

**CLACKAMAS COUNTY BOARD OF COUNTY COMMISSIONERS
(Sitting/Acting as the Board of Clackamas County Service District #5)**

Study Session Worksheet

Presentation Date: March 18, 2013 **Approx Start Time:** 10:30 a.m. **Approx Length:** 60 min.

Presentation Title: CCSD#5 (Street Lighting) Revenue Distribution and Street Light Conversion

Department: Department of Transportation and Development

Presenters: Dan Johnson; District Manager

Other Invitees: Dave Robertson and Jay Tinker; Portland General Electric

WHAT ACTION ARE YOU REQUESTING FROM THE BOARD?

Clackamas County Service District #5 (CCSD#5), Street Lighting, is requesting two actions from the Board: A) direction on use of recently received additional revenues and B) authorization to proceed with additional lighting conversions to improve efficiency and reduce cost.

EXECUTIVE SUMMARY:

CCSD#5 is the street lighting authority for unincorporated urban Clackamas County, and the cities of Happy Valley and Damascus. The district coordinates with Portland General Electric (PGE) to design, maintain and operate approximately 9,000 street lights within the district.

There are several recent issues that are influencing CCSD#5 operations:

1. Additional revenue through street lighting-type changes and the sale of district poles;
2. PGE rate increase that went into effect Jan. 1, 2014, and
3. The opportunity to convert more street lights to increase efficiency.

Background information about each issue is provided below.

1. Additional Revenue

District representatives previously informed the Board about the conversion from High Pressure Sodium (HPS) to Light Emitting Diode (LED) street lighting and the sale of district-owned streetlight poles (also known as Option B poles).

These actions have resulted in additional revenues consisting of:

- Street light conversion Energy Trust Credit: \$250,000
- Light pole sales: \$615,000

While there was no specific discussion on how these revenues were to be spent, the District Board did express the hope that the funds could be used to both reduce rates and fund specific projects to deal with lighting needs around the county.

2. PGE Rate Increase

On February 15, 2013, PGE filed a Request for a General Rate Revision, also known as the 2014 PGE Rate Case, with the Oregon Public Utility Commission (OPUC). On December 9, 2013, OPUC approved some of PGE's proposed rate revisions equating to an overall average rate increase of 3.8%.

Two components of the Rate Case apply directly to street lighting in CCSD#5:

- An increase in general cost of service, and
- A change in methodology from an embedded cost model to a marginal or fixed cost model.

Staff had assumed some increase in cost would be forthcoming since current PGE rates have been in place since 2007. However, the impacts of this methodology change, which was not expected nor thoroughly communicated by PGE, have significantly increased CCSD#5 operational costs.

The attached memorandum from PGE (Attachment A) summarizes the aforementioned increase in cost of service and changes in methodology.

Preliminary analysis suggests these increased costs and change in methodology would equate to a 16% increase in district rates.

3. Conversion of Street Lighting Type

According to PGE's most recent data, the cost for High Pressure Sodium (HPS) lighting continues to increase, while costs for Light Emitting Diode (LED) lighting has decreased. Over the past year, district lighting, where feasible, has been converted from HPS to LED to improve efficiencies. Preliminary data suggests these increased efficiencies provided by LED lighting, has defrayed the majority of luminary cost increases associated with HPS lighting under the Rate Case.

In light of the cost increases associated with the Rate Case, PGE has proposed to convert additional street lighting from HPS to LED at no cost to the district.

The street lighting under consideration for conversion, known as shoebox-style streetlights, is most commonly found in Happy Valley. PGE estimates there are approximately 1,364 lights of this type in the district and conversion of these street lights from HPS to LED would save the district approximately \$100,000 annually.

Preliminary analysis suggests these savings would reduce the aforementioned estimated rate increase from 16% to 11%.

