Exhibit 7

Boundary Hydroelectric Project (FERC No. 2144)

Dissolved Oxygen Attainment Plan

Seattle City Light

March 2010

TABLE OF CONTENTS

1 Introduction 1

1.1. Dissolved Oxygen Standard 1

2 Dissolved Oxygen in the Project Area 1

3 Dissolved Oxygen Attainment Plan 5

3.1. Dissolved Oxygen Monitoring 5

3.2. Monitoring Design 5

3.3. Monitoring Methods 5

3.4. Evaluating Monitoring Results and Potential Secondary Actions 6

3.5. Compliance Schedule 6

3.5.1. Reasonable and Feasible Measures 6

3.5.2. Schedule 6

4 References 7

List of Tables

Table 2.0-1. Dissolved oxygen sampling sites used in 2007 -2008 relicensing studies. 1
Table 2.0-2. Dissolved oxygen (mg/L) data summary for water quality monitoring sites in Boundary Reservoir and tailrace (May 2007–March 2008). 4

List of Figures

Figure 2.0-1. Water quality monitoring site locations. 2

Dissolved Oxygen Attainment Plan
Boundary Hydroelectric Project (FERC No. 2144)

1 INTRODUCTION

This document describes Seattle City Light's (SCL) proposed Dissolved Oxygen (DO) Attainment Plan for the Boundary Hydroelectric Project (Project), Federal Energy Regulatory Commission (FERC) No. 2144. The following sections include a summary of DO data collected in the Project area during 2007 and 2008 and a description of SCL's proposed approach to post-license DO monitoring. In addition, pH will be measured simulaneously with DO to provide the Washington Department of Ecology (Ecology) with pH trend data for the portion of the Pend Oreille River in the Project area.

1.1. Dissolved Oxygen Standard

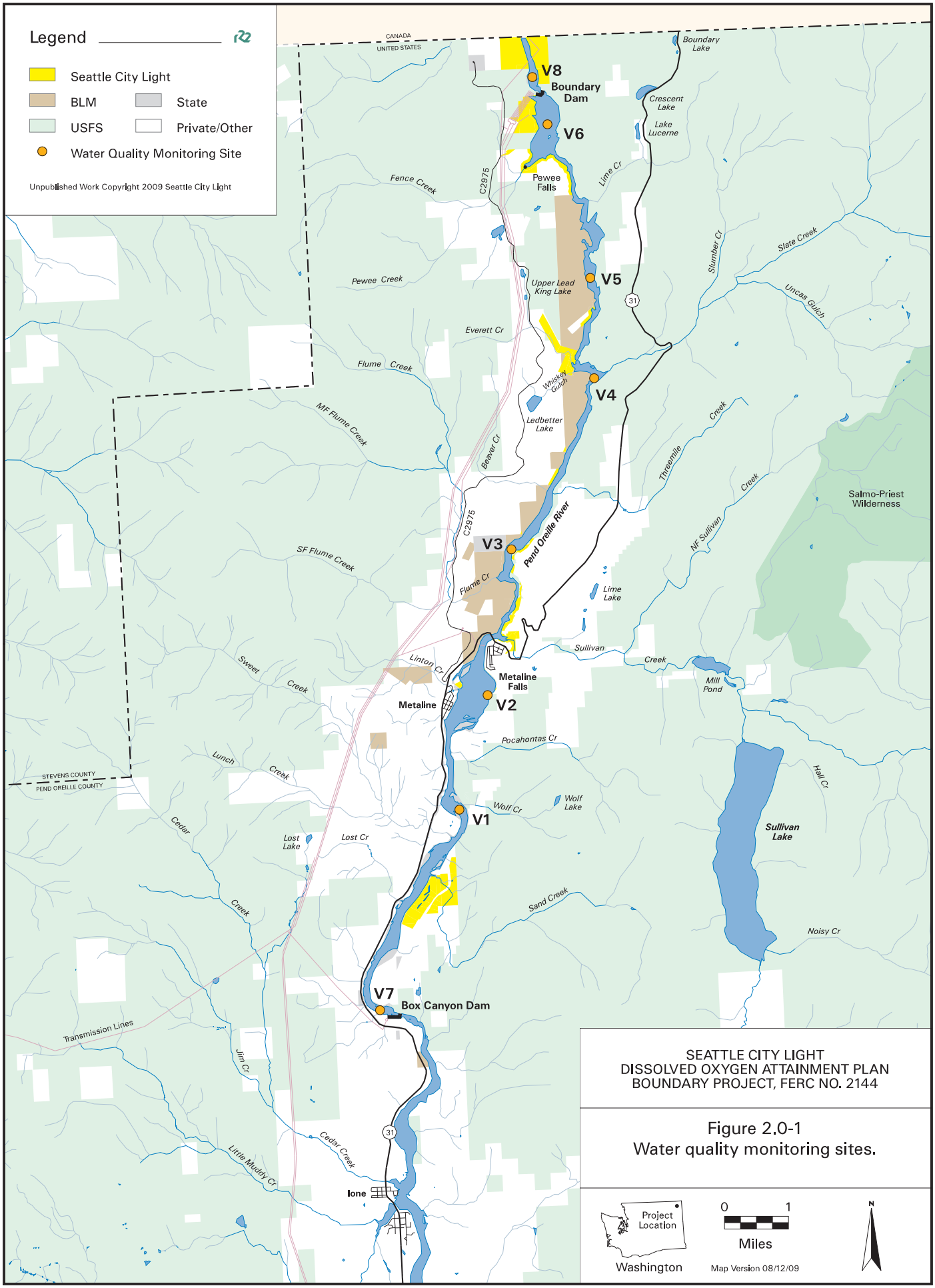
The State of Washington's water quality criteria for the Pend Oreille River dictate that the lowest one-day minimum concentration of DO shall be 8.0 mg/L (Ecology 2006). This 8.0 mg/L criterion has been established by Ecology to support salmonid spawning, rearing, and migration. The criterion states that DO concentrations are not to fall below 8.0 mg/L at a probability frequency of more than once every ten years on average.

