SOUTHERN CALIFORNIA EDISON COMPANY WHITE PAPER

ON

CENTRALIZED CAPACITY MARKETS AND FEDERAL/STATE JURISDICTION

I. OVERVIEW

Implementation of a centralized capacity market in California that is administered by the CAISO, as proposed by the California Forward Capacity Markets Advocates (CFCMA), will necessarily increase the Federal Energy Regulatory Commission's (FERC's) role in overseeing the wholesale capacity market in California. However, the increased role for FERC will not be a dramatic shift in regulatory oversight, given FERC's existing broad statutory jurisdiction over the sale of wholesale power and interstate transmission. Instead, the FERC's increased role will be primarily related to overseeing the adoption of the specific rules necessary to implement a centralized capacity market, including the necessary market power mitigation measures that are an integral component of the CFCM proposal. However, as discussed below, FERC's actions with respect to centralized capacity markets in other regions indicate that FERC is willing to show deference to the states regarding numerous capacity market/resource adequacy issues and will respect state jurisdiction. Indeed, under the centralized capacity market proposed by CFCMA, the California Public Utilities Commission (CPUC) would retain significant control and influence over capacity procurement – including the authority to ultimately require the Investor Owned Utilities' (IOUs') to entirely self-supply resources into the market if necessary – and oversight of energy procurement.

II. EXISTING FERC JURISDICTION OVER WHOLESALE ELECTRICITY MARKETS AND ITS ROLE IN MARKET POWER MITIGATION

FERC has broad jurisdiction over the wholesale sale of both electric energy and capacity pursuant to the Federal Power Act (FPA).¹ With respect to energy sales, courts have confirmed that, under certain circumstances, FERC may rely on the market to set rates for wholesale energy sales.² Such authority not only includes market power monitoring and mitigation, it requires it. In order to permit market-based pricing, as the Ninth Circuit has reminded FERC, it must be vigilant in ensuring market power is mitigated.³ FERC's market-based regime was permitted so long as it was coupled with enforceable post-approval reporting that would enable FERC to determine whether the rates were just and reasonable and whether market forces were truly determining the price.⁴

¹ 16 USC § 824.

² E.g., La. Energy & Power Auth. v. FERC, 141 F.3d 364 (D.C. Cir. 1998).

³ California ex rel. Lockyer v. FERC, 383 F.3d 1006 (9th Cir. 2004), cert. denied, 127 S. Ct. 2972 (2007) (Lockyer).

⁴ See id.

In an untold number of orders in the past decade, FERC has addressed market power and imposed market power mitigation remedies vis-à-vis the wholesale energy markets.⁵ As markets have become more sophisticated, so do the market power mitigation measures.⁶ Also, FERC's authority under the EPAct of 2005 over generation facility purchases, which authority was added to FPA Section 203, provides it a significant new market power mitigation tool. This statutory authority allows FERC to block acquisitions of generating capacity that will result in the potential to exercise market power.

With respect to wholesale capacity sales, FERC has plenary jurisdiction, while the states are permitted to regulate the prudence of wholesale purchases by their jurisdictional entities. Despite not having direct jurisdiction over capacity purchases, FERC has asserted jurisdiction over those aspects of capacity markets and resource adequacy requirements that impact wholesale sales and transmission reliability. For example, in the present California market, FERC has already had a hand in expanding reliability requirements to non-CPUC jurisdictional LSEs. In approving the CAISO's Interim Reliability Requirements Program (IRRP), FERC's jurisdictional authority was challenged by LSEs that complained about having to adhere to the resource adequacy reporting requirements adopted by the CPUC.⁷ PG&E argued that EPAct 2005 expressly limits FERC's authority with respect to resource adequacy as it relates to the new Electricity Reliability Organization (ERO). The CPUC argued that, read broadly, the IRRP appears to require LSEs to comply with CAISO-imposed resource adequacy requirements even though the authority to impose these requirements is clearly outside the CAISO's jurisdiction given the position of California law on the subject and the existence of the CPUC's resource adequacy requirements program. FERC found that the CAISO's IRPP would "not interfere with the resource adequacy decisions of the CPUC or other LRAs."8 With respect to PG&E's concerns that the proposed tariff revisions should not supersede or otherwise interfere with the actions taken by the CPUC or by any LRA to implement resource adequacy, FERC found "that the CAISO tariff provides sufficient discretion to the LRAs to enact, modify or implement their resource adequacy programs."9 Therefore, even in the absence of a centralized capacity market, FERC has already asserted its jurisdiction in the sale and purchase of capacity in California, while providing deference to the state's preferences.

