

UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Joseph T. Kelliher, Chairman;
Nora Mead Brownell, and Suedeen G. Kelly.

California Independent System Operator
Corporation

Docket No. ER98-3760-010

ORDER GRANTING REHEARING
AND DIRECTING COMPLIANCE FILING

(Issued September 30, 2005)

1. In this order, we grant a request for rehearing of the order issued on November 19, 2004 (November 19 Order),¹ and we direct the California Independent System Operator Corporation (ISO) to submit its plans for the implementation of competitive procurement of Voltage Support and Black Start services, including a timeline for doing so.

Background

2. In 1999, in the proceeding to address Outstanding Issues concerning the California Independent System Operator Corporation (ISO), the ISO originally identified approximately 680 Outstanding Issues that remained unresolved. Subsequently, the ISO filed a table that identified approximately 80 Outstanding Issues, out of the original 680, and stated that: the proponents still contested several issues; several issues were being addressed in other Commission proceedings; and several issues had either been withdrawn by the proponent or were moot.

¹ *California Independent System Operator Corp.*, 109 FERC ¶ 61,183 (2004).

3. The November 19 Order addressed Outstanding Issues concerning ancillary services requirements, market monitoring, metered subsystems and metering protocols. It also dismissed several other issues as withdrawn by the proponents or moot.² In particular, Outstanding Issue A.4 concerned Voltage Support and Black Start services.³

4. Outstanding Issue A.4 is as follows:

Has the ISO unreasonably precluded certain entities from providing competitive Voltage Support and Black Start services to the ISO Grid and should the ISO Tariff, including section 2.5.3.4 (Voltage Support) and Ancillary Services Requirements Protocol (ASRP) 7.5.1 (Long-Term Voltage Support), be revised to require competitive procurement of Voltage Support and Black Start services?

5. The November 19 Order determined that ISO Tariff section 2.5.3.4 and ASRP 7.5.1 provide the ISO with a reasonable means for procuring Voltage Support and Black Start services. Further, if additional resources can provide reliable and economical Voltage Support and Black Start services, the Commission encouraged the ISO to explore those options.⁴

6. The California Department of Water Resources State Water Project (DWR) filed a request for rehearing of this determination. On rehearing, DWR argues that the November 19 Order provides no support for its conclusion that ISO Tariff section 2.5.3.4 and ASRP 7.5.1 provide the ISO with a reasonable means to procure Voltage Support and Black Start. According to DWR, additional reliable and economical resources are available to provide Voltage Support and Black Start, but the ISO has still failed to establish a mechanism to procure those services.

² The November 19 Order stated that the Commission will address the remaining Outstanding Issues in a future order or orders.

³ The ISO Tariff defines Voltage Support as “[s]ervices by Generating Units or other equipment . . . that are required to maintain established grid voltage criteria. This service is required under normal or system emergency conditions.” The ISO Tariff defines Black Start as “[t]he procedure by which a Generating Unit self-starts without an external source of electricity thereby restoring power to the ISO controlled Grid following system or local area blackouts.”

⁴ 109 FERC ¶ 61,183 at P 36.

7. DWR argues that the November 19 Order is at odds with the Commission's order accepting Amendment No. 60 to the ISO Tariff.⁵ In Amendment No. 60, the ISO proposed, among other things, zonal allocation of must offer generation costs used to maintain acceptable voltage levels at a location that is part of a transmission path between congestion zones. According to DWR, the ISO's documentation of the need for Amendment No. 60 shows that the ISO's Tariff mechanisms for Voltage Support have failed to meet its grid needs⁶ and that the ISO continues to rely upon out-of-market purchases to meet those needs.

8. DWR argues that the Commission and interested parties envisioned that the ISO would develop a competitive process for obtaining Voltage Support and Black Start. Specifically, it contends that the Commission, in an October 30, 1997 Order, conditionally accepted the ISO Tariff based upon the understanding that all available sources which met technical requirements for provision of Voltage Support and Black Start services would compete for contracts for providing such services to the ISO.⁷ DWR states that in a November 27, 1997 filing,⁸ the ISO anticipated that, by January 1, 1999, it would have a fully functional process by which Voltage Support services are competitively bid. However, the ISO has not established such a market, and DWR believes that Amendment No. 60 shows that the ISO does not intend to do so. Thus, DWR requests that the Commission direct the ISO to develop a competitive procurement mechanism.

