

STIPULATION AND IMPLEMENTATION AGREEMENT
for
HELLS CANYON COMPLEX HYDROELECTRIC PROJECT

This Stipulation and Implementation Agreement (“Agreement”) is entered between the State of Oregon, by and through the Office of the Governor, the Oregon Department of Environmental Quality (“ODEQ”) and Oregon Department of Fish and Wildlife (“ODFW”) (collectively referred to as “OR”); the State of Idaho by and through the Office of the Governor, the Idaho Department of Environmental Quality (“IDEQ”) and the Idaho Department of Fish and Game (“IDFG”) (collectively referred to as “ID”); and the Idaho Power Company (“IPC”), an Idaho corporation, related to water quality certification under section 401 of the Clean Water Act, 33 U.S.C. § 1341 (“§ 401” or “Section 401”), and the Federal Energy Regulatory Commission (“FERC”) relicensing of the Hells Canyon Complex Hydroelectric Project (the “Project”). ODEQ and IDEQ are collectively referred to herein as “the DEQs.” The Offices of the Oregon and Idaho Governors, ODEQ, ODFW, IDEQ, IDFG, and IPC are referred to herein individually as a “Party” and collectively as “the Parties.”

RECITALS

IPC owns and operates the Project, comprised of Brownlee, Oxbow, and Hells Canyon Dams, reservoirs, and power plants on a reach of the Snake River that forms the border between Idaho and Oregon. The Project is operated under a FERC license issued under the Federal Power Act as FERC Project No. 1971. The original license for the Project expired on July 31, 2005, and the Project has been operated under annual licenses, issued by FERC, since that date.

On July 21, 2003, IPC applied to FERC for a new license (“New License”) to continue operating the Project. As portions of Project lands and facilities are located in Idaho and Oregon, and the Project discharges water to the Snake River in both Oregon and Idaho, IPC filed applications with ODEQ and IDEQ for § 401 certification.

The DEQs issued Draft § 401 Certifications in 2016 that contained conditions related to compliance with the respective state water quality standards. Certain of the temperature and dissolved oxygen measures included in the Section 401 certifications issued by ODEQ and IDEQ are outside of the existing Project boundary. While the Parties intend that such measures are and will be designed to be actions that do not result in an expansion of the Project boundary, the Parties further agree that there should be a contractual remedy for the DEQs in the event FERC determines that it has no jurisdiction to enforce such temperature and dissolved oxygen measures.

The Parties also recognize that the States of Idaho and Oregon have independent sovereignty over their respective fish and wildlife resources while also recognizing that

cooperation and collaboration is warranted where activities occur on a border river that may affect the water quality or sovereign interest of the other state.

The 2016 draft certifications issued by ODEQ and IDEQ were not identical, and ODEQ's inclusion of fish-related measures in its certification led to a disagreement between the Parties. This Agreement is intended to resolve that disagreement through an agreement with the DEQs to issue 401 certifications that include no requirements for fish introduction or reintroduction and are substantively similar to Attachments D and E, and IPC's agreement to carry out specified fish-related measures set forth in Attachment A. This Agreement does not restrict either OR or ID from advocating their respective state policies with regard to fish and wildlife resources.

The measures described in Attachment A to this Agreement have been developed in consultation with ODFW and IDFG and are to be implemented by IPC in cooperation with those state agencies as part of this settlement. ODFW and IDFG are executing this settlement to demonstrate their support for this settlement and as the respective state agencies that are expected to work with IPC in the implementation of the fish related measures that are a part of the settlement.

Accordingly, in the interest of cooperation, this settlement is intended to facilitate issuance of §401 certifications, the conditions of which the Parties expect to be incorporated into the New License. The Parties intend that this settlement will be evaluated by the DEQs and by the Oregon HART process as part of IPC's proposed activity, and that other than the monitoring and studies set forth in Attachment D, section IX, no other fish production, placement, monitoring or studies, fish habitat restoration or evaluation, or fish collection device or facility will be necessary to protect designated beneficial uses or otherwise meet Oregon's or Idaho's narrative water quality standards, antidegradation policy, or other appropriate requirements of state law.

Activities conducted within state tributaries utilizing fish allocated to that state pursuant to existing law or agreement are, to the extent consistent with existing state or federal law, within the exclusive authority and control of that state. Accordingly, with respect to all fish placement within state tributaries pursuant to the terms of this Agreement, which applies only to placement of non-ESA listed fish, the respective state maintains sole authority over approval of such placement by IPC, any associated plans, studies or reports, and any modifications thereto.

AGREEMENT TERMS AND CONDITIONS

In consideration of the mutual promises set forth herein, the receipt and sufficiency of which are hereby acknowledged, the Parties agree to the following:

A. Incorporation by Reference and Attachments

1. Each of the following documents is hereby incorporated by this reference into this Agreement:
 - a. Attachment A – Settlement Terms
 - b. Attachment B – Idaho Project Oversight Payment
 - c. Attachment C – Oregon Project Oversight Payment
2. The DEQs' respective § 401 certifications as they exist as of the date of execution of this Agreement are Attachments hereto for the purposes of defining the scope of the Parties' rights under Section F.4, J, and O.4 of this Agreement, but shall not be considered as incorporated by reference into this Agreement for any other purpose.
 - a. Attachment D – Oregon Department of Environmental Quality 401 Certification.
 - b. Attachment E – Idaho Department of Environmental Quality 401 Certification.

B. Oregon HART Process

1. OR acknowledges that IPC intends to enter into a separate settlement agreement with the Oregon Water Resources Department ("OWRD") related to its issuance of a water right for the Project and OWRD's participation on the Hydroelectric Application Review Team ("HART"). Consistent with Section D below, OR shall recommend the final unified state position and proposed final order on reauthorization of water right be consistent with the conditions of ODEQ's § 401 certification and include the terms and conditions of Attachment A. OR shall not recommend that the water right certificate for the Project contain any provision for fish introduction or reintroduction above Hells Canyon Dam. IPC reserves all rights, claims, or defenses in any forum related to the HART or water right processes.
2. IPC and ID understand and agree that notwithstanding that the State of Oregon by and through the Office of the Governor is a party to this Agreement that only the Governor, ODEQ, and ODFW are bound by the terms of this Agreement, and no action may be taken to enforce this

Agreement against any agency or department of the State of Oregon other than ODEQ or ODFW.

C. Enforcement of this Agreement

1. The Parties agree that they are bound by the terms of this Agreement and that any Party may seek enforcement of any commitment of any other Party herein only if the Parties first complete dispute resolution under Section I.
2. ODEQ or IDEQ may seek specific performance under this Agreement of only the temperature or Brownlee reservoir dissolved oxygen conditions in sections II and III of their respective §401 certifications, and only if:
 - a. the Parties first complete the dispute resolution process under Section I;
 - b. FERC concludes in writing that it has no jurisdiction to enforce, in whole or in part, the temperature or Brownlee reservoir dissolved oxygen conditions in the FERC license; and
 - c. such specific performance is pursued in a single proceeding, provided that no Party will argue that both ODEQ and IDEQ are indispensable parties to or are otherwise required to be joined in such proceeding.
3. By agreeing to enforcement of the terms of this Agreement as set forth in this Section C, no Party waives its right to any other available process or remedy to enforce conditions within the DEQs' respective § 401 certifications and no party waives any defenses to such authority, enforcement process, or remedy.
4. Except with respect to enforcement of the § 401 certifications under Section C.2, the Parties reserve all claims and defenses, in any forum, as to whether FERC has exclusive jurisdiction and authority to enforce those portions of the § 401 certifications that are included in the FERC license.

D. No Inconsistent Actions

1. Following the Effective Date of this Agreement:
 - a. The DEQs shall issue § 401 Certifications which, other than the monitoring and studies set forth in section IX of Attachment D, will not contain any condition relating to the introduction or reintroduction of fish above, below, or within the Project, or fish production, placement, monitoring or studies, fish habitat restoration or evaluation, or fish collection.

- b. OR and ID agree not to make, nor to encourage or collaborate with any non-party to make, any recommendation, condition, prescription, determination, or comment with respect to spring Chinook salmon or summer steelhead in any proceeding relating to the New License that materially conflicts with, adds to, omits portions of, or prevents or renders impracticable implementation of any Party's obligations under Attachment A of this Agreement during the first twenty (20) years of the term of the New License. For the purposes of this Section D, an increase in cost for the performance of any obligation set forth in Attachment A will not be deemed to prevent or render impracticable implementation of any Party's obligations; provided further that as used in this Agreement a determination or comment does not include any Party's findings, evaluation, or assessment of impacts on fish resources.
2. Nothing in this Agreement shall be construed as limiting OR's or ID's advocacy that is related to any aspect of its sovereignty or state policies, nor any party's advocacy in opposition. Without limiting the generality of the foregoing clause, the Parties agree that:
- a. No Party shall be required to withdraw comments previously filed before FERC relating to the New License; and,
 - b. Except for such recommendations, conditions, prescriptions, determinations, or comments related to spring Chinook salmon or summer steelhead in any proceeding relating to the New License for the first twenty (20) years of the New License , ODFW or IDFG may:
 - i. submit comments on an Environmental Impact Statement ("EIS") for the Project that are substantively identical or are otherwise comparable and within the scope of issues addressed in its prior EIS comments;
 - ii. submit comments or otherwise participate in Endangered Species Act consultations consistent with ODFW's or IDFG's, as applicable, prior Project EIS comments and previously filed Federal Power Act section 10(j) recommendations ("10(j) recommendations");
 - iii. make 10(j) recommendations consistent with prior filings, meaning without recommending any additional measures beyond those originally filed yet updated to reflect current science; and

- iv. provide to OWRD in the HART process for inclusion in the final unified state position recommendations consistent with its prior filed 10(j) recommendations, as described above, the ODEQ 401 certification, and the terms and conditions of Attachment A.

E. FERC Consideration of Settlement

Within one hundred and twenty (120) calendar days after the Effective Date or another reasonable date agreed to by the Parties, IPC, on behalf of the Parties, shall file an Offer of Settlement, including an Explanatory Statement cooperatively drafted by IPC, OR, and ID, consistent with normal FERC procedures for doing so, and the Parties shall request that FERC: (i) approve the Offer of Settlement; (ii) issue a new license for the Project that incorporates – without material modification – the commitments of IPC set forth in Attachment A of the Agreement, through the inclusion of the Proposed License Articles (to be cooperatively drafted by IPC, OR and ID); and (iii) consider the obligations in DEQs 401 Certifications and this Agreement in its environmental review.

F. Application for and Issuance of § 401 Certifications

1. The Parties intend that nothing in this Agreement should cause expansion of the Project boundary.
2. IPC's proposed actions under Attachment A to this Agreement will be evaluated by OR and ID, but shall not be included as § 401 conditions.
3. This Agreement does not diminish opportunities for public input or comment otherwise provided for by law, and the Parties further recognize the DEQs may not prejudice or disregard public comments received upon the release of any draft § 401 certification. The DEQs specifically reserve the right to modify or amend such draft, as authorized under existing law, as a result of such public input or comment, but not otherwise. Subject to section F.5, IPC reserves the right to seek review of or contest any such modification or amendment in any available forum.
4. Unless the terms and conditions of the final § 401 certifications issued by ODEQ or IDEQ include any material modification to an existing requirement or new substantive requirement not set forth in Attachments D or E, IPC agrees not to seek administrative or judicial review of the final § 401 certifications and not to contest the incorporation of the § 401 conditions, if any, into the New License.
5. IPC agrees not to seek administrative or judicial review in any forum of any Adaptive Management adjustments to the programs or measures that either of the DEQs requires IPC to implement in order to comply with any conditions in the § 401 certifications, except to the extent an adjustment or measure required by one DEQ conflicts with an adjustment or measure

required by the other DEQ. In that event the Dispute Resolution provisions of Section I shall be implemented. For purposes of this Agreement, Adaptive Management means a structured approach to making decisions and adjustments, as described in the final respective state § 401 certifications, to the programs or measures in response to new information and data developed or obtained during the term of the New License. Adaptive Management does not involve changing any compliance objective in the DEQs' respective § 401 certifications, including any water quality standard or TMDL on which such compliance objective is based. This Agreement does not bar IPC from seeking administrative or judicial review, in any applicable forum, on the question of whether any required adjustments are within the scope and terms of the § 401 certifications; provided that the Parties must first complete dispute resolution under Section I before IPC may seek such administrative or judicial review.

6. Notwithstanding any other provision of this Agreement, should any other person or entity initiate an administrative or judicial review of either of the § 401 certifications, this Agreement, or the New License, any Party may participate as it deems appropriate in any such administrative or judicial review with regard to all issues raised by such other person or entity. Consistent with Section D above, each Party agrees to support the validity and enforceability of the § 401 certifications and this Agreement.

G. Implementation of the § 401 Conditions

Upon FERC's issuance of the New License, IPC shall comply with all of the temperature and Brownlee reservoir dissolved oxygen conditions included in the final § 401 certifications for the Project, including without limitation the Adaptive Management provisions related to temperature and Brownlee reservoir dissolved oxygen; provided that, if an administrative process or judicial proceeding results in any material modification to an existing requirement or new substantive requirement in the 401 certifications not set forth in attachments D or E, IPC may terminate this agreement under section O.4.

H. Implementation of Attachment A to this Agreement

1. IPC shall, to the maximum extent practicable, integrate its obligations set forth in Attachment A into any plans, proposals, or proposed activities for review by other agencies.
2. Upon FERC's issuance of the New License, each Party shall comply with all terms and conditions set forth in Attachment A. If a condition in the New License or a requirement of other applicable state or federal law prohibits or otherwise impairs IPC's ability to implement the measures in Attachment A, the Parties shall confer in good faith to reach agreement on alternative(s) to avoid any such impairment and otherwise integrate all requirements of the New License with the terms of this Agreement to

maintain the Parties' bargained-for benefits herein. For the purposes of this Section H, an increase in cost for the performance of any obligation set forth in Attachment A due to other federal requirements will not be deemed to prohibit or otherwise impair IPC's ability to implement such measures.

3. Unless and until the Parties agree to modifications to this Agreement, and provided no other Party is in violation of the terms and conditions of this Agreement, IPC shall perform its obligations set forth in Attachment A, provided that IPC shall not be required to continue to perform such obligations so long as IPC is advised by a court or federal agency of competent jurisdiction that doing so will violate or be prohibited by federal law or other federal requirements.

I. Coordination and Dispute Resolution Process

1. ODEQ and IDEQ shall use their best efforts to cooperatively administer and avoid conflicts in oversight of their respective § 401 certifications, including any Adaptive Management adjustments thereto.
2. Except as provided in Section I.3, the Parties agree to utilize the following process in the event of a dispute among any of the Parties, including without limitation a dispute that arises under Section D or because IPC receives conflicting decisions from the DEQs regarding implementation of this Agreement or a § 401 condition, including any Adaptive Management adjustments thereto.
 - a. At the request of any Party, each Party shall cooperate in good faith to promptly schedule, attend, and participate in resolution of the dispute.
 - b. A Party that wishes to initiate the dispute resolution process herein shall give written notice to the other Parties within thirty (30) calendar days of the Party's actual knowledge of the act, event, or omission giving rise to the dispute. Such notice shall describe the dispute with specificity.
 - c. Within thirty (30) calendar days of the notice under Section I.2.b, the Parties shall convene one meeting or conference call to attempt to resolve the dispute at the level of implementing staff for each Party.
 - d. If the dispute is not resolved within fifteen (15) calendar days after the first meeting or call under Section I.2.c, the Parties shall convene a second meeting or conference call within forty-five (45) calendar days of the first meeting or call to attempt to resolve the dispute at the level of supervisory staff for each Party.

- e. If the dispute is not resolved within fifteen (15) calendar days of the second meeting or call under Section I.2.d, within a reasonable time thereafter, ODEQ and IDEQ shall give written notice to IPC of their resolution of the disputed matter. Such written notice shall provide detail as to the basis for the DEQs' resolution. IPC reserves any claims, defenses, or rights of review, in any forum, regarding such resolution.
3. Upon the written consent of all Parties, the Parties may forego the process set forth in Section I.2 and seek to resolve a dispute among any of the Parties by mediation through a mediator mutually agreed upon by the Parties. Any cost of mediation under this Section I.3 shall be divided equally among the Parties.
4. If ODEQ and IDEQ do not agree on a final resolution of any dispute among the Parties, ODEQ and IDEQ reserve their respective authorities under the Clean Water Act and state law to make decisions or require actions on the disputed matter. IPC reserves any claims, defenses, or rights of review regarding ODEQ's or IDEQ's respective authority, decision, or action.

J. Dismissal of TMDL Challenge and Challenge Related to Oregon Fish Passage Laws

1. IPC shall dismiss *Idaho Power Company v. Oregon Department of Environmental Quality*, Case No. 03-678, in the Circuit Court for Baker County, Oregon, upon the later of the following dates: (i) thirty (30) calendar days after expiration of any time period for administrative or judicial review of the final § 401 certifications without review having been sought by a third party, or (ii) thirty (30) calendar days after conclusion of administrative or judicial review, which conclusion affirms the final § 401 certifications without requiring imposition of § 401 certification conditions pertinent to temperature or Brownlee reservoir dissolved oxygen that do not make any material modification to an existing requirement or add any substantive new requirement to the terms and conditions of sections II and III of Attachments D or E.
2. IPC shall dismiss *Idaho Power Co. v. FERC*, Case No. 18-1046, in the U.S. Court of Appeals for the District of Columbia, thirty (30) calendar days after the completion of final state administrative processes and judicial review of those state administrative processes resulting in requirements that do not make any material modification to an existing requirement or add any substantive new requirement to the terms and conditions of Attachments D or E. OR and ID will concur in motions by IPC to hold this matter in abeyance until that time.

K. No Third-Party Beneficiaries

This Agreement does not create any right or benefit for third parties and is enforceable only by the Parties.

L. General Stipulations and Reservations

1. This is a settlement of disputed claims and is not an admission of liability by any Party.
2. Nothing in the Agreement, nor any measures, actions, or processes implemented with regard thereto, shall be deemed or considered to be a predetermination or admission by any Party as to whether passage, introduction, or reintroduction of anadromous fish should or should not occur or that such efforts would otherwise be successful if initiated.
3. The Parties agree that by entering into this Agreement IPC neither admits nor assumes responsibility for any water quality issues, including but not limited to temperature, dissolved oxygen, resource, or habitat issues, apart from provisions of this Agreement, and 401 certifications may address. Subject to the terms of this Agreement, all Parties reserve all claims, rights, and defenses as to the causative factors for such issues.
4. This Agreement is not intended and shall not be construed to affect or limit OR or ID from complying with their obligations under applicable laws, nor from considering and responding to comments received in any environmental review or regulatory process related to the Project. This Agreement does not predetermine the outcome of any environmental or administrative review or appeal process related to the Project.
5. The Parties acknowledge that each Party has participated in the drafting of this Agreement, and that any ambiguity should not be construed for or against any Party on account of such drafting.
6. Subject to Section J.1, IPC reserves the right to participate or challenge in any applicable forum the establishment of new water quality standards, TMDLs, or load allocations, or any modification thereto, regardless of whether they may affect, or potentially result in modifications to, the § 401 certification conditions.
7. Notwithstanding any other provisions of this Agreement, this Agreement does not bar any Party, after issuance of the § 401 certifications, from seeking changes to the Snake River-Hells Canyon TMDL, adoption of water quality standards, approval by EPA of water quality standards, or performance of a use attainability analysis. If such procedures result in a revised water quality standard or TMDL load allocation applicable to the Project, all Parties shall confer and attempt to reach agreement on any modification to the § 401 certifications necessary to integrate such revised

water quality standard or TMDL load allocation. Notwithstanding any term herein to the contrary, any modifications to a 401 certification agreed to by the Parties to integrate any revised water quality standard or TMDL load allocation does not allow IPC to terminate this Agreement pursuant to Section O.4.

8. ODEQ and IDEQ, by entering this Agreement, do not waive any authority to the extent allowed under applicable law to require conditions in addition to those required under the § 401 certifications as necessary to assure compliance with all present and future water quality standards and TMDL allocations, or to protect beneficial uses over the duration of the New License, including any annual license issued after the New License. The DEQs shall issue any such modifications in writing. IPC reserves any claims, defenses, or rights of review, in any forum, regarding ODEQ's or IDEQ's respective action under this Section L.8.
9.
 - a. ODEQ and IDEQ reserve the right to modify the § 401 certifications to the extent allowed under applicable law, provided that for the first twenty (20) years of the New License such modifications shall not include any condition requiring fish introduction or reintroduction.
 - b. OR and ID reserve the right to request that FERC reopen or amend the New License to consider license modifications they deem necessary to assure compliance with water quality standards and other appropriate requirements of state law based on New Information, including without limitation TMDL allocations and protection of designated beneficial uses. New Information is defined as new material information that was not known and could not have reasonably been known by the applicable Party on the Effective Date.
 - c. The Parties agree to provide written notice to all other Parties before initiating such modification, decision, or action and, upon request by any Party, to initiate the dispute resolution process set forth in section I of this Agreement. This Section L.9 does not apply to any Adaptive Management set forth in the § 401 certification. IPC reserves any claims, defenses, rights of review, right to oppose any such action or to seek administrative or judicial review, in any forum, regarding ODEQ's or IDEQ's respective decision or action.
 - d. Consistent with Section D above, the Parties understand and agree that this section L.9 does not allow OR or ID to make any recommendation, condition, prescription, determination, or comment with respect to spring Chinook salmon or summer steelhead that materially conflicts, adds to, omits portions of, or prevents or renders impracticable implementation of any Party's obligations under Attachment A of this Agreement during the first twenty (20) years of the term of the New License.

10. The Parties understand and agree that this Agreement has no effect on any existing or prior agreements between the Parties; provided further that the Parties' obligations herein are supplementary to any other obligations each may have in other binding agreement(s), if any.

M. Force Majeure

No Party will be liable to any other Party for breach of this Agreement as a result of a failure to perform or for a delay in performance of any provision of this Agreement if such performance is delayed or prevented by Force Majeure. "Force Majeure" means any cause that is beyond the performing Party's control, and without the performing Party's fault or negligence. Notwithstanding the foregoing, increased cost for the performance of any action required by this Agreement by itself does not constitute Force Majeure. The Party whose performance is affected by Force Majeure will notify the other Parties in writing within seven (7) calendar days after becoming aware of any event that such performing Party contends constitutes Force Majeure. Such notice shall identify the event causing the delay or anticipated delay, estimate the anticipated length of delay, state the measures taken or to be taken to minimize the delay, and estimate the timetable for implementation of the measures. The performing Party will make reasonable efforts to resume performance of this Agreement promptly and, when able, to resume performance and give all other Parties written notice to that effect. If, despite its reasonable efforts, the performing Party is unable to resume performance, the Parties shall meet and confer on reasonable alternatives to performance.