Additionally, FERC presently has a central role in administering wholesale market power mitigation rules with respect to wholesale capacity sales in California. Local area

⁶ Cal. Indep. Sys. Operator Corp., 119 FERC ¶ 61,076 at P 117 (2007) (CAISO Rehearing Order) (to alleviate concerns over demand side market power, FERC orders the CAISO to implement convergence bidding within 12 months after the implementation of MRTU Release 1), appealed sub nom. Sacramento Municipal Utility District, et al. v. FERC, Case Nos. 07-1208, et al. (D.C. Cir.). This appeal, in which several municipal utilities have challenged FERC's jurisdiction to impose resource requirements, will likely be dismissed for procedural reasons because a further rehearing was still pending at FERC at the time of the appeal.

⁷ California Indep. Sys. Operator Corp., 115 FERC ¶ 61,172 (2006).

⁸ *Id.* at P 28.

⁹ Id. at P 30.

⁵ E.g., San Diego Gas & Elec. .Co., 93 FERC ¶ 61,121 (2000) (imposing price caps).

reliability requirements are determined by the CAISO, pursuant to the procedures approved by FERC in the CAISO's Tariff. In connection with setting the requirements for local area capacity needs, the CAISO is authorized to engage in backstop procurement pursuant to FERC-approved mechanisms (such as the Reliability Capacity Services Tariff) in order to ensure that the local area needs are met, which in turn functions as a market power mitigation tool with respect to generator market power within the local areas. In another CAISO case,¹⁰ FERC encouraged the CAISO to monitor, among other things, the mitigation frequency of non-RMR and non-RA resources as well as the effects of local capacity area RA resource requirements once phased into the Market Redesign and Technology Upgrade (MRTU) to assess whether units needed for local reliability are receiving adequate compensation from RA requirements. The CAISO Department of Market Monitoring was asked to monitor mitigation frequency and the RA capacity markets to determine if these markets are sufficiently granular to provide adequate compensation for local reliability units.

Thus, despite FERC's broad authority in the regulation of wholesale energy and capacity markets, a state regulatory authority such as the CPUC undeniably has jurisdiction to impact the procurement activity within and competitiveness of wholesale power markets. Among other things, the CPUC presently has direct authority to establish and enforce procurement policies, energy portfolio requirements, capacity planning reserve requirements, and presumably resource counting conventions (*e.g.*, counting of intermittent resources for resource adequacy) applicable to its jurisdictional LSEs. As discussed below, in the context of approving centralized capacity market structures in various regions, FERC has acknowledged that much of this authority must continue to be retained by the state regulatory authorities. Indeed, the centralized capacity market proposed by CFCMA, while likely providing a more direct and up-front role for FERC in capacity market design and market power mitigation, will also enable the CPUC to retain significant authority and control over market outcomes.

III. FERC JURISDICTION OVER CENTRALIZED CAPACITY MARKETS, INCLUDING RESOURCE ADEQUACY OBLIGATIONS AND MARKET POWER MITIGATION

In the past three years, FERC has addressed the issue of how far its authority over capacity markets extends, as ISOs and others have proposed centralized capacity markets in which participation by LSEs is mandatory.¹¹

In the FERC order that resulted in the first appellate challenge to jurisdiction – *ISO New England, Inc.*, 112 FERC ¶ 61,254 (2005) – the Commission's answer to the jurisdictional challenge was rather simplistic: the ISO Tariff and the Participants Agreement

¹⁰ Cal. Indep. Sys. Operator Corp., 119 FERC ¶ 61,313 at P 352 (2007).

