June 11, 2009

Julie Keil, Hydropower Relicensing
Portland General Electric Company
121 SW Salmon St. - 3WTC BRHL
Portland, OR 97204

Re: Clackamas Hydroelectric Project, FERC Project No. 2195;
Certification Pursuant to Section 401 of the federal Clean Water Act;
Notice of Opportunity for Contested Case Hearing

Dear Ms. Keil:

Portland General Electric Company (PGE) owns and operates the Clackamas Hydro-electric Project (Project). The Project is located in the Clackamas Basin upstream of the city of Estacada in Clackamas County, Oregon. PGE operates the Project under a license issued by the Federal Energy Regulatory Commission (FERC). In August, 2004, PGE submitted applications to FERC for a new License (FERC Project No. 2195).

On June 20, 2008, PGE applied to the Oregon Department of Environmental Quality (Department) for water quality certification of the Project pursuant to § 401 of the federal Clean Water Act and ORS 468B.040. The Department has evaluated the application for consistency with the applicable provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act; Oregon Administrative Rules (OAR) Chapter 340, Divisions 41 and 48; the specific water quality provisions for the Willamette River Basin set forth in OAR 340-041-0340 through 0350; and ORS 543A.025(2)-(4).

Based on PGE’s application, the Department’s Evaluation and Findings Report (enclosed), and consideration of public comment, the Department grants § 401 certification for the Clackamas Project for the waters upstream of River Mill dam. The Department is reasonably assured that operations under the new license will be consistent with applicable provisions of Sections 301, 302, 303, 306, and 307 of the Clean Water Act, state water quality standards, ORS 543A.025, and other appropriate requirements of state law related to water quality, provided the § 401 certification conditions attached to this certification are followed.
The enclosed certification is valid for the PGE only and not transferable without written approval by DEQ, in accordance with OAR 340-048-0042(6).

In accordance with OAR 340-048-0045, PGE, if dissatisfied with the conditions of this certification, may request a hearing before the Environmental Quality Commission. Such request for a hearing must be made in writing to the Director of the Oregon Department of Environmental Quality within 20 days of the date of mailing of this certification. Any hearing will be conducted pursuant to the rules of the Commission for contested cases.

Sincerely,

[Signature]

Nina De Concini
Northwest Region Administrator

Enclosures: Certification Conditions
Evaluation and Findings Report
Clean Water Act § 401 Certification Conditions
For the
Clackamas Hydroelectric Project
(FERC No. 2195)
Clackamas River Basin
Clackamas County, Oregon

Upon Federal Energy Regulatory Commission (FERC) issuance of a new license for the Clackamas Hydroelectric Project (Project), Portland General Electric Company (PGE) shall comply with the following § 401 Certification Conditions:

1. Water Quality Monitoring and Management Plan

   Within 90 days of issuance of the FERC license, PGE, in consultation with the Oregon Department of Environmental Quality (DEQ), shall, as necessary to ensure consistency with these § 401 Certification Conditions, revise the Water Quality Monitoring and Management Plan (WQMPM) attached to these § 401 Certification Conditions as Exhibit A and submit the revised plan for DEQ approval. Upon DEQ approval, the revised WQMPM becomes part of these § 401 Certification Conditions for the Project for the purposes of any federal license or permit.

2. Dissolved Oxygen (DO) and Intergravel Dissolved Oxygen (IGDO)

   a. Spawning Season DO and IGDO at Project-affected sites.

      (1) The WQMPM shall specify the monitoring reasonably needed to (a) determine whether the DO and IGDO criteria are exceeded in waters affected by the Project, (b) determine whether such exceedances are caused by Project operations, and (c) identify additional measures that may be needed to reduce the Project’s contribution to exceedances of the criteria.

      (2) PGE shall implement the revised WQMPM for DO and IGDO beginning with the first sampling season after the revised plan is approved by DEQ.

