



3628 South 35th Street

Tacoma, Washington 98409-3192

TACOMA PUBLIC UTILITIES

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July 17, 2013

Kimberly D. Bose, Secretary
Federal Energy Regulatory Commission
888 First Street NE
Washington, DC 20426

**Re: City of Tacoma, Cowlitz River Project, FERC No. 2016
License Article 501, Hydropower Compliance Management Plan – 2012-2013
Annual Report**

Dear Ms. Bose:

License Article 501 (2) requires Tacoma Power to file an annual report with the Commission regarding progress made toward the completion of each license requirement on or before each anniversary date of the issuance of the license. By letter dated September 26, 2003, FERC established July 18, 2003 as both the effective and issuance date of the license. Attached is the annual report for the period July 1, 2012 to June 30, 2013.

If you have any questions regarding this filing, please do not hesitate to contact Keith Underwood, Natural Resources Manager, at (253) 502-8196 or Cindy Swanberg, Wildlife and Recreation Coordinator, at (253) 502-8362.

Sincerely,

Patrick D. McCarty
Generation Manager

Attachment

cc: Federal Energy Regulatory Commission, Portland Regional Office
Erich Gaedeke, Federal Energy Regulatory Commission, Portland Regional Office
HCMP Consultation Distribution
Keith Underwood
Cindy Swanberg

Ms. Kimberly D. Bose
July 16, 2013
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bcc: Eileen McLanahan (by email w/attachment)
Central File
CLOG distribution (by email with attachment)

**Cowlitz River Project
Hydropower Compliance Management Plan Annual Report
CONSULTATION DISTRIBUTION LIST, 2012-2013***

Ms. Debbie Carlson
Bonneville Power Administration
P.O. Box 968, MD 1399
Richland, WA 99352-0968

Lewis County Board of Commissioners
360 NW North Street, CMS01
Chehalis, WA 98532

Mr. Bob Geddes
Lewis County PUD No. 1
PO Box 330
Chehalis, WA 98532

Mr. Bill Iyall
Cowlitz Indian Tribe
P.O. Box 2547
Longview, WA 98632

Ms. Lou Ellyn Jones
U.S. Fish and Wildlife Service
510 Desmond Drive SE
Lacey, WA 98503-1273

Mr. Bob Rose
Yakama Nation Fisheries
PO Box 151
Toppenish, WA 98948

Ms. Michelle Day
NOAA Fisheries
Hydropower Division
1201 NE Lloyd Blvd., Suite 1100
Portland, OR 97232

Ms. Janine Clayton
Gifford Pinchot National Forest
10600 N.E. 51st Circle
Vancouver, WA 98682

Ms. Ruth Tracy
USDA Forest Service
Gifford Pinchot National Forest
10600 NE 51st Circle
Vancouver, WA 98682

Mr. Hal Beecher
Washington Department of Fish and
Wildlife
600 Capitol Way N.
Olympia, WA 98501

Mr. Brad Caldwell
Washington Department of Ecology
P.O. Box 47600
Olympia, WA 98504-7600

Mr. Steve McLellan
WA State Recreation and
Conservation Office
PO Box 40917
Olympia, WA 98504-0917

Ms. Cindy LeFleur
WA Department of Fish & Wildlife
2108 Grand Blvd.
Vancouver, WA 98661-4624

Mr. Paul Sparks
WA Chapter, Trout Unlimited
14205 Military Road SE
Tenino, WA 98589

Rob Whitlam, Ph.D.
State Archaeologist
WA State Office of Archeology and
Historic Preservation
P.O. Box 48343
Olympia, WA 98504-8343

Mr. Steve Brand
WA State Parks and Recreation
Commission
SW Region
1111 Israel Road SW
Olympia, WA 98504-2650

Casey Barney
Yakama Nation
Cultural Resources Program
PO Box 151, Fort Road
Toppenish, WA 98948

**Cowlitz River Hydroelectric Project FERC No. 2016
License Article 501
Hydropower Compliance Management Program
Annual Report
July 1, 2012 – June 30, 2013**

Introduction

This report is prepared in compliance with Article 501 of the Cowlitz River Hydroelectric Project license as described in the March 13, 2002, Federal Energy Regulatory Commission (FERC, or the Commission) Order Approving Settlement and Issuing New License, and the July 18, 2003, Commission Order Denying Rehearing and Lifting Stay for FERC Project No. 2016.

Article 501 of the license stipulates that within four months of the effective date of the license (July 18, 2003), Tacoma is to file a Hydropower Compliance Management Program (HCMP) for Commission approval. Tacoma filed the HCMP with the Commission on November 17, 2003 and on January 13, 2004 the Commission issued its Order approving the HCMP.

Section 2 of Article 501 requires Tacoma to file an annual report with the Commission on or before each anniversary of the effective date of the license. The report is to demonstrate the progress made toward completion of each license requirement under the schedules presented in the HCMP.

Article 501

Article 501. (1) The licensee, within 4 months of the effective date of this license, shall file a Hydropower Compliance Management Program (HCMP) for Commission approval. The HCMP shall include the following elements for each license requirement.

- a. The identification of, and a schedule for, each action necessary to complete the license requirements;*
 - b. A schedule for the start and completion of the consultation process with each resource agency required to be consulted for each action necessary to complete the license requirements; and*
 - c. The identification of specific individuals in each agency that need to be consulted on each action necessary to complete the license requirements.*
- (2) The licensee shall file an annual report with the Commission on or before each anniversary of the issuance date of this license that demonstrates the progress made toward completion of each license requirement under the schedules presented in the HCMP.*

Eight copies of all submissions under this article must be filed with the Secretary of the Commission. One copy of each submission must also be filed with any agency consulted under element (1)b above.

