



California Independent
System Operator Corporation

July 23, 2021

The Honorable Kimberly D. Bose
Secretary
Federal Energy Regulatory Commission
888 First Street, NE
Washington, DC 20426

**Re: California Independent System Operator Corporation
Filing to Comply with Order No. 676-I
Docket Nos. ER21-____-000; RM05-5-025; RM05-5-026; RM05-5-027**

Dear Secretary Bose:

The California Independent System Operator Corporation (“CAISO”)¹ submits this filing in compliance with the Commission’s Order No. 676-I.² In Order No. 676-I, the Commission directed public utilities, including the CAISO, to incorporate in their jurisdictional tariffs the latest versions of the business practice standards promulgated by the Wholesale Electric Quadrant (“WEQ”) of the North American Energy Standards Board (“NAESB”) and included by reference in the Commission’s regulations. None of the NAESB standards adopted by Order No. 676-I requires substantive CAISO tariff revisions for implementation. The CAISO accordingly requests that the Commission accept the enclosed revisions to incorporate the NAESB standards into the tariff by reference, effective October 27, 2021.³

I. Background

In Order No. 676-I, the Commission amended its regulations to incorporate by reference the latest version (Version 003.2) of specified business practice standards that NAESB filed with the Commission on December 8, 2017 and including minor

¹ Capitalized terms not otherwise defined herein have the meanings set forth in appendix A to the CAISO tariff.

² *Standards for Bus. Practices & Comm’n Protocols for Pub. Utils.*, Order No. 676-I, 85 FR 10,571 (Feb. 25, 2020), 170 FERC ¶ 61,062 (2020).

³ As discussed below, the CAISO is also filing a request for waiver of some of the NAESB standards.

clarifications and updates submitted by NAESB on June 5, 2019 and July 23, 2019. The Version 003.2 NAESB standards include updates to standards that the Commission previously incorporated by reference into its regulations. The Version 003.2 standards build upon the standards included in the WEQ Version 003.1 Standards and include, in their entirety, the modifications submitted to the Commission in WEQ Version 003.1, which were the subject of an earlier notice of proposed rulemaking.⁴

The Version 003.2 standards also include updates to NAESB's Smart Grid Standards (WEQ-018 and WEQ-019) that the Commission listed for information purposes in Part 2 of the Commission's Regulations, to match the latest iteration of those standards.⁵ Finally, the Commission incorporated by reference the WEQ-022 Electric Industry Registry (EIR) Business Practice Standards, but declined to incorporate by reference in its entirety the WEQ-023 Modeling Business Practice Standards.⁶

Order No. 676-I directed public utilities to revise their Open Access Transmission Tariffs ("OATTs") to incorporate the following NAESB standards by reference:

- WEQ-000, Abbreviations, Acronyms, and Definition of Terms, WEQ Version 003.1, September 30, 2015 (including only the definitions of Interconnection Time Monitor, Time Error, and Time Error Correction);
- WEQ-000, Abbreviations, Acronyms, and Definition of Terms (WEQ Version 003.2, Dec. 8, 2017) (with minor correction applied July 23, 2019);
- WEQ-001, Open Access Same-Time Information Systems (OASIS), [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017), excluding standards WEQ-001-9 preamble text, WEQ-001-10 preamble text;
- WEQ-002, Open Access Same-Time Information Systems (OASIS) Business Practice Standards and Communication Protocols (S&CP), [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-003, Open Access Same-Time Information Systems (OASIS) Data Dictionary, [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017) (with minor corrections applied July 23, 2019);
- WEQ-004, Coordinate Interchange (WEQ Version 003.2, Dec. 8, 2017);

⁴ Order No. 676-I, 170 FERC ¶ 61,062, at PP 2.

⁵ *Id.* at PP 4.

⁶ *Id.* at PP 5.

