UNITED STATES OF AMERICA BEFORE THE FEDERAL ENERGY REGULATORY COMMISSION

)))

)

)

CXA La Paloma, LLC	
٧.	
California Independent Sy Operator Corporation	vstem

Docket No. EL18-177-000

ANSWER OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION TO COMPLAINT

August 24, 2018

Table of Contents

I. EXECUTIVE SUMMARY				
II.	BACK	GROU	ND	13
	A.		Resource Adequacy, Integrated Resource Planning, and Backstop rement Framework in the CAISO Balancing Authority Area	
		1.	Resource Adequacy Requirements	13
		2.	Resource Adequacy Related Requirements	17
			a. Providing RA Substitute Capacity	17
			b. Resource Adequacy Availability Incentive Mechanism	18
		3.	Other Existing Mechanisms Supporting Resource Adequacy	18
		4.	The CPUC's Integrated Resource Planning Process	19
		5.	The CAISO's Capacity Procurement Mechanism	22
		6.	Reliability Must-Run Tariff Provisions	24
	В.	The L	a Paloma Complaint	26
III.	ANSW	'ER		27
	A.	La Paloma Fails to Satisfy the Requirements of Section 206 of the Federal Power Act27		
	В.	Jurisc Procu	Ioma Fails To Show that the Commission Should Exercise Its liction Regarding Resource Adequacy to Eliminate a Bilateral Irement Framework and Impose a Mandatory Centralized Capacit	•
		1.	The Commission's Resource Adequacy Jurisdiction	31
		2.	The Reliability Problems Facing PJM That Led to PJM's Reliability Pricing Model	34
		3.	The Reliability Problems in ISO New England That Caused the Commission to Order Major Changes to ISO New England's Capacity Market	37
		4.	Conditions in the CAISO Are Unlike the Conditions in PJM and ISO New England That Resulted In Sweeping Changes to Their Resource Adequacy Constructs	
	C.		loma Fails to Show the Existence of Any Reliability Problems Justify the Unprecedented Remedy It Requests	40
		1.	The CAISO Has Maintained Reliability with an RA Framework Based on Bilateral Procurement	41
		2.	Resource Development is Occurring, and There Is No Need for A Different Mechanism to Incent New Generation	44

	3.		2018 Summer Assessment Does Not Foretell Dire Reliability ems for the CAISO System		
	4.	The CAISO Is Ensuring There Remains Sufficient Flexible Capacity on the System			
	5.	The CAISO and CPUC Are Proactively Considering RA Program Refinements to Adapt to an Evolving Grid51			
D.			s Limited Backstop Procurement Does Not Justify Mandatory Centralized Capacity Market	. 53	
	1.	RMR	Designations	. 57	
		a.	Calpine Feather River, Yuba City, and Metcalf Units	. 57	
		b.	NRG Ellwood and Ormond Beach Units	. 61	
	2.	СРМ	Designations	. 64	
E.	The P	lannin	g Reserve Margin Is Not Unjust and Unreasonable	. 68	
	1.		e Is No Basis to Change the Planning Reserve Margin sions of the CAISO Tariff	. 68	
	2.		e Is No Basis to Require the CAISO to Adopt a Sloped and Curve	. 73	
F.			Prices Arising from a Capacity Surplus Do Not Justify Existing Resource Adequacy Framework	. 75	
	1.		Prices Resulting from a Capacity Surplus Does Not er the CAISO Tariff Unjust and Unreasonable	.76	
	2.		Prices Do Not Necessitate a Mandatory Centralized city Market	. 82	
G.	Allegations That the State's Procurement Policies Are Unduly Discriminatory Is not Within the Scope of the Federal Power Act				
H.	Compensating Existing Resources Differently Than New Resources under Bilateral Contracts Does Not Support a Complaint against the CAISO				
I.	The Commission Does Not Require ISOs and RTOs to Have Mandatory Centralized Capacity Markets				
J.	There Is No Reason to Conclude Centralized Capacity Markets Implemented by Other ISOs and RTOs Are Superior To the CAISO's Resource Adequacy Provisions				
K.	The CAISO and CPUC Are Pursuing Enhancements to the Resource Adequacy Program10				

