

License Articles applicable to Article 107 c or Flooding

Article 305. Imminent Flood Event Report. The licensee shall incorporate into the imminent flood event report required by Settlement Agreement article 107 in Appendix A of this license, the following measures:

(1) an analysis of how any specific procedures used to address imminent flood events would affect the safety and adequacy of project structures;

(2) a provision to allow the licensee to temporarily modify storage requirements if required by an emergency and if the U.S. Army Corps of Engineers mutually agrees to the temporary modification; and

(3) a provision to notify the Commission as soon as possible, but not later than 10 days after each such temporary modification.

Article 306. Flood Control. The Commission reserves the authority to order, upon its own motion or upon the recommendation of the U.S. Army Corps of Engineers, alterations of project structures and operations for flood control purposes, after notice and opportunity for a hearing.

Article 106 Flow Implementation

Licensee shall release flows and manage reservoirs at the Baker River Project for the protection, restoration and/or enhancement of fish and wildlife resources, riparian vegetation, aesthetic resources, water quality, recreation resources, flood control and health and safety, as described in this article and Article 107.

(A) Interim Operations. Until the new units described in this article are constructed, licensee shall conduct operations in accordance with the Interim Protection Plan (IPP) analyzed in the Biological Opinion for Endangered Species Act Section 7 Consultation for the Baker River Hydroelectric Project (FERC No. 2150), NOAA Fisheries Consultation No. 2002/01040, or as approved by the Commission. During this interim period, licensee shall use best efforts to protect other species of salmonids not addressed in the IPP by reducing the maximum flow from generation of 4,100 cfs to 3,200 cfs from the Lower Baker Development, or less if possible, during the spawning season, from September 1 to December 31. The licensee shall investigate methods and make best efforts to reduce ramping rates toward the standards established in Aquatics Table 1 below. In making its best efforts, licensee shall consider the best interests of the fish resources by limiting the rate of

change of incrementally decreasing flows, limiting the amount of daily amplitude change, and minimizing the difference between spawning and incubation flows. These flows may not necessarily be preferred for energy generation, but will be within the operational limitations of the existing Lower Baker dam and powerhouse.

(B) Flow Implementation Plan. Within four years of license issuance, the licensee shall prepare and submit for the Commission's approval a Flow Implementation Plan (FIP). The FIP shall: 1) specify the schedule for construction of two new generating units each with 750 cfs capacity, as provided in subsection (E); 2) require the implementation of Aquatics Table 1 or 2 as provided in sub-section (C), following construction; 3) provide the process and criteria for proposing modifications to Aquatics Table 1 or 2; and 4) provide the process and criteria for amending the FIP. The licensee shall develop the plan in consultation with the ARG, including specifically Ecology, USFWS, NOAA Fisheries, USDA-FS, WDFW, the Swinomish Indian Tribal Community, Upper Skagit Indian Tribe, and Sauk-Suiattle Indian Tribe. The licensee shall allow a minimum of 60 days for the consulted entities to comment and to make recommendations before filing the plan with the Commission. The plan shall include documentation of consultation, copies of comments and recommendations, and the licensee's responses. If the licensee does not accept a recommendation, the plan shall include the licensee's reasons based on Project-specific information.

(C) Plan Implementation. Following construction of the facilities required by this article, the licensee shall release flows as provided in Aquatics Table 1. In the event that the Army Corps' of Engineers' (ACOE) District Engineer directs the licensee to operate the Lower Baker reservoir to provide up to 29,000 acre-feet of storage in accordance with Article 107, licensee shall implement Aquatics Table 2, following the construction of any necessary facilities modifications, and the FIP shall be revised to incorporate Aquatics Table 2.

(D) Aquatics Table 1 or 2 Modifications. Aquatics Table 1 or 2 may be modified, as appropriate to protect, mitigate, and enhance aquatic resources. If licensee obtains or receives new information that suggests different flows may better protect, mitigate, and enhance aquatic resources, then licensee will provide the new information to the ARG to allow consideration of a modification to Aquatics Table 1 or 2. The ARG may propose a modification provided that the modification shall not require licensee to make additional funds available or to increase the total expected cost or other impact on Project generation or capacity, subject to the reserved authority of the Commission or Ecology. Modifications may be proposed at any time prior to completion of the FIP or through the plan amendment process thereafter. Following approval by the Commission, the licensee shall implement the modifications as required by the FIP.

