

PUBLIC UTILITY COMMISSION OF OREGON
STAFF REPORT
PUBLIC MEETING DATE: January 13, 2015

REGULAR _____ CONSENT X EFFECTIVE DATE January 1, 2015

DATE: December 18, 2014

TO: Public Utility Commission

FROM: Paul Birkeland *PRB*

THROUGH: Jason Eisdorfer and Lori Koho *JE LK*

SUBJECT: PORTLAND GENERAL ELECTRIC: (Docket No. UM 1004) Sets Service Quality Measures performance threshold levels for 2015.

STAFF RECOMMENDATION:

Staff and Portland General Electric (PGE) jointly recommend that the Commission set the Service Quality Measures performance threshold levels, as required in UM 814, OPUC Order No. 97-196, for calendar year 2015 at the same levels used in 2014.

DISCUSSION:

Overview: Service Quality Measures (SQMs) were adopted by the Commission in 1997 as measurement tools related to customer service, safety issues, and reliability monitoring activities. SQMs are intended ". . . to provide a mechanism to ensure service quality is maintained at current levels or improved . . ." (see *UM 814 – PGE/Enron Merger, Order No. 97-196*).

There are eight separate measures included in PGE's UM 814 SQMs:

1. C1 - At Fault Customer Complaints
2. R1 - Average Interruption Duration
3. R2 - Average Interruption Frequency
4. R3 - Average Momentary Interruption Frequency
5. R4 - Annual Service Restoration Index
6. X1 - Annual Review Vegetative Management
7. X2 - Annual Review Basic Inspection and Maintenance Programs
8. X3 - Annual Review Special Programs

Five of the above measures (C1, R1, R2, R3, and R4) have three performance levels each (*i.e.*, a goal and two penalty levels).¹ The performance levels are set by the Commission on an annual basis. The establishment of SQM performance levels for 2015 is the subject of this memo.

The remaining measures are X1, X2, and X3.² The last three measures are program-monitoring tools for maintenance programs performed by PGE. For these measures, Safety, Reliability, and Security Staff monitor items such as annual accomplishments, budgets and expenditures, and staffing levels. Basic programs include vegetation management, inspection and repair programs for overhead and underground lines, electric supply stations, marinas, major equipment maintenance, standards, and the metering program.

SQM C1: The first measure that the Commission sets performance levels for is C1, or customer at-fault complaint frequency. This is expressed as the number of PUC customer complaints where PGE has been determined to be at-fault, having violated a tariff, rule, or business practice standard. The C1 statistic is presented as the number of at-fault complaints per 1,000 customers.

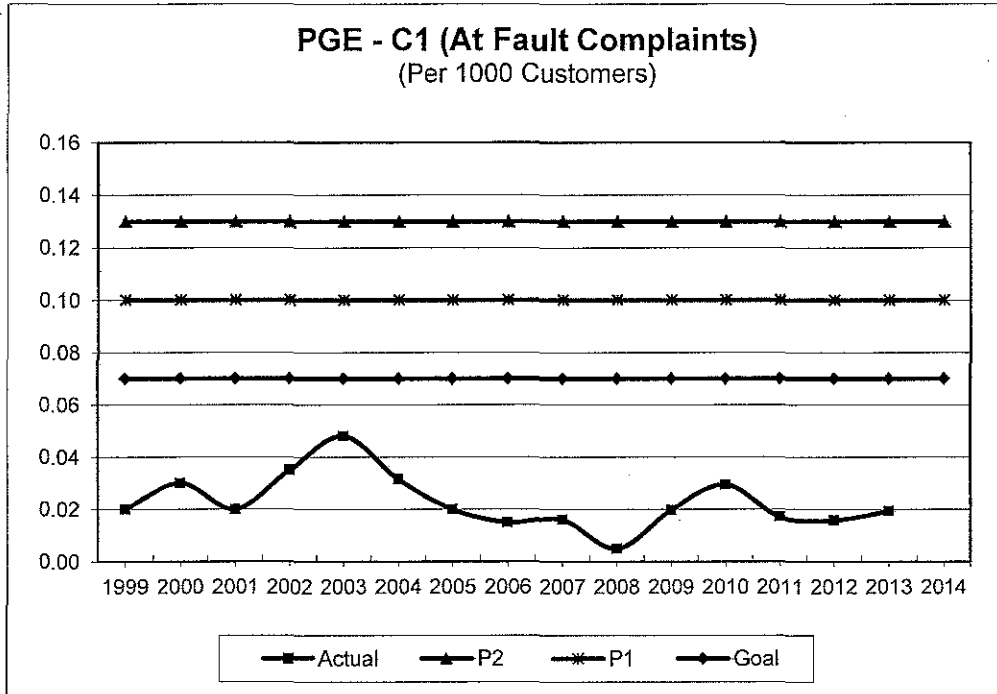
The C1 performance levels should be comparable among energy utilities in Oregon (*i.e.*, the same for Pacific Power and PGE). For 2015, the performance levels recommended for Commission adoption are:

- Goal - less than 0.07 at-fault complaints per 1,000 customers
- Penalty 1 level (\$100,000) - 0.10 at-fault complaints per 1,000 customers
- Penalty 2 level (\$1,000,000) - 0.13 at-fault complaints per 1,000 customers

Actual PGE performance is provided in the following graph:

¹ Note that, if determined by the Commission to be appropriate, a penalty would be imposed as a revenue requirement reduction that would be returned to customers.

² This discussion is for informational purposes only; no Commission action is required for these measures.

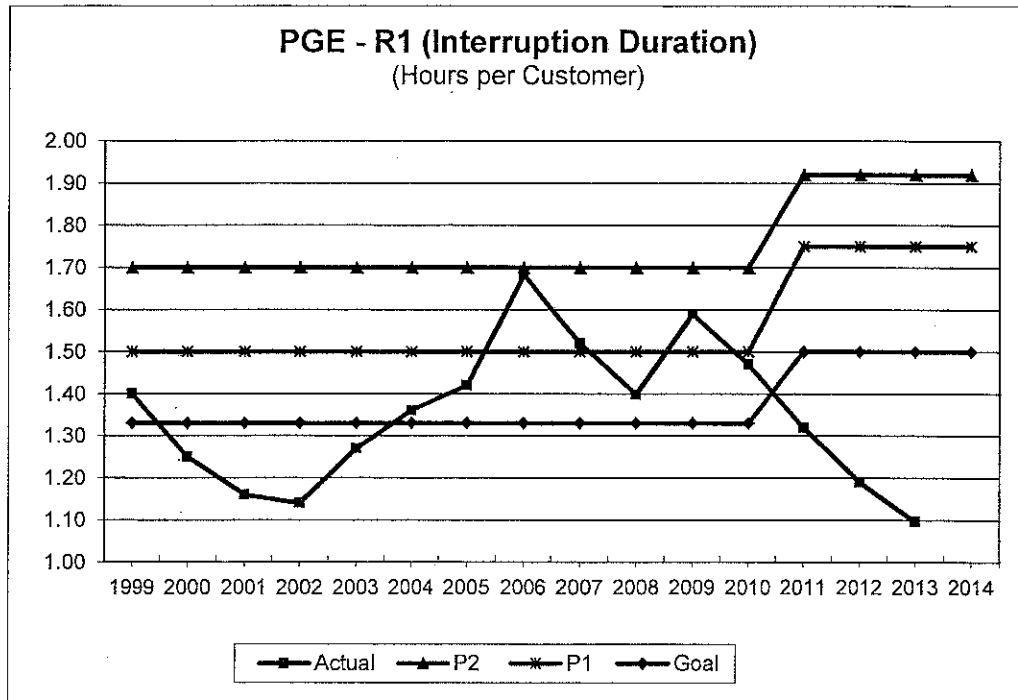


The next four measures relate to service reliability.