		1.	The CPUC Has Already Adopted Significant Improvements to its RA Program that Will Support Local Reliability in Future Years and Reduce the Need For CAISO Backstop Procurement		07
		2.	Imple	ack 2, the CAISO and the CPUC Are Assessing mentation Details for the Multi-Year Local RA irement Framework and Other RA Enhancements	08
			a.	Multi-Year Procurement1	80
			b.	Measures to Reduce the Need for CAISO Backstop Procurement10	09
			C.	Other RA Enhancements the CAISO Is Proposing1	11
	L.	CAIS Aspec	O and S ots of th	Justification for Usurping the Respective Roles of the State and Local Regulators in Developing Fundamental ne Resource Adequacy/Backstop Procurement	
		Fram	ework.	1 [·]	12
	М.			the Proposed Capacity Market Are Not Just and If Applied To the CAISO1	14
	N.	There	e Is No	Basis for La Paloma's Transition Payment Proposal12	22
IV.	COMMUNICATIONS				27
V.	CONCLUSION128				28

ANSWER OF THE CALIFORNIA INDEPENDENT SYSTEM OPERATOR CORPORATION TO COMPLAINT

The California Independent System Operator Corporation ("CAISO") submits its answer to the complaint filed in this proceeding by CXA La Paloma, LLC ("La Paloma") on June 20, 2016 (the "Complaint").¹ The Commission should reject the complaint for the numerous reasons set forth below.

I. EXECUTIVE SUMMARY

The Commission should dismiss the Complaint. La Paloma fails to satisfy the requirements of Section 206 of the Federal Power Act (FPA). The Complaint falls far short of satisfying the heavy burden of proof under Section 206 of demonstrating, through substantial evidence, that the CAISO tariff is unjust, unreasonable, unduly discriminatory, or preferential. At the heart is an unsubstantiated and inaccurate claim that a resource adequacy (RA) framework based on bilateral procurement by load serving entities (LSEs) is unduly discriminatory and unable to secure the resources needed to maintain reliability. For over a decade, the CAISO has maintained system reliability and secured the resources it needs through an RA program based on bilateral procurement authority exercised in limited circumstances. The existing RA program requires LSEs to procure sufficient capacity to meet system, local, and flexible capacity requirements.

The Commission need not reach the second part of Section 206 in this proceeding, *i.e.*, determining a just and reasonable substitute for an RA program based

¹ The CAISO files this Answer pursuant to Rule 213 of the Federal Energy Regulatory Commission's ("Commission") Rules of Practice and Procedure, 18 C.F.R. § 385.213 (2018). On June 28, 2018, the Commission granted an extension of time until August 24, 2018, to submit responses to the Complaint.

on bilateral procurement. However, La Paloma fails to support the justness and reasonableness of its proposal to graft onto the CAISO tariff a mandatory centralized capacity market incompatible with the CAISO's market design and circumstances in the CAISO balancing authority area. La Paloma also provides no justification for its proposed "transitional payment mechanism" to provide additional revenues to existing resources until the capacity market is implemented. La Paloma's proposals make clear that its true purpose is to funnel additional revenues to resources that have not received an RA contract or been found by the CAISO to be needed for reliability.

When approving the RA provisions of the CAISO tariff, the Commission stated that its primary responsibilities regarding resource adequacy are to ensure the reliability of the transmission system, to require that LSEs accept as a condition to participating in the CAISO markets certain minimum obligations to maintain a reliable supply of energy at reasonable rates, and to prevent LSEs from "leaning" on the resources provided by other LSEs to the detriment of customers and system reliability. La Paloma identifies no reliability standards violations that have occurred because of the RA program, provides no credible proof that reliability violations are imminent, and provides no evidence that some LSEs are "leaning" on other LSEs to the detriment of their customers. The CAISO has incurred no reliability standards violations related to resource adequacy, and no region-wide violations are imminent.

