

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

California Independent System) Docket Nos. OA08-12-001 and
Operator Corporation) OA08-113-000

**MOTION FOR LEAVE TO ANSWER AND ANSWER OF THE
CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION
TO COMMENTS ON ORDER NOS. 890 AND 890-A
COMPLIANCE FILING**

Pursuant to the Commission’s Rules of Practice and Procedure, 18 C.F.R. §§385.212 and 385.213, the California Independent System Operator Corporation (“CAISO”) respectfully submits this Motion for Leave to Answer and Answer to the comments of Beacon Power Corporation (“Beacon”) on the CAISO’s April 15, 2008 filing in compliance with the non-transmission planning elements of Order Nos. 890¹ and 890-A². In this Answer, the CAISO explains that it would be inappropriate to grant Beacon’s request and require the CAISO through this proceeding to modify additional tariff provisions to accommodate non-generation resources, and to make changes to the CAISO master file, software, and operating procedures, that go far beyond the compliance requirements of Order No. 890. As further explained in this Answer, the CAISO has already initiated a comprehensive project and public stakeholder process to integrate energy storage facilities onto the grid, which will, *inter alia*, facilitate the provision of Ancillary Services by such resources. It is, therefore, unnecessary for the Commission to mandate the process Beacon requests. Moreover, the timeframe

¹ *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890, 72 FR 12266 (March 15, 2007), FERC Stats. & Regs. ¶ 31,241 (2007), *reh’g pending*.

² *Preventing Undue Discrimination and Preference in Transmission Service*, Order No. 890-A, 73 Fed. Reg. 2984 (Jan. 16, 2008), FERC Stats. & Regs. ¶ 31,261 (2008), *reh’g pending* (“Order No. 890-A”).

Beacon recommends for implementing its suggested additional changes is arbitrary, unreasonably short for the effort required, and conflicts with the CAISO's project timeline and implementation of the CAISO's Market Redesign and Technology Upgrade ("MRTU").

I. BACKGROUND

On February 16, 2007, the Commission issued Order No. 890, in which it adopted a number of changes to the *pro forma* Open Access Transmission Tariff ("OATT"), including a modification to allow certain Ancillary Services to be provided by other non-generation resources, such as demand resources, where appropriate.³ The tariff language adopted by the Commission in Order No. 890 provided that non-generation resources can provide each of the specified Ancillary Services -- reactive supply and voltage control, regulation and frequency response, energy imbalance, spinning reserves, supplemental reserves and generator imbalance services -- to the extent they are capable of providing the specific service.⁴

On October 11, 2007, the CAISO submitted its filing to comply with Order No. 890. That filing inadvertently omitted tariff language to comply with the aforementioned directive. In response to comments by Beacon that pointed out this omission from the CAISO's compliance filing, the CAISO agreed that this modification should be incorporated into its tariff and proposed to correct the oversight by modifying Section 8.1 of its MRTU Tariff to allow non-generation resources, such as Beacon's flywheel technology, to provide Ancillary Services, to the extent the modification is compatible

³ Order No. 890 at P 888.

⁴ See Schedules 2, 3, 4, 5, 6, and 9 of the *pro forma* OATT as modified in Order No. 890.

with the CAISO's service model.⁵

In its April 15, 2008 filing to comply with Order Nos. 890 and 890-A, the CAISO proposed revisions to incorporate the modification into Section 8.1 of both its existing open access transmission tariff ("CAISO Tariff") and MRTU Tariff. On May 6, 2008, Beacon filed a motion to intervene and comments on the CAISO's compliance filing. In its comments, Beacon contends that Tariff revisions adopted in Order No. 890 are not enough to allow non-generation resources to provide Ancillary Services. Beacon requests that, in addition to implementing those Tariff revisions, the Commission should direct the CAISO to modify other Tariff provisions, the master file data base, software, and operating procedures to accommodate the provision of Ancillary Services by non-generation resources. Beacon claims that these changes can be made "without significant effort or disruption of MRTU" and requests that the Commission direct the CAISO to implement all of these changes either within 90 days or in advance of the effective date for MRTU, whichever occurs sooner.