¹¹ Arguably, under FERC's own, broad view of its jurisdiction, it could *sua sponte* order the establishment of a capacity market, such as the type being contemplated by various California market participants. Whether such orders would survive judicial review, if opposed, remains an open question. Nevertheless, State involvement in the process of developing a capacity market design that is ultimately proposed at FERC for adoption will ensure that California retains substantial influence over the design of the market that is implemented.

allowed the filing. The Connecticut Department of Public Utility Control sought judicial review of this order, which accepted the ISO-NE's filing of proposed installed capacity requirements (ICR) for its participants. Realizing that this argument might not withstand judicial review, on brief, the Commission abandoned it.¹² In briefing the issue, FERC largely ignored its reliance on the ISO Tariff and the Participants Agreement as a basis for jurisdiction, contending instead that FPA section 201 permits the Commission to regulate generation resource adequacy because of its effect on interstate electricity transmission. The court rejected this argument but only on the grounds that FERC had replaced the original "tariff allows it" rationale in its order with post-hoc rationalizations. Since that case, FERC has re-asserted jurisdiction in several cases.

In *PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,087 (2007), FERC concisely summarized its jurisdictional bases over the proposed Fixed Resource Requirement and Reliability Pricing Model (RPM) Base Residual Auction in the PJM market this way:

The PJM capacity costs are a component of the wholesale price for power and, as such, fall within the Commission's jurisdiction. If insufficient resources are made available, system reliability throughout the PJM grid may be compromised. In addition, where resource demand exceeds the supply, the price for capacity may increase. These are direct effects on Commission-jurisdictional rates. Further, [Reliability Pricing Model] RPM's Base Residual Auction will 'set a sales price' that will directly affect wholesale rates and, therefore, is subject to the Commission's jurisdiction over wholesale rates under section 205 of the FPA.¹³

FERC's authority over centralized capacity markets would include authority to mitigate any perceived market power being exerted in such markets. Indeed, in virtually all the orders on capacity markets or resource adequacy requirements, FERC discusses market power mitigation.

For example, in ISO-NE, existing capacity resources may remove themselves from participation in the Forward Capacity Auction through the submission of a de-list bid. One aspect of capacity market power mitigation is that the PJM Market Monitor may reject a de-list bid. A generator whose de-list bid is rejected by the Market Monitor may either (a) submit a new de-list bid based on the Market Monitor's estimate of its costs or (b) not submit a new delist bid, but retain its ability to challenge the Market Monitor's estimate before FERC. Should the generator choose the latter alternative, it bears the risk that FERC may uphold the Market Monitor's determination and the generator will be required to participate in the auction at a bid level determined by FERC.¹⁴

¹² Conn. Dept. of Pub. Util. Control v. FERC, 484 F.3d 558 (D.C. Cir. 2007) (CDPUC v. FERC).

¹³ *PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,087 (2007) (*PJM*) at P 48.

¹⁴ *ISO New England, Inc.*, 120 FERC ¶ 61,087 (2007). Under PJM's RPM approach, there are specific measures to mitigate the exercise of market power as measured by the "three-pivotal supplier" test. For sellers owning existing resources that fail this test, mitigation entails capping

Additionally, in a case involving the NYISO, FERC discussed a prior order issued to the NYISO to report on the effectiveness of the demand curves used in the capacity market. FERC specifically found that the provision of this additional information would allow it to better assess the effectiveness of the ICAP Demand Curves on capacity, price stability, withholding, and investment in new generation.¹⁵

Despite indications that FERC views its jurisdiction over capacity markets as broad, FERC has indicated that state jurisdiction will be respected and that it will show deference to state determinations regarding resource adequacy. Some of the ways in which FERC has done so are summarized below.

Setting Resource Requirements. FERC will defer to state and local entity decisions when possible on resource adequacy matters. FERC thus indicated in *CAISO Rehearing Order* when discussing the IRRP requirements, that "as a general matter, California or the region may determine in the first instance the appropriate level of planning reserves by balancing reliability and cost considerations."¹⁶ In the context of centralized capacity market implementation, FERC similarly explained in *PJM* that it would show deference on this issue:

In this case, the Commission is not determining the capacity requirement; rather, PJM uses the loss of load methodology as determined by Reliability First, the regional reliability council, of which PJM is a member, to determine the resource adequacy requirement. The adoption of RPM has not changed in any way the 15 percent installed reserve margin used by PJM to ensure reliability. RPM, including the Fixed Resource Requirement, establishes the just and reasonable rate in order to ensure that PJM is able to meet the applicable reserve margin.¹⁷