N. Terms of § 401 Certifications and Agreement Necessary to Satisfy State Law

ODEQ and IDEQ have evaluated IPC's proposed actions and have determined that compliance with the terms of their respective § 401 certifications and this Agreement are necessary to meet water quality standards and other appropriate requirements of State law.

O. Effective Date, Duration, and Termination of this Agreement

1. The effective date of this Agreement is the date of the latest signature below ("Effective Date").
2. This Agreement shall remain in effect for the duration of the New License, including any amendments thereto and any annual license issued after the New License.
3. The Parties may terminate this Agreement by the written consent of each party.
4. Any Party may unilaterally terminate this Agreement only if ODEQ or IDEQ issues a final § 401 certification, or there is a final ruling by any administrative or judicial tribunal, where either DEQ's final § 401

certification or applicable final ruling, results in any material modification to an existing requirement or any substantive new requirement to the terms and conditions of Attachments D or E. A Party seeking to unilaterally terminate this Agreement must complete the dispute resolution process under Section I and must initiate dispute resolution within thirty (30) calendar days of the date of the applicable § 401 certification or final ruling. Termination under this Section O.4 is effective upon receipt by all other Parties of written notice from the terminating Party stating that dispute resolution has been completed without success.

5. If this Agreement is terminated, ODEQ and IDEQ reserve the right to modify or revoke their respective § 401 certifications consistent with state and federal law, and IPC reserves any claims, defenses, or rights of review in any applicable forum regarding ODEQ's or IDEQ's respective authority, decision, or action.

P. Payment for Oversight of § 401 Certifications

1. IPC shall make the payments outlined below and more particularly described in Attachments B and C.
 - a. IDAHO: IPC agrees to provide to IDEQ an oversight payment sufficient to cover the costs incurred by the agency in administering IDEQ's § 401 certification as particularly described in Attachment B.
 - b. OREGON: IPC agrees to pay ODEQ in the manner and amount specified by state law and particularly described in Attachment C.
2. The Parties agree that such payments shall be in lieu of and not in addition to any payments required by the DEQs related to issuance and implementation of the states' § 401 certifications of the Project provided for pursuant to state law.
3. If this Agreement is terminated, IPC reserves all claims, defenses, or rights of review in any applicable forum as to any assertions that Oregon or Idaho state law requires the payments described in this Section P.

Q. Counterparts

This Agreement may be executed in several counterparts (facsimile or otherwise) all of which when taken together shall constitute one agreement binding on all Parties, notwithstanding that all Parties are not signatories to the same counterpart. Each complete copy of this Agreement shall constitute an original.

R. Section Titles for Convenience Only

The titles for the sections and paragraphs are used only for convenience of reference and organization, and will not be used to modify, explain, or interpret any of the provisions of this Agreement or the intentions of the Parties.

S. Limitations

This Agreement establishes no principle or precedent with regard to any issue addressed in this Agreement or otherwise limits any Party's participation in any other pending or future licensing proceeding. This Agreement shall not be offered in evidence or cited as precedent by any Party to this Agreement in any judicial litigation, arbitration, or other adjudicative proceeding, except in a proceeding relating to the New License or to establish the existence of or to enforce or implement this Agreement. This Section S shall survive any termination of this Agreement.

T. Entire Agreement

This Agreement sets forth the entire agreement between the Parties related to the subject matter of this Agreement and may not be modified without the written consent of all Parties.

CONTINUED ON NEXT PAGE

U. Signatures

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, have authority to execute it, and agree to be bound by its terms and conditions.

IDAHO POWER COMPANY

David T. Anderson

4/12/19
Date

State of Oregon, by and through
THE GOVERNOR

Date

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

OREGON DEPARTMENT OF FISH AND WILDLIFE

Date

State of Idaho, by and through
THE GOVERNOR

Date

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

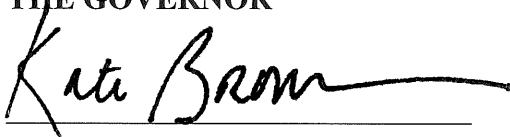
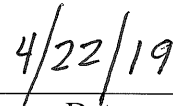
IDAHO DEPARTMENT OF FISH AND GAME

Date

U. Signatures

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, have authority to execute it, and agree to be bound by its terms and conditions.

IDAHO POWER COMPANY

_____	_____
	Date
State of Oregon, by and through THE GOVERNOR	
	
_____	_____
	Date

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

_____	_____
	Date

OREGON DEPARTMENT OF FISH AND WILDLIFE

_____	_____
	Date

**State of Idaho, by and through
THE GOVERNOR**

_____	_____
	Date

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

_____	_____
	Date

IDAHO DEPARTMENT OF FISH AND GAME

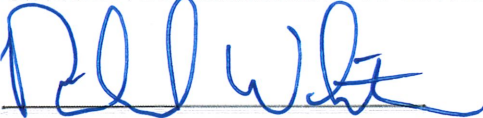
_____	_____
	Date

U. Signatures

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, have authority to execute it, and agree to be bound by its terms and conditions.

IDAHO POWER COMPANY

Date
**State of Oregon, by and through
THE GOVERNOR**

Date
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY


Date 4/17/19

OREGON DEPARTMENT OF FISH AND WILDLIFE

Date
**State of Idaho, by and through
THE GOVERNOR**

Date

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

IDAHO DEPARTMENT OF FISH AND GAME

Date

U. Signatures

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, have authority to execute it, and agree to be bound by its terms and conditions.

IDAHO POWER COMPANY

Date
**State of Oregon, by and through
THE GOVERNOR**

Date
OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Date
OREGON DEPARTMENT OF FISH AND WILDLIFE
Curtis E. Miller 4/18/19

Date

**State of Idaho, by and through
THE GOVERNOR**

Date
IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

IDAHO DEPARTMENT OF FISH AND GAME

Date

U. Signatures

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, have authority to execute it, and agree to be bound by its terms and conditions.

IDAHO POWER COMPANY

Date
**State of Oregon, by and through
THE GOVERNOR**


Date

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

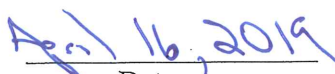
Date

OREGON DEPARTMENT OF FISH AND WILDLIFE

Date
**State of Idaho, by and through
THE GOVERNOR**



Date



Date

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

IDAHO DEPARTMENT OF FISH AND GAME

Date

U. Signatures

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, have authority to execute it, and agree to be bound by its terms and conditions.

IDAHO POWER COMPANY

Date
**State of Oregon, by and through
THE GOVERNOR**

Date

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

OREGON DEPARTMENT OF FISH AND WILDLIFE

Date
**State of Idaho, by and through
THE GOVERNOR**

Date

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

 _____
Date 4/17/2019

IDAHO DEPARTMENT OF FISH AND GAME

Date

U. Signatures

THE PARTIES, by execution of this Agreement, hereby acknowledge that their signing representatives have read this Agreement, understand it, have authority to execute it, and agree to be bound by its terms and conditions.

IDAHO POWER COMPANY

Date
**State of Oregon, by and through
THE GOVERNOR**

Date

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

OREGON DEPARTMENT OF FISH AND WILDLIFE

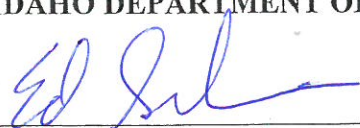
Date
**State of Idaho, by and through
THE GOVERNOR**

Date

IDAHO DEPARTMENT OF ENVIRONMENTAL QUALITY

Date

IDAHO DEPARTMENT OF FISH AND GAME



Date
4/17/2019

ATTACHMENT A – Settlement Terms

A. General Terms

1. Parties agree that the obligations herein are not intended to result in any additional constraints or liabilities associated with the Endangered Species Act (ESA) or Clean Water Act (CWA) on land or water use, or landowners or water users in Oregon or Idaho.
2. Parties agree that with respect to all fish placement within state tributaries pursuant to the terms herein, the respective state maintains sole authority among parties to this Settlement over approval of such placement by IPC, and any associated plans, evaluations, studies or reports, and any modifications thereto.
3. Parties further agree that activities conducted within state tributaries utilizing fish that are allocated to that state pursuant to existing law or agreement are, to the extent consistent with existing law and management commitments with non-party sovereigns, within the exclusive authority and control of that state.
4. Notwithstanding any term to the contrary, the Parties agree that IPC's obligations related to fish placement set forth herein are limited to placement of non-ESA listed spring Chinook salmon and summer steelhead species; provided further that should there be any change of law or listing status related to species¹ placed above or within the Project, all Parties agree that the obligations set forth in sections D and E of this Attachment A will be suspended immediately. In this circumstance, the Parties will meet immediately to discuss potential amendments to this Attachment A to maintain bargained-for benefits of the Agreement.

B. Supplementation of Spring Chinook Salmon Hatchery Production

1. Parties understand and agree that the spring Chinook salmon produced at the Rapid River Hatchery are not listed under the Endangered Species Act (ESA) because this stock is no longer considered to be part of the Snake River Evolutionarily Significant Unit.
2. Within three (3) years of FERC's issuance of a new license for the Project, IPC shall increase the hatchery production capacity of spring Chinook salmon to provide for an annual production of 4,000,000 spring Chinook salmon smolts, (i.e. an increased production capacity of approximately 800,000 smolts over the previously realized capacity of 3.2M smolts), and maintain and renovate, as necessary, the hatchery infrastructure necessary to accommodate and sustain this production (e.g., hatchery water intake, incubation building, early rearing raceways, late juvenile rearing and adult holding ponds). The Parties understand and agree

¹ "Species" means any group or population of wildlife that interbreeds and is substantially reproductively isolated including an evolutionary significant unit, a subspecies or a geographic race

that IDFG is responsible for operation and maintenance of the Rapid River Hatchery and that IPC is responsible for funding IDFG's operation and maintenance of the Rapid River Hatchery, including the additional production contemplated herein.

3. Within six (6) years of FERC's issuance of a new license for the Project, IPC shall annually release the additional 800,000 spring Chinook salmon smolts consistent with the *United States v. Oregon* allocation strategy in place at the time of these smolt releases. The current allocation strategy for additional smolt releases is described in the 2018-2027 *United States v. Oregon* Management Agreement, Table B1, footnote 9, which currently states any production at Rapid River Fish Hatchery above 2.5 million will be stocked in Hells Canyon/Snake River and Little Salmon River, with alternating outplants of 100,000 in Hells Canyon and 50,000 in the Little Salmon River. Parties agree that this allocation of the additional production of up to 800,000 spring Chinook salmon smolts will follow the schedule in Table 1, below, until an agreement by the Fishery Managers in the Snake Basin alters that allocation. Parties also agree to work together regarding federal ESA compliance for these additional smolt releases, and recognize that existing production and allocations have priority over new production if federal authorization constraints arise.

Table 1. Default outplant allocation of additional spring Chinook salmon production consistent with the 2018 – 2027 *United States v. Oregon* Management Agreement.

Additional production Total	Hells Canyon Allocation	Little Salmon River Allocation
50,000	50,000	-0-
200,000	150,000	50,000
350,000	250,000	100,000
500,000	350,000	150,000
650,000	450,000	200,000
800,000	550,000	250,000

4. Parties agree that if IPC is unable to provide for the increased capacity at the Rapid River Hatchery to provide 4,000,000 spring Chinook salmon smolts after completion of renovations, as described in section B.2 above, then IPC shall initiate the dispute resolution process set forth in section I of the Agreement to determine alternatives, in lieu of the capacity increase, in order to maintain

bargained-for benefits of this Agreement (i.e., equivalent alternative production or other options parties agree is equivalent benefit at that time). On an annual basis, if, as one example, IPC is unable to provide for the additional 800,000 spring Chinook salmon smolts, after its completion of that increase in capacity, then the Parties agree that IPC will reimburse ODFW and IDFG at \$0.44/smolt in 2019 dollars for the difference between the number of smolts produced and the 800,000 target split equally between ODFW and IDFG. Provided, however that such a reimbursement shall not apply if IPC's failure to achieve that target is the result of a force majeure event, as defined in section N of the Agreement (including, for example, a disease outbreak not related to the operation and maintenance of the facility or if fish managers fail to secure the necessary brood stock to achieve the target).

C. Upstream Adult Collection Facility at Hells Canyon Dam

1. Consistent with fishway prescriptions but no later than five (5) years after FERC's issuance of a new license for the Project, IPC shall modify the existing Hells Canyon trap to construct facilities sufficient to allow safe and efficient means of on-site sorting, handling, enumeration, and holding of multiple species of resident and anadromous fish, including but not limited to a covered fish sampling area and research area, as well as means of returning wild fish to the river after sorting, scanning of fish for marks or tags, and capture and transport of resident salmonids and other species.

2. Parties recognize that ODFW, IDFG and other appropriate management partners, including but not limited to the Nez Perce Tribe, determine overall annual Hells Canyon trapping operations and fish allocations outside of this agreement to help meet multiple objectives, such as mainstem fisheries, Rapid River Hatchery broodstock, bull trout movement, tribal subsistence and state tributary adult placement objectives. Parties also recognize that increased spring Chinook salmon production capacity at Rapid River hatchery associated with this agreement is provided, in part, to increase the likelihood of adult returns to the Hells Canyon Trap to help facilitate adult placements of spring Chinook salmon as described in sections D and E. As such, ODFW and IDFG agree to work cooperatively and in good faith toward adequate trapping of adults from non-tribal harvest shares to meet the intent of sections D and E, along with these other objectives.

3. Subject to the determination of ODFW, IDFG and other appropriate management partners for overall trapping operations and fish allocations referenced in the foregoing clause and following modifications to the Hells Canyon trap described above, IPC shall:

- a. Operate the trap over a range of flows between 5,000 cfs and 50,000 cfs to collect the quantities of adult spring Chinook salmon and summer steelhead necessary, as determined by ODFW, to implement the Placement Plan as described below in section E.
- b. Develop, subject to ODFW approval, an operating plan that must include descriptions of trap operations (including timing and period of

operation) and the type (e.g., species, size, gender, mark/tags or genetic sampling) of spring Chinook salmon and summer steelhead that will be trapped and transported to placement locations at the direction of ODFW in accordance with D and E (and in accordance with appropriate management partner coordination by ODFW outside of this Settlement).

D. Placement of Non-ESA-listed Adult Fish

Within two (2) years of FERC's issuance of a new license for the Project, IPC shall annually provide reasonable transportation of spring Chinook salmon and summer steelhead adults for placement as requested by each respective state; provided, however that the states assume all risks associated with the release of such fish into the receiving basins, including the potential transfer of pathogens. For adult placements into Pine Creek, prior to release, IPC shall collect tissue samples for the application of Parental Based Tagging (PBT) method.

E. Pine Creek Placement, Monitoring, and Juvenile Collection

1. Within 90 days of FERC's issuance of a new license for the Project, IPC shall develop, in collaboration with ODFW and subject to ODFW approval, an anadromous fish placement, monitoring and evaluation plan for Pine Creek (hereinafter referred to as the "Placement Plan") that provides for safe, timely, and effective placement of adult spring Chinook salmon and summer steelhead into Pine Creek and an evaluation of the juvenile production associated with those placements. The Placement Plan shall detail goals, objectives, tasks, timelines, monitoring, evaluation, and decision processes including adaptive management provisions, methods for implementation, and adult placement target numbers and locations. IPC shall implement the Placement Plan through specific annual work plans developed collaboratively between IPC and ODFW, and approved by ODFW following ODFW's coordination with appropriate management partners outside of this Settlement. Parties shall annually review results through annual reports and meetings, as defined in this subsection E.7, below, and apply adaptive management as necessary. Performance of adults and juveniles shall be compared to other regional populations as determined by ODFW.

2. Immediately following placement of adult spring Chinook salmon and summer steelhead into Pine Creek, IPC shall perform studies that evaluate the effectiveness of agreed-upon release strategies relative to their migration, survival, holding behavior, and spawning. IPC shall implant telemetry tags into a minimum of 30 adult spring Chinook salmon and 30 adult summer steelhead, unless otherwise agreed to by ODFW after collaborative development of annual work plans and, dependent upon availability of fish. IPC shall use remote data logging receivers to track adult fish into tributaries throughout the Pine Creek basin, immediately above the confluence of Indian Creek and below Hells Canyon Dam to document any out of basin movement, and IPC shall conduct mobile ground tracking in Pine Creek to locate potential holding and spawning areas. IPC's monitoring and evaluation of adult placement in Pine Creek shall

include determining migration success to potential spawning areas including an estimate of pre-spawn survival, spawn timing and location including redd counts. IPC shall estimate adult returns at Hells Canyon Dam associated with Pine Creek placements using PBT and Passive Integrated Transponder (PIT) tagging mark/recapture methods, and smolt-to-adult returns and recruits per spawner based upon collective returns over several years of individual cohorts resulting from adult placements.

3. IPC shall fund and implement a pathogen risk assessment of adult fish placements developed with Oregon and Idaho state fish pathologists and consistent with the existing U.S. Fish and Wildlife Service Federal Power Act Section 18 prescription for bull trout filed with FERC in the HCC relicensing proceeding in the following tributaries: Pine Creek in Oregon; Indian Creek and the Wildhorse River in Idaho. Parties understand and agree that the purpose of the pathogen assessment is to inform fish managers of the risks of any decision to allow movement of fish from below Hells Canyon Dam to upstream receiving waters. Following the initial assessment of pathogen risk, IPC shall perform follow-up pathogen surveys at 5-year increments or as required by fish health specialists.

4. IPC shall follow pathogen procedures developed by state Fish Pathology staff to ensure fish health, including adhering to surveillance protocols developed by state Fish Pathology staff to minimize fish pathogen exposure(s).

5. Beginning one (1) year following adult placement into Pine Creek, IPC shall annually use a sufficient number of screw traps (not to exceed a total of 10 screw traps) or other agreed-upon methods to collect sufficient numbers of juvenile spring Chinook salmon and summer steelhead produced from successful adult spawning in Pine Creek and its tributaries to ensure a statistically valid estimate of fish produced from adult spawning, and target capture of 50% of smolt emigrants (or 5,000 fish captured of each species for PIT tagging) to assess outmigration timing, age of outmigrants, smolts produced per female spawner and basin (or sub-basin) production. IPC shall deploy screw traps, or other more efficient and approved collection methods, downstream and near the lowest known spawning/rearing areas within tributaries in the Pine Creek basin. Screw traps will also be deployed near the confluence of main Pine Creek and the Snake River. IPC shall tag captured juveniles with a PIT tag and collect a tissue sample for PBT analyses. Adipose fins will remain intact for all fish collected. Parties agree that periodically a sample of juveniles tagged in the upper screw traps will be released to estimate capture efficiency of the lower screw traps using mark and recapture methods. Collections and capture efficiency of the lower screw traps will be used to estimate total basin production for each species. A metric of smolt production will include an estimate of the average number of smolts per female spawner produced in the Pine Creek drainage. IPC shall consult with ODFW on the design development and maintenance plan for these collection devices including evaluation and performance standards to ensure proper design, operation and performance. If factors limiting the efficiency of the

collection devices cannot be mitigated, then IPC shall propose and, subject to ODFW's approval, implement alternative means of collection. Further, if the ability to access private lands limits the ability to fully meet the Pine Creek placement or juvenile monitoring, then IPC shall propose, and subject to ODFW's approval, implement alternative means or methods of evaluation.

6. Within a time frame sufficient to inform decisions at the end of the 20 year evaluation period, IPC shall, in consultation with ODFW and IDFG through the development of annual work plans and ongoing findings from the placement monitoring and evaluation, design and conduct limited research using surrogate juveniles to monitor movement of outmigrants out of Pine Creek through Hells Canyon reservoir.

7. IPC shall provide raw data collected under the Placement Plan, and prepare and submit annual progress reports to ODFW that summarize research and findings to date related to adult placement and juvenile collection within three (3) months of completing each annual monitoring period. Annual reports shall evaluate the effectiveness of efforts and progress toward meeting goals and objectives set forth in the Placement Plan and include a proposed work plan for upcoming monitoring and evaluation efforts, including habitat evaluations and assessments described in Section F.5, F.6, and F.7, below. Thirty (30) days following submission of each report, IPC shall meet with ODFW to review the annual report and proposed work plan. IPC shall revise the work plan based on agreements reached between ODFW and IPC and submit the revised work plan to ODFW within thirty (30) days of the meeting.

F. Habitat Improvement and Evaluation in Oregon Tributaries

1. Parties understand and agree that the foregoing measures are in addition to any habitat enhancement work IPC is performing, or may perform in the future, if any, in Oregon tributaries pursuant to its ongoing Tributary Habitat Enhancement Program described in FERC's staff alternative section 5.2.4.5 of the existing final Environmental Impact Statement or other similar habitat improvement program that may be imposed by FERC in a new license.