II. MOTION FOR LEAVE TO ANSWER

The CAISO requests waiver of Rule 213(a)(2), 18 C.F.R. § 385.213(a)(2), to permit it to submit this Answer to Beacon's comments. Through those comments, Beacon for the first time challenges the sufficiency of the specific Tariff modifications the Commission adopted in Order No. 890 to allow non-generation resources to provide Ancillary Services. Beacon requests that the CAISO be required to undertake additional actions, including further tariff revisions, software modifications, and operating procedure changes, and to do so in a manner and timeframe that conflicts with the CAISO's planned stakeholder process to address these issues and the implementation

⁵ CAISO Answer to Comments, Docket No OA08-12-000 (November 16, 2007) at 3.

of MRTU. Good cause for this waiver exists because the CAISO's Answer will aid the Commission in understanding the issues in the proceeding, provide additional information to assist the Commission in the decision-making process, and help to ensure a complete and accurate record in this case. See, e.g., *Entergy Serv., Inc.*, 116 FERC ¶ 61,286, at P 6 (2006); *Midwest Indep. Transmission Sys. Operator, Inc.*, 116 FERC ¶ 61,124, at P 11 (2006); *High Island Offshore System, L.L.C.*, 113 FERC ¶ 61,202, at P 8 (2005).

III. ANSWER

The CAISO supports the goal articulated by the Commission in Order No. 890 of preventing undue discrimination and preference with regard to the provision of transmission services. The CAISO further supports the development and deployment of alternative technologies and welcomes the participation of non-generation resources, such as Beacon's flywheel technology, in the CAISO's Ancillary Services market. To that end, the CAISO has fully complied with the requirements of Paragraph 888 of Order No. 890 and proposed revisions to its currently effective CAISO Tariff and MRTU Tariff to authorize non-generation resources to provide the specified Ancillary Services. Specifically, the CAISO proposed to revise Section 8.1 in both tariffs to provide that: (1) bids for Regulation, Spinning Reserve, Non-Spinning Reserve, and Voltage Support may be submitted by a Scheduling Coordinator for other non-generation resources that are capable of providing the specific service and that meet applicable Ancillary Service standards and technical requirements, as set forth in Sections 8.1 through 8.4, and are certified by the CAISO to provide Ancillary Services;⁶ and (2) the provision of

⁶ Energy imbalance service, which is an Ancillary Service under the *pro forma* OATT, is not an Ancillary Service under the CAISO Tariff. Instead, imbalances are resolved through the CAISO's Imbalance

Regulation, Spinning Reserve, Non-Spinning Reserve, and Voltage Support by other non-generation resources will be subject to the same requirements applicable to other providers of these Ancillary Services, as set forth in Sections 8.5 through 8.14 of the current CAISO Tariff and in Sections 8.5 through 8.11 in the MRTU Tariff. This tariff language is fully consistent with the tariff language that was adopted by the Commission in Order No. 890.

Beacon does not take issue with the content of these proposed tariff revisions. In fact, Beacon commends the CAISO for proposing tariff changes that comply with the Commission's directive in Order No. 890 and supports the adoption of the proposed revisions.⁷

However, in its comments, Beacon for the first time in this proceeding questions the sufficiency of the specific tariff modifications adopted in Order No. 890 to allow non-generation resources to provide Ancillary Services in the CAISO's markets. According to Beacon, more than a simple tariff change is required.⁸ Beacon suggests that numerous additional CAISO Tariff provisions will require modification, such as Section 4 Roles and Responsibilities, Section 9 Outages, Appendix A Master Definitions, Appendix B.2 Participating Generator Agreement, and Section 25 and Appendices U, V, and AA Generator Interconnection Procedures.⁹ Beacon further claims that changes will be necessary to the CAISO's master file data base, software, and other operating

Energy markets, and those markets accommodate bids by Participating Loads. The MRTU Tariff already permits Participating Loads to provide Non-Spinning Reserve, as well as participate in the CAISO's Day-Ahead and Real-Time Markets.

⁷ Beacon Motion to Intervene and Comments, Docket Nos. OA-08-12-001 and OA-113-000 (May 6, 2008), pp. 6 and 10.

