**North American Energy Standards Board**

**Request for Initiation of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction**

**or**

**Enhancement of an Existing NAESB Business Practice Standard, Model Business Practice or Electronic Transaction**

**Instructions:**

 **1. Please fill out as much of the requested information as possible. It is mandatory to provide a contact name, phone number and fax number to which questions can be directed. If you have an electronic mailing address, please make that available as well.**

 **2. Attach any information you believe is related to the request. The more complete your request is, the less time is required to review it.**

 **3. Once completed, send your request to:**

 **Rae McQuade**

 **NAESB, President**

 **1415 Louisiana, Suite 3460**

 **Houston, TX 77002**

 **Phone: 713‑356‑0060**

 **Fax: 713‑356‑0067**

 **by either mail, fax, or to NAESB’s email address, naesb@naesb.org.**

**Once received, the request will be routed to the appropriate subcommittees for review.**

**North American Energy Standards Board**

**Request for Initiation of a NAESB Business Practice Standard, Model Business Practice or Electronic Transaction**

**or**

**Enhancement of an Existing NAESB Business Practice Standard, Model Business Practice or Electronic Transaction**

 Date of Request: 9/13/2024

1. Submitting Entity & Address:

 Southwest Power Pool

 201 Worthen Drive Little Rock, AR 72223

 RCWEST/CAISO

 250 Outcropping Way, Folsom CA 95630

2. Contact Person, Phone #, Fax #, Electronic Mailing Address:

 Name : Alex Watkins

 Title : Manager, System Operations West

 Phone: 501.482.2430

 Fax : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 E‑mail : awatkins@spp.org

 Name : Raja Thappetaobula

 Title : Director Operation Engineering Services

 Phone: 9165425340

 Fax : \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

 E‑mail : rthappetaobula@caiso.com

1. Title and Description of Proposed Standard or Enhancement:

Title:

ECC Expansion – Western Interconnection Congestion Management

1. Description:

The Western Interconnection lacks a uniform congestion management process that each RC, BA, and TOP follow in coordination together to support reliability and equity in application for all systems and customers. As the Western Interconnection transitions to services requiring broader coordination with its neighbors, establishing a standardized and efficient framework for addressing congestion management interconnection wide will be essential for reliability, equitability, and transparency. Currently, the Western Interconnect utilizes the Western Interconnection Unscheduled Flow Mitigation Plan (WIUFMP) to mitigate high flows on qualified paths to reliable levels during real time operations. One of the main drawbacks of the existing process is it is limited to 5 qualified paths currently and can’t be utilized to address unscheduled flows across various system operating limits (SOL’s) in the Western Interconnection. The WIUFMP is administered utilizing Enhanced Curtailment calculator (webECC).

The Enhanced Curtailment Calculator Working Group (ECCWG) is a technical advisory group providing guidance on the decisions affecting the sustainment and improvement of the webECC tool. The ECCWG established an ECC expansion Taskforce to evaluate and advise the ECCWG on the technical feasibility of expanding the webECC model for System Operating Limits (“SOLs”) and Interconnection Reliability Operating Limits (“IROLs”) constraints.

The ECC expansion Taskforce proposal is to enhance webECC and utilize the model for SOLs across the Western Interconnect. The proposal includes issuing relief obligations on a pro rata basis while respecting transaction priorities for both tagged and non-tagged transactions. The relief obligation should be based upon constraints defined in the ECC to resolve or prevent SOL exceedances. The first step in this relief obligation assignment process is to determine if e-tags/dynamic tags and balancing areas serving their own load have a material contribution to the SOL exceedance. An entity has a material impact when an individual Impact (e-Tag, Dynamic Transfer, and Generation to load impact GTL) is greater than or equal to a 5% Impact Threshold on the constraint. These 5% impacts will be considered for relief obligations.

If the ECC identifies no impacts greater than 5% threshold on a constraint than that particular constraint would remain a local issue that the BA, TOP and RC would resolve with existing methods. Impact Calculations should respect any existing seams agreements and be able to accommodate future seams agreements.

E-Tag and Dynamic Transfers Impacts:

The e-Tag and Dynamic Transfer Impacts are calculated based on the real-time value from the e-Tag or from available telemetry on the dynamic tag. When e-Tags or Dynamic Transfers are used to assign relief obligations, the ECC will respect transmission priorities so that non-firm curtailments are requested prior to firm curtailments using a bucket approach. E-Tags or Dynamic Transfers included in the relief obligations will be subject to systematic curtailment. Balancing areas will have the authority to reject the curtailments of specific e-Tags if the curtailment of those e-Tags would create emergency conditions for the BA.

Generation to Load Impacts:

The Generation to Load (“GTL”) impacts of a balancing area are calculated based on internal area generation serving area load adjusting for imports and exports. The GTL calculation will be done by the ECC using real time telemetry and unit outputs. This will ensure that the methodology used to calculate GTL impacts is uniform and applied consistently across the interconnection.