Aquatics Table 1. Flows and reservoir elevations proposed for the Baker River Project, FERC No. 2150.

Lower Baker Development Engineering Module: Three turbines (one 4,100 cfs turbine, two 750-cfs turbines)							Upper Baker Development No changes to turbine configuration				
Period	Min. Instream Flow (cfs)	Max. Instream Flow (cfs) ⁽¹⁾	Downramping Rates ⁽²⁾	Flood Control Storage (AF)	Max Pool Level (ft) (NAVD 88)	Min Pool Level (ft) (NAVD 88)	Period	Flood Control Storage (AF)	Max Pool ⁽³⁾ Level (ft) (NAVD 88)	Min Pool Level (ft) (NAVD 88)	Max Daily Pool Level Change
Aug 1-31	1,000	3,600	1-inch per hour day and night	No flood control requirement	442.35	404.75	Aug 1-31	No flood control requirement prior to 10/01	727.77	724.8	Max pool fluctuation ≤ 0.5 ft per rolling 24-hr period
Sep 1-3	1,000	3,600			442.35	404.75	Sep 3		727.77	724.8	
4-9	1,000	3,600			442.35	404.75	Sep 9		727.77	720.8	
10-30	1,000	3,200			442.35	404.75	Sep 30		727.77	718.8	
Oct 1-7	1,000	3,200 ⁽¹⁾			442.35	389	Oct 7	727.11 ⁽⁴⁾	713.8		
8-15	1,000	3,200 ⁽¹⁾			442.35	389	Oct 15	726.23 ⁽⁴⁾	685		
16-20	1,000	3,200 ⁽¹⁾			442.35	389	Oct 20	725.68 ⁽⁴⁾	685		
21-31	1,200	3,600 ⁽¹⁾	442.35		389	Oct 31	724.47 ⁽⁴⁾	685			
Nov 1-15	1,200	3,600 ⁽¹⁾	2-inches per hour day and night		442.35	389	Nov 14	712.42 ⁽⁴⁾	685		
16-30	1,200	3,600 ⁽¹⁾			442.35	389	Nov 15-30	711.56	685		
Dec 1-31	1,200	3,600 ⁽¹⁾			442.35	389	Dec 1-31	711.56	685		
Jan 1-31	1,200	5,600			442.35	389	Jan 1-31	711.56	685		
Feb 1-15	1,200	5,600	0 inches per hour day and 2 inches per hour night		442.35	389	Feb 1-15	711.56	685		
16-28	1,200	5,600			442.35	389	16-28	711.56	685		
Mar 1-31	1,200	5,600			442.35	389	Mar 1-31	718	685		
Apr 1-30	1,200	3,600			442.35	389	Apr 1-30	718	685		
May 1-8	1,200	3,600	1-inch /hour day and night		442.35	389	May 1-8	727.77	685		
9-14	1,200	3,600			442.35	389	9-14	727.77	713.8		
15-22	1,200	3,600			442.35	389	15-22	727.77	718.8		
23-31	1,200	3,600			442.35	389	23-31	727.77	724.8		
Jun 1-15	1,200	5,600			442.35	404.75	Jun 1-15	727.77	724.8		
16-30	1,200	5,600		442.35	404.75	16-30	727.77	724.8			
Jul 1-31	1,200	5,600		442.35	404.75	Jul 1-31	727.77	724.8			

⁽¹⁾ Maximum release constraints eliminated when Baker Lake inflow > 10 % monthly exceedance flow OR Skagit River above the Baker River confluence > 24,000 cfs October through December.

⁽²⁾ Downramping rates measured at the Baker River at Concrete, but based on stage changes observed at Transect 1 on the mainstem Skagit River below the Baker River confluence (RM 56.5).

⁽³⁾ Maximum elevation unless otherwise directed by the District Engineer (Corps) during Flood Season.

No minimum flow requirements.

No maximum instream flow constraint.

No downramping limitations for environmental interests.