⁸ Id. at 7.

⁹ Id. at 6-7.

procedures for non-generation resources. Beacon requests that the Commission direct the CAISO to work with Beacon and other owners of non-generation resources to develop these additional tariff provisions and other changes that allow for a competitive Ancillary Service marketplace. Beacon's request is based on a purportedly similar evaluation and discussion that Midwest ISO undertook with Beacon to determine what changes to rules and ancillary service procedures were required to allow new technologies into Midwest ISO's regulating reserve markets.

It is unnecessary for the Commission to direct the CAISO to engage in the collaborative effort Beacon recommends or to adopt any further tariff revisions at this time. The CAISO has already initiated a project and stakeholder process to develop the technical and operational requirements for integrating storage technologies into the system and consider the extent to which additional tariff revisions may be necessary to enable their participation in the CAISO's markets. As indicated in the attached Market Notice, dated May 21, 2008, the CAISO is taking significant steps to integrate large amounts of renewable resources onto the electric grid, including energy storage technologies. This project will undertake a comprehensive review of key issues related to the integration of energy storage facilities. The types of storage technologies to be considered in the review will include flywheel systems like Beacon's, as well as pumped hydro, battery storage, compressed air storage, super capacitors, flow batteries, and plug-in hybrid vehicles. As indicated in the Market Notice, the project will begin with the CAISO posting an initial discussion paper on May 22, 2008 and conducting a stakeholder conference call on May 29, 2008. A multi-step stakeholder process will follow, in which issues and possible solutions will be considered in additional

whitepapers prepared by the CAISO and stakeholder feedback will be obtained through a series of stakeholder meetings, conference calls, and opportunities to submit written comments. The CAISO anticipates that implementation of the recommendations that result from the project and stakeholder process will occur after the expected Fall 2008 start-up of MRTU.

The CAISO requests that it be permitted to proceed with this comprehensive, multi-step process to address the integration of storage technologies as planned. Beacon has suggested that the CAISO be required to implement all of the necessary changes either within 90 days or sufficiently in advance of the start up of MRTU for non-generation resources to fully participate in the MRTU markets, whichever occurs sooner. This suggestion is apparently based on Beacon's mistaken belief that the additional tariff revisions and other software and operational changes can be made "without significant effort or disruption to the CAISO's implementation of MRTU."¹⁰ As just discussed, however, the project will be comprehensive and address many technologies. The CAISO should not be required to shorten or limit the scope of the entire project, or consider flywheel systems separately, in order to meet an arbitrary 90-day deadline. There are no interconnection applications pending for non-generation resources to come on line within the next 90 days, and no parties other than Beacon have submitted comments in this proceeding that even address the issue.

Further, no stakeholder -- including Beacon -- raised these issues during the public stakeholder process that the CAISO conducted leading up to its Order No. 890 compliance filing. Beacon had the opportunity to raise implementation and operational issues much earlier in this proceeding, during the publicly noticed stakeholder meetings

¹⁰ Id. at 8.

and process on the CAISO's compliance filing for Order No. 890. However, Beacon opted not to participate in that process. Likewise, Beacon could have pursued resolution of these issues through the extensive, multi-year, MRTU policy development process, and the FERC process through which CAISO first sought conceptual guidance and later actual approval of the MRTU Tariff.

At this stage of the implementation schedule for MRTU, the CAISO is endeavoring towards a Fall 2008 start-up. The Commission should not require the CAISO to divert its attention from the implementation of the new market design to address within an arbitrary and abbreviated timeframe the issues Beacon has raised at such a late hour. Further, the CAISO's MRTU systems and software are well into the testing and market simulation phases. Any requirement issued at this time that CAISO make new software changes to accommodate Ancillary Services bidding by non-generation resources will pose significant pressure and risk to the MRTU implementation schedule. Such a result would be wholly inappropriate under the circumstances described herein.

In any event, the CAISO has already initiated a project and stakeholder process to consider the integration of energy storage facilities. This is more appropriate and efficient forum to consider the types of issues raised by Beacon given that the requirements of Order No. 890 apply to all non-generation resources, not just to Beacon's flywheel technology.

