



GARY HERBERT  
*Governor*  
SPENCER J. COX  
*Lieutenant Governor*

State of Utah  
Department of Commerce  
Division of Public Utilities

FRANCINE GIANI  
*Executive Director*

THOMAS BRADY  
*Deputy Director*

CHRIS PARKER  
*Director, Division of Public Utilities*

## MEMORANDUM

**To:** Public Service Commission

**From:** Division of Public Utilities  
Chris Parker, Director  
Energy Section  
Artie Powell, Manager  
Abdinasir Abdulle, Utility Analyst  
Charles Peterson, Technical Consultant

**Date:** November 7, 2016

**RE:** 15-035-72. TECHNICAL WORKSHOP on Rocky Mountain Power's Reliability Baseline Indices

---

### RECOMMENDATION (Approve new baselines)

The participants of the workshop ("Group") recommend that the control limits be reset as 137 to 187 minutes for SAIDI and 1.0 to 1.6 events for SAIFI. These values are the baseline values plus or minus approximately two standard deviations.

### BACKGROUND AND DISCUSSION

In compliance with the Commission Order in Docket No. 15-035-72 dated July 5, 2016, on September 27, 2016, the Division of Public Utilities (Division) and PacifiCorp (Company) convened a technical workshop. In addition to the Division and the Company, the Office of Consumer Services ("Office") participated the workshop. The participants of the workshop will hereafter be collectively referred to as the "Group". As was directed by the Commission the Group addressed baselines for the reliability indices and other issues.

## **Baseline for the Reliability Indices**

Pursuant to Utah Administrative Code (“UAC”) R746-313 “Electric Service Reliability” (“Rule”), in Docket No. 13-035-01, using the underlying distribution interruption data from January 1, 2008 to December 1, 2012, the Company calculated the average SAIDI and SAIFI values as 176 minutes and 1.6 events, respectively, and proposed them as the baseline values for the SAIDI and SAIFI performance standards. The Commission approved. The Company also proposed and the Commission approved control limits for SAIDI (151 – 201 minutes) and SAIFI (1.3 – 1.9 events). These control limits were calculated as the baseline values plus or minus two standard deviations. The Company proposed and the Commission approved the upper limit of the control band to be used as a notification level.

In the last two annual reports, the Division noticed that the SAIDI measure was near or below its lower control limit most of the time and the SAIFI measure was consistently below its lower control limit most of the time. In Section 2.6 of its January 1 through December 31, 2015 Utah Service Quality Review, the Company recalculated the SAIDI and SAIFI baselines to include the most recent results. The report showed two sets of updated ranges of SAIDI and SAIFI. In its memorandum in this Docket, dated June 3, 2016, the Division recommended that the Company explain the relationship between these two sets of recalculated baselines and reset the SAIDI and SAIFI baselines to the appropriately recalculated baseline ranges.

In its Order in this Docket, dated July 5, 2016, the Commission directed the Division and the Company to convene a technical workshop to address the reliability indices baselines and other issues. On September 27, 2016, the technical workshop was held. The Group discussed how the reliability baselines should be adjusted given that the recent values of the reliability indices indicate an improvement in the Company’s service reliability. The Group agreed to recommend a slight downward adjustment of the reliability baselines and notification levels for the SAIDI and SAIFI. The Group recommends that the control limits be reset as 137 to 187 minutes for SAIDI and 1.0 to 1.6 events for SAIFI. These values were calculated, using the 12-month moving average data from 2011 to 2015, as the mean plus or minus approximately two standard deviations.

### **Worst Performing Circuits Process**

In the Worst Performing Circuits (WPC) process, the Company annually selects the five worst performing circuits based on circuit performance index (CPI) score which is based on a weighted values of sustained outages, momentary outages, and breaker operations. The current standard for the CPI is to improve the score by 20 percent within five years.

In the workshop the Company indicated to the Group that it is going to eliminate the WPC process and replace it with a new process that it termed as Open Reliability and Reporting (ORR). The Company explained this new process to the Group and indicated that it intends to propose it to the Commission around November, 2016. The Division will comment on this new process when the Company files for approval.

CC: Bob Lively, RMP  
Michele Beck, OCS