⁽⁴⁾ Daily reservoir elevations between October 1, November 1, and November 15 shall be at or below straight lines drawn between 727.77 and 724.47 and between 724.47 and 711.56 for those respective dates with a gradual refill after March 1.

NOTE: All elevations are referenced to NAVD 88. Operations in effect for all years (no special dry year conditions)

Aquatics Table 2. Flows and reservoir elevations proposed for the Baker River Project, FERC No. 2150 if Proposed Article 107 is adopted.

Lower Baker Development Engineering Module: Three turbines (one 4,100 cfs turbine, two 750-cfs turbines)							Upper Baker Development No changes to turbine configuration							
Period	Min. Instream Flow (cfs)	Max. Instream Flow (cfs) ⁽¹⁾	Downramping Rates ⁽²⁾	Flood Control Storage (AF)	Max Pool Level (ft) (NAVD 88) ⁽³⁾	Min Pool Level (ft) (NAVD 88)	Period	Flood Control Storage (AF)	Max Pool Level (ft) (NAVD 88) ⁽³⁾	Min Pool Level (ft) (NAVD 88)	Max Daily Pool Level Change			
Aug 1-31	1,000	3,600	1-inch per hour day and night	No flood control requirement prior to 10/1	442.35	404.75	Aug 1-31	No flood control requirement prior to 10/1	727.77	724.8	Max pool fluctuation ≤ 0.5 ft per rolling 24-hr period			
Sep 1-3	1,000	3,600			442.35	404.75	Sept 3		727.03 ⁽⁴⁾	724.8				
4-9	1,000	3,600			442.35	404.75	Sept 9		724.82 ⁽⁴⁾	720.8				
10-30	1,000	3,200			442.35	404.75	Sept 30		717.09 ⁽⁴⁾	718.8				
Oct 1-7	1,000	3,200 ⁽¹⁾		29,000 AF 10/01 to 03/01	428.55	389	Oct 7	Gradual drawdown to 74000 AF by 10/15 ⁽⁴⁾	714.51 ⁽⁴⁾	713.8		No constraints on max daily pool level changes		
8-15	1,000	3,200 ⁽¹⁾			428.55	389	Oct 15		711.56 ⁽⁴⁾	685				
16-20	1,000	3,200 ⁽¹⁾			428.55	389	16-20		711.56	685				
21-31	1,200	3,600 ⁽¹⁾			428.55	389	21-31		711.56	685				
Nov 1-15	1,200	3,600 ⁽¹⁾	428.55		389	Nov 1-15	711.56		685					
16-30	1,200	3,600 ⁽¹⁾	428.55		389	16-30	711.56		685					
Dec 1-31	1,200	3,600 ⁽¹⁾	428.55		389	Dec 1-31	711.56		685					
Jan 1-31	1,200	5,600	428.55		389	Jan 1-31	711.56		685					
Feb 1-15	1,200	5,600	2-inches per hour day and night	29,000 AF 10/01 to 03/01	428.55	389	Feb 1-15	74,000 AF 10/15 to 03/01	711.56	685				
16-28	1,200	5,600			428.55	389	16-28		711.56	685				
Mar 1-31	1,200	5,600			0 inches per hour day and 2 inches per hour night	No flood control requirement after 03/01	442.35		389	Mar 1-31	Gradual refill		718	685
Apr 1-30	1,200	3,600					442.35		389	Apr 1-30	No flood control requirement after 04/01		718	685
May 1-8	1,200	3,600					442.35		389	May 1-8			727.77	685
9-14	1,200	3,600					442.35		389	9-14			727.77	713.8
15-22	1,200	3,600					442.35		389	15-22			727.77	718.8
23-31	1,200	3,600					442.35		389	23-31			727.77	724.8
Jun 1-15	1,200	5,600	442.35	404.75			Jun 1-15	727.77	724.8					
16-30	1,200	5,600	442.35	404.75			16-30	727.77	724.8					
Jul 1-31	1,200	5,600	1-inch /hour day and night	442.35	404.75	Jul 1-31	727.77	724.8	Max pool fluctuation ≤ 0.5 ft per rolling 24-hr period					

⁽¹⁾ Maximum release constraints eliminated when Baker Lake inflow > 10 % monthly exceedance flow OR Skagit River above the Baker River confluence > 24,000 cfs October through December.