Project Description

The Cowlitz River Project (FERC No. 2016) is Tacoma Power's largest electricity generating facility and is located on the Cowlitz River in Lewis County, Washington. The Project consists of two dams, Mayfield Dam at river mile (RM) 52 and Mossyrock Dam, upstream at RM 65. In addition to generating electricity and providing flood control, Tacoma operates 3 major parks, manages over 14,000 acres of wildlife lands and owns and funds operation of the Cowlitz Salmon Hatchery (RM 50) and the Cowlitz Trout Hatchery (RM 42). The Barrier Dam, associated with the Cowlitz Salmon Hatchery is located at RM 49.5. The original 50-year license for the Cowlitz Project was issued on December 28, 1951. A new 35-year license was issued and became effective on July 18, 2003.

The Mayfield development completed in 1963 includes a 250-foot-high, 850-foot-long, concrete arch and gravity dam that impounds Mayfield Lake, which has a maximum surface area of 2,250 acres. In addition to the Cowlitz River, inflows from the Tilton River also contribute to Mayfield Lake, which supports public and private recreational facilities. An 854-foot-long power tunnel passes through the right abutment of the dam and terminates at a concrete forebay structure. Four penstocks continue from the forebay structure to the four generating units, which have an installed capacity of 162 megawatts (MW).

The Mossyrock development, completed in 1968, includes a 606-foot-high double curvature concrete arch dam that creates Riffe Lake, a 23-mile long, 11,830-acre reservoir with 52 miles of shoreline. Riffe Lake supports several parks and other recreational facilities. Three penstocks, varying in length from 248 to 285 feet, extend down to the powerhouse, which is adjacent to the base of the dam. The powerhouse contains two generating units with room for a third and has a total installed capacity of 300 MW. Transmission lines link the Mossyrock and Mayfield developments.

REPORT

Article 201 – Reimbursement for Costs of Administration and Use of Land

The invoice from the Commission in the amount of \$654,027.74 for administrative costs was paid in August 2012. The invoice from the Commission for use of land in the amount of \$3,758.64 was paid in March 2013.

Article 202 – Aperture Cards

The conditions of this License Article were met within 45 days of the effective date of the new license.

Article 203 – Reimbursement for Benefits

No direct benefits were realized by Tacoma Power during this reporting period.

Article 301 – Exhibit A, F, & G Revisions after Construction of Fish Passage and Recreation Facilities

Revised Exhibit F drawings reflecting changes associated with the Cowlitz Salmon Hatchery remodel were filed with FERC on June 6, 2011. It appears FERC issued an order approving the Exhibit F drawings for the Cowlitz Salmon Hatchery remodeling on October 4, 2011, but

the issuance was dated October 4, 2010. Tacoma Power has no record of receiving this issuance. On July 13, 2012 Tacoma Power requested an extension until September 10, 2012 to complete the aperture cards.

In their Order issued August 30, 2012, the FERC granted Tacoma Power's request for an extension of time until September 10, 2012 to submit revised Exhibit F aperture cards and electronic drawings for the Cowlitz Salmon Hatchery remodel.

Tacoma Power submitted two (2) sets of aperture cards and two (2) CDs containing separate files for each drawing submitted in electronic raster format containing the revised Exhibit F Drawings for the Cowlitz Salmon Hatchery remodel to the FERC OEP/DHAC on September 4, 2012. An additional one (1) set of aperture cards and one (1) CD containing electronic drawings was also submitted to the Portland Regional Office on September 4, 2012.

Article 302 – 60-day Construction Notice to Division of Dam Safety – Portland

All notices have been submitted as required. All construction actions for Settlement Agreement Article 1 have been done on Cowlitz Falls Dam with Lewis County Public Utility District submitting required notices. No construction contract specifications or Quality Control Inspection Programs relating to fish passage facilities described in Settlement Agreement Article 3 have been initiated. Work continues on improving fish passage facilities for Settlement Agreement Article 1. Specifically, Tacoma Power deployed a new prototype weir box at the Cowlitz Falls Dam from April 16–June 30. In addition, a design team was formed and work has begun on the design of the Cowlitz Falls North Shore Collector (CFNSC). The CFNSC is a multi-million dollar shore-based collector at the Cowlitz Falls Dam that is scheduled to be constructed by the end of 2016.

Article 303 – Flood Control

Tacoma Power did not exceed the flood control curve for Riffe Lake during the report period.

Article 401 – Requirement to File Plans for Commission Approval

See details regarding Settlement Agreement Articles 1, 2, 3, 15, 16 and Water Quality Certification conditions later in this report.

Article 402 – Annual USGS Gauge Monitoring Report

As required, the Annual Monitoring Report was filed with the Commission on November 19, 2012 for the water year October 1, 2011 to September 30, 2012. The report contained the daily flow records of USGS flow gauge 14238000 (Mayfield) with an explanation of any instream flow deficiencies from those required by Settlement Agreement Article 13 and 14.

Article 403 – Implement the Programmatic Agreement for Cultural Resources

The annual report on activities covered under the Programmatic Agreement was filed with the Commission concurrent with this report.

Article 404 – Archaeological Resources Monitoring Plan

Erosion monitoring under the plan continues with no changes made to the plan. Additional details are contained in the annual report noted under Article 403 above. With the completion of the 2013 monitoring survey, the quantity of data is now considered sufficient to allow preparation of a summary report during the next reporting period. This effort may lead to a proposal to modify the Archaeological Resources Monitoring Plan. Any such modification would be developed in consultation with the Washington Department of Archaeology and Historic Preservation (DAHP) and the Tribes. A report on the results of the data recovery at the historic-period Puncheon Road was completed during this reporting period and on March 20, 2013 was sent to the Washington Department of Archaeology and Historic Preservation (DAHP), as well as the Tribes. No comments were received by the April 20, 2013 deadline. However, Tacoma Power continues to request formal concurrence from DAHP.

Article 405 – Public Information Management Plan

Between July 1, 2012 and June 30, 2013, 630 visitors participated in formal tours of the Cowlitz dams and salmon hatchery. In addition, classroom presentations, primarily in the service area, were given to 759 participants regarding the Cowlitz Project and 225 people participated in career pathway presentations about the Cowlitz Project. Four presentations to Lewis County community groups interested in recreation and tourism were presented to approximately 100 people. The Cowlitz Salmon Hatchery Visitor Center was the location for a May 1, 2013 open house and meeting focused on the tourism industry. The Cowlitz River Project Open House was not held this year due to resource constraints.