      (3) If DEQ, in consultation with PGE, determines that monitoring shows Project operations are causing impacts to DO or IGDO that result in water quality violations, PGE shall consult with DEQ to evaluate whether any modifications to Project operations can reverse such impacts to DO or IGDO. If DEQ determines that such modifications can reverse such impacts, PGE shall propose modifications to DEQ and, upon DEQ approval, shall implement the modifications.

   b. Timothy Lake and North Fork Reservoir:

      (1) The WQMPM regarding Tastes and Odors shall include the collection of dissolved oxygen at depth profiles from at least three sites in Timothy Lake and two sites in North Fork Reservoir during the summer season.

      (2) PGE shall develop a schedule for monitoring profiles for dissolved oxygen in consultation with DEQ and the Blue-Green Team, based in part on the evaluation of data collected prior to and early in the FERC license period.
(3) Upon DEQ approval of the revised WQMP, PGE shall implement the plan.

(4) PGE shall consult with DEQ and the Blue-Green Team to evaluate the results of the monitoring program and to evaluate whether feasible measures exist to reduce the frequency or severity of blue-green bloom contributions to DO concentrations in the reservoirs. If DEQ determines that such measures do exist, PGE shall propose modifications to DEQ and, upon DEQ approval, shall implement the modifications.

c. Downstream of Timothy Lake.

At all times, PGE shall route a sufficient proportion of the water discharged from Timothy Lake through the Howell Bunger valve to meet the applicable criteria for DO in the Oak Grove Fork in the Timothy Lake tailrace. If the Howell Bunger Valve is permanently disabled, or if PGE wishes to replace it for any other reason, the replacement equipment must provide equivalent assurance to DEQ of compliance with the DO standard.

3. Hydrogen Ion Concentration (pH)

a. The WQMP regarding Taste and Odors shall include the collection of pH (hydrogen ion concentration) at depth profiles from at least three sites in Timothy Lake and two sites in North Fork Reservoir during the summer season.

b. PGE shall develop a schedule for monitoring profiles for pH in consultation with DEQ and the Blue-Green Team, based in part on the evaluation of data collected prior to and early in the FERC license period.

c. Upon DEQ approval of the revised WQMP, PGE shall implement the plan.

d. PGE shall consult with the Blue-Green Team to evaluate the results of the monitoring program and to evaluate whether feasible measures exist to reduce the frequency or severity of blue-green bloom contributions to adverse pH conditions in the reservoirs. If DEQ determines that such measures do exist, PGE shall propose modifications to DEQ and, upon DEQ approval, shall implement the modifications.

4. Total Dissolved Gas (TDG)

a. The WQMP regarding TDG shall specify the monitoring reasonably needed to (a) determine whether the TDG criterion is exceeded in waters affected by the Project, (b) determine whether such exceedances are caused by Project operations, and (c) identify additional measures that may be needed to reduce the Project's contribution to exceedances of the criteria. The monitoring plan regarding TDG shall at a minimum include the following sampling sites and flow or spill conditions:

(1) North Fork tailrace under spill conditions for Clackamas River flows up to 21,000 cfs or a revised ten-year seven-day flood event;

(2) At River Mill Tailrace when spilling here or at North Fork Dam, for Clackamas River flows up to 21,000 cfs or a revised ten-year seven-day flood event, especially under conditions when TDG at North Fork Dam exceeds 110% saturation.

(3) Sampling at both North Fork and River Mill Tailraces under conditions of both unintentional spill at North Fork Dam (i.e. spill at flows that exceed powerhouse capacity) and intentional spill to protect fish passage at North Fork Dam.
b. If DEQ determines that monitoring of TDG at any of the Clackamas Project dam tailraces at times of spill indicates noncompliance with the TDG standard, PGE shall develop a plan and schedule for assessing the problem and thereafter developing a remedy. Upon approval of the remedial plan by DEQ, PGE shall implement the remedial plan in accordance with the approved schedule.