⁽²⁾ Downramping rates measured at the Baker River at Concrete, but based on stage changes observed at Transect 1 on the mainstem Skagit River below the Baker River confluence (RM 56.5).

⁽³⁾ Maximum elevation unless otherwise directed by the District Engineer (Corps) during Flood Season.

No minimum flow requirements.
No maximum instream flow constraint.
No downramping limitations for environmental interests.

⁽⁴⁾ Daily reservoir elevations between October 1 and October 15, shall be at or below straight lines drawn between 727.77 and 711.56 for those respective dates with a gradual refill after March 1.

(E) Construction of New Units. To achieve this flow regime and meet these ramping rates, the licensee shall, upon Commission approval of a construction plan and schedule: 1) install two new generating units with approximately 750 cfs capacity each at the Lower Baker Development, to come on line within six years after license issuance; and, if needed, 2) alter the existing facilities.

(F) Ramping Rates. The licensee shall, beginning as early as reasonably practicable following license issuance and installation of the two new generating units at the Lower Baker Development, change the ramping rates for all licensee-controlled streamflow releases per Aquatics Table 1 or 2. The ramping rates shall apply on the Skagit River at transect 1, but will be measured on the Baker River based upon an established relationship shown on a table or curve to be developed by licensee by seeking input from the ARG, WDFW, the Upper Skagit Indian Tribe, the Sauk-Suiattle Indian Tribe, the Swinomish Indian Tribal, the USFWS, NOAA Fisheries, and USDA-FS, and in consultation with Ecology, and in accordance with any approval received from Ecology.

These ramping restrictions are to be in effect whenever the flow, as calculated at the Skagit River above the Baker River confluence, is less than or equal to 26,000 cfs. The relationship between flows and ramping is depicted on Aquatics Ramping Rate Figures A and B above.

(G) Monitoring Flows and Ramping Rates. Instream flows and ramping rates shall be monitored at the USGS gage (Station 12193500) Baker River at Concrete or via other approved means. Results of monitoring shall be made available to the Commission as part of the report required by this article. In the event that the gaging site USGS #12193500 Baker River at Concrete is no longer operable and another gage is used which is influenced by extraneous conditions (gages of the Skagit River, or tributaries, wind action, fluctuations in flow from upstream projects, for example), these ramping compliance conditions will be revisited.

(H) Temporary Modification to Flows and Ramping Rates – Natural Events. The flow regime required by this article may be temporarily suspended and modified in the event that drought conditions, or some other natural event outside of the control of licensee, limit licensee's ability to comply with the requirements of this article. Prior to operating outside of the conditions of this article, licensee shall: 1) notify the ARG and, at least, NOAA Fisheries, USFWS, Ecology, WDFW, the Sauk-Suiattle Indian Tribe, the Swinomish Indian Tribal Community, the Upper Skagit Indian Tribe, and Skagit County; 2) hold a meeting to identify potential options and solutions, which may include, but not be limited to, controlled generation and specified release patterns to protect fish to the extent practicable; and 3) obtain approval from Ecology. Controlled generation and specified release pattern solutions include, but are not limited to, the following:

If the total Project live storage (Baker Lake and Lake Shannon combined) drops below 160,000 acre-feet, licensee shall notify the ARG and reduce generation at the Lower Baker Development to the minimum instream flow in effect at that time until Project storage has been restored above 160,000 acre-feet.

(I) Temporary Modification to Flows and Ramping Rates – Emergencies. In the event that a condition affecting the safety of the Project or Project works, as defined by 18 C.F.R. § 12.3(b)(4), occurs and does not allow for consultation to occur before responding, then flows and ramping rates may be temporarily modified following any consultation with Ecology that is possible given the exigencies of the event. If the flow is so modified, the licensee shall notify Ecology, the Commission and the ARG as soon as practicable after the condition is discovered, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency action procedure. Licensee shall provide all members of the ARG with a copy of any written report required by 18 C.F.R. § 12.10(a)(2) within ten (10) days of filing with the Commission.