A public celebration is planned for the 50th Anniversary of Mayfield Dam and powerhouse on August 1, 2013. It will include powerhouse tours, refreshments, giveaways and displays about dam construction, fish collection, parks and wildlife.

The *Cowlitz Currents* was published in May 2012 and is planned for publication in August 2013. It will be sent to 17,000 recipients in Lewis County. This 8 page full-color newsletter will contain articles about juvenile fish collection, Mayfield Dam, Mayfield Lake water level, dam safety, Mossyrock Dam overlook improvements, and the water safety program.

Tacoma Power continues to manage and improve its public website, www.mytpu.org, and has also enhanced its use of social media such as Twitter and Facebook. Tacoma Power also has published Cowlitz River Project license-related information—including FERC filings and documents, the FHMP, the FTC and its meeting summaries—at its web site. In addition, we continue offering the toll-free Fishing and Recreation phone line, providing daily updates about water levels and boat launch availability.

Tacoma Power co-hosted a public meeting with the Washington Department of Fish and Wildlife in May 2013 to review fisheries and hatchery plans and projects. More than 100 people attended the meeting held in Centralia, Washington.

Tacoma Power funds the www.cowlitzfish.net web site through its contract with Insight Northwest LLC, a public relations firm which assists with Cowlitz River Project public communications. Cowlitzfish.net averaged 1,586 unique visitors per month from July 2012 to June 2013, an increase of more than 50 percent compared with the previous 12 months. The most frequently viewed item is Tacoma Power's weekly Cowlitz River Fish Report.

Cowlitzfish.net also has information about the Fisheries Technical Committee and links to the FTC monthly meeting summaries, along with information helpful to those fishing the Cowlitz River watershed.

Article 407 – Land Use Provisions

Tacoma Power continues to implement and enforce its Reservoir Structure Policy that guides permitting of non-commercial docks.

No conveyances of real property in the FERC project boundary were made during the reporting year.

Article 409 – Maintenance and Use of Side – Channel Habitat

The annual Side Channel Monitoring Report was filed with the Commission on July 30, 2012.

Article 410 – Water Quality Monitoring Plan

A suitable (target) Riffe Lake reservoir level, in conjunction with rainy, windy weather, was achieved for the nearshore turbidity sampling during January 2013. Sampling in Riffe Lake was completed and the final water quality monitoring report is in preparation.

Article 411 – Fisheries and Hatchery Management Plan

See Settlement Agreement Article 6 below.

Article 412 – Modifying Instream Flows

No request to modify project operations to provide agency-specified stream flows downstream from Mayfield Dam was received from Washington Department of Ecology or the Commission during this reporting period.

Article 413 – Trap and Haul Plan

The Trap and Haul Plan was approved by the Commission on April 11, 2006. Detailed data on each fish haul from the Project is provided in the annual Upstream Fish Passage Report. The 2013 annual Upstream Fish Passage Study Report is scheduled to be filed with the Commission on July 18, 2013. The 2012 report was filed with FERC on July 6, 2012.

Article 414 – Implement Adaptive Management

The plan, which is part of the Fisheries and Hatchery Management Plan Update (FHMP), is being implemented and the resulting actions discussed and evaluated within the Cowlitz Fisheries Technical Committee (FTC) in accordance with the adaptive management provisions in that plan. The FHMP was modified and approved by the Commission on April 6, 2006. The FHMP was updated and filed with the Commission for approval on November 2, 2011.

Article 415 – Fish Passage Plan

There have been no changes in the operation, maintenance, emergency or inspection procedures of the Cowlitz Project fish passage facilities since filing the Final Fish Passage Plan in February 2006. A new Final Fish Passage Plan will be developed upon the occurrence of any updated or new procedures. Until that time, and to satisfy the requirements of Article 415, a brief discussion of the status of the existing procedures at the Cowlitz Project fish passage facilities is included in reports developed under Settlement Agreement Articles 1, 2 and 3.

The information for this reporting period is included in the 2012 Upstream Fish Passage Report filed with the Commission on July 6, 2012 and the 2013 Upstream Fish Passage Study Report scheduled to be filed with the Commission on July 18, 2013.

Article 416 – Construction Practices

Tacoma Power opted to prepare a template for construction project managers and engineers to use to ensure compliance with the construction practices set forth in Appendix E of the July 9, 2004 order amending the license to adopt the requirements of the Biological Opinion. In order to facilitate review of the plans for each project, Tacoma Power consulted with and received approval from National Marine Fisheries Service (NMFS) on the template. The template was submitted to the Commission on May 27, 2005 and approved in a letter from Harry T. Hall (PRO) dated August 18, 2005.

No construction project plans were submitted to the Commission in the reporting period.

Article 417 – Best Management Plan for Gravel Augmentation and Large Woody Debris

These plans were submitted and approved by the Commission in 2005. More detail is found in License Articles 9 and 10.

Article 501 – Hydropower Compliance Management Plan

This annual report is being submitted to the Commission in compliance with Article 501.

APPENDIX A – SETTLEMENT AGREEMENT LICENSE ARTICLES

Article 1 – Downstream Fish Passage: Riffe Lake and Cowlitz Falls Collection and Passage

- a) The plan for Downstream Fish Passage and Collection at Riffe Lake and Cowlitz Falls was submitted to the Commission on July 19, 2004. An Order Modifying and Approving the plan was issued by the Commission on April 22, 2005.

As noted in previous reports, a Downstream Fish Passage Team (DFPT) was formed in May 2008 as proposed by the FTC to analyze the results of the brainstorming workshop held on March 3 and 4, 2008. The DFPT was made up of Tacoma Power personnel, agency staff and private consultants who are experts on the collection and behavior of juvenile salmonids. The DFPT met numerous times between 2008 and 2012 and conducted discussions of a preferred alternative and the preparation of a Conceptual Design Report (CDR).