FERC has clarified that it may review the means by which an ISO "determines the amount of resources member LSEs must provide (which leads ultimately to a determination of the amount of resources each individual state's LSEs must provide), which, as described above, directly affects the charges to customer, in order to evaluate the justness and reasonableness of the rates and charges to customers."¹⁸ It bears noting that FERC refused to defer to the New England

their capacity bids at a predetermined avoidable or opportunity cost level. Offers for new or planned resources are generally not subject to mitigation except in two specific cases. In the case where the seller may have the incentive and ability to increase prices above the competitive level, its bid for a planned resource may be rejected by the Market Monitor. In the case where the seller may have the incentive and ability to depress prices below the competitive level, its bid for a planned resource may be increased to more appropriately reflect the Cost of New Entry (Minimum Offer Price Rule). 119 FERC \P 61,318 at P 135.

¹⁵ New York Independent System Operator, Inc., 119 FERC ¶ 61,162 (2007).

¹⁶ CAISO Rehearing at P 558.

¹⁷ *PJM* at P 49.

¹⁸ *ISO New England*, 120 FERC ¶ 61,234 at P 27.

states as to certain ICR matters on the grounds that the states had not yet put forth a final proposal. Here, CFCMA's proposal is intended to proceed through full CPUC and CAISO proceedings in which the proposal will be refined to fully define the process for determining capacity requirements (which will include direct State involvement as described below), such that deference to the State's determinations will be appropriate.

Role of Demand-Side Resources. FERC will provide some deference to the states on demand-side resource issues. For example, in *CAISO Rehearing*, FERC ruled that "the CAISO must be allowed to make technical determinations as to whether a particular resource (whether a generator or demand response) can support grid reliability. However, we agree that the CAISO should respect California's determination that energy efficiency and demand-side resources receive the highest priority in meeting future reliability needs."¹⁹

Generation Siting/Construction. FERC has countered claims that it is intruding on state jurisdiction over generation siting or the need to construct generation within a state in its regulation of capacity markets. In *ISO New England*, FERC explained that it "is not seeking to pre-empt (and has not pre-empted) the state's decision-making as to when or where or how many new generating facilities should be built in that state, and ISO-NE's determination of the amount of capacity that each LSE must procure does not render the state unable to go through that decision-making process."²⁰ In *PJM*, FERC explained that neither RPM nor the Fixed Resource Requirement *required* the construction of new generation. According to FERC, RPM does not mandate or require the construction of new generation, or that any participant satisfy its capacity obligation through the use of any particular resource or set of resources. Rather, it renders transparent the choices that LSEs make to fulfill their capacity needs, so that they may make those choices in a more informed fashion.²¹

IV. CONTINUING AUTHORITY FOR THE STATE FOLLOWING IMPLEMENTATION OF A CENTRALIZED CAPACITY MARKET IN CALIFORNIA

Adoption of a centralized capacity market for California would mean that FERC would have authority to approve the ultimate capacity market design and market rules. Given FERC's existing authority with respect to wholesale capacity markets, implementation of a centralized capacity market in California has the advantage of ensuring that FERC will exercise its existing authority by implementing market power mitigation rules in an up-front manner as part of the market design. This removes the inherent uncertainty faced by California customers today when such mitigation rules are implemented through CAISO backstop procurement mechanisms that may be inconsistent with the State's resource adequacy program rules and goals.

Importantly, FERC's greater up-front role in market design will not preclude the State from impacting the capacity market. Rather, the State will retain influence over market

¹⁹ CAISO Rehearing at P 560.

²⁰ 120 FERC ¶ 61,234 at P 39.

²¹ 119 FERC ¶ 61,318 at P 51.

outcomes through: (1) responsibility for establishing key benchmarks for capacity market operation, (2) continuing oversight of utility procurement practices, (3) continuing oversight of energy portfolio requirements for CPUC-jurisdictional LSEs, and (4) other programs that can impact the capacity requirements and pricing of the centralized capacity market. Thus, implementation of a centralized capacity market will not prevent the State from having multiple levels of control with respect to the operation of the market for wholesale capacity in California.