The Commission has stated that RA requirements also can provide a mechanism to encourage the construction of new generation where and when needed. La Paloma fails to demonstrate that the existing provisions of the CAISO tariff are failing to promote the development of needed new supply sources. La Paloma admits that regional

-2-

trends, including the resource planning efforts of the California Public Utilities Commission (CPUC), have produced a capacity surplus on the system. Mechanisms exist to support the procurement of new supply sources, including increasing Renewable Portfolio Standard (RPS) requirements, a robust storage procurement target, and Integrated Resource Planning processes. The CAISO region faces generally declining load forecasts. A mandatory centralized capacity market is not needed to incent the construction of new generation. The Commission has recognized that long-term planning processes diminish the need for and benefits of forward price signals.

The CAISO recognizes that the grid is transforming and, looking toward the future, the RA program must "keep up" to ensure that it continues to secure resources needed to meet the CAISO's changing operational needs. The CAISO is seeking modifications to the RA program in an ongoing CPUC proceeding directed at enhancing the efficacy of the current RA program because of the changing needs and characteristics of the power system so that in future years the RA program will continue to secure the right resources with the right capabilities and minimize the need for any CAISO backstop procurement. The CAISO has successfully maintained reliability under a bilateral RA program remains effective as system conditions change. There is no need for a completely different RA framework to maintain future reliability or to incent the construction of new generation.

La Paloma's argument that the CAISO's recent use of reliability must run (RMR) contracts and short-term procurement under the Capacity Procurement Mechanism

- 3 -

(CPM) indicates a need for a mandatory centralized capacity market is misplaced. The CAISO's limited backstop procurement does not indicate an existing or imminent reliability problem that must be fixed with a mandatory centralized capacity market. The backstop procurement was mostly "transitional" and maintained the near-term availability of specific resources not expected to be long-term reliability solutions because of their age, their non-compliance with once-through-cooling (OTC) regulations, and/or their anticipated replacement with already approved long-term mitigation solutions such as transmission, storage, and new resources. Unique and extraordinary circumstances also led to short-term backstop procurement. Using these Commission-approved mechanisms, which are comparable to backstop mechanisms used by other independent system operators (ISOs) and regional transmission organizations (RTOs), in the limited circumstances for which they were intended does not render the CAISO tariff unjust and unreasonable or support the need for a mandatory centralized capacity market. The CAISO also notes that due to the CAISO's recent backstop procurement the CPUC has made it a "top priority" in its ongoing RA proceeding to identify modifications to the RA program that will reduce any backstop procurement. Consistent with that goal, the CAISO is proposing in that proceeding more granular local procurement requirements.

La Paloma's claim that the trend toward 100 percent renewables will result in only two categories of resources in California—RPS resources and local and flexible resources procured under the CAISO's backstop authority – is incorrect and illogical. Because the RA provisions of the tariff include local and flexible capacity requirements, LSEs must procure sufficient resources with local and flexible capacity attributes as RA

-4-

resources. Suggesting that LSEs will procure no such resources and that the CAISO will have to procure 100 percent of them through its backstop provisions is groundless. None of the RMR and CPM procurement to which La Paloma refers was to remedy a flexible capacity deficiency or to meet a flexible capacity need.

La Paloma states that prices in the CAISO's energy and ancillary service markets may not be sufficient for some existing resources without RA contracts to recover their costs. That does not translate into a finding that the CAISO's RA tariff provisions are unjust and unreasonable. In addition to earning market revenues, resources needed for reliability also earn revenues through RA contracts, RMR agreements, and CPM designations. Further, La Paloma admits that low market prices result from a capacity surplus in the CAISO marketplace and that increasing energy offered by renewable resources with lower marginal costs has decreased the utilization of thermal resources.

