 would be modified as follows:

The licensee shall maintain flow meters on each of the penstocks serving the Ketchikan powerhouse. If the minimum flow, as measured by the flow meters, falls below that required under article 405 or the ramping rate, as measured by the flow meters, is exceeded per Article 407, the licensee shall file a report with the Commission within 30 days of the incident. The report shall, to the extent possible, identify the cause, severity, and duration of the incident, and any observed or reported adverse environmental impacts resulting from the incident. The report shall also include: 1) operational data necessary to determine compliance with Articles 405 or 407, as appropriate; 2) a description of any corrective measures implemented or proposed to ensure that similar incidents do not recur; and 3) comments or correspondence, if any, received from the Alaska Department of Fish and Game, National Marine Fisheries Service, and U.S. Fish and Wildlife Service regarding the incident.

#### Article 413

Under the licensee's proposal, the licensee would consult annually with fish and wildlife agencies on the need for an annual project review meeting. Article 413 would be modified as follows:

The licensee shall coordinate and consult with fish and wildlife agency representatives, including Alaska Department of Fish and Game (ADF&G), National

Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (FWS), regarding the need for an annual project review meeting. If a meeting is deemed necessary by the agencies, the licensee shall schedule and host an annual project review meeting with agencies and interested parties at a mutually acceptable time and place. The meetings may be held by conference call or in conjunction with the annual Commission operation inspection, if sufficient advance notice is provided and agency staff is available. The meeting agenda shall include review of study reports and compliance with license articles. Draft minutes of meetings will be recorded by the licensee and circulated for review, comments, and approval by attendees within 14 days after each meeting. Within 60 days following such consultation, the licensee shall file with the Commission, final minutes of the meeting, with any recommendations made by ADF&G, FWS, and NMFS; other fish and wildlife agencies; and the licensee, and other pertinent enclosures.

#### RESOURCE AGENCY CONSULTATION

Following the completion of the 12-month trial period, the licensee consulted with the Alaska Department of Fish & Game (ADF&G) and the National Marine Fisheries Service (NMFS) on the proposed license article modifications and provided them with a final report containing 12 months of data and the ramping rate criteria with the purpose of proposing a final ramping rate schedule to the Commission. The agencies' comments were incorporated into the licensee's proposed changes to the article 405 and 407 requirements.

#### PUBLIC NOTICE

On January 23, 2009, a public notice was issued of the proposed amendment of license and soliciting comments, motions to intervene, and protests by February 24, 2009. No comments, motions to intervene, or protests were filed.

#### DISCUSSION

The licensee has consulted with and reached agreement with the resource agencies on its proposed modifications to articles 405, 407, 409, and 413 and has incorporated the agencies' comments for its proposed modifications to articles 405 and 407 on an operational regime that will take into consideration the practical limitations of compliance with Article 407. After review of the 12-months data results, and after consultation with the resource agencies, the licensee has proposed a final ramping rate schedule.

Accordingly, the licensee's proposed modifications to articles 405, 407, 409 and

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413 appear adequate to protect project area resources and should be approved.

The Director orders:

(A) The proposed amendment to articles 405, 407, 409, and 413, as requested by Ketchikan Public Utilities on November 17, 2008, is approved.

(B) Article 405 is amended to read:

Article 405. The licensee shall release from the Ketchikan Lakes powerhouse into the project tailrace a minimum flow of 47 cfs, except in the event of a plant power trip or for the purpose of protecting the water supply purposes of the project, when the flow may be reduced to 30 cfs. These minimum flows are for the protection of the fish resources in lower Ketchikan Creek, and shall be measured by flowmeters installed on the penstocks at the powerhouse.

If the minimum flow falls below that required under this article, KPU shall notify the Alaska Department of Fish & Game, the U.S. Fish & Wildlife Service and the National Marine Fisheries Service within 72 hours of the incident.