2. Upon FERC's issuance of a new license for the Project, IPC shall establish a Habitat Enhancement Fund totaling \$2 million (2018 dollars) to enhance native salmonid habitat in tributaries to the Powder River (downstream of Thief Valley Dam). Projects funded through the Habitat Enhancement Fund may be carried out by IPC, ODFW, or other entities, and must be approved by ODFW, in consultation with the Aquatic Resources Technical Advisory Committee (established under the new FERC license), through consideration of the following criteria:

- a. The project must be located on a tributary of the Powder River.
- b. The project must have clearly identified direct benefits for native fish populations.
- c. The project must be within one of the following categories:
 - i. Instream flow restoration, conservation or protection;
 - ii. Riparian habitat or vegetation restoration;

- iii. Fish passage or screening structures, or both;
 - iv. Enhancement or improvement of instream habitat diversity;
 - v. Water quality improvement; or
 - vi. Enhancement or improvement of floodplain habitat.
- d. The project must be consistent with ODFW management plans, policies or rules.
 - e. The project will be cost effective, as determined by ODFW. Priority will be given to projects that are cost-shared with other funding sources.
3. Within 90 days of FERC's issuance of a new license for the Project, IPC shall develop a plan, in consultation with and approved by ODFW, setting forth how it will conduct the habitat evaluations described in this subsection F.5, F.6 and F.7.
4. Upon FERC's issuance of a new license for the Project, IPC shall provide ODEQ with funding of \$200,000 per year for 16 years, which ODEQ shall utilize to establish a Water Quality Enhancement Fund totaling \$3.2 million (2018 dollars) to enhance water quality in the Snake River or its tributaries in Oregon. Projects funded through the Water Quality Enhancement Fund may be carried out by ODEQ, ODFW, or other entities, and may include projects, as determined by ODEQ, such as but not limited to:
- a. Studies related to habitat, vegetation, or hydrology required to maintain the aquatic system or regional water quality issues including toxicity, bioaccumulation of pollutants, diversity and composition of aquatic species, entrapment of pollutants in sediment, stormwater, etc.;
 - b. Projects to enhance water quality to support resident biological communities or to protect beneficial uses;
 - c. Projects to prevent deleterious conditions to fish and other aquatic life or to improve water quality by addressing impacts to aquatic habitats, be that of a physical or chemical nature.
5. Within three (3) years of FERC's issuance of a new license for the Project IPC shall carry out general habitat evaluations to determine the status of habitat necessary to support and identify primary basin habitat features that could be limiting to the production potential of spring Chinook salmon and summer steelhead in the Pine Creek basin and, within five (5) years, shall carry out such evaluations that could be limiting to the production potential of native salmonids in Powder River basins (below Thief Valley Dam). This general habitat evaluation shall:
- a. Identify adult migration barriers. For purposes of this subsection a barrier may include thermal, flow, gradient, natural geomorphic barriers, and anthropogenic barriers and disturbances;
 - b. Monitor and evaluate annual cycle of water temperatures encompassing the full freshwater life cycle including periods of migration, pre-spawn holding and spawning and rearing;
 - c. Inventory and prioritize water diversions relative to potential loss of juvenile production during juvenile rearing and emigration periods, including location, size, and type of diversion

- infrastructure and fish protection devices;
- d. Assess risk of introducing deleterious pathogens to resident fish populations.
6. With respect to detailed habitat assessments that will occur in Pine Creek basin, IPC shall evaluate quality of available physical habitat and identify habitat limitations to spring Chinook salmon and summer steelhead survival and productivity through life-cycle model approaches. Using an annual collaborative prioritization process and work plans based on the progression and findings of fish placement monitoring and evaluations or other agreed-upon existing information, IPC shall:
 - a. Conduct habitat assessments in accordance with annual work plans, approved by ODFW, using continuous Aquatic Inventories (AQI) Habitat Methods² or other agreed upon methods to provide a complete census of all potential rearing, spawning, and holding habitat for spring Chinook salmon and summer steelhead; and
 - b. Within the Pine Creek basin, evaluate fish community composition or densities, or both, and forage availability within spawning and rearing areas.
 7. With respect to detailed habitat assessments that will occur in Powder River tributaries (downstream of Thief Valley Dam), IPC shall conduct habitat assessments in accordance with annual work plans, approved by ODFW, using continuous Aquatic Inventories (AQI) Habitat Methods or other agreed-upon methods to provide a complete census of all potential rearing, spawning, and holding habitat for native salmonids, and evaluate fish community composition or densities, or both, and forage availability within spawning and rearing areas. Further, if the ability to access private lands limits the ability to fully meet habitat assessment work in the Powder, then IPC shall propose, and subject to ODFW's approval, implement alternative means or methods of evaluation.
 8. IPC shall prepare and submit completion reports to ODFW that summarize habitat evaluation and assessment findings within three (3) months of completing each basin or sub-basin assessment or evaluation. IPC shall provide, upon ODFW's request, raw data collected as part of habitat assessments and evaluations.

G. Check-in and Reporting to the States

1. Within twenty (20) years of FERC license issuance, IPC shall prepare the following reports (or compilation reports, as applicable) for evaluation by the states that summarize all data, studies, and analysis completed to-date; include both an evaluation of and identification of data gaps, program

² See Moore, K., K. Jones, J. Dambacher and C. Stein. 2018. Aquatic Inventories Project: Methods for Stream Habitat and Snorkel Surveys. Oregon Department of Fish and Wildlife, Conservation and Recovery Program. Corvallis, Oregon. 91p, available at https://odfw.forestry.oregonstate.edu/freshwater/inventory/pdf/hmethd18_tablet.pdf

inefficiencies, or challenges that may have impacted relevant analysis; and address any proposed research and evaluation efforts needed to address uncertainties, if any:

- a. Pathogen risk assessment associated with upstream passage of native migratory fish into Oregon tributaries;
 - b. Report evaluating habitat conditions, including but not limited to an evaluation of production potential in Pine Creek and the mainstem Snake River upstream of Hells Canyon Dam, that includes an assessment of the success, if any, of any tributary habitat enhancement work in improving fish habitat or protecting fish and aquatic life use; and
 - c. Report summarizing and evaluating spring Chinook salmon and summer steelhead productivity in the Pine Creek basin including metrics, as determined in the Placement Plan, and any biological, structural or operational limiting factors.
2. Within twenty-one (21) years of license issuance, IPC shall prepare a summary of options available, including the feasibility, for non-volitional upstream and downstream passage of non-ESA-listed anadromous species in Oregon tributaries above Hells Canyon Dam. Such summary shall include a proposed course of action with the regard to the passage of anadromous fish above Hells Canyon Dam for the remainder of the license term.
3. Parties understand and agree that if, based upon the evaluation of these reports and IPC's proposed course of action, the Parties agree on a course of action for the remainder of the FERC license term, then the Parties will jointly petition FERC for approval of the proposed course of action. Further, the Parties understand and agree that if the Parties do not agree on a course of action, then any Party may petition FERC with a recommended course of action for the passage of anadromous fish for the remainder of the FERC license term. The remaining Parties reserve all rights relating to advocating its position related to the proposed course of action, including the right to respond and file comments with the FERC.

H. Oregon Water Quality Improvement Program (OWQIP)

1. IPC shall fund, in the amounts specified below, a voluntary, incentive-based program for participating agricultural-land owners that shall result in improvements to water quality by reducing sediment and phosphorus loading to the Snake, Malheur, and Owyhee rivers. The Malheur Basin was prioritized based on monitoring conducted by IPC in support of its 2003 Hells Canyon Complex FERC license application. Technical report Appendix E.2.2-1 identified the Malheur River as the largest Oregon tributary source of both sediment associated phosphorus and dissolved phosphorus (Hoelscher and Myers 2003). The Malheur River also had the highest mean concentration of phosphorus when compared to all Oregon and Idaho tributaries to the Snake River from Swan Falls downstream through the Hells Canyon Complex.
2. The Parties intend for the OWQIP to be within, and complimentary to, the framework of the Malheur River Basin Agricultural Water Quality

Management Area Plan (Malheur Plan), and the Owyhee River Basin Agricultural Water Quality Management Area Plan (Owyhee Plan) that is administered by the Oregon Department of Agriculture. The Malheur Plan is the implementation mechanism for the Malheur Basin TMDL and ODEQ's basin coordinator provides technical assistance to the Oregon Department of Agriculture for achieving the TMDL allocations. The Oregon Watershed Enhancement Board (OWEB) provides financial assistance to landowners, agencies, and local groups to fund projects that will achieve land conditions that contribute to good water quality.

3. Through the OWQIP, IPC will provide funding to landowners to voluntarily implement improvements to water quality within the Malheur or Owyhee River Basin Agricultural Water Quality Management Areas and within areas where agricultural return flow has the potential to drain into the lower Malheur, lower Owyhee, or Snake River. IPC funding shall be administered through the OWEB grant application process using matching money to support administrative and monitoring activities. OWEB must evaluate grant applications using the OWEB Region 5 review team or other similar multi-agency work group. The geographic boundaries of potential project areas that meet this criterion are outlined on the map (Map 1), below. The green hues on the map represent areas of shrubland and grazed grassland, while the red/orange hues indicate areas of intensive, cropland agriculture. While the total potential project area includes approximately 1.4 million acres, approximately 1.15 million acres of the total is forest, grassland, or shrubland. The privately owned, cultivated agricultural land accounts for approximately 250,000 acres, which will be the focus area of the program.

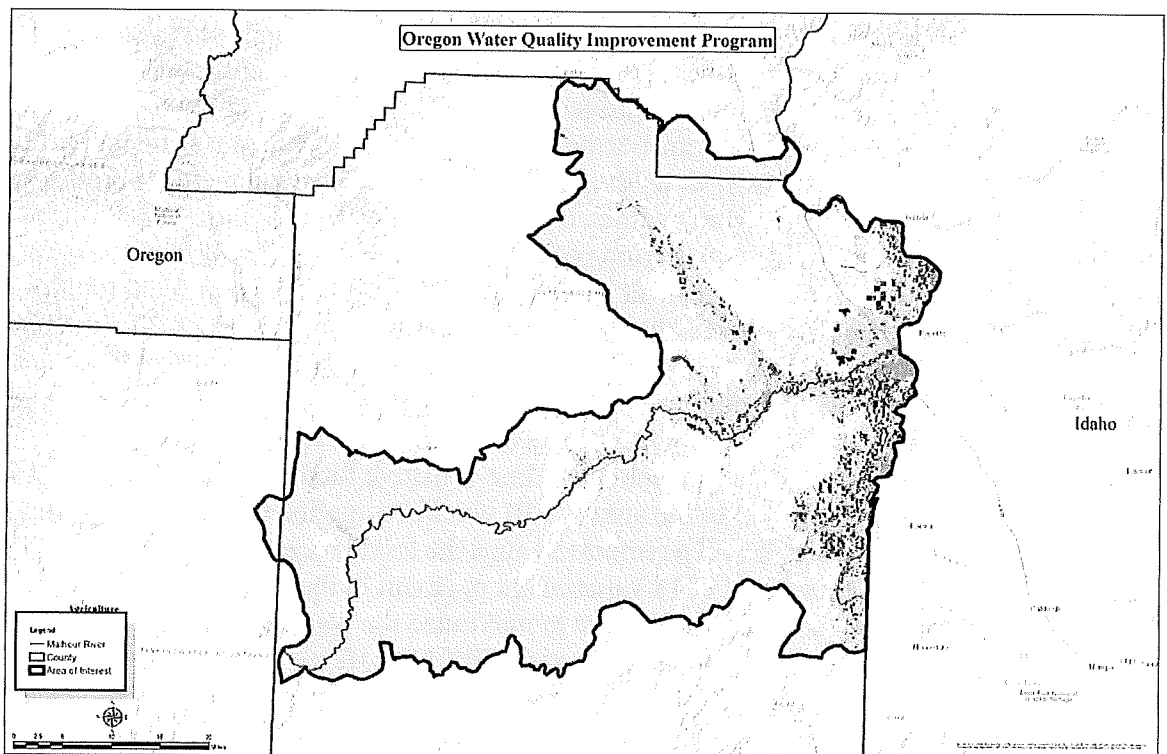
4. Provided qualifying projects are available, IPC will fund the QWQIP for a period of 20 years at a minimum of \$340,000 per year, with total program funding not to exceed a total of \$6.8 million for the 20-year life of the program. Annual funding contributions could be higher than \$340,000, at IPC's discretion, to accommodate time sensitive project opportunities. However, annual funding during later years of the program would be reduced to compensate for any accelerated time-sensitive funding increases. An inflation factor equivalent to the annual CPI would be applied to the annual payments. Value of the annual payments toward the total program limit would be based on the equivalent 2018 value of the payment in the year it was provided to the OWEB. Provided further that to maximize the water quality benefits of the OWQIP, a minimum of 90% of the IPC OWQIP contribution will be used to fund expenses directly related to on-the-ground implementation of water quality improvement projects. As such, IPC's share of expenses associated with administrative activities and monitoring activities may not exceed 10% of the program contribution.

5. The Parties agree that should qualifying projects not be available, IPC shall initiate the dispute process set forth in section I of the Agreement to determine appropriate modifications to maintain the Parties' bargained-for benefits of this Agreement. Unless and until the Parties agree to modifications to this section of the Agreement, IPC shall continue to seek out appropriate

qualifying projects; provided, however that if Parties are unable to agree to such modifications after a period of one year from initiation of dispute resolution process, then remaining unallocated funds shall be transferred to the Water Quality Enhancement Fund established by section F.4, above.

6. The Parties agree that crediting of a specific phosphorus reduction from the OWQIP projects to a current water quality standard, load allocation or obligation for the HCC is not a condition of IPC's funding of this program; provided, however that IPC reserves the right to apply or seek to apply such water quality credits from this program as may be allowable under existing law to meet any future obligation(s) associated with the Project or IPC's other hydroelectric projects. The states reiterate that nothing in this Agreement is intended or shall be construed to affect or limit the states from complying with its obligations under applicable federal and state laws; provided further that the states make no commitment that such could approve credits from this program, if any.

Map 1. Geographical Area of the Oregon Water Quality Improvement Program.



ATTACHMENT B – Idaho Project Oversight Payment

Amount

To cover the costs incurred by the Idaho Department of Environmental Quality (“IDEQ”) in administering its § 401 certification for the Project, Idaho Power Company (“IPC”) shall provide to IDEQ an oversight payment in the amount of \$110,000 in 2019 dollars adjusted according to the formula below (“Idaho Payment”), made payable to the State of Idaho, Department of Environmental Quality on the schedule specified below.

Adjustment

The Idaho Payment amount must be adjusted annually, according to the following formula:

$$AD = D \times (CPI-U)/(CPI-U-June 2019)$$

Where:

AD = Idaho Payment,

D = \$110,000,

CPI- U = the most current published version of the Consumer Price Index-Urban. The CPI-U is published monthly by the Bureau of Labor Statistics of the U.S. Department of Labor. If that index ceases to be published, any reasonably equivalent index published by the Bureau of Economic Analysis may be substituted by written agreement between IDEQ and IPC.

Payment Schedule

The oversight payment must be paid pursuant to a written invoice from IDEQ. Except for the initial prorated payment provided below, IPC shall pay the Idaho Payment on July 1 of each year following issuance of a New License for the Project. IPC must pay an initial prorated Idaho Payment to IDEQ within thirty (30) days of the date FERC issues the New License, for the period from the date FERC issues the New License to the first June 30 which follows issuance of the New License.

Expenditure Summary

IDEQ shall, on a biennial basis, provide Idaho Power Company with a summary of project specific expenditures.

Duration

The Idaho Payment obligation shall expire 30 years after the first July 1 following the issuance of the new FERC license, unless IDEQ terminates it earlier because oversight for purposes of § 401 Certification is no longer necessary. One year before the expiration of the payment obligation, or earlier if mutually agreed, IDEQ and IPC shall review the need, if any, to modify, extend, or terminate the payment. IPC will pay any oversight payment required after such review, including the payment established as a result of any administrative or judicial review in accordance with state law.

ATTACHMENT C – Oregon Project Oversight Payment

Amount

The annual cost of overseeing implementation of the conditions in the Clean Water Act section 401 certification is set forth in the table below (“Oregon Payment”).

Year	Amount
1	\$125,250
2	\$125,250
3	\$110,640
4	\$112,725
5	\$112,725
6-30	\$74,105

Idaho Power Company (“IPC”) shall pay this Oregon Payment in each of the first thirty (30) years beginning July 1 of each year following issuance of a FERC license in <DATE> dollars adjusted according to the formula set forth below, and IPC shall pay an initial prorated payment within thirty (30) days following issuance of a FERC license for the period from the date of FERC license issuance to the first June 30 which follows that license issuance.

Adjustment

The Oregon Payment must be adjusted annually, according to the following formula:

$$AD = D \times (CPI-U)/(CPI-U- <DATE>)$$

Where:

AD = Adjusted dollar amount payable to Oregon Department of Environmental Quality.

D = Dollar amount pursuant to Oregon Payment above,

CPI- U = the most current published version of the Consumer Price Index-Urban.

The CPI-U is published monthly by the Bureau of Labor Statistics of the U.S. Dept. of Labor. If that index ceases to be published, any reasonably equivalent index published by the Bureau of Economic Analysis may be substituted by written agreement between ODEQ and IPC.

Payment Schedule

Except for the initial prorated payment due within thirty (30) days following issuance of a FERC license, IPC shall pay the Oregon Payment within thirty (30) days of receipt of invoice from ODEQ, and make the payment payable to the Oregon Department of Environmental Quality.

Expenditure Summary

In accordance with ORS 543.080(9), each agency that receives all or any portion of the Oregon Payment shall, on a biennial basis, provide IPC with a summary of project specific expenditures.

Termination; Extension

Prior to one year before the expiration of the Oregon Payment, IPC shall meet with all agencies that oversee implementation of the conditions in the Clean Water Act section 401 certification to review the need, if any, to modify, extend, or terminate such oversight and corresponding Oregon Payment. After such review, ODEQ shall propose modifications, an extension, or termination of the Oregon Payment. Any dispute over ODEQ's decision related to any modification or extension of the Oregon Payment shall be resolved in accordance with ORS 543.080(6).

ATTACHMENT D

Clean Water Act § 401 Certification Conditions
For the Hells Canyon Complex Hydroelectric Project
(FERC No. P-1971)

Malheur, Baker, and Wallowa counties, Oregon
Powder Basin, Grande Ronde Basin, Oregon

The following certification is in response to an application submitted by the Idaho Power Company on June 14, 2018, as supplemented by responses to additional information requests and supplemental documents referred to herein (the "Application"). The Idaho and Oregon Departments of Environmental Quality are hereinafter separately referred to as "IDEQ" and "ODEQ," respectively, and collectively referred to as the "DEQs".

Upon Federal Energy Regulatory Commission ("FERC") issuance of a license to Idaho Power Company for the Hells Canyon Complex Hydroelectric Project ("Project"), Idaho Power Company must comply with the following § 401 Certification conditions:

I. Project Operation

The proposed operations are as particularly described in Exhibit A, which is incorporated here in its entirety by this reference. In accordance with applicable law, IPC shall notify the DEQs if FERC authorizes modification to these operations so as to allow the DEQs to determine whether such changes may affect compliance with water quality standards.

II. Temperature

A. Required Actions. Idaho Power Company ("IPC") shall take the following actions, which are further detailed in the conditions set out below, in order to comply with the Snake River-Hells Canyon Total Maximum Daily Load ("TMDL") temperature load allocation, the Oregon and Idaho salmonid spawning criteria (IDAPA 58.01.02.286; OAR 340-041-0028(4)(a)), and migration corridor temperature criteria (OAR 340-041-0028(4)(d)) ("applicable temperature criteria"):

1. Implement a Temperature Management and Compliance Plan ("TMCP"); and
2. Attain the Year 15 and 30 year thermal load reductions ("required thermal benefits"); or attain the TMDL temperature load allocation and applicable temperature criteria as provided in the approved Temperature Alternative Measures Plan ("TAMP").

B. Required Thermal Benefits. IPC shall attain thermal benefits of 1191.6 billion kilocalories ("bkcal") at the inflow to the Project by 30 years after the date that FERC

issues a new license for the Project. IPC shall maintain the required thermal benefits throughout the term of the FERC license. No later than 15 years after the date that FERC issues the new license, IPC shall attain thermal benefits of 595.8 bkcal at the inflow to the Project. Or, if an alternative measure is implemented, IPC shall attain the TMDL temperature load allocation and applicable temperature criteria as provided in the approved TAMP.

C. Implementation of the TMCP.

1. IPC shall implement the TMCP in order to attain the required 15 and 30 year required thermal benefits. The TMCP shall include the Snake River Stewardship Program (“SRSP”) that is specifically described in Exhibit 7.1-5 of the Application, which by this reference is incorporated in its entirety except that the following sentence in Section 2.5.3 of Exhibit 7.1-5 is not incorporated: “The thermal benefits generated from SRSP restoration projects do not need to be discounted on a project site-by-project site basis to account for river and reservoir attenuation, conservatism, or margin of safety, as those factors have already been accounted for in calculating IPC’s cumulative thermal load exceedance (see Section 7.1 of the 401 application).” The TMCP shall also include the Brownlee operational component as described in section II.C.6 below and a temperature monitoring plan, as described in section II.D below.
2. As part of the TMCP, IPC shall implement the SRSP, which includes the development and implementation of measures upstream of the Project in the mainstem of the Snake River and in tributaries to the Snake River, in order to attain the required thermal benefits. The thermal benefits attained by IPC through the implementation of the SRSP shall be determined as described in Section 2.3 of Exhibit 7.1-5 of the Application.
3. The selection, design, implementation, monitoring and maintenance of specific SRSP projects shall be in accordance with Restoration Quality Standards and Guidelines (“Restoration Standards”) developed by IPC and described in Section 2.5.1 and Attachment 1 of Exhibit 7.1-5 of the Application. As part of the annual reporting process set forth in section II.E below, IPC may propose modifications to the Restoration Standards to reflect information gathered from the implementation of projects. If approved by ODEQ, the modified Restoration Standards shall apply to all SRSP projects constructed after the date the modified Restoration Standards are approved.
4. SRSP projects that are confirmed to be implemented consistent with the project design and the approved Restoration Standards shall count towards the required thermal benefits. The thermal benefits for a project shall continue to be counted towards the required thermal benefits as long as monitoring establishes that the project is maintained in accordance with the Restoration Standards. IPC shall reduce in-river and tributary project thermal benefits by 22% and 25%, respectively, before being applied or credited toward the aggregate thermal load target of 1191.6 bkcal at the HCC inflow.
5. As part of the annual and five-year SRSP reporting set forth in section II.E below, IPC shall describe the SRSP projects implemented, the status of maintenance on all projects, and the thermal benefits IPC attributes to any project. Thermal benefits shall count towards the required thermal benefits if

ODEQ, after consultation with IDEQ, concurs that the project has been implemented and maintained in accordance with the Restoration Standards. If ODEQ finds that a project is not implemented or maintained in accordance with the Restoration Standards, or fails the program audits, IPC shall not count the thermal benefits of such project towards the required thermal benefits unless subsequent monitoring shows the project is in compliance. Information obtained from monitoring will be used to inform the thermal benefit calculation for future projects, but will not be used to adjust credits already assigned to existing approved projects. Following review of the annual and five-year SRSP reports, ODEQ shall notify IPC of the results of its review of projects, and the amount of thermal benefits claimed by IPC that count towards the required thermal benefits.

6. As part of the TMCP, IPC shall implement the Brownlee operational component as specifically described in Section 7.1.2.1 of the Application. The Brownlee operational component includes, at a minimum:
 - a. IPC shall forecast the Hells Canyon Complex outflow 7 day average maximum temperature conditions;
 - b. If forecast at the beginning of the salmonid spawning period indicates a high probability of exceeding the 16.5 degrees Celsius (“°C”) target 7-day average maximum temperature conditions, then IPC shall enhance fall drafting of Brownlee Reservoir to achieve 16.5°C in the Snake River downstream of Hells Canyon Dam; and
 - c. IPC shall meet with the DEQs each August to report on the forecasted temperature and discuss the decision to enhance fall drafting of Brownlee Reservoir.

