- BEFORE THE PUBLIC SE	RVICEC	OMMISSION OF UTAH -
In the Matter of Rocky Mountain Power's Proposed Utah Service Reliability Performance Baselines	) ) ) ) ) ) )	DOCKET NO. 13-035-01  ORDER ON PERFORMANCI BASELINES

**ISSUED:** May 30, 2013

By the Commission:

This matter is before the Public Service Commission of Utah ("Commission") upon the January 7, 2013, application of PacifiCorp, a public utility doing business in Utah as Rocky Mountain Power ("PacifiCorp" or "Company"), for the approval of its proposed electric service reliability performance baselines ("Performance Baselines" or "Baselines"). The application was filed pursuant to requirements in the recently adopted Utah Administrative Code ("UAC") R746-313 "Electric Service Reliability" ("Rule").

In addition to requiring each electric company to have a written electric service reliability program, Section 4 of the Rule requires PacifiCorp to file for Commission approval Performance Baselines for System Average Interruption Duration Index ("SAIDI") and System Average Interruption Frequency Index ("SAIFI") reliability indices and supporting information within 3 months after the effective date of the Rule. The Company's application includes proposed SAIDI and SAIFI Baselines, the basis for the proposed Baselines, and proposed notification requirements in the event reliability performance exceeds either of the Baselines. The application also identifies systems and processes to collect, monitor, and analyze electric service interruption data, defines terms, and provides other supporting information.

On January 7, 2013, the Commission issued an action request to the Utah Division of Public Utilities ("Division") with a due date of February 6, 2013. On February 6, 2013, the Division filed a memorandum informing the Commission of its concerns with the methods the Company used to determine Baselines and notification targets. To address these concerns, the Division stated the Company had decided to revise and re-file its application. Therefore the Division requested an extension until March 6, 2013, to respond to the action request which the Commission granted on February 11, 2013.

On March 6, 2013, the Company filed a revised application ("Application") addressing the Division's concerns. Once again, the Application contained proposed SAIDI and SAIFI Baselines, the basis for the proposed Baselines, notification requirements in the event reliability performance exceeds either of the Baselines, identification of systems and processes to collect, monitor and analyze electric service interruption data, definitions, and other supporting information. On March 7, 2013, the Division filed a memorandum recommending approval of the Company's Application as filed. On April 4, 2013, the Commission issued a notice of technical conference to be held on April 23, 2013. The purpose of the technical conference was to review, clarify, and discuss the information and details supporting the Application. The technical conference was conducted on April 23, 2013, during which PacifiCorp clarified several items pertaining to its Application.

## **BACKGROUND**

SAIDI and SAIFI reliability indices have historically been used by PacifiCorp to measure electric power distribution network performance, or the overall level of service it provides to customers. Until the adoption of the Rule, SAIDI and SAIFI performance standards applicable to PacifiCorp were generally the result of voluntary commitments proposed by the

Company and approved by the Commission in dockets relating to the acquisition of PacifiCorp by another entity. While important for improving, or at least maintaining electric service reliability, the voluntary performance standards were temporary in nature and, most recently, represented internal targets or goals.

With the adoption of the Rule, acceptable levels of electric service reliability performance will now be established independently from other regulatory actions and will be ongoing and subject to enforcement. In addition, the Rule adopts the IEEE Standard 1366-2013, "IEEE Guide for Electric Power Distribution Reliability Indices," ("IEEE 1366" or "Standard") to ensure consistency and transparency of reporting. Any departures from the Standard for items such as definitions, formulas, or methods must be approved by the Commission. Section 7 of the Rule requires the Company to report deviations from the Commission-approved Baselines to the Commission within 60 days after the end of the month when the deviation(s) occurred.

# PACIFICORP'S PROPOSAL AND DIVISION COMMENTS

The Company developed its proposed SAIDI and SAIFI Baselines using a two step process. First, using underlying distribution network interruption data,<sup>2</sup> the Company calculates a "control limit" for both SAIDI and SAIFI. The control limit is the average of the 365-day rolling daily values of underlying SAIDI and SAIFI for the time period January 1, 2008, through December 31, 2012. Next, using the same five years of data, the Company calculates

<sup>&</sup>lt;sup>1</sup> See Docket Nos. 98-2035-04, "In the Matter of the Application of PacifiCorp and Scottish Power plc for an Order Approving Issuance of PacifiCorp Common Stock," Report and Order dated November 23, 1999, and Commission Correspondence dated April 29, 2005; 04-035-T13, "In the Matter of Rule 25-Customer Guarantees, Schedule 300 – Regulation charges, Regarding Docket No. 98-2035-04," Commission Correspondence dated April 29, 2005; 05-035-54, "In the Matter of the Application of MidAmerican Energy Holdings Company and PacifiCorp for an Order Authorizing MidAmerican Energy Holdings Company to Exercise Substantial Influence over the Policies and Actions of PacifiCorp," Report and Order dated January 27, 2006; 08-035-55, "In the Matter of the Service Quality Standards for Rocky Mountain Power," Order dated June 11, 2009; and 11-035-195, "In the Matter of the Request

of PacifiCorp to Extend its Network Performance Standards and Customer Guarantees Program to Become Effective January 1, 2012," Commission Correspondence dated December 16, 2011.