(J) Reporting Violations. In the event of a violation of the flow release or ramping schedule, the licensee shall report such violations as soon as discovered, but no later than 24 hours. Email notification, or other reporting mechanisms, agreeable to the parties, shall be made to the Commission, Ecology, and the ARG. The licensee shall provide a follow-up report to the Commission, Ecology, and the ARG within two weeks of the incident stating what occurred, licensee's response, and any measures licensee proposes to reduce future similar occurrences.

(K) Annual Reporting. Within two years of license issuance and annually thereafter according to the schedule set forth in Article 102, the licensee shall prepare and submit a Flow Implementation Report (FIR) regarding implementation of this article's requirements. The licensee shall develop the report in consultation with the ARG, including specifically Ecology, USFWS, NOAA Fisheries, USDA-FS, WDFW, the Swinomish Indian Tribal Community, Upper Skagit Indian Tribe and Sauk-Suiattle Indian Tribe. The licensee shall provide a minimum of 60 days for the consulted entities to comment before filing the FIR with the Commission. The FIR shall include documentation of consultation, copies of comments, and licensee's responses based on Project-specific information.

(L) Conflicts. If a conflict arises between the ramping rates or flow regimes in Article 106 and the additional flood control measures implemented as a part of Article 107(b) or (c), then the licensee shall modify its operations to the minimum extent necessary to avoid the conflict in a manner to protect aquatic resources.

Article 107 Flood Storage

(a) The licensee shall so operate the Upper Baker River reservoir as to provide each year 16,000 acre-feet of space for flood regulation between October 15 and March 1 as replacement for the valley storage eliminated by the development. Utilization of this storage space shall be as directed by the District Engineer, Corps of Engineers. In addition to the above-specified 16,000 acre-feet, the licensee shall provide in the Upper Baker River reservoir space for flood control during the storage drawdown season (about September 1 to April 15) up to a maximum of 58,000 acre-feet as may be requested by the District Engineer, provided that suitable arrangements shall have been made to compensate the licensee for the reservation of flood control space other than the 16,000 acre-feet specified herein.

(b) Additionally, from October 1 to March 1, licensee shall operate the Lower Baker storage reservoir to provide up to 29,000 acre-feet of storage for flood regulation, at the direction of the District Engineer, Corps of Engineers, acting on behalf of the Secretary of the Department of the Army, subject to the following: (i) such storage shall be provided only in accordance with arrangements that are acceptable to the Corps of Engineers; and (ii) such storage shall be provided only after suitable arrangements have been made to compensate the licensee for the 29,000 acre-feet of storage for flood regulation specified herein.

(c) Licensee shall consult with the ARG, and specifically Skagit County and the Corps of Engineers, to develop means and operational methods to operate the Project reservoirs in a manner addressing imminent flood events and consistent with the requirements of the license. Appropriate means and methods may include, without limitation, additional reservoir drawdown below the maximum established flood pool. Licensee shall submit a report to the Commission within three years following license issuance describing any operational changes developed as a result of this consultation.

WDOE 401 Certification

5.2 INSTREAM FLOWS AND RAMPING RATES

The Project shall protect the designated uses listed in WAC 173-201A-200 by complying with the primary instream flow requirements as set forth by the Settlement Agreement and as approved by the WDFW. These requirements are as follows:

- 1) Interim Operations. Until the new turbine units are installed at Lower Baker Development, PSE shall conduct operations in accordance with the Interim Protection Plan (IPP) analyzed in the Biological Opinion for Endangered Species Act Section 7 Consultation for the Baker River Hydroelectric Project, NOAA Fisheries Consultation No. 2002/01040, or as approved by FERC. During this interim period, and effective upon license issuance, PSE shall use best efforts to protect other species of salmonids not addressed in the IPP by reducing the maximum flow from generation of 4,100 cfs to 3,200 cfs from the Lower Baker Development, or less if possible, during the spawning season, from September 1 to December 31. PSE shall investigate methods and make best efforts to reduce ramping rates towards the standards established in Table 1. In making its best efforts, PSE shall consider the best interests of the fish resources by limiting the rate of change of incrementally decreasing flows, limiting the amount of daily amplitude change, and minimizing the difference between spawning and incubation flows. These flows may not necessarily be preferred for energy generation, but will be within the operational limitations of the existing Lower Baker dam and powerhouse. PSE shall document their efforts to reduce ramping rates and the affect the various approaches have on water quality; this information shall be provided in the annual Flow Implementation Report (see *Annual Reporting*).

