MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO:	Commissioners Brown, Carlson, Mital, Simpson and Helgeson,
FROM:	Rod Price, Chief Electric Engineering & Operations Officer; Nick Nevins, Engineering Technician
DATE:	May 15, 2018
SUBJECT:	Downtown Fiber Network Status Update
OBJECTIVE:	Information Only

Background:
In February 2017 Eugene Water and Electric Board (EWEB) and the City of Eugene (COE) entered into an agreement for the construction of a high speed fiber optic network in the downtown core of Eugene. In May, 2017 the Economic Development Administration (EDA) awarded the multi-agency project team a grant that would reimburse up to 50% of construction costs. As soon as the grant was awarded the entire project team began working through the EDA requirements in order to begin construction on the remainder of the fiber network.

Discussion:
After almost a year of attempting to meet the EDA's award conditions it became clear there was little hope that would be possible. As a result, in March of 2018, the project team notified the EDA that we would not be using grant funds for the fiber network. City of Eugene gave EWEB a notice to proceed (NTP) with construction and a remaining scope/schedule has been created.

To date the COE has given a total of four different NTPs to EWEB (three preliminary and one final) along with a separate material purchase authorization. With those NTPs, EWEB's fiber network is currently serving 29 buildings downtown. To date, the project has been proceeding on planned schedules and meeting planned budgets.

The multi-agency project team has intentionally spent almost no time marketing this network until that final schedule is in place. Even without that marketing effort there are currently an additional 27 buildings that have signed up and waiting for connection.

The current plan is to complete the subscribed network by the end of 2018. That will be depending on the number of buildings that sign up for the network. The project team estimates that at least another 20 buildings could sign up and still meet our end of year goal. Connections requested in 2019 and later will be provided on an individual project basis, likely at higher costs.

If you have any questions please contact Nick Nevins at nicholas.nevins@eweb.org or 541-685-7751.

Recommendation and Requested Board Action
This memo is for informational purposes only. No Board action is requested.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO:	Commissioners Brown, Carlson, Mital, Simpson and Helgeson
FROM:	Susan Ackerman, Chief Energy Officer, Greg Brownell, Portfolio Management and Pricing Supervisor, and Catherine Gray, Senior Energy Resource Analyst
DATE:	May 25, 2018
SUBJECT:	EWEB's 2017 Oregon Renewable Portfolio Standard Compliance Report
OBJECTIVE:	Information Only

Issue
In accordance with the Oregon Renewable Portfolio Standard (RPS), EWEB's 2017 RPS Compliance report is attached for Board review.

Background
The Oregon Renewable Energy Act of 2007 established a Renewable Portfolio Standard (RPS) for all Oregon electric utilities. The statute applicable to EWEB that governs compliance reporting, ORS 469A.170, states "A consumer-owned utility shall make the report to the members or customers of the utility" by June 1 of each year. Each year EWEB has met the reporting requirements of this standard by providing a detailed report to its governing Board and posting a copy on the website for customers.

Recommendation and Requested Board Action
This item is information only and accordingly there is no requested Board action.

Attachments
The 2017 compliance report is attached. This report will also be posted on EWEB's website on June 1 at the following location: http://www.eweb.org/rps

Eugene Water Electric Board

Oregon Renewable Portfolio Standard
2017 Compliance Report

June 1, 2018

Introduction

In 2007 Oregon enacted Senate Bill 838, the Oregon Renewable Energy Act (Act), which created a Renewable Portfolio Standard (RPS) that all Oregon electric utilities must follow. The purpose of the RPS is to decrease Oregon utilities reliance on fossil fuels for electric generation and increase their use of renewable energy sources. In 2016, SB 1547 increased RPS targets, only for investor-owned utilities.