SQM R1: The R1 measure is a customer interruption duration (*i.e.*, annual time without power) that utilizes a three-year weighted averaging formula. This is similar to the System Average Interruption Duration Index (SAIDI), calculated with the target year weighted at 50 percent, the previous year weighted at 30 percent, and the third year weighted at 20 percent. Certain "major events" can be excluded from these statistics when specific requirements have been met (*see OAR 860-023-0080 through 0161*). The performance levels recommended for Commission adoption for 2015 are:

- Goal - 1.50 hours
- Penalty 1 level (\$100,000) - 1.75 hours
- Penalty 2 level (\$1,000,000) - 1.92 hours

Actual PGE performance for this measure is provided in the following graph:



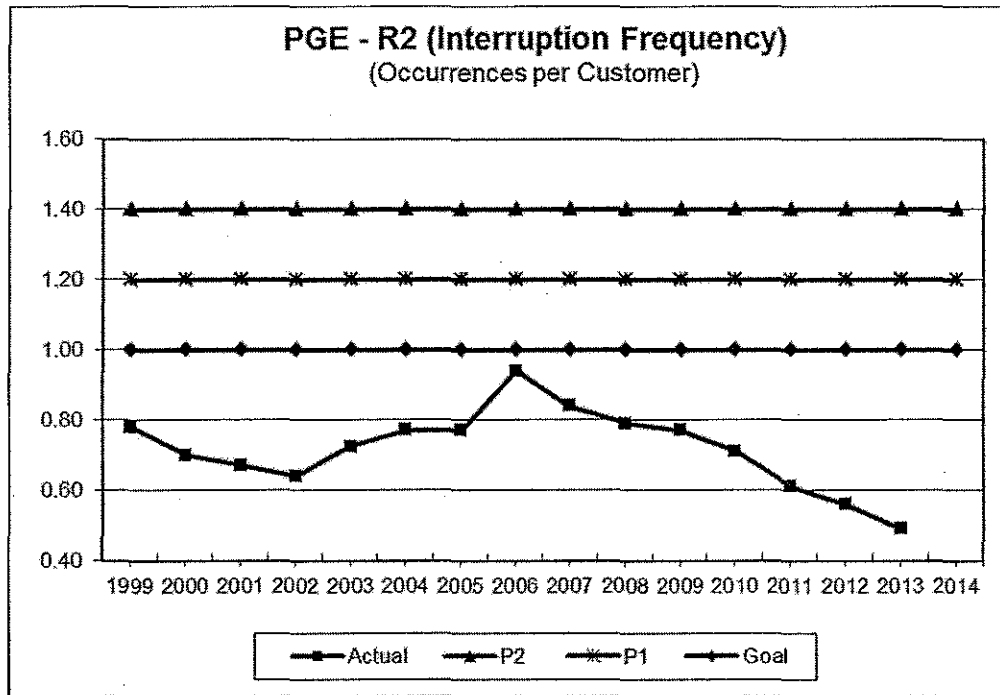
PGE's R1 thresholds were increased in 2011. Staff and the Company determined that these levels were set too low. Increased accuracy in outage reporting resulting from technological advancements, and adverse weather events caused PGE to exceed the thresholds multiple times. Establishment of the higher R1 thresholds has remedied this situation by setting a more reasonable standard.

ANSI/IEEE Standard 1366 was incorporated into the Oregon electric reliability rules (OAR 860-023-0080 to 860-023-0161) in 2011 and first reported on in 2012. Inclusion of this standard has resulted in better methodologies for assessing utility reliability performance and establishing appropriate SQM goals and penalty levels.