D. **Monitoring.** IPC shall monitor projects described in the SRSP and in accordance with the Restoration Standards. In addition, IPC shall monitor daily maximum temperatures at the locations specified below in section II.D.1 and in accordance with the approved Temperature Monitoring Plan. Within 90 days of the date of FERC’s issuance of a new license for the Project, IPC shall submit to the DEQs for approval a Temperature Monitoring Plan. Once approved by ODEQ, after consultation with IDEQ, IPC shall implement the Temperature Monitoring Plan. IPC may submit proposed revisions to the Temperature Monitoring Plan and, if approved by ODEQ, after consultation with IDEQ, IPC shall implement the revised plan in accordance with ODEQ’s approval. The Temperature Monitoring Plan shall include the following components:

1. Proposed temperature monitoring locations. Locations shall be proposed that are representative of the Snake River flowing into Brownlee Reservoir, within Brownlee Reservoir, within Oxbow Reservoir, within Hells Canyon Reservoir, flowing out of Hells Canyon Dam, and within three miles downstream of the Hells Canyon Dam.
2. Proposed data collection equipment and procedures.
3. Proposed frequency of monitoring.
4. A project-specific *Quality Assurance Project Plan* (“QAPP”); and

5. A proposal for data analysis and reporting.

E. **Reporting.** IPC shall provide the following reports to ODEQ:

1. **Brownlee Operations Reports.** In any year when IPC drafts Brownlee Reservoir as described under Section II.C.6, IPC shall:
 - a. Meet with the DEQs in late November for a post-implementation effectiveness meeting; and
 - b. Provide a draft report at the post-implementation effectiveness meeting, which describes the following:
 - i. Whether the target of 16.5°C was attained and if not, analyze data and determine why the target was not attained;
 - ii. Propose actions to ensure the 16.5°C target is not exceeded in the future; and
 - c. Provide a final report by December 31 of the draft year that also includes the above components in sections II.E.1.b.i and ii.
2. **SRSP Annual Reports.** At the end of each calendar year following the issuance of the new FERC license for the Project, IPC shall provide a SRSP Annual Report that complies with the requirements of subsection (3) of OAR 340-039-0017 including but not limited to the following:
 - a. The results of the required monitoring of SRSP projects including:
 - i. Qualitative (i.e., project) monitoring at all sites.
 - ii. Remote effectiveness monitoring at all sites.
 - iii. Quantitative (i.e., effectiveness) monitoring on a selected sample of projects representative of the in-stream habitat and riparian revegetation project types.
 - b. A description of the SRSP projects implemented in that year, the baseline for each project, the status of implementation of all projects, expected completion date and any other information necessary to determine if a project has been implemented and maintained in accordance with Restoration Standards. IPC shall include a map showing the location of all projects implemented to date.
 - c. The thermal benefits IPC attributes to any projects implemented in that year. For projects implemented in prior years, a statement as to whether the project is being maintained in accordance with Restoration Standards and if so, the thermal benefits IPC claims from those projects.
 - d. A description of the proposed projects scheduled for implementation in the next year or future years, including IPC's estimate of those projects' aggregate thermal benefits.

- e. An audit review report, including a summary of whether the sites surveyed complied with the acceptance threshold for the audit and any remediation activities if necessary.
- f. The cumulative thermal benefits from that year and past years, and IPC's assessment of whether implementation of the TMCP, including the SRSP, is reasonably likely to achieve the 15 and 30 year required thermal benefits.
- g. A report of daily maximum temperature and associated data files measured within three miles downstream of Hells Canyon Dam, including a comparison between these data and data representing inflow to Brownlee and outflow temperatures in the Snake River below Hells Canyon Dam.
- h. IPC may include a request for the DEQs to consider approval of alternative or additional measures, including but not limited to Plan B as described in Section 7.1.2.5.3.1 and Exhibits 7.1-8 and 7.1-9 of the Application, hereinafter referred to as "Plan B", which by this reference is incorporated in its entirety. As used in this section II, "Temperature Alternative Measures" are methods or approaches not included in the TMCP that will provide, or assist in providing, reasonable assurance that the required thermal benefits will be achieved, or in the case of Plan B, reasonable assurance that the TMDL temperature load allocation and applicable temperature criteria will be met. The DEQs shall review such a request as provided in section II.F below. Such a request shall include the following:
 - i. The basis or reasons why IPC considers Temperature Alternative Measures to be necessary or appropriate.
 - ii. A detailed description of proposed Temperature Alternative Measures.
 - iii. An analysis of how the Temperature Alternative Measures will provide, or assist in providing, reasonable assurance that the required thermal benefits will be attained.
 - iv. A statement of whether the proposed Temperature Alternative Measures will cause or contribute to a violation of applicable water quality standards.

3. DEQs' Response to SRSP Annual Reports.

- a. The DEQs shall review SRSP Annual Reports to determine whether SRSP projects were implemented and maintained in compliance with Restoration Standards. If ODEQ, after consultation with IDEQ, does not concur that projects were implemented and maintained in compliance with Restoration Standards, the ODEQ shall notify IPC of the amount of thermal benefits in that year that shall be counted towards the required thermal benefits.

- b. ODEQ shall notify IPC whether they approve of or reject any amendment to the TMCP to address issues associated with implementation.
 - c. The DEQs shall respond to any Temperature Alternative Measures request as provided in section II.F below.
4. **SRSP Five-Year Reports.** At the end of every fifth calendar year following the issuance of a new FERC license for the Project, IPC shall provide a SRSP Five-Year Report that includes the following:
- a. All the required elements of the annual report for that year.
 - b. Summary of data analysis, progress on implementation of the TMCP, and program effectiveness during the five-year-review period.
 - c. Identification of any data gaps, program inefficiencies or challenges.
 - d. An evaluation of observed changes occurring relative to pre-SRSP project conditions in monitored implemented projects (including vegetation, hydrology, morphology).
 - e. A summary and evaluation of changes in applicable laws or regulations related to the regulatory baseline in the SRSP program area that may affect the thermal benefits assigned to projects and otherwise as required by OAR 340-039-0030.
 - f. Any proposed changes to Restoration Standards, including changes to modeling of thermal benefits. Any such changes must be approved by ODEQ, after consultation with IDEQ, before implemented by IPC.
 - g. Summary of thermal benefits associated with previously implemented projects that were not previously quantified, including any benefits unquantified due to a lack of data or recognized methodology. New benefits not previously quantified can only be counted towards meeting the required thermal benefits if ODEQ, after consultation with IDEQ, approves the data and methodology for determining such benefits.
 - h. Non-temperature benefits calculated, projected or observed specific to projects that have been implemented. This includes a discussion of progress towards meeting the non-temperature related goals of the in-stream work in the mainstem Snake river as well as non-temperature benefits of the tributary restoration work.
 - i. Summary of any new SRSP restoration actions and quantification methodologies proposed.
 - j. Estimates of current trajectory of thermal benefits to achieve modeled conditions. A report and consolidation of the previous annual summaries of the progress toward achieving the required thermal benefits, including an analysis and updated assessment of whether the program is reasonably likely to achieve compliance with the 15 and 30 year required thermal benefits.

5. **DEQs' Response to SRSP Five-Year Reports.** The DEQs shall respond to a Five Year Report as follows:
 - a. With respect to information that must or may also be included in the SRSP Annual Reports, the DEQs shall respond as set forth in section II.E.3 above.
 - b. ODEQ shall notify IPC whether it approves of or rejects any changes to the Restoration Standards proposed by IPC.

F. Temperature Alternative Measures. The process and the standard for determining whether Temperature Alternative Measures are required are set forth below.

1. **IPC Proposal.** In any SRSP Annual or Five-Year Report, IPC may include a request for the DEQs to consider approval of Temperature Alternative Measures.
 - a. Within 60 days of the receipt of IPC's proposal, ODEQ shall meet with IPC and discuss the proposal and any additional information that may be required by ODEQ in order to make a determination.
 - b. Within 90 days of the meeting and the submission of additional information, whichever occurs later, ODEQ, after consultation with IDEQ, shall notify IPC in writing of its approval or denial of the proposed alternative measures. If denied, ODEQ shall specify the basis for the rejection.
 - c. Within 120 days of approval, if any, of proposed alternative measures, IPC shall submit to the DEQs for approval a Temperature Alternative Measures Plan, as described below.
2. **ODEQs' Determination that Temperature Alternative Measures are Required.** With respect to the Brownlee operational component, if water temperature in the Snake River below Hells Canyon Dam during salmonid spawning period exceeds the 16.5° C target in three consecutive years, IPC shall submit for the DEQs' approval an alternative measures report, including but not limited to its proposed alternative measures set forth in section 7.1.2.5.3 of the Application. In addition, with respect to the SRSP, after the second Five-Year SRSP Report, and after any subsequent five-year report, ODEQ, after consultation with IDEQ, may determine that Temperature Alternative Measures are required in accordance with section II.F.4 below.
 - a. Within 60 days of the receipt of the applicable report, the DEQs and IPC shall meet to discuss the report, whether Temperature Alternative Measures are required, and any other issues including but not limited to any additional information that may be required by ODEQ in order to make a determination.
 - b. Within 90 days of the meeting and the submission of additional information, whichever occurs later, ODEQ, after consultation with IDEQ, shall notify IPC if Temperature Alternative Measures are required.

- c. Within 180 days of the notification, IPC shall submit to the DEQs for approval a Temperature Alternative Measures Plan, as described below.

3. Temperature Alternative Measures Plan (“TAMP”).

- a. IPC shall include the following in any TAMP that addresses compliance with applicable temperature criteria:
 - i. Details of the measure to be implemented, including a comparison of the proposed measure to the current SRSP. If ODEQ, after consultation with IDEQ, requires Plan B as the Temperature Alternative Measure, the TAMP must provide details with respect to Plan B, including, at a minimum, the manner in which IPC achieves the TMDL temperature allocation and the other applicable temperature criteria.
 - ii. An evaluation of whether the measure may cause or contribute to a violation of applicable water quality standards. The TAMP must include a detailed description of actions needed to prevent a violation of water quality standards.
 - iii. If the construction or implementation of the measure may require permitting or approval by any state or federal agency, a description of the process necessary and the estimated time period to acquire such permitting or approval.
 - iv. A schedule for the implementation of the measure.

4. Temperature Alternative Measures Standard.

- a. IPC shall implement Plan B or other approved Temperature Alternative Measures if, taking into account any previously approved revisions to the SRSP, projects implemented and to be implemented under the SRSP, ODEQ, after consultation with IDEQ, determines that the SRSP, in addition to the Brownlee operational component described above, does not appear reasonably likely to achieve the year 15 and 30 required thermal benefits. ODEQ, after consultation with IDEQ, may require that Plan B be submitted as the Temperature Alternative Measure if it determines that other proposed alternative measures, if any, are not likely to achieve the required thermal benefits or otherwise meet the TMDL temperature load allocation and the applicable temperature criteria.
- b. In determining whether to approve proposed alternative measures and a TAMP, ODEQ, after consultation with IDEQ, shall consider the following:
 - i. Whether Plan B or the proposed alternative measures, as presented in the TAMP, are reasonable likely to achieve the required thermal benefits or otherwise meet the TMDL temperature load allocation and the other applicable temperature criteria.

- ii. Whether Plan B or the proposed alternative measures, operated alone or in combination with other Temperature Alternative Measures, after consideration of any mercury or other water quality studies undertaken and any other information ODEQ deems relevant, may cause or contribute to a violation of applicable water quality standards. As provided in section II.F.3.a above, IPC must include in the TAMP a detailed description of any actions necessary to prevent a violation of water quality standards; and
- iii. Other issues relevant to the implementation of Plan B or the proposed alternative measures, including whether the construction or implementation of the measure may require any permitting or approval by any state or federal agency, including FERC.

5. Implementation of TAMP.

- a. Upon ODEQ's approval of the TAMP, IPC shall implement the TAMP in accordance with its terms and schedule, including any modifications made by ODEQ as conditions of its approval.
- b. Unless and until ODEQ approves a TAMP in writing, IPC shall continue to implement the approved TMCP to achieve the year 15 and 30 year required thermal benefits.

III. Dissolved Oxygen ("DO")—Brownlee Reservoir TMDL Load Allocation.

A. Required Actions. IPC shall take the following actions, which are further detailed in the conditions set out below, in order to comply with the Brownlee Reservoir Snake River Hells Canyon Total Maximum Daily Load Dissolved Oxygen allocation:

1. Implementation of the Riverside Operational Water-Quality Improvement Project ("ROWQIP") or any approved Brownlee DO Alternative Measure;
2. Attainment of the TMDL DO allocation by reducing phosphorus loads upstream of Brownlee by 15,000 pounds during mid-April through mid-October (183 days) each year;
3. Implementation of the Grand View Sediment Reduction Program ("Grand View Program"); and
4. Implementation of the Swan Falls Project Aquatic Vegetation and Debris Removal Program ("Swan Fall Program").

B. Implementation of the ROWQIP, Grand View Program, and Swan Falls Program. Upon the issuance of a new FERC license for the Project, IPC shall continue to implement the ROWQIP, Grand View Program, and Swan Falls Program, as such programs are described in the Section 7.2.1 of the Application, which by this reference is incorporated in its entirety, and in accordance with this 401 certification in order to meet the DO load allocation for the FERC license term unless Brownlee DO Alternative Measures are approved in accordance with section III.B.6 below

1. **ROWQIP Monitoring Plan.** Within 120 days of the issuance of a new FERC license for the Project, IPC shall submit to the DEQs for approval a monitoring plan that monitors implementation of the ROWQIP. Once approved by ODEQ, after consultation with IDEQ, IPC shall implement the monitoring plan in accordance with its terms and schedule, including any modifications made by ODEQ as conditions of its approval. The monitoring plan shall include, at a minimum, a requirement that IPC will monitor for:
 - a. Total phosphorus concentrations in Riverside Canal tributary inflows.
 - b. Total phosphorus concentrations in spill from all locations, including the end of the canal delivery system.
 - c. Total suspended solids concentration in Riverside Canal tributary inflows.
 - d. Flow data collected at the Boise River diversion; other tributary inflow locations; and spill from all locations, including the end of the canal delivery system.
 - e. Total phosphorus monitoring at river mile 345.
2. **Grand View Program Monitoring Plan.** Within 120 days of the issuance of a new FERC license for the Project, IPC shall submit to the DEQs for approval a monitoring plan that monitors implementation of the Grand View Program. Once approved by ODEQ, after consultation with IDEQ, IPC shall implement the monitoring plan in accordance with its terms and schedule, including any modifications made by ODEQ as conditions of its approval. The monitoring plan shall include, at a minimum, a requirement that IPC will monitor for:
 - a. Total phosphorus concentrations in drains and tributaries in Grand View program area.
 - b. Total suspended solid concentrations in drains and tributaries in Grand View program area.
3. **Swan Falls Monitoring Plan.** Within 120 days of the issuance of a new FERC license for the Project, IPC shall submit to the DEQs for approval a monitoring plan that monitors implementation of the Swan Falls Program. Once approved by ODEQ, after consultation with IDEQ, IPC shall implement the monitoring plan in accordance with its terms and schedule, including any modifications made by ODEQ as conditions of its approval. The monitoring plan shall include, at a minimum, a requirement that IPC will monitor for:
 - a. Number of truckloads of aquatic vegetation and debris removed at the Swan Falls project annually between April 15 and October 15.
 - b. The total phosphorus removed from the Snake River following removal of aquatic vegetation and debris from the Swan Fall project.
4. **Brownlee DO Annual Reports.** Within 120 days of December 31 of each year following the issuance of the new FERC license for the Project, IPC shall provide to the DEQs an Annual Report that includes the following information:

- a. The results of monitoring accomplished in the past year in accordance with the approved monitoring plans described in sections III.B.1 through .3;
 - b. Total phosphorus load reduction analysis demonstrating whether the implementation of the ROWQIP, Grand View Program, and Swan Falls Program attained the DO load allocation, expressed as a total phosphorus reduction, for that year; and
 - c. Any proposed changes to the ROWQIP, Grand View Program, or Swan Falls Program, as applicable, and any Brownlee DO Alternative Measures proposed by IPC. As used in this section III, "Brownlee DO Alternative Measures" are methods or approaches not included in the ROWQIP, Grand View Program, or Swan Falls Program, as applicable, which will provide, or assist in providing, reasonable assurance that the DO load allocation described in section III.A.2 above will be achieved. ODEQ shall review such a proposal as provided in section III.B.6 below. Any such proposal must include the following:
 - i. The basis or reasons why IPC considers Brownlee DO Alternative Measures to be necessary or appropriate;
 - ii. A detailed description of the proposed alternative measure;
 - iii. An analysis of how the proposed alternative measure will provide, or assist in providing, reasonable assurance that the DO load allocation described in section III.A.2 above will be attained; and
 - iv. A statement of whether the proposed alternative measures will cause or contribute to a violation of applicable water quality standards.
 - d. **DEQ Response to Brownlee DO Annual Reports.** ODEQ, after consultation with IDEQ, shall respond to Brownlee DO Annual Reports, if necessary, as follows:
 - i. Within 90 days, ODEQ shall either approve or reject proposed changes to the ROWQIP, Grand View Program, or Swan Falls Program, as applicable.
 - ii. ODEQ shall respond to a proposed alternative measures as set forth in section III.B.6 below.
5. **Brownlee DO Five-Year Reports.** Within 120 days of December 31 of every fifth calendar year following the issuance of a new FERC license for the Project, IPC shall provide a Brownlee DO Five-Year Report to the DEQs that includes the following:
- a. All the required elements of the Brownlee DO Annual Report for that year;

- b. Trend analysis of total phosphorus data collected at Brownlee Reservoir inflow; and
 - c. A discussion of how total phosphorus data collected at the inflow to Brownlee Reservoir compares to Snake River Hells Canyon TMDL target of 0.07 mg/L.
6. **Brownlee DO Alternative Measures.** The process and the standard for determining whether Brownlee DO Alternative Measures are required are set forth below.
- a. **IPC Proposal.** In any Brownlee DO Annual Report, IPC may include a request for the DEQs to consider approval of Brownlee DO Alternative Measures.
 - i. Within 60 days of the receipt of IPC's proposal, the DEQs shall meet with IPC and discuss the proposal and any additional information that may be required by the DEQs in order to make a determination whether Brownlee DO Alternative Measures are required.
 - ii. Within 90 days of the meeting or the submission of additional information, if requested by the DEQs, whichever occurs later, ODEQ shall notify IPC in writing of its approval or denial of the proposed alternative measures. If denied, ODEQ shall specify the basis for the rejection.
 - iii. Within 120 days of approval of the proposed alternative measures, if any, IPC shall submit to the DEQs for approval a Brownlee DO Alternative Measures Plan, as described in section III.B.6.c below.
 - b. **DEQs' Determination that Brownlee DO Alternative Measures are Required.** After any Brownlee DO Annual Report, ODEQ may, after consultation with IDEQ, determine that Brownlee DO Alternative Measures are required in accordance with section III.B.6.d below.
 - i. Within 60 days of the receipt of an Annual Report and after consultation with IDEQ, ODEQ shall notify IPC if Brownlee DO Alternative Measures are required.
 - ii. Within 120 days of the notification, IPC shall submit to the DEQs for approval a Brownlee DO Alternative Measures Plan, as described in section III.B.6.c below.
 - c. **Brownlee DO Alternative Measures Plan.** IPC shall include the following in any Brownlee DO Alternative Measures Plan:
 - i. Details of the measure to be implemented, including a comparison of the proposed alternative measure to the ROWQIP, Grand View Program, or Swan Falls Program, as applicable.

- ii. Whether the proposed alternative measure, operated alone or in combination with other Brownlee DO Alternative Measures, may cause or contribute to a violation of applicable water quality standards, and if so, the alternative measures plan must include a detailed description of actions needed to prevent a violation of water quality standards.
- iii. If the construction or implementation of the proposed alternative measure may require permitting or approval by any state or federal agency, a description of the process necessary and the estimated time period to acquire such permitting or approval.
- iv. A schedule for the implementation of the proposed alternative measure.

d. **Brownlee DO Alternative Measures Standard.**

- i. IPC shall implement **Brownlee DO** Alternative Measures, such as a measure to directly supplement DO in Brownlee Reservoir if, taking into account any previously approved revisions to the ROWQIP, Grand View Program, or Swan Falls Program, as applicable, and after consultation with IDEQ, ODEQ determines the ROWQIP, Grand View Program, and Swan Falls Program are currently not attaining the DO load allocation described in section III.A.2 above or is not reasonably likely to attain that DO load allocation in the future.
- ii. In determining whether to approve a proposed alternative measure and **Brownlee DO** Alternative Measures Plan, the DEQs shall consider the following:
 - (a) Whether the proposed alternative measure, as presented in the alternative measures plan, is reasonably likely to attain the DO load allocation described in section III.A.2 above and;
 - (b) Whether the proposed alternative measures, operated alone or in combination with other Brownlee DO Alternative Measures, may cause or contribute to a violation of water quality standards, and if so, whether there are any actions that can be undertaken to ensure no such violation occurs; and
 - (c) Other issues relevant to the consideration of the proposed alternative measure, including whether the construction or implementation of the measure may require any permitting or approval by any state or federal agency, including FERC.

e. **Implementation of the Brownlee DO Alternative Measures Plan.**

- i. After consultation with IDEQ and upon ODEQ's approval of the Brownlee DO Alternative Measures Plan, IPC shall implement the plan in accordance with the approved plan terms and

schedule, including any modifications made to the plan by ODEQ as a condition of its approval.

- ii. Unless and until ODEQ approves a Brownlee DO Alternative Measures Plan, IPC shall continue to implement the ROWQIP, the Grand View Program, and the Swan Falls Program as set forth in Section 7.2.1 of the Application and in accordance with the conditions of this certification to achieve the DO load allocation described in section III.A.2 above.

IV. DO—DO Criteria Below Hells Canyon Dam.

A. Required Actions. IPC shall take the following actions, which are further detailed in the conditions set out below, in order to comply with the applicable DO criteria (IDAPA 58.01.02; OAR 340-041-0016):

1. IPC shall install and operate the distributed aeration systems on turbine units 1 through 4 at the Brownlee Powerhouse as described in Section 7.2.2 of the Application, which by this reference is incorporated in its entirety.
2. IPC shall test each system following installation.
3. Between July 1 and October 22, IPC shall add as much additional oxygen as possible or increase DO in the outflow from the Hells Canyon Dam, as measured at the turbine water intake system at Hells Canyon Dam, by an average of 1.2 mg/L, whichever is greater, until any further addition or increase would cause an exceedance of the current total dissolved gas criterion set forth in section VI below. IPC shall calculate this 1.2 mg/L requirement as a minimum of the 30 consecutive -day floating average of the calculated daily mean dissolved oxygen concentration.
4. Between October 23 and December 31, IPC shall add as much additional oxygen as possible or increase DO in the outflow from the Hells Canyon Dam, as measured at the turbine water intake system at Hells Canyon Dam, by an average of 1.5 mg/L, whichever is greater, until any further addition or increase would cause an exceedance of the current total dissolved gas criterion set forth in section VI below. IPC shall calculate this 1.5 mg/L requirement as a seven-day mean minimum. For calculating the mean, concentrations in excess of 100 percent of saturation are valued at the saturation concentration.