⁵ See *California Independent System Operator Corp.*, 108 FERC ¶ 61,022, *order on reh'g*, 109 FERC ¶ 61,097, *order on reh'g*, 109 FERC ¶ 61,097 (2004), *order on reh'g*, 110 FERC ¶ 61,071 (2005) (Order on Amendment No. 60).

⁶ DWR cites ISO witness testimony concerning voltage problems in the hearing on Amendment No. 60. Rehearing at 6-7.

⁷ DWR cites *Pacific Gas and Electric Co.*, 81 FERC ¶ 61,122 at 61,496-67 (1997) (October 1997 Order).

⁸ *Pacific Gas and Electric Co.*, Docket No. EC96-19, ISO Revised Staging Plan No. 1, p.3 (filed Nov. 27, 1997).

9. According to DWR, additional supplies of Voltage Support and Black Start services are available from DWR and other market participants on a reliable basis.⁹ In addition, DWR argues that, if the ISO does not procure Voltage Support and Black Start services from sources other than RMR units and must offer generation, DWR and other parties will continue to incur opportunity costs arising from their inability to compete to provide such services, and all market participants will be subject to the ISO's artificially increased costs of obtaining such services.

10. DWR also contends that allowing the ISO to eschew competitive Voltage Support acquisition in favor of non-market, non-Tariff purchases of must offer generation to supply needed Voltage Support is contrary to the goal of the Order No. 888 principle fostering competitive ancillary services markets. It also cannot be reconciled with the Commission's commitment to electric system reliability, according to DWR. DWR contends that by limiting procurement to RMR units and must offer generation, the ISO continues to arbitrarily limit the number of service providers.

11. In addition, DWR argues that the November 19 Order is inconsistent with the Commission's policy that independent system operators and Regional Transmission Organizations should first seek to use market-based solutions for the acquisition of reliability support and that non-market solutions should only be a backstop mechanism.¹⁰ DWR also argues that the November 19 Order is contrary to the goal of the Commission's Reactive Power Policy initiative of promoting reliable and efficient

⁹ DWR states that it could provide the ISO with substantial Voltage Support through its generation and pumping load and that Voltage Support could also come from loads with adjustable power band factors, such as the large pump motors that DWR and Metropolitan Water District use to operate their water conveyance systems. In its Initial Brief on Issue A.4, DWR also stated that it is capable of providing significant Black Start capability from its large hydroelectric units.

¹⁰ DWR cites *PJM Interconnection, LLC*, 107 FERC ¶ 61,112 at P 21 and P 72 (2004), *order on reh'g*, 110 FERC ¶ 61,053, *order on reh'g*, 112 FERC ¶ 61,031 (2005) (*PJM*).

infrastructure investment, production, and customer use.¹¹ Finally, DWR argues that the Final Report on the August 13, 2003 blackout¹² also emphasizes the importance Voltage Support (referred to therein as reactive power) as a crucial reliability component.¹³

Discussion

12. ISO Tariff section 2.5.3.4 (Voltage Support) provides that the ISO shall determine on an hourly basis for each day the quantity and location of Voltage Support required to maintain voltage levels and reactive margins within the criteria of the Western Systems Coordinating Council and the North American Electric Reliability Council. Section 2.5.3.4 further provides, among other things, that “[i]f the ISO requires additional Voltage Support, it shall procure this either through Reliability Must-Run [(RMR)] contracts or, if no other more economic sources are available by instructing a Generating Unit to move its MVar output outside its mandatory range.”¹⁴ ASRP 7.5.1 (Long-Term Voltage Support) provides that “[a]s of the Operations Date, the ISO will contract for long term Voltage Support service with Owners of [RMR] Units under [RMR] Contracts.”¹⁵

¹¹ Docket No. AD05-1-000.

¹² U.S.-Canada Power System Outage Task Force, *Final Report on the August 14, 2003 Blackout in the United States and Canada* (issued Apr. 5, 2004) (Blackout Final Report).