5. Nuisance Algae; Taste, Odor and Toxic Algae Formation; Aesthetic Conditions

a. The WQMP regarding Tastes and Odors shall describe a monitoring program to track the occurrence and causes of blue-green algae blooms in Timothy Lake and North Fork Reservoir. The WQMP shall be developed in consultation with the Blue-Green Team and DEQ and shall be consistent with the provisions of the Blue-Green Algae Monitoring Plan, Exhibit F of the Settlement Agreement.

b. PGE shall consult with the Blue-Green Team to evaluate the results of the monitoring program and to evaluate whether feasible measures exist to reduce the occurrence or severity of blue-green blooms. If DEQ determines that such measures do exist, PGE shall propose modifications to DEQ and, upon DEQ approval, shall implement the modifications.

c. With the approval of DEQ, PGE may cease or modify implementation of the WQMP regarding the Blue-Green Monitoring Plan. DEQ may approve termination or modification if DEQ determines that it will not impair the achievement of any load allocation for any future Total Maximum Daily Load (TMDL) for the Project for nuisance phytoplankton growth or blue-green algal blooms, and will not contribute to the exceedance of the relevant nuisance phytoplankton growth or other water quality criteria in the Project reservoirs.

6. Temperature

a. **Timothy Lake and North Fork Reservoir.**

   (1) The WQMP regarding taste and odors shall include the collection of temperature at depth profiles from at least three sites in Timothy Lake and two sites in North Fork Reservoir during the summer season.

   (2) PGE shall develop a schedule for monitoring profiles for temperature in consultation with DEQ and the Blue-Green Team, based in part on the evaluation of data collected prior to and early in the FERC license period.

   (3) Upon DEQ approval of the revised WQMP, PGE shall implement the plan.

   (4) PGE shall consult with the Blue-Green Team to evaluate the results of the monitoring program and to evaluate whether feasible measures exist to reduce the frequency or severity of blue-green bloom contributions to adverse temperature conditions in the reservoirs. If DEQ determines that such measures do exist, PGE shall propose modifications to DEQ and, upon DEQ approval, shall implement the modifications.

b. **Lower Oak Grove Fork.**

   (1) PGE shall construct a flow control structure at Harriett Lake capable of directing 100 cubic feet per second (cfs) instream flows to the Oak Grove Fork downstream of Harriett Lake (see Proposed License Article 8).

   (2) PGE shall provide stream flow to the Oak Grove Fork downstream of Harriett Lake as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 8).
(3) PGE shall establish a flow gage in the Lower Oak Grove Fork as specified in the Settlement Agreement (see Settlement Exhibit C § 3(c); Proposed License Article 9), to ensure that instream flows are attained in the Lower Oak Grove reach downstream of Harriett Lake.

c. Faraday Diversion Reach.

PGE shall maintain a minimum flow of at least 250 cfs in the Faraday Bypass reach except when higher flows are required by the state instream water right described in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 13).

7. Turbidity

During ground-disturbing activities or instream work, PGE shall implement Best Management Practices to protect surface water and beneficial uses from adverse Project-related water quality impacts (including but not limited to preventing excessive sediment and turbidity), shall comply with state and federal permitting requirements, and shall comply with state and federal emergency notification requirements.

8. Biological Criteria; Protection of Beneficial Uses; Compliance with Other Appropriate Requirements of State Law

a. Reservoir Levels

(1) PGE shall manage water levels in Timothy Lake as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 6), to protect amphibian reproduction in Timothy Lake.

(2) PGE shall manage the reservoir level in Estacada Lake as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 15), to protect spawning habitat at the upstream end of the lake.

b. Stream Flows

(1) PGE shall release flow downstream of Timothy Lake as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 6), following both the minimum and maximum flow requirements to increase habitat for resident trout.

(2) PGE shall release flow downstream of Harriett Lake according to the schedule specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 8), to increase aquatic habitat.