2 DISSOLVED OXYGEN IN THE PROJECT AREA

DO was measured at eight sampling sites in 2007 and 2008 as part of the Project's relicensing studies (Table 2.0-1). Locations of these sampling sites within the Project area are shown in Figure 2.0-1.

Table 2.0-1. Dissolved oxygen sampling sites used in 2007 -2008 relicensing studies.

Sample site	Location description
Box Canyon Tailrace (V7)	In Boundary Reservoir just downstream of Box Canyon Dam
Wolf Creek (V1)	Adjacent to Wolf Creek inlet (above Metaline Falls)
Metaline Old (V2)	Old channel of Pend Oreille River across from Metaline (above Metaline Falls)
Pend Oreille Mine (V3)	Downstream of Pend Oreille Mine (below Metaline Falls)
Slate Creek (V4)	Downstream of Slate Creek across from campsite on left bank (below Metaline Falls)
Everett Creek Island (V5)	Upstream of Everett Creek Island (below Metaline Falls)
Boundary Forebay (V6)	Boundary forebay
Boundary Tailrace (V8)	Downstream of Boundary Dam



SEATTLE CITY LIGHT
DISSOLVED OXYGEN ATTAINMENT PLAN
BOUNDARY PROJECT, FERC NO. 2144

Figure 2.0-1
Water quality monitoring sites.

Average, maximum, and minimum DO concentrations measured at all sampling sites during 2007 and 2008 are presented, by sampling month, in Table 2.0-2. The DO values measured in the field were not recorded simultaneously at each site, and therefore are not directly comparable, but still allow for general longitudinal trends to be inferred for the entire sampling period. All DO concentrations measured in May and June and September through March were greater than 8.0 mg/L, but a few exceedances of the Ecology criterion occurred in July and August (Table 2.0-2). The complete DO dataset is included in Appendix 2 of the Water Quality Constituent and Productivity Monitoring Final Report (SCL 2009) and was provided in Excel® format to Ecology (C. Pratt [SCL] email to M. Mangold [Ecology], February 13, 2009).

In July 2007, DO concentrations were in compliance with the DO criterion at all sampling stations, except for the Everett Creek Island (V5) and Boundary Forebay (V6) stations, where DO values at depths below 28.0 meters (92 feet) (7.0 mg/L minimum) and below 35.0 meters (115 feet) (7.7 mg/L minimum), respectively, fell below 8.0 mg/L. In August 2007, DO concentrations were below 8.0 mg/L at the Metaline Old (V2), Boundary Forebay (V6), and Boundary Tailrace (V8) stations, where minimum DO concentrations were 7.9, 7.6, and 7.7 mg/L, respectively. DO values that were below the 8.0 mg/L standard were also often below saturation, which was about 7.9 mg/L in July and 8.5 mg/L in August. This means that DO was less than the maximum concentration the reservoir water could hold based on ambient temperature and atmospheric pressure.