- WEQ–005, Area Control Error (ACE) Equation Special Cases (WEQ Version 003.2, Dec. 8, 2017);
- WEQ–006, Manual Time Error Correction (WEQ Version 003.1, Sept. 30, 2015);
- WEQ–007, Inadvertent Interchange Payback (WEQ Version 003.2, Dec. 8, 2017);
- WEQ–008, Transmission Loading Relief (TLR)—Eastern Interconnection (WEQ Version 003.2, Dec. 8, 2017);
- WEQ–011, Gas/ Electric Coordination (WEQ Version 003.2, Dec. 8, 2017);
- WEQ–012, Public Key Infrastructure (PKI) (WEQ Version 003.2, Dec. 8, 2017);
- WEQ–013, Open Access Same-Time Information Systems (OASIS) Implementation Guide, [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017);
- WEQ–015, Measurement and Verification of Wholesale Electricity Demand Response (WEQ Version 003.2, Dec. 8, 2017);
- WEQ–021, Measurement and Verification of Energy Efficiency Products (WEQ Version 003.2, Dec. 8, 2017);
- WEQ–022, Electric Industry Registry Business Practice Standards (WEQ Version 003.2, Dec. 8, 2017); and
- WEQ-023, Modeling. The following standards are incorporated by reference: WEQ-023-5; WEQ-023-5.1; WEQ-023-5.1.1; WEQ-023-5.1.2; WEQ-023-5.1.2.1; WEQ-023-5.1.2.2; WEQ-023-5.1.2.3; WEQ-023-5.1.3; WEQ-023-5.2; WEQ-023-6; WEQ-023-6.1; WEQ-023-6.1.1; WEQ-023-6.1.2; and WEQ-023-A Appendix A. (WEQ Version 003.2, Dec. 8, 2017).⁷

The Commission initially directed public utilities to submit their Order No. 676-I compliance filings by May 25, 2020, and to make the OATT revisions in those filings effective as of July 27, 2020.⁸ However, in response to a Joint Motion for Extension of Time filed by the Southwest Power Pool, Inc. and Midcontinent Independent System Operator Corporation, the Commission extended the date for compliance and waiver

⁷ *Id.* The Commission also incorporated those NAESB standards into its regulations by reference in 18 CFR 38.1.

⁸ *Id.* at P 20.

filings to July 27, 2021, with an implementation date no sooner than October 27, 2021.⁹

II. Proposed Tariff Revisions

Adoption of the NAESB standards set forth in Order No. 676-I does not require any substantive changes or revisions to the existing provisions of the CAISO tariff. Therefore, in accordance with Order No. 676-I, the CAISO has revised section 7.3.3 of its tariff to incorporate those NAESB standards by reference, using the referencing language prescribed in Order 676-I and replicated in Section I above.

The CAISO also has revised tariff section 7.3.3 to list the NAESB standards for which the CAISO has requested waiver, pursuant to the petition for waiver it is submitting the same day as this compliance filing.

III. Effective Date

Pursuant to the directives in Order No. 676-I, the CAISO requests that the Commission accept the tariff revisions contained in this filing effective as of October 27, 2021.

IV. Communications

Correspondence and other communications regarding this filing should be directed to:

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⁹ *Notice of Extension of Time*, Docket No. RM05-5-028 (April 3, 2020).

V. Service

The CAISO has served copies of this filing on the California Public Utilities Commission, the California Energy Commission, and all parties with scheduling coordinator agreements under the CAISO tariff. In addition, the CAISO has posted a copy of the filing on the CAISO website.

VI. Contents of this Filing

In addition to this transmittal letter, this filing includes the following attachments:

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|--------------|--|
| Attachment A | Clean CAISO tariff sheets incorporating the compliance changes described above |
| Attachment B | Red-lined document showing the revisions contained in this compliance filing |

VII. Conclusion

For the reasons set forth in this filing, the CAISO respectfully requests that the Commission accept the tariff revisions contained in the filing as compliant with Order No. 676-I, effective as of October 27, 2021.

