



Memorandum

To: ISO Board of Governors

From: Eric Schmitt, VP, Operations

Date: July 18, 2018

Re: **Decision on reliability coordinator services rate design, terms, and conditions**

This memorandum requires Board action.

EXECUTIVE SUMMARY

As part of the ISO's reliability coordinator (RC) initiative, a stakeholder process has been completed to develop the rates, terms, and conditions of the ISO's RC services. The stakeholder process included input from a range of existing customers in the ISO balancing authority area, potential new customers across the Western Interconnection and other interested parties.

The rates, terms, and conditions outlined in this memo and the draft final proposal will be added to the tariff that will ultimately be filed with FERC for approval. Management intends to perform RC services for its balancing authority area and to offer these services to the balancing authorities and transmission operators throughout the Western Interconnection.

The ISO has the experienced operators, technology and other necessary resources to support this important function. Providing RC services will significantly reduce costs over the current provider, will enhance the ISO's service offerings and has the potential to improve overall system reliability.

Management seeks the approval of the Board of Governors and proposes the following motion:

Moved, that the ISO Board of Governors approves the proposal to implement the reliability coordinator services as described in the memo dated July 18, 2018; and

Moved, that the ISO Board of Governors authorizes Management to make all necessary and appropriate filings with the Federal Energy Regulatory Commission to implement the proposal described in the memorandum, including any filings that implement the overarching

initiative policy but contain discrete revisions to incorporate Commission guidance in any initial ruling on the proposed tariff amendment.

BACKGROUND

The ISO currently receives reliability coordinator services from Peak Reliability. On January 2, 2018, the ISO provided Peak with notice that it will no longer take service from, or fund, Peak after September 2, 2019. Prior to that date, the ISO intends to be certified by the North American Electric Reliability Corporation and Western Electricity Coordinating Council as a reliability coordinator for its balancing authority area. All transmission operators within the ISO balancing authority area will become reliability coordinator service customers of the ISO at that time.

The ISO reliability coordinator services will also be offered to balancing authorities outside of the ISO and to transmission operators within those external balancing authority areas.

The ISO has completed a stakeholder process to determine the rate design, terms and conditions for its RC services. During the process, a broad set of stakeholders provided specific requests for changes to the ISO's straw proposal, many of which are reflected in the draft final proposal that is being presented to the Board for consideration. Should the Board approve the proposal, Management will develop the relevant tariff amendments to be filed with FERC which allow the ISO to execute a FERC-approved agreement for RC services with interested customers. Management anticipates a FERC decision, executed binding agreements, and a committed set of customers by the end of 2018.

Parallel to the stakeholder initiative, Management has been working with the transmission operators inside and outside of the ISO balancing authority area, that have provided a letter of intent and executed a non-disclosure agreement with the ISO. This effort began with the formation of working groups comprised of subject matter experts from potential customers, and includes the development of the operating procedures, specific technical requirements, and other technical elements necessary to implement the reliability standards for RC services. The technical materials developed through this process support the RC certification process and will eventually be incorporated into the ISO operating procedures.

It is Management's intent to be certified as an RC and operational by July 1, 2019. At that time, the ISO anticipates first providing RC services to all entities within its balancing authority area, followed by adding other interested entities outside of the ISO area during the fourth quarter of 2019.

The ISO has stayed closely coordinated with Peak Reliability and other potential RC entities within the Western Interconnection. There will be ongoing seams coordination efforts as the transition takes place. Management continues to work with interested customers and other stakeholders on a thoughtful and rational schedule for the transition and will have a defined scope after receiving signed RC services agreements.

DISCUSSION AND ANALYSIS

The reliability coordinator is the highest level of authority responsible for the reliable operation of the Bulk Electric System (BES), and has authority to prevent or mitigate emergencies in day-ahead and real-time operations of the grid.

To do this, the RC:

- Maintains wide area situational awareness of the BES, including state estimation, contingency analysis, identifying and studying mitigation measures
- Aggregates outage information and conducts week-ahead studies of major outages
- Establishes the methodology for system operating limits (SOL) and coordinates seasonal studies
- Monitors transmission path flows, voltages, frequency, and related conditions
- Coordinates with other RCs within the same interconnection

The ISO already performs many of the “RC-like” tasks in its current role as the transmission operator for facilities within the ISO’s balancing authority area as well as outside of its area for shared and adjacent facilities. Becoming a certified RC will extend the area of responsibility for these activities to additional balancing authorities that elect to take reliability coordinator services from the ISO.