- 2) Instream Flows and Ramping Rates. PSE shall, beginning within 90 days following installation of the new generating units at the Lower Baker Development, operate the Project such that the minimum and maximum instream flows and ramping rates are consistent with those detailed in the Flow Implementation Plan (FIP), as required in Article 106 of the Settlement Agreement. Those flow, ramping rate, and pool elevation requirements are summarized in Table 1. In the event that the Army Corps' District Engineer (ACOE) directs PSE to operate the Lower Baker reservoir to provide up to 29,000 acre-feet of storage in accordance with Article 107, PSE shall implement the storage accordingly, following the construction of any necessary facilities modifications, and the FIP shall be revised to incorporate such changes.
- 3) The ramping rates shall apply on the Skagit River at transect 1, but will be measured on the Baker River based upon an established relationship shown on a table or curve to be developed by PSE by seeking input from the ARG, WDFW, the Upper Skagit Indian Tribe, the Sauk-Suiattle Indian Tribe, the Swinomish Indian Tribal, the United States Fish and Wildlife Service (USFWS), National Oceanic & Atmospheric Administration (NOAA) Fisheries, and Forest Service of the United States Department of Agriculture (USDA-FS), and in consultation with Ecology, and in accordance with any approval received from Ecology.

These ramping restrictions are to be in effect whenever the flow, as calculated at the Skagit River above the Baker River confluence, is less than or equal to 26,000 cfs.

- 4) Construction of New Units. To achieve this flow regime and meet these ramping rates, PSE shall, upon FERC approval of a construction plan and schedule: 1) install two or more new generating units with a total capacity of approximately 1500 cfs at the Lower Baker Development; and, if needed, 2) alter the existing facilities.

Table 1. Instream Flows and Ramping Rates

Lower Baker Development Engineering Module: 3 turbines (one 4,100 cfs turbine, two 750-cfs turbines)				Upper Baker Development
Period	Min. Instream Flow (cfs)	Max. Instream Flow (cfs) ⁽¹⁾	Downramping Rates ⁽²⁾	Max Daily Pool Level Change
Aug 1-31	1,000	3,600	1-inch per hour day and night	Max pool fluctuation ≤ 0.5 ft per rolling 24-hr period
Sep 1-3	1,000	3,600		
4-9	1,000	3,600		
10-30	1,000	3,200		
Oct 1-7	1,000	3,200 ⁽¹⁾		
8-15	1,000	3,200 ⁽¹⁾		
16-20	1,000	3,200 ⁽¹⁾		
21-31	1,200	3,600 ⁽¹⁾	2-inches per hour day and night	No constraints on max daily pool level changes
Nov 1-15	1,200	3,600 ⁽¹⁾		
16-30	1,200	3,600 ⁽¹⁾		
Dec 1-31	1,200	3,600 ⁽¹⁾		

Jan 1-31	1,200	5,600	0 inches per hour day and 2 inches per hour night	
Feb 1-15	1,200	5,600		
16-28	1,200	5,600		
Mar 1-31	1,200	5,600		
Apr 1-30	1,200	3,600		
May 1-8	1,200	3,600		
9-14	1,200	3,600		
15-22	1,200	3,600		
23-31	1,200	3,600		
Jun 1-15	1,200	5,600		
16-30	1,200	5,600		
Jul 1-31	1,200	5,600		
(1) Maximum release constraints eliminated when Baker Lake inflow > 10% monthly exceedance flow OR Skagit River above the Baker River confluence > 24,000 cfs October through December. (2) Downramping rates measured at the Baker River at Concrete, but based on stage changes observed at Transect 1 on the mainstem Skagit River below the Baker River confluence (RM 56.5).				No minimum flow requirements. No maximum instream flow constraint. No downramping limitations for environmental interests.