- 4 -

the standard deviations for both SAIDI and SAIFI. Two standard deviations are then added to the control limit to identify the upper and lower bounds of a 95 percent confidence interval to establish a range within which electric service reliability delivered to customers falls within an expected level and beyond which notification to the Commission, as required by Section 7 of the Rule, would be required.

Applying this method, the Company proposes a control limit for the underlying SAIDI of 176 minutes and a Baseline notification level set at 201 minutes. For the SAIFI performance baseline the Company proposes a control limit of 1.6 events, with a Baseline notification level set at 1.9 events.

When electric service reliability performance fluctuates around the control limit level the Company proposes to closely monitor performance by reviewing the Service Quality Reports<sup>3</sup> and under the direction of the Service Quality Review Group. <sup>4</sup> The Company also proposes that performance exceeding the expected level as identified by Baseline notification level, would require additional analysis. Rather than notifying the Commission of deviations from the Baselines within 60 days after the end of the month when the deviation(s) occurred pursuant to Section 7 of the Rule, the Company proposes if the reliability performance exceeds the Baseline notification level for three consecutive months, calculated at the end of the month, it will file notice with the Commission pursuant to the Rule within 60 days of the performance being beyond the notification limit. During the technical conference, the Company explained its

<sup>&</sup>lt;sup>2</sup> Underlying distribution interruptions are exclusive of major events as identified in IEEE 1366 and prearranged and customer requested interruptions.

<sup>&</sup>lt;sup>3</sup> The referenced service quality reports are filed annually pursuant to Section 7 of the Rule and semi-annually as agreed to with the Service Quality Review Group.

The formation of the Service Quality Review Group was proposed through stipulation and approved by the Commission in the February 25, 2005, Report and order in Docket No. 04-035-42, "In the Matter of the Application of PacifiCorp for Approval of its Proposed Electric Service Schedules and Electric Service Regulations."

proposed notification limit was suggested by the Division based upon the rationale that allowing three consecutive calendar months before filing a notice addresses the uncertain volatility of performance from month to month.<sup>5</sup>

The Company emphasizes its proposed performance baselines were developed based upon the historic ratio of outage causes that result in the 365-day rolling performance history. Therefore, in order to provide transparency for the baseline levels, the Company presents a cause code weighted history based upon the same time-period as the SAIDI and SAIFI data against which any underlying performance variances would be compared. The Company maintains certain outage causes may have period-to-period volatility (for example, outages caused by malicious activity or a car hitting a telephone pole) and proposes that if a given cause code exceeds the level included in the history, discussion about the cause code performance, its impact on underlying performance, and its initiating events can be reviewed with stakeholders.

The Company also provides reliability definitions which it asserts are not materially different than those identified in the Standard and specifies it is not proposing any departure from the Standard for the calculation of reliability indices. The Company does not adopt the Standard's definition of "customer" used in reliability index calculations as a metered electrical service point for which an active bill account is established at a specific location.

Rather, consistent with historic practice, the Company proposes to use a "frozen customer count" when calculating SAIDI, SAIFI, and other indices.

<sup>&</sup>lt;sup>5</sup> See Docket No. 13-035-01, page 10 of the April 23, 2013, document entitled "Rocky Mountain Power's Advance Responses to the April 23, 2013, Technical Conference Questions."

<sup>&</sup>lt;sup>6</sup> The Company proposes to establish the "frozen customer count" for the reporting period as follows: annually, at the beginning of each reporting year, the Company will perform an extract from its computer-aided distribution operations system/automated outage management system, or CADOPS, and each site service location is assumed to be a "customer" at the specific location identified. Each site service location will be tallied by circuit, operating area, regional reporting area and state.