The Final CDR, in which a preferred alternative with 3 configurations (Cases 1-3) was described, was submitted to FERC in February 2012. The selection of the final collector configuration was to be the result of a computational fluid dynamics (CFD) study. Based on the results of the CFD study, a fourth configuration (Case 4) was selected as the preferred configuration to the selected alternative. In this configuration the collection of fish will occur through an approximately 15 foot square opening constructed through the right gravity section of Cowlitz Falls Dam, just north of the emergency spillway. The fish collector will be constructed immediately downstream of the dam. The designs are currently underway for this concept with 30% drawings anticipated to be distributed for review in September 2013. It is anticipated that construction of the collection facility will be completed in 2016.

A fish collector at the entrance to spill bay No. 3 of Cowlitz Falls Dam is designed to use flow from the Turbine 2 induction slot to draw water over a weir and into a collection box and is referred to as a weir box. The prototype was deployed in the second week of April 2013. In 2012 the weir box testing period was truncated after it was determined that the entrance to the turbine unit was occluded with debris by up to 60%, which forced an extraordinary amount of flow through the weir box and then the induction slot. This condition created a large head differential between the upstream and downstream sides of the baffle panels and weir box. Therefore, the weir box was removed and only redeployed during the very low flow period from August 1-3 and August 6-9, 2012.

In the winter of 2012/2013 Lewis County Public Utility Department (LCPUD) and Bonneville Power Administration (BPA) contracted crews to remove the silt and debris occluding the turbine units' trash racks to approximately 10%. Once completed, this provided the conditions under which it was feasible to test the prototype weir box from April 16 through the end of June in 2013. Testing was completed prior to July to ensure that the base configuration of dam operations would not interfere with planned LCPUD survival studies scheduled to begin July 1, 2013. Early results did not indicate a significant rate of collection through the weir box; however, there did seem to be some inconsistent, yet strong periods of Fish Capture Efficiency results during testing. Further analysis will be conducted to

determine if these positive periods can be maximized in future seasons. Additional testing is planned for 2014 during the months of July and August.

In 2012 the Downstream Adaptive Management Workgroup (DAMW) was formed and the DFPT was dissolved upon completion of the CDR. The focus of the DAMW group is to apply the guidelines of the CDR to create an Adaptive Management Plan (AMP) which contains two major components. The first is to implement actions to improve smolt passage survival in the near term, prior to the Cowlitz Falls North Shore Collector (CFNSC) being fully constructed and operational. The second identifies long-term processes to improve performance of the Upper Cowlitz smolt collection system consistent with attaining fish passage survival goals described in the Settlement Agreement. The DAMW is working on the AMP and is currently planning to have a draft of the first several chapters available for stakeholder review by the end of July 2013.

As part of the focus on near term solutions, DAMW evaluated an Alternatives Analysis for a smolt collector which would be positioned in Upper Riffe Lake and deployed seasonally. The current design criteria for the collector would include deployment between approximately the beginning of July and the end of August in river discharge conditions ranging from around 1,000 to 5,000 cfs. The focus of this collector would be to capture fish that were not effectively captured at Cowlitz Falls Dam. DAMW selected a recommended alternative, which would be deployed approximately 0.5–1.5 river miles downstream from the dam. The trap would be configured of a 300 foot long net structure approximately 80 feet wide at the mouth (approximately 50% of the river cross section at low pool and 30% at high pool). Fish would then be funneled into a trap which would be constructed of a v-trap or screw trap. Designs are currently underway for a prototype, which is anticipated to be tested in the summer of 2014.

The supplemental collection efforts for the 2013 collection season were reduced from 2012. This was the result of two factors: 1) in order to accommodate a request by LCPUD to avoid potential interference with survival studies, Merwin traps were not installed beginning in July as they have been in previous years; 2) beach seining efforts were not as consistent as in previous years due to staff focus on data collection at prototype collectors. As a result, collection efforts in 2013 will be compared using Catch per Unit Effort metrics rather than total capture for supplemental collection.

The short-term agreement with LCPUD and BPA that allows Tacoma Power access to the Cowlitz Falls Dam and the Cowlitz Falls Fish Facility for prototype testing and other fish monitoring was extended through the end of 2013.

On June 2, 2009 NMFS issued its Biological Opinion for the Cowlitz Falls Project. Tacoma Power filed comments with the Commission urging that they require LCPUD to fully participate in the effort to meet the juvenile fish passage survival (FPS) goals. Tacoma Power believes this will be necessary to meet the FPS goals in the Cowlitz River Hydroelectric Project license.

- b) Improvements to the Cowlitz Falls surface bypass collector and status of the final collection plan are noted in (a) above. If there are no lengthy delays in finalizing the

plan, construction of the planned partial flow collector to meet the fish passage goals is anticipated to be complete in 2016.

On July 9, 2004, the Commission issued an order incorporating the Biological Opinion issued in March 2004 by NMFS for the project. This included the provision in Article 401 requiring that the fish passage survival goal be met within three years of the date of that order. This created a conflict between Article 401 and this Article that was not resolved in the Commission's April 22, 2005, order approving the plan for Article 1(a).

- c) Tacoma continues to implement additional improvements to the Cowlitz Falls downstream passage facilities.

Article 2 – Downstream Fish Passage: Mayfield

- a) The study results required by this article were submitted to the Commission on July 18, 2004 and approved on July 12, 2005.
- b) The plan for improvements to the fish collection facility at Mayfield Dam was submitted to the Commission on July 18, 2006. The Order Modifying and Approving the plan was issued on December 5, 2006. Tacoma Power filed an updated schedule for the improvement projects on February 9, 2007 and an updated status report on April 3, 2008. Provision B in the December 5, 2006 Commission order required a summary report of activities related to the article to be covered in this report.
- c) Summary of activities:
 - (1) Debris management: Documented weekly and daily inspections for debris now occur. If any debris is present Tacoma removes it immediately. These inspections, debris removal, and annual de-watering and cleaning of the louver bays will continue as part of the routine hydro plant operations.
 - (2) Hydraulic improvements are complete.
 - (3) Noise investigations are complete.
 - (4) Secondary separator improvements are complete.
 - (5) Counting house improvements are complete.
 - (6) Discharge chute upgrade is complete.
 - (7) Emergency procedures: This work has been completed; no further action is required at this time. Emergency events are reported in the Annual Upstream Passage Report (SA Article 3). For this reporting period there were no emergency events to report.
 - (8) Manual updates: This work has been completed; the manual will continue to be updated as needed.

