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Division of Public Utilities

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To: Public Service Commission of Utah

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

Date: May, 10, 2017

Re: 15-035-72 – In the Matter of Rocky Mountain Power's Service Quality Review
           Report.

RECOMMENDATION (Conditional Approval)

The Division of Public Utilities ("Division") recommends that the Public Service Commission ("Commission") approve Rocky Mountain Power's ("Company") proposed Open Reliability Reporting ("ORR") processes as a replacement for the current Worst Performing Circuits (WPC) process after it makes the correction described in the Discussion Section of this Memorandum. The Division believes that the Company's change will result in an improved reliability performance.

ISSUE

On March 30, 2017, the Company filed with the Commission its application requesting approval for its proposed replacement of the WPC process with the ORR process. On April 14, 2017, the Commission issued a Scheduling Order and Notice of Technical Conference in which it set dates for a Technical Conference, Comments, and Reply Comments. The Comments from the parties

are due on May 10, 2017. This memorandum represents the Division's comments on the Company's request.

DISCUSSION

In compliance with the Commission Order dated July 5, 2016, on September 27, 2016, a technical workshop was convened by the Division and the Company. The Office of Consumer Services ("Office") also participated this workshop. In this workshop the Company explained the ORR process and indicated that it intended to propose it as a replacement to the current WPC process. In its memorandum dated November 7, 2016, the Division reported the Company's intent to the Commission and indicated that it would comment when the Company filed its proposal.

In a filing on March 30, 2017, the Company proposed replacing the WPC process with the ORR process. In compliance with the Commission's Scheduling Order and Notice of Technical Conference dated April 14, 2017, a Technical Conference was held on April 25, 2017 in which the ORR process was discussed.

The WPC process was initiated by the Company during the Scottish Power Merger. The WPC process was intended to help avoid selecting target areas for reliability improvements only from densely populated areas while the rural areas may be left lagging behind in their reliability improvement. In the WPC process, the Company uses Circuit Performance Indicators (CPI), which blends reliability metrics including SAIDI, SAIFI, $MAIFI_E$, and lockouts[1] and annually selects the five worst performing circuits for improvement based on the CPI scores. Once these WPC are selected the Company works on them to improve the composite CPI score by 20 percent within five years. The Company then tracks and reports on the improvement of these circuits until the improvement goal is achieved. When the WPC process was adopted, the Company had at best circuit-level reliability data.

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[1] For the specific formula, refer to the Company's 2015 Service Quality Review Report. P. 37.

Since that time, the Company's measurement system and its network topology data set improved: it now has the capability to identify segments of circuits that are underperforming. In other words, the Company now monitors reliability using near real-time tools to identify and correct emerging reliability issues. Hence, the Company is proposing to replace the old WPC process with the new ORR process. The ORR process works as follows.

Each Geographic area has an Area Improvement Team (AIT). The team members include people from the operations, engineering, substation operations, and investment delivery functions. These are the people who either deal with the consequences of an outage, set policies and strategies to try to prevent outages, or can fund projects that meet funding thresholds. The AITs meet on a monthly basis and evaluate performance and identify problems that have occurred within their geographic area. The AIT uses the Frequent Interrupters Requiring Evaluation (FIRE) and Geographic Reliability Evaluation Analysis Tool Extensively Revised (GREATER) tools, any tasks or tags that are outstanding and other data.

The FIRE is a data scraping tool. The Company sets certain thresholds based on specific devises in specific areas or outage causes or number of customers served, and whenever that threshold is exceeded, FIRE notifies the people who are responsible for that device the next day. These people then look at the outage data and make comments and create tasks to follow up. This allows them to act quickly instead of waiting for three years of data (as in the WPC process) and to capture device level issues that they might not be able to capture if the focus was solely at the circuit level. When the issue is identified, a scope and reliability work plan (RWP) is developed. In the RWP, estimates of reliability improvement and costs to deliver that improvement are prepared. That is, the difference between pre-work and post-work performance estimates (based on Customer Minutes Lost, or CML) and the associated cost ($/Change in CML). If the project is cost effective ($/Change in CML is below certain cut-off line) the AIT approves the project for funding. This process of determining the projects to be funded does not favor projects from densely populated areas over projects from rural areas, since projects are determined by district AITs and many of the districts are mostly rural in character. Project selection is primarily based upon the cost effectiveness of the project.

If the project is advanced because it meets that local area's threshold for spending, then, after it is completed, the data are captured at the device level indicating how well it performed against expected improvements and what the actual cost of the improvement was. There is a certain amount of flexibility in establishing a cost effective cut-off point but once it is approved, a project moves forward and is constructed and monitored against the expected performance improvement. One year after completion, routine assessments of performance are prepared.

The Company proposes the Table shown in its filing to replace the Company's current WPC process in its Service Quality Report. The Division reviewed this Table and determined that the last column (Plans Not Meeting Goals not included in metrics) contains incorrect numbers. The numbers in the column should be the difference between the second column (Project Count) and the fourth column (Plans Meeting Goal (>1 year since project completion)). Hence, the Division recommends that the Commission direct the Company make that correction to the proposed Table. The Division also recommends that the last column be distinguished from other columns under the Effectiveness Metrics.

The GREATER tool allows the user to take the network topology and overlay it on whatever the issue of interest is, say for instance, customer complaint or breaker operations. This assists in determining what is happening at a devise or small area level within the system.

CC: Bob Lively, RMP
        Michele Beck, OCS