B. Monitoring Plan. Within 90 days of the issuance of a new FERC license for the Project, IPC shall submit to the DEQs for approval a Dissolved Oxygen Water Quality Monitoring Plan. Once approved by ODEQ, after consultation with IDEQ, IPC shall implement the monitoring plan in accordance with ODEQ's approval. The Dissolved Oxygen Water Quality Monitoring Plan must, at a minimum, include the following components:

1. A description of the method IPC will use to determine whether the distributed aeration systems are achieving the required increase in DO.
2. Identification of DO monitoring locations. IPC shall monitor DO at locations that are representative of DO levels in the Snake River flowing into Brownlee Reservoir, within Brownlee Reservoir, within Oxbow

Reservoir, within Hells Canyon Reservoir, at the turbine water intake at Hells Canyon Dam, and within three miles downstream of the Hells Canyon Dam.

3. Identification of downstream monitoring locations for intergravel dissolved oxygen. IPC shall monitor for intergravel DO below Hells Canyon Dam at sampling locations that include, at a minimum, two sampling locations within 10 miles downstream of the Hells Canyon Dam.
4. Proposed data collection procedures including description of equipment, methods and frequency of monitoring.
5. A project-specific *Quality Assurance Project Plan* (“QAPP”); and
6. A proposal for data analysis.

C. Outflow DO Annual Reports. Within 90 days of December 31st of each year following the issuance of the new FERC license for the Project, IPC shall provide to the DEQs an Outflow DO Annual Report that includes the following information:

1. Updates on the installation and testing of the distributed aeration systems currently scheduled for installation by mid-year 2019;
2. The results of monitoring accomplished in the year in accordance with the approved Dissolved Oxygen Water Quality Monitoring Plan;
3. An analysis regarding whether the systems are achieving or are anticipated to achieve the required increase in DO; and
4. A discussion of how aeration affects total dissolved gas concentrations in the Snake River within and below the Hells Canyon Complex.

D. Alternative Measures. If, after any Outflow DO Annual Report and after consultation with IDEQ, ODEQ determines that either (1) the distributed aeration systems are not achieving or will not likely achieve an increase in DO in the outflow of Hells Canyon Dam, as measured at the turbine water intake system at Hells Canyon Dam, of at least an average of 1.2 mg/L during July 1 to October 22 and 1.5 mg/L during October 23 to December 31, or (2) monitoring results collected within 3 miles downstream of Hells Canyon dam indicate DO levels fall below applicable minimum DO criteria, then ODEQ shall notify IPC that Outflow DO Alternative Measures are required. Within 120 days of the notification, IPC shall submit to the DEQs for approval a Brownlee DO Alternative Measures Plan.

1. IPC shall include the following in any Outflow DO Alternative Measures Plan:
 - a. Details of the measure to be implemented, including a comparison of the proposed alternative measure to the proposed distributed aeration systems;
 - b. An evaluation of whether the proposed alternative measure may cause or contribute to a violation of applicable water quality standards, and if so, whether there are any actions that can be undertaken to ensure no such violation occurs;

- c. If the construction or implementation of the proposed alternative measure may require permitting or approval by any state or federal agency, a description of the process necessary and the estimated time period to acquire such permitting or approval; and
 - d. A schedule for the implementation of the proposed alternative measure.
2. Upon ODEQ's approval of an Outflow DO Alternative Measures Plan, IPC shall implement the plan in accordance with the approved plan's terms and schedule, including any modifications made to the plan by ODEQ as a condition of approval.
 3. Unless and until ODEQ approves an Outflow DO Alternative Measures Plan, IPC shall continue to operate the proposed distributed aeration systems as set forth in sections IV.A.3 and .4 to achieve the required increase in DO in the outflow from Hells Canyon Dam.

V. **Oxbow Bypass Destratification**

- A. **Required Actions.** IPC shall take the following actions, which are further detailed in the conditions set out in sections V.B and C below, to comply with applicable DO criteria (IDAPA 58.01.02.250.f.i; OAR 340-041-0016).
- B. **Oxbow Operating Plan.** Within one year of the issuance of the new FERC license for the Project, IPC shall submit to the DEQs and FERC for approval the final Oxbow Operating Plan for a destratification system. The system shall address thermal stratification in the deep pool of the Oxbow Bypass and the resulting anoxic conditions by introducing sufficient mixing (using diffused air bubbles) to prevent thermal stratification and development of anoxic conditions in the deep pool. The Oxbow Operating Plan shall include:
 1. Final design plans;
 2. Parameters and requirements for operation and expected performance;
 3. A monitoring plan to determine whether the system is meeting performance goals;
 4. Adaptive management protocols; and
 5. A reporting schedule.
- C. **Installation and Operation of the System.** Within 6 months of ODEQ's and FERC's approval of the Oxbow Operating Plan, IPC shall install the system in accordance with the approved design and thereafter operate the system for the FERC license term in accordance with the approved Operating Plan.

VI. **Total Dissolved Gas ("TDG").**

- A. **Required Actions.** IPC shall take the following actions, which are further detailed in the conditions set out in this section VI below, to comply with applicable TDG criteria (IDAPA 58.01.250.01.b and 300; OAR 340-041-0031(2)) and the TMDL load allocations:

1. IPC shall meet and maintain a TDG level of less than 110% of saturation at the sampling locations defined in section VI.B.2 below, except when flows exceed the ten-year, seven-day average flood.
2. IPC shall install and implement flow deflectors as described in Section 7.3.1.2 - .4 of the Application, which by this reference are incorporated in its entirety, except that:
 - a. IPC shall construct and install the Oxbow Dam spillway flow deflector within 2 years of the completion of FERC's required design review process and any required permitting;
 - b. IPC shall construct and install Hells Canyon sluiceway flow deflectors within 2 years of construction of the Oxbow Dam spillway flow deflector; and
 - c. IPC shall construct and install Brownlee Dam spillway flow deflectors within 2 years of construction of the Hells Canyon sluiceway flow deflectors.
3. IPC shall continue preferential Brownlee Dam upper gate spill until the flow deflectors are installed and operating.

B. TDG Operating Plan. Within 90 days of the issuance of the new FERC license for the Project, IPC shall submit to the DEQs an TDG Operating Plan that includes:

1. A proposed schedule for the submittal for approval of the design plans to FERC, and installation of flow deflectors at the Brownlee Dam spillway, the Oxbow Dam spillway and the Hells Canyon sluiceway;
2. A monitoring plan to determine whether the system is meeting the applicable criteria and load allocation. The monitoring plan shall include, at a minimum, monitoring of TDG concentrations during spill events, specific locations to define point of sampling location below each dam for determining compliance, and a description of the methodology and equipment that will be used for monitoring;
3. Adaptive management measures as described in Section 7.3.2 of the Application, which is incorporated here in its entirety by this reference; and
4. A reporting schedule.

C. Installation and Operation of the System. In accordance with the schedule in the approved TDG Operating Plan, IPC shall install the deflectors; and IPC shall monitor in accordance with the approved TDG Operating Plan to determine if TDG criteria and the load allocations are met at sampling locations defined in the monitoring plan.

D. TDG Alternative Measures. If ODEQ, after consultation with IDEQ, notifies IPC that monitoring indicates that TDG criteria and allocations are not being met, then within 120 days of such notification IPC shall submit to the ODEQ proposed TDG alternatives measures and a TDG alternative measures plan to address compliance with applicable criteria and allocations. IPC shall implement the plan in accordance with the approved plan terms and schedule, including any modifications made to the plan by ODEQ as a

condition of its approval. Unless and until ODEQ approves a TDG alternative measures plan, IPC shall continue to meet conditions set forth in section VI.A above.

VII. Harmful Algal Blooms (“HAB”).

- A. Required Actions:** IPC shall take the following actions, which are further detailed in the conditions set out in this section VII.A below, to comply with the applicable criteria (OAR 340-041-0007(10), (12) and (13); IDAPA 58.01.02.200.05 and .06).
1. Within 90 days of issuance of the new FERC license, IPC must submit to the DEQs a HAB monitoring plan. At minimum, the HAB monitoring plan must include:
 - a. Identification of times and locations of high recreational activity and any other location identified by the DEQs.
 - b. A minimum of weekly visual monitoring during periods of high recreation.
 - c. Additional quantitative (e.g. cell counts, species identification, toxin concentration, or other as deemed needed by ODEQ or Oregon Health Authority (“OHA”) monitoring if visual monitoring indicates potential HAB.
 - d. Submission of visual and quantitative monitoring results to the OHA.
 - e. Advisory postings at the sampling locations following issuance of an advisory by OHA.
 - f. Additional visual and quantitative monitoring as needed to provide OHA sufficient data to lift the advisory.
 - g. Monitoring shall follow OHA guidelines (Oregon Health Authority P. H., 2018). ODEQ will work with OHA on review of the monitoring plan.
 2. After consultation with IDEQ and once approved by ODEQ, IPC shall implement the HAB monitoring plan in accordance with ODEQ’s approval.
- B. HAB Monitoring Plans.** IPC shall review and update the HAB monitoring plans at least once every five years to reflect monitoring results or new versions of OHA guidance documents. Updated HAB monitoring plans shall be submitted to the DEQs for review and approval.
- C. HAB Alternative Measures.** If ODEQ, after consultation with IDEQ, notifies IPC that visual and quantitative monitoring indicates that occurrence of HAB are increasing, then within 120 days of such notification IPC shall submit to the ODEQ proposed HAB alternative measures and a HAB alternative measures plan. IPC shall implement the plan in accordance with the approved plan terms and schedule, including any modifications made to the plan by ODEQ as a condition of its approval.

VIII. Mercury

A. Required Actions: IPC shall take the following actions, which are further detailed in the conditions set out below, to comply with the applicable criteria (OAR 340-041-0007(10) and OAR 340-041-0033(1), (2) and (3); IDAPA 58.01.02.210.01):

1. IPC shall continue to assist in funding the U.S. Geological Survey (“USGS”) mercury and methylmercury study as described in Section 6.6.2.2.1 of the Application, which includes the development of a predictive model.
2. IPC shall update the DEQs annually on the progress of the mercury and methyl mercury studies with USGS.
3. If ODEQ determines after consultation with IDEQ that USGS has failed to complete the study, then IPC shall complete the study and develop the predictive model.
4. The study shall be completed and the predictive model shall be developed no later than one year following issuance of the FERC license or by another, later date approved by the DEQs.

B. Methyl Mercury Reports. At the end of each calendar year following the issuance of the new FERC license for the Project, IPC shall provide an annual report on the status of and any results from the mercury and methyl mercury study released by USGS and ambient water quality monitoring. Within 90 days following completion of the Hells Canyon Complex predictive model, whether by USGS or IPC, IPC shall provide the DEQs with a report identifying the key processes that influence methyl mercury production in the Hells Canyon Complex.

C. Methyl Mercury Management Scenarios. Within 180 days of completion of the report on key processes described in section VIII.B above, IPC shall run a series of management scenarios to evaluate how to minimize, to maximum extent practicable, the Project’s effect on methyl mercury production.

D. Methyl Mercury Management Plan. Within 180 days following completion of the Hells Canyon Complex predictive model scenarios described in section VIII.C above, IPC shall propose to the DEQs a methyl mercury management plan to address the Hells Canyon Complex’s role in methyl mercury production. After consultation with IDEQ and once approved by ODEQ, IPC shall implement the methyl mercury management plan in accordance with ODEQ’s approval.

IX. Biological Criteria; Statewide Narrative Criteria; Protection of Designated Beneficial Uses; Antidegradation; Compliance with Other Appropriate Requirements of State Law

A. Required Actions: IPC shall take the following actions, which are further detailed in the conditions set out below, in order to ensure that waters of the State are of sufficient quality to support aquatic species without detrimental changes in the resident biological communities as required by OAR 340-041-0011; to maintain overall water quality at the highest possible levels and deleterious factors to lowest possible levels, and prevent deleterious conditions to fish and other aquatic life as required by OAR 340-041-0007(1), (7), respectively; to protect designated beneficial uses as required by OAR 340-041-0004 and OAR 340-041-0121; and to

comply with other appropriate requirements of state law pursuant to ORS 468B and 33 U.S.C. 1341(d):

1. Develop and implement a macroinvertebrate monitoring plan;
2. Implement survey and entrapment management plans; and
3. Maintain proposed minimum flows.

B. Macroinvertebrate Monitoring Plan. Within 90 days of issuance of a new FERC license for the Project, IPC shall submit to ODEQ for approval a macroinvertebrate and periphyton monitoring plan.

1. **Components:** At a minimum, IPC shall include the following components in the monitoring plan:
 - a. A description of an appropriate sampling technique for macroinvertebrate and periphyton monitoring below Hells Canyon Dam, which shall include standard bioassessment metrics including densities, abundance, richness and tolerance;
 - b. Identification of monitoring locations below Hells Canyon Dam, which shall, at a minimum, include one sampling location within 10 miles downstream of the Hells Canyon Dam and one sampling location within 30 miles downstream of the Hells Canyon Dam; and
 - c. Identification of the frequency of macroinvertebrate and periphyton monitoring below Hells Canyon Dam, which shall include proposed sampling during summer; and
 - d. Measurement and reporting of river stage at a location within 5 miles downstream of Hells Canyon Dam.
2. **Implementation of Macroinvertebrate Monitoring Plan.** Once approved by ODEQ, IPC shall implement the macroinvertebrate monitoring plan in accordance with ODEQ's approval.
3. **Annual Reports.** Within 120 days of December 31 of each calendar year following the issuance of the new FERC license for the Project, IPC shall provide to the ODEQ an annual report that includes the results of macroinvertebrate and periphyton monitoring completed in the past year in accordance with the approved monitoring plan.
4. **Periodic Meetings.** Following each fifth year of monitoring, IPC shall meet with ODEQ and, based on the monitoring results, discuss evidence of continuing impairment, if any, of macroinvertebrate and periphyton communities during the previous five years. If ODEQ determines monitoring demonstrates that the resident biological community below Hells Canyon Dam is in fair or good condition based on comparison of the standard bioassessment metrics to the monitoring results, then ODEQ may allow IPC to cease monitoring for a period of time or for the remaining term of the license.

5. **Alternative Measures.** After the first five-year report, if ODEQ determines the Project is continuing to impair health of the macroinvertebrate and periphyton communities, IPC shall develop an alternative measures plan that must include the following:
 - a. A detailed description of proposed alternative measures;
 - b. An analysis of how alternative measures will provide, or assist in providing, reasonable assurance that the macroinvertebrate and periphyton communities or other designated beneficial uses will not be impaired by Project operations; and
 - c. A statement of whether the proposed alternative measures will cause or contribute to a violation of applicable water quality standards.
6. **Implementation of Alternative Measures.** Upon ODEQ's review and approval of the alternative measures plan, IPC shall implement the plan in accordance with the approved plan's terms and schedule, including any modifications made to the plan by ODEQ as a condition of its approval.

C. Entrapment Management Plan; Minimum Flows. Within 180 days of issuance of a new FERC license for the Project, IPC shall take the following actions as specifically described below unless an Alternative Measure is approved in accordance with this section IX.C.3 below.

1. **Entrapment Management Plan.** Within 180 days of issuance of a new FERC license for the Project, IPC shall:
 - a. Implement the Summer Entrapment Pool Survey Plan;
 - b. Implement section 2.1 of the Juvenile Fall Chinook Salmon Entrapment Management Plan, including adaptive management described therein;
 - c. Report continuous temperature data collected in the entrapment pools;
 - d. Measure variation in river stage at the Snake River at Hells Canyon Dam gaging station 13290450 (RM 247) or at any other gaging station located within five miles downstream of Hells Canyon Dam; and
 - e. Report these measurements to ODEQ on a monthly and annual basis.
2. **Minimum Flows.** IPC shall operate in accordance with proposed operations for project outflows as described in Exhibit A.
3. **Alternative Measures.** If the new FERC license modifies proposed operations as set forth in Exhibit A then, within 60 days of issuance of a new FERC license for the Project, IPC shall notify ODEQ and prepare a report that evaluates the effect of any such operational changes on the resident biological communities and describes why IPC considers the additional or modified measures provide, or assist in providing, reasonable assurance of compliance with water quality standards. Within 90 days of receipt of this report and any additional information requested by ODEQ, whichever date is later, ODEQ may modify the conditions in this section IX.C to align with FERC requirements or as necessary to prevent a violation of

applicable water quality standards, protect designated beneficial uses, or to comply with other appropriate requirements of state law.

X. General Conditions.

A. Document Submittal and Review Process. Except as provided in this certification, IPC shall follow the submittal and review process set forth in this section X.A with respect to all documents required by this certification to be submitted to ODEQ for approval, and this process shall be followed until the document is approved by ODEQ or the document review time frame has expired.

1. After IPC submits a document, ODEQ will (a) notify IPC in writing that the document is approved; (b) notify IPC in writing of any deficiencies in the document; or (c) modify the document. and approve the document.
2. If ODEQ notifies IPC of deficiencies in the document, IPC shall submit a document revised to cure those deficiencies within 30 calendar days of receipt of the notice.
3. The submittal process shall be repeated until ODEQ notifies IPC that the document is approved. However, IPC's documents shall meet the requirements of this certification no later than 90 days from ODEQ's notification of deficiencies and IPC's failure to develop an ODEQ-approved document within such time frame will be considered a violation of this condition of this certification.
4. Once documents are approved by ODEQ, and if ODEQ directs IPC to submit the documents to FERC, then IPC shall submit these documents to FERC with a request that such documents be incorporated into and enforceable as a part of this license. IPC shall implement this certification in accordance with its terms and conditions.

B. Certification Compliance Schedules. If any event occurs that is beyond the IPC's reasonable control and that causes or may cause a delay or deviation in compliance with schedules contained in this section 401 Certification and the required plans, IPC shall immediately notify the DEQs in writing of the cause of delay or deviation and its anticipated duration; the measures that have been or will be taken to prevent or minimize the delay or deviation; and the timetable by which IPC proposes to carry out such measures. It is IPC's responsibility in the written notification to demonstrate to the DEQ's satisfaction that the delay or deviation has been or will be caused by circumstances beyond the control and despite due diligence of IPC. If IPC so demonstrates, the DEQs shall extend times of performance of related activities under this condition, as appropriate. Circumstances or events beyond IPC's control include, but are not limited to, acts of nature, unforeseen strikes, work stoppages, fires, explosion, riot, sabotage, or war. IPC may also consider other circumstances or events as beyond IPC's control. These other circumstances or events may include, but not be limited to, changes in state statutes; delays in the receipt of necessary approvals for construction design or permits; or delays that ODEQ agrees IPC would not have been expected to anticipate. These other circumstances or events will only be considered if they are not due to the actions or inactions of IPC. Increased cost of performance or consultant's failure to provide timely reports may not be considered circumstances beyond IPC's control.

- C. § 401 Certification Modification.** ODEQ may modify this Certification to add, delete, or alter Certification conditions as necessary and feasible if:
1. Changes in conditions regarding operation of the Project from those described in the Application will affect or might affect compliance with water quality standards and requirements;
 2. There are changes to water quality standards, the TMDL, applicable federal laws or other appropriate requirements of state law; or
 3. Modifications are otherwise authorized under state law, including but not limited to OAR 340-048-0050.
- D. Project Changes.** IPC shall notify the DEQs of any change in ownership, scope, or operation of the Project. IPC shall obtain ODEQ's review and any additional certification deemed necessary by ODEQ under Clean Water Act § 401 before undertaking any such change to the Project that may affect water quality.
- E. Project Repair or Maintenance.** IPC shall obtain ODEQ's review before undertaking Project repair or maintenance activities that may potentially affect water quality. ODEQ may, at IPC request, approve specified repair and maintenance activities on a periodic or ongoing basis.
- F. Project Inspection.** IPC shall allow the DEQs such access as necessary to inspect the Project area and Project records required by this Certification at reasonable times as necessary to monitor compliance with § 401 Certification conditions.
- G. Posting of § 401 Certification.** IPC shall post a copy of these Certification conditions in prominent locations at each of the Project Powerhouses.
- H. Water Quality Standards Compliance.** Notwithstanding the conditions of this Certification, no wastes shall be discharged and no activities shall be conducted which will violate state water quality standards.
- I. Conflict Between Certification Conditions and Application.** To the extent that there are any conflicts between the terms and conditions in this certification and how activities, obligations, and processes are described in the Application, the terms and conditions in this certification, as interpreted by ODEQ, shall control.
- J. State DEQ Coordination.** Subject to the requirements of their respective state laws, ODEQ and IDEQ shall use their best efforts to cooperatively administer and oversee implementation of their respective § 401 Certifications, including any adaptive management adjustments thereto.
- K. Dispute Resolution.**
1. In the event of a dispute between IPC and the DEQs, including without limitation a dispute that arises because IPC receives conflicting decisions from the DEQs, regarding implementation of 401 certifications, including any adaptive management adjustments thereto, IPC shall notify the DEQs within thirty (30) calendar days of its actual knowledge of the act, event, or omission giving rise to the dispute and shall describe such dispute with specificity.

2. Unless the DEQs and IPC participate in mediation under section X.K.3 below, IPC shall, within thirty (30) calendar days of the notice under section X.K.1, convene one meeting or conference call to attempt to resolve the dispute at the level of implementing staff for IPC and the DEQs. If the dispute is not resolved within fifteen (15) calendar days after the first meeting or call, IPC shall convene a second meeting or conference call within forty-five (45) calendar days of the first meeting or call to attempt to resolve the dispute at the level of supervisory staff for IPC and the DEQs.
3. Upon the written consent of ODEQ, IDEQ, and IPC, the DEQs and IPC may forgo the process in section X.K.2 and seek to resolve the by mediation through a mutually agreed-upon mediator.
4. If the dispute is not resolved within fifteen (15) calendar days of the second meeting or call under section X.K.2 or completion of mediation under section X.K.3, as applicable, IPC shall give notice to the DEQs that there remains a dispute among these entities. Within a reasonable time, ODEQ and IDEQ shall give notice to IPC of their resolution of the disputed matter, and IPC shall take actions required by the DEQs in this notice. In the event that ODEQ and IDEQ do not agree on a final resolution, ODEQ and IDEQ reserve their respective authorities under the Clean Water Act and state law to make decisions or require actions on disputed matters.

L. Project Oversight Payment. IPC shall pay the project oversight payment as required by applicable law and in the manner and amount as particularly described in Exhibit B, which is incorporated here in its entirety by this reference.

