

165 FERC ¶ 61,148
UNITED STATES OF AMERICA
FEDERAL ENERGY REGULATORY COMMISSION

Before Commissioners: Neil Chatterjee, Chairman;
Cheryl A. LaFleur and Richard Glick.

CXA La Paloma, LLC v. California Independent System Operator Corporation

ORDER DENYING COMPLAINT

(Issued November 19, 2018)

1. On June 20, 2018, CXA La Paloma, LLC (CXA La Paloma) filed a complaint pursuant to section 206 of the Federal Power Act (FPA)¹ against the California Independent System Operator Corporation (CAISO) alleging that the resource adequacy regime in California is unjust, unreasonable, and unduly discriminatory, and requesting that the Commission direct CAISO to implement centralized resource adequacy procurement and a transitional payment mechanism. In this order, we deny the complaint.

I. Background

2. CAISO and the local regulatory authorities within its balancing authority area, chiefly the California Public Utilities Commission (CPUC), are jointly responsible for ensuring resource adequacy through a variety of CPUC-administered programs and under the CAISO tariff. The primary resource adequacy procurement mechanism is the CPUC Resource Adequacy Program, which requires load serving entities to procure capacity in three distinct categories: system capacity requirements (effective June 1, 2006), local capacity requirements (effective January 1, 2007), and flexible capacity requirements (effective January 1, 2015). System requirements are determined by the California Energy Commission based on each load serving entity's adjusted monthly load forecast plus a 15 percent planning reserve margin. Local requirements are fixed for the year and determined based on an annual CAISO study. Flexible requirements are based on an

¹ 16 U.S.C. § 824e (2012).

annual CAISO study that assesses the largest three hour ramp needs for each month needed to run the system reliably to meet the imbalance between CAISO's peak energy demand and renewable energy production. CAISO's local and flexible resource adequacy determinations are adopted by CPUC for the upcoming resource adequacy year. Because there is no centralized capacity market, load serving entities meet their resource adequacy requirements through a combination of owned resources and bilateral contracting. Capacity procured under the resource adequacy program carries an obligation to bid into the CAISO markets, i.e., it has a must offer obligation.²

3. In addition, load serving entities must submit annual and monthly resource adequacy plans to CPUC and CAISO demonstrating that they have procured the capacity required to meet their forecasted load and reserve margin. Scheduling coordinators for resource adequacy resources must also submit annual and monthly supply plans to CAISO that verify their commitment to provide the listed resource adequacy capacity from specific resources. CAISO cross-validates the resource adequacy plans and supply plans to ensure that load serving entities are meeting their individual resource adequacy requirements. In the event of a discrepancy between plans, CAISO advises the relevant scheduling coordinators and local regulatory authorities to resolve the issue. CPUC may penalize load serving entities for deficiencies in their resource adequacy filings.

4. To remedy unresolved deficiencies in load serving entities' resource adequacy plans or to meet specified reliability needs,³ CAISO relies on backstop capacity procurement authority under the capacity procurement mechanism (CPM) provisions of its tariff.⁴ Resources designated under the CPM are treated like resource adequacy resources under CPUC's resource adequacy program and are subject to a must offer obligation. With the exception of risk of retirement CPM designations,⁵ resources

² Resource adequacy resources must offer into CAISO's markets in the hours for which they were procured. Resources that do not offer into CAISO's markets and are not on outage will have a generated bid submitted on their behalf. *See* CAISO Tariff Section 40.6.

³ CAISO may require additional capacity for reliability reasons, for example, when load serving entities have met their local regulatory authorities' megawatt capacity requirement but the capacity procured is not in the right locations or when a major transmission or generation outage significantly changes the assumptions that went into determining resource adequacy requirements.

⁴ CAISO Tariff, § 43A.

⁵ The risk of retirement CPM tariff provisions permit CAISO to retain resources that are at risk of retirement, generally for economic reasons, but are found by CAISO

receiving CPM designations are compensated based on their bids into a competitive solicitation process and these resources retain all revenues they earn in the CAISO markets. The risk of retirement designation of a resource⁶ serves as a bridge between the current year and the year the resource is needed for reliability, in those circumstances where the resource has not been able to secure a resource adequacy contract. Risk of retirement capacity is compensated based on its requested compensation, up to a cap, or based on the resource-specific rate calculated pursuant to Schedule F of the *pro forma* Reliability Must-Run (RMR) Agreement.⁷ Acceptance by a resource of a CPM designation, including a risk of retirement CPM designation, is voluntary.

5. CAISO may also rely on the authority set forth in section 41 of its tariff to enter into RMR contracts, which are geared toward addressing reliability issues on a local level.⁸ When a generator notifies CAISO of its planned retirement, CAISO studies whether the resource is needed for local reliability and, if so, CAISO can offer the resource an RMR contract. Acceptance of an RMR contract is mandatory. CAISO, based on its studies, also has the authority to terminate RMR contracts that are no longer necessary or can be replaced by less expensive or more competitive resources to maintain local reliability.

6. Implemented in February 2018, the process for addressing longer-term resource adequacy needs is the CPUC Integrated Resource Planning (IRP) process, (which replaced the prior Long-Term Procurement Planning (LTPP) process) as the umbrella planning proceeding that CPUC uses to assess long-term additional resource needs and identify necessary procurement to meet those needs. The IRP process implements California Senate Bill (SB) 350 by ensuring that load serving entities' planning and procurement efforts are on track to meet California's greenhouse gas emissions reductions targets.⁹ SB 350 requires the CPUC to "[i]dentify a diverse and balanced

to be needed for reliability in the year following the year of the designation. CAISO Tariff, § 43A.2.6.

⁶ To date, CAISO has never issued a risk of retirement CPM designation.

⁷ *Cal. Independ. Sys. Operator Corp.*, 153 FERC ¶ 61,001, at P 29 (2015).

⁸ Unlike RMR designations, risk of retirement CPM designations can be issued to meet any identified reliability need.

⁹ SB 350 also refined implementation of the "loading order" policy, which mandates that energy efficiency and demand response be pursued first, followed by renewables and lastly conventional supply. The loading order was adopted in the 2003

portfolio of resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy in a cost-effective manner.”¹⁰ CPUC describes the IRP process as an analysis leading to an optimized portfolio of resources to serve load that is constrained by greenhouse gas emissions, reliability, and cost.¹¹

7. CXA La Paloma owns the 1,124 megawatt (MW) natural gas-fired La Paloma generating facility in McKittrick, California, which began commercial operations in January 2003. CXA La Paloma is an indirect, wholly-owned subsidiary of LNV Corporation, a wholly-owned subsidiary of Beal Bank USA, and a senior secured creditor of La Paloma Generating Company, LLC (LPGC) in the bankruptcy proceeding wherein CXA La Paloma acquired the La Paloma generating facility on December 4, 2017.¹² In June 2016, prior to the acquisition by CXA La Paloma, LPGC filed a complaint with the Commission arising from CAISO’s denial of a request for approval of an outage due to economic reasons. LPGC requested that the Commission direct CAISO to grant LPGC an RMR designation for the portion of its generating capacity that had not been designated as resource adequacy capacity at the time the complaint was filed. The Commission denied the complaint, finding that CAISO had administered its tariff properly when it denied LPGC’s outage request.¹³

II. Complaint

8. In the instant complaint, CXA La Paloma alleges that regulation of the wholesale power market in California is fragmented and compartmentalized, and that in failing to develop centralized capacity procurement, CAISO has facilitated an unduly

Energy Action Plan prepared by the CPUC, the California Energy Commission, and the California Consumer Power and Conservation Financing Authority.

¹⁰ Cal. Pub. Util. Code § 454.51(a).

¹¹ CPUC, R.16-02-007, *Order Instituting Rulemaking to Develop an Electricity Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements*, at 13.

¹² See *La Paloma Generating Plant*, Cal. Energy Res. Conservation & Dev. Comm’n, Docket No. 98-AFC-2C, *Affidavit of James Erwin in Support of Petition to Transfer Ownership and Operational Control of the La Paloma Generating Plant* at 4 (filed Aug. 3, 2018).

¹³ See *La Paloma Generating Co., LLC v. Cal. Independ. Sys. Operator Corp.*, 157 FERC ¶ 61,002, at PP 28-29 (2016).

discriminatory, unjust and unreasonable market design that is harmful to both market participants and ratepayers.¹⁴

9. First, CXA La Paloma argues that the current resource adequacy regime is unduly discriminatory unjust and unreasonable because CPUC excludes existing units from the IRP (LTPP contracts), even though those existing resources can provide the same service as new resources.¹⁵ Second, according to CXA La Paloma, the current resource adequacy regime among CPUC and CAISO does not provide a revenue stream for capacity that can attract and retain resources that are needed for reliability. Third, CXA La Paloma argues that the current resource adequacy regime does not provide accurate price signals for suppliers to incent appropriate investment in existing resources and efficient entry and exit of supply. CXA La Paloma asserts that, rather than satisfying these requirements, the current capacity procurement mechanisms result in a problem of inadequate revenue for generation resources.¹⁶ CXA La Paloma claims that the problem of inadequate revenue is exacerbated by the participation of renewable resources that receive out-of-market subsidies through federal tax credits, which allows them to offer into the CAISO markets at zero or negative prices, thereby depressing locational marginal prices for electricity.¹⁷

10. CXA La Paloma posits that there are only two viable solutions to a lack of adequate revenue. The first is true scarcity pricing in the energy market, which would allow prices to fluctuate in a manner that adequately compensates resources that are only dispatched in peak or scarcity conditions. The other solution to the inadequate revenue problem, according to CXA La Paloma, is centralized capacity procurement. CXA La Paloma asserts that centralized capacity procurement benefits the market by ensuring that (i) capacity enters the market when and where it is needed; (ii) unnecessary or uneconomic capacity retires; (iii) market power is not exercised; and (iv) capacity prices are more predictable and transparent over the long term. CXA La Paloma contends that, without centralized capacity procurement, CAISO will be forced to increase its reliance on out-of-market mechanisms like RMR and CPM to prevent flexible resources from exiting the market. CXA La Paloma highlights that RMR and CPM designations have increased dramatically over the past year.¹⁸

¹⁴ Complaint at 28-29.