SQM R2: The R2 measure is an averaged customer interruption frequency (*i.e.*, *annual number of times service is interrupted for five minutes or more*) that, like R1, utilizes a weighted three-year formula. This is, in essence, a three-year weighted System Average Interruption Frequency Index (SAIFI). The 2015 performance levels recommended for Commission adoption are:

- Goal - 1.0 occurrences
- Penalty 1 level (\$100,000) - 1.2 occurrences
- Penalty 2 level (\$1,000,000) - 1.4 occurrences

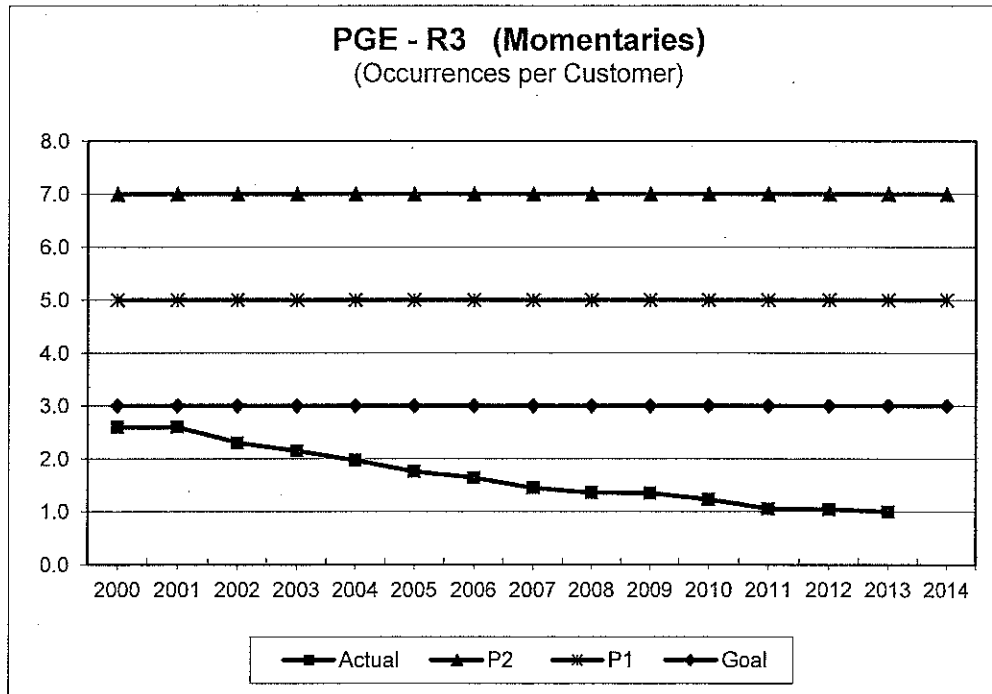
Actual PGE performance for R2 is provided in the following graph:



SQM R3: The R3 measure is a 3-year weighted average of a customer's momentary interruption event frequency (*i.e.*, *Momentary Average Interruption Event Frequency Index or MAIFI*) that has been phased in over the last few years. Momentary outages are primarily the quick blinks that occur on an electrical system when automatic switches perform their protective function in response to a fault on the line. Consistent with the performance levels set for 2000 through 2014, Staff and PGE recommend that 2015 R3 levels be set at:

- Goal - 3.0 occurrences
- Penalty 1 level (\$100,000) - 5.0 occurrences
- Penalty 2 level (\$1,000,000) - 7.0 occurrences

PGE's historical performance for R3 is reflected in the following graph:

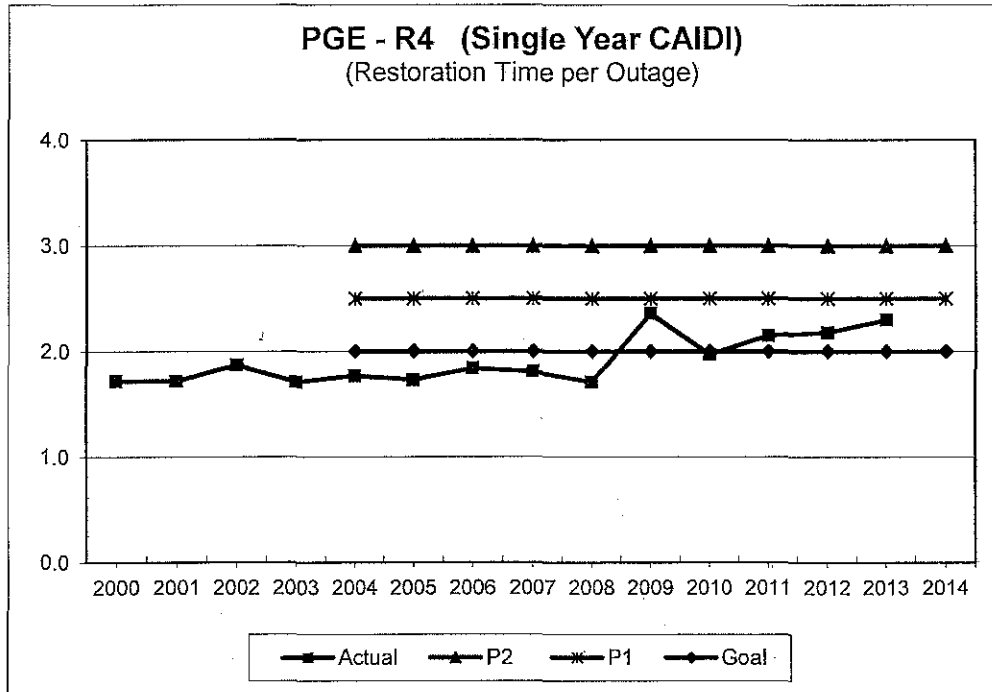


SQM R4: The R4 measure (Service Restoration Indicator) was changed by the Commission in 2004 from percent of customers restored with power within three hours to a standard utility industry index known as the Customer Average Interruption Duration Index (CAIDI). CAIDI represents the average time in hours required to restore service to the average customer per sustained interruption, exclusive of Major Events.

Consistent with the performance levels set for 2014, Staff and PGE recommend that 2015 R4 levels be set at:

- Goal - 2.0 hours per outage
- Threshold Level 1 (\$100,000) - 2.5 hours per outage
- Penalty 2 level (\$1,000,000) - 3.0 hours per outage

PGE's historical performance for R4 is reflected in the following graph:



In 2015, Staff and PGE will continue working together to reevaluate and establish appropriate SQM performance levels based upon the full implementation of Advanced Metering Infrastructure (AMI). One of the many benefits expected to come from AMI will be PGE’s ability to determine the extent of outages more quickly and deploy restoration crews more accurately. This will be a great benefit to both the customers and the Company.

PROPOSED COMMISSION MOTION:

The Portland General Electric Service Quality Measure performance levels for the year 2015 should be set as follows:

1. For C1: Goal - 0.07 at-fault complaints per 1000 customers
 Penalty 1 - 0.10 at-fault complaints per 1000 customers
 Penalty 2 - 0.13 at-fault complaints per 1000 customers

2. For R1: Goal - 1.50 hours of service outage per customer
 Penalty 1 - 1.75 hours of service outage per customer
 Penalty 2 - 1.92 hours of service outage per customer

3. For R2: Goal - 1.0 sustained outage occurrences per customer
Penalty 1 - 1.2 sustained outage occurrences per customer
Penalty 2 - 1.4 sustained outage occurrences per customer
4. For R3: Goal - 3.0 momentary outages per customer
Penalty 1 - 5.0 momentary outages per customer
Penalty 2 - 7.0 momentary outages per customer
5. For R4: Goal - 2.0 hours per outage
Penalty 1 - 2.5 hours per outage
Penalty 2 - 3.0 hours per outage