- (9) Evaluation and study plan: Evaluations of the previously reported improvements to the Mayfield Dam Downstream Fish Passage Facilities commenced in a phased manner beginning in April 2013. During this reporting period Tacoma submitted a Mayfield Dam Downstream Fish Passage Evaluation Study Plan to the Cowlitz Fisheries Technical Committee for their approval. A contractor was selected and the 2013 study is currently underway

Article 3 – Upstream Fish Passage: Barrier, Mayfield and Mossyrock

Upstream fish passage using Tacoma Power trap and haul facilities continues as required by this Article. The 2012 annual Upstream Fish Passage Report was filed with the Commission on July 6, 2012. The 2013 annual Upstream Fish Passage Study Report is scheduled to be filed with the Commission on July 18, 2013.

The Fish Passage Facility Fund started on or before July 18, 2008. Due to legal restrictions on the use of bond funds, Tacoma Power uses investment pool earnings to calculate the interest earned over time as if the money was accruing interest in an escrow account. The value of this fund as of June 30, 2013 was \$16,760,719.10.

The Cowlitz FTC has developed a Cowlitz Restoration and Recovery (CRR) plan to guide the use of the Fish Passage Facility fund in the future. The FTC has recommended that the fund be expended for habitat measures in the upper Cowlitz River basin for the recovery of listed anadromous fish and not for additional fish production. It is planned that the fund will be available for fee title purchases and conservation easement acquisitions as well as habitat enhancement projects beginning in 2014. The FTC recommended terminating the productivity test and utilizing the upstream fish passage facility fund as proposed in the Cowlitz Settlement Agreement and the FERC license. FERC approved a Cowlitz Project license amendment for Article 401 on March 20, 2013, allowing an earlier expenditure of the escrow funds established in lieu of volitional upstream fish passage during the current license period. A plan is currently being developed with the FTC for usage of the fund.

Productivity testing of late winter-run steelhead in the upper Cowlitz River basin, begun in the winter of 2009/2010, continues. The testing is being conducted to determine achievement of the criteria for implementing a volitional upstream passage system per Cowlitz Project License Article 3, Upstream Fish Passage. Testing began by releasing only natural-origin late winter-run steelhead adults in the Tilton River and the upper Cowlitz River basins. No hatchery-origin adults or juveniles are being released in the upper river basins during the testing period. Only unmarked late winter steelhead adults returning to the Cowlitz Salmon Hatchery separator are used in the calculations of productivity. The returning adults are transported to the upper river basins with unmarked late winter steelhead being transported to the Tilton River and uniquely marked late winter steelhead being transported to the upper Cowlitz Basin.

Article 4 – Juvenile Tagging and Monitoring

The Fisheries and Hatchery Management Plan (Settlement Article 6) has been implemented; therefore, no further action is required as specified by this License Article.

Article 5 – Fish Production and Hatcheries

Tacoma Power continues to fund operation and maintenance of the Cowlitz Hatchery Complex, which is operated under contract by WDFW. The hatchery production plan is developed through the annual review process incorporated into the FHMP update.

Article 6 – Fisheries and Hatchery Management Plan

An updated Fisheries and Hatchery Management Plan (FHMP) was filed with the Commission on November 2, 2011. The FHMP update was developed from 2008-2011 through a comprehensive process in cooperation with the public and a variety of agencies, including state and federal. Both Tacoma Power and WDFW are committed to implementing the provisions of the FHMP update and implementing hatchery reform on the Cowlitz River. Due to the high level of preparation involved in the FHMP update, the agreement of all members of the FTC on the content of the plan, and the very low likelihood of substantial changes to the plan, the primary implementing parties (Tacoma Power and WDFW) are moving forward with the implementation of the FHMP update to guide fish production and fishery management in the Cowlitz River.

The Fisheries and Hatchery Management Plan Annual Project Evaluation and Status Report was filed with the Commission on May 13, 2013.

Article 7 – Hatchery Complex Remodel and Phase-In Plan

The remodel of the Cowlitz Complex is functionally complete; however, a few projects remain to be completed such as the upgrade of the well system and/or the addition of purification equipment that may be needed at the Cowlitz Salmon Hatchery.

Article 8 – Disease Management Plan

The Disease Management Plan was filed with the Commission on July 17, 2008 and an Order Modifying and Approving Fisheries Disease Management Plan, Article 8, was issued on October 31, 2008. The order required a status report on the review process to be filed by November 1, 2013 and every 5 years thereafter. If it is determined that the criteria for success is not being met in consultation with the FTC and fish pathology experts from the agencies, a revised report is to be filed on the same schedule.

Article 9 – Large Woody Debris

A best management plan (BMP) for handling large woody debris at the Project, as required by License Article 417, was approved by the Commission on July 25, 2005. Approximately 623 linear feet of woody debris consisting of 15 trees was placed just upstream of the Blue Creek boat launch on August 6, 2012. All of the wood placed at this location was carried downriver during subsequent flow events. Another 600 linear feet or more of large woody debris is planned for placement in the same location in August 2013. A Washington State Hydraulic Project Approval permit was secured in April 2010 to allow placement of woody debris until April 2015, at which time a new permit will be requested.

Article 10 – Gravel Augmentation

The Gravel Augmentation Plan was approved as submitted by the Commission on July 26, 2004. The BMP for placement of gravel in the Cowlitz River, as required by License Article 417, was approved by the Commission on July 25, 2005.

A 500-cubic yard, 700 ton batch of gravel was moved into place adjacent to the river in late August 2012 to be swept away during high flows and distributed down the river. The next 500-cubic yard batch will be placed in the same location for recruitment in August 2013.