In addition, as an RC, the ISO will:

- Determine limits for and monitor interconnection reliability operating limits across its reliability coordination area
- Coordinate its activities with BAAs and transmission operators in its reliability coordination area both among operators and through user forums and user groups

A reliability coordinator also acts as the Interchange Authority for the balancing authorities it represents and administers interchange scheduling and tagging tools to perform this function. The WECC Interchange Tool is currently used for this purpose, which facilitates and coordinates the exchange of energy between balancing authorities in the Western Interconnection. The Enhanced Curtailment Calculator is another tool used by the reliability coordinator to manage power system congestion in conjunction with other tools. The ISO proposes to use either the same set of tools or new tools with similar functionality in order to manage Interchange Authority functions for its area.

The ISO RC services being offered to other balancing authorities and transmission operators will be a new line of business not directly related to participation in ISO markets. The ISO is well-suited to provide these services for the following reasons:

1. The ISO operates both a sophisticated energy market with a large Balancing Authority Area (BAA) and a real-time energy imbalance market (EIM) area that will soon serve 65% of the load in the Western Interconnection by 2020.

2. The ISO has existing knowledge and experience in coordinating operations across BAAs, data sources and models for the full Western Interconnection, including analytical tools that can be extended across the reliability coordination area.
3. The ISO has established extensive data communications with other BAAs across the interconnection, resulting in a mature and robust data platform for managing reliability information across all participating BAAs in a reliability coordination area.
4. The ISO is an experienced transmission operator with a large BAA that has a significant number of remedial action schemes, special protection schemes, and other mitigation procedures.
5. The ISO is able to provide reliability coordinator services to customers across a majority of the Western Interconnection at roughly 40% of current costs.

Reliability Coordinator Oversight

The ISO has established a senior management level interim committee, the Reliability Coordinator Project Steering Committee (RPSC). This committee includes a representative from each BA and transmission operator (TOP) that has expressed interest in RC services and has executed a letter of intent and non-disclosure agreement, as well as a representative from the ISO. Each representative is to have responsibility within their respective organization for maintaining reliability. The committee, and its working groups, are developing, reviewing and commenting on procedures and practices relating to the ISO's implementation and certification of its RC function.

The RPSC is providing input and guidance regarding the establishment and role of a future RC oversight committee that will provide oversight of the RC function and will be comprised of representatives from BAs and TOPs that elect to take RC service from the ISO. The tariff will reference the oversight committee and provide that the committee's operation will be governed by a charter established by the ISO and the BAs and TOPs that have elected to take RC service from the ISO. This oversight committee will provide input and guidance to ISO management on various issues relating to the RC function, including operational issues and overarching reliability coordinator policies and procedures.

The ISO recognizes the importance of transparency. To that end, the oversight committee will hold at least one public meeting per year that will focus on any matters regarding the ISO's performance of the RC function. This can help to serve the interests of stakeholders, including state and federal regulators and regional advisory bodies, such as the Western Interconnection Regional Advisory Board (WIRAB), which are an important component to this process. Management will also maintain regular contact and interaction with such entities, including WIRAB, to ensure that state and federal regulators and regional advisory bodies are kept informed of matters relating to RC service and have an available channel to provide input and advice on relevant matters.

Rate Design

Management has leveraged its existing rate design model and activity based costing (ABC) system to determine the amount it will charge for RC services. This is the same model used by the ISO to determine its other rates, including the Grid Management Charge and EIM administrative fees.

A modified interim cost of service study was performed to assess the impacts of the RC service on the ISO's overall cost structure. The study revealed that the combined direct and indirect costs of the RC service would account for 9% of the ISO overall costs. This percentage will be filed in the tariff and will establish the formula that will be used to develop the annual RC Funding Requirement and, subsequently the, Grid Management Charge revenue requirement.

This percentage presumes a future RC area that is comprised of the existing ISO BA and RC Customers from both the Northwest and Southwest regions of the Western Interconnection. The draft final proposal also presents the "ISO BA only" model which will be used to establish the initial rates for ISO BA customers beginning on July 1, 2019. The "ISO BA only" model will remain in place until additional potential customers join.

Annually, using this percentage, Management will allocate that portion of the revenue requirement to the RC service area to set the RC Funding Requirement. This percentage would remain in effect until reviewed during the next triennial cost of service study.

Other Rate Design Elements

- ***RC Rate*** – An RC rate per MWh will be established annually by dividing the RC Funding Requirement (adjusted for any known minimum charge billings) by the annual RC volumes.
- ***Billing Data*** – Most customers will be billed on their Net Energy for Load MWh volumes. For generation-only BAs and TOPs, Net Generation MWh volumes will be used.
- ***Minimum Charge*** - A minimum annual charge of \$5,000 will apply to entities that have no load or generation yet require RC services and to entities where the submitted MWh volumes yield a charge less than the established minimum charge.
- ***Settlements Process*** - RC Customers will be billed annually in January with payments due 21 business days after the invoice date to avoid late charges and default provisions.