The Complaint also alleges that low RA prices resulting from a capacity surplus are inadequate to keep needed resources in the market. La Paloma provides no evidence to support this claim. La Paloma does not identify any specific resources needed for reliability that have been forced to retire due to insufficient revenues. That some resources exit the market is not evidence that the CAISO's RA tariff provisions are unjust and unreasonable because not all resources in the region are needed to maintain reliability. The Commission has recognized that low prices are justified in regions with surplus capacity and the fact prices do not signal a need to build new resources or even maintain the operation all existing resources is more indicative of a well-functioning marketplace than it is of an unjust and unreasonable RA framework.

- 5 -

La Paloma likewise fails to demonstrate any changed circumstances that render the Commission-approved default 15 percent planning reserve margin unjust and unreasonable. The CAISO has maintained reliability with such default reserve margin, and regulators are able to approve procurement above that level. The Commission recently approved a 12 percent reserve margin (9.89 percent for LSEs with a resource mix that is at least 75 percent hydro) for the Southwest Power Pool (SPP).

The Complaint directs much attention to the CPUC's procurement policies such as implementing RPS requirements. La Paloma's assertion that the CPUC's procurement practices are unduly discriminatory because they favor procuring new, renewable resources instead of existing fossil-fuel resources fails to support a claim under the FPA that the CAISO tariff is unjust and unreasonable. When the Commission approved the RA provisions of the CAISO tariff it did so in a manner that respected the states' traditional role in overseeing their LSEs. Consistent with this balanced approach, the CAISO tariff establishes basic RA requirements that LSEs must satisfy but does not dictate the specific resources that LSEs must procure to satisfy these requirements or the processes they must utilize to procure resources. Overwhelming judicial and Commission precedent recognizes that resource planning decisions are the prerogative of state regulatory authorities and are not within the scope of the FPA. Precedent shows that states may pursue procurement policies that choose new resources over existing ones, more expensive resources over cheaper ones, and renewable resources instead of fossil fuel resources. Also, unlike certain state procurement programs in the east that courts have found to be preempted by the FPA, the CPUC's directives to procure RPS resources and other clean resources do not

-6-

condition payment of state funds on such capacity clearing a Commission-approved capacity market and does not change the price paid in such market.² Thus, La Paloma's undue discrimination claim must fail.

Similarly, La Paloma's claim that purchasers of electricity are engaging in undue discrimination by entering into bilateral contracts for new resources that reflect prices higher than bilateral contracts for existing resources does not support a Section 206 complaint against the CAISO or a finding that the CAISO tariff is unjust and unreasonable. The CAISO is not a party to those contracts, and the CAISO tariff does not establish the prices to be paid under such contracts. The FPA regulates sellers of electricity and prohibits sellers from engaging in undue discrimination, not buyers. La Paloma's claim that purchasers of electricity are engaging in undue discrimination by paying different sellers different prices under their bilateral contracts is not within the scope of FPA Section 206. Further, the courts have recognized that the FPA is premised on contractual agreements voluntarily entered by utilities. La Paloma objects to arms-length contracts voluntarily entered by willing buyers and sellers.

La Paloma references the Commission's approval of the eastern capacity markets as support for unilaterally imposing a mandatory centralized capacity market on the CAISO. La Paloma ignores Commission precedent affirming there is no "one-sizefits-all" approach to resource adequacy. The Commission has never required ISOs and RTOs to have mandatory centralized capacity markets. Recently the Commission approved SPP's RA program, which is based on a bilateral procurement. In at least seven orders, the most recent in February of this year, the Commission has rejected

2

See Hughes v. Talen Energy Mktg., LLC, 136 S.Ct. 1288, 1298 (2016) (Hughes v. Talen).

requests to impose a mandatory centralized capacity market on the Midcontinent Independent Transmission System Operator (MISO). Just as the low prices in MISO did not justify adopting a mandatory centralized capacity market and undoing MISO's bilateral RA procurement framework, the low prices in the CAISO markets resulting from a capacity surplus do not justify imposing a mandatory centralized capacity market on the CAISO.