Article 11 – Fish Habitat Fund

Eleven parcels of property totaling 480.29 acres within the target areas of the lower Cowlitz River have been acquired as of June 30, 2013; an addition of 148.56 acres during the reporting year. The 2012 Habitat Advisory Group Annual Report was filed with the Commission on December 20, 2012. The balance of the Fish Habitat Fund was \$461,923.76 as of June 30, 2013.

Article 12 – Coordination with Wildlife Settlement Wetlands Acquisition Fund

The Wildlife Wetland Acquisition Fund Coordination Plan approved by FERC on November 17, 2004 required that the signatory parties accelerate the expenditure of the acquisition fund. In the plan several alternatives to fee-title wetland acquisition were proposed to begin after 2008 if funds still remained. In 2009, \$1,411,895 still remained in the account and as a result the settlement parties began to explore options to protect wildlife habitat and to expend the funds as directed. An acquisition report is included in the Cowlitz Wildlife Area Annual Report filed with the Commission on April 30, 2013.

In late 2009 the parties, with the assistance of a local land conservancy, began to investigate the feasibility of a conservation easement on lands owned by Pope Resources that lie between Riffe Lake and Tacoma Power's Cowlitz Wildlife Area on Peterman Hill. This area was considered vulnerable to future development. In April 2012 the Washington Department of Fish and Wildlife and the U.S. Fish and Wildlife Service, the signatories to the Settlement Agreement Relating to Wildlife for the Cowlitz Hydroelectric Project, agreed in writing to use all the money in the fund to purchase a conservation easement. After lengthy negotiations, the WDFW purchased a 1,859-acre conservation easement from Pope Resources for \$1,253,000 with funds provided by Tacoma Power, and assigned ownership to Tacoma Power on July 31, 2012. The conservation easement protects the wildlife habitat from future development and allows walk-in public access.

As of April 2013, \$1,181.90 remained in the Special Acquisition Account held by the WDFW. The Wildlife Management Coordinating Committee directed the WDFW to move the small amount of remaining money from the Special Acquisition Account and place it in the WDFW Operations and Maintenance Account. All of the funds provided by Tacoma Power in the WDFW Special Acquisition Account have been expended and Article 12 is complete.

Article 13 – Instream Flows

Upon license issuance Tacoma Power implemented the instream flows as prescribed by this article. Instream flows are measured and recorded by the U.S. Geological Survey (USGS) gauge located on the Cowlitz River below Mayfield Dam (Gauge No. 14238000). The

Article 10 – Gravel Augmentation

The Gravel Augmentation Plan was approved as submitted by the Commission on July 26, 2004. The BMP for placement of gravel in the Cowlitz River, as required by License Article 417, was approved by the Commission on July 25, 2005.

A 500-cubic yard, 700 ton batch of gravel was moved into place adjacent to the river in late August 2012 to be swept away during high flows and distributed down the river. The next 500-cubic yard batch will be placed in the same location for recruitment in August 2013.

Article 11 – Fish Habitat Fund

Eleven parcels of property totaling 480.29 acres within the target areas of the lower Cowlitz River have been acquired as of June 30, 2013; an addition of 148.56 acres during the reporting year. The 2012 Habitat Advisory Group Annual Report was filed with the Commission on December 20, 2012. The balance of the Fish Habitat Fund was \$461,923.76 as of June 30, 2013.

Article 12 – Coordination with Wildlife Settlement Wetlands Acquisition Fund

The Wildlife Wetland Acquisition Fund Coordination Plan approved by FERC on November 17, 2004 required that the signatory parties accelerate the expenditure of the acquisition fund. In the plan several alternatives to fee-title wetland acquisition were proposed to begin after 2008 if funds still remained. In 2009, \$1,411,895 still remained in the account and as a result the settlement parties began to explore options to protect wildlife habitat and to expend the funds as directed. An acquisition report is included in the Cowlitz Wildlife Area Annual Report filed with the Commission on April 30, 2013.

In late 2009 the parties, with the assistance of the Cascade Land Conservancy, began to investigate the feasibility of a conservation easement on lands owned by Pope Resources that lie between Riffe Lake and Tacoma Power's Cowlitz Wildlife Area on Peterman Hill. This area was considered vulnerable to future development. In April 2012 the Washington Department of Fish and Wildlife and the U.S. Fish and Wildlife Service, the signatories to the Settlement Agreement Relating to Wildlife for the Cowlitz Hydroelectric Project, agreed in writing to use all the money in the fund to purchase a conservation easement. After lengthy negotiations, the WDFW purchased a 1,859-acre conservation easement from Pope Resources for \$1,253,000 with funds provided by Tacoma Power, and assigned ownership to Tacoma Power on July 31, 2012. The conservation easement protects the wildlife habitat from future development and allows walk-in public access.

As of April 2013, \$1,181.90 remained in the Special Acquisition Account held by the WDFW. The Wildlife Management Coordinating Committee directed the WDFW to move the small amount of remaining money from the Special Acquisition Account and place it in the WDFW Operations and Maintenance Account. All of the funds provided by Tacoma Power in the WDFW Special Acquisition Account have been expended and Article 12 is complete.

Article 13 – Instream Flows

Upon license issuance Tacoma Power implemented the instream flows as prescribed by this article. Instream flows are measured and recorded by the U.S. Geological Survey (USGS) gauge located on the Cowlitz River below Mayfield Dam (Gauge No. 14238000). The

annual monitoring report for the water year October 1, 2011 to September 30, 2012 required by Article 402 documents any incident in which instream flows fall below the required minimum. The annual report was submitted December 1, 2012.

Article 14 – Ramping Rate Conditions

Tacoma Power adheres to the ramping rates prescribed by Article 14. River stage is measured and recorded by the USGS gauge located on the Cowlitz River below Mayfield Dam (Gauge No. 14238000). The annual monitoring report documents the water year October 1, 2011 to September 30, 2012 and describes any incident in which ramping rates exceed the permitted levels. The annual report was submitted on December 1, 2012.