(3) PGE shall maintain a minimum flow of 270 cfs in the Faraday Bypass reach except when higher flows are required by the state instream water right described in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 13). In year 8 or later of the new FERC license, PGE may lower the instream flow to 250 cfs after demonstrating reduced juvenile steelhead entrainment in North Fork Reservoir as specified in the Settlement Agreement (see Settlement Exhibit C Plan; Proposed License Article 13). PGE shall provide pulsed flows in the Faraday Diversion reach between April 1 and October 31 as specified in the Settlement Agreement (see Settlement Exhibit D; Proposed License Article 13(c), 37).

(4) PGE shall manage flows in the River Mill Tailrace as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 14).
c. Ramping Rates

(1) PGE shall follow the stage change limits described downstream of Timothy Dam as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 6(c)).

(2) PGE shall follow the stage change limits described downstream of the Oak Grove Powerhouse as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 11(b)).

(3) PGE shall follow the stage change limits described for the River Mill Tailrace as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 15(b)(iii)).

d. Run-of-River Operations

PGE shall operate the North Fork Reservoir, Faraday Diversion Dam, Faraday Lake and bypass, and Estacada Lake so that outflow at River Mill Dam is equal to inflow to North Fork Reservoir, as described in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 15).

e. Stream Gaging

PGE shall install and maintain, or arrange and contract for the installation and maintenance, of a flow gage in the Lower Oak Grove Fork as specified in the Settlement Agreement (see Settlement Exhibit C; Proposed License Article 9).

f. Fish Passage

PGE shall improve fish passage through the Project facilities as specified in the Settlement Agreement (see Settlement Exhibit D; Proposed License Article 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, and 41).

g. Evaluation of Fish and Aquatic Life Mitigation Effectiveness

PGE shall perform, or allow the Oregon Department of Fish and Wildlife (ODFW) to perform, any tests or studies required by ODFW to evaluate the effectiveness of measures for the protection of fish and aquatic life as described in the Settlement Agreement (see Settlement Exhibit D; Proposed License Article 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 34, 35, 36, 37, 38, 40, and 41).

h. Habitat Enhancement and Large Wood

PGE shall implement the following habitat projects as specified in the Settlement Agreement:

(1) Construct habitat projects in Dinger Creek (see Settlement Exhibit D; Proposed License Article 42).

(2) Disrupt Brook Trout and Kokanee spawning in Timothy Lake Tributaries (see Settlement Exhibit D; Proposed License Article 42).

(3) Construct habitat structures in the Oak Grove Fork downstream of Timothy Dam (see Settlement Exhibit D; Proposed License Article 42).

(4) Restore side channels in the Lower Oak Grove downstream of Harriett Dam (see Settlement Exhibit D; Proposed License Article 44).
(5) Construct habitat projects in the mainstem of the Lower Oak Grove Fork downstream of Harriet Dam (see Settlement Exhibit D; Proposed License Article 44).

(6) Implement the Plan for Large Woody Debris pertaining to Harriet Dam and the North Fork Reservoir (see Settlement Exhibit D; Proposed License Article 47).

(7) Implement the Wetland Mitigation Plan (see Settlement Exhibit I; Proposed License Article 52).

(8) Implement the Vegetation Management Plan (see Settlement Exhibit E-2; Proposed License Article 51).

i. Sediment Transport

PGE shall implement the following programs with regard to sediment transport as specified in the Settlement Agreement:

(1) Implement the Gravel Augmentation Program downstream of River Mill Dam (see Settlement Exhibits D and F; Proposed License Article 46).

(2) Implement the gravel augmentation program in the Lower Oak Grove Fork (see Settlement Exhibit D; Proposed License Article 44).

j. Mitigation and Enhancement Fund

PGE shall establish and oversee the Mitigation and Enhancement Fund as specified in the Settlement Agreement (see Settlement Exhibit H; Proposed License Article 48).

k. Monitoring

PGE shall conduct all monitoring, recording, and reporting specified in the revised WQMMP and in the Settlement Agreement and associated exhibits, including but not limited to monitoring of water quality, project operations, stream flow, ramping rates, and reservoir levels.

l. Temperature Load Allocation Downstream of River Mill Dam

(1) Within six months of issuance of a new FERC license, PGE shall develop and submit for DEQ approval a plan to implement either a seasonal drawdown of Faraday Lake, or a channelization of Faraday Lake that would produce a comparable temperature reduction at the Faraday tailrace, as specified in the Modified Proposed License Article 14 submitted to FERC on July 21, 2008.