FINANCIAL IMPLICATIONS (current year and ongoing):

Attachment B provides an analysis of these topics and how they impact future rate adjustments. The analysis assumes authorization to advance LED conversion of the shoebox-style lighting discussed above. Variables include:

- Option 1 - Retaining all revenue, advancing no projects at this time and minimizing future rate increases;
- Option 2 - Retaining some portion of the revenue, advancing some projects at this time, and using the remaining funding to minimize future rate increases;
- Option 3 – Use all of the revenue to advance projects.

LEGAL/POLICY REQUIREMENTS:

Not Applicable

PUBLIC/GOVERNMENTAL PARTICIPATION:

City of Happy Valley: During the LED conversions and Option B light pole sales, staff had a number of discussions with City representatives regarding the use of the additional revenue. While a primary focus is providing additional LED lighting alternatives, the city has proposed a number of specific lighting safety projects. With news of the new rate information from PGE and the possible conversion of shoebox-style lighting, staff has scheduled a presentation to the Happy Valley City Council on the evening of March 18.

McLoughlin Area Plan Implementation Team (MAP-IT): Over the last year, staff has worked closely with MAP-IT representatives on a number of lighting projects, with a focus on providing additional lighting along McLoughlin Boulevard (OR 99E) in unincorporated Clackamas County between Milwaukie and Gladstone. District staff is currently negotiating an Intergovernmental Agreement (IGA) with the Oregon Department of Transportation to allow additional lighting along the corridor where feasible.

CONSIDERATION A: AUTHORIZATION TO ADVANCE ADDITIONAL LED CONVERSION

OPTIONS:

1. Direct staff to coordinate with the City of Happy Valley and, with concurrence of the city, advance documentation necessary to initiate the conversion of Shoebox-style lighting in the district from HPS to LED.
2. Direct staff to delay advancing additional LED conversion at this time.

RECOMMENDATION:

Option 1: Staff respectfully recommends that the District Board direct staff to coordinate with the City of Happy Valley and, with concurrence of the city, advance documentation necessary to initiate the conversion of Shoebox-style lighting in the district from HPS to LED.

CONSIDERATION B: DIRECTION ON USE OF ADDITIONAL REVENUE

OPTIONS:

1. Direct staff to delay project funding at this time and retain additional revenue to mitigate future rate increases.
2. Direct staff to retain a portion of the additional revenue for possible projects, retain remaining revenue to mitigate future rate increases, and refine the proposed list of projects for future consideration by the District Board.
3. Direct staff to retain all of the additional revenue for possible projects and refine the proposed list of projects for future consideration by the District Board.
4. Direct staff to provide additional information for consideration by the District Board.

RECOMMENDATION:

Option 1: Staff respectfully recommends the District Board direct staff to delay project funding at this time and retain additional revenue to mitigate future rate increases.

ATTACHMENTS:

Attachment A: PGE Memorandum dated March 10, 2014

Attachment B: Fiscal Analysis

SUBMITTED BY:

Division Director/Head Approval



Department Director/Head Approval

M. B. Castmiller 3/11/14

County Administrator Approval

For information on this issue or copies of attachments, please contact Wendi Coryell @ 503-742-4657.



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Memorandum

To: Clackamas County Service District #5 Board

From: Jay Tinker, Director of Pricing and Tariffs, Rates and Regulatory Affairs *JT (by kw)*

Date: March 10, 2014

Subject: 2014 General Rate Case Explanation and Description of Price Change

The purpose of this memorandum is to provide an explanation of the streetlight price methodology change that was proposed and approved in Portland General Electric's (PGE) most recent rate case (Oregon Public Utility Commission Docket UE 262), with new prices effective January 1, 2014. An explanation of why the change occurred and a brief explanation of what the change means is included.

Process

To change prices, public utilities must undertake a public rate case process that allows the opportunity for the Oregon Public Utility Commission (OPUC), OPUC Staff, intervenors and interested parties to analyze and question proposed changes. On February 15, 2013, PGE filed a rate case, asking for new prices to be effective on January 1, 2014. The streetlight portion of this rate case included a change in pricing method – from historical price allocation method to replacement cost allocation method (these methods are also commonly known as “embedded cost” and “marginal cost,” respectively).

Pricing Method Change

The change from historical cost to replacement cost can largely be attributed to two factors: making sure that costs are correctly allocated to customers and making sure that our streetlights were allocated in the same way that we allocate our other assets.

As to customer allocation, more simply put, we've changed to a pricing method where streetlight customers are responsible for the full cost of their streetlight system, while holding other PGE customers harmless. This has not been the case in the past. When the historical cost method was used, other electrical customers subsidized 42% of streetlight costs through

general distribution charges. This was also consistent with the historical-pricing method used for luminaires (both LED and High Pressure Sodium) which was replacement cost. With this change our methodology is now consistent.

In regards to cost, in addition to changing the methodology, we updated our costs. Our streetlight costs were last set in our 2007 general rate case which calculated prices based on 2005 cost data.

The switch to the replacement cost method for Option A (PGE owned and maintained) poles means that the monthly price reflects PGE's cost of investment (which is the cost of replacing a damaged pole with a brand new pole, if necessary), labor expenses, warehouse storage of poles and parts, taxes, and return on investment. Then, in accordance with the asset life specified in our depreciation study, we determine how much those inputs cost per year, and finally per month, resulting in the Option A price. Pricing Option A services in this way helps to smooth out the cost of maintaining and replacing poles -- and all of the expense that comes with that.

The historical cost method, which was used previously, priced poles based on their depreciated value. This meant that when PGE installed new replacement poles for Option A customers, other PGE customers were providing a subsidy. The replacement cost method fully allocates costs to the customers who are responsible for them.

As you are aware, PGE filed a rate case on February 13th, 2014 for rates which will take effect on January 1st, 2015. As before, our request was filed with the OPUC and will be subject to a process whereby interested parties can evaluate our proposals and offer alternatives. The increase for PGE's proposed changes for streetlights and poles is minimal, when looking at the averages system-wide. We did evaluate expected pole lives, and are proposing that they be extended from an assumed life of 43 years to 53 years. PGE has assembled a pro forma showing the potential impact on Clackamas County Service District #5, if those changes are adopted by the OPUC as proposed.

Clackamas County Lighting District #5
Rate Increase Options

	13-14	14-15	15-16	16-17	17-18	18-19	19-20	20-21	21-22	22-23	23-24	24-25
	YE Est	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast	Forecast
Scenario 1 The \$865,089 PGE Light Sale Used to Defer Rate Increases												
Assessments	1,779,397	1,779,397	1,814,985	1,851,285	1,888,311	1,926,077	1,964,598	2,003,890	2,064,007	2,125,927	2,189,705	2,233,499
Rate Increase		0.00%	2.00%	2.00%	2.00%	2.00%	2.00%	2.00%	3.00%	3.00%	3.00%	2.00%
Scenario 2 One Half of the \$865,089 PGE Light Sale Used to Defer Rate Increases												
Assessments	1,779,397	1,779,397	1,814,985	1,851,285	1,897,567	1,954,494	2,013,129	2,073,523	2,135,728	2,199,800	2,265,794	2,311,110
Rate Increase		0.00%	2.00%	2.00%	2.50%	3.00%	3.00%	3.00%	3.00%	3.00%	3.00%	2.00%
Scenario 3 None of the \$865,089 PGE Light Sale Used to Defer Rate Increases												
Assessments	1,779,397	1,779,397	1,868,367	1,924,418	1,982,151	2,031,704	2,082,497	2,124,147	2,166,630	2,209,963	2,254,162	2,299,245
Rate Increase		0.00%	5.00%	3.00%	3.00%	2.50%	2.50%	2.00%	2.00%	2.00%	2.00%	2.00%

Forecast Assumptions:

- ♦ Forecasts maintain a minimum fund balance equal to 5 months of PGE bills
- ♦ Forecasts factor an annual 2% increase in electrical costs
- ♦ Forecasts do not assume any new rate payers to the district
- ♦ Forecasts assume a \$100,000 annual savings for LED conversions