DO values recorded show that DO does not vary greatly with depth (Figures 5.1-20 through 5.1-27 in the Water Quality Constituent and Productivity Monitoring Final Report, SCL 2009) or longitudinally (Figures 5.1-28 through 5.1-33 in the same report) in Boundary Reservoir. The slight decline in DO with depth during July, August, and September/October, as well as slight variations longitudinally during these months, can be attributed to respiration in the water column and sediments. These results indicate no correlation between DO and water surface elevation fluctuations in Boundary Reservoir that are related to Project operations. However, water depth and retention time would be less if the reservoir did not exist. A natural river would have higher potential for re-aeration than the existing condition, and DO levels would likely be more uniformly distributed and closer to saturation throughout the water column.

Table 2.0-2. Dissolved oxygen (mg/L) data summary for water quality monitoring sites in Boundary Reservoir and tailrace (May 2007–March 2008).

Site	May			June			July			August			September/October			November			March		
	Avg.	**Max**	**Min**	**Avg.**	**Max**	**Min**	**Avg.**	**Max**	**Min**	**Avg.**	**Max**	**Min**	**Avg.**	**Max**	**Min**	**Avg.**	**Max**	**Min**	**Avg.**	**Max**	**Min**
V7	11.0	11.0	11.0	10.0	10.0	10.0	8.6	8.6	8.5	8.4	8.4	8.4	9.6	9.7	9.6	12.4	13.6	12.0	12.8	12.9	12.4
V1	11.4	11.4	11.4	10.0	10.1	9.9	8.7	8.8	8.7	8.1	8.1	8.1	9.6	9.7	9.6	12.1	13.1	11.9	12.7	12.9	12.3
V2	11.3	11.3	11.2	10.0	10.1	9.9	9.2	9.7	8.9	**7.9**	8.0	**7.9**	9.6	9.7	9.5	11.8	11.9	11.8	12.7	12.8	12.7
V3	11.4	11.4	11.4	9.5	9.6	9.4	8.2	8.4	8.1	8.9	9.1	8.8	9.6	9.9	9.4	12.1	12.2	12.0	12.6	12.7	12.5
V4	11.3	11.3	11.3	9.2	9.3	9.1	8.5	8.7	8.4	8.8	9.0	8.6	9.6	9.9	9.4	12.1	12.3	12.0	12.7	12.7	12.6
V5	11.2	11.2	11.2	9.2	9.3	9.1	8.1	8.5	**7.7**	8.5	8.9	8.1	9.6	10.0	9.3	12.0	12.5	11.9	12.7	12.8	12.6
V6	11.2	11.2	11.2	9.0	9.3	8.8	**7.8**	8.4	**7.0**	8.0	8.4	**7.6**	9.4	9.9	9.1	11.8	12.3	11.7	12.5	12.6	12.4
V8	11.2	11.2	11.2	9.5	9.5	9.5	8.2	8.2	8.2	**7.7**	**7.7**	**7.7**	9.7	9.7	9.7	12.0	12.1	12.0	12.6	12.7	12.4

Note:
Bold and underlined text indicates when DO measurements were lower than the one-day minimum numeric criterion of 8.0 mg/L.

3 DISSOLVED OXYGEN ATTAINMENT PLAN

3.1. Dissolved Oxygen Monitoring

Based on the DO data described in Section 2 of this document, SCL proposes a monitoring program to better define the magnitude and spatial and temporal extent of DO concentrations below 8.0 mg/L. Ecology reviewed SCL's Preliminary Licensing Proposal (PLP) and data provided by SCL, and indicated that in its preliminary assessment, DO levels did not appear to be outside of the normal range for this system and that additional monitoring would help to confirm this preliminary assessment (M. Mangold, Ecology, personal communication, June 18, 2009). SCL proposes a five-year DO monitoring plan, including annual reporting and consultation with Ecology, to be implemented following issuance of the new FERC license.

3.2. Monitoring Design

SCL will coordinate with Ecology and the Water Quality Workgroup to finalize the specifics of the monitoring program identified below, including sampling depths, duration of monitoring periods, and measurement equipment to be used. Because DO concentration is dependent on water temperature, temperature will be measured every time DO measurements are made. In addition, Ecology requested that pH data be collected concurrently with DO data collection to provide pH trend information for Ecology's use (M. Mangold, Ecology, personal communication, June 18, 2009).

