## UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator ) Corporation Docket No. ER17-114

# ANSWER OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION TO MOTIONS TO INTERVENE

The California Independent System Operator Corporation (CAISO) files this answer to motions to intervene filed in the above-captioned proceeding.<sup>1</sup> While the parties have not raised substantive comments in connection with their motions, the CAISO has received stakeholder feedback that its proposed tariff revisions submitted in compliance with Commission Order No. 827<sup>2</sup> and Order No. 828<sup>3</sup> in this proceeding contain potential inconsistencies and errors. The CAISO has reviewed its prior submission and takes this opportunity to identify these inconsistences and errors. The CAISO is willing to correct these matters on further compliance, if the Commission so directs. Appendix 1 hereto reflects the corrections the CAISO proposes to make on further compliance.

<sup>&</sup>lt;sup>1</sup> The CAISO files this answer pursuant to Rules 212 and 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. §§ 385.212, 385.213. The following parties filed motions to intervene: Pacific Gas and Electric Company; the Cities of Anaheim, Azusa, Banning, Colton, Pasadena and Riverside, California; City of Santa Clara, California; Trans Bay Cable LLC; NRG Power Marketing LLC and GenOn Energy Management, LLC; and EDF Renewable Energy, Inc.

<sup>&</sup>lt;sup>2</sup> Reactive Power Requirements for Non-Synchronous Generation, 155 FERC ¶ 61,277 (2016) (Order No. 827).

<sup>&</sup>lt;sup>3</sup> Requirements for Frequency and Voltage Ride Through Capability of Small Generating Facilities, 156 FERC ¶ 61,062 (2016) (Order No. 828).

The CAISO appreciates the stakeholder feedback it received and respectfully

requests that the Commission authorize it to modify its proposed tariff on further

compliance as explained in further detail in Appendix 1.

Dated: November 15, 2016

Respectfully submitted,

### By: /s/ Andrew Ulmer

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Appendix 1 – Proposed Tariff Corrections (Strikethrough text reflects a deletion; underlined text reflects an addition)

Tariff Section	Revision	Rational
Appendix T, Section 1.5.7, first paragraph	For Interconnection Customers that execute or request the <u>un-</u> executed filing of an SGIA on or after October 5, 2016, the Interconnection Customer shall ensure "frequency ride-through" capability and "voltage ride- through" capability of its Small Generating Facility.	This change corrects a typographical error in the CAISO's prior compliance filing and adds punctuation.
Appendix T, Section 1.5.7, third paragraph	Voltage Conditions. The Interconnection Customer shall ensure "voltage ride-through" capability of its Small Generating Facility. The Interconnection Customer shall enable these capabilities such that its Small Generating Facility shall not disconnect automatically or instantaneously from the system or equipment of the CAISO and any Affected Systems for an under-voltage or over-voltage condition, as tested pursuant to section 2.1 of this Agreement. The defined conditions shall be in accordance with Good Utility Practice and consistent with any standards and guidelines that are applied to other generating facilities in the Balancing Authority Area on a comparable basis. Asynchronous Generating Facilities are subject to the voltage ride-through requirements set forth in Attachment 7.	This language corrects an omission from the CAISO's prior compliance filing with Order No. 828.
Appendix T, Section 1.8.1	For Asynchronous Generating Facilities, executing a Facilities	This change aligns the proposed addition to Appendix T with the
second paragraph	Study Agreement on or after September 21, 2016, the	pro forma language adopted by Order 827.

Tariff Section	Revision	Rational
	Interconnection Customer shall design the Small Generating Facility to maintain power factor criteria to-maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the CAISO has established a different power factor range that applies to all Asynchronous Generating Facilities on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors and reactors, or a combination of the two.	
Appendix V, Section 9.6.1, second paragraph	For Asynchronous Generating Facilities submitting a written request to continue a restudy under Section 6.4 of Appendix U of the CAISO Tariff on or after September 21, 2016, the Interconnection Customer shall design the Large Generating Facility to maintain power factor criteria to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the CAISO has established a different power factor range that applies to all Asynchronous Generating Facilities on a	This change aligns the proposed addition to Appendix V with the <i>pro forma</i> language adopted by Order 827.

Tariff Section	Revision	Rational
	comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors and reactors, or a combination of the two.	
Appendix BB, Section 9.6.1,	For Asynchronous Generating Facilities submitting a written request to continue a restudy under Section 6.4 of Appendix U of the CAISO Tariff on or after September 21, 2016, the Interconnection Customer shall design the Large Generating Facility to maintain power factor eriteria- to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the CAISO has established a different power factor range that applies to all Asynchronous Generating Facilities on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors and reactors, or a combination of the two.	This change aligns the proposed addition to Appendix BB with the pro forma language adopted by Order 827.

Tariff Section	Revision	Rational
Appendix EE, Section 9.6.1, second paragraph	When an Interconnection Customer posts Interconnection Financial Security for an Asynchronous Generating Facility under the Fast Track Process pursuant to Appendix DD of the CAISO Tariff on or after September 21, 2016, the Interconnection Customer will design the Large Generator Facility to maintain a composite power delivery at continuous rated power output at the high-side of the generator substation at a power factor within the range of 0.95 leading to 0.95 lagging, unless the CAISO has established a different power factor range that applies to all Asynchronous Generating Facilities on a comparable basis. This power factor range standard shall be dynamic and can be met using, for example, power electronics designed to supply this level of reactive capability (taking into account any limitations due to voltage level, real power output, etc.) or fixed and switched capacitors and reactors, or a combination of the two.	This change reflects in advertent reference to the Fast Track Process in this paragraph of Appendix EE and adds punctuation.
Appendix FF, Section 1.5.7, first paragraph	For Interconnection Customers that execute or request the <u>un-</u> executed filing of an SGIA on or after October 5, 2016, the Interconnection Customer shall ensure "frequency ride-through" capability and "voltage ride- through" capability of its Small Generating Facility.	This change corrects a typographical error in the CAISO's prior compliance filing.

# CERTIFICATE OF SERVICE

I hereby certify that I have served the foregoing document upon all of the parties listed on the official service list for the captioned proceeding, 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 15<sup>th</sup> day of November 2016.

<u>/s/</u>GraceClark

Grace Clark