(2) PGE shall implement the Gravel Augmentation Program as specified in the Settlement Agreement (see Settlement Exhibit D, Appendix F; Proposed License Article 48).

m. Implementation

PGE shall, prior to implementation or construction of any measures required under these Certification Conditions, provide evidence to DEQ that PGE has received all required approvals and permits, including but not limited to approvals as set forth in the Settlement Agreement by “Fish Agencies” as defined in the Settlement Agreement.

n. Spill and Waste Management
PGE shall maintain and implement current Spill Prevention, Control, and Countermeasure (SPCC) plans for oil and hazardous materials, prepared in accordance with 40 CFR 112. These plans shall address all locations at the Project where Project operations have the potential to result in a spill or release or threatened spill or release to the Clackamas River, Oak Grove Fork, or any other water of the state in the vicinity of Project operations. In the event of a spill or release or threatened spill or release to such waters, PGE shall immediately implement the SPCC plans and notify the Oregon Emergency Response System (OERS) at 1-800-452-0311.

9. General

a. Schedules

Unless otherwise specified in the WQMMP or the Settlement Agreement, actions required of PGE under these § 401 Certification Conditions, including but not limited to adaptive management evaluations and modifications, shall be performed in accordance with such reasonable schedules as specified in writing by DEQ for the action.

b. TMDL

Nothing in this § 401 Certification affects DEQ’s authority to require PGE to perform measures, in addition to those specified in Certification Condition 8.I above, necessary to attain the Project’s load allocation for temperature downstream of River Mill Dam.

c. Certification Modification

DEQ, in accordance with OAR Chapter 340 Division 48 and, as applicable, 33 USC 1341, may reconsider this Certification and add, delete, or modify certification conditions as necessary to address: (1) adverse or potentially adverse Project effects on water quality or designated beneficial uses that did not exist or were not reasonably apparent when this Certification was issued; (2) TMDLs; (3) changes in water quality standards; (4) any failure of Certification conditions to protect water quality or designated beneficial uses as expected when the Certification was issued; or (5) any change in the Project or its operations that was not contemplated by the Certification that might adversely affect water quality or designated beneficial uses.

d. Other Federal Permits

Upon applying for any federal permit for construction activities at the Project that might disturb river sediments, PGE shall provide DEQ written notice of such application and of any proposed changes to or new specifications for the construction activities since issuance of this Certification. DEQ will notify PGE and the federal agency either that: (1) this Certification is sufficient for purposes of the federal permit; or (2) in light of new information related to the water quality impacts of the construction activities, there is no longer reasonable assurance of compliance with state water quality standards. In the latter event, DEQ will consider the new information, solicit and consider public and agency comment as required by law, and issue a § 401 certification determination for purposes of the federal permit activities.

e. Project Changes
PGE shall obtain DEQ review and approval before undertaking any change to the Project that might significantly affect water quality, including changes to Project structures, operations, and flows.

f. Project Repair or Maintenance

PGE shall obtain DEQ review and approval before undertaking Project repair or maintenance activities that might significantly affect water quality. DEQ may, at PGE’s request, provide such prior approval effective prospectively for specified repair and maintenance activities.

g. Project Inspection

Upon reasonable notice from DEQ, and subject to DEQ personnel following reasonable safety and security procedures when on the project, PGE shall allow DEQ 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 these Certification Conditions.

h. Posting of § 401 Certification

PGE shall post a copy of these Certification Conditions in a prominent location at the Clackamas Powerhouse Control Center.

i. Circumstances Beyond PGE’s Control.