¹⁵ *Id.* at 14, 28-29

¹⁶ *Id.* at 30.

¹⁷ *Id.* at 32-33.

¹⁸ *Id.* at 29, 30-34.

11. CXA La Paloma argues that the existing resource adequacy requirement, in combination with the CPUC LTPP/IRP ensures that capacity prices will remain below the actual economic value of the capacity. Because resource adequacy requirements are fixed amounts of capacity, CXA La Paloma contends that these requirements effectively function as a vertical demand curve for capacity. CXA La Paloma explains that, with a vertical demand curve, prices will spike to a level at or near the cost of new entry if there is a shortage of capacity in the market, but will plummet when there is a surplus. CXA La Paloma asserts that CPUC's implementation of the LTPP/IRP ensures a surplus in the capacity market, which causes prices for resource adequacy to remain low. CXA La Paloma highlights that the Commission has approved a sloped demand curve rather than a vertical demand curve to determine capacity prices in other markets.¹⁹ CXA La Paloma asserts that the Commission has noted many benefits of sloped demand curves, including reduced price volatility, decreased susceptibility to market power abuses, increased reliability, and a better indication of the incremental value of capacity at different capacity levels.²⁰ CXA La Paloma argues that, just as it was necessary to transition from a vertical demand curve in ISO New England Inc. (ISO-NE), PJM Interconnection, L.L.C. (PJM), and New York Independent System Operator, Inc. (NYISO), it is necessary to implement a sloped demand curve for capacity in CAISO. Further, CXA La Paloma argues that it would be unjust and unreasonable to permit the functional vertical demand curve to persist because it prevents suppliers from receiving adequate compensation for the capacity they provide.²¹

12. CXA La Paloma also argues that CPUC's implementation of LTPP/IRP discriminates against existing generation resources and fossil fuel sources, and prevents these resources from obtaining adequate revenue. CXA La Paloma explains that under the LTPP/IRP, investor-owned utilities solicit long-term contracts for new generation to meet forecasted needs. CXA La Paloma complains that existing generators are excluded from procurement solicitations because their capacity is already assumed to be available when net positions for load serving entities are calculated. Further, CXA La Paloma objects to the state's loading order, which requires that investment in energy efficiency, demand side resources, and renewable resources occurs before any investment in new conventional electricity supply. CXA La Paloma argues that this approach implemented

¹⁹ *Id.* at 34-36.

²⁰ *Id.* at 36-38 (citing *ISO New England Inc. and New England Power Pool Participants Committee*, 147 FERC ¶ 61,173, at PP 29, 75 (2014); *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331, at PP 78, 169 (2006); *N.Y. Indep. Sys. Operator, Inc.*, 103 FERC ¶ 61,201 (2003)).

²¹ *Id.* at 37-38.

by the CPUC is unduly discriminatory and preferential.²² CXA La Paloma contends that this approach to procurement has led to capacity payments to new resources that are roughly four to seven times the payments received by existing units with contracts through the Resource Adequacy Program. Thus, CXA La Paloma asserts that certain existing resources will not be able to obtain sufficient revenue through the Resource Adequacy Program as the level of new renewable resources increases.²³

13. CXA La Paloma argues that backstop capacity payments through CAISO's CPM do not address the purported inadequate revenue problem. CXA La Paloma reports that, between the years of 2012 – 2017, CAISO paid out a total of \$39,530,862 in CPM payments, with an average payment amount of \$6.59 million per year. CXA La Paloma asserts that such low amounts are inadequate to compensate the generation facilities needed for reliability in California, particularly due to the increasing need for flexible resources.²⁴

14. Finally, CXA La Paloma argues that the currently effective market design is inconsistent with the Commission's objective of promoting competitive outcomes. CXA La Paloma cites the Commission's Strategic Plan to illustrate the Commission's commitment to promoting competitive processes to ensure just and reasonable rates,²⁵ and claims that the existing resource adequacy regime fails to achieve that objective. Instead, CXA La Paloma characterizes the current resource adequacy mechanisms as "a congregation of discriminatory, 'pick-the-winner' mechanisms."²⁶ CXA La Paloma contends that, in the absence of non-discriminatory, centralized, competitive resource adequacy procurement in California, CAISO will be forced to rely more and more on RMR and CPM to ensure the availability of the needed flexible resources.²⁷

²² *Id.* at 39 (citing CPUC & Cal. Energy Comm'n, CEC-100-2008-001, 2008 Energy Action Plan Update (Feb. 2008)).

²³ *Id.* at 39-40.

²⁴ *Id.* at 38.

²⁵ *Id.* at 40 (citing FERC, *Strategic Plan FY 2014-2018*, at 1 (Mar. 2014), <https://www.ferc.gov/about/strat-docs/FY-2014-FY-2018-strat-plan.pdf>).

²⁶ *Id.*

²⁷ *Id.*

15. Thus, CXA La Paloma asserts that the Commission can and should exercise its jurisdiction over resource adequacy to direct the implementation of centralized capacity procurement. CXA La Paloma acknowledges that FPA section 201(b)(1)²⁸ expressly excludes from the Commission's jurisdiction "facilities used for the generation of electric energy," but contends that the Commission's regulatory authority over wholesale sales, transmission, and reliability supports the argument that the Commission can and should assert jurisdiction over resource adequacy in California to ensure just and reasonable wholesale rates that are not unduly discriminatory. Further, CXA La Paloma asserts that, because decisions about capacity requirements directly implicate and affect reliability and jurisdictional rates, the regulation of resource adequacy falls squarely within the Commission's jurisdiction. CXA La Paloma states that the Commission recently, asserted its jurisdiction over resource adequacy when wholesale rates are affected in an order approving tariff amendments related to the forward capacity market in ISO-NE.²⁹ CXA La Paloma asserts that the practical need for coordination among CAISO, CPUC, and stakeholders to implement centralized capacity procurement does not alter the jurisdictional analysis. Thus, CXA La Paloma contends that the Commission should similarly assert its jurisdiction in the instant proceeding and order CAISO to implement centralized capacity procurement.³⁰

16. CXA La Paloma argues that the following features are critical to the success of a centralized capacity market:

- Centralized resource adequacy procurement administered by CAISO, with uniform, locational pricing;
- Appropriate flexibility requirements;
- Downward sloped demand curve;
- Market power mitigation rules in the form of a minimum offer price rule (MOPR);
- Capacity performance incentives;
- One-year long, three-year forward physical delivery obligation;

²⁸ 16 U.S.C. § 824(b)(1) (2012).

²⁹ Complaint at 27-28 (citing *ISO New England Inc.*, 162 FERC ¶ 61,205, at P 24 (2018) (CASPR Order)).

³⁰ *Id.* at 25-28.

- Reconfiguration auctions leading up to the delivery year; and
- Competition without regard to differences in technology or status.

CXA La Paloma asserts that the Commission has acknowledged the benefits of centralized capacity procurement in orders on the merits in other regional transmission organization (RTO) and independent system operator (ISO) resource adequacy regimes and argues that these features would have similar benefits in CAISO. In addition, CXA La Paloma contends that centralized resource adequacy procurement with these features would complement the existing bilateral market for resource adequacy by sending appropriate price signals for investment and entry and exit from the market. With this type of resource adequacy procurement, CXA La Paloma asserts that CPM could be eliminated and RMR could be retained as a last resort to retain capacity needed for local reliability.³¹

17. Finally, CXA La Paloma requests that the Commission order CAISO to implement transitional payments to be paid to resources that provide capacity benefits to the market to ensure just compensation until CAISO implements centralized capacity resource adequacy procurement.³²

III. Notice and Responsive Pleadings

18. Notice of CXA La Paloma's complaint was published in the *Federal Register*, 83 Fed. Reg. 30,162 (2018), with interventions and protests due on or before July 10, 2018. On June 22, 2018, CAISO filed a motion requesting an extension of time until August 24, 2018 to answer the complaint. CAISO's request was granted in a notice issued June 28, 2018.

19. Timely motions to intervene were submitted by Direct Energy Business Marketing, LLC; Bonneville Power Agency; Modesto Irrigation District; Transmission Agency of Northern California; the City and County of San Francisco, California; Exelon Corporation; EDF Renewable Energy, Inc.; San Diego Gas & Electric Company; Southern California Edison Company; California Air Resources Board; American Wind Energy Association; the Power and Water Resources Pooling Authority; the Natural Resources Defense Council and Sustainable FERC Project (jointly); People of the State of California, ex rel. Xavier Becerra, Attorney General; the Department of Market

³¹ *Id.* at 42-48.

³² *Id.* at 48-49.

Monitoring of the California Independent System Operator Corporation; and the Cogeneration Association of California.

