

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

CXA La Paloma, LLC	)	
	)	
	)	
v.	)	Docket No. EL18-177-000
	)	
California Independent	)	
System Operator	)	
	)	

**COMMENTS OF THE ELECTRIC POWER SUPPLY ASSOCIATION**

Pursuant to Rule 211 of the Federal Energy Regulatory Commission’s (“FERC” or the “Commission”) Rules of Practice and Procedure, 18 C.F.R. § 385.211 (2017), the Electric Power Supply Association (“EPSA”)<sup>1</sup> respectfully files these comments in the above-captioned proceeding. On June 19, 2018, CXA La Paloma, LLC (“La Paloma”) filed a formal complaint (“La Paloma complaint” or “the complaint”) against California Independent System Operator Corporation (“CAISO”) pursuant to section 206 of the Federal Power Act (“FPA”) and Rule 206 of the Federal Energy Regulatory Commission’s (“FERC” or “Commission”) Rules of Practice and Procedure, 16 U.S.C. § 824e; 18 C.F.R. § 385.206, alleging that CAISO’s continued reliance on short-term, interim, stopgap mechanisms for resource adequacy has created a regime that is unjust and unreasonable and unduly discriminatory. La Paloma requests that the Commission

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<sup>1</sup> Launched over 20 years ago, EPSA is the national trade association representing leading independent power producers and marketers. EPSA members provide reliable and competitively priced electricity from environmentally responsible facilities using a diverse mix of fuels and technologies. Power supplied on a competitive basis collectively accounts for 40 percent of the U.S. installed generating capacity. EPSA seeks to bring the benefits of competition to all power customers. EPSA filed a doc-less Motion to Intervene in this proceeding on June 26, 2018. This pleading represents the position of EPSA as an organization, but not necessarily the views of any particular member with respect to any issue.

order CAISO to implement a centralized resource adequacy procurement process including a downward sloped demand curve, uniform locational pricing, and several other key features, as discussed in the complaint. La Paloma also requests that the Commission order CAISO to implement a transitional payment mechanism to ensure that existing resources are justly compensated for the capacity they provide.

For the reasons discussed herein, EPSA urges the Commission to act on the La Paloma complaint and determine that California's patchwork resource adequacy construct is *not* just and reasonable as required under Section 205 of the FPA. As requested in the complaint, the Commission should require CAISO to implement multi-year forward centralized resource adequacy procurement with mandatory participation, with appropriate flexibility requirements given the region's resource mix, to generate price signals necessary to attract and retain resources needed for system planning purposes, to incent appropriate investment in existing resources, and to signal efficient entry and exit of supply. In addition, the Commission should order CAISO to implement all the essential elements of a functional centralized capacity procurement construct, which include a downward sloped demand curve, uniform locational pricing, and several other features outlined in the Complaint. At a minimum, the Commission should acknowledge that CAISO's current approach is fundamentally flawed because it has resulted in CAISO having to resort to out-of-market mechanisms to acquire the capacity it needs to maintain reliability, and failed to support resource adequacy in the region. Short of directing development of a mandatory, multi-year forward centralized resource adequacy procurement market, EPSA requests that the Commission open a settlement

proceeding to work with stakeholders to improve California's current dysfunctional capacity procurement construct.

## I. COMMENTS

CAISO has an obligation to ensure that any capacity market or resource adequacy construct enhances efficient price formation while procuring sufficient long-term resource adequacy in the region. As the complaint explains at length, with certain critical capacity market features entirely absent, CAISO's construct fails to accomplish those goals, is not just and reasonable, and must be modified. As the Commission has acknowledged in numerous proceedings, "in a competitive market, [it] is responsible . . . for assuring that [generators are] provided the *opportunity* to recover [their] costs."<sup>2</sup> While each missing element of CAISO's construct is troubling on its own, together they all but guarantee that independent power producers will not receive just and reasonable rates for the capacity they provide. California's current market structure, which is plagued by administrative entry and ubiquitous bid mitigation, offers no opportunity for independent power producers to recover their costs on their original investment.

As the complaint points out, California's increasing need for flexible generation – which will likely be further exacerbated by California's new building standards (which require new homes to install solar panels beginning in 2020)<sup>3</sup> – will force CAISO to rely

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<sup>2</sup> *Bridgeport Energy, LLC*, 113 FERC ¶ 61,311 at P 29 (2005); see also, e.g., *Price Formation in Energy and Ancillary Servs. Mkts. Operated by Reg'l Transmission Orgs. & Indep. Sys. Operators*, 153 FERC ¶ 61,221 at P 2 (2015) (the "goals of proper price formation" include "ensur[ing] that all suppliers have an opportunity to recover their costs"); *Midwest Indep. Transmission Sys. Operator, Inc.*, 102 FERC ¶ 61,196 at P 49 (2003) ("[W]e believe that competitive prices over the long run should recover both the fixed and variable costs of efficient generating units[,] and we fear investors may decline to invest in needed generation... if they do not see a reasonable expectation of recovering their costs.").

<sup>3</sup> California Energy Commission Press Release, May, 9, 2018, *Energy Commission Adopts Standards Requiring Solar Systems for New Homes, First in Nation*, [http://www.energy.ca.gov/releases/2018\\_releases/2018-05-09\\_building\\_standards\\_adopted\\_nr.html](http://www.energy.ca.gov/releases/2018_releases/2018-05-09_building_standards_adopted_nr.html).

more and more on short-term out-of-market procurement (e.g., Reliability Must-Run (“RMR”) and Capacity Procurement Mechanism (“CPM”)) if it does not implement a revised, durable market mechanism to maintain reliability.<sup>4</sup> This will ultimately hurt consumers, as the failure to compensate independent generators will discourage new entry and lead to higher prices for tighter energy supply, possibly even energy shortages under current conditions.<sup>5</sup>

**A. California’s Current Approach to Resource Adequacy Does Not Achieve The Needed Results Or Send Useful Signals For Investment**

The La Paloma complaint and the associated Jeffrey Tranen and Joseph Cavicchi affidavit (“the Affidavit”) illustrate how the current California resource adequacy construct is unduly discriminatory and is not just and reasonable. As currently structured, this regime is not providing financial incentives to guide orderly investment in and entry into the market by resources with needed attributes, or exit from the market by resources without those attributes. The Affidavit provides extensive detail on the issues facing California wholesale markets writ large:

“The current California RA wholesale markets do not meet the Commission’s wholesale electricity market objectives and are not able to assure reliable operation of the CAISO system through just and reasonable rates that are not unduly discriminatory or preferential. The rates are unduly discriminatory because existing resources and new resources are prevented from competing against each other and are

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These standards will result in additional proliferation of behind the meter solar, to which CAISO has limited visibility and cannot curtail. Such a change will only increase the need for flexible resources.

<sup>4</sup> CXA La Paloma, LLC Complaint v. California Independent System Operator Corporation, Complaint Seeking to Implement a Centralized Capacity Market, Docket No. EL18-177-000 (filed June 19, 2018), includes Affidavit of Jeffrey Tranen and Joseph Cavicchi, and exhibits in support thereof at p. 2.

<sup>5</sup> 2018 Summer Reliability Assessment, North American Electric Reliability Corporation, May 2018, p.6. “CAISO faces significant risk of encountering operating conditions that could result in operating reserve shortfalls. The increased risk is primarily a result of lower hydro conditions and the retirement of 789 MW of dispatchable natural gas generation that had been available in prior summers to meet high load conditions.”

[https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC\\_SRA\\_05252018\\_Final.pdf](https://www.nerc.com/pa/RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_05252018_Final.pdf).

compensated under different mechanisms, with existing resources receiving less than 25% of the capacity payments received by new resources providing substantially similar service. The rates are not just and reasonable because they are unable to guide investment in and retention of existing thermal resources that are increasingly needed to provide flexibility to the grid as the level of intermittent renewable resources continues to climb. Also, this results in the CAISO increasingly relying on inefficient out-of-market mechanisms to assure reliable operation by retaining resources that the market is signaling to retire. This market failure was foreseen almost a decade ago and its severity is clearly understood.”<sup>6</sup>

The increased proliferation of backstop procurements – nearly 2,000 MW in 2017 – is additional proof that the current construct is failing.<sup>7</sup> Furthermore, in coordination with the CEC and CPUC, CAISO recently announced that it will designate capacity procurement mechanism (“CPM”) system capacity pursuant to a “significant event.” This will result in the out-of-market procurement of thousands of megawatts of capacity for the September through December 2018 period, with the potential to contract for a staggering 5,000 MW for October 2018 alone.<sup>8</sup> CAISO itself has expressed concerns with the current resource adequacy values assigned to wind and solar resources, which it claims could lead to reliability issues.<sup>9</sup> CAISO has also proposed using a 1-in-5 peak

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<sup>6</sup> Affidavit of Jeffrey Tranen and Joseph Cavicchi at p. 2

<sup>7</sup> The Commission recently approved uncontested settlement agreements reducing the rates to be charged under RMR agreements and establishing a must-offer requirement for RMR units. See Metcalf Energy Center, LLC, RMR Agreement Filing, Docket No. ER18-240 (filed Nov. 2, 2017) (RMR agreement for Metcalf Energy Center); Gilroy Energy Center LLC, RMR Agreement Filing, Docket No. ER18-230 (filed Nov. 2, 2017) (RMR agreement for Yuba City Energy Center and Feather River Energy Center). In total, CAISO capacity obtained from RMR resources increased to nearly 1,000 MW this year, increasing dramatically over the past several months, while exceptional dispatch Capacity Procurement Mechanism usage has also increased to over 1000 MW in recent months. See Exhibit JT/JC-9 from Affidavit of Jeffrey Tranen and Joseph Cavicchi.

<sup>8</sup> Presentation of Delphine Hou, Manager State Regulatory Affairs, CAISO. *Intent to designate CPM capacity pursuant to CPM significant event*, August 2, 2018. <http://www.caiso.com/Documents/Presentation-CapacityProcurementMechanismSignificantEvent.pdf>

<sup>9</sup> Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 2019 and 2020 Compliance Years, CPUC Rulemaking 17-09-020, June 11, 2018, *Comments of the California Independent System Operator* at p. 6. “CAISO urges the [CPUC] to further evaluate that the ELCC value for wind and solar resources and their contributions to local reliability. [*sic*] The CAISO uses [CPUC]-

demand forecast to set system resource adequacy requirements for April, May, and June, instead of the currently applicable 1-in-2 peak demand forecast, citing the risk and operational challenges during the months with highest peak demand uncertainty, especially in the spring months when the weather can vary significantly before and during the transition into summer.<sup>10</sup> This uncertainty further highlights the need to better incent flexible resources to remain on the system in order to preserve reliability.

Additionally, as the complaint provides, California's current market and policy regime places additional strain on non-subsidized resources:

The current design of the California wholesale market fails to address (and in some cases exacerbates) this inadequate revenue problem. The CAISO energy market does not employ scarcity pricing and...the resource adequacy procurement mechanisms that currently operate in the California market do not provide the key benefits typically associated with centralized capacity procurement administered by an ISO or RTO. The inadequate revenue problem is exacerbated by the participation of suppliers receiving out-of-market subsidies that incent them to offer at zero or negative prices, thereby depressing CAISO locational marginal pricing ("LMP") for electricity. In particular, renewable resources that receive subsidies can offer at extremely low or negative prices, thereby reducing the possible revenue that other resources can recover in the energy market.<sup>11</sup>

Further evidence of potential reliability issues is found in CAISO's 2019 Local Capacity Technical Analysis. Inspection of the LCR (Local Capacity Requirements) studies shows that several areas are deficient or nearly

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approved ELCC values for wind and solar resources in its local capacity requirements study, but in many areas—most notably the San Diego-Imperial Valley area—the output of solar resources during the local area peak is far lower than the ELCC value. As a result, these resources will not be able to provide sufficient capacity during actual local peak conditions, thereby increasing the likelihood of unserved load.” <http://docs.cpuc.ca.gov/PublishedDocs/Efile/G000/M216/K273/216273346.PDF>.

<sup>10</sup> *Id.* CAISO Track 2 Testimony, Corrected Chapter 4: System Resource Adequacy Demand Forecasts, Testimony of Robert Emmert, Manager, Interconnection Resources, p. 1. [http://www.caiso.com/Documents/Jul10\\_2018\\_RAProceedingTrack2Testimony-Chapter4-SystemRADemandForecasts\\_ProposalNo3\\_R17-09-020.pdf](http://www.caiso.com/Documents/Jul10_2018_RAProceedingTrack2Testimony-Chapter4-SystemRADemandForecasts_ProposalNo3_R17-09-020.pdf).

<sup>11</sup> La Paloma Complaint at p. 32.

deficient.<sup>12</sup> For example, the San Diego Imperial Valley area shows a need for 4026 MW of capacity with a total available supply of 4358 MW.<sup>13</sup> With such a slim margin of error, it is possible that a single unit made unavailable would create a supply deficiency. Lower compensation for and misaligned incentives for unsubsidized resources exacerbate the risk of unavailability.

The unsustainable strain created by this construct places resources needed for the reliable operation of California's electric system at risk. Drawing on the lessons learned in Eastern ISOs/RTOs, FERC should order CAISO to work with the CPUC and other stakeholders to develop a multi-year forward capacity market construct that includes the critical features detailed below. As the Affidavit and current experiences provide, absent the implementation of a forward capacity market, increased reliance on reliability must run contracts and other market-distorting mechanisms will likely be necessary to maintain reliable service in California.<sup>14</sup>

## **B. Key Market Design Elements Must Be Incorporated For CAISO's Resource Adequacy Construct To Be Just And Reasonable**

The Eastern regional organized wholesale electricity markets have extensive experience with multi-year forward capacity markets that has led to important lessons

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<sup>12</sup> CAISO 2019 Local Capacity Technical Analysis Final Report and Study Results. May 15, 2018 at p, 2. <http://www.caiso.com/Documents/Final2019LocalCapacityTechnicalReport.pdf>.

<sup>13</sup> *Id.*

<sup>14</sup> See discussion of RMR contracts required for newer vintage Calpine units in Affidavit at pp 39-40. "The significance of this problem and the breakdown of the CPUC's RA framework were made clear in 2017. Calpine, facing increased maintenance costs and future revenue uncertainty (see above), was forced to indicate an intention to retire certain capacity resources for which it could not wait until the last minute to make decisions. The CAISO, recognizing the seriousness of the investment timing problem facing Calpine, had to offer Calpine RMR contracts which the CPUC has opposed. These problems will continue as greater penetration of renewable resources diminishes resource opportunities to receive RA contracts and reduces resource utilization and opportunities to earn margins to cover going forward costs to remain operational. A forward-looking RA market product provides the certainty necessary for capacity resources to plan and complete investments that will have a fair opportunity to recover the capital investment costs including a return on capital investment."

learned regarding the design elements necessary for a well-functioning market structure. At a minimum, the following elements are necessary:

- (1) A transparent means of forecasting expected electricity consumption at a future period of time, plus establishment of an appropriate reserve margin;
- (2) Establishment of an auction process whereby potential suppliers of capacity offer to provide the same capacity product at a given location in the forward period, typically three years ahead of time;
- (3) Appropriate mitigation of both buyer-side and seller-side market power;
- (4) A market clearing mechanism, such as a sloped demand curve, that establishes the lowest cost suite of resources necessary to reliably operate the transmission system; and,
- (5) Procurement of capacity sufficient to reliably operate the bulk power system, considering the physical constraints of the system.<sup>15</sup>

Given the failure of California's current construct, CAISO should further be required to, at a minimum, include a three-year forward commitment similar to that in PJM and ISO-NE in order to provide forward looking, more transparent price signals that can account for ongoing resource changes. As the Affidavit provides, "A forward RA product procured at least three years prior to the delivery year would be of considerable importance for California given the ongoing investment planning difficulties facing existing thermal resources that have no assurance of receiving an RA contract."<sup>16</sup>

In conjunction with this, the Commission has issued numerous orders for other ISOs/RTOs determining that sloped demand curves provide more accurate and stable pricing than a vertical demand curve, recognizing that vertical demand curves lead to

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<sup>15</sup> See generally Comments of the Electric Power Supply Association, *Centralized Capacity Markets in Regional Transmission Organizations and Independent System Operators*, Docket No. AD13-7-000 (filed January 8, 2014). For a discussion of essential market elements, see pp 24-35 responding to post-technical conference questions on market design elements. See also "EPSA's Principles to Power America – Competitive Market Evolution: The next decade of progress," pp.10-12, (October 19, 2011), available at <https://epsa.org/resource/studies-and-reports/page/2/>.

<sup>16</sup> Affidavit of Jeffrey Tranen and Joseph Cavicchi at p. 39

price volatility and could encourage the exercise of market power.<sup>17</sup> In fact, the Commission found that ISO-NE's continued use of vertical demand curves was unjust and unreasonable, explaining that "[w]hen vertical demand curves are used, even small increases or decreases in supply can result in large changes in price," whereas a sloped demand curve would "ensure that the market produces accurate price signals."<sup>18</sup> The Commission therefore concluded that, in light of "the general benefits of implementing zonal sloped demand curves," ISO-NE's continued use of a vertical demand curve rendered its tariff unjust and unreasonable.<sup>19</sup> The Commission should similarly direct CAISO to implement a sloped demand curve.

Further, as the complaint explains, any new CAISO capacity construct must include buyer-side mitigation rules (e.g., a minimum offer price rule or "MOPR") at least comparable to those in other organized capacity markets. The Commission has long affirmed that centralized capacity markets "will not be able to produce the needed investment to serve load and reliability if a subset of suppliers is allowed to bid noncompetitively to suppress market clearing prices."<sup>20</sup> Indeed, every other organized capacity market (*i.e.*, those in PJM, NYISO, and ISO-NE) has rules to prevent buyers from artificially suppressing capacity prices. Artificial price suppression is a particular

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<sup>17</sup> See *N.Y. Indep. Sys. Operator, Inc.*, 103 FERC ¶ 61,201 at PP 13–17, *reh'g denied*, 105 FERC ¶ 61,108 (2003), *aff'd*, *Elec. Consumers Res. Council v. FERC*, 407 F.3d 1232 (D.C. Cir. 2005); *PJM Interconnection, L.L.C.*, 117 FERC ¶ 61,331 at PP 75–78 (2006) ("*PJM I*"), *on reh'g*, 119 FERC ¶ 61,318, *aff'd*, *Pub. Serv. Elec. & Gas Co. v. FERC*, 324 F. App'x 1 (2009); *ISO New England Inc.*, 146 FERC ¶ 61,038 at P 30 & n.41 (2014); *ISO New England Inc.*, 147 FERC ¶ 61,173 at P 29 (2014).

<sup>18</sup> *ISO New England Inc.*, 153 FERC ¶ 61,338 at P 12 (2015).

<sup>19</sup> *Id.* at PP 14–15.

<sup>20</sup> *PJM Interconnection, L.L.C.*, 128 FERC ¶ 61,157 at P 90 (2008). See also, e.g., *New York Indep. Sys. Operator, Inc.*, 122 FERC ¶ 61,211 at P 103 ("*NYISO*") ("Markets require appropriate price signals to alert investors when increased entry is needed. By allowing net buyers to artificially suppress prices, these necessary price signals may never be seen."), *on reh'g*, 124 FERC ¶ 61,301 (2008), *on reh'g*, 131 FERC ¶ 61,170 (2010), *on reh'g*, 150 FERC ¶ 61,208 (2015).

concern in CAISO given the large amount of renewable generation that is supported via out-of-market payments, which has led to the overbuilding of intermittent capacity while leading to insufficient capacity pricing for other resource types and technologies.<sup>21</sup> If uneconomic resources are allowed to obtain preferential capacity commitments, existing resources that are needed to provide essential attributes to the California grid may not be able to compete. Accordingly, the Commission should require CAISO to implement buyer-side mitigation rules, such as a MOPR, to prevent uneconomic entry, with no blanket exemption for state-sponsored resources, as provided in the complaint. Conversely, to guard against seller-side market power, any CAISO capacity auction structure should include an obligation for all available capacity resources to make offers into the RA auctions, as outlined in the Affidavit.<sup>22</sup>

With these elements in place, the market can foster competition among potential capacity resources to benefit consumers by attaining long-term resource adequacy through markets at the lowest cost. In order to avoid further exacerbating potential reliability issues and avert costly, market-distorting remedial measures, the Commission should direct CAISO to implement a forward capacity market that includes the elements outlined in the complaint. *At minimum*, the Commission could open a settlement proceeding to work with stakeholders to improve California's current capacity procurement construct.

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<sup>21</sup> Affidavit of Jeffrey Tranen and Joseph Cavicchi at p. 46.

<sup>22</sup> Affidavit of Jeffrey Tranen and Joseph Cavicchi at pp. 32-33.

## II. CONCLUSION

For the stated reasons, EPSA urges the Commission to determine that the California Resource Adequacy construct is not just and reasonable and grant the La Paloma complaint. The Commission should direct CAISO to work with the CPUC and other stakeholders to develop a capacity market construct that includes these key elements: (1) the market secures capacity needed to meet all projected reliability requirements three years in advance with mandatory auction participation; (2) a downward sloping demand curve with auctions held three-years forward; and (3) buyer-side mitigation rules (*i.e.*, a minimum offer price rule, "MOPR"). These design reforms are necessary so that CAISO can develop an effective forward capacity market structure that allows generators a reasonable opportunity to recover their costs and a fair return on their investments, while ensuring customers are reliably and cost-effectively served.

/s/

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Date: August 24, 2018

**CERTIFICATE OF SERVICE**

I hereby certify that I have served a copy of these comments upon each person designated on the official service lists compiled by the Secretary in these proceedings.

Dated at Washington, D.C. this 24<sup>th</sup> Day of August, 2018.

/s/

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