SCL anticipates that monitoring will be conducted continuously (see Section 3.3 of this plan) at the following sites: Box Canyon Tailrace (V7), Metaline Old (V2), Everett Creek Island (V5), Boundary Forebay (V6), and Boundary Tailrace (V8) stations (Table 2.0-1). Based on the 2007-2008 dataset samples along vertical profiles at these sites will be collected at 10, 30, 45, and 60 meters (33, 98, 148, and 197 feet) to provide DO levels throughout the water column.

Because exceedances were only observed in July and August of 2007, SCL proposes to conduct post-license monitoring during the warmer months of the year, when exceedances are more likely. SCL proposes to "bracket" the period when exceedances occurred and conduct monitoring from June 15 through September 15 during each of the five post-license monitoring years. Monitoring will begin on the falling limb of the hydrograph once it is safe to place equipment (e.g., below approximately 50,000 cfs).

3.3. Monitoring Methods

Continuous DO and pH monitoring will be conducted for the duration of the period described in the preceding section (June 15 - September 15) at each sampling site (V7, V2, V5, V6, and V8). A Hydrolab®, or other comparable measurement device, will be attached to a profile cable at the depth intervals identified above. Calibration and sampling will be performed per manufacturer's specifications and distributor configuration. DO, temperature, and pH will be measured every 15 minutes throughout the data collection period. Data will be downloaded and measurement equipment will be checked for maintenance at a minimum of every 30 days.

A Quality Assurance Project Plan (QAPP) will be prepared to document the quality assurance (QA) and quality control (QC) measures to be observed to ensure that the following objectives are met: data are consistent, correct, and complete, with no errors or omissions; QC sample results have been reviewed and are included; established criteria for QC results are met; measurement quality objectives have been met, or data qualifiers are properly assigned where necessary; and data specified in the sampling process design are obtained. Data collection methods will follow established Ecology and U.S. Environmental Protection Agency (EPA) guidelines. Within six months of license issuance, a QAPP will be filed with Ecology. The QAPP is anticipated to be comparable to that developed and approved by Ecology, for the 2007-2008 water quality sampling (SCL 2009).

3.4. Evaluating Monitoring Results and Potential Secondary Actions

The purpose of the monitoring program is to verify the results of the relicensing study by monitoring more extensively, i.e., continuously, during the summer months when DO levels are more likely to be below 8.0 mg/L. The proposed monitoring program will help to define the magnitude and spatial and temporal extent of DO occurrences below 8.0 mg/L. The monitoring will be used to confirm that DO concentrations in Boundary Reservoir comply with Ecology standards under most conditions, and that DO levels continue to follow expected patterns for the Pend Oreille River system. SCL will report DO data to Ecology on an annual basis, and after five-years of monitoring, in consultation with Ecology, determine if any further actions are needed.

3.5. Compliance Schedule

3.5.1. Reasonable and Feasible Measures

Relicensing study results indicate no correlation between DO levels and water surface elevation fluctuations in Boundary Reservoir related to Project operations. However, water depth and retention time would be less if the reservoir did not exist. At this time, there are no reasonable or feasible measures that have been identified to address DO levels at depth. Installation of an aerator has been used in other waterbodies to increase water movement. The size and volume of water in Boundary reservoir renders an aerator approach infeasible.

3.5.2. Schedule

A QAPP will be filed with Ecology within the six months following license issuance, and the monitoring program will be conducted annually for five years, beginning one-year following issuance of the new Project license. After five years of the monitoring program, SCL will consult with Ecology regarding interpretation of results and potential next steps. SCL will summarize each year's data in a brief technical memorandum, which will be submitted to Ecology in December of each year.

4 REFERENCES

Ecology (Washington Department of Ecology). 2006. Water Quality Standards for Surface Waters of the State of Washington. Chapter 173-201A WAC. Olympia, Washington.

Mangold, M. 2009. Washington Department of Ecology. Personal Communication, June 18, 2009.

SCL. 2009. Updated Study Report. Boundary Hydroelectric Project (FERC No. 2144). Seattle, Washington. Available: http://www.seattle.gov/light/news/issues/bndryRelic/br_document.asp. March 2009.

This page intentionally left blank.