# BEFORE THE PUBLIC UTILITY COMMISSION OF OREGON

UM 1003

In the Matter of Setting PACIFIC POWER AND LIGHT's Service Quality Measure (SQM) Lines for 2006.	) ) )	ORDER
DISPOSITION: 2006 SERVICE REVENUE REQUIREMENT R		
At its public meeting on December Oregon adopted Pacific Power and Light and Stand penalty lines for 2006. Staff's recommendation of the properties of the p	aff's joint re	
ORD	ER	
IT IS ORDERED that the 2006 Service Quality Measures goal and penalty lines for Pacific Power and Light are set, as described in Appendix A.		
Made, entered and effective	DEC 2 3	2005
	BY THI	E COMMISSION:
SS	B	Becky L. Beier Commission Secretary

A party may request rehearing or reconsideration of this order pursuant to ORS 756.561. A request for rehearing or reconsideration must be filed with the Commission within 60 days of the date of service of this order. The request must comply with the requirements in OAR 860-014-0095. A copy of any such request must also be served on each party to the proceeding as provided by OAR 860-013-0070(2). A party may appeal this order to a court pursuant to applicable law.

ITEM NO. CA5

## PUBLIC UTILITY COMMISSION OF OREGON STAFF REPORT PUBLIC MEETING DATE: December 6, 2005

REGULAR _	CONSENT X EFFECTIVE DATE April 1, 2006
DATE:	November 21, 2005
то:	Public Utility Commission
FROM:	Bill McNamee WM
THROUGH:	Lee Sparling, Ed Busch, JR Gonzalez, and Bonnie Tatom
SUBJECT:	PACIFIC POWER AND LIGHT: (Docket No. UM 1003) Joint recommendation for the Commission to set Pacific Power and Light's Service Quality Measures performance levels for 2006, as required by

### STAFF RECOMMENDATION:

Staff and Pacific Power and Light (PP&L or Pacific) jointly recommend that the Commission set the Service Quality Measures (SQMs) performance levels for 2006 (April 1, 2006, through March 31, 2007, consistent with the Company's fiscal year) at the same levels that were established for 2005.

OPUC Orders No. 98-191 and No. 99-616.

#### DISCUSSION:

**Overview**: Service Quality Measures had their origins as monitoring tools for evaluating the effectiveness of utility safety programs and reliability activities. OPUC Safety Program Staff and PP&L worked to establish SQMs as part of the Company's 1998 UE 94 proceeding -- "Alternative Form of Regulation" (see Order No. 98-191). The SQMs were also modified by stipulation in UM 918 -- PP&L/ScottishPower merger (see Order No. 99-616). The stated purpose of SQMs is "...to provide a mechanism to ensure service quality is maintained at current or improved levels ...". Safety and Reliability Program Staff believe that the SQMs have proven to be an excellent regulatory tool.

There are nine separate measures included in PP&L's 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 Average Interruption Duration (Per Occurrence)
- 6. S1 Major Safety Violations
- 7. X1 Annual Review Vegetative Management
- 8. X2 Annual Review Basic Inspection & Maintenance Programs
- 9. X3 Annual Review Special Programs

Five of the above measures (C1, R1, R2, R3 & R4) have three performance levels each (a goal and two penalty levels). These performance levels are set by the Commission on an annual basis. The establishment of SQM performance levels for 2006 is the subject of this memo.

Other Measures: In addition, a sixth measure (S1) has pre-set performance penalties in any case where the Commission declares that a "Major Safety Violation" has occurred. The remaining three measures, (X1, X2, and X3) are program-monitoring tools for various maintenance programs performed by PP&L on an ongoing basis. For these measures, Safety Staff monitor items such as annual accomplishments, budgets and expenditures, and staffing levels. Basic programs include vegetation management (tree trimming), inspection and repair programs for overhead and underground lines, electric supply stations, marinas, major equipment maintenance, standards, and the metering program.

**SQM Requirements and Penalties**: The details of SQM requirements are found in the UM 918 stipulation adopted by the Commission in 1999. This stipulation gives the Commission the ability to impose penalties if service quality falls below the level the company agreed to provide. The SQM stipulation also lists reporting requirements and a timeline, that includes this submission to the Commission, for determination of performance levels for the coming year.