- 6 -

During the April 23<sup>rd</sup> technical conference, the Company provided a handout clarifying how it determines the frozen customer count and also how it identifies major event days based upon outage data from any 24-hour time period (as opposed to outage data starting at the same time each day). As an example, using a November 28, 2012, data extract from CADOPS, the Company calculated a frozen customer count of 845,466 by summing the number of active and inactive meters in place for all metered rate schedules and for miscellaneous Company-use meters (845,369 meters and 197 meters, respectively). Unmetered street lights and security area lighting are not included in the determination of frozen customer count as no meters exist at these locations. The Company will use an identical process at the end of each calendar year to determine the frozen customer count used for reliability index calculations. The Company stated it is using the same methods in all of the states in which it operates and that the Standard allows utilities and regulators to determine the most appropriate data to use for reliability performance monitoring.<sup>8</sup> The Company also explained that, while it removes major event days from its daily SAIDI data, the daily SAIDI data surrounding a major event may not include 24-hours of outage data.

In response to observations that the 2008 daily rolling 365-day SAIDI and SAIFI data presented in Figures 1 and 2 of the Application appeared to be unusually high and inconsistent with the remaining four years of data, the Company offered, if directed by the Commission, to update its five-year calculated performance baselines annually in the annual report required by the Rule using the most recent five years of data. This method would effectively remove the 2008 data from the baseline over time. The Company also pointed out

<sup>&</sup>lt;sup>7</sup> See Docket No. 13-035-01, pages 1-4 of the April 23, 2013, document entitled "Rocky Mountain Power's Advance Responses to the April 23, 2013, Technical Conference Questions."

<sup>&</sup>lt;sup>8</sup> See IEEE 1366-2013, Annex C, C.1 Calculation of reliability indices for subsets of data for internal company use.

- 7 -

that as SAIDI performance improves, the daily SAIDI value for determining the major event day threshold decreases. This decrease could result in the designation of more major event days by the Company which could, in turn, affect the Baselines over time if the Commission selects some type of dynamic method for Baseline determination. The Company added that this has not yet been an issue as the average number of major event days for the past several years has not exceeded the number of major event days upon which the major event day method in IEEE 1366 is based, i.e., 2.3 days. <sup>10</sup>

The Division's analysis determined the Company included in its filing the appropriate information required by the Rule. The Division summarizes the Company's method for establishing normal SAIDI and SAIFI levels and reiterates the Company's proposal that if either or both the SAIDI and SAIFI levels exceed the upper limit of the control bands (i.e., 201 minutes for SAIDI and 1.9 events for SAIFI) for three consecutive months, then the Company must notify the Commission it has exceeded the approved Baseline(s). The Division concludes the Company's methods are reasonable and therefore, recommends the Commission approve the Company's Application.

# **DISCUSSION, FINDINGS AND CONCLUSIONS**

For nearly 15 years PacifiCorp has worked with interested parties to develop and execute electric service reliability goals established through voluntary commitments. In light of the expiration of the voluntary network performance commitments and the recognition of the importance of electric service reliability to customers, the Commission developed the Rule to

<sup>&</sup>lt;sup>9</sup> In Docket No. 08-035-25, "In the Matter of the Major Event Exclusion Request of Rocky Mountain Power for the Storm-related Event January 4, 2008 through January 5, 2008," the Division calculated a major event of 8.6 minutes. In Docket No. 12-035-115, "In the Matter of the Request of Rocky Mountain Power for Major Event Exclusion for the Weather-Related Event that Occurred on November 9-12, 2012," the Division calculated a major event threshold of 5.91 minutes.

<sup>&</sup>lt;sup>10</sup> See IEEE-1366, Annex B, B.1 Justification and process for development of the 2.5 β methodology.

ensure investments in reliability continue and customers receive a reasonable level of reliability over time.

The Company's Application and supporting information demonstrate the challenges in calculating, monitoring, and evaluating electric service reliability data. The Company's method for determining SAIDI and SAIFI using a frozen customer count departs from the Standard. This method, however, has been in use by the Company for many years, is consistent with the method used in other Company jurisdictions, promotes administrative efficiency and is somewhat conservative in nature. Therefore, we approve the Company's definition and use of the frozen customer count.

The Company's use of definitions, data, and methods differing from those in the Standard makes it difficult to compare reliability indices and outage data with other utilities and requires ongoing evaluation to ensure their use results in outcomes consistent with the Standard. For example, the Company's method for determining a major event day is inconsistent with the Standard, but rather is an outgrowth of its ability to calculate the SAIDI values for any 24-hour period, not just for a given calendar day. This level of precision could result in the identification of more major event days than contemplated by the major event day determination method in the Standard. Should this occur an evaluation of the Company's method would be in order.