RC Services Agreement

All Balancing Authorities and Transmission Operators who wish to receive RC services from the ISO must enter into a *pro forma* Reliability Coordinator Service Agreement (RCSA) with the ISO. The *pro forma* RCSA will be filed with FERC in August 2018. Once the *pro forma* agreement is accepted by FERC, individual service agreements with RC Customers will be executed and recorded in FERC's electronic quarterly reports.

The Initial Term of the RCSA will be 18 months. Thereafter, the agreement will renew annually for consecutive one year terms until terminated by the RC Customer or the ISO pursuant to the RCSA.

An RC Customer may terminate its agreement with the ISO, without penalty, by giving not less than twelve (12) months' written notice to the ISO after completion of the Initial Term; provided, such notice will be required to be aligned with the annual April exit window.

Supplemental Services

The ISO proposes to offer other services that will enhance its core RC services at an additional cost. These additional services include, but are not limited to, Hosted Advanced Network Applications (HANA) and Physical Security assessments (CIP-014). As detailed in the draft final proposal, these voluntary services will be billed separately at a rate to recover the ISO's costs for providing them. The ISO will continue to work with the RC Oversight Committee to identify supplemental services that will enhance the ISO RC service offerings and to determine the best ways to fund them.

POSITIONS OF THE PARTIES

The rate design stakeholder process has been well attended both in person and via webinar, and the feedback from stakeholders is broadly supportive of the RC rate design. Many of the provisions in the draft final proposal were modified based upon stakeholder feedback. The proposal for Board consideration is a result of four final minor changes to the draft final proposal and are a direct result of stakeholder comments.

In addition, a number of stakeholders asked for more clarity on elements of the draft final proposal that pertain to the rate design, and they provided input to the expected tariff provisions and the draft RC services agreement.

Regarding the rate design, stakeholders asked for assurance that the optional HANA tool costs and revenues will be borne by the users and not the customers of core RC services. At least one stakeholder requested that RC management be held accountable for compliance and excellence in reliable operations of the grid. ISO can confirm that both of these will be consistently applied as the ISO provides the RC services. Stakeholders also asked for more information on topics such as the RC staffing levels, the oversight of the RC processes and procedures, and how new customers will be

“onboarded” to begin receiving RC services. They generally acknowledged this can be provided as the ISO continues work with potential customers through the RPSC.

While not directly affecting the rate design, Management intentionally posted an early draft RC services agreement on May 31, to allow stakeholders the opportunity to provide their initial comments. These comments are helpful and will guide the ISO in preparation of the draft tariff language and a revised RC services agreement that are expected to be available in Mid-July. Upon approval of the rate design by the Board, the ISO will engage stakeholders in a process to prepare its FERC filing that is consistent with the final policy.

A number of potential new RC Customers have voiced support for an RC Rate cap and cost containment measures. Management continues to be non-supportive of a rate cap for the following reasons:

- It is partially redundant to the existing FERC revenue requirement cap in place, which is designed to limit the growth of the revenue requirement that can occur without a full cost of service study and FERC filing.
- Restricting the rate growth or degree of cost increases could severely restrict the ISO’s ability to respond to operational or technical design changes in its RC Service function, which could be detrimental to reliability.
- A rate cap could also unfairly shift costs to other grid management charge categories which would be contrary to our cost causation principle.
- The ISO has shown years of cost and revenue requirement stability which provides our stakeholders with confidence in our fiscal discipline.

CHANGES TO THE DRAFT FINAL PROPOSAL

- Billing data period will be aligned to calendar year versus the draft final proposal of July 1 - June 30 period.
 - The ISO agrees with public stakeholder comment that initially a billing data period consistent with the current process performed in the Western Interconnection is simpler during this transition phase. The ISO is open to changes in the billing data period at a later date if the RC Customers see benefits in potential changes.
- Removed California Oregon Intertie (COI) Path Operator fee credit from modified cost of service study.
 - It has been determined that the fee credit in the modified cost of service study for COI revenue belongs in the BA only and should not be offsetting the RC Service cost category. The delta was less than \$300k.
- Changed RC invoice due date to 21 business days from January 31.
 - This ensures customers always have a full 21 business days to submit payment even if invoice is not released on January 1.

- The 2019 billing process, which was identified in the draft final proposal as needing to be modified from the normal ongoing billing process has been clarified.
 - Charges for RC Services received from the ISO in 2019 will be included on the January 2020 invoice. Therefore, customers will be paying for the number of months in 2019 for which the ISO was the RC of record and for the 12 months in 2020 for which they will receive RC Services.

CONCLUSION

Management requests the ISO Board of Governors approve the proposal to provide RC services to all transmission operators within its BA area, followed by offering other interested balancing authorities and transmission operators in those balancing authority areas RC services. Management anticipates providing RC services to its balancing authority area on July 1, 2019 and to other interested entities no earlier than the fall of 2019. Approval allows the project to proceed on a schedule that will support the transition of the ISO and a significant portion of the load represented by balancing authorities in the Western Interconnection within 2019.