The Commission has a great deal of discretion regarding how imposed penalties may be paid. Penalties can range from \$100,000 to \$1,000,000. The penalties could be implemented as revenue requirement reductions that would be returned to customers through rate decreases. The Commission could also direct the funds towards specific utility projects that would benefit customers, or could otherwise determine an appropriate use. The Commission has the discretion to recognize circumstances beyond the company's control and cap or adjust the penalty amount. An additional provision of the SQM stipulation allows refunds with interest when certain programs have not been funded at historical levels and associated performance has not met the levels set by the Commission. The concept here is that customers have paid for services that they have not received and, therefore, should be reimbursed.

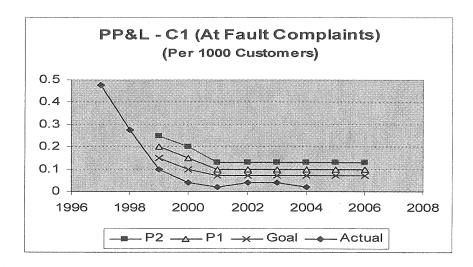
<sup>&</sup>lt;sup>1</sup> These penalties are distinct from those imposed under ORS 756.990.

**SQM C1**: The first measure that the Commission needs to set performance levels for is C1, or customer at-fault complaint frequency. This is expressed as the number of PUC customer complaints where PP&L 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 1000 customers.

The C1 performance levels should be comparable among energy utilities in Oregon (i.e., the same for PP&L and PGE). For 2006, it is recommended that the performance levels be set as follows:

- Goal less than .07
- Penalty 1 line (\$100,000) .10
- Penalty 2 line (\$1,000,000) .13

Actual PP&L performance, that has significantly improved since 1997, is provided in the following graph:



**Reliability**: The next four SQMs relate to service reliability. In contrast to C1, the performance levels for reliability-based measures differ by utility. Differences are based on system configuration, terrain, customer density, and other service territory-specific variables. For PP&L, the implementation of SQM monitoring involved transitioning from an old reporting system to a technologically updated and, therefore, more accurate system. This created a data consistency and comparability problem.

The issue parties needed to resolve was that the new electronic system would provide more accurate data that would most likely show a false indication of deteriorating performance (i.e., the new data would measure performance flaws that were simply

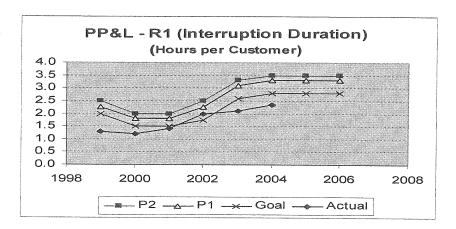
missed by the old reporting system). Therefore, a meaningful method of transitioning from the historical performance levels to the new, and more accurate, levels had to be devised. Staff has worked with PP&L to recommend establishing performance levels that simultaneously ensure: (1) customers continue to receive the same or improved reliability of service; and (2) the Company is not subject to SQM penalties that are not deserved.

In 2002, PP&L placed its electronic outage management system into operation for its Oregon service territory. Staff has worked with PP&L to study and evaluate the resulting system data gathering impacts and projections. This includes quantifying reliability improvement objectives specified in the PP&L/ScottishPower merger (i.e., 10 percent improvement in customer outage durations and frequency, and 5 percent improvement in momentary outages). As shown in the following charts, the SQM performance levels have been adjusted to reflect the more accurate data achieved by the system improvements.

**SQM R1**: The R1 measure is an averaged customer interruption duration (annual time without power) that utilizes a three-year weighted averaging formula. This is similar to System Average Interruption Duration Index (SAIDI), calculated with the target year weighted at 50 percent, the previous year weighted at 30 percent, and the prior previous year weighted at 20 percent. Certain "major events" can be excluded from these statistics when specific requirements have been met (based on OAR 860-023-0080 through 0160). The performance levels recommended for Commission adoption for 2006 are:

- Goal 2.8 hours
- Penalty 1 level (\$100,000) 3.3 hours
- Penalty 2 level (\$1,000,000) 3.5 hours

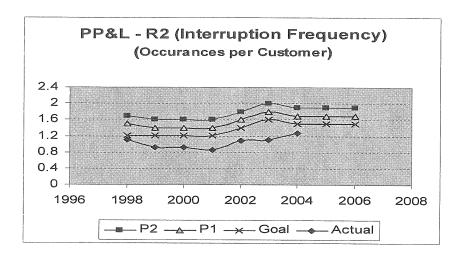
Actual PP&L performance for this measure is provided in the following graph:



**SQM R2**: The R2 measure is an averaged customer interruption frequency (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 2006 R2 performance levels recommended for Commission adoption are:

- Goal 1.5 occurrences
- Penalty 1 level (\$100,000) 1.7 occurrences
- Penalty 2 level (\$1,000,000) 1.9 occurrences

Actual PP&L performance for R2 is provided in the following graph:



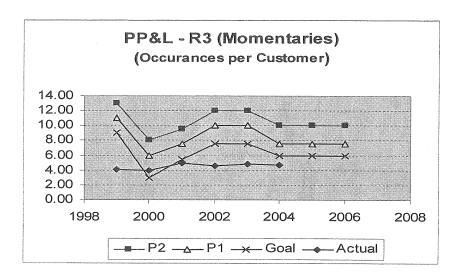
**SQM R3**: The R3 measure is a 3-year weighted average of a customer's momentary interruption frequency (i.e., Momentary Average Interruption Frequency Index or MAIFI). Momentary outages are primarily the quick blinks that occur on an electrical system when automatic switches perform their protective function in response to a fault on the line. The diverse and rural nature of Pacific's system has made this a difficult statistic to measure. With equipment modifications, however, the Company has substantially improved its reporting capabilities. Staff and PP&L have worked to adjust the R3 statistic to reflect Pacific's continually improving data collection system for momentaries. Staff believes that Pacific's current R3 reporting is reasonably accurate.

<sup>&</sup>lt;sup>2</sup> In compliance with Order No. 04-739, on March 9, 2005, PP&L submitted a written MAIFI Plan that presented the Company's updated automated system data collection (SCADA) procedures. The Company indicated that it has improved its coverage of Oregon circuits from roughly 30 percent in 2002 to nearly 50 percent (i.e., data on momentary occurrences are now collected for approximately 78 percent of Oregon customers). This is a substantial improvement in the reporting of the R3 statistic.

Staff and PP&L recommend 2006 R3 levels be set for at:

- Goal 6
- Penalty 1 level (\$100,000) 7.5
- Penalty 2 level (\$1,000,000) 10

PP&L performance levels for R3 are shown in the following graph:

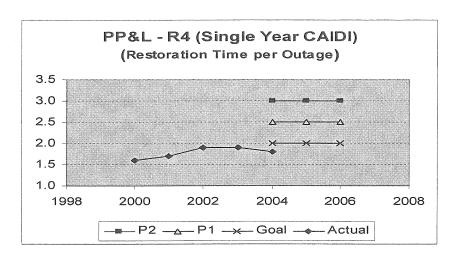


**SQM R4**: The R4 Measure (Service Restoration Indicator) was changed by the Commission in 2004 from percent of customers restored with power within three hours to a standard utility industry index known as the Customer Average Interruption Duration Index (CAIDI). CAIDI represents the average time (hours) required to restore service to the average customer per sustained outage. Major events may be excluded from the R4 statistic.

Staff and PP&L recommend 2006 R4 levels be set at:

- Goal 2 hours
- Penalty 1 line (\$100,000) 2.5 hours
- Penalty 2 line (\$1,000,000) 3 hours

The following graph shows the R4 performance levels recommended for 2006, along with several years of historical performance.



### PROPOSED COMMISSION MOTION:

The Service Quality Measures performance levels for Pacific Power and Light, for 2006 (April 1, 2006, through March 31, 2007, consistent with the Company's fiscal year), be set as follows:

- 1. For C1: Goal = .07 at-fault complaints per 1000 customers
  Penalty 1 = .10 at-fault complaints per 1000 customers
  Penalty 2 = .13 at-fault complaints per 1000 customers
- 2. For R1: Goal = 2.8 hours of service outage per customer
  Penalty 1 = 3.3 hours of service outage per customer
  Penalty 2 = 3.5 hours of service outage per customer
- 3. For R2: Goal = 1.5 sustained outage occurrences per customer
  Penalty 1 = 1.7 sustained outage occurrences per customer
  Penalty 2 = 1.9 sustained outage occurrences per customer
- 4. For R3: Goal = 6 momentary outages per customer
  Penalty 1 = 7.5 momentary outages per customer
  Penalty 2 = 10 momentary outages per customer
- 5. For R4: Goal = 2 hours per outage Penalty 1 = 2.5 hours per outage Penalty 2 = 3 hours per outage

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