Article 15 – Fish Monitoring Plan

An Order Modifying and Approving the Fish Monitoring Plan was issued by the Commission on December 2, 2004. An addendum to the plan was approved by the Commission on June 25, 2005. The addendum called for an interim monitoring report to be filed with the Commission by December 31, 2009. That report was filed with the Commission on December 14, 2009. On January 18, 2010 the Commission issued a letter stating that the report fulfilled the requirement.

Article 16 – Instream Flow Implementation

The instream implementation report was filed with the Commission on July 14, 2005, and by letter dated September 12, 2005 the Commission accepted the report as fulfilling the requirements of this License Article.

Article 17 – Recreation Facilities

A Recreation Facilities Plan addressing all requirements of this License Article was approved as submitted by the Commission in an order issued May 18, 2005. On July 14, 2005 Tacoma Power filed an updated schedule of estimated completion dates for the tasks proposed in the Recreation Facilities Plan.

The following is the status of the recreation projects:

- 17a Peterman Hill Trail – Construction is complete on the first 10 miles of the trail. The layout of the last 10 miles of the trail has been completed and construction is planned in 2013 and 2014. Construction must be coordinated with planned timber harvesting activity in the area and narrow windows of opportunity to build bridges over fish bearing streams.
- 17b Mossyrock Park Trail – Complete. Construction is complete; the trail is open.
- 17c Mossyrock Park Boat Launch Ramp – This ramp has been extended to lake elevation 715 feet with a goal of lengthening it to elevation 705. The final lengthening has not occurred because construction must occur entirely above the water line and Riffe Lake has not been low enough to allow this since the plan was approved. The original provision of License Article 17c to lengthen a launching dock at the Mossyrock Ramp was eliminated by Commission approval on November 10,

2009 and a dock was subsequently built at the Taidnapam North Boat Launch as described in 17d.

- 17d Taidnapam Low Water Boat Launch Ramp – Complete. Construction of this ramp was completed in 2008 and it is open to the public. The ramp includes a second lane and a launching dock that was approved in 2009 as a license requirement under a change in License Article 17c. The launch ramp extends to reservoir elevation 716 feet. The innovative skid- dock has been very successful at all water levels.
- 17e Cowlitz Salmon Hatchery ADA Fishing Platform – Complete. Construction was completed in February 2008. This fishing platform, as well as the similar ADA fishing platform installed at the Cowlitz Trout Hatchery outlet, has been well received. In particular, the platform at the Cowlitz Trout Hatchery is heavily utilized by disabled anglers and Tacoma Power has worked with the Washington Department of Fish and Wildlife on special fishing opportunities.
- 17f Taidnapam Park Expansion – Complete. The 100 new camping sites are complete and are fully integrated into Tacoma Power's online camping reservation system. This area has proven to be very popular.
- 17g Taidnapam Access Road – The initial surfacing is complete. Ongoing maintenance of selected sections continues.
- 17h Mossyrock Park Expansion – Complete. The final Recreation Facilities Plan, approved by the Commission on May 18, 2006, allowed for the 50 additional campsites originally proposed at Mossyrock Park to be built instead at Taidnapam Park (Article 17g), thereby increasing the total new campsites at Taidnapam Park to 100 as described in 17f.
- 17i \$500,000 for improvements at Ike Kinswa State Park – The Washington State Parks and Recreation Commission's Ike Kinswa State Park rescinded earlier plans to build a group camp with the Tacoma Power funding because of long-term state budget shortfalls. On April 20, 2012 they presented an acceptable alternate plan to Tacoma Power to construct of a restroom/shower building and camping cabins. The Washington State Parks and Recreation Commission notified Tacoma Power in the spring of 2013 that they have begun to expend funds from this account for planning but no construction has begun and no invoices have been received.
- 17j \$100,000 for unidentified improvements by the State of Washington – Project applications were solicited for this funding for further enhancements to the ADA fishing dock/hand-carried boat dock at Ike Kinswa State Park (see Article 19); the successful applicant was the Washington State Parks and Recreation Commission. The funding is now adequate and an MOU has been signed to facilitate reimbursement. Planning has begun and the Washington State Parks and Recreation Commission submitted their first invoice in December 2012.

Article 18 – Recreation Operation

A Recreation Operation, Maintenance and Safety Plan addressing all requirements of this License Article was approved by the Commission in an order issued May 18, 2005 in conjunction with the approval of the Article 17 Recreation Facilities Plan. On July 14, 2005

Tacoma Power filed an updated schedule of estimated completion dates for the tasks proposed in the Recreation Operation, Maintenance and Safety Plan.

The following is the status of the projects:

- 18a Monitoring of the Peterman Hill trail and the portion of the Mossyrock Trail in the Cowlitz Wildlife Area – This is an ongoing responsibility. Tacoma Power hires seasonal staff to conduct trail maintenance, including clearing the trail and repairing damaged signs. One short section of trail was temporarily closed in the summer of 2012 to avoid conflicts with an active logging operation. The Mossyrock Trail was mowed and weeds treated regularly by park staff.
- 18b Plan to improve boating safety – During this reporting period boating safety improvements were maintained and boating safety information was provided to the public. Tacoma Power provided brochures and posters about Washington State boating requirements at its parks and staff emphasized safe boating when talking with the public. Tacoma Power's Lands Officer regularly works with state and local law enforcement officers. During the course of these efforts officers look for opportunities to enforce and educate the public on behalf of Tacoma Power about safe boating on Riffe and Mayfield lakes.

All buoys and booms were inspected in September 2012 and many buoys were repaired or replaced in the spring of 2013. Each buoy bears a bar code and inspection data is entered into an Access database that tracks inspection and repair needs. To promote safe boating, the Cowlitz Project continued annual collection of floating debris on both Riffe and Mayfield lakes.

- 18c Americans with Disabilities Act (ADA) improvements –Washington State fishing regulations providing a special ADA fishing opportunity near at the Cowlitz Trout Hatchery Boat Launch, coupled with the ADA fishing platform constructed by Tacoma Power, has created a very popular opportunity. Tacoma Power is working with the WDFW to examine ways to enlarge or improve ADA access to accommodate the high numbers of mobility impaired persons who use the area.