On the other hand, these definitions, data, and methods are being used for establishing Performance Baselines as required by the Rule, rather than for comparison with broad industry groups, and can be used to compare the Company's electric service reliability in Utah with other Company jurisdictions. In addition, rigorous monitoring and evaluation of reliability data by the Company, the Division, and the Service Quality Review Group will ensure the Commission is notified in the event a particular method or practice may need to be re-

evaluated. For example, we anticipate the Division will notify the Commission if problems arise from the Company's use of its method for determining a major event day. Therefore we accept the Company's proposed departures from elements of IEEE-1366 subject to ongoing review.

The Company proposes, and the Division recommends approval of, a control limit for the underlying SAIDI of 176 minutes and a Baseline notification level set at 201 minutes. For SAIFI, the Company proposes a control limit of 1.6 events, with a Baseline notification level set at 1.9 events. As stated above, rigorous monitoring and evaluation of reliability data by the Company, the Division, and the Service Quality Review Group will ensure the Commission is notified if modifications to the Baselines are appropriate. Therefore we accept the Company's proposed Baselines as stated in the Application, subject to ongoing review.

The Company proposes that if a given cause code exceeds the level included in the cause code history presented in the Application, discussion about the cause code performance, its impact on underlying performance, and its initiating events can be undertaken with stakeholders. We support the Company's proposal to review this information with stakeholders. We also encourage the Company to provide all relevant information in any future notification to the Commission in the event a Baseline is exceeded. At a minimum, we encourage the Service Quality Review Group to discuss this topic at its next meeting, including the granularity of data necessary for the Company's approach to be useful.

Lastly, the Company requests that if the reliability performance exceeds the Baseline notification level for three consecutive months, calculated at the end of the month, it will file notice with the Commission pursuant to the Rule within 60 days of the performance being beyond the notification limit. In contrast, the Rule currently requires the Company to notify the Commission of deviations from the Baselines within 60 days after the end of the

month when the deviation occurred. Considering that no party filed comment pertaining to the notification requirements during the public comment period relevant to R756-313-7(1), and that the Company's request would require a waiver of existing rule requirements, we do not approve the Company's notification proposal. Because this is a newly enacted rule, we anticipate future opportunities to re-examine these requirements.

In summary, with the exception of the Company's notification proposal, we approve the Application. Rigorous ongoing monitoring and evaluation of reliability data by the Company, the Division, and the Service Quality Review Group will ensure the Commission is notified if modifications to any elements of the Application and/or Rule are necessary.

## **ORDER**

Wherefore, pursuant to the foregoing discussion, findings and conclusions made herein, we order:

- 1) A SAIDI performance baseline of 201 minutes is approved.
- 2) A SAIFI performance baseline of 1.9 events is approved.
- 3) The Company's proposed method for the determination and use of a frozen customer count is approved.
- 4) With the exception of the Company's proposed notification requirements, other definitions, data, and methods presented in the Application are approved subject to ongoing review.
- 5) The Company shall report to the Commission each time a reliability performance baseline is exceeded in accordance with R756-313-7(1), unless otherwise approved.

- 11 -

DATED at Salt Lake City, Utah, this 30<sup>th</sup> day of May, 2013.

/s/ Ron Allen, Chairman

/s/ David Clark, Commissioner

/s/ Thad Levar, Commissioner

Attest:
/s/ Gary Widerburg
Commission Secretary

# Notice of Opportunity for Agency Review or Rehearing

Pursuant to §§ 63G-4-301 and 54-7-15 of the Utah Code, an aggrieved party may request agency review or rehearing of this Order by filing a written request with the Commission within 30 days after the issuance of this Order. Responses to a request for agency review or rehearing must be filed within 15 days of the filing of the request for review or rehearing. If the Commission does not grant a request for review or rehearing within 20 days after the filing of the request, it is deemed denied. Judicial review of the Commission's final agency action may be obtained by filing a petition for review with the Utah Supreme Court within 30 days after final agency action. Any petition for review must comply with the requirements of §§ 63G-4-401 and 63G-4-403 of the Utah Code and Utah Rules of Appellate Procedure.

- 12 -

## CERTIFICATE OF SERVICE

I HEREBY CERTIFY that on the 30<sup>th</sup> day of May, 2013, a true and correct copy of the foregoing ORDER was served upon the following as indicated below:

# By Electronic Mail:

Data Request Response Center (<u>datarequest@pacificorp.com</u>) PacifiCorp

Dave Taylor (<u>dave.taylor@pacificorp.com</u>) Rocky Mountain Power

# By Hand-Delivery:

Division of Public Utilities 160 East 300 South, 4<sup>th</sup> Floor Salt Lake City, Utah 84111

Office of Consumer Services 160 East 300 South, 2<sup>nd</sup> Floor Salt Lake City, Utah 84111

Administrative Assistant