Exhibit A – Proposed Operations

	Brownlee	Oxbow	Hells Canyon
Maximum reservoir elevation (ft msl)	2,077	1,805	1,688
Minimum reservoir elevation (ft msl)	1,976	1,800 ⁴	1,683 ¹
Flood control	Elevations at or below USACE flood-control mandates	NA	NA
Daily Reservoir Elevation Changes			
January 1 – May 20	Not to exceed 3 feet ²		
May 21 – June 20	Draft not to exceed 1 foot ^{2,3}		
June 21 – July 4	Draft not to exceed 3 feet or go below elevation of 2,069 ft-msl ^{2,3}		
July 5–Dec 31	Not to exceed 3 feet ²		
January 1–December 31		5 foot ⁴	5 feet above ¹
Reservoir Target Elevations			
May 20	2,069 or higher		
August 7	2,059 or less ⁵		
Project Outflows			
Fall Chinook salmon stable flow program second Monday in October through second Friday in December			8,500 cfs to 13,500 cfs ⁶
Hourly ramp-rate restrictions	NA	NA	1 ft per hour – up and down ⁷
Maximum daily flow fluctuation, June 1 – September 30	NA	NA	10,000 cfs ⁸
Minimum flow			
<ul style="list-style-type: none"> ▪ Fall Chinook incubation and rearing period 	NA	NA	Dependent upon flow established to protect critical redd ⁹
<ul style="list-style-type: none"> ▪ Completion of fall Chinook rearing and incubation period to initiation of fall Chinook stable flows 			6,500 cfs at Johnson Bar Gage
<ul style="list-style-type: none"> ▪ Year-round at McDuff Gage 			13,000 cfs; 11,500 cfs ¹⁰
Minimum bypass flow	NA	100 cfs	NA
Adaptive fish protection operations			Operational protocols established to reconnect entrapment pools or respond to temperature conditions in critical entrapment areas during the fall Chinook salmon rearing period. ¹¹

¹ A minimum reservoir elevation limit of 1,678 will be in place during atypical conditions. A maximum daily reservoir-level fluctuation will be 10 ft under atypical conditions. See note 2 for description of atypical conditions.

² Except for atypical conditions which are defined as operations needed to: 1) protect the performance, integrity, reliability or stability of the electrical system with which the HCC is interconnected; 2) compensate for any unscheduled loss of generation; 3) provide generation during severe weather or extreme market conditions; 4) inspect, maintain, repair, replace or improve the electrical system or facilities related to the HCC; 5) prevent injury to people or damage to property; or 6) assist in search-and rescue activities.

³ IPC will protect peak spawning periods for smallmouth bass and crappie by limiting Brownlee Reservoir drafts to no more than 1 ft from the highest elevation reached during a 30-day period starting on May 21, and by maintaining an elevation of at least 2,069 fmsl from the end of the 30-day period through July 4. This operational constraint is secondary to any conflicting operational requirement.

⁴ A minimum reservoir elevation limit of 1,795 will be in place during atypical conditions. A maximum daily reservoir-level fluctuation will be 10 ft under atypical conditions. See note 2 for description of atypical conditions.

⁵ This proposed operation is consistent with a flow augmentation operational regime that IPC has complied with annually since 2006.

⁶ Flow below HCC within this period to be operationally stable at levels set annually between 8,500 cfs and 13,500 cfs as determined by flow forecasts. Minor deviations from the stable flow below Hells Canyon Dam may be required to ensure Brownlee Reservoir does not fill prior to the 2nd Friday in December. Communication with NOAA Fisheries prior to deviating from minimum flow may be required to determine any potential effect to spawning fall Chinook salmon consistent with requirements identified in any future Hells Canyon Complex Biological Opinion.

⁷ The compliance point for ramp rate and flow measurements will be at the Johnson Bar Gage, located approximately 18 miles downstream of Hells Canyon Dam.

⁸ A limit of 16,000 cfs will be in place during atypical conditions. See note 2 for description of atypical conditions.

⁹ At the conclusion of fall Chinook salmon stable flow program in early December (see note 6), IPC biologists currently determine the flow required to protect the most critical shallow redd. This flow becomes the minimum flow during the fall Chinook salmon incubation and rearing period (typically near the middle to end of May). The conclusion of the incubation and rearing period is currently determined through weekly observations of fall Chinook salmon rearing areas during Entrapment Surveys (see note 10) with agreement from NOAA Fisheries consistent with requirements identified in the existing Hells Canyon Biological Opinion.

¹⁰ These flows also relate to navigation flows. FERC Staff concluded in the 2007 FEIS that while IPC did not propose 13,000 cfs at Lime Point for navigation purposes that “this value is consistent with the flow releases from Hells Canyon Dam assumed by [IPC] for modeling purposes. In the absence of an explicit proposal, we consider it part of [IPC’s] proposed operation.” In 2007, the U.S. Army Corps of Engineers recommended to FERC a minimum flow for safe navigation of 11,500 cfs at “the Snake River below McDuff Rapids at China Garden, Idaho gaging station 13317660.” IPC concurs with the Corps’ recommendation and anticipates that the new license will provide for a minimum flow of 11,500 cfs measured at McDuff Rapids at China Garden, Idaho gaging station 13317660 with a proviso that IPC would not be required to use reservoir storage to meet the 11,500 cfs minimum flow.

¹¹ Adaptive operations are described in section 2.1.4 of the Juvenile Fall Chinook Salmon Entrapment Management Plan for the Upper Hells Canyon Reach of the Snake River, October 2018, and such adaptive operations will not deviate from other relevant operational constraints (e.g. – ramp rate).

Exhibit B - Oregon Project Oversight Payment

Amount

The annual cost of overseeing implementation of the conditions in the Clean Water Act section 401 certification is set forth in the table below (“Oregon Payment”).

Year	Amount
1	\$125,250
2	\$125,250
3	\$110,640
4	\$112,725
5	\$112,725
6-30	\$74,105

Idaho Power Company (“IPC”) shall pay this Oregon Payment in each of the first thirty (30) years beginning July 1 of each year following issuance of a FERC license in 2018 dollars adjusted according to the formula set forth below, and IPC shall pay an initial prorated payment within thirty (30) days following issuance of a FERC license for the period from the date of FERC license issuance to the first June 30 which follows that license issuance.

Adjustment

The Oregon Payment must be adjusted annually, according to the following formula:

$$AD = D \times (CPI-U)/(CPI-U-December 2018)$$

Where:

AD = Adjusted dollar amount payable to Oregon Department of Environmental Quality.

D = Dollar amount pursuant to Oregon Payment above,

CPI- U = the most current published version of the Consumer Price Index-Urban.

The CPI-U is published monthly by the Bureau of Labor Statistics of the U.S. Dept. of Labor. If that index ceases to be published, any reasonably equivalent index published by the Bureau of Economic Analysis may be substituted by written agreement between ODEQ and IPC.

Payment Schedule

Except for the initial prorated payment due within thirty (30) days following issuance of a FERC license, IPC shall pay the Oregon Payment within thirty (30) days of receipt of invoice from ODEQ, and make the payment payable to the Oregon Department of Environmental Quality.

Expenditure Summary

In accordance with ORS 543.080(9), each agency that receives all or any portion of the Oregon Payment shall, on a biennial basis, provide IPC with a summary of project specific expenditures.

Termination; Extension.

Prior to one year before the expiration of the Oregon Payment, IPC shall meet with all agencies that oversee implementation of the conditions in the Clean Water Act section 401 certification to review the need, if any, to modify, extend, or terminate such oversight and corresponding Oregon Payment. After such review, ODEQ shall propose modifications, an extension, or termination of the Oregon Payment. Any dispute over ODEQ's decision related to any modification or extension of the Oregon Payment shall be resolved in accordance with ORS 543.080(6).

ATTACHMENT E

Idaho Department of Environmental Quality
Clean Water Act § 401 Certification
For the Hells Canyon Complex Hydroelectric Project
(FERC Project No. P-1971-079)

Pursuant to Section 401(a)(1) of the Federal Water Pollution Control Act, as amended, 33 U.S.C. § 1341(a)(1) (“§ 401”); Idaho Code §§ 39-101, et seq.; and Idaho Code §§ 39-3601, et seq., the Idaho Department of Environmental Quality (“IDEQ”) has authority to review activities licensed by the Federal Energy Regulatory Commission (“FERC”) and issue water quality certification decisions.

This certification is in response to an application submitted by the Idaho Power Company (“IPC”) on June 14, 2018, as supplemented by responses to additional information requests and supplemental documents referred to herein (the “Application”). The application requests certification pursuant to Section 401 of the CWA of the issuance of a new license authorizing the continued operation of the Hells Canyon Complex, a three-dam hydroelectric project comprised of the Brownlee Project, the Oxbow Project, and the Hells Canyon Project (collectively FERC Project No. 1971-079, hereafter “Project”). The Project is located on the Snake River. The stretch of the Snake River where the Project is located is in both Idaho and Oregon. Therefore, IPC submitted an identical application for certification to the Oregon Department of Environmental Quality.

IPC’s Application includes measures proposed to provide reasonable assurance the operation of the Project complies with Oregon and Idaho Water Quality Standards, and the Snake River-Hells Canyon Total Maximum Daily Load (“TMDL”). The TMDL was jointly issued by the DEQs in 2004 and includes allocations to IPC and other sources to attain compliance with Oregon and Idaho Water Quality Standards. In the TMDL, the DEQs determined that the Project contributes to violations of Water Quality Standards related to nutrients and dissolved oxygen, salmonid spawning temperature and total dissolved gas and therefore provided allocations to IPC with respect to compliance with these Water Quality Standards. Subsequent to the TMDL, the DEQs have determined that IPC contributes to a violation of the applicable dissolved oxygen criteria below the Hells Canyon Dam.

Based upon its review of the above-referenced application and other relevant information, IDEQ certifies that if IPC complies with the terms and conditions imposed by the FERC license along with the conditions set forth in this water quality certification, then there is reasonable assurance the operation of the Project will comply with the applicable requirements of sections 1311, 1312, 1313, 1316, and 1317 of Title 33 of the United States Code; the Idaho Water Quality Standards

(IDAPA 58.01.02); the TMDL's allocations; and other appropriate water quality requirements of Idaho law.

This certification does not constitute authorization of the permitted activities by any other state or federal agency or private person or entity. This certification does not excuse the permit holder from the obligation to obtain any other necessary approvals, authorizations, or permits.

Antidegradation Review

The Idaho Water Quality Standards include an antidegradation policy, providing three levels of protection to water bodies in Idaho (IDAPA 58.01.02.051).

- Tier I Protection. The first level of protection applies to all water bodies subject to Clean Water Act jurisdiction and ensures that existing uses of a water body and the level of water quality necessary to protect those existing uses will be maintained and protected (IDAPA 58.01.02.051.01; 58.01.02.052.01). Additionally, a Tier I review is performed for all new or reissued permits or licenses (IDAPA 58.01.02.052.07).
- Tier II Protection. The second level of protection applies to those water bodies considered high quality and ensures that no lowering of water quality will be allowed unless deemed necessary to accommodate important economic or social development (IDAPA 58.01.02.051.02; 58.01.02.052.08).
- Tier III Protection. The third level of protection applies to water bodies that have been designated outstanding resource waters and requires that activities not cause a lowering of water quality (IDAPA 58.01.02.051.03; 58.01.02.052.09).

IDEQ is employing a water body by water body approach to implementing Idaho's antidegradation policy. This approach means that any water body fully supporting its beneficial uses will be considered high quality (IDAPA 58.01.02.052.05.a). Any water body not fully supporting its beneficial uses will be provided Tier I protection for that use, unless specific circumstances warranting Tier II protection are met (IDAPA 58.01.02.052.05.c). The most recent federally approved Integrated Report and supporting data are used to determine support status and the tier of protection (IDAPA 58.01.02.052.05).

Pollutants of Concern

Pollutants of concern related to the Project are temperature, dissolved oxygen, nutrients, mercury and total dissolved gas.

Receiving Water Body Level of Protection

The Project includes a number of Assessment Units ("AUs").

Brownlee Reservoir, AU ID17050201SW003_08 is designated for cold water aquatic life ("COLD"), primary contact recreation ("PCR") and domestic water supply ("DWS"). According to the 2014 Integrated Report ("IR"), this AU is not fully supporting COLD and recreational uses.

Oxbow Reservoir, AU ID17050201SW002_08, is designated for COLD, PCR, and DWS. According to the 2014 IR, this AU is not fully supporting COLD and recreational uses; the DWS use is not assessed.

Hells Canyon Reservoir, ID17050201SW001_08, is designated for COLD, PCR, and DWS. According to the 2014 IR, this AU is not fully supporting COLD and recreational uses.

The Snake River downstream of the Hells Canyon Dam to Sheep Creek, AU ID17060101SL003_08 is designated for COLD, salmonid spawning (“SS”), PCR and DWS. According to the 2014 IR, this AU is not fully supporting the COLD SS, and recreational uses; the DWS use is not assessed.

Because the 2014 IR indicates the AUs above are not fully supporting their aquatic life and recreational uses and circumstances warranting Tier II protection are not present, IDEQ will provide Tier I protection only for all the AUs relevant to the Project.

Protection and Maintenance of Existing Uses (Tier 1 Protection)

As noted above, a Tier I review is performed for all new or reissued permits or licenses, applies to all waters subject to the jurisdiction of the Clean Water Act, and requires demonstration that existing uses and the level of water quality necessary to protect existing uses shall be maintained and protected. In order to protect and maintain designated and existing beneficial uses, a permitted discharge must comply with narrative and numeric criteria of the Idaho Water Quality Standards, as well as other provisions of the standards such as Section 055, which addresses water quality limited waters.

The numeric and narrative criteria in the Idaho Water Quality Standards are set at levels that ensure protection of designated beneficial uses. Below, this 401 certification includes conditions requiring IPC implement measures to meet the narrative and numeric criteria in the standards. With respect to salmonid spawning temperature criteria, the Project is solely responsible for the Snake River exceeding the applicable criteria below the Hells Canyon Dam during the fall chinook spawning period when the temperature at river mile 345 is less than or equal to the applicable criteria. With respect to total dissolved gas, the Project is solely responsible for violating the TDG criteria below the three dams in the complex. For these pollutants and criteria, the certification includes requirements that provide a reasonable assurance that the operation of the complex will meet criteria. With respect to nutrients and dissolved oxygen, the violation of criteria is attributed to a number of sources, including the Project. In these circumstances, the certification includes requirements that provide reasonable assurance that IPC will meet its responsibility for contributing to the violation. IPC’s responsibility for contributing to a violation with respect to nutrients and dissolved oxygen, temperature and total dissolved gas is outlined in the TMDL.

Water bodies not supporting existing or designated beneficial uses must be identified as water quality limited, and a total maximum daily load must be prepared for those pollutants causing impairment. A central purpose of total maximum daily loads is to establish allocations, which are set at levels designed to help restore the water body to a condition that supports existing and designated beneficial uses. Discharges must be consistent with the allocations in a TMDL (IDAPA 58.01.02.055.05).

As noted, the TMDL contains allocations to IPC and the Project for temperature, dissolved oxygen and nutrients and total dissolved gas. The conditions in the certification require IPC to take actions to meet the allocations provided in the TMDL, and therefore, address IPC's responsibility for contributing to a violation of criteria for these pollutants.

The AUs at issue in the Hells Canyon Complex are also impaired as a result of the violation of applicable mercury criteria. There has been no TMDL prepared with respect to mercury or methylmercury. The contribution, if any, of the Project to a violation of mercury and methylmercury criteria is unknown at this time. The certification requires the continued study of mercury and methylmercury and the influence of the Project. The certification also requires IPC to model methylmercury management scenarios and produce for approval and implement a methylmercury management plan to address the role, if any, of the Project in the violation of criteria. These provisions provide reasonable assurance of compliance with the applicable mercury and methylmercury criteria.

In summary, the conditions below provide reasonable assurance of compliance with the narrative and numeric criteria in the Idaho Water Quality Standards as well as the applicable allocations in the TMDL. Therefore, IDEQ has determined the license for the Project will protect and maintain existing beneficial uses in the Snake River in compliance with the Tier I provisions of Idaho's antidegradation policy (IDAPA 58.01.02.051.01 and 58.01.02.052.07).

Conditions Necessary to Ensure Compliance with Water Quality Standards and Other Appropriate Water Quality Requirements of State Law

In the conditions below, the Idaho and Oregon Departments of Environmental Quality are separately referred to as "IDEQ" and "ODEQ," respectively, and collectively referred to as the "DEQs." The Idaho Power Company is referred to as "IPC."

Upon FERC's issuance of a license to Idaho Power Company for the Project, IPC must comply with the following § 401 Certification conditions:

I. Project Operation

The proposed operations are as particularly described in Exhibit A, which is incorporated here in its entirety by this reference. In accordance with applicable law, IPC shall notify the DEQs if FERC authorizes modification to these operations so as to allow the DEQs to determine whether such changes may affect compliance with water quality standards.

II. Temperature

A. **Required Actions.** IPC shall take the following actions, which are further detailed in the conditions set out below, in order to comply with the Snake River-Hells Canyon Total Maximum Daily Load ("TMDL") temperature load allocation, the Oregon and Idaho salmonid spawning criteria (IDAPA

58.01.02.286; OAR 340-041-0028(4)(a)), and migration corridor temperature criteria (OAR 340-041-0028(4)(d)) (“applicable temperature criteria”):

1. Implement a Temperature Management and Compliance Plan (“TMCP”); and
2. Attain the Year 15 and 30 year thermal load reductions (“required thermal benefits”); or attain the TMDL temperature load allocation and applicable temperature criteria as provided in the approved Temperature Alternative Measures Plan (“TAMP”).

B. Required Thermal Benefits. IPC shall attain thermal benefits of 1191.6 billion kilocalories (“bkcal”) at the inflow to the Project by 30 years after the date that FERC issues a new license for the Project. IPC shall maintain the required thermal benefits throughout the term of the FERC license. No later than 15 years after the date that FERC issues the new license, IPC shall attain thermal benefits of 595.8 bkcal at the inflow to the Project. Or, if an alternative measure is implemented, IPC shall attain the TMDL temperature load allocation and applicable temperature criteria as provided in the approved TAMP.

C. Implementation of the TMCP.

1. IPC shall implement the TMCP in order to attain the required 15 and 30 year required thermal benefits. The TMCP shall include the Snake River Stewardship Program (“SRSP”) that is specifically described in Exhibit 7.1-5 of the Application, which by this reference is incorporated in its entirety except that the following sentence in Section 2.5.3 of Exhibit 7.1-5 is not incorporated: “The thermal benefits generated from SRSP restoration projects do not need to be discounted on a project site-by-project site basis to account for river and reservoir attenuation, conservatism, or margin of safety, as those factors have already been accounted for in calculating IPC’s cumulative thermal load exceedance (see Section 7.1 of the 401 application).” The TMCP shall also include the Brownlee operational component as described in section II.C.6 below and a temperature monitoring plan, as described in section II.D below.
2. As part of the TMCP, IPC shall implement the SRSP, which includes the development and implementation of measures upstream of the Project in the mainstem of the Snake River and in tributaries to the Snake River, in order to attain the required thermal benefits. The thermal benefits attained by IPC through the implementation of the SRSP shall be determined as described in Section 2.3 of Exhibit 7.1-5 of the Application.
3. The selection, design, implementation, monitoring and maintenance of specific SRSP projects shall be in accordance with Restoration Quality Standards and Guidelines (“Restoration Standards”) developed by IPC

and described in Section 2.5.1 and Attachment 1 of Exhibit 7.1-5 of the Application. As part of the annual reporting process set forth in section II.E below, IPC may propose modifications to the Restoration Standards to reflect information gathered from the implementation of projects. If approved by IDEQ, the modified Restoration Standards shall apply to all SRSP projects constructed after the date the modified Restoration Standards are approved.

4. SRSP projects that are confirmed to be implemented consistent with the project design and the approved Restoration Standards shall count towards the required thermal benefits. The thermal benefits for a project shall continue to be counted towards the required thermal benefits as long as monitoring establishes that the project is maintained in accordance with the Restoration Standards. IPC shall reduce in-river and tributary project thermal benefits by 22% and 25%, respectively, before being applied or credited toward the aggregate thermal load target of 1191.6 bkcal at the HCC inflow.
5. As part of the annual and five-year SRSP reporting set forth in section II.E below, IPC shall describe the SRSP projects implemented, the status of maintenance on all projects, and the thermal benefits IPC attributes to any project. Thermal benefits shall count towards the required thermal benefits if IDEQ, after consultation with ODEQ, concurs that the project has been implemented and maintained in accordance with the Restoration Standards. If IDEQ finds that a project is not implemented or maintained in accordance with the Restoration Standards, or fails the program audits, IPC shall not count the thermal benefits of such project towards the required thermal benefits unless subsequent monitoring shows the project is in compliance. Information obtained from monitoring will be used to inform the thermal benefit calculation for future projects, but will not be used to adjust credits already assigned to existing approved projects. Following review of the annual and five-year SRSP reports, IDEQ shall notify IPC of the results of its review of projects, and the amount of thermal benefits claimed by IPC that count towards the required thermal benefits.
6. As part of the TMCP, IPC shall implement the Brownlee operational component as specifically described in Section 7.1.2.1 of the Application. The Brownlee operational component includes, at a minimum:
 - a. IPC shall forecast the Hells Canyon Complex outflow 7 day average maximum temperature conditions;
 - b. If forecast at the beginning of the salmonid spawning period indicates a high probability of exceeding the 16.5 degrees Celsius (“°C”) target 7-day average maximum temperature

conditions, then IPC shall enhance fall drafting of Brownlee Reservoir to achieve 16.5°C in the Snake River downstream of Hells Canyon Dam; and

- c. IPC shall meet with the DEQs each August to report on the forecasted temperature and discuss the decision to enhance fall drafting of Brownlee Reservoir.

D. **Monitoring.** IPC shall monitor projects described in the SRSP and in accordance with the Restoration Standards. In addition, IPC shall monitor daily maximum temperatures at the locations specified below in section II.D.1 and in accordance with the approved Temperature Monitoring Plan. Within 90 days of the date of FERC's issuance of a new license for the Project, IPC shall submit to the DEQs for approval a Temperature Monitoring Plan. Once approved by IDEQ, after consultation with ODEQ, IPC shall implement the Temperature Monitoring Plan. IPC may submit proposed revisions to the Temperature Monitoring Plan and, if approved by IDEQ, after consultation with ODEQ, IPC shall implement the revised plan in accordance with IDEQ's approval. The Temperature Monitoring Plan shall include the following components:

1. Proposed temperature monitoring locations. Locations shall be proposed that are representative of the Snake River flowing into Brownlee Reservoir, within Brownlee Reservoir, within Oxbow Reservoir, within Hells Canyon Reservoir, flowing out of Hells Canyon Dam, and within three miles downstream of the Hells Canyon Dam.
2. Proposed data collection equipment and procedures.
3. Proposed frequency of monitoring.
4. A project-specific *Quality Assurance Project Plan* ("QAPP"); and
5. A proposal for data analysis and reporting.