20. Timely motions to intervene and comments or protests were filed by Public Interest Organizations;³³ the City of Santa Clara, California, doing business as Silicon Valley Power (SVP), and the M-S-R Public Power Agency (M-S-R) (collectively SVP/M-S-R); the Cities of Anaheim, Azusa, Banning, Colton, Pasadena, and Riverside, California (Six Cities); Imperial Irrigation District (IID); the California Municipal Utilities Association (CMUA); American Public Power Association (APPA); the National Rural Electric Cooperative Association (NRECA); the Northern California Power Agency (NCPA); the California Department of Water Resources State Water Project (SWP); Public Citizen, Inc. (Public Citizen); Arizona Electric Power Cooperative, Inc. (AEPCO); Pacific Gas and Electric Company (PG&E); NRG Power Marketing LLC (NRG); Cogentrix Energy Power Management, LLC (Cogentrix); Calpine Corporation (Calpine); Powerex Corp. (Powerex); the Electric Power Supply Association (EPSA); and the Western Power Trading Forum (WPTF).

21. A timely notice of intervention and protest was filed by CPUC. CAISO filed a timely motion to intervene and answer to the complaint.

22. A motion to intervene out-of-time was filed on September 4, 2018 by Solar RTO Coalition.

23. On September 10, 2018, and September 17, 2018, respectively, CAISO and Six Cities filed answers to the comments in support of the complaint. On September 14, 2018, NCPA filed an answer to the comments of WPTF, Calpine, and NRG in support of the complaint and NRG filed an answer to the protests. On September 20, 2018, CXA La Paloma submitted an answer to the CAISO August 24 answer and protests. On September 25, 2018, Powerex filed an answer to CAISO's September 10 answer. On September 28, 2018, CMUA filed an answer in response to certain comments. On October 11, 2018, CAISO filed an answer responding to the CXA La Paloma answer.

IV. CAISO Answer

24. CAISO argues that the Commission should dismiss the complaint because CXA La Paloma has not satisfied its burden under FPA section 206 to demonstrate that the CAISO tariff is unjust, unreasonable, or unduly discriminatory. CAISO contends that there is no basis here for the Commission to invoke its jurisdiction over resource adequacy to undo the existing bilateral procurement framework. CAISO asserts that,

³³ Public Interest Organizations include the Union of Concerned Scientists, Sierra Club, Communities for a Better Environment, Natural Resources Defense Council, and the Sustainable FERC Project.

when the Commission exercised its jurisdiction to order major foundational changes to the resource adequacy constructs in ISO-NE and PJM, it did so only because there were imminent and significant threats to system reliability. CAISO argues that its system does not face the significant reliability problems, flawed capacity market designs, and new resource needs that PJM and ISO-NE faced when the Commission ordered them to overhaul their then-existing capacity market constructs.³⁴

25. CAISO denies that the current resource adequacy paradigm creates any threat to reliability. CAISO contends that it has maintained system reliability under the current resource adequacy paradigm and backstop capacity procurement provisions of the CAISO tariff, and that CXA La Paloma has not identified any past reliability violation or provided any credible proof that future violations will occur.³⁵ CAISO states that it is proactively assessing the risks of early economic retirement of the gas fleet and future flexible capacity needs, and that its studies thus far have not indicated any flexible capacity sufficiency issues.³⁶ CAISO also notes that the CPUC is currently engaged in a rulemaking, the Resource Adequacy Refinement Proceeding, to consider modifications to the Resource Adequacy Program in light of recent trends, including (1) out-of-market procurement of resources for local reliability, (2) growth in Community Choice Aggregation (CCA), (3) gas fleet transition considerations driven by the CPUC's IRP proceeding, and (4) more variable weather and more weather-correlated generation.³⁷

26. CAISO disputes CXA La Paloma's claims that the current market design results in insufficient revenue for existing resources. CAISO argues that, in applying the FPA, the Commission has properly recognized that ISO/RTO wholesale market designs should provide wholesale suppliers an opportunity to earn revenue sufficient to cover costs and earn a return, but does not guarantee such revenues. CAISO states that the fact that some resources might receive less compensation than other resources in their bilateral contracts does not render an ISO/RTO's market rules unduly discriminatory or preferential. Moreover, CAISO argues that CXA La Paloma fails to support its claim that low prices

³⁴ CAISO Answer at 31-40.

³⁵ *Id.* at 41-44.

³⁶ *Id.* at 48-51 (citing CAISO, *2016-2017 Transmission Plan* at 206-19, <http://www.caiso.com/planning/Pages/TransmissionPlanning/2016-2017TransmissionPlanningProcess.aspx> (CAISO 2016-2017 Transmission Plan) and CAISO, *2017-2018 Transmission Plan* at 284-86, http://www.caiso.com/Documents/BoardApproved-2017-2018_Transmission_Plan.pdf).

³⁷ *Id.* at 105-106 (citing CPUC, *Amended Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge*, R.16-02-007 (May 14, 2018)).

in the CAISO energy and ancillary services markets demonstrate that the CAISO resource adequacy tariff provisions are unjust and unreasonable.³⁸

27. CAISO explains that any low prices in the CAISO markets are a product of capacity surplus and the availability of lower marginal cost resources in the region. In addition, CAISO notes that the Commission recently rejected arguments by some suppliers that the Midcontinent Independent Transmission System Operator, Inc.'s (MISO) resource adequacy construct was not just and reasonable because capacity prices were too low.³⁹ CAISO also argues that any impact on locational marginal prices of state-subsidized suppliers participating in the CAISO markets is irrelevant because any such impacts pertain solely to the CAISO-administered energy markets and not capacity procurement through the Resource Adequacy Program. CAISO maintains that the presence of subsidized resources in the energy markets does not render its tariff unjust and unreasonable, nor does it necessitate imposing a completely separate and distinct capacity market.⁴⁰

28. Further, CAISO emphasizes that CXA La Paloma's undue discrimination claims are focused on the CPUC's LTPP/IRP and loading order, and not any provision of the CAISO tariff. CAISO asserts, therefore, that CXA La Paloma's undue discrimination argument is not within the scope of FPA section 206 because it focuses solely on state-administered programs. CAISO argues that CXA La Paloma ignores overwhelming judicial and Commission precedent holding that states—not the Commission—have exclusive jurisdiction over resource planning and determining the mix of resources their load serving entities procure.⁴¹

29. Regarding CXA La Paloma's claim that capacity payments to new resources have been roughly four to seven times those received by existing units with resource adequacy contracts, CAISO states that its tariff does not set the prices for bilateral resource adequacy contracts and CAISO is not a party to those contracts. CAISO explains that these contracts are negotiated between willing buyers and sellers. Prices are established at arms-length based on different terms and conditions, as opposed to a market that clears supply and demand. CAISO notes that the Commission has previously rejected the

³⁸ *Id.* at 76-81.

³⁹ *Id.* at 76 (citing *Midcontinent Indep. Transmission Sys. Operator, Inc.*, 162 FERC ¶ 61,176, at P 60 (2018) (2018 MISO Order)).

⁴⁰ *Id.* at 82-83.

⁴¹ *Id.* at 85-88.

argument that price discrimination exists because new units are being paid a higher price and/or receiving longer-term contracts.⁴²

30. In response to CXA La Paloma's claims that CAISO's increasing reliance on RMR and CPM designations demonstrates flaws in California's resource adequacy paradigm, CAISO avers that most of its recent RMR and CPM designations were unique and transitional in nature. CAISO explains that the RMR and CPM designations involved a few resources that CAISO needed to meet specific localized reliability needs for a short period of time. CAISO states that it has identified longer-term solutions to address these needs, and such solutions are proceeding. CAISO contends that these were legitimate uses of backstop procurement because resource adequacy cannot, and should not be required to, procure capacity to meet every possible contingency. CAISO notes that none of the RMR and CPM designations raised by CXA La Paloma occurred to address a flexible capacity deficiency or meet a flexible capacity need.⁴³ CAISO also states that it is proposing several enhancements to the Resource Adequacy Program in the ongoing CPUC Resource Adequacy Refinement Proceeding, such as more granular local capacity requirements, that will help reduce CAISO's use of its backstop authority.⁴⁴

31. CAISO denies that the planning reserve margin acts as a vertical demand curve and that thermal resources are denied just compensation for their reliability contributions to the grid. CAISO notes that its tariff does not fix the reserve margin at 15 percent, but merely establishes a default minimum in the event that a local regulatory authority does not set its own reserve margin.⁴⁵ CAISO states that the CPUC's Resource Adequacy Program can accommodate procurement over the default 15 percent planning reserve margin, and the CAISO tariff does not preclude such procurement. CAISO argues that a sloped demand curve does not make sense in a bilateral procurement regime overseen by state and local regulators that can approve procurement above the level of the margin. In addition, CAISO highlights that in all three RTOs/ISOs where the Commission has approved a sloped demand curve, that feature was proposed by the RTO/ISO and was not mandated by the Commission.⁴⁶

⁴² *Id.* at 91-93 (citing *Cal. Independ. Sys. Operator Corp.*, 125 FERC ¶ 61,053, at PP 102-104 (2008)).

⁴³ *Id.* at 53-56.

⁴⁴ *Id.* at 67-68.

⁴⁵ *Id.* at 68-69.

⁴⁶ *Id.* at 73-75.

32. CAISO disputes comparisons to the eastern capacity markets, noting that the eastern capacity markets procure generic capacity and CAISO requires resources with specific attributes to maintain reliability in a transforming grid and to comply with state law dictating the generation mix.⁴⁷ CAISO argues that a bilateral procurement framework overseen by state and local authorities is better suited to accommodating this range of consideration than a mandatory centralized capacity market. CAISO further states that the Commission has never required RTOs/ISOs to have centralized capacity markets and has rejected suppliers' requests to impose a mandatory capacity market on MISO.⁴⁸

33. Finally, CAISO asks that the Commission reject CXA La Paloma's request for transitional payments to generators. CAISO argues that CXA La Paloma's proposal violates a fundamental tenet of the market-based rate program (i.e., that resources are not guaranteed cost recovery) and would require ratepayers to make long-term capacity payments to additional resources not found to be needed for reliability.⁴⁹

V. Comments and Protests

34. Public Interest Organizations, SVP/M-S-R, Six Cities, IID, CPUC, APPA, NCPA, SWP, and AEPCO echo CAISO's position that CXA La Paloma has not satisfied its burden under FPA section 206. Public Interest Organizations assert that CXA La Paloma has failed to identify any objective measures or empirical evidence by which the resource adequacy regime is failing to meet the needs of the grid.⁵⁰ Six Cities contend that the allegations in the complaint are inconsistent with recent reports by the Department of Energy and the U.S. Government Accountability Office regarding resource adequacy in organized markets in different regions of the country. Six Cities and NCPA also argue that declining energy prices, resource retirements, and CAISO's use of its CPM and RMR authority do not, in themselves, constitute evidence of market failure.⁵¹ IID further asserts that CXA La Paloma has not identified how the relevant CAISO tariff provisions are responsible for the perceived lack of revenue.⁵² SVP/M-S-R and IID characterize the complaint as CXA La Paloma's attempt to frame its own self-inflicted financial shortfalls

⁴⁷ *Id.* at 114-115.

⁴⁸ *Id.* at 95-96 (citing 2018 MISO Order, 162 FERC ¶ 61,176 at P 57).

⁴⁹ *Id.* at 122-123.

⁵⁰ Public Interest Organizations Protest at 7-8; Six Cities Protest at 7.

⁵¹ Six Cities Protest at 7-12; NCPA Protest at 6-8.

⁵² IID Protest at 18.

as a burden born by the entire market.⁵³ Public Citizen argues that CXA La Paloma’s complaint erroneously blames market dynamics for the underperformance of an already struggling generation facility.⁵⁴

35. CPUC likewise contends that CXA La Paloma’s assertions of inadequate revenue are not evidence that the resource adequacy regime is unjust and unreasonable, and also argues that CXA La Paloma has not demonstrated that a centralized capacity market in California will result in just and reasonable rates. Specifically, CPUC disputes CXA La Paloma’s claim that the financial issues raised in the complaint stem from the increased penetration of renewables and suggests that the complaint instead raises questions about CXA La Paloma’s business model rather than broader issues of market failure.⁵⁵

36. APPA argues that, even if the argument that CAISO’s resource adequacy rules reflect a “patchwork” of programs was accepted, it does not imply or demonstrate that the existing resource adequacy regime is unjust and unreasonable. APPA also asserts that the current configuration of resource adequacy mechanisms does not indicate that a centralized capacity market should be adopted, nor does the fact that CPUC and CAISO considered but decided not to implement a capacity market. APPA also disputes CXA La Paloma’s contention that the resource adequacy regime is unduly discriminatory and avers that there is no requirement within wholesale market rules that all resources be paid the same price.⁵⁶ NCPA similarly disputes CXA La Paloma’s undue discrimination argument and contends that the division of resource adequacy responsibilities between CAISO and CPUC complement each other to fulfill diverse requirements, consistent with the cooperative federalism at the heart of the FPA.⁵⁷ SWP asserts that the resource adequacy provisions of the CAISO tariff ensure that CAISO has enough capacity to reliably operate the grid, while still respecting local regulatory authorities’ decisions regarding their appropriate resource mix.⁵⁸

37. AEPCO highlights that, where centralized capacity markets exist, they have been adopted as a result of FPA section 205 filings. AEPCO contends that there is no precedent for the Commission to order the establishment of a capacity market under

⁵³ SVP/M-S-R Protest at 7; IID Protest at 17.

⁵⁴ Public Citizen Protest at 3-5.

⁵⁵ CPUC Protest at 2-4, 17-21.

⁵⁶ APPA Protest at 7-11.

⁵⁷ NCPA Protest at 8-10.

⁵⁸ SWP Protest at 4-5.

FPA section 206 in the first instance and, therefore, CXA La Paloma's complaint is legally deficient.⁵⁹ NCPA contends that the absence of a centralized capacity market does not render the existing resource adequacy regime unjust and unreasonable. NCPA asserts that the Commission has already rejected this argument by finding that a centralized capacity market is not a necessary component of a just and reasonable resource adequacy program.⁶⁰ Similarly, Public Interest Organizations, Six Cities, NRECA, and CMUA point out that the Commission has declined to impose a standardized market design on RTOs/ISOs, and has instead recognized the value of allowing stakeholders to develop different approaches that are tailored to regional needs.⁶¹ Six Cities highlights that the Commission recently rejected arguments that MISO's voluntary capacity auction should be made mandatory, and has accepted resource adequacy requirements for SPP that are implemented through bilateral capacity procurement.⁶²

38. Public Interest Organizations, Six Cities, IID, CPUC, and APPA argue that CXA La Paloma's request for the Commission to require a centralized capacity market oversteps the Commission's authority under the FPA and improperly intrudes upon California's discretion to determine its preferred mix of generation resources. Public Interest Organizations assert that, in accepting CAISO's resource adequacy tariff provisions, the Commission properly deferred to authority of state and local entities to set resource adequacy requirements and should continue to do so here.⁶³ Six Cities and IID likewise argue that the relevant legal precedent supports the well-established principal that the states, and not the Commission, are the entities primarily responsible for shaping

⁵⁹ AEPCO Protest at 3.

⁶⁰ NCPA Protest at 5 (citing *Sw. Power Pool, Inc.*, 164 FERC ¶ 61,092, at P 78 (2018) (2018 SPP Order)).

⁶¹ Public Interest Organizations Protest at 21-22; Six Cities Protest at 3-6; NRECA Protest at 2; CMUA Protest at 9-10.

⁶² Six Cities Protest at 6 (citing *Midwest Indep. Sys. Operator, Inc.*, 125 FERC ¶ 61,060, at P 39 (2008), *order on reh'g and compliance*, 127 FERC ¶ 61,054 (2009), *order on reh'g and compliance*, 137 FERC ¶ 61,213 (2011); 2018 SPP Order, 164 FERC ¶ 61,092 at P 78).

⁶³ Public Interest Organizations Protest at 14-20 (citing *Cal. Indep. Sys. Operator Corp.*, 116 FERC ¶ 61,274, at P 1117 (2006) (MRTU Order)).

the generation mix.⁶⁴ IID, CPUC, and APPA aver that the FPA allows states broad control over the type of resources they prefer.⁶⁵ IID contends that the Commission's actions with regard to ISO-NE's capacity market do not justify the jurisdictional overreach requested by CXA La Paloma. Further, IID argues that the Commission lacks the authority to require any specific outcome from a CPUC resource adequacy proceeding.⁶⁶ CPUC asserts that CXA La Paloma's request for the Commission to mandate CAISO-administered centralized capacity procurement would conflict with California law pertaining to the state's environmental goals.⁶⁷ APPA contends that CXA's arguments regarding the Commission's jurisdiction over resource adequacy do not support the conclusion that the Commission may impose a centralized capacity market, especially when doing so may interfere with a state's discretion over the generation mix.⁶⁸

39. Like CAISO, numerous protestors aver that the existing resource adequacy regime successfully ensures the availability of the capacity needed for reliable operation of the grid, and note that both CAISO and CPUC continue to refine their resource adequacy rules to adapt to the evolving needs of the grid.⁶⁹ Public Interest Organizations, IID, and PG&E note the ongoing and planned CAISO and CPUC stakeholder initiatives aimed at enhancing resource adequacy and argue that those processes are the appropriate forum for addressing the concerns raised in the complaint.⁷⁰

40. Six Cities, IID, APPA, NRECA, NCPA, SWP, and APPA argue that La Paloma has failed to demonstrate that its requested remedy of CAISO-administered centralized capacity procurement would improve upon the existing resource adequacy regime or address the concerns raised in its complaint. Six Cities contend that CXA La Paloma

⁶⁴ Six Cities Protest at 18-19; IID Protest at 7-11 (citing e.g., *Hughes v. Talen*, 136 S.Ct. 1288 (2016); CASPR Order, 162 FERC ¶ 61,205).

⁶⁵ See IID Protest at 7; CPUC Protest at 25-26; APPA Protest at 5 (citing 16 U.S.C. § 201(b) (2012)).

⁶⁶ IID Protest at 11-16.

⁶⁷ CPUC Protest at 22-24.

⁶⁸ APPA Protest at 5-7.

⁶⁹ Public Interest Organizations Protest at 8-11; SVP/M-S-R Protest at 9-10; IID Protest at 22-23; CPUC Protest at 5-17; CMUA Protest at 5-9.

⁷⁰ Public Interest Organizations Protest at 10-12; IID Protest at 23-25; PG&E Protest at 3-6.

presents no evidence that there is an overall shortage of capacity in California or that a mandatory capacity auction would result in the procurement of capacity with the right operational attributes in the right locations.⁷¹ IID asserts that CXA La Paloma has not shown how a centralized auction with a sloped demand curve would provide CXA La Paloma with a more consistent revenue stream than the current regime. Further, IID argues that the imposition of a centralized capacity market could adversely impact reliability by disrupting present expectations regarding resource adequacy import capability into CAISO.⁷²

41. APPA disputes CXA La Paloma's claim that a centralized capacity market is the only proven approach for addressing the "missing money" problem. APPA and NCPA note the numerous challenges faced by the eastern RTO/ISO centralized capacity markets, such as ongoing litigation and numerous design changes, and argue that those markets have not necessarily achieved a desired resource mix or avoided the need for backstop procurement mechanisms. APPA asserts that CXA La Paloma fails to explain how its proposed centralized capacity procurement would incorporate a flexible capacity requirement or why centralized procurement is necessary to achieve a requirement that is already in place in California.⁷³ NCPA contends that CAISO is already taking the actions needed to ensure the availability of the needed flexible capacity.⁷⁴ NRECA posits that the implementation of a mandatory capacity market could complicate and delay CAISO's efforts to address flexibility requirements.⁷⁵

42. AEPCO argues that the adoption of a centralized capacity market in some regions does not make it appropriate for CAISO and raises concerns that a MOPR may present the risk of double payment for capacity that is self-supplied. AEPCO also disputes the notion that a single market clearing price is necessary to achieve just and reasonable, and not unduly discriminatory rates.⁷⁶

43. Finally, Six Cities, IID, CMUA, and PG&E contend that CXA La Paloma's request for a transitional payment mechanism should be denied. Six Cities and CMUA assert that CXA La Paloma has not shown that transitional payments are necessary or

⁷¹ Six Cities Protest at 12-17;

⁷² IID Protest at 26-28.

⁷³ APPA Protest at 11-16; NCPA Protest at 12-14.

⁷⁴ NCPA Protest at 11-12.

⁷⁵ NRECA Protest at 2.

⁷⁶ AEPCO Protest at 4-5.

appropriate.⁷⁷ IID contends that, because the Commission should deny CXA La Paloma’s request for centralized capacity procurement, its request for transitional payments is moot.⁷⁸ PG&E asserts that transitional payments are unnecessary because CAISO already has the authority to address resource adequacy deficiencies or potential retirements through its RMR and CPM processes.⁷⁹

44. Some commenters offer support for CXA La Paloma’s arguments about the resource adequacy framework. NRG, Cogentrix, Calpine, Powerex, EPSA, and WPTF concur with CXA La Paloma’s position that the existing resource adequacy regime is flawed and is no longer just and reasonable. Cogentrix asserts that the current regulatory processes are fragmented and compartmentalized in a way that delivers unjust and unreasonable rates to market participants.⁸⁰

45. NRG argues that resource adequacy procurement currently discriminates not only between carbon-free power production and conventional generation, but also price discriminates, without any economic or policy justification, between otherwise comparable conventional generation by way of the LTPP/IRP’s exclusion of existing resources. NRG also argues that the use of monthly or annual procurement targets threatens the ability of generators to recover operating costs. In addition, NRG contends that the threat of buyer-side market power⁸¹ is rampant under the current resource adequacy design, particularly in light of the CPUC local capacity procurement rules. NRG asserts that the potential exercise of buyer-side market power puts artificial downward pressure on resource adequacy contract prices and also forces CAISO to assume the primary role in resource adequacy procurement through its backstop mechanisms.⁸²

46. Similarly, Calpine argues that California’s resource adequacy procurement policies, particularly the LTPP/IRP, perpetuate the economic hardship faced by existing thermal resources by discriminating against their procurement. Calpine asserts that the

⁷⁷ Six Cities Protest at 22-23; CMUA Protest at 11-12.

⁷⁸ IID Protest at 29.

⁷⁹ PG&E Protest at 7.

⁸⁰ Cogentrix Comments at 6.

⁸¹ Buyer-side market power is “the market power exhibited by entities seeking to lower capacity market prices for the capacity they buy.” *Consolidated Edison Co. of N.Y., Inc. v. N.Y. Indep. Sys. Operator, Inc.*, 150 FERC ¶61,139, at P 2 (2015).

⁸² NRG Comments at 4-10.

LTPP/IRP, combined with the state's loading order, has led to a persistent surplus of system resource adequacy capacity that suppresses resource adequacy and energy market opportunities for existing thermal resources and forces CAISO to rely on its backstop authority to secure the necessary local capacity. Calpine and WPTF contend that the lack of more granular sub-local procurement requirements, combined with CPUC's policy of allowing the aggregation of distinct and unrelated local areas and proliferation of CCAs, deny existing thermal generation located in local sub-areas a reasonable opportunity to obtain forward contracts sufficient to cover costs and ensure appropriate business planning.⁸³ Calpine asserts that several market trends, including the growth in renewables production, increasing incidence of negative prices, and system operating reserve margins in excess of the 15 percent resource adequacy planning reserve margin, make it likely that energy market revenues will decline over time, and resource adequacy compensation for existing thermal generators will not be sufficient to close the monetary gap. Calpine argues that CAISO's increased reliance on RMR and CPM demonstrates the effects of chronic under-compensation of existing thermal resources.⁸⁴

47. EPSA contends that the existing regime is not providing financial incentives to guide orderly investment in and entry into the market of resources with needed attributes, or exit from the market of resources without those attributes. EPSA asserts that the increased proliferation of RMR and CPM procurements indicates that the current construct is failing. Further, EPSA argues that CAISO's 2019 Local Capacity Technical Analysis shows that several local areas are deficient or nearly deficient in capacity. Thus, EPSA posits that lower compensation and misaligned incentives for unsubsidized conventional resources pose a risk to the reliable operation of the grid.⁸⁵

48. WPTF contends that the resource adequacy regime has not been meaningfully reformed in response to changing wholesale market conditions. WPTF acknowledges that the existing resource adequacy framework has not prevented CAISO from reliably operating the grid in the past; however, it asserts that there is evidence that this framework is ill-suited to meet the long-term needs of the grid given the changing resource mix. Further, WPTF asserts that the existing resource adequacy framework overestimates the quantity of capacity that resource adequacy resources can actually supply, particularly with regard to solar resources. Thus, WPTF posits that CAISO will

⁸³ Calpine Comments at 5-8; WPTF Comments at 10-11.

⁸⁴ Calpine Comments at 4-13.

⁸⁵ EPSA Comments at 4-7 (citing CAISO, 2019 Local Capacity Technical Analysis Final Report and Study Results, at 2 (May 15, 2018), <http://www.caiso.com/Documents/Final2019LocalCapacityTechnicalReport.pdf>).

be forced to increasingly rely on out-of-market backstop procurement to compensate for deficiencies in the existing market design.⁸⁶

49. Powerex alleges that the CPUC LTPP/IRP process is unduly discriminatory and distorts Commission-jurisdictional capacity and energy markets. Powerex recognizes that states may use their jurisdiction over generation facilities to pursue legitimate policy goals, but maintains that states may not use this authority in a way that intrudes upon the Commission's jurisdiction over wholesale rates or results in wholesale rates that are unduly discriminatory or otherwise unjust and unreasonable. Powerex opines that a review of data regarding the pricing of resource adequacy contracts indicates that price differentials demonstrate clear and intentional price discrimination and are not an unintended consequence of the state pursuing a legitimate policy objective. Further, Powerex asserts that the discriminatory outcomes observed in the bilateral capacity market suppress wholesale rates in the short-term energy markets.⁸⁷

50. Powerex further contends that the existing resource adequacy framework is incapable of ensuring reliability. It argues that the current resource adequacy rules systematically set procurement requirements that are below actual system needs. Powerex asserts that data collected by CAISO's Department of Market Monitoring (DMM)⁸⁸ indicate that there have been numerous days in June and September 2017 when actual peak system load exceeded the resource adequacy targets by thousands of MW. Powerex also points to CAISO's recent use of CPM to procure significant amounts of additional capacity to address shortfalls between the 2018 resource adequacy requirements and updated peak load forecasts as support for its contention that the current resource adequacy regime is not procuring sufficient capacity for reliable grid operation. Next, Powerex argues that the existing resource adequacy rules overstate the quantity of capacity that contracted resources can supply by failing to account for reasonably anticipated unavailability during the relevant delivery period and by qualifying behind-the-meter rooftop solar resources without reflecting expected performance.⁸⁹

51. Powerex asserts that its conclusions are supported by DMM data showing that the quantity of resource adequacy capacity made available in CAISO's day-ahead market fell

⁸⁶ WPTF Comments at 5-12.

⁸⁷ Powerex Comments at 11-18.

⁸⁸ CAISO Dep't of Market Monitoring Q2 2017 Report on Market Issues and Performance, at 20 (2017), <http://www.caiso.com/Documents/2017SecondQuarterReport-MarketIssuesandPerformance-September2017.pdf>.

⁸⁹ Powerex Comments at 20-26.

short of resource adequacy commitments by 4,000 to 5,000 MW on several occasions in 2017. Cogentrix likewise contends that the current resource adequacy framework overestimates the reliability contribution of intermittent resources and, therefore, underestimates the amount of additional procurement required, resulting in resource adequacy prices below the otherwise competitive level.⁹⁰ Powerex also opines that the DMM data raise serious questions about whether resource adequacy resources that submit offers into the day-ahead market are capable of delivering energy. Powerex states, for example, that rules governing external resources do not require that import resource adequacy contracts be backed by physical capacity and the necessary transmission rights.⁹¹

52. In addition, Powerex argues that CAISO's tariff provisions pertaining to the allocation of maximum import capability on interties erect barriers to participation by certain resources that would otherwise be capable of meeting resource adequacy requirements. Powerex contends that, under the current allocation process, there is generally little or no import capability available on most of the major interties despite evidence that the maximum import capability allocated to California load serving entities is frequently left unused. Powerex asserts that the result of this framework has been to significantly limit the ability of external resources to compete to supply resource adequacy capacity and high prices that are received for bilateral transfers of maximum import capability. Powerex argues that this barrier to the competitive provision of system resource adequacy capacity by resources located outside of the CAISO grid undermines competition and creates unduly discriminatory outcomes among otherwise similarly-situated suppliers.⁹²

53. NRG and Calpine claim that CAISO's increased use of its RMR and CPM backstop procurement authority demonstrates that the existing resource adequacy regime is not securing the resources necessary to ensure the reliable grid operation. NRG argues that Commission precedent is clear that extensive use of RMR contracts undermines effective market performance and the Commission should therefore direct CAISO to incorporate the effects of RMR agreements into a market-type mechanism as it did in ISO-NE.⁹³ Calpine contends that the RMR and CPM processes are ill-suited for procurement of reliability resources facing ongoing investment or retirement decisions,

⁹⁰ Cogentrix Comments at 5.

⁹¹ Powerex Comments at 19-31.

⁹² *Id.* at 31-36.

⁹³ NRG Comments at 4-7 (citing *Devon Power LLC*, 103 FERC ¶ 61,082, at PP 29, 31 (2003)).

and asserts that the “last minute” nature of these processes leaves little or no time for orderly planning. Further, Calpine argues that CAISO’s RMR tariff provisions, which often result in extensive negotiations and settlement proceedings, need to be modernized to align with the current operating conditions in CAISO.⁹⁴ Cogentrix asserts that systematic employment of RMR and CPM to maintain reliability interferes with efficient market function and distorts market signals. It argues that a proper market design would require any resource awarded an RMR agreement to prevent its retirement be prohibited from reverting to a market-based resource after the term of that agreement.⁹⁵

54. In light of the perceived deficiencies in the existing resource adequacy framework, Calpine, Powerex, WPTF, and NRG urge the Commission to take expeditious action instead of deferring to ongoing CAISO and CPUC proceedings. Calpine expresses concern that, without Commission action, these proceedings will end in inaction or piecemeal reforms. Calpine asserts that the establishment of a Commission remedy proceeding to run parallel to the other reform proceedings would enable the necessary comprehensive and holistic reform of the CAISO tariff. Calpine emphasizes that it is not asking the Commission to enjoin the development of an eastern-style centralized capacity market but requests that the Commission convene a technical conference, followed by hearing and settlement judge procedures, to facilitate reform of CAISO’s backstop procurement authority. Calpine offers several design principles that it believes would address the perceived shortcomings of the current RMR and CPM processes.⁹⁶ Cogentrix, EPSA, WPTF, and Powerex argue that, at a minimum, the Commission should convene a technical conference or establish settlement proceedings to explore options for an alternative approach to resource adequacy in California.⁹⁷

55. Powerex asserts that the fact that many of the issues in the complaint relate to state-administered programs does not provide a basis for Commission inaction. Powerex avers that the courts and the Commission have recognized that the Commission has a duty to act where state procurement programs distort or otherwise prevent just and reasonable and not unduly discriminatory wholesale market outcomes.⁹⁸ Powerex takes

⁹⁴ Calpine Comments at 14-17.

⁹⁵ Cogentrix Comments at 4.

⁹⁶ Calpine Comments at 17-25.

⁹⁷ Cogentrix Comments at 6-7; EPSA Comments at 10; WPTF Comments at 17; Powerex Comments at 38-39.

⁹⁸ Powerex Comments at 36 (citing CASPR Order, 162 FERC ¶ 61,205 at P 21; *New England Power Generators' Ass'n v. FERC*, 757 F.3d 283, 290 (D.C. Cir. 2014)

no position on the specific remedy requested by CXA La Paloma, other than to opine that such relief would not fully address the purported deficiencies of the existing framework. Powerex also emphasizes that it is not suggesting that the Commission can or should direct CPUC to make changes to its long-term procurement program or interfere with the state's pursuit of legitimate policy objectives.⁹⁹

56. WPTF argues that the Commission has both the jurisdiction and a duty to act to address issues with the existing resource adequacy paradigm to the extent that these issues affect wholesale rates.¹⁰⁰ WPTF asserts that, while states may use their authority over generation resources and retail rates to pursue legitimate policy objectives, the Commission must ensure that such programs do not undermine the ability of wholesale markets to result in just and reasonable rates and maintain reliability. WPTF notes that the CAISO tariff currently contains some resource adequacy provisions, but contends that the tariff lacks appropriate provisions to make CAISO responsible for ensuring that wholesale rates are properly compensatory for reliability-related services provided by capacity. WPTF agrees with CXA La Paloma that the solution to the purported deficiencies of the existing resource adequacy construct requires the adoption of a centralized capacity procurement framework that is transparent, preserves reliability, and sends appropriate price signals. To that end, WPTF requests that the Commission grant the complaint and clearly articulate a baseline of essential program attributes that the prospective resource adequacy program must contain. WPTF argues that, in the alternative, if the Commission finds that the instant record is not sufficient to fully explore the issues that implementation of such a program may raise, then the Commission should convene a technical conference to engage in comprehensive examination of the existing framework and possible remedies.¹⁰¹

57. NRG likewise contends that the Commission has authority to act and work with California stakeholders to craft a market design that accommodates state energy policies, addresses the challenges presented by the growth of CCAs, and ensures reliability for the wider Western Interconnection as well as just and reasonable rates for suppliers. Given

(noting that the Commission has a statutory duty to protect the integrity of wholesale rates against distortion by state subsidized resources).

⁹⁹ *Id.* at 36-38.

¹⁰⁰ WPTF Comments at 12-14 (citing *FERC v. Elec. Supply Ass'n*, 136 S.Ct. 760 (2016); *Transmission Access Policy Study Group v. FERC*, 225 F.3d 667, 718 (D.C. Cir. 2000); *Cal. Indep. Sys. Operator Corp.*, 134 FERC ¶ 61,211, at P 126 (2011); *N.Y. Indep. Sys. Operator, Inc.*, 153 FERC ¶ 61,010, at P 10 (2015)).

¹⁰¹ *Id.* at 14-17.

these challenges, NRG asserts that a move to centralized capacity procurement is particularly timely and requests that the Commission grant the complaint.¹⁰²

VI. Answers

58. CAISO argues that the Commission should disregard issues raised by commenters that go beyond the scope of the complaint and differ from the remedy CXA La Paloma seeks. CAISO notes that several of these matters can be raised or addressed in either the CPUC's Resource Adequacy Refinement Proceeding or CAISO stakeholder processes.¹⁰³ CAISO reiterates its argument that a centralized capacity market would be incompatible with both CAISO's existing market design and the circumstances that exist in the CAISO balancing authority area.¹⁰⁴

59. In response to NRG's comment regarding the growth of CCAs, CAISO contends that CCA is not a new concept and that no commenter provides evidence that this growth has rendered the general resource adequacy framework unjust and unreasonable.¹⁰⁵ CAISO also contends that concerns regarding its increased reliance on backstop authority are hyperbolic. According to CAISO, there were specific, limited circumstances surrounding these backstop procurements that will not be ongoing, and any remaining issues will be addressed by CPUC's Resource Adequacy Refinement Proceeding.¹⁰⁶ Regarding Powerex's argument that a September 2017 peak load event is an example of CAISO needing to lean on imports, CAISO states that Powerex inappropriately conflates capacity procurement and energy markets. CAISO contends that the fact that on some high load days import resources that voluntarily bid into the CAISO energy markets were more economic than other resources does not mean those external resources were providing capacity services that require capacity payments. CAISO also notes that the September 2017 peak load event was a 1-in-19-plus year weather event, well above the established planning criteria.¹⁰⁷ Finally, regarding Powerex's comments that the maximum import capability allocation framework presents a barrier for external resources to competitively provide resource adequacy capacity, CAISO notes that the Commission has previously found this allocation process to be just and reasonable

¹⁰² NRG Comments at 10-12.

¹⁰³ CAISO September 10 Answer at 4-6.

¹⁰⁴ *Id.* at 6-7.

¹⁰⁵ *Id.* at 8-9.

¹⁰⁶ *Id.* at 11-15.

¹⁰⁷ *Id.* at 20-23.

because it corresponds to the way that costs are contributed to the transmission grid while acknowledging historical use.¹⁰⁸

60. CAISO argues that, given CPUC's Resource Adequacy Refinement Proceeding and CAISO stakeholder initiatives, there is no reason at this time for the Commission to intervene and schedule additional technical conferences or other proceedings to discuss resource adequacy issues. CAISO maintains that resource adequacy issues, including those related to backstop procurement, are being fully vetted in these processes.¹⁰⁹

61. NCPA takes issue with the argument that the growth in CCAs is fragmenting the Resource Adequacy Program. NCPA contends that this is not the case, and also notes that commenters do not allege that the CAISO tariff is unjust and unreasonable as a result of CCA growth.¹¹⁰

62. NRG argues that recent events have undermined the theory that the existing resource adequacy framework is a competitive bilateral market designed to allow parties to contract at competitive prices. NRG contends that CAISO's increased use of its backstop authority to remedy fundamental resource adequacy shortfalls suggests that the current construct is no longer workable.¹¹¹ NRG further argues that the Commission has legal authority to address these failures, and that resource adequacy issues fall within the Commission's jurisdiction.¹¹² Finally, in response to suggestions that the Commission await the outcome of the Resource Adequacy Refinement Proceeding, NRG argues that there is no certainty that CPUC will reform the resource adequacy process.¹¹³

63. Six Cities and CMUA argue that it would be counter-productive for the Commission to establish further proceedings to address resource adequacy-related issues that are already being addressed in planned or ongoing CAISO and CPUC initiatives.¹¹⁴

¹⁰⁸ *Id.* (citing *Cal. Indep. Sys. Operator Corp.*, 119 FERC ¶ 61,164, at P 29 (2007) (2007 MIC Order)).

¹⁰⁹ *Id.* at 35, 38.

¹¹⁰ NCPA Answer at 3-4.

¹¹¹ NRG Answer at 5-6.

¹¹² *Id.* at 7-12.

¹¹³ *Id.* at 12.

¹¹⁴ Six Cities Reply Comments at 6-7; CMUA Answer at 3-4.

CMUA also asserts that there is no reason to conclude that the growth of CCAs will prevent a just and reasonable resource adequacy framework because the existing framework was designed to accommodate a range of load serving entities.¹¹⁵

64. CXA La Paloma avers that it is not seeking a guaranteed revenue stream, but only an opportunity to compete in a transparent and non-discriminatory market for capacity. CXA La Paloma repeats its objections to California's renewable resource policies, and complains that these policies discriminate against existing fossil-fueled generation and result in a surplus of capacity, thereby depressing capacity prices. CXA La Paloma asserts that all of these factors will lead to the premature retirement of resources with the necessary flexibility attributes.¹¹⁶ CXA La Paloma again claims that it and other resources are not being justly compensated for their reliability contributions, specifically referencing an exceptional dispatch on August 13, 2018 as an example of the alleged inadequate compensation.¹¹⁷ CXA La Paloma acknowledges the legitimacy of the state's role in implementing policy goals, but argues that the Commission nevertheless has the authority to intervene in cases where state policies interfere with Commission-jurisdictional rates. Thus, CXA La Paloma contends that the Commission has a duty to require a remedy for the perceived inadequacies of the current resource adequacy regime.¹¹⁸ Further, CXA La Paloma asserts that, although the Commission has not mandated a centralized capacity market as part of a just and reasonable market design, the fundamental principles of transparency, competition, and price signals to guide orderly entry into and exit from the market that are discussed in precedent related to the eastern RTOs/ISOs apply with equal force to the California markets. CXA La Paloma notes, however, that its intention is not to displace the current bilateral capacity construct, but rather to implement a complementary, CAISO-administered, centralized capacity procurement framework and a transitional payment mechanism to ensure that existing gas-fired generators have an opportunity to compete with renewable resources on an even playing field.¹¹⁹

65. Powerex argues that the Commission should reject CAISO's argument that the deficiencies identified in Powerex's comments are beyond the scope of the proceeding because this evidence directly supports the central claim of CXA La Paloma's complaint.

¹¹⁵ CMUA Answer at 3.

¹¹⁶ CXA La Paloma Answer at 5-7.

¹¹⁷ *Id.* at 6 n.13.

¹¹⁸ *Id.* at 14-17.

¹¹⁹ *Id.* at 23-26.

Powerex maintains that the existing resource adequacy construct is incapable of producing just and reasonable rates for capacity, and contends that the Commission should direct CAISO to submit a filing revising its tariff to address this issue.¹²⁰ Powerex also states that CAISO misunderstands its arguments about import resources. Powerex asserts that all physical resources, including those external to the CAISO balancing authority area, should have an opportunity to compete for forward resource adequacy contracts. Powerex argue that, while CAISO characterizes the September 2017 peak load event as a 1-in-19 plus year event, CAISO's analysis shows that the quantity of contracted capacity was below a 1-in-2 planning forecast and was therefore insufficient to meet normal peak summer season needs.¹²¹ Finally, Powerex argues that CAISO misunderstands its argument regarding the maximum import capability allocation framework. Powerex asserts that the Commission has never found it is just and reasonable for entities that bear the cost of the grid to be given exclusive right to deny access to transmission facilities, even when they are not using the associated capacity.¹²²

66. In its October 11, 2018 answer, CAISO argues that CXA La Paloma's reference to the August 13, 2018 exceptional dispatch does not constitute evidence that resources are not receiving just and reasonable compensation. Further, CAISO highlights that the Commission has repeatedly found that the exceptional dispatch provisions of its tariff provide appropriate compensation.¹²³

VII. Discussion

A. Procedural Matters

67. Pursuant to Rule 214 of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214 (2018), the notice of intervention and timely, unopposed motions to intervene serve to make the entities that filed them parties to this proceeding. Pursuant to Rule 214(d) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.214(d) (2018), the Commission will grant Solar RTO Coalition's late-filed motion

¹²⁰ Powerex Answer at 4-6.

¹²¹ *Id.* at 7-10 (citing CAISO, 2018 Summer Loads & Resources Assessment, <http://www.caiso.com/Documents/2018SummerLoadsandResourcesAssessment.pdf>).

¹²² *Id.* at 17-18.

¹²³ CAISO October 11 Answer at 2 (citing *Cal. Indep. Sys. Operator Corp.*, 126 FERC ¶ 61,150, at P 33 (2009); *Cal. Indep. Sys. Operator Corp.*, 129 FERC ¶ 61,144, at P 32 (2009)).

to intervene given its interest in the proceeding, the early stage of the proceeding, and the absence of undue prejudice or delay.

68. Rule 213(a)(2) of the Commission's Rules of Practice and Procedure, 18 C.F.R. § 385.213(a)(2) (2018), prohibits an answer to an answer unless otherwise ordered by the decisional authority. We will accept the answers filed by CAISO, Six Cities, NCPA, NRG, CXA La Paloma, Powerex, and CMUA because they have assisted us in the decision-making process.

B. Commission Determination

69. We deny the complaint. We find that CXA La Paloma has not satisfied its burden under FPA section 206 to demonstrate that the CAISO tariff is unjust, unreasonable, or unduly discriminatory or preferential. Under FPA section 206, "the burden of proof to show that any rate, charge, classification, rule, regulation, practice, or contract is unjust, unreasonable, unduly discriminatory, or preferential shall be upon ... the complainant."¹²⁴ Further, "[w]ithout a showing that the existing rate is unlawful," the Commission "has no authority to impose a new rate."¹²⁵ Accordingly, CXA La Paloma must demonstrate that CAISO's existing tariff provisions, which the Commission has previously accepted as just and reasonable and not unduly discriminatory or preferential, have become unjust, unreasonable, or unduly discriminatory or preferential. For the reasons discussed below, we find that CXA La Paloma has not made such a demonstration.

70. As a threshold matter, we find that CXA La Paloma's complaint fails to identify any specific CAISO tariff provisions that are unjust and unreasonable. Sections 40, 41, and 43A of the CAISO tariff create the framework for ensuring that CAISO has enough system, local, and flexible capacity to reliably operate the grid, while respecting the role of local regulatory authorities, such as CPUC. The Commission has held that this bifurcated framework respects the jurisdictional boundaries of the FPA while recognizing the states' historical role in ensuring resource adequacy.¹²⁶ CXA La Paloma has not demonstrated that circumstances have changed such that this division of responsibilities has become unjust and unreasonable, nor has CXA La Paloma alleged that any provisions of sections 40, 41, or 43A of the CAISO tariff have failed to achieve their objective of ensuring sufficient capacity to operate the grid reliably. Rather, CXA La Paloma

¹²⁴ 16 U.S.C. § 824e(b); *see also*, e.g., *FirstEnergy Serv. Co. v. FERC*, 758 F.3d 346, 353 (D.C. Cir. 2014); *Md. Pub. Serv. Comm'n v. FERC*, 632 F.3d 1283, 1285 n.1 (D.C. Cir. 2011).

¹²⁵ *Emera Maine v. FERC*, 854 F.3d 9, 24-25 (D.C. Cir. 2017).

¹²⁶ See MRTU Order, 116 FERC ¶ 61,274 at PP 1117-18.

complains generally about low prices for capacity transactions and posits that these low prices will lead to a shortage of generation resources with the needed flexibility attributes to maintain reliability.

71. We find that this line of argument fails for several reasons. First, we are not persuaded by CXA La Paloma’s arguments regarding inadequate revenue. The Commission has been clear that suppliers in competitive wholesale electricity markets are not guaranteed full cost recovery, but only the opportunity to recover their costs.¹²⁷ Thus, even if CXA La Paloma is experiencing financial hardship, it has not demonstrated that the existing resource adequacy construct in California systematically denies it or other resources a meaningful opportunity to recover their costs.

72. Second, we find that CXA La Paloma has not adequately supported its claims that the perceived insufficiency of revenues under the current resource adequacy paradigm will lead to the premature retirement of needed gas-fired resources. CXA La Paloma’s only evidence proffered on this issue is the CAISO DMM’s 2017 Annual Report, which found that “net operating revenues for many older existing gas-fired generators may be lower than their going-forward costs.”¹²⁸ The DMM’s 2017 Annual Report, however, focused solely on the performance of the CAISO-administered energy markets. The report did not analyze prices for resource adequacy contracts or evaluate how revenue from bilateral resource adequacy contracts affected the financial viability of these generators.¹²⁹ Thus, we find that CXA La Paloma’s reliance on this report is misplaced. CXA La Paloma offers no other support for its argument that resource adequacy prices are not adequate to keep system, local, and flexible capacity resources in the market. In addition, even if bilateral resource adequacy prices are low, by CXA La Paloma’s own admission this situation is not the result of any CAISO tariff provision, but instead results from a current surplus of capacity.¹³⁰ Further, the Commission has previously found that “low prices, in and of themselves, do not demonstrate that a market is not just and

¹²⁷ See *Bridgeport Energy, LLC*, 113 FERC ¶ 61,311, at P 29 (2005).

¹²⁸ CXA La Paloma Affidavit at 9 (citing CAISO Dep’t of Market Monitoring, 2017 Annual Report on Market Issues & Performance, at 60, 73-74 (2018), <http://www.caiso.com/Documents/2017AnnualReportonMarketIssuesandPerformance.pdf> (2017 DMM Report)); CXA La Paloma Ex. JT/JC-4.

¹²⁹ See 2017 DMM Report at 58-66.

¹³⁰ Complaint at 36 (“CPUC’s implementation of LTPP assures that such surplus [capacity] will exist.”).

reasonable.”¹³¹ More recently, the Commission rejected arguments that MISO’s resource adequacy construct was not just and reasonable because prices were too low. The Commission found that “[t]he low capacity prices, where they have arisen in MISO, accurately reflect MISO’s capacity surplus,” and are not necessarily indicative of an unjust and unreasonable construct.¹³² Thus, we find that CXA La Paloma’s broad and generalized claims about revenue insufficiency do not satisfy its burden under FPA section 206.

73. Third, we find that CXA La Paloma fails to identify any reliability violation resulting from the purported inadequacies of the resource adequacy paradigm, nor does it provide credible evidence that any such reliability violations are likely in the foreseeable future. To the contrary, a recent report issued by the United States Government Accountability Office indicates that the current resource adequacy paradigm will ensure sufficient reserve margins through 2021.¹³³

74. Also, as described by CAISO, its recent studies confirm that the existing volume of flexible capacity exceeds the maximum monthly flexible needs through 2021.¹³⁴ CAISO further explains that its sensitivity studies indicate that a potential capacity insufficiency does not start to emerge until the retirement of 4,000 to 6,000 MW of gas-fired resources beyond the net reduction of 4,900 MW of thermal resources by the end of 2020 that has already been accounted for in the CAISO transmission planning process and CPUC’s IRP.¹³⁵ Moreover, we find that CAISO has acknowledged the importance of flexible capacity and is taking appropriate steps through its stakeholder processes to reconsider its flexible capacity rules and enhance opportunities for flexible resources to earn additional revenue.

¹³¹ *Midwest Indep. Transmission Sys. Operator, Inc.*, 153 FERC ¶ 61,229, at P 110 (2015).

¹³² 2018 MISO Order, 162 FERC ¶ 61,176 at P 60.

¹³³ U.S. Gov’t Accountability Office, GAO-18-131, *Four Regions Use Capacity Markets to Help Ensure Adequate Resources, but FERC Has Not Fully Assessed Their Performance*, at 24-25 (2017); available at <https://www.gao.gov/assets/690/688811.pdf>.

¹³⁴ CAISO Answer at 48 (citing CAISO, Final Flexible Capacity Needs Assessment for 2019, at 9 (May 21, 2018), <http://www.caiso.com/Documents/2019FinalFlexibleCapacityNeedsAssessment.pdf>).

¹³⁵ CAISO Answer at 49 (citing CAISO 2016-2017 Transmission Plan at 206-219).

75. Although CXA La Paloma does provide evidence that CAISO's use of its CPM and RMR authority has increased recently,¹³⁶ we agree with CAISO that this evidence alone does not demonstrate a reliability concern, and specifically does not indicate a failure of the current resource adequacy paradigm to attract and retain flexible capacity. We agree with CAISO that each recent issuance of a CPM or RMR designation has been unique and transitional in nature,¹³⁷ and consistent with the purposes of CAISO's backstop procurement authority, and has not been for the purpose of curing a deficiency in flexible capacity. Thus, we find that evidence in the record contradicts CXA La Paloma's claim that the current resource adequacy construct may not be capable of supporting reliable grid operation.

76. We also find that CXA La Paloma has not substantiated its general claims that CAISO's and CPUC's decision not to implement centralized capacity procurement renders the existing resource adequacy paradigm unjust and unreasonable. As CAISO and several protestors correctly observe, the Commission has not required a centralized capacity market as part of a just and reasonable market design. Indeed, the Commission has consistently rejected a one-size-fits all approach to resource adequacy in the various RTOs/ISOs due, in large part, to significant differences between each region and also due to the well-established tenet that there can be more than one just and reasonable rate.¹³⁸ In a recent MISO case, the Commission considered and rejected requests to impose a mandatory centralized capacity market with a sloped demand curve and MOPR, despite purportedly low capacity prices and concerns that the existing construct was failing to ensure the availability of generation needed for reliability.¹³⁹ The Commission also recently accepted a proposal for a resource adequacy construct in SPP based on bilateral

¹³⁶ Complaint at 33-34; Exs. JT/JC-8, JT/JC-9.

¹³⁷ For example, CAISO has indicated that transmission upgrades that are currently underway should eliminate the need for an RMR contract for 2019 for Calpine's Metcalf unit. CAISO Answer at 60, 64.

¹³⁸ E.g., 2018 MISO Order, 162 FERC ¶ 61,176 at P 57; *Southwest Power Pool, Inc.*, 158 FERC ¶ 61,063, at P 13 (2017) ("market rules need not be identical among the regions to be just and reasonable, and there can be more than one just and reasonable rate."); *PJM Interconnection, L.L.C.*, 119 FERC ¶ 61,063, at P 39 (2007) ("[t]he Commission has permitted different just and reasonable rate designs reflective of particular system characteristics and stakeholder input.").

¹³⁹ 2018 MISO Order, 162 FERC ¶ 61,176 at PP 14-17, 56-58, 67, 75.

contracting.¹⁴⁰ While the Commission has opined on the benefits of specific features of the eastern RTO/ISO centralized capacity markets within the context of those specific regions and market designs, the Commission has not imposed a centralized capacity market in an RTO/ISO or found that it is the only just and reasonable resource adequacy construct to attract and retain sufficient capacity. With respect to the eastern RTOs, the capacity markets originated through section 205 filings or developed through settlements.¹⁴¹ Thus, we find that CXA La Paloma’s reliance on Commission precedent pertaining to the eastern centralized capacity markets is inapt here.

77. We find that CXA La Paloma’s undue discrimination argument and its claim that the LTPP/IRP gives undue preference to renewable resources is not legally cognizable under FPA section 206. CXA La Paloma focuses its claims of undue discrimination on state-administered programs and not on CAISO’s tariff or on CAISO’s implementation of its resource adequacy authority. With regard to the impact of the participation of subsidized renewable resources in CAISO’s energy markets, we find that CXA La Paloma has not demonstrated that CAISO’s energy market rules have become unjust, unreasonable, or unduly discriminatory as result of an increased proportion of subsidized resources in the market.

78. In addition, because we find that CXA La Paloma has not satisfied its burden under FPA section 206 to show that the existing resource adequacy construct is unjust, unreasonable, or unduly discriminatory or preferential, we find that it is not necessary to opine on the merits of a centralized capacity market as a remedy for CXA La Paloma’s concerns or to consider a transitional payment mechanism, as requested in the complaint.

79. We are not persuaded that the issues raised by Powerex’s comments provide a basis for Commission intervention in California’s resource adequacy construct. We find that the issues raised by Powerex are already being explored in ongoing or planned initiatives by CPUC or CAISO. Further, nothing in Powerex’s comments demonstrates how centralized capacity procurement would have resulted in a different outcome. Moreover, we find that Powerex has not demonstrated that circumstances have changed in any way to render CAISO’s previously-accepted tariff provisions unjust and unreasonable or unduly discriminatory or preferential.

¹⁴⁰ 2018 SPP Order, 164 FERC ¶ 61,092 at P 78. SPP also does not have a centralized capacity market.

¹⁴¹ E.g., *ISO New England Inc.*, 135 FERC ¶ 61,029 (2011), *reh’g denied in pertinent part*, 138 FERC ¶ 61,027 (2012); *PJM Interconnection, L.L.C.*, 115 FERC ¶ 61,079 (2006), *order on reh’g and approving settlement*, 117 FERC ¶ 61,331 (2007), *order on reh’g*, 119 FERC ¶ 61,318 (2007); *N.Y. Indep. Sys. Operator, Inc.*, 103 FERC ¶ 61,201 (2003).

80. Finally, we reject requests by Calpine, NRG, Cogentrix, EPSA and WPTF for further Commission proceedings on the issue of resource adequacy in California. We find that, through the CPUC Resource Adequacy Refinement Proceeding and related CAISO stakeholder processes, CAISO and CPUC are undertaking appropriate initiatives to address various challenges as grid conditions evolve.

The Commission orders:

CXA La Paloma's complaint is hereby denied, as discussed in the body of this order.

By the Commission. Commissioner McIntyre is not voting on this order.

(S E A L)

Kimberly D. Bose,
Secretary.