

**PORT OF SEATTLE**  
**MEMORANDUM**

**COMMISSION AGENDA**

**Item No.** 4a

**Date of Meeting** April 23, 2013

**DATE:** April 15, 2013  
**TO:** Tay Yoshitani, Chief Executive Officer  
**FROM:** Michael Ehl, Director Airport Operations  
George England, Program Leader, Project Management Group  
**SUBJECT:** Special Order of Business - Seattle City Light (SCL) Incentive Check  
Presentation to Port of Seattle for the Consolidated Rental Car Facility

**SYNOPSIS:**

Mr. Jorge Carrasco, Superintendent of Seattle City Light (SCL), will attend this meeting to present the Port with an incentive check in the amount of \$408,275 for an overall energy savings exceeding 2,150,541 kilowatt-hours (kWh) per year at the Rental Car Facility (RCF) as part of SCL's Energy Smart Service Program, which pays up to 70% of costs for retrofits and new equipment purchases that save energy. The rebate is based on the project's first-year kWh savings. In addition to the energy savings, the annual operational savings realized through participation in the program are estimated to be \$135,484, and the RCF's greenhouse gas emissions are reduced by an estimated 1,290 tons/year.

The Port, rental car companies, and SCL began collaborating in 2006 during the design of the RCF, as an associated effort to the RCF being designated the Airport's sustainable asset management demonstration project and seeking certification in Leadership in Environmental and Energy Design (LEED), to incorporate energy-efficient features into the facility identified below. The project has now joined a select group of sustainable and state-of-the-art projects locally that manifest efficient electrical design practices to meet specified energy saving standards and reduce the negative impact of buildings' consuming electrical energy on the environment. The amount of \$408,275 will offset Customer Facility Charge (CFC) funding, reducing the CFC's used for the project. Port, rental car company representatives, and SCL staff will also be present to be recognized for their significant effort in obtaining this incentive payment.

**BACKGROUND:**

The RCF project was designated the Aviation Division's sustainable asset management demonstration project in 2005 during the preliminary engineering phase. During design, the project established a goal to implement a 'total cost of ownership' decision-making framework that would positively impact construction and operation of the facility. The project used lifecycle cost analyses as evaluation criteria for major equipment and systems, eco-charrettes, and guiding principles of 'right sizing' the facility as strategic

## **COMMISSION AGENDA**

Tay Yoshitani, Chief Executive Officer

April 15, 2013

Page 2 of 3

measures. A LEED checklist was used as a guideline during the preliminary and final designs. In addition to operations and maintenance, the team also considered any impacts to rental car operations.

After the 60% design submittal, the decision was made to seek a 'Certified' rating under the LEED New Construction 2.2 system. Associated with the decision to pursue LEED, Port staff investigated and approached SCL about the potential of the RCF qualifying for the Energy Smart Service Program. The Port and SCL entered into a formal agreement on May 11, 2010. The RCF opened on May 17, 2012.

The Port provided specific design calculations and equipment performance information to SCL. In addition, the Port provided construction cost information for five key energy efficient systems and components to SCL via the contractor as part of SCL's program verification process. As a program requirement, SCL was required to fully evaluate and inspect the completed facility approximately six months after opening to determine if the Port had met its obligations under the agreement and for SCL to determine the actual energy usage and resultant savings. The overall energy usage has well exceeded the expected energy savings, resulting in a 2,150,541 kWh/year saving and an estimated \$135,484 in operational savings per year. Additionally, the RCF energy-saving features reduce greenhouse gas emissions by an estimated 1,290 tons per year.

### **Features implemented that contribute to energy savings include:**

- Reduction in floor plate mechanical ventilation by using natural ventilation strategies and CO<sub>2</sub> sensor-controlled ventilation systems on the floor plates
- Right sized building space to reduce continuous mechanical heating/cooling by approximately 33%
- Energy efficient heating/cooling equipment including variable speed drives on the air handlers, and air cooled chillers
- Energy efficient substation transformer and distribution transformers
- High efficiency lighting with automated occupancy sensor controls throughout facility
- Day lighting strategies in the customer service building and operational floor plates
- Painting floor plate ceilings white to reduce the number of light fixtures installed

SCL's Energy Smart Services Program focuses on business customers on their medium, large or high-demand rate schedules. The program pays up to 70% of costs for retrofits and new equipment purchases that save energy. The rebate amount is based on a project's first year kWh savings. This program is the most cost effective way to meet the City's future electricity needs. Incentivizing customers avoids the expense of building new electric generating facilities or buying electricity on the open market. Currently, the Port is City Light's eleventh largest consumer of electric energy within its territory.

## **COMMISSION AGENDA**

Tay Yoshitani, Chief Executive Officer

April 15, 2013

Page 3 of 3

### **OTHER DOCUMENTS ASSOCIATED WITH THIS SPECIAL ORDER:**

- None

### **PREVIOUS COMMISSION ACTIONS OR BRIEFINGS:**

- Monthly RCF updates, April 22, 2008, through March 27, 2012.
- LEED Certification Special Presentation April 24, 2012.