Outdated and non-compliant vault toilets at both the Cowlitz Salmon Hatchery Boat Launch and the Cowlitz Trout Hatchery Boat Launch were removed and replaced with compliant and modern portable toilets. ADA parking area striping was reviewed and any deficiencies addressed. ADA signs were inventoried and consistency will be addressed in the next reporting period.

The ADA transition plan is being reviewed with the City of Tacoma disability specialist to insure continued compliance with changing federal, state and city rules. Data about facilities was collected in this reporting period and a prioritized list will be developed.

The parks continue to make improvements for ADA access as part of their annual maintenance program. The new boat dock installed in early 2012 at Mayfield Lake Park has accessible ramps and openings for loading wheel chairs from the dock to a boat. ADA parking and a paved way of travel allows boat launch access at Mossyrock Park. Tacoma Power's online camping reservation system identifies ADA accessible campsites reservable only by those with disabilities. The online users

survey continues to ask park users if Tacoma Power parks met their ADA accessibility needs or those of someone in their group, and why or why not.

An ADA accessibility brochure describing accessible facilities and special accommodations is available to campers at each park. The brochure is printed in an easy to read, large print format. There is also a paragraph about ADA accessibility in each separate park brochure. Campers may access additional information and download the ADA brochure.

Article 19 – Water Access Facilities

The Water Access Facilities Plan was approved by the Commission on August 30, 2006. The solicitation and selection process was completed for the first \$67,000 grant in 2007-2008 and the second solicitation occurred in the fall of 2011. The grants have been awarded to: 1) Ike Kinswa State Park for a new combination ADA fishing dock and short-term mooring dock; 2) the City of Toledo for improvements to their waterfront park including a covered gazebo for the ADA picnic area. The Ike Kinswa project is in the design phase and Ike Kinswa State Park has begun to submit invoices to Tacoma Power. The City of Toledo anticipates construction in 2013.

Article 20 – Recreation Reporting

The report, *Cowlitz Hydroelectric Project Recreation Monitoring, January 1, 2008 - December 31, 2008*, was submitted to the Commission on June 15, 2009 after a 30-day review. On September 3, 2009 the Commission issued a letter stating that the report fulfilled the license requirement. The next reporting period is January 1, 2014 to December 31, 2014 and the next report (including Form 80) is due April 1, 2015.

Article 21 – Forest Service Facilities

The annual payment to the USDA-Forest Service is \$6,477 and the amount will stay constant until September 30, 2014. The most recent annual payment of \$6,477 was made on September 13, 2012. The next payment is due by October 1, 2013. Tacoma Power filed a report with the Commission on November 29, 2012, describing how the USDA-FS used the funds in their federal fiscal year ending September 30, 2012.

Article 22 – Forest Service Report

In June 2004 Tacoma Power filed a report with the Commission documenting attempts to enter into a transfer of lands within the Project boundary with USDA-FS. USDA-FS indicated they were not ready to consider such a transfer. The Commission subsequently issued a letter on August 17, 2005 stating that Tacoma Power had satisfied the requirements of this License Article and that no further action was required unless the USDA-FS changed their position. There has been no change in position by the USDA-FS in this matter.

Article 23 – Cultural and Historic Resources

As noted in the discussion under Article 403 above, the Cultural Resource Management Plan (CRMP) was approved prior to the license issuance. An updated and revised CRMP was submitted to the Commission on March 29, 2007 and approved on February 5, 2008. The updated CRMP eliminated the biennial report to the Washington Department of

Archaeology and Historic Preservation in favor of the annual report. The activities undertaken in compliance with the CRMP are documented in the annual report that has been submitted to the Commission on the schedule required by the CRMP and the Programmatic Agreement.

Article 24 – Wildlife

Tacoma Power has complied with the Settlement Agreement Relating to Wildlife for the Cowlitz Hydroelectric Project entered into by the Washington Department of Fish and Wildlife) WDFW and the U.S. Fish and Wildlife Service (USFWS) regarding wildlife mitigation at the Project. Tacoma Power submitted the annual report written by the WDFW for the calendar year 2012 to FERC on April 26, 2013, as required by the License Article.

Tacoma Power calculated the annual payment for 2013 using the Consumer Price Index and sent a check to the WDFW for \$430,377.93 on December 17, 2012. At the end of 2012 there was \$551,965.71 in the WDFW operations and maintenance account. There was \$1,181.90 in the WDFW land acquisition account. As mentioned in the section on Article 12, the remaining small amount left in the acquisition account will be placed in the operations and maintenance account and the acquisition account will be closed.

APPENDIX B – FPA SECTION 4(e) TERMS and CONDITIONS

Condition 1 – Not applicable as Settlement Agreement was adopted into the license.

Condition 2 – No ground disturbing activities are currently planned on USDA-FS lands.

Condition 3 – No ground disturbing activities are currently planned on USDA-FS lands.

Condition 4 – No changes to constructed facilities or uses occurred on USDA-FS lands or on lands with direct impact to USDA-FS lands.

Condition 5 – This year's annual meeting between Tacoma Power and the Cowlitz Valley District Ranger of the Gifford Pinchot National Forest was held on July 15, 2013. Tacoma Power will file a report concurrent with this report for the 2012-2013 period regarding issues discussed during the annual meeting.

Condition 6 – Surrender of the license is not contemplated.

APPENDICES C and C-1 – Water Quality Certification

Tacoma Power submitted the Total Dissolved Gas (TDG) Transect Study Plan to the Washington Department of Ecology (WDOE) on March 28, 2003 and with the Commission on August 6, 2003. Comments on the plan were received from WDOE on September 15, 2004. Following additional meetings with WDOE and revisions to the plan, the Commission issued an Order Modifying and Approving the revised plan on August 11, 2005.

The 7Q10 flows for Mayfield and Mossyrock dams have not been finalized. The Washington Department of Ecology (WDOE) previously indicated it would review documents Tacoma Power has submitted and schedule a meeting. As of June 30, 2013 Tacoma has not received any response from WDOE.