- 5) Monitoring Flow and Ramping Rates. Instream flows and ramping rates shall be monitored at the USGS gauge (Station 12193500) Baker River at Concrete or via other approved means. In assessing compliance with the requirements summarized in Table 1, ramping rates shall be calculated on a minimum of a 15-minute basis, not averaged over an hour. In the event that the gaging site USGS #12193500 Baker River at Concrete is no longer operable and another gauge is used which is influenced by extraneous conditions (gauges of the Skagit River, or tributaries, wind action, fluctuations in flow from upstream projects, for example), ramping compliance conditions should be modified to reflect site-specific conditions for that new gauge.
- 6) Annual Reporting. Within two (2) years of license issuance and annually thereafter according to the schedule set forth in Article 102 of the Settlement Agreement, PSE shall prepare and submit a Flow Implementation Report (FIR) regarding implementation of the requirements stated in Article 102 of the Settlement Agreement. PSE shall develop the report in consultation with the ARG, including specifically Ecology, USFWS, NOAA Fisheries, USDA-FS, WDFW, the Swinomish Indian Tribal Community, Upper Skagit Indian Tribe and Sauk-Suiattle Indian Tribe. PSE shall provide a minimum of 60 days for the consulted entities to comment before filing the FIR with FERC. The FIR shall include documentation of consultation, copies of comments, and PSE's responses based on Project-specific information.
- 7) Reporting Violations. In the event of a violation of the flow release or ramping schedule, PSE shall report such violations as soon as discovered, but no later than 24 hours. Email notification, or other reporting mechanisms, agreeable to the parties,

shall be made to FERC, Ecology, and the ARG. PSE shall provide a follow-up report to FERC, Ecology, and the ARG within two (2) weeks of the incident stating what occurred, PSE's response, and any measures PSE proposes to reduce future similar occurrences.

- 8) Temporary Modification to Flows and Ramping Rates – Natural Events. The flow regime required by this certification may be temporarily suspended and modified in the event that drought conditions, or some other natural event outside of the control of PSE, limit PSE's ability to comply with the requirements of this article. Prior to operating outside of the conditions of this article, PSE shall: 1) notify the ARG and, at least, NOAA Fisheries, USFWS, Ecology, WDFW, the Sauk-Suiattle Indian Tribe, the Swinomish Indian Tribal Community, the Upper Skagit Indian Tribe, and Skagit County; 2) hold a meeting to identify potential options and solutions, which may include, but not be limited to, controlled generation and specified release patterns to protect fish to the extent practicable; and 3) obtain approval from Ecology. An example of controlled generation and specified release pattern solutions is as follows:

If the total Project live storage (Baker Lake and Lake Shannon combined) drops below 160,000 acre-feet, PSE shall notify the ARG and reduce generation at the Lower Baker Development to the minimum instream flow in effect at that time until Project storage has been restored above 160,000 acre-feet.

- 9) Temporary Modification to Flows and Ramping Rates – Emergencies. In the event that a condition affecting the safety of the Project or Project works, as defined by 18 C.F.R. § 12.3(b)(4), occurs and does not allow for consultation to occur before responding, then flows and ramping rates may be temporarily modified following any consultation with Ecology that is possible given the exigencies of the event. If the flow is so modified, PSE shall notify Ecology, FERC and the ARG as soon as practicable after the condition is discovered, without unduly interfering with any necessary or appropriate emergency repair, alarm, or other emergency action procedure. PSE shall provide all members of the ARG with a copy of any written report required by 18 C.F.R. § 12.10(a)(2) within ten (10) days of filing with FERC.
- 10) Flow modifications. Flows in Table 1 may be modified, as appropriate to protect, mitigate, and enhance aquatic resources. If PSE obtains or receives new information that suggests different flows may better protect, mitigate, and enhance aquatic resources, then PSE will provide the new information to the ARG to allow consideration of a modification to Table 1. The ARG may propose a modification provided that the modification shall not require PSE to make additional funds available or to increase the total expected cost or other impact on Project generation or capacity, subject to the reserved authority of FERC or Ecology. Modifications may be proposed at any time prior to completion of the FIP or through the plan amendment process thereafter. Following approval by FERC, PSE shall implement the modifications as required by the FIP.

