UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

California Independent System Operator Corporation)	Docket No. ER10-1706-000

ANSWER TO COMMENTS OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION

I. INTRODUCTION

The California Independent System Operator Corporation (the ISO) files this answer in response to comments submitted by the California Wind Energy Association on the ISO's filing in compliance with the Commission's August 31, 2010 order in this proceeding.[1] In compliance with the Commission's directives, the ISO submitted tariff language that extends low voltage ride through requirements to all asynchronous generating facilities seeking to interconnect to the ISO gird. The ISO also modified its proposed tariff language related to power factor design and operations criteria and voltage regulation and reactive power control requirements consistent with the Commission's August 31, 2010 order.

In its comments, Cal-WEA seeks several additional changes to the ISO's tariff language related to low voltage ride through requirements as well as requirements related to power factor design and operations. Although unnecessary, the ISO does not object to modifying the tariff language relating to low voltage ride through requirements, as specified in this answer, if the

[1] *California Indep. System Operator* 132 FERC ¶ 61,196 (2010).

Commission so directs.[2] However, the Commission should reject the remainder of Cal-WEA's comments because they exceed the scope of the ISO's compliance filing, and therefore constitute an improper collateral attack on the August 31, 2010 order.

II. ANSWER

A. The ISO agrees that asynchronous generating facilities are not required to ride through low voltage disturbances if clearing a single fault effectively disconnects the generator from the system.

The ISO's proposed requirements for low voltage ride through in this proceeding did not seek to modify the substantive requirements of Commission's Order 661-A.[3] Instead, the ISO proposed to extend these requirements to all asynchronous generating facilities, which the Commission approved.[4] In its comments, Cal-WEA argues that the ISO's proposed low voltage ride through requirements should not apply to a single circuit generator when a fault occurs on that circuit and needs to be cleared.[5] Cal-WEA argues that specific language adopted by the Commission in Order 661-A addresses this fact and recommends that the ISO clarify that the low voltage ride through requirements shall not apply

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[2] The ISO submits this answer pursuant to Rule 213 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213 (2010).

[3] *Interconnection for Wind Energy*, Order No. 661-A, FERC Stats. & Regs. ¶ 31,198, at PP 41-46 (2005).

[4] August 31, 2010 Order at P 69.

[5] Comments of Cal-WEA at 5-6.

if "clearing the fault effectively disconnects the generator from the system."[6] The ISO agrees that an asynchronous generating facility is not required to ride through a low voltage disturbance if clearing a single fault effectively disconnects the generating facility from the system. The ISO did not include this specific language in its proposed requirements because of the fact that the low voltage ride through requirement cannot physically apply to a single circuit generating facility, if clearing a single fault effectively disconnects the generator from the remainder of the electric system. As a result, the ISO did not believe it was necessary to include specific tariff language addressing this situation. The ISO, however, is willing to make the changes recommended by Cal-WEA on further compliance, if the Commission so directs.

B. The Commission should reject the remainder of Cal-WEA's comments because they exceed the scope of the ISO's compliance filing

In response to the ISO's compliance filing, Cal-WEA proposes several additional tariff modifications that are unrelated to the changes made by the ISO in the compliance filing. Cal-WEA argues that the Commission should require all new interconnecting generators to comply with the ISO's low voltage ride through requirements, not just asynchronous generating facilities.[7] Cal-WEA also seeks changes to the ISO's proposed language to allow asynchronous generating facilities greater latitude to satisfy voltage support requirements and to eliminate

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[6] Cal-WEA comments at 5 and 6, recommending changes to Appendix H of the Large Generator Interconnection Agreement at Sections (A)(i)(1) and (A)(i)(2).

[7] Cal-WEA comments at 4.

any power factor operation when a facility is generating less than 20 percent of its rated output.[8] The ISO addresses each of Cal-WEA's arguments in turn.