Respectfully submitted,

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Attachment A – Clean Tariff

Compliance with Order No. 676-I

California Independent System Operator Corporation

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7.3.3 NAESB Standards

The following standards of the Wholesale Electric Quadrant (WEQ) of the North American Energy Standards Board (NAESB) are incorporated by reference, except to the extent FERC has granted waiver of such NAESB WEQ standards:

- WEQ-000, Abbreviations, Acronyms, and Definition of Terms, WEQ Version 003.1, September 30, 2015 (including only the definitions of Interconnection Time Monitor, Time Error, and Time Error Correction);
- WEQ-000, Abbreviations, Acronyms, and Definition of Terms (WEQ Version 003.2, Dec. 8, 2017) (with minor correction applied July 23, 2019);
- WEQ-001, Open Access Same-Time Information Systems (OASIS), [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017), excluding standards WEQ-001-9 preamble text, WEQ-001-10 preamble text, and exclusively as to standards WEQ-001-13.1.1, 001-13.1.4, 001-13.1.5, and 001-16;
- WEQ-002, Open Access Same-Time Information Systems (OASIS) Business Practice Standards and Communication Protocols (S&CP), [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-003, Open Access Same-Time Information Systems (OASIS) Data Dictionary, [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017) (with minor corrections applied July 23, 2019);
- WEQ-004, Coordinate Interchange (WEQ Version 003.2, Dec 8, 2017);
- WEQ-005, Area Control Error (ACE) Equation Special Cases (WEQ Version 003.2, Dec 8, 2017);
- WEQ-006, Manual Time Error Correction (WEQ Version 003.1, Sept. 30, 2015);

- WEQ-007, Inadvertent Interchange Payback (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-008, Transmission Loading Relief (TLR) – Eastern Interconnection (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-011, Gas / Electric Coordination (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-012, Public Key Infrastructure (PKI) (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-013, Open Access Same-Time Information Systems (OASIS) Implementation Guide [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-015, Measurement and Verification of Wholesale Electricity Demand Response (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-021, Measurement and Verification of Energy Efficiency Products (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-022, Electric Industry Registry Business Practice Standards (WEQ Version 003.2, Dec. 8, 2017); and
- WEQ-023, Modeling. The following standards are incorporated by reference: WEQ-023-5; WEQ-023-5.1; WEQ-023-5.1.1; WEQ-023-5.1.2; WEQ-023-5.1.2.1; WEQ-023-5.1.2.2; WEQ-023-5.1.2.3; WEQ-023-5.1.3; WEQ-023-5.2; WEQ-023-6; WEQ-023-6.1; WEQ-023-6.1.1; WEQ-023-6.1.2; and WEQ-023-A Appendix A. (WEQ Version 003.2, Dec. 8, 2017).

The CAISO has applied for a waiver of the following NAESB WEQ standards:

- WEQ-001, Open Access Same-Time Information Systems (OASIS), [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017), excluding standards WEQ-001-9 preamble text, WEQ-001-10 preamble text, and except as set forth above;

- WEQ-002, Open Access Same-Time Information Systems (OASIS) Business Practice Standards and Communication Protocols (S&CP), [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017);
- WEQ-003, Open Access Same-Time Information Systems (OASIS) Data Dictionary, [OASIS] Version 2.2 (WEQ Version 003.2, Dec. 8, 2017) (with minor corrections applied July 23, 2019);
- WEQ-006, Manual Time Error Correction (WEQ Version 003.1, Sept. 30, 2015) and only as to standards WEQ-006-5 and 006-9;
- WEQ-012, Public Key Infrastructure (PKI) (WEQ Version 003.2, Dec. 8, 2017) to the extent it applies to OASIS applications;
- WEQ-013, Open Access Same-Time Information Systems (OASIS) Implementation Guide, [OASIS] Version 2.2 (WEQ Version 003.2, Dec 8, 2017);) and
- WEQ-023, Modeling; specifically, standards WEQ-023-5; WEQ-023-5.1; WEQ-023-5.1.1; WEQ-023-5.1.2; WEQ-023-5.1.2.1; WEQ-023-5.1.2.2; WEQ-023-5.1.2.3; WEQ-023-5.1.3; WEQ-023-5.2; WEQ-023-6; WEQ-023-6.1; WEQ-023-6.1.1; WEQ-023-6.1.2; and WEQ-023-A Appendix A. (WEQ Version 003.2, Dec. 8, 2017).