The CAISO submits that rejecting Beacon's request will have no adverse effect on Beacon or on entry into the CAISO's Ancillary Services markets by non-generation resources. As indicated above, no energy storage facilities with a start-up date within

the next 90 days are currently in the CAISO interconnection queue. Beacon and all other providers of energy storage technologies will still have the opportunity to participate in the CAISO's stakeholder process and offer their views and recommendations on changes needed to integrate non-generation resources. To the extent that any energy storage facilities obtain all necessary approvals and seek an on-line service date prior to the conclusion of the project, they will be permitted to participate in the Ancillary Service markets under the proposed revisions to Section 8.1 and the CAISO could adopt, as appropriate, interim measures needed to accommodate operation of that technology, which may not require changes to our software, data bases, or operating procedures.

IV. CONCLUSION

For the reasons set forth herein, the Commission should grant the CAISO's motion for leave to file this answer, approve the CAISO's proposed tariff revisions to comply with Paragraph 888 of Order No. 890, and reject Beacon's request for a Commission-ordered effort by the CAISO to modify additional tariff provisions and make other changes to its master file, software, and operating procedures within an arbitrary timeline.

Respectfully submitted,

/s/ Beth Ann Burns

Sean A. Atkins
Michael E. Ward
Alston & Bird LLP
The Atlantic Building
950 F Street, N.W.
Washington, DC 20004-1404
Tel: (202) 756-3405
Fax: (202) 756-3333

Counsel for the California Independent
System Operator Corporation

Nancy Saracino, General Counsel
Anthony J. Ivancovich, Assistant General
Counsel-Regulatory
Beth Ann Burns, Senior Counsel
The California Independent System
Operator Corporation
151 Blue Ravine Road
Folsom, CA 95630
Tel: (916) 351-4400
Fax: (916) 351-4436

Dated: May 22, 2008

ATTACHMENT

California Independent System Operator - Market Notice

Integration of Energy Storage Facilities

May 22, 2008

Market Notice

May 21, 2008



California ISO
Your Link to Power

10 Year Anniversary 1998-2008

Categories

Grid Operation
Market Operations
Market Rules and Market Design

Requested Client Action

Mark Your Calendar

Integration of Energy Storage Facilities

Summary

The CAISO will conduct a conference call on May 29, 2008 to discuss issues associated with integrating storage facilities on the grid and the California electricity markets.

Main Text

In collaboration with stakeholders, the California ISO (CAISO) is taking significant steps to integrate large amounts of renewable resources into the electric grid. Among the key areas being evaluated is the need for energy storage technologies and processes to use services from storage facilities to assist with integration of renewable resources. The CAISO will hold a conference call on May 29 to discuss the issues associated with integrating storage facilities onto the grid and into California Markets.

The purpose of the call is to identify key issues related to the integration of energy storage facilities. Concepts that will be explored during the call include, but not limited to:

- Are energy storage facilities a transmission device that should be covered in transmission rates?
- To what extent is each type of energy storage technology capable of providing market-based services such as regulation or other ancillary services?

The CAISO will post a discussion paper to help frame issues by May 22, 2008 to its website at <http://www.caiso.com/1c51/1c51c7946a480.html>.

Conference Call Details

Date: Thursday, May 29, 2008
Time: 9:30 a.m. – 12:00 p.m. (Pacific Time)
Call-in Number: (800) 230-1092
International Number: (612) 332-0923
Name of Call: Storage Facilities

Web Conference Information

Web Address: <http://www.webmeeting.att.com>
Meeting Number: 8662054243
Code: 3459258

For More Information Contact

David Hawkins at dhawkins@caiso.com or 916-351-4465

The California ISO strives to be a world-class electric transmission organization built around a globally recognized and inspired team providing cost-effective and reliable service, well-balanced energy market mechanisms, and high-quality information for the benefit of our customers.

151 Blue Ravine Road, Folsom, CA 95630

[Update profile or unsubscribe](#)

EA/ComPR/IPS/ds

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 22nd day of May, 2008.

/s/ Anna Pascuzzo
Anna Pascuzzo