



California Independent  
System Operator Corporation

October 21, 2021

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

**Re: California Independent System Operator Corporation  
Amended Filing to Comply with Order No. 676-I  
Docket Nos. ER21-2496-\_\_\_; RM05-5-025; RM05-5-026; RM05-5-027**

Dear Secretary Bose:

The California Independent System Operator Corporation (“CAISO”)<sup>1</sup> submits this amended filing in compliance with the Commission’s Order No. 676-I.<sup>2</sup> 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, with an open ended effective date.<sup>3</sup>

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

<sup>2</sup> *Standards for Bus. Practices & Commc’n Protocols for Pub. Utils.*, Order No. 676-I, 85 FR 10,571 (Feb. 25, 2020), 170 FERC ¶ 61,062 (2020). The CAISO submits this amended filing so that its proposed tariff changes in Attachments A and B are consistent with the revised description of the NAESB standards set forth in the *Errata Notice*, Docket Nos. RM05-5-025, RM05-5-026 and RM05-5-027 (March 3, 2020). The CAISO also has revised the requested effective date of this filing from October 27, 2021 to 12/31/9998, consistent with Order No. 676-I.

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

## 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 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.<sup>4</sup>

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.<sup>5</sup> 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.<sup>6</sup>

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, standard WEQ-000-2 ([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);

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

<sup>5</sup> *Id.* at PP 4.

<sup>6</sup> *Id.* at PP 5.

- 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 ([WEQ] Version 003.2, Dec. 8, 2017); and
- WEQ-023, Modeling ([WEQ] Versions 003.2, Dec. 8, 2017), including only: 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.<sup>7</sup>

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

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.<sup>8</sup> 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 filings to July 27, 2021, with an implementation date no sooner than October 27, 2021.<sup>9</sup>

## 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 amended filing with an open ended effective date.

## IV. Communications

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

John E. Spomer  
Senior Counsel  
California Independent System  
Operator Corporation  
250 Outcropping Way  
Folsom, CA 95630  
Tel: (916) 351-4400  
Fax: (916) 608-7236  
E-mail: [jspomer@caiso.com](mailto:jspomer@caiso.com)

Sean A. Atkins  
Bradley R. Miliauskas  
Davis Wright Tremaine, LLP  
1301 K Street NW  
Suite 500 East  
Washington, D.C. 20005  
Tel: (202) 973-4200  
Fax: (202) 973-4499  
E-mail: [seanatkins@dwt.com](mailto:seanatkins@dwt.com)  
[bradleymiliauskas@dwt.com](mailto:bradleymiliauskas@dwt.com)

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<sup>8</sup> *Id.* at P 20.

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

## V. Contents of this Filing

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

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

## VI. Conclusion

For the reasons set forth in this amended filing, the CAISO respectfully requests that the Commission accept the tariff revisions contained in the filing as compliant with Order No. 676-I, with an open ended effective date.

Respectfully submitted,

John E. Spomer  
Senior Counsel  
California Independent System  
Operator Corporation  
250 Outcropping Way  
Folsom, CA 95630  
Tel: (916) 351-4400  
Fax: (916) 608-7236  
E-mail: [jspomer@caiso.com](mailto:jspomer@caiso.com)

Sean A. Atkins  
Bradley R. Miliauskas  
Davis Wright Tremaine, LLP  
1301 K Street NW  
Suite 500 East  
Washington, D.C. 20005  
Tel: (202) 973-4200  
Fax: (202) 973-4499  
E-mail: [seanatkins@dwt.com](mailto:seanatkins@dwt.com)  
[bradleymiliauskas@dwt.com](mailto:bradleymiliauskas@dwt.com)

Counsel for the California Independent System Operator Corporation

**Attachment A – Clean Tariff**

**Compliance with Order No. 676-I – Amended**

**California Independent System Operator Corporation**

**October 21, 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, standard WEQ-000-2 ([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 ([WEQ] Version 003.2, Dec. 8, 2017); and
- WEQ-023, Modeling ([WEQ] Version 003.2, Dec. 8, 2017), including only: 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.

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 ([WEQ] Version 003.2, Dec. 8, 2017), including only: 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.

**Attachment B – Marked Tariff**

**Compliance with Order No. 676-I – Amended**

**California Independent System Operator Corporation**

**October 21, 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, ~~standard WEQ-000-2 ([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 2.0, ([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, 2012~~  
(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, 2017July 31, 2012);
- WEQ-022, Electric Industry Registry ([WEQ] Version 003.2, Dec. 8, 2017); and
- WEQ-023, Modeling ([WEQ] Version 003.2, Dec. 8, 2017), including only: 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.

~~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, 2017July 31, 2012, as modified by NAESB final actions ratified on Dec. 28, 2012 (with minor corrections applied Nov. 26, 2013), excluding sStandards 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, 2017July 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, 2019Nov. 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 ([WEQ] Version 003.2, Dec. 8, 2017), including only: 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.

## **CERTIFICATE OF SERVICE**

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 21st day of October, 2021.

*/s/ Jacqueline Meredith*  
Jacqueline Meredith