APPENDIX H

Interim Protection Plan

1. Baker River Flow Reduction Rate Limitation. Whenever the total Skagit River flow falls below 18,000 cfs as measured at the Skagit River USGS Gage No. 12194000 near Concrete, WA, operate the Baker Project to limit the average hourly rate of Baker River flow reduction attributable to the Baker Project to a rate not greater than 2,000 cubic feet per second (cfs).
2. Enhanced Storage/Split Chinook Spawning Season Flow Management Plan. Subject to and so as not to affect the existing Puget/Corps flood control agreement (and absent circumstances beyond Puget's reasonable control), operate the Baker Project during late summer/fall as follows:
 - a. Enhanced Storage:

Create 115,000 acre-feet of flood storage at the Baker Project by October 1. From October 1 through November 15, available flood storage will not, by virtue of fisheries directed operations, exceed 156,000 acre-feet (i.e., Puget will reserve up to 41,000 acre-feet of reservoir storage as a hedge against dry conditions). If the Skagit River flow measured at the USGS gage near Concrete is greater than 40,000 cfs during this period, and Baker Project storage exceeds 74,000 acre-feet, Puget will consult with the Corps regarding the timing of flow releases to reduce peak flow. If the flood peak can be significantly reduced, Puget will shut off all generation and store inflow until the flood crest estimated by the Corps passes the Baker River/Skagit River confluence.
 - b. Early Chinook Spawning Period September 15–October 15:
 - 1) When flow in the Skagit River, measured immediately above the confluence of the Baker River, is greater than 4,200 cfs, and inflow to Baker Lake is less than 2,500 cfs, Puget will store inflow to the Baker Project and avoid generation at the Lower Baker Development unless generation is needed to satisfy the Enhanced Storage measure.
 - 2) During periods of low flow (less than 4,200 cfs measured in the Skagit River immediately above the Baker River confluence), Puget will generate at least 3,200 cfs on a continuous basis not to exceed 156,000 acre-feet of evacuated reservoir storage. If Puget cannot meet the amplitude limitation without violating storage directives, Puget will still try to release no more water than the volume of the Skagit

Project load-following troughs (subject to high flow conditions outlined below).

- 3) During periods of high inflow to Baker Lake (greater than 2,500 cfs), Puget will generate power at the Lower Baker Development to restore available flood storage. Puget will initially generate to fill Skagit Project load-following troughs or generate continuously at the Lower Baker Development if needed to maintain 115,000 acre-feet of total flood storage.
- c. Late Chinook Spawning Period October 16–November 15:
- 1) During the majority of the 31-day late spawning period, Puget will generate power at the Lower Baker Development to restore available flood storage. Depending on the level of available flood storage on October 16, Puget will initially generate into Skagit Project load-following troughs or generate continuously at the Lower Baker Development if needed to restore available flood storage. If available flood storage capacity on October 16 is less than 74,000 acre-feet, Puget will generate continuously to restore flood storage capacity to that level. If the available flood storage capacity is greater than 74,000 acre-feet but less than the target level of 115,000 acre-feet, Puget will evacuate storage through generation at a rate needed to achieve the target storage level by November 15. Flow will preferentially be released during the Skagit Project troughs prior to releasing flows outside of these time periods.
 - 2) During periods of low flow (less than 6,000 cfs measured in the Skagit River immediately above the Baker River confluence), Puget will generate at least 3,200 cfs at the Lower Baker Development into Skagit Project load-following troughs or will generate at 3,200 cfs on a continuous basis not to exceed 156,000 acre-feet of evacuated reservoir storage.
 - 3) During periods of high inflow to Baker Lake (greater than 3,400 cfs), Puget will generate power at the Lower Baker Development to restore available flood storage. Puget will initially generate into Skagit Project load-following troughs or generate continuously at the Lower Baker Development if needed to maintain 115,000 acre-feet of total flood storage.

Emergency Exclusion

Flood control measures required to protect human life and property will override requested releases for fisheries benefits. In the event of an emergency power shortage, all

available water stored behind the Baker Project reservoirs may be used to generate power.

Monitoring and Reporting

Bi-annually, the licensee shall submit a report to the Commission and NMFS identifying and describing any instances of project operations that deviate from the proposed conservation measures.