Attachment B – Marked Tariff

Compliance with Order No. 676-I

California Independent System Operator Corporation

July 23, 2021

7.3.3 NAESB Standards

The following standards of the Wholesale Electric Quadrant (WEQ) of the North American Energy Standards Board (NAESB) are incorporated by reference, except to the extent FERC has granted waiver of such NAESB WEQ standards:

- WEQ-000, Abbreviations, Acronyms, and Definition of Terms, WEQ Version 003.1, September 30, 2015 (including only the definitions of Interconnection Time Monitor, Time Error, and Time Error Correction); ~~July 31, 2012, as modified by NAESB final actions ratified on Oct. 4, 2012, Nov. 28, 2012 and Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013);~~
- WEQ-000, Abbreviations, Acronyms, and Definition of Terms (WEQ Version 003.2, Dec. 8, 2017) (with minor correction applied July 23, 2019);
- WEQ-001, Open Access Same-Time Information Systems (OASIS), [OASIS] Version 2.0, WEQ Version 003, July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013) excluding Standards 001-9.5, 001-10.5, 001-14.1.3, 001-15.1.2 and 001-106.2.5 Version 2.2 (WEQ Version 003.2, Dec. 8, 2017), excluding standards WEQ-001-9 preamble text, WEQ-001-10 preamble text, and exclusively as to sStandards WEQ-001-13.1.1, 001-13.1.4, 001-13.1.5, and 001-16;
- WEQ-002, Open Access Same-Time Information Systems (OASIS) Business Practice Standards and Communication Protocols (S&CP), [OASIS] Version 2.20, (WEQ Version 003.2, Dec. 8, 2017, ~~July 31, 2012, as modified by NAESB final actions ratified on Nov. 28, 2012 and Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013);~~
- WEQ-003, Open Access Same-Time Information Systems (OASIS) Data Dictionary Business Practice Standards, [OASIS Version 2.0, WEQ] Version 2.2 (WEQ Version

~~003.2, July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2017~~
(with minor corrections applied ~~July 23, 2019~~~~Nov. 26, 2013~~);

- WEQ-004, Coordinate Interchange, ~~(WEQ Version 003.2, Dec 8, 2017, July 31, 2012~~
~~(with Final Action ratified on December 28, 2012)~~);
- WEQ-005, Area Control Error (ACE) Equation Special Cases, ~~(WEQ Version 003.2,~~
~~Dec 8, 2017, July 31, 2012)~~);
- WEQ-006, Manual Time Error Correction, ~~(WEQ Version 003.1, Sept. 30, 2015, July~~
~~31, 2012)~~);
- WEQ-007, Inadvertent Interchange Payback, ~~(WEQ Version 003.2, Dec. 8, 2017,~~
~~July 31, 2012)~~);
- WEQ-008, Transmission Loading Relief (TLR) – Eastern Interconnection,
~~(WEQ Version 003.2, Dec. 8, 2017 July 31, 2012 (with minor corrections applied~~
~~November 28, 2012)~~);
- WEQ-011, Gas / Electric Coordination, ~~(WEQ Version 003.2, Dec. 8, 2017 July 31,~~
~~2012)~~);
- WEQ-012, Public Key Infrastructure (PKI), ~~(WEQ Version 003.2, Dec. 8, 2017 July 31,~~
~~2012, as modified by NAESB final actions ratified on Oct. 4, 2012)~~);
- WEQ-013, Open Access Same-Time Information Systems (OASIS) Implementation
Guide ~~[OASIS], OASIS Version 2.20, (WEQ Version 003.2, Dec. 8, 2017, July~~
~~31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 (with minor~~
~~corrections applied Nov. 26, 2013)~~);
- WEQ-015, Measurement and Verification of Wholesale Electricity Demand
Response, ~~(WEQ Version 003.2, Dec. 8, 2017 July 31, 2012)~~; and