Cal-WEA proposes that the ISO apply its low voltage ride through requirements to both asynchronous and synchronous generating facilities seeking to interconnect to the ISO grid. As part of Order 661-A, the Commission adopted low voltage ride through requirements for wind resources in part to address specific reliability concerns raised by the North American Electric Reliability Corporation.[9] The Commission determined that low voltage ride through requirements for wind facilities would ensure that wind plants are interconnected to the grid in a manner that will not degrade system reliability.[10] The ISO's proposed tariff amendment and the Commission's August 31, 2010 order extend low voltage ride through requirements to all asynchronous generating facilities.[11] The Commission recognized that the design of asynchronous generating facilities may result in sympathetic trips of these facilities that could result in more severe system imbalances after a disturbance.

Cal-WEA's proposal to apply these requirements to both asynchronous and synchronous generating facilities exceeds the scope of the compliance directives set forth in the Commission's August 31, 2001 order. Cal-WEA could have raised this argument on rehearing of the August 31, 2010 order, but the Commission should not permit Cal-WEA to do so in response to the ISO's

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[8] Cal-WEA comments at 6-8.

[9] Order 661-A at PP 13-14.

[10] Order 661-A at PP 31-35.

[11] August 31, 2010 order at PP 67-69.

compliance filing. The only issue in a compliance filing is whether the utility has complied with the Commission's directives.[12] The Commission should, accordingly, reject Cal-WEA's proposal as an improper collateral attack on the August 31, 2010 order.

Cal-WEA also seeks changes to the tariff requirements for power factor design and operations criteria set forth in Section A(iii) of Appendix H to the ISO's large generator interconnection agreement.[13] Cal-WEA proposes that the tariff require that an interconnection customer, the ISO and the participating transmission owner mutually agree on the dynamic voltage support that asynchronous generating facilities can or should provide. Cal-WEA suggests this language provides a means for an asynchronous generating facility to comply with NERC reliability standard VAR-002-1.1b, which requires each generator to maintain generator voltage or reactive power as directed by a transmission operator.[14] In response to the Commission directives, the ISO replaced its proposed interconnection requirements for power factor design and operations with existing tariff language regarding power factor design.[15] Again, Cal-WEA's proposal exceeds the scope of the Commission's directives and the ISO's compliance filing. The Commission should reject Cal-WEA's proposal.

Finally, Cal-WEA recommends eliminating any power factor operation when an asynchronous generating facility is generating less than 20 percent of

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[12] *See. e.g., Midwest Independent Transmission System Operator, Inc*. 131 FERC ¶ 61,273 at P 29 (2010).

[13] Cal-WEA comments at 8.

[14] http://www.nerc.com/files/VAR-002-1_1b.pdf

[15] August 31, 2010 Order at P 55 and fn 54.

its rated output. The ISO included a similar limitation as part of its tariff amendments relating to power factor operations criteria. The August 31, 2010 order rejected the ISO's proposal without prejudice. Cal-WEA could have raised its proposal to adopt portions of the ISO's proposed power factor operations criteria in comments to the ISO's original filing, or in a request for rehearing of the August 31, 2010 order. It is not, however, an appropriate proposal in the context of the ISO's compliance filing, which simply implements the Commission's directive on this issue. For this reason, the Commission should reject Cal-WEA's proposal to modify the ISO's tariff language.

III. CONCLUSION

The ISO's compliance filing meets the directives of the Commission's August 31, 2010 order. The comments of Cal-WEA correctly identify that the low voltage ride through requirements set forth in the ISO's tariff should not apply to an asynchronous generating facility on a single circuit, if clearing a fault effectively disconnects the generating facility from the system. The ISO agrees but believes this point is self-evident. The ISO is willing to modify its tariff language consistent with Cal-WEA's recommendation concerning this issue, if the Commission so directs. Cal-WEA's remaining comments, however, raise issues that exceed the scope of compliance directives in this matter and the Commission should reject them.

Respectfully submitted,

/s/ Andrew Ulmer

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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 5th day of November 2010.

/s/ Jane Ostapovich
Jane Ostapovich