¹³ Blackout Final Report at 38.

¹⁴ The ISO has authority outside of its organized spot markets to dispatch generators (out-of-market dispatch authority) in order to support grid reliability. That is, when the ISO has not received bids from generators that must operate in order to resolve a real-time system problem, the ISO has the authority to issue dispatch orders to those generators and pay them for the energy they produce at the real-time market price. *See, e.g., California Independent System Operator Corp.*, 90 FERC ¶ 61,006 at 61,009-11, *reh’g denied*, 91 FERC ¶ 61,026 (2000) (describing the ISO’s out-of-market dispatch authority); *San Diego Gas & Electric Co.*, 110 FERC ¶ 61,336 at P 66 (2005) (same).

¹⁵ Issue A.4 does not cite any tariff provision or protocol with regard to Black Start. But, we note that ISO Tariff section 2.5.3.5 (Black Start Capability) provides that the ISO shall determine the amount and location of Black Start Generation it requires through contingency studies that are used as the basis of the ISO’s emergency plans. It further provides that the ISO shall specify load restoration performance goals, and

(continued)

13. Below, we elaborate on the parties' positions in their briefs on Issue A.4, which informs our determination on this issue.

14. In DWR's Initial Brief on Issue A.4,¹⁶ it argued that, in 1997, the ISO represented that it would implement competitive procurement by January 1, 1999 but subsequently failed to do so. In its reply brief, the ISO responded that it had always intended to obtain Voltage Support and Black Start services pursuant to a competitive process and that it never intended to procure those services from RMR units indefinitely.¹⁷ The ISO contended that its procurement of Voltage Support and Black Start services from Reliability Must-Run (RMR) units did not preclude future competitive procurement of those services. Rather, it asserted that "[a]s soon as the ISO is in a position to competitively procure and financially settle Voltage Support and Black Start services based on input from a stakeholder process it expects to conduct, the ISO will file to amend its Tariff to so provide."¹⁸ Further, the ISO asserted that it never intended to procure Voltage Support or Black Start services from RMR units indefinitely.

15. DWR also criticized the ISO for continuing to obtain Voltage Support and Black Start services exclusively through its Local Area Reliability Service (LARS) process, under which it issues a request for proposals and successful candidates are expected to execute RMR Agreements in a form consistent with the Commission-approved pro forma RMR Agreement.¹⁹ DWR questioned the seriousness and credibility of the ISO's effort to implement competitive procurement, arguing that in its 1999 LARS Request for Proposals, the ISO stated that it had not developed technical support standards for the provision of Voltage Support and Black Start services and had not identified a need for more services than those already supplied by existing RMR generation.

Scheduling Coordinators shall provide the ISO with their load restoration time requirements to any loads that provide emergency service.

¹⁶ DWR filed a joint initial brief on Issue A.4 with other proponents that did not seek rehearing of the November 19 Order. For purposes of this order, we treat the proponents' arguments as DWR's arguments.

¹⁷ ISO Reply Brief at 72-73.

¹⁸ *Id.* at 72.

¹⁹ The ISO uses a LARS process to determine which resources it requires to be designated as Must-Run in order to ensure system reliability. It continues to obtain Voltage Support and Black Start services on an annual basis through its LARS process.

16. The ISO responded that DWR was claiming that competitive procurement through the LARS process is somehow inferior because of the requirement that successful generators execute RMR agreements. According to the ISO, DWR failed to recognize that all entities are able to participate in the LARS competitive procurement process and that Voltage Support and Black Start services are location-dependent, and therefore it is necessary to enter into a cost-based RMR agreement with each provider in order to prevent such providers from exercising market power. Thus, the ISO contended that even if it were to procure Voltage Support and Black Service via another mechanism, such as a periodic auction, it would still have to address the market power issue.²⁰

17. The ISO further argued that it has always reasoned that Voltage Support and Black Start services could technically be provided from other resources in the state, citing its LARS 2000 initiative. It stated that the LARS initiative was intended to explore cost-effective alternatives to existing RMR generation and considered such alternatives as non-RMR generation, transmission project alternatives, and load-based alternatives, such as demand-side management programs. However, according to the ISO, no entity responded to the LARS 2000 request for proposals offering to supply Voltage Support and Black Start services.²¹