E. **Reporting.** IPC shall provide the following reports to IDEQ:

1. **Brownlee Operations Reports.** In any year when IPC drafts Brownlee Reservoir as described under Section II.C.6, IPC shall:
 - a. Meet with the DEQs in late November for a post-implementation effectiveness meeting; and
 - b. Provide a draft report at the post-implementation effectiveness meeting, which describes the following:
 - i. Whether the target of 16.5°C was attained and if not, analyze data and determine why the target was not attained;

- ii. Propose actions to ensure the 16.5°C target is not exceeded in the future; and
 - c. Provide a final report by December 31 of the draft year that also includes the above components in sections II.E.1.b.i and ii.
- 2. **SRSP Annual Reports.** At the end of each calendar year following the issuance of the new FERC license for the Project, IPC shall provide a SRSP Annual Report that includes, without limitation, the following:
 - a. The results of the required monitoring of SRSP projects, including:
 - i. Qualitative (i.e., project) monitoring at all sites.
 - ii. Remote effectiveness monitoring at all sites.
 - iii. Quantitative (i.e., effectiveness) monitoring on a selected sample of projects representative of the in-stream habitat and riparian revegetation project types.
 - b. A description of the SRSP projects implemented in that year, the baseline for each project, the status of implementation of all projects, expected completion date and any other information necessary to determine if a project has been implemented and maintained in accordance with Restoration Standards. IPC shall include a map showing the location of all projects implemented to date.
 - c. The thermal benefits IPC attributes to any projects implemented in that year. For projects implemented in prior years, a statement as to whether the project is being maintained in accordance with Restoration Standards and if so, the thermal benefits IPC claims from those projects.
 - d. A description of the proposed projects scheduled for implementation in the next year or future years, including IPC's estimate of those projects' aggregate thermal benefits.
 - e. An audit review report, including a summary of whether the sites surveyed complied with the acceptance threshold for the audit and any remediation activities if necessary.
 - f. The cumulative thermal benefits from that year and past years, and IPC's assessment of whether implementation of the TMCP, including the SRSP, is reasonably likely to achieve the 15 and 30 year required thermal benefits.

- g. A report of daily maximum temperature and associated data files measured within three miles downstream of Hells Canyon Dam, including a comparison between these data and data representing inflow to Brownlee and outflow temperatures in the Snake River below Hells Canyon Dam.
- h. IPC may include a request for the DEQs to consider approval of alternative or additional measures, including but not limited to Plan B as described in Section 7.1.2.5.3.1 and Exhibits 7.1-8 and 7.1-9 of the Application, hereinafter referred to as "Plan B", which by this reference is incorporated in its entirety. As used in this section II, "Temperature Alternative Measures" are methods or approaches not included in the TMCP that will provide, or assist in providing, reasonable assurance that the required thermal benefits will be achieved, or in the case of Plan B, reasonable assurance that the TMDL temperature load allocation and applicable temperature criteria will be met. The DEQs shall review such a request as provided in section II.F below. Such a request shall include the following:
 - i. The basis or reasons why IPC considers Temperature Alternative Measures to be necessary or appropriate.
 - ii. A detailed description of proposed Temperature Alternative Measures.
 - iii. An analysis of how the Temperature Alternative Measures will provide, or assist in providing, reasonable assurance that the required thermal benefits will be attained.
 - iv. A statement of whether the proposed Temperature Alternative Measures will cause or contribute to a violation of applicable water quality standards.

3. IDEQ's Response to SRSP Annual Reports.

- a. The DEQs shall review SRSP Annual Reports to determine whether SRSP projects were implemented and maintained in compliance with Restoration Standards. If IDEQ, after consultation with ODEQ, does not concur that projects were implemented and maintained in compliance with Restoration Standards, then IDEQ shall notify IPC of the amount of thermal benefits in that year that shall be counted towards the required thermal benefits.
- b. IDEQ shall notify IPC whether they approve of or reject any amendment to the TMCP to address issues associated with implementation.

- c. The DEQs shall respond to any Temperature Alternative Measures request as provided in section II.F below.
4. **SRSP Five-Year Reports.** At the end of every fifth calendar year following the issuance of a new FERC license for the Project, IPC shall provide a SRSP Five-Year Report that includes the following:
- a. All the required elements of the annual report for that year.
 - b. Summary of data analysis, progress on implementation of the TMCP, and program effectiveness during the five-year-review period.
 - c. Identification of any data gaps, program inefficiencies or challenges.
 - d. An evaluation of observed changes occurring relative to pre-SRSP project conditions in monitored implemented projects (including vegetation, hydrology, and morphology).
 - e. A summary and evaluation of changes in applicable laws or regulations related to the regulatory baseline in the SRSP program area that may affect the thermal benefits assigned to projects.
 - f. Any proposed changes to Restoration Standards, including changes to modeling of thermal benefits. Any such changes must be approved by IDEQ, after consultation with ODEQ, before implemented by IPC.
 - g. Summary of thermal benefits associated with previously implemented projects that were not previously quantified, including any benefits unquantified due to a lack of data or recognized methodology. New benefits not previously quantified can only be counted towards meeting the required thermal benefits if IDEQ, after consultation with ODEQ, approves the data and methodology for determining such benefits.
 - h. Non-temperature benefits calculated, projected or observed specific to projects that have been implemented. This includes a discussion of progress towards meeting the non-temperature related goals of the in-stream work in the mainstem Snake River as well as non-temperature benefits of the tributary restoration work.
 - i. Summary of any new SRSP restoration actions and quantification methodologies proposed.

- j. Estimates of current trajectory of thermal benefits to achieve modeled conditions. A report and consolidation of the previous annual summaries of the progress toward achieving the required thermal benefits, including an analysis and updated assessment of whether the program is reasonably likely to achieve compliance with the 15 and 30 year required thermal benefits.

5. **IDEQ's Response to SRSP Five-Year Reports.** The DEQs shall respond to a Five Year Report as follows:

- a. With respect to information that must or may also be included in the SRSP Annual Reports, the DEQs shall respond as set forth in section II.E.3 above.
- b. IDEQ shall notify IPC whether it approves of or rejects any changes to the Restoration Standards proposed by IPC.

F. **Temperature Alternative Measures.** The process and the standard for determining whether Temperature Alternative Measures are required are set forth below.

1. **IPC Proposal.** In any SRSP Annual or Five-Year Report, IPC may include a request for the DEQs to consider approval of Temperature Alternative Measures.

- a. Within 60 days of the receipt of IPC's proposal, IDEQ shall meet with IPC and discuss the proposal and any additional information that may be required by IDEQ in order to make a determination.
- b. Within 90 days of the meeting and the submission of additional information, whichever occurs later, IDEQ, after consultation with ODEQ, shall notify IPC in writing of its approval or denial of the proposed alternative measures. If denied, IDEQ shall specify the basis for the rejection.
- c. Within 120 days of approval, if any, of proposed alternative measures, IPC shall submit to the DEQs for approval a Temperature Alternative Measures Plan, as described below.

2. **IDEQ's Determination that Temperature Alternative Measures are Required.** With respect to the Brownlee operational component, if water temperature in the Snake River below Hells Canyon Dam during salmonid spawning period exceeds the 16.5° C target in three consecutive years, IPC shall submit for the DEQs' approval an alternative measures report, including but not limited to its proposed alternative measures set forth in section 7.1.2.5.3 of the Application. In addition, with respect to the SRSP, after the second Five-Year SRSP Report, and after any subsequent five-year report, IDEQ, after

consultation with ODEQ, may determine that Temperature Alternative Measures are required in accordance with section II.F.4 below.

- a. Within 60 days of the receipt of the applicable report, the DEQs and IPC shall meet to discuss the report, whether Temperature Alternative Measures are required, and any other issues including but not limited to any additional information that may be required by IDEQ in order to make a determination.
- b. Within 90 days of the meeting and the submission of additional information, whichever occurs later, IDEQ, after consultation with ODEQ, shall notify IPC if Temperature Alternative Measures are required.
- c. Within 180 days of the notification, IPC shall submit to the DEQs for approval a Temperature Alternative Measures Plan, as described below.

3. Temperature Alternative Measures Plan (“TAMP”).

- a. IPC shall include the following in any TAMP that addresses compliance with applicable temperature criteria:
 - i. Details of the measure to be implemented, including a comparison of the proposed measure to the current SRSP. If IDEQ, after consultation with ODEQ, requires Plan B as the Temperature Alternative Measure, the TAMP must provide details with respect to Plan B, including, at a minimum, the manner in which IPC achieves the TMDL temperature allocation and the other applicable temperature criteria.
 - ii. An evaluation of whether the measure may cause or contribute to a violation of applicable water quality standards. The TAMP must include a detailed description of actions needed to prevent a violation of water quality standards.
 - iii. If the construction or implementation of the measure may require permitting or approval by any state or federal agency, a description of the process necessary and the estimated time period to acquire such permitting or approval.
 - iv. A schedule for the implementation of the measure.

4. Temperature Alternative Measures Standard.

- a. IPC shall implement Plan B or other approved Temperature Alternative Measures if, taking into account any previously approved revisions to the SRSP, projects implemented and to be implemented under the SRSP, IDEQ, after consultation with ODEQ, determines that the SRSP, in addition to the Brownlee operational component described above, does not appear reasonably likely to achieve the year 15 and 30 required thermal benefits. IDEQ, after consultation with ODEQ, may require that Plan B be submitted as the Temperature Alternative Measure if it determines that other proposed alternative measures, if any, are not likely to achieve the required thermal benefits or otherwise meet the TMDL temperature load allocation and the applicable temperature criteria.
- b. In determining whether to approve proposed alternative measures and a TAMP, IDEQ, after consultation with ODEQ, shall consider the following:
 - i. Whether Plan B or the proposed alternative measures, as presented in the TAMP, are reasonable likely to achieve the required thermal benefits or otherwise meet the TMDL temperature load allocation and the other applicable temperature criteria.
 - ii. Whether Plan B or the proposed alternative measures, operated alone or in combination with other Temperature Alternative Measures, after consideration of any mercury or other water quality studies undertaken and any other information IDEQ deems relevant, may cause or contribute to a violation of applicable water quality standards. As provided in section II.F.3.a above, IPC must include in the TAMP a detailed description of any actions necessary to prevent a violation of water quality standards; and
 - iii. Other issues relevant to the implementation of Plan B or the proposed alternative measures, including whether the construction or implementation of the measure may require any permitting or approval by any state or federal agency, including FERC.

5. Implementation of TAMP.

- a. Upon IDEQ's approval of the TAMP, IPC shall implement the TAMP in accordance with its terms and schedule, including any modifications made by IDEQ as conditions of its approval.

- b. Unless and until IDEQ approves a TAMP in writing, IPC shall continue to implement the approved TMCP to achieve the year 15 and 30 year required thermal benefits.

III. Dissolved Oxygen (“DO”)—Brownlee Reservoir TMDL Load Allocation.

A. **Required Actions.** IPC shall take the following actions, which are further detailed in the conditions set out below, in order to comply with the Brownlee Reservoir Snake River Hells Canyon Total Maximum Daily Load Dissolved Oxygen allocation:

1. Implementation of the Riverside Operational Water-Quality Improvement Project (“ROWQIP”) or any approved Brownlee DO Alternative Measure;
2. Attainment of the TMDL DO allocation by reducing phosphorus loads upstream of Brownlee by 15,000 pounds during mid-April through mid-October (183 days) each year;
3. Implementation of the Grand View Sediment Reduction Program (“Grand View Program”); and
4. Implementation of the Swan Falls Project Aquatic Vegetation and Debris Removal Program (“Swan Fall Program”).

B. **Implementation of the ROWQIP, Grand View Program, and Swan Falls Program.** Upon the issuance of a new FERC license for the Project, IPC shall continue to implement the ROWQIP, Grand View Program, and Swan Falls Program, as such programs are described in the Section 7.2.1 of the Application, which by this reference is incorporated in its entirety, and in accordance with this 401 certification in order to meet the DO load allocation for the FERC license term unless Brownlee DO Alternative Measures are approved in accordance with section III.B.6 below

1. **ROWQIP Monitoring Plan.** Within 120 days of the issuance of a new FERC license for the Project, IPC shall submit to the DEQs for approval a monitoring plan that monitors implementation of the ROWQIP. Once approved by IDEQ, after consultation with ODEQ, IPC shall implement the monitoring plan in accordance with its terms and schedule, including any modifications made by IDEQ as conditions of its approval. The monitoring plan shall include, at a minimum, a requirement that IPC will monitor for:
 - a. Total phosphorus concentrations in Riverside Canal tributary inflows.
 - b. Total phosphorus concentrations in spill from all locations, including the end of the canal delivery system.

- c. Total suspended solids concentration in Riverside Canal tributary inflows.
 - d. Flow data collected at the Boise River diversion; other tributary inflow locations; and spill from all locations, including the end of the canal delivery system.
 - e. Total phosphorus monitoring at river mile 345.
2. **Grand View Program Monitoring Plan.** Within 120 days of the issuance of a new FERC license for the Project, IPC shall submit to the DEQs for approval a monitoring plan that monitors implementation of the Grand View Program. Once approved by IDEQ, after consultation with ODEQ, IPC shall implement the monitoring plan in accordance with its terms and schedule, including any modifications made by IDEQ as conditions of its approval. The monitoring plan shall include, at a minimum, a requirement that IPC will monitor for:
- a. Total phosphorus concentrations in drains and tributaries in Grand View program area.
 - b. Total suspended solid concentrations in drains and tributaries in Grand View program area.
3. **Swan Falls Monitoring Plan.** Within 120 days of the issuance of a new FERC license for the Project, IPC shall submit to the DEQs for approval a monitoring plan that monitors implementation of the Swan Falls Program. Once approved by IDEQ, after consultation with ODEQ, IPC shall implement the monitoring plan in accordance with its terms and schedule, including any modifications made by IDEQ as conditions of its approval. The monitoring plan shall include, at a minimum, a requirement that IPC will monitor for:
- a. Number of truckloads of aquatic vegetation and debris removed at the Swan Falls project annually between April 15 and October 15.
 - b. The total phosphorus removed from the Snake River following removal of aquatic vegetation and debris from the Swan Fall project.
4. **Brownlee DO Annual Reports.** Within 120 days of December 31 of each year following the issuance of the new FERC license for the Project, IPC shall provide to the DEQs an Annual Report that includes the following information:
- a. The results of monitoring accomplished in the past year in accordance with the approved monitoring plans described in sections III.B.1 through .3;

- b. Total phosphorus load reduction analysis demonstrating whether the implementation of the ROWQIP, Grand View Program, and Swan Falls Program attained the DO load allocation, expressed as a total phosphorus reduction, for that year; and
 - c. Any proposed changes to the ROWQIP, Grand View Program, or Swan Falls Program, as applicable, and any Brownlee DO Alternative Measures proposed by IPC. As used in this section III, “Brownlee DO Alternative Measures” are methods or approaches not included in the ROWQIP, Grand View Program, or Swan Falls Program, as applicable, which will provide, or assist in providing, reasonable assurance that the DO load allocation described in section III.A.2 above will be achieved. IDEQ shall review such a proposal as provided in section III.B.6 below. Any such proposal must include the following:
 - i. The basis or reasons why IPC considers Brownlee DO Alternative Measures to be necessary or appropriate;
 - ii. A detailed description of the proposed alternative measure;
 - iii. An analysis of how the proposed alternative measure will provide, or assist in providing, reasonable assurance that the DO load allocation described in section III.A.2 above will be attained; and
 - iv. A statement of whether the proposed alternative measures will cause or contribute to a violation of applicable water quality standards.
 - d. **IDEQ’s Response to Brownlee DO Annual Reports.** IDEQ, after consultation with ODEQ, shall respond to Brownlee DO Annual Reports, if necessary, as follows:
 - i. Within 90 days, IDEQ shall either approve or reject proposed changes to the ROWQIP, Grand View Program, or Swan Falls Program, as applicable.
 - ii. IDEQ shall respond to a proposed alternative measures as set forth in section III.B.6 below.
5. **Brownlee DO Five-Year Reports.** Within 120 days of December 31 of every fifth calendar year following the issuance of a new FERC license for the Project, IPC shall provide a Brownlee DO Five-Year Report to the DEQs that includes the following:
- a. All the required elements of the Brownlee DO Annual Report for that year;

- b. Trend analysis of total phosphorus data collected at Brownlee Reservoir inflow; and
 - c. A discussion of how total phosphorus data collected at the inflow to Brownlee Reservoir compares to Snake River Hells Canyon TMDL target of 0.07 milligrams per Liter (“mg/L”).
6. **Brownlee DO Alternative Measures.** The process and the standard for determining whether Brownlee DO Alternative Measures are required are set forth below.
- a. **IPC Proposal.** In any Brownlee DO Annual Report, IPC may include a request for the DEQs to consider approval of Brownlee DO Alternative Measures.
 - i. Within 60 days of the receipt of IPC’s proposal, the DEQs shall meet with IPC and discuss the proposal and any additional information that may be required by the DEQs in order to make a determination whether Brownlee DO Alternative Measures are required.
 - ii. Within 90 days of the meeting or the submission of additional information, if requested by the DEQs, whichever occurs later, IDEQ shall notify IPC in writing of its approval or denial of the proposed alternative measures. If denied, IDEQ shall specify the basis for the rejection.
 - iii. Within 120 days of approval of the proposed alternative measures, if any, IPC shall submit to the DEQs for approval a Brownlee DO Alternative Measures Plan, as described in section III.B.6.c below.
 - b. **DEQs’ Determination that Brownlee DO Alternative Measures are Required.** After any Brownlee DO Annual Report, IDEQ may, after consultation with ODEQ, determine that Brownlee DO Alternative Measures are required in accordance with section III.B.6.d below.
 - i. Within 60 days of the receipt of an Annual Report and after consultation with ODEQ, IDEQ shall notify IPC if Brownlee DO Alternative Measures are required.
 - ii. Within 120 days of the notification, IPC shall submit to the DEQs for approval a Brownlee DO Alternative Measures Plan, as described in section III.B.6.c below.
 - c. **Brownlee DO Alternative Measures Plan.** IPC shall include the following in any Brownlee DO Alternative Measures Plan:

- i. Details of the measure to be implemented, including a comparison of the proposed alternative measure to the ROWQIP, Grand View Program, or Swan Falls Program, as applicable.
- ii. Whether the proposed alternative measure, operated alone or in combination with other Brownlee DO Alternative Measures, may cause or contribute to a violation of applicable water quality standards, and if so, the alternative measures plan must include a detailed description of actions needed to prevent a violation of water quality standards.
- iii. If the construction or implementation of the proposed alternative measure may require permitting or approval by any state or federal agency, a description of the process necessary and the estimated time period to acquire such permitting or approval.
- iv. A schedule for the implementation of the proposed alternative measure.

d. Brownlee DO Alternative Measures Standard.

- i. IPC shall implement Brownlee DO Alternative Measures, such as a measure to directly supplement DO in Brownlee Reservoir if, taking into account any previously approved revisions to the ROWQIP, Grand View Program, or Swan Falls Program, as applicable, and after consultation with ODEQ, IDEQ determines the ROWQIP, Grand View Program, and Swan Falls Program are currently not attaining the DO load allocation described in section III.A.2 above or is not reasonably likely to attain that DO load allocation in the future.
- ii. In determining whether to approve a proposed alternative measure and Brownlee DO Alternative Measures Plan, the DEQs shall consider the following:
 - (a) Whether the proposed alternative measure, as presented in the alternative measures plan, is reasonably likely to attain the DO load allocation described in section III.A.2 above and;
 - (b) Whether the proposed alternative measures, operated alone or in combination with other Brownlee DO Alternative Measures, may cause or contribute to a violation of water quality standards, and if so, whether

there are any actions that can be undertaken to ensure no such violation occurs; and

- (c) Other issues relevant to the consideration of the proposed alternative measure, including whether the construction or implementation of the measure may require any permitting or approval by any state or federal agency, including FERC.

e. Implementation of the Brownlee DO Alternative Measures Plan.

- i. After consultation with ODEQ and upon IDEQ's approval of the Brownlee DO Alternative Measures Plan, IPC shall implement the plan in accordance with the approved plan terms and schedule, including any modifications made to the plan by IDEQ as a condition of its approval.
- ii. Unless and until IDEQ approves a Brownlee DO Alternative Measures Plan, IPC shall continue to implement the ROWQIP, the Grand View Program, and the Swan Falls Program as set forth in Section 7.2.1 of the Application and in accordance with the conditions of this certification to achieve the DO load allocation described in section III.A.2 above.

IV. DO—DO Criteria Below Hells Canyon Dam.

- A. Required Actions.** IPC shall take the following actions, which are further detailed in the conditions set out below, in order to comply with the applicable DO criteria (IDAPA 58.01.02; OAR 340-041-0016):
- 1. IPC shall install and operate the distributed aeration systems on turbine units 1 through 4 at the Brownlee Powerhouse as described in Section 7.2.2 of the Application, which by this reference is incorporated in its entirety.
 - 2. IPC shall test each system following installation.
 - 3. Between July 1 and October 22, IPC shall add as much additional oxygen as possible or increase DO in the outflow from the Hells Canyon Dam, as measured at the turbine water intake system at Hells Canyon Dam, by an average of 1.2 mg/L, whichever is greater, until any further addition or increase would cause an exceedance of the current total dissolved gas criterion set forth in section VI below. IPC shall calculate this 1.2 mg/L requirement as a minimum of the 30 consecutive -day

floating average of the calculated daily mean dissolved oxygen concentration.

4. Between October 23 and December 31, IPC shall add as much additional oxygen as possible or increase DO in the outflow from the Hells Canyon Dam, as measured at the turbine water intake system at Hells Canyon Dam, by an average of 1.5 mg/L, whichever is greater, until any further addition or increase would cause an exceedance of the current total dissolved gas criterion set forth in section VI below. IPC shall calculate this 1.5 mg/L requirement as a seven-day mean minimum. For calculating the mean, concentrations in excess of 100 percent of saturation are valued at the saturation concentration.

B. Monitoring Plan. Within 90 days of the issuance of a new FERC license for the Project, IPC shall submit to the DEQs for approval a Dissolved Oxygen Water Quality Monitoring Plan. Once approved by IDEQ, after consultation with ODEQ, IPC shall implement the monitoring plan in accordance with IDEQ's approval. The Dissolved Oxygen Water Quality Monitoring Plan must, at a minimum, include the following components:

1. A description of the method IPC will use to determine whether the distributed aeration systems are achieving the required increase in DO.
2. Identification of DO monitoring locations. IPC shall monitor DO at locations that are representative of DO levels in the Snake River flowing into Brownlee Reservoir, within Brownlee Reservoir, within Oxbow Reservoir, within Hells Canyon Reservoir, at the turbine water intake at Hells Canyon Dam, and within three miles downstream of the Hells Canyon Dam.
3. Identification of downstream monitoring locations for intergravel dissolved oxygen. IPC shall monitor for intergravel DO below Hells Canyon Dam at sampling locations that include, at a minimum, two sampling locations within 10 miles downstream of the Hells Canyon Dam.
4. Proposed data collection procedures including description of equipment, methods and frequency of monitoring.
5. A project-specific QAPP; and
6. A proposal for data analysis.