Under the CFCMA's proposed capacity market design, the State would retain authority to determine critical inputs that shape the annual quantity of capacity sought by the centralized market, and will play a significant collaborative role in shaping other rules and policies of the market. Specifically, the State will continue to have authority to determine planning criteria. In consultation with the CAISO, the CPUC will continue to establish the applicable planning reserve margin (as discussed above, FERC has recognized that such authority should remain with the state in its rulings on other centralized capacity markets), and the California Energy Commission (CEC) will retain authority to develop the statewide peak load forecast.²² The CAISO, as it does today, will have the lead role in assessing locational capacity requirements and the allowed level of imports, but will seek CPUC input in making these determinations.²³ The CPUC will also have a substantial role in shaping capacity counting rules. The CAISO will be expected to work collaboratively with the CPUC to determine which resources should count as capacity and the appropriate calculations for assessing the capacity value of different classes of resources (e.g., wind, solar, hydro, etc.), before such rules are implemented. In addition, the CPUC will have a direct role in market power mitigation efforts. as the CAISO Department of Market Monitoring will consult CPUC staff after each centralized auction to discuss any apparent market power issues and work jointly on identifying appropriate remedies.24

Moreover, the State's broad jurisdiction over utility procurement activities and other key policy initiatives – which is not impacted by implementation of a centralized capacity market – can operate as a significant check upon the operation of the centralized market. For example, as FERC has previously acknowledged (as discussed above), the CPUC has authority to determine and implement demand-side management programs applicable to its jurisdictional LSEs. These programs, such as demand response and energy efficiency, can be expanded or enhanced by the CPUC as appropriate. The demand-side programs can reduce the need to acquire new capacity through the centralized capacity market and thereby lower costs for ensuring reliability.

Energy portfolio oversight is another area in which State jurisdiction is not affected by the implementation of a centralized capacity market, and indeed, such oversight can impact the operation of the centralized market. Even with a centralized capacity market in place, the CPUC will continue to exercise authority to implement and assess its jurisdictional LSEs' compliance with Renewable Portfolio Standard (RPS) requirements pursuant to Public Utilities

²⁴ *Id.*, at 24.

²² Track 2 Centralized Capacity Market Proposal of the California Forward Capacity Market Advocates, August 3, 2007, at Appendix A, p. 5.

 $^{^{23}}$ *Id*.

Code §§ 399.11 *et seq*. The California Air Resources Board (CARB) will likewise remain responsible for regulating Greenhouse Gas (GHG) emissions reduction and compliance requirements pursuant to Assembly Bill (AB) 32. This continuing state authority with respect to energy requirements will necessarily impact power procurement by LSEs, irrespective of the capacity requirements established through the centralized capacity market. Compliance with these requirements by jurisdictional LSEs will likely impact the capacity that these LSEs acquire and self-supply into the centralized market (when purchasing bundled capacity and energy products). Additionally, developers of new generation projects will project how the energy portfolio requirements of the LSEs will impact the demand and profitability of their planned projects and only commit to resources that can be cost-effectively projected to operate and sell energy and capacity services to the market.

The CPUC will also retain jurisdiction over utility procurement practices pursuant to AB 57, including the procurement of capacity, if a centralized capacity market is implemented for California. To the extent the CPUC concludes that the centralized market is not appropriately or cost-effectively ensuring reliability, the CPUC can order the three IOUs to build, or contract to build, new generation resources and enter into long- or short-term contracts with existing supply via the Long-Term Procurement Plan process (including, if necessary, resources sufficient to meet the entire bundled customer demand of each IOU rather than allowing the IOUs' demand to be satisfied by the centralized market). Such directives would result in the IOUs providing significant additional amounts of self-supply to the centralized capacity market of the types of resources the CPUC finds necessary to maintain reliability at an appropriate cost. Furthermore, the CPUC would continue to have the authority to direct the IOUs, where appropriate, to bolster their transmission systems to relieve import congestion into load pockets. This action could reduce the need for, and expense associated with, acquiring new generation within a given load pocket.

Accordingly, adoption of a centralized capacity market for California as proposed by CFCMA will not deprive the CPUC of key controls to ensure that, in its view, the market functions appropriately to meet reliability needs for California's customers.