Balancing areas participating in an organized market could be aggregated and their net generation to load relief obligation could be issued for the entire market area. GTL impacts above the Impact Threshold will default to the highest transmission priority so that they are aligned with the firm e-Tags when determining relief obligation. If specific generators serving load within a BA do not have firm transmission service, the transmission service provider will need to provide this information so that non-firm GTL relief obligations are issued with the appropriate e-Tag curtailments.

Relief obligations will be effective immediately upon issuance from the ECC and terminate at the end of the clock hour. E-Tag and Dynamic Schedule curtailments will happen systematically through the ECC and WIT. Balancing areas or market areas issued GTL relief obligations will need to redispatch their systems to achieve the relief obligation. A re-evaluation and recalculation of the ECC relief obligation, that includes all transactions approved to begin at the top of the hour, will be performed at 45 minutes after the hour.

The ECC will continue to support the business requirements of the WIUFMP and issuance of events for Elements configured as Qualified Paths.

1. Use of Proposed Standard or Enhancement (include how the standard will be used, documentation on the description of the proposed standard, any existing documentation of the proposed standard, and required communication protocols):

The proposed standard should follow current NAESB TLR standards in WEQ-008, allowing for industry to make Western Interconnection changes as applicable.

1. Description of Any Tangible or Intangible Benefits to the Use of the Proposed Standard or Enhancement:

The Western Interconnection lacks a uniform congestion management process that each RC, BA, and TOP follow in coordination together to support reliability and equity in application for all systems and customers. A lack of uniform coordination creates inconsistency in how transmission congestion is resolved across the West, resulting in BAs and TOP largely resolving issues on their own. The inconsistency in application creates uncertainty and limits transparency for customers on curtailment processes for transactions moving across the West, including how impacts of loop flows are managed. As a result, some customers in one region may experience curtailments for reasons that are different than a similarly situated customer in another area of the West region because the differences in methodologies applied by individual BAs and TOPs, and because of the limitations of the WIUMFP.

As the Western Interconnection transitions to services requiring broader coordination with neighbors establishing a standardized and efficient framework for addressing congestion management interconnection wide will be essential for reliability, equitability, and transparency.

The Enhanced Curtailment Calculator Working Group (ECCWG) is a technical advisory group providing guidance on the decisions affecting the sustainment and improvement of the webECC tool. The ECCWG established an ECC expansion Taskforce to evaluate and advise the ECCWG on the technical feasibility of expanding the webECC model for System Operating Limits (“SOLs”) and Interconnection Reliability Operating Limits (“IROLs”) constraints.

The ECC expansion Taskforce proposal is to enhance the webECC and utilize the model for SOLs across the Western Interconnect. The proposal includes issuing relief obligations on a pro rata basis while respecting transaction priorities for both tagged and non-tagged transactions

1. Estimate of Incremental Specific Costs to Implement Proposed Standard or Enhancement:

Unknown at this time.

1. Description of Any Specific Legal or Other Considerations:

N/A

9. If This Proposed Standard or Enhancement Is Not Tested Yet, List Trading Partners Willing to Test Standard or Enhancement (Corporations and contacts):

Southwest Power Pool & RC West

1. If This Proposed Standard or Enhancement Is in Use, Who are the Trading Partners:

N/A

10. Attachments (such as: further detailed proposals, transaction data descriptions, information flows, implementation guides, business process descriptions, examples of ASC ANSI X12 mapped transactions):

The ECCWG is a technical advisory group established as a means to ensure the western Reliability Coordinators have input and oversight with respect to tools used to perform Reliability Coordination functions within the WECC footprint. The ECCWG established the ECCETF to evaluate and advise the working group regarding all aspects of the webECC.

The ECCETF assessed the webECC’s potential to accurately capture MW impacts by Balancing Authority (“(BA”), Transmission Operator (“TOP”), Transmission Service Provider (“TSP”), or market operator dispatch, as well as impacts of tagged transactions on transmission constraints.

1. The ECCETF determined the technical feasibility of expanding curtailment capability procedures capabilities from the Qualified Paths to include System Operating Limits (“SOLs”) and Interconnection Reliability Operating Limits (“IROLs”) constraints. Western Interconnection
2. A comprehensive curtailment approach was drafted by the ECCETF for both tagged and non-tagged transaction MWs, using a prioritization approach consistent with existing NAESB standards.
3. The ECCETF evaluated the compatibility and coordination between Western Interconnection Unscheduled Flow Mitigation Plan (“WIUFMP”) on Qualified Paths (“QP” s) and other ECC curtailment events in the Western Interconnection, including phase shifter coordination.
4. New required standards from NERC, NAESB, and/or WECC were deemed necessary in order to implement an expanded curtailment approach beyond qualified paths.
5. The ECCETF documented software requirements, possible tariff impacts, and business practice changes needed to implement an expanded Western Interconnection congestion management approach.
6. The ECCETF proposed an implementation approach of these changes taking into account the technical considerations, compliance implications, and operational transparency.

These considerations were documented in a whitepaper, *ECC Future State*, that has been provided.