As the Commission is aware, the CAISO grid is transforming and new challenges are emerging. The RA program must adapt as the grid transforms. Both the CAISO and the CPUC recognize this and have processes in place to address emerging trends and proactively identify enhancements. In that regard, the CPUC has an ongoing proceeding – the RA Refinement Proceeding in Rulemaking 17-09-020 to consider these trends and identify potential modifications to its RA procurement program to "secure a generation fleet that meets California's needs." The CAISO also has ongoing stakeholder initiatives to develop enhanced flexibility requirements that will align with the CAISO's future operational needs and to assess its flexible capacity requirements and backstop procurement mechanisms. The Commission should let these processes play-out. The procurement rules La Paloma complains about likely will not be the procurement rules starting with the 2020 RA compliance year and beyond.

A challenge the CAISO will face in the future as the grid transforms will be operating with increased levels of variable energy resources on the system. Integrating such resources will require retaining some of the existing resource fleet with flexibility attributes. The CAISO is "out-in-front-of" this matter and is proactively assessing future flexible capacity needs and considering the resources that will be necessary to meet

- 8 -

those needs. The CAISO's flexible capacity and transmission planning studies inform both stakeholders and the regulators directing LSE procurement to meet the CAISO's operational needs. The need to retain some of the existing fleet with flexibility attributes, however, does not render a bilateral procurement RA framework unjust and unreasonable. Under the flexible capacity RA provisions of the tariff, the CAISO updates its flexible capacity need annually, and that updated need then translates into an updated annual flexible capacity RA procurement requirement for LSEs. The CAISO currently has a surplus of flexible capacity resources, and the need for flexible resources does not require incenting new generation, which is a key purpose of a mandatory centralized capacity market. Targeted enhancements to the RA program can provide a just and reasonable framework to procure existing flexible capacity and maintain future reliability. Further, the CAISO has risk-of-retirement CPM authority that acts as a "bridge" allowing it to procure resources not needed until a future year.

In an order issued earlier this year in its ongoing RA Refinement Proceeding, the CPUC signaled its intent to adopt a multi-year procurement requirement for local capacity. The CAISO is actively participating in that proceeding and has proposed certain targeted enhancements that, along with the studies the CAISO conducts, will support the retention of needed resources with flexibility attributes, promote revenue stability and facilitate major maintenance for needed existing resources, provide an earlier indication of need for certain existing resources, inform procurement, promote orderly retirement decisions, reduce the CAISO's use of backstop procurement, align with the CAISO's expected future reliability and operational needs, and prevent unnecessary over-procurement. The CAISO's proposed refinements include, *inter alia*,

-9-

enhancing the bilateral RA framework to (1) require three-year procurement for system, local, and flexible capacity requirements, (2) require local capacity procurement at a more granular level not just from local capacity areas within a Transmission Access Charge area, and (3) identify essential reliability resources to inform procurement. A mandatory, centralized capacity market is not needed to ensure the CAISO can secure the resources it needs to meet future, changing grid conditions. There is no need for a sledgehammer when a scalpel will do.

La Paloma claims that alternative means of resolving its concerns would not be effective; yet, it is not even participating in the CPUC's RA Refinement proceeding. La Paloma is not justified in casting aspersions on the CAISO stakeholder process or the CPUC resource adequacy proceedings when it has chosen not to participate in those fora. Instead, La Paloma proffers an extraordinary and unprecedented proposal that usurps the CAISO's fundamental role of designing its own markets to address future challenges. The right and responsibility of developing updates to their own market designs is at the heart of what ISOs and RTOs do. La Paloma's proposal to undo entirely the existing RA framework when there is no need to do so and to impose an entirely different paradigm would not address all of the needs the CAISO and its stakeholders have identified.

La Paloma also ignores the significant challenges that have confronted other ISO's and RTO's centralized capacity markets, including the constant litigation and need for ongoing refinements. As the Commission has recognized in several high profile orders this year, there are significant challenges in reconciling competitive capacity markets with state procurement practices, including RPS requirements. These

- 10 -

issues include whether to use a minimum offer price rule to address state policy impacts on capacity markets and whether there should be exemptions from such a rule. Further, a mandatory centralized capacity market can cause customers to pay twice for capacity, first for renewable resources (or other state policy resources) procured through state programs outside of the capacity market, and second for additional capacity procured because the capacity market sent the incorrect signals that additional capacity is needed. The Commission has stated that it does not take this concern lightly. A bilateral RA framework avoids these issues. There is no need to create problems that do not exist today.