C. Outflow DO Annual Reports. Within 90 days of December 31st of each year following the issuance of the new FERC license for the Project, IPC shall provide to the DEQs an Outflow DO Annual Report that includes the following information:

1. Updates on the installation and testing of the distributed aeration systems currently scheduled for installation by mid-year 2019;
2. The results of monitoring accomplished in the year in accordance with the approved Dissolved Oxygen Water Quality Monitoring Plan;
3. An analysis regarding whether the systems are achieving or are anticipated to achieve the required increase in DO; and
4. A discussion of how aeration affects total dissolved gas concentrations in the Snake River within and below the Hells Canyon Complex.

D. Alternative Measures. If, after any Outflow DO Annual Report and after consultation with ODEQ, IDEQ determines that either (1) the distributed aeration systems are not achieving or will not likely achieve an increase in DO in the outflow of Hells Canyon Dam, as measured at the turbine water intake system at Hells Canyon Dam, of at least an average of 1.2 mg/L during July 1 to October 22 and 1.5 mg/L during October 23 to December 31, or (2) monitoring results collected within 3 miles downstream of Hells Canyon Dam indicate DO levels fall below applicable minimum DO water quality criteria, then IDEQ shall notify IPC that Outflow DO Alternative Measures are required. Within 120 days of the notification, IPC shall submit to the DEQs for approval a Brownlee DO Alternative Measures Plan.

1. IPC shall include the following in any Outflow DO Alternative Measures Plan:
 - a. Details of the measure to be implemented, including a comparison of the proposed alternative measure to the proposed distributed aeration systems;
 - b. An evaluation of whether the proposed alternative measure may cause or contribute to a violation of applicable water quality standards, and if so, whether there are any actions that can be undertaken to ensure no such violation occurs;
 - c. If the construction or implementation of the proposed alternative measure may require permitting or approval by any state or federal agency, a description of the process necessary and the estimated time period to acquire such permitting or approval; and
 - d. A schedule for the implementation of the proposed alternative measure.
2. Upon IDEQ's approval of an Outflow DO Alternative Measures Plan, IPC shall implement the plan in accordance with the approved plan's terms and schedule, including any modifications made to the plan by IDEQ as a condition of approval.

3. Unless and until IDEQ approves an Outflow DO Alternative Measures Plan, IPC shall continue to operate the proposed distributed aeration systems as set forth in sections IV.A.3 and .4 to achieve the required increase in DO in the outflow from Hells Canyon Dam.

V. Oxbow Bypass Destratification

- A. **Required Actions.** IPC shall take the following actions, which are further detailed in the conditions set out in sections V.B and C below, to comply with applicable DO criteria (IDAPA 58.01.02.250.f.i; OAR 340-041-0016).
- B. **Oxbow Operating Plan.** Within one year of the issuance of the new FERC license for the Project, IPC shall submit to the DEQs and FERC for approval the final Oxbow Operating Plan for a destratification system. The system shall address thermal stratification in the deep pool of the Oxbow Bypass and the resulting anoxic conditions by introducing sufficient mixing (using diffused air bubbles) to prevent thermal stratification and development of anoxic conditions in the deep pool. The Oxbow Operating Plan shall include:
 1. Final design plans;
 2. Parameters and requirements for operation and expected performance;
 3. A monitoring plan to determine whether the system is meeting performance goals;
 4. Adaptive management protocols; and
 5. A reporting schedule.
- C. **Installation and Operation of the System.** Within 6 months of IDEQ's and FERC's approval of the Oxbow Operating Plan, IPC shall install the system in accordance with the approved design and thereafter operate the system for the FERC license term in accordance with the approved Operating Plan.

VI. Total Dissolved Gas ("TDG").

- A. **Required Actions.** IPC shall take the following actions, which are further detailed in the conditions set out in this section VI below, to comply with applicable TDG criteria (IDAPA 58.01.250.01.b and 300; OAR 340-041-0031(2)) and the TMDL load allocations:
 1. IPC shall meet and maintain a TDG level of less than 110% of saturation at the sampling locations defined in section VI.B.2 below, except when flows exceed the ten-year, seven-day average flood.
 2. IPC shall install and implement flow deflectors as described in Section 7.3.1.2 - .4 of the Application, which by this reference are incorporated in their entirety, except that:

- a. IPC shall construct and install the Oxbow Dam spillway flow deflector within 2 years of the completion of FERC's required design review process and any required permitting;
 - b. IPC shall construct and install Hells Canyon Dam sluiceway flow deflectors within 2 years of construction of the Oxbow Dam spillway flow deflector; and
 - c. IPC shall construct and install Brownlee Dam spillway flow deflectors within 2 years of construction of the Hells Canyon Dam sluiceway flow deflectors.
3. IPC shall continue preferential Brownlee Dam upper gate spill until the flow deflectors are installed and operating.
- B. TDG Operating Plan.** Within 90 days of the issuance of the new FERC license for the Project, IPC shall submit to the DEQs an TDG Operating Plan that includes:
1. A proposed schedule for the submittal for approval of the design plans to FERC, and installation of flow deflectors at the Brownlee Dam spillway, the Oxbow Dam spillway and the Hells Canyon sluiceway;
 2. A monitoring plan to determine whether the system is meeting the applicable criteria and load allocation. The monitoring plan shall include, at a minimum, monitoring of TDG concentrations during spill events, specific locations to define point of sampling location below each dam for determining compliance, and a description of the methodology and equipment that will be used for monitoring;
 3. Adaptive management measures as described in Section 7.3.2 of the Application, which is incorporated here in its entirety by this reference; and
 4. A reporting schedule.
- C. Installation and Operation of the System.** In accordance with the schedule in the approved TDG Operating Plan, IPC shall install the deflectors; and IPC shall monitor in accordance with the approved TDG Operating Plan to determine if TDG criteria and the load allocations are met at sampling locations defined in the monitoring plan.
- D. TDG Alternative Measures.** If IDEQ, after consultation with ODEQ, notifies IPC that monitoring indicates that TDG criteria and allocations are not being met, then within 120 days of such notification IPC shall submit to the IDEQ proposed TDG alternatives measures and a TDG alternative measures plan to address compliance with applicable criteria and allocations. IPC shall implement the plan in accordance with the approved plan terms and schedule, including any modifications made to the plan by IDEQ as a condition of its approval. Unless

and until IDEQ approves a TDG alternative measures plan, IPC shall continue to meet conditions set forth in section VI.A above.

VII. Harmful Algal Blooms (“HAB”).

- A. Required Actions:** IPC shall take the following actions, which are further detailed in the conditions set out in this section VII.A below, to comply with the applicable criteria (OAR 340-041-0007(10), (12) and (13); IDAPA 58.01.02.200.05 and .06).
1. Within 90 days of issuance of the new FERC license, IPC must submit to the DEQs a HAB monitoring plan. At minimum, the HAB monitoring plan must include:
 - a. Identification of times and locations of high recreational activity and any other location identified by the DEQs.
 - b. A minimum of weekly visual monitoring during periods of high recreation.
 - c. Additional quantitative monitoring (e.g. cell counts, species identification, toxin concentration, or other as deemed needed by IDEQ) if visual monitoring indicates potential HAB.
 - d. Submission of visual and quantitative monitoring results to the IDEQ.
 - e. Advisory postings at the sampling locations following issuance of an advisory by IDEQ.
 - f. Additional visual and quantitative monitoring as needed to provide IDEQ sufficient data to lift the advisory.
 - g. Monitoring shall follow IDEQ guidelines.
 2. After consultation with ODEQ and once approved by IDEQ, IPC shall implement the HAB monitoring plan in accordance with IDEQ’s approval.
- B. HAB Monitoring Plans.** IPC shall review and update the HAB monitoring plans at least once every five years to reflect monitoring results or new versions of IDEQ guidance documents. Updated HAB monitoring plans shall be submitted to the DEQs for review and approval.
- C. HAB Alternative Measures.** If IDEQ, after consultation with ODEQ, notifies IPC that visual and quantitative monitoring indicates that occurrence of HAB are increasing, then within 120 days of such notification IPC shall submit to the IDEQ proposed HAB alternative measures and a HAB alternative measures plan.

IPC shall implement the plan in accordance with the approved plan terms and schedule, including any modifications made to the plan by IDEQ as a condition of its approval.

VIII. Mercury

A. Required Actions: IPC shall take the following actions, which are further detailed in the conditions set out below, to comply with the applicable criteria (OAR 340-041-0007(10) and OAR 340-041-0033(1), (2) and (3); IDAPA 58.01.02.210.01):

1. IPC shall continue to assist in funding the U.S. Geological Survey (“USGS”) mercury and methylmercury study as described in Section 6.6.2.2.1 of the Application, which includes the development of a predictive model.
2. IPC shall update the DEQs annually on the progress of the mercury and methyl mercury studies with USGS.
3. If USGS fails to complete the study, then IPC shall complete the study and develop the predictive model. IPC shall complete the study and develop the predictive model within one year following issuance of the FERC license or by another date approved by the DEQs.

B. Methyl Mercury Reports. At the end of each calendar year following the issuance of the new FERC license for the Project, IPC shall provide an annual report on the status of and any results from the mercury and methyl mercury study released by USGS and ambient water quality monitoring. Within 90 days following completion of the Hells Canyon Complex predictive model, whether by USGS or IPC, IPC shall provide the DEQs with a report identifying the key processes that influence methyl mercury production in the Hells Canyon Complex.

C. Methyl Mercury Management Scenarios. Within 180 days of completion of the report on key processes described in section VIII.B above, IPC shall run a series of management scenarios to evaluate how to minimize, to maximum extent practicable, the Project’s effect on methyl mercury production.

D. Methyl Mercury Management Plan. Within 180 days following completion of the Hells Canyon Complex predictive model scenarios described in section VIII.C above, IPC shall propose to the DEQs a methyl mercury management plan to address the Hells Canyon Complex’s role in methyl mercury production. After consultation with ODEQ and once approved by IDEQ, IPC shall implement the methyl mercury management plan in accordance with IDEQ’s approval.

IX. General Conditions.

A. Document Submittal and Review Process. Except as provided in this certification, IPC shall follow the submittal and review process set forth in this section IX.A with respect to all documents required by this certification to be submitted to IDEQ for

approval, and this process shall be followed until the document is approved by IDEQ or the document review time frame has expired.

1. After IPC submits a document, IDEQ will (a) notify IPC in writing that the document is approved; (b) notify IPC in writing of any deficiencies in the document; or (c) modify the document and approve the document.
2. If IDEQ notifies IPC of deficiencies in the document, IPC shall submit a document revised to cure those deficiencies within 30 calendar days of receipt of the notice.
3. The submittal process shall be repeated until IDEQ notifies IPC that the document is approved. However, IPC's documents shall meet the requirements of this certification no later than 90 days from IDEQ's notification of deficiencies and IPC's failure to develop an IDEQ-approved document within such time frame will be considered a violation of this condition of this certification.
4. Once documents are approved by IDEQ, IPC shall submit these documents to FERC with a request that such documents be incorporated into and enforceable as a part of this license. IPC shall implement this certification in accordance with its terms and conditions.

B. Certification Compliance Schedules. If any event occurs that is beyond the IPC's reasonable control and that causes or may cause a delay or deviation in compliance with schedules contained in this section 401 Certification and the required plans, IPC shall immediately notify the DEQs in writing of the cause of delay or deviation and its anticipated duration; the measures that have been or will be taken to prevent or minimize the delay or deviation; and the timetable by which IPC proposes to carry out such measures. It is IPC's responsibility in the written notification to demonstrate to the DEQs' satisfaction that the delay or deviation has been or will be caused by circumstances beyond the control and despite due diligence of IPC. If IPC so demonstrates, the DEQs shall extend times of performance of related activities under this condition, as appropriate. Circumstances or events beyond IPC's control include, but are not limited to, acts of nature, unforeseen strikes, work stoppages, fires, explosion, riot, sabotage, or war. IPC may also consider other circumstances or events as beyond IPC's control. These other circumstances or events may include, but not be limited to, changes in state statutes; delays in the receipt of necessary approvals for construction design or permits; or delays that IDEQ agrees IPC would not have been expected to anticipate. These other circumstances or events will only be considered if they are not due to the actions or inactions of IPC. Increased cost of performance or consultant's failure to provide timely reports may not be considered circumstances beyond IPC's control.

C. § 401 Certification Modification. IDEQ may modify this Certification to add, delete, or alter Certification conditions as necessary and feasible if:

1. Changes in conditions regarding operation of the Project from those described in the Application will affect or might affect compliance with water quality standards and requirements;
 2. There are changes to water quality standards, the TMDL, applicable federal laws or other appropriate requirements of state law; or
 3. Modifications are otherwise authorized under state law.
- D. Project Changes.** IPC shall notify the DEQs of any change in ownership, scope, or operation of the Project. IPC shall obtain IDEQ's review and any additional certification deemed necessary by IDEQ under Clean Water Act § 401 before undertaking any such change to the Project that may affect water quality.
- E. Project Repair or Maintenance.** IPC shall obtain IDEQ's review before undertaking Project repair or maintenance activities that may potentially affect water quality. IDEQ may, at IPC request, approve specified repair and maintenance activities on a periodic or ongoing basis.
- F. Project Inspection.** IPC shall allow the DEQs such access as necessary to inspect the Project area and Project records required by this Certification at reasonable times as necessary to monitor compliance with § 401 Certification conditions.
- G. Posting of § 401 Certification.** IPC shall post a copy of these Certification conditions in prominent locations at each of the Project Powerhouses.
- H. Water Quality Standards Compliance.** Notwithstanding the conditions of this Certification, no wastes shall be discharged and no activities shall be conducted which will violate state water quality standards.
- I. Conflict Between Certification Conditions and Application.** To the extent that there are any conflicts between the terms and conditions in this certification and how activities, obligations, and processes are described in the Application, the terms and conditions in this certification, as interpreted by IDEQ, shall control.
- J. State DEQ Coordination.** Subject to the requirements of their respective state laws, ODEQ and IDEQ shall use their best efforts to cooperatively administer and oversee implementation of their respective § 401 Certifications, including any adaptive management adjustments thereto.
- K. Dispute Resolution.**
1. In the event of a dispute between IPC and the DEQs, including without limitation a dispute that arises because IPC receives conflicting decisions from the DEQs, regarding implementation of 401 certifications, including any adaptive management adjustments thereto, IPC shall notify the DEQs within thirty (30) calendar days of its actual knowledge of the act, event, or omission giving rise to the dispute and shall describe such dispute with specificity.

2. Unless the DEQs and IPC participate in mediation under section IX.K.3 below, IPC shall, within thirty (30) calendar days of the notice under section IX.K.1, convene one meeting or conference call to attempt to resolve the dispute at the level of implementing staff for IPC and the DEQs. If the dispute is not resolved within fifteen (15) calendar days after the first meeting or call, IPC shall convene a second meeting or conference call within forty-five (45) calendar days of the first meeting or call to attempt to resolve the dispute at the level of supervisory staff for IPC and the DEQs.
3. Upon the written consent of ODEQ, IDEQ, and IPC, the DEQs and IPC may forgo the process in section IX.K.2 and seek to resolve the by mediation through a mutually agreed-upon mediator.
4. If the dispute is not resolved within fifteen (15) calendar days of the second meeting or call under section IX.K.2 or completion of mediation under section IX.K.3, as applicable, IPC shall give notice to the DEQs that there remains a dispute among these entities. Within a reasonable time, ODEQ and IDEQ shall give notice to IPC of their resolution of the disputed matter, and IPC shall take actions required by the DEQs in this notice. In the event that ODEQ and IDEQ do not agree on a final resolution, ODEQ and IDEQ reserve their respective authorities under the Clean Water Act and state law to make decisions or require actions on disputed matters.

L. Project Oversight Payment. IPC shall pay the project oversight payment as required by applicable law and in the manner and amount as particularly described in Exhibit B, which is incorporated here in its entirety by this reference.

Exhibit A – Proposed Operations

	Brownlee	Oxbow	Hells Canyon
Maximum reservoir elevation (ft msl)	2,077	1,805	1,688
Minimum reservoir elevation (ft msl)	1,976	1,800 ⁴	1,683 ¹
Flood control	Elevations at or below USACE flood-control mandates	NA	NA
Daily Reservoir Elevation Changes			
January 1 – May 20	Not to exceed 3 feet ²		
May 21 – June 20	Draft not to exceed 1 foot ²³		
June 21 – July 4	Draft not to exceed 3 feet or go below elevation of 2,069 ft-msl ²³		
July 5–Dec 31	Not to exceed 3 feet ²		
January 1–December 31		5 foot ⁴	5 feet above ¹
Reservoir Target Elevations			
May 20	2,069 or higher		
August 7	2,059 or less ⁵		
Project Outflows			
Fall Chinook salmon stable flow program second Monday in October through second Friday in December			8,500 cfs to 13,500 cfs ⁶
Hourly ramp-rate restrictions	NA	NA	1 ft per hour - up and down ⁷
Maximum daily flow fluctuation, June 1 – September 30	NA	NA	10,000 cfs ⁸
Minimum flow			
▪ Fall Chinook incubation and rearing period	NA	NA	Dependent upon flow established to protect critical redd ⁹
▪ Completion of fall Chinook rearing and incubation period to initiation of fall Chinook stable flows			6,500 cfs at Johnson Bar Gage
▪ Year-round at McDuff Gage			13,000 cfs; 11,500 cfs ¹⁰
Minimum bypass flow	NA	100 cfs	NA
Adaptive fish protection operations			Operational protocols established to reconnect entrapment pools or respond to temperature conditions in critical entrapment areas during the fall Chinook salmon rearing period. ¹¹

¹ A minimum reservoir elevation limit of 1,678 will be in place during atypical conditions. A maximum daily reservoir-level fluctuation will be 10 ft under atypical conditions. See note 2 for description of atypical conditions.

² Except for atypical conditions which are defined as operations needed to: 1) protect the performance, integrity, reliability or stability of the electrical system with which the HCC is interconnected; 2) compensate for any unscheduled loss of generation; 3) provide generation during severe weather or extreme market conditions; 4) inspect, maintain, repair, replace or improve the electrical system or facilities related to the HCC; 5) prevent injury to people or damage to property; or 6) assist in search-and rescue activities.

³ IPC will protect peak spawning periods for smallmouth bass and crappie by limiting Brownlee Reservoir drafts to no more than 1 ft from the highest elevation reached during a 30-day period starting on May 21, and by maintaining an elevation of at least 2,069 ftmsl from the end of the 30-day period through July 4. This operational constraint is secondary to any conflicting operational requirement.

⁴ A minimum reservoir elevation limit of 1,795 will be in place during atypical conditions. A maximum daily reservoir-level fluctuation will be 10 ft under atypical conditions. See note 2 for description of atypical conditions.

⁵ This proposed operation is consistent with a flow augmentation operational regime that IPC has complied with annually since 2006.

⁶ Flow below HCC within this period to be operationally stable at levels set annually between 8,500 cfs and 13,500 cfs as determined by flow forecasts. Minor deviations from the stable flow below Hells Canyon Dam may be required to ensure Brownlee Reservoir does not fill prior to the 2nd Friday in December. Communication with NOAA Fisheries prior to deviating from minimum flow may be required to determine any potential effect to spawning fall Chinook salmon consistent with requirements identified in any future Hells Canyon Complex Biological Opinion.

⁷ The compliance point for ramp rate and flow measurements will be at the Johnson Bar Gage, located approximately 18 miles downstream of Hells Canyon Dam.

⁸ A limit of 16,000 cfs will be in place during atypical conditions See note 2 for description of atypical conditions.

⁹ At the conclusion of fall Chinook salmon stable flow program in early December (see note 6), IPC biologists currently determine the flow required to protect the most critical shallow redd. This flow becomes the minimum flow during the fall Chinook salmon incubation and rearing period (typically near the middle to end of May). The conclusion of the incubation and rearing period is currently determined through weekly observations of fall Chinook salmon rearing areas during Entrapment Surveys (see note 10) with agreement from NOAA Fisheries consistent with requirements identified in the existing Hells Canyon Biological Opinion.

¹⁰ These flows also relate to navigation flows. FERC Staff concluded in the 2007 FEIS that while IPC did not propose 13,000 cfs at Lime Point for navigation purposes that “this value is consistent with the flow releases from Hells Canyon Dam assumed by [IPC] for modeling purposes. In the absence of an explicit proposal, we consider it part of [IPC’s] proposed operation.” In 2007, the U.S. Army Corps of Engineers recommended to FERC a minimum flow for safe navigation of 11,500 cfs at “the Snake River below McDuff Rapids at China Garden, Idaho gaging station 13317660.” IPC concurs with the Corps’ recommendation and anticipates that the new license will provide for a minimum flow of 11,500 cfs measured at McDuff Rapids at China Garden, Idaho gaging station 13317660 with a proviso that IPC would not be required to use reservoir storage to meet the 11,500 cfs minimum flow.

¹¹ Adaptive operations are described in section 2.1.4 of the Juvenile Fall Chinook Salmon Entrapment Management Plan for the Upper Hells Canyon Reach of the Snake River, October 2018, and such adaptive operations will not deviate from other relevant operational constraints (e.g. – ramp rate).

Exhibit B - Idaho Project Oversight Payment

Amount

To cover the costs incurred by the Idaho Department of Environmental Quality (“IDEQ”) in administering its § 401 certification for the Project, Idaho Power Company (“IPC”) shall provide to IDEQ an oversight payment in the amount of \$110,000 in 2019 dollars adjusted according to the formula below (“Idaho Payment”), made payable to the State of Idaho, Department of Environmental Quality on the schedule specified below.

Adjustment

The Idaho Payment amount must be adjusted annually, according to the following formula:

$$AD = D \times (CPI-U)/(CPI-U-June 2019)$$

Where:

AD = Idaho Payment,

D = \$110,000,

CPI- U = the most current published version of the Consumer Price Index-Urban. The CPI-U is published monthly by the Bureau of Labor Statistics of the U.S. Department of Labor. If that index ceases to be published, any reasonably equivalent index published by the Bureau of Economic Analysis may be substituted by written agreement between IDEQ and IPC.

Payment Schedule

The oversight payment must be paid pursuant to a written invoice from IDEQ. Except for the initial prorated payment provided below, IPC shall pay the Idaho Payment on July 1 of each year following issuance of a New License for the Project. IPC must pay an initial prorated Idaho Payment to IDEQ within thirty (30) days of the date FERC issues the New License, for the period from the date FERC issues the New License to the first June 30 which follows issuance of the New License.

Expenditure Summary

IDEQ shall, on a biennial basis, provide Idaho Power Company with a summary of project specific expenditures.

Duration

The Idaho Payment obligation shall expire 30 years after the first July 1 following the issuance of the new FERC license, unless IDEQ terminates it earlier because oversight for purposes of § 401 Certification is no longer necessary. One year before the expiration of the payment obligation, or earlier if mutually agreed, IDEQ and IPC shall review the need, if any, to modify, extend, or terminate the payment. IPC will pay any oversight payment required after such review, including the payment established as a result of any administrative or judicial review in accordance with state law.