18. DWR also asserted that the delay in implementation of competitive procurement for Voltage Support and Black Start subjected DWR to what it characterized as the ISO's artificially increased cost of obtaining such services. The ISO responded that DWR ignored the fact that the ISO obtained such services under cost-based RMR agreements, and it reiterated that it annually solicited cost-effective alternatives to the RMR agreements. Finally, the ISO argued that the ISO Tariff already provides it with the discretion to competitively procure Voltage Support and Black Start and that no change to the Tariff or protocols is warranted.

²⁰ See also *Cities of Anaheim, Azusa, Banning, Colton, and Riverside, California and City of Vernon, California v. California Independent System Operator Corp.*, 107 FERC ¶ 61,070 at P 26 & n.6 (2004), *reh'g denied*, 110 FERC ¶ 61,387, *reh'g denied*, 111 FERC ¶ 61,218 (2005) (RMR agreements prevent RMR unit owners from taking advantage of location-specific market power).

²¹ As noted above, *supra* note 19, the ISO has conducted subsequent LARS initiatives.

19. The ISO has not disputed that it has always intended to obtain Voltage Support and Black Start services pursuant to a competitive process. Further, in response to intervenors' argument that the ISO should competitively procure Voltage Support, the October 1997 Order noted that:

section 2.5.3.4 clearly provides that if the ISO requires additional Voltage Support, it will procure such services competitively through negotiated contracts from any available source which meets the ISO's technical requirements on an annual or other such basis. Moreover, section 2.5.3.4 of the ISO Tariff provides that if no more economic sources are available the ISO may instruct a Generating Unit to move its MVar output outside its mandatory range. In that case, if the Generating Unit must reduce its ME output it will be compensated by the ISO.^[22]

Commission Determination

20. With respect to DWR's request for rehearing, the ISO did not dispute that it originally committed to obtain Voltage Support and Black Start services through competitive procurement – a commitment that the Commission cited in the October 1997 Order conditionally authorizing the ISO's operations. Further, the ISO reiterated its commitment to do so in its reply brief. So, the real issue here is whether the ISO should be directed to implement a specific process for competitive procurement of Voltage Support and Black Start services pursuant to its commitment.

21. Based on the discussion above, we believe that the LARS process has represented a good faith effort by the ISO to competitively procure Voltage Support and Black Start services. However, the ISO has yet to implement a competitive procurement process as it committed to do in 1997 and again in 2000. Given that DWR indicates that it and perhaps others are prepared to offer Voltage Support and Black Start services through a competitive procurement process, there is some evidence that reliable and economical sources of such services exist as alternatives to the current means of procurement. Further, while the ISO stated that it would work with stakeholders to implement competitive procurement of Voltage Support and Black Start services, we have yet to see a proposal. In view of the ISO's commitment, the passage of time without fulfilling that commitment and DWR's representation that it and others are able to provide such services, we will grant rehearing on Issue A.4 and direct the ISO to submit a proposed

²² October 1997 Order, 81 FERC ¶ 61,122 at 61,500.

structure for the implementation of competitive procurement of Voltage Support and Black Start services. Such submittal should include its plans for the implementation of competitive procurement of those services, including a proposed timeline for doing so.

22. We recognize that the ISO currently has time and resources committed to its pending market redesign, which is expected to be implemented in February 2007.²³ Therefore, we will direct the ISO to submit its proposed structure and timeline for implementing competitive procurement of Voltage Support and Black Start services within 120 days of the date of this order. Accordingly, DWR's request for rehearing is hereby granted.

The Commission orders:

(A) The request for rehearing is hereby granted, as discussed in the body of this order.

(B) The ISO is hereby directed to submit a compliance filing within 120 days of the date of this order, as discussed in the body of this order.

By the Commission.

(S E A L)

Magalie R. Salas,
Secretary.

²³ See *California Independent System Operator Corp.*, 112 FERC ¶ 61,013, order on reh'g, 112 FERC ¶ 61,310 (2005).