Although centralized capacity markets may be a reasonable design feature for eastern ISOs and RTOs, La Paloma fails to demonstrate this paradigm would be just and reasonable if applied to the CAISO. The eastern capacity markets have only had to procure generic capacity. Procurement in the CAISO footprint, however, requires many more considerations. The CAISO requires resources with specific attributes, *e.g.*, flexibility, to maintain reliability in a transforming grid. Further, state law requires procurement that produces a diverse and balanced resource mix, ensures system and local reliability, optimally integrates renewable energy, minimizes impacts on disadvantaged communities, promotes grid resilience, and meets greenhouse gas emission targets and RPS goals. A bilateral procurement framework overseen by state and local authorities can better accommodate this range of considerations than a CAISO-operated, mandatory centralized capacity market.

A CAISO-operated mandatory centralized capacity market is not needed to maintain reliability and is not just and reasonable based on circumstances that exist in

– 11 –

the CAISO. The CAISO has successfully maintained reliability under a bilateral procurement framework and is constantly assessing enhancements to ensure it continues to be effective as conditions on the system change. There is no need for a completely different framework to maintain future reliability or to incent the construction of new generation. The RA program imposes obligations on LSEs to procure system, local, and flexible capacity to help meet the CAISO's planning and operational needs. Because an RA framework based on bilateral procurement is just and reasonable, there is no need to abandon it, particularly where state and local regulators strongly prefer a resource adequacy framework based on bilateral procurement and object to a mandatory centralized capacity market.

Finally, La Paloma's transition payment proposal constitutes a thinly veiled attempt to secure payments for resources that do not have RA or RMR contracts because the CAISO and others have not found them to be needed for reliability. There is no legal, policy, or evidentiary justification – much less a glaring reliability need to retain every resource on the system -- to support imposing such an excessive and unnecessary compensation scheme on CAISO ratepayers. The only instance where the Commission has approved such transition payments was as part of a comprehensive negotiated settlement that significantly modified ISO New England's existing centralized capacity market and where ISO New England was facing imminent reliability problems. Those circumstances do not exist here. The FPA does not guarantee revenue to generators that cannot negotiate contracts with LSEs and that the CAISO has not determined are needed for reliability under the backstop procurement provisions of the CAISO tariff.

II. BACKGROUND

A. The Resource Adequacy, Integrated Resource Planning, and Backstop Procurement Framework in the CAISO Balancing Authority Area

1. Resource Adequacy Requirements

Since 2006, the CAISO has coordinated with the CPUC and local regulatory authorities within its balancing authority area, to develop RA requirements enforced under the CAISO tariff. The RA program is intended to provide sufficient capacity to the CAISO when and where needed to support the safe and reliable operation of the CAISO grid.

The RA program requires that LSEs procure capacity to meet their forecasted peak load plus a reserve margin (*i.e.*, system resource adequacy), local area capacity requirements, and flexible capacity requirements. The CPUC and local regulatory authorities determine the reserve margin applicable to their jurisdictional load serving entities. If they set no reserve margin, the CAISO applies 15 percent default reserve margin.³

CPUC and non-CPUC jurisdictional LSEs must demonstrate that they have procured their required resource adequacy capacity by submitting an annual resource adequacy plan and monthly resource adequacy plans. LSEs under the CPUC's jurisdiction must procure at least 90 percent of their system resource adequacy requirement for the five summer months in compliance with a year-ahead forward commitment obligation. CPUC-jurisdictional load serving entities must procure 100 percent of the capacity needed to meet their resource adequacy requirement—their

³ CAISO tariff § 40.2.2.1 (b).

total forecast load for each month plus a planning reserve margin of 15 percent—in compliance with a month-ahead forward commitment obligation. Similarly, non-CPUC LSEs must submit annual and monthly resource adequacy plans to the CAISO demonstrating procurement of the system resource adequacy requirements their respective local regulatory authorities establish and their allocated share of local capacity. All LSEs must procure 100 percent of their local capacity need for the entire year in the year-ahead timeframe. In their annual and monthly resource adequacy plans, LSEs must also show their procurement of 90 percent and 100 percent, respectively, of their flexible capacity requirements.