This flow may be temporarily modified if required by operation emergencies beyond the control of the licensee, and for short periods upon agreement between the licensee and the ADF&G, FWS, and NMFS. If the flow is so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

(C) Article 407 is amended to read:

Article 407. The licensee shall limit plant discharge-based ramping rates to obtain the following maximum flow changes in the project tailrace for the following periods:

February 28 to May 31

During the daylight period, a plant discharge rate of 15 cubic feet per second (cfs)/hour, except that ramping up to 30 cfs/hour would be permitted when needed to ensure adequate quantity and quality of water for domestic water supply;

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During the night period, a plant discharge rate of 35 cfs/hour when tailrace flow is less than 85 cfs;  
 55 cfs/hour when tailrace flow is at least 85 cfs, but less than 140 cfs;  
 65 cfs/hour when tailrace flow is at least 140 cfs, but less than 205 cfs;  
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 80 cfs/hour when tailrace flow is 280 cfs or greater.

#### June 1 to September 15

The following plant discharge rates will apply.  
 15 cfs/hour when tailrace flow is less than 65 cfs;  
 20 cfs/hour when tailrace flow is at least 65 cfs, but less than 85 cfs;  
 25 cfs/hour when tailrace flow is at least 85 cfs, but less than 110 cfs;  
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 32 cfs/hour when tailrace flow is at least 140 cfs, but less than 172 cfs;  
 34 cfs/hour when tailrace flow is at least 172 cfs, but less than 205 cfs;  
 36 cfs/hour when tailrace flow is at least 205 cfs, but less than 242 cfs;  
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#### September 16 to February 27

The following plant discharge rates will apply.  
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 55 cfs/hour when tailrace flow is at least 85 cfs, but less than 140 cfs;  
 65 cfs/hour when tailrace flow is at least 140 cfs, but less than 205 cfs;  
 75 cfs/hour when tailrace flow is at least 205 cfs, but less than 280 cfs;  
 80 cfs/hour when tailrace flow is 280 cfs or greater.

If the ramping rate is exceeded per this article, the licensee shall notify the Alaska Department of Fish and Game (ADF&G), National Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (FWS) within 72 hours of the incident.

These ramping rates may be temporarily modified if required by operation emergencies beyond the control of the licensee, and for short periods upon agreement between the licensee and the ADF&G, FWS, and NMFS. If the flow is

so modified, the licensee shall notify the Commission as soon as possible, but no later than 10 days after each such incident.

(D) Article 409 is amended to read:

Article 409. The licensee shall maintain flow meters on each of the penstocks serving the Ketchikan powerhouse. If the minimum flow, as measured by the flow meters, falls below that required under article 405 or the ramping rate, as measured by the flow meters, is exceeded per Article 407, the licensee shall file a report with the Commission within 30 days of the incident. The report shall, to the extent possible, identify the cause, severity, and duration of the incident, and any observed or reported adverse environmental impacts resulting from the incident. The report shall also include: 1) operational data necessary to determine compliance with Articles 405 or 407, as appropriate; 2) a description of any corrective measures implemented or proposed to ensure that similar incidents do not recur; and 3) comments or correspondence, if any, received from the Alaska Department of Fish and Game, National Marine Fisheries Service, and U.S. Fish and Wildlife Service regarding the incident.

(E) Article 413 is amended to read:

Article 413. The licensee shall coordinate and consult with fish and wildlife agency representatives, including Alaska Department of Fish and Game (ADF&G), National Marine Fisheries Service (NMFS), and U.S. Fish and Wildlife Service (FWS), regarding the need for an annual project review meeting. If a meeting is deemed necessary by the agencies, the licensee shall schedule and host an annual project review meeting with agencies and interested parties at a mutually acceptable time and place. The meetings may be held by conference call or in conjunction with the annual Commission operation inspection, if sufficient advance notice is provided and agency staff is available. The meeting agenda should include review of study reports and compliance with license articles. Draft minutes of meetings will be recorded by the licensee and circulated for review, comments, and approval by attendees within 14 days after each meeting. Within 60 days following such consultation, the licensee shall file with the Commission final minutes of the meeting, with any recommendations made by ADF&G, FWS, and NMFS; other fish and wildlife agencies; and the licensee, and other pertinent enclosures.

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(F) This order constitutes final agency action. Requests for rehearing by the Commission may be filed within 30 days of the date of issuance of this order, pursuant to 18 C.F.R. § 385.713.

William Guey-Lee  
Chief, Engineering and Jurisdiction Branch  
Division of Hydropower Administration  
and Compliance

Document Content(s)

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