Oregon's RPS statute establishes standards for Oregon's electric utilities requiring that a percentage of their annual sales must come from qualifying renewable resources beginning in 2011. The exact percentage requirement and the year the requirement begins differs for large and small electric utilities, and specifically for large investor owned utilities, as shown in Figure 1. The size of the utility is a percentage of Oregon's total retail electric sales in the year. EWEB is the only Consumer Owned Utility (COU) classified as a large electric utility. PacifiCorp and Portland General Electric are assigned an even larger target based on both size and utility type (investor-owned, IOU)). All of Oregon's other COUs or IOUs are classified as small electric utilities, which under the Act generally do not have compliance obligations until 2025. [1]

Figure 1. Annual percentage target of qualifying electricity by year

	Utility Size	2011	2015	2020	2025	2040
Large IOU	3% or more			20%	27%	50%
Large Utilities	3% or more	5%	15%	20%	25%	
Smaller Utilities	From 1.5% to 3%				10%	
Smallest Utilities	Under 1.5%				5%	

The Oregon Public Utilities Commission (PUC) oversees Investor Owned Utilities (IOU) reporting and compliance with the RPS. Because the PUC does not generally regulate Oregon COUs, the statute governing compliance reports, ORS 469A.170, states "A consumer-owned utility shall make the report to the members or customers of the utility." EWEB's longer term compliance strategy is addressed in its Integrated Electric Resource Plan (IERP) which is updated every 5 years or as determined by the board of commissioners.

The Act also defines which types of renewable generation are considered qualifying electricity. In general, qualifying renewable resources must have an on-line date of January 1, 1995 or later, with some exceptions.[2]

In recognition of the low-emission resources already existing in the region and other reasonable barriers to compliance, there are four exemptions in the Act that allow utilities to reduce the annual compliance target. These exempt utilities from taking actions for compliance that:

- Would cause the utility to spend over 4 percent of annual costs to comply with RPS
- Force Consumer Owned Utilities (COU) to replace Bonneville Power Administration (BPA)Tier 1 power with new renewable electricity

[1] For additional information on the Oregon RPS see State of Oregon: Energy in Oregon - Renewable Portfolio Standard

[2] See link for a list of conditions under which pre-1995 resources that eligible to produce qualifying electricity, https://olis.leg.state.or.us/liz/2016R1/Downloads/MeasureDocument/SB1547/Enrolled
A later amendment to the RPS allows for pre-1995 woody biomass to qualify, but the RECs will not be eligible for use in compliance until 2026.

- Force a utility to acquire resources in excess of their load requirement
- Force a utility to replace older renewable or non-fossil fuel generation (i.e. legacy hydroelectric projects) with new renewable generation

Currently, the vast majority of EWEB's resources are from BPA Tier 1 resources and EWEB owned or contracted legacy hydro. It is EWEB's interpretation that these resources can be used towards the exemption.

The Act also requires Oregon utilities to offer customers the option to elect a green power rate. EWEB's Greenpower program, implemented prior to the passage of the Act, is an example of such a voluntary retail green power rate.

RPS Compliance rules

The RPS requires that utilities include a percentage of electricity generated from qualifying renewable energy sources in their portfolio of power sold to retail customers. Measurement of compliance is based on annual megawatt hours (MWh) of retail sales and qualifying generation.

Per rules adopted by the Oregon Department of Energy, qualifying generation volumes are based on values recorded and reported to the Western Renewable Energy Generation Information System (WREGIS). WREGIS is a large database that receives monthly generation volumes of renewable generation and serves as the regional system of record to issue, monitor, account for or transfer Renewable Energy Certificates (REC). Each MWh of renewable generation equals one REC. Each REC has a unique identification number that indicates the generation project and the month the electricity was generated. The purpose of this system is to ensure that renewable generation and its associated REC are not used to meet the requirements of more than one program.

The compliance target for EWEB in 2017 is 15 percent of retail sales, subject to the four exemptions that can reduce the compliance target. Compliance is demonstrated by retiring a quantity of WREGIS RECs equal to the compliance target. Once a REC is retired in WREGIS it is no longer available to be used in any other program. However, as long as a REC has not been retired it can be retained or banked for a future use such as compliance, a voluntary program, or sold to another entity.

Under EWEB's interpretation, two exemptions significantly reduce EWEB's current and projected compliance targets. The first exemption releases EWEB from reducing purchases of BPA Tier 1 energy in order to take in qualifying electricity. The second exemption releases EWEB from replacing energy produced by non-fossil resources (such as our legacy hydro) with qualifying electricity.

EWEB's understanding of the policy rationale for these exemptions is that the intent of the RPS is to displace fossil fuels, not to require EWEB to replace energy from our existing legacy hydro projects with other renewable energy resources. The Act strikes a balance in doing no harm to the many legacy hydro projects in the Northwest while disqualifying them from creating RECs. For the purposes of calculating its hydro exemption, EWEB excludes renewable portions of BPA Tier 1 generation volumes. These renewable portions include energy that generated RECs through hydro efficiency upgrades and the contribution of existing BPA renewable resources.

EWEB's generation portfolio is overwhelmingly supplied from BPA Tier 1 power and our legacy hydro generation. Under Oregon's RPS rules, if exempt generation in 2017 exceeds 85 percent of total retail sales then EWEB can reduce the 15 percent compliance target by the amount the exempt generation exceeds 85 percent. If exempt generation exceeds 100 percent of total retail sales then EWEB can reduce its compliance target to zero.

2017 Oregon Renewable Energy Act and RPS Compliance Information

RPS compliance is measured in annual MWh. Figure 2 contains annual MWh information used to calculate EWEB's RPS compliance.

Figure 2. EWEB 2017 RPS Compliance Obligation Calculation

Category	MWh
Sales to Customers	2,526,240
RPS Target	15%
RPS obligation BEFORE exemption	378,936
Exempt resources	
BPA Tier 1 net purchases	2,438,599
Mid-C hydro (contract)	13,588
EWEB hydro (owned)	561,245
Total Exempt Resources	3,013,432
Fraction of retail sales from exempt resources	119%
RPS obligations AFTER exemption	0

EWEB interprets the exemptions reflected in the table to mean EWEB does not have any RPS compliance obligation in 2017; however, EWEB did retire a number of RECs to satisfy the portion of the Act that refers to voluntary renewable purchases by EWEB customers under the Greenpower program. Surplus RECs will be banked for future use or sold.

The Greenpower program allows customers the choice to voluntarily pay an additional one cent per kWh which contributes to the development and use of renewable energy. Just as RECs are retired to satisfy any obligations under the mandatory RPS, RECs are also retired to match the volume of sales under EWEB's voluntary retail Greenpower program, with one REC retired for every MWh of program sales.

In 2017, sales to EWEB customers under the Greenpower totaled 26,562 MWh. EWEB has retired this amount of RECs from our available portfolio. For additional information on EWEB's Greenpower program please see Greenpower | EWEB.

EWEB will publish the 2018 compliance report by June 1st of 2019.

MEMORANDUM

EUGENE WATER & ELECTRIC BOARD

Rely on us.

TO: Commissioners Brown, Carlson, Mital, Simpson and Helgeson

FROM: Mel Damewood, Chief Water Engineering & Operations Officer

Sue Fahey, Chief Financial Officer

DATE: May 25, 2018

SUBJECT: Water Utility – Pumping Level Charge Discrepancy

OBJECTIVE: Information Only

Issue

EWEB has different water service charges and prices, hereafter referred to as charges, which are applied to customers depending on the type of customer and their location in our service area. Different charges are applied for residential or general service, inside or outside city limits, and higher or lower elevations. Audits are routinely performed to verify customers are paying the correct charges and at times discrepancies are found.

Background

EWEB's water system consists of one large Base Level in which approximately 85 percent of the customers reside and five smaller higher elevation pressure zones in the South Hills. While Base Level customers are supplied with water directly from the Hayden Bridge Filtration Plant and Pump Station, water delivery to the higher elevation zones require additional pump stations and reservoirs. To help offset the cost of these additional facilities, EWEB customers who reside at higher elevations pay additional charges as part of their water bill.

There are currently three levels of 'pumping levels', Level 1, Level 2, and Level 3. The higher the pumping level, the higher the charge. These additional charges are broken down into two components; Pumping and Delivery Charge Above the Base (Volumetric) and Fixed Pumping and Delivery Charge Above the Base (Fixed). The current additional charges are shown below:

Pumping and Delivery Charge Above the Base*

Services at Base Level	None	
Services at Level 1 (800 to 850 feet)	24.9¢	per 1,000 gallons
Services at Level 2 (975 feet)	49.9¢	per 1,000 gallons
Services at Level 3 (1,150 to 1,325 feet)	73.8¢	per 1,000 gallons

Fixed Pumping and Delivery Charge Above the Base

Level 1	$3.00
Level 2	$5.00
Level 3	$7.00

*The elevations referred to are equivalent reservoir overflow elevations, not household elevations.

To put the charges in perspective, a typical customer who lives in Level 1 and uses 7,000 gallons per month pays approximately $4.74 more per month than a customer who lives in the base level and uses the same amount of water. A customer in Level 3 pays approximately $12.16 more per month for the same amount.

Discussion
Staff routinely perform audits to ensure customers are being charged correctly and fix discrepancies when found. There is, however, one significant discrepancy in the charges that exists. This is associated with the College Hill 703 pressure zone.

There are approximately 490 customers on College Hill who are at or above an elevation at which they cannot be served directly from the Base Level. Historically these customers were served by a pump station and elevated water tank on top of College Hill. While these customers were served by a pump station above the Base Level, they have always been considered Base Level with respect to their rate codes. All other areas in the water system where customers are fed from a pump station above the Base Level are considered Pumping Level I customers and pay the higher charge.

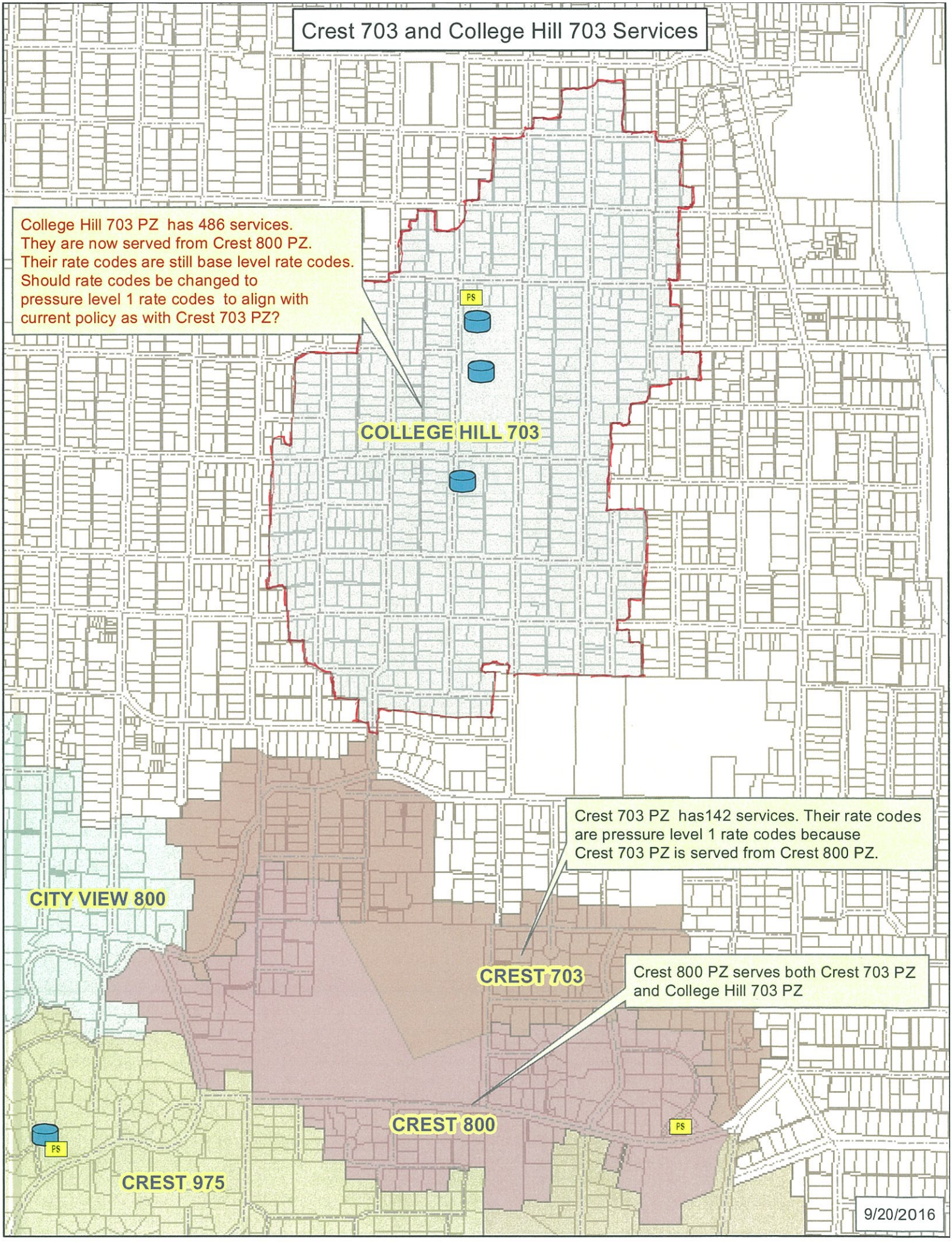
This issue was highlighted in 2015 when a pipeline was constructed which allowed the College Hill 703 zone to be fed from the Crest 800 zone. This improvement allowed for the pump station and elevated tank to be removed from service and also highlighted the fact that the Crest 703 pressure zone, which is also fed from the Crest 800 zone, is considered Pumping Level 1. In summary we have two pressure zones fed from the same source that have different charges applied. The Crest 703 customers are charged the correct Pumping Level 1 rates while the College Hill 703 customers are charged the incorrect Base Level rate. This is illustrated in the attached Figure.

To correct this issue, EWEB staff plan to change the rate codes to those customers in the College Hill 703 zone from Base Level to Pumping Level 1. This will increase the monthly bill for the average customer in that zone between $4.00 and $5.00 per month.

For an implementation strategy, EWEB will send letters to all customers a notification of change in the pumping level charges 60 days prior to implementation. Staff is targeting September 2018 as the month to implement the pumping level charges.

TBL Assessment
There is an inequity between the customers in the College Hill 703 zone and all other customers that are charged Pump Level 1 rates. Changing the rate code for the College Hill 703 customers from Base Level to Pumping Level 1 corrects this inequity.

Recommendation/Requested Board Action
None. This is information only.


Crest 703 and College Hill 703 Services
College Hill 703 PZ has 486 services.
They are now served from Crest 800 PZ.
Their rate codes are still base level rate codes.
Should rate codes be changed to
pressure level 1 rate codes to align with
current policy as with Crest 703 PZ?
PS
COLLEGE HILL 703
Crest 703 PZ has142 services. Their rate codes
are pressure level 1 rate codes because
Crest 703 PZ is served from Crest 800 PZ.
CITY VIEW 800
CREST 703
Crest 800 PZ serves both Crest 703 PZ
and College Hill 703 PZ
CREST 800
PS
PS
CREST 975
9/20/2016