Each year the CAISO's role in the RA process begins with publishing the Locational Capacity Technical Study and the Deliverability Study. The Locational Capacity Technical Study determines the minimum capacity needed in each identified transmission constrained "load pocket" or local capacity area to ensure reliable grid operations. Annual and monthly local capacity requirements are based on a 1-in-10 load forecast. In performing the Local Capacity Technical Study, the CAISO applies methods for resolving contingencies considered appropriate for the performance level that corresponds to a particular studied contingency as provided in North American Electric Reliability Corporation (NERC) Reliability Standard TPL-001-4, as augmented by the CAISO Reliability Criteria. Under tariff section 40.3.1.1, CAISO Reliability Criteria include:

 Time Allowed for Manual Readjustment: This is the amount of time required for the Operator to take all actions necessary to prepare the system for the next Contingency. This time should not be more than thirty (30) minutes. (2) No voltage collapse or dynamic instability shall be allowed for a Contingency in Category D --extreme event (any B1-4 system readjusted (Common Mode) L-2).

Under tariff section 40.3.1.2, the Local Capacity Technical Study assesses these

contingencies:

NERC/WECC Performance Level A –No Contingencies

NERC/WECC Performance Level B—Loss of a single element

Generator (G-1) Transmission Circuit (L-1) Transformer (T-1) Single Pole (dc) Line G-1 system readjusted L-1

NERC/WECC Performance Level C – Loss of two or more elements

L-1 system realignment G-1 G-1 system readjusted T-1 or T-1 system readjusted G-1 L-1 system readjusted T-1 or T-1 system readjusted L-1 G-1 system readjusted G-1 L-1 system readjusted L-1 Bipolar (dc) line Two circuits (Common Mode) G-2 WECC-S3. Two generators (Common Mode) G-2

D—Extreme Event—loss of two or more elements

Any B1-4 system readjusted (Common Mode) L-2

Based on the results of the Local Capacity Technical Study, the CAISO allocates

responsibility for local capacity resources to scheduling coordinators for LSEs, generally

based on LSE load share within each Transmission Access Charge area.

The CAISO established flexible RA capacity requirements for LSEs beginning

with the 2015 RA compliance year. ⁴ The CAISO also has authority through its Capacity Procurement Mechanism (CPM) to procure backstop flexible resource adequacy capacity if there is a cumulative deficiency of flexible resource adequacy capacity.⁵ The CAISO implemented flexible resource adequacy capacity obligations to maintain reliability in the face of the increasing variability and unpredictability arising from the expected increased quantities of variable energy resources and distributed energy resources. CAISO studies showed that to reliably operate the grid with this heightened variability and unpredictability, the CAISO had an increased need for resources that can ramp up and down quickly and start and shut down potentially multiple times per day, *i.e.*, flexible capacity. As with certain other RA requirements, the CAISO developed flexible capacity requirements under its tariff in parallel with CPUC proceedings on the same topic.⁶

The flexible RA capacity requirements are set forth in section 40.10 *et seq.* of the tariff. To determine flexible resource adequacy requirements, the CAISO, in the year-ahead timeframe, conducts a study to determine its system-wide flexible capacity needs for each month of the next calendar year. The CAISO determines flexible capacity needs each month by assessing the largest monthly three-hour net load ramps. The flexible capacity need has three components: (1) the largest system three-hour net load ramp each month; (2) the higher of the most severe single contingency or 3.5 percent of forecasted monthly peak load; and (3) a forecast adjustment (upward or downward).