If any event occurs that is beyond PGE’s reasonable control and that causes or may cause a delay or deviation in compliance with these Certification Conditions, PGE shall immediately notify DEQ 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 PGE proposes to carry out such measures. It is PGE’s responsibility in the written notification to demonstrate to DEQ’s satisfaction that the delay or deviation has been or will be caused by circumstances beyond the control and despite due diligence of PGE. If PGE so demonstrates, DEQ may extend times of performance of related activities under this condition, as appropriate. Circumstances or events beyond PGE’s control include, but are not limited to, acts of nature, unforeseen strikes, work stoppages, fires, explosion, riot, sabotage, or war. DEQ may also consider other circumstances or events as beyond PGE’s control. These other circumstances 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 DEQ agrees PGE 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 PGE. Increased cost of performance or consultant’s failure to provide timely reports may not be considered circumstances beyond PGE’s control.

j. Project Specific Fees.

In accordance with ORS 543.080, PGE shall pay project-specific fees for DEQ’s and ODFW’s costs of overseeing implementation of these Certification Conditions.

1. The fees for DEQ shall be $28,000 annually (2009 dollars adjusted according to the formula in (7) below), made payable to “State of Oregon, Department of Environmental Quality.

2. The fees for ODFW are set forth in the following table (2009 dollars adjusted according to the formula in (7) below), to be made payable to “State of Oregon, Department of Fish and Wildlife.”
The annual fee was calculated assuming license issuance in 2010 to provide ODFW with funding for the following specific functions:

(i) Habitat Biologist (NRS2) – 2 weeks per year for six years starting January 1 after license issuance;
(ii) District Fish Biologist (NRS3) – 4 weeks per year for 10 years starting January 1 after license issuance; and
(iii) Statistical Support (NRS4) – 2 weeks per year for 5 years starting January 1 of the second full year after license issuance.

If the new license is issued in 2011 or later, the specific functions described above will start 6 months after license issuance.

(3) Fees for each Agency shall be paid pursuant to a written invoice from DEQ or ODFW as applicable. Except as provided below, fees shall be due on January 1 of each year after issuance of the new FERC license. PGE shall pay an initial prorated payment to DEQ within 60 days of license issuance, for the period from the date of license issuance to the first January 1 that follows license issuance. PGE shall begin payments to ODFW on the first January 1 after the new FERC license is issued, unless otherwise directed in (2) above.

(4) ODFW shall provide semi-annual reporting on the activities supported by the project-specific fee to PGE.

(5) DEQ and ODFW shall respectively credit against these amounts any fee or other compensation paid or payable to DEQ or ODFW, directly or through other agencies of the State of Oregon, during the preceding year (January 1 to December 31) for DEQ’s or ODFW’s cost of oversight.

(6) The DEQ fee shall expire 6 years after the first January 1 following issuance of the new license, unless terminated earlier by DEQ because oversight is no longer necessary, and the ODFW fee shall expire 10 years after the first January 1 following issuance of the new license, unless terminated earlier by ODFW because oversight is no longer necessary. One year before the expiration of the fee, the agencies and PGE shall review the need, if any, to modify, extend, or terminate the fee, in accordance with ORS 543.080. PGE shall continue to pay any project-specific fee required after such review.

(7) The fee amounts set forth above shall be adjusted under the following formula, which shall be applied annually:
Fee Inflation Adjustment Equation:
AD = D x (CPI-U)/(CPI-U-June 2009)

Where:
AD = Adjusted dollar amount payable to agency
D = Dollar amount pursuant to subsection j(1) and j(2), 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. Department of
Labor. If that index ceases to be published, any reasonably equivalent index published by
the Bureau of Economic Analysis may be substituted upon written agreement between
the agency and PGE.

OREGON DEPARTMENT OF ENVIRONMENTAL QUALITY

Nina De Concini, Administrator
Northwest Region

June 11, 2009