- WEQ-021, Measurement and Verification of Energy Efficiency Products, (WEQ Version 003.2, Dec. 8, 2017~~July 31, 2012~~);
- WEQ-022, Electric Industry Registry Business Practice Standards (WEQ Version 003.2, Dec. 8, 2017); and
- WEQ-023, Modeling. The following standards are incorporated by reference: WEQ-023-5; WEQ-023-5.1; WEQ-023-5.1.1; WEQ-023-5.1.2; WEQ-023-5.1.2.1; WEQ-023-5.1.2.2; WEQ-023-5.1.2.3; WEQ-023-5.1.3; WEQ-023-5.2; WEQ-023-6; WEQ-023-6.1; WEQ-023-6.1.1; WEQ-023-6.1.2; and WEQ-023-A Appendix A. (WEQ Version 003.2, Dec. 8, 2017).

~~The CAISO has applied for Pursuant to FERC's Order on Requests for Waiver, Docket No. ER15-531-000 (May 18, 2015), 151 FERC ¶ 61,151, the CAISO has been granted~~ a waiver of the following NAESB WEQ standards:

- WEQ-001, Open Access Same-Time Information Systems (OASIS), [OASIS] Version 2.20, ~~(WEQ Version 003.2, Dec. 8, 2017~~July 31, 2012, ~~as modified by NAESB final actions ratified on Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013),~~ excluding ~~s~~Standards WEQ-001-9.5, preamble text, WEQ-001-10.5, 001-14.1.3, 001-15.1.2 and 001-106.2.5 preamble text, and except as set forth above;
- WEQ-002, Open Access Same-Time Information Systems (OASIS) Business Practice Standards and Communication Protocols (S&CP), [OASIS] Version 2.20, ~~(WEQ Version 003.2, Dec. 8, 2017~~July 31, 2012, ~~as modified by NAESB final actions ratified on Nov. 28, 2012 and Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013);~~
- WEQ-003, Open Access Same-Time Information Systems (OASIS) Data Dictionary Business Practice Standards, [OASIS] Version 2.20, (WEQ Version 003.2, Dec. 8,

~~2017) July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012~~

(with minor corrections applied ~~July 23, 2019~~ Nov. 26, 2013);

- WEQ-006, Manual Time Error Correction (WEQ Version 003.1, Sept. 30, 2015) and only as to standards WEQ-006-5 and 006-9;
- WEQ-012, Public Key Infrastructure (PKI), ~~(WEQ Version 003.2, Dec. 8, 2017, July 31, 2012, as modified by NAESB final actions ratified on Oct. 4, 2012)~~ to the extent it applies to OASIS applications; ~~and~~
- WEQ-013, Open Access Same-Time Information Systems (OASIS) Implementation Guide, ~~[OASIS] Version 2.20, (WEQ Version 003.2, Dec 8, 2017); July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013); and~~
- WEQ-023, Modeling; specifically, standards WEQ-023-5; WEQ-023-5.1; WEQ-023-5.1.1; WEQ-023-5.1.2; WEQ-023-5.1.2.1; WEQ-023-5.1.2.2; WEQ-023-5.1.2.3; WEQ-023-5.1.3; WEQ-023-5.2; WEQ-023-6; WEQ-023-6.1; WEQ-023-6.1.1; WEQ-023-6.1.2; and WEQ-023-A Appendix A. (WEQ Version 003.2, Dec. 8, 2017).