⁴ *Cal. Indep. Sys. Operator Corp.*, 149 FERC ¶ 61,042 (2014).

⁵ CAISO tariff § 43A.2.7.

⁶ The CPUC decision adopting flexible RA capacity requirements is available at: <u>http://docs.cpuc.</u> <u>ca.gov/PublishedDocs/Published/G000/M097/K619/97619935.PDF</u>.

There are three types of flexible capacity under the CAISO tariff: (1) base ramping flexibility;⁷ (2) peak ramping flexibility;⁸ and (3) super-peak ramping flexibility.⁹ Resources providing flexible resource adequacy capacity must submit economic bids for their flexible capacity in the hours and days for which that given category of flexible capacity holds a must offer obligation.

The CAISO allocates a proportionate share of the total flexible capacity needs to each local regulatory authority based on its load serving entities' average contribution to the components of the five highest daily maximum three-hour net load ramps on the system. Each local regulatory authority then determines how to allocate that overall need to each of its jurisdictional LSEs.

2. Resource Adequacy Related Requirements

a. Providing RA Substitute Capacity

The CAISO tariff has provisions to ensure that LSEs cannot fully count RA capacity from a resource scheduled to be on outage for the entire month. Under the CAISO tariff,¹⁰ the CAISO can approve resource maintenance outages from resources providing resource adequacy capacity through the outage management process if the resources provide substitute capacity. If resources do not provide substitute capacity, they can take their outages during off-peak hours or upon short notice if the outage will not detrimentally impact the efficient use and reliable operation of the grid. These rules

⁷ CAISO tariff § 40.10.3.2.

⁸ *Id.* at § 40.10.3.3.

⁹ *Id.* at § 40.10.3.4.

¹⁰ *Id.* at § 9.3.1.3

help ensure sufficient capacity will be operationally available to operate the grid reliably and meet LSEs' load obligations, while minimizing CAISO procurement of capacity through its backstop procurement mechanisms.

b. Resource Adequacy Availability Incentive Mechanism

The CAISO has a resource adequacy availability incentive mechanism to help ensure RA resources remain available to meet demand. The resource adequacy availability incentive mechanism incentivizes resource adequacy resources to comply with their must-offer obligations.¹¹ The resource adequacy availability incentive mechanism provisions are contained in section 40.9 of the CAISO tariff.

Under this mechanism, the CAISO assesses charges (called non-availability charges) and makes payments (called availability incentive payments) based on a resource's availability each month. Specifically, the resource adequacy availability incentive mechanism evaluates resources' availability based on the extent to which resources providing resource adequacy capacity meet their must offer obligations in the assessment hours applicable to generic capacity (system and local), flexible capacity, and overlapping capacity (MW of capacity that count as both).

3. Other Existing Mechanisms Supporting Resource Adequacy

Besides the RA program, various other factors and programs contribute to maintaining a reliable and resilient system for California, including a robust transmission system, integrated resource planning, state energy efficiency mandates, access to imports from neighboring balancing authority areas, storage procurement targets,

11

Cal. Indep. Sys. Operator Corp., 153 FERC ¶ 61,002 at P 15 (2015).

increasing distribution-side resources, demand response, and the Flex Alert program.¹² California has adopted RPS requirements for load-serving entities to procure 50 percent of their energy requirements from eligible renewable resources by 2030.¹³ This target likely will increase, bringing new resources to the system. The CPUC has also adopted storage procurement targets (over 1800 MW) for its jurisdictional LSEs.¹⁴ The CAISO is also actively studying and assessing the use and benefits of renewable resources and bulk storage to balance and reliably operate the grid.

4. The CPUC's Integrated Resource Planning Process

On February 8, 2018, the CPUC adopted a decision articulating the integrated resource plan (IRP) filing requirements for jurisdictional LSEs.¹⁵ The IRP process is the "umbrella" planning proceeding to consider all of the CPUC's longer-term electric procurement policies and programs to meet state greenhouse gas reduction and other enumerated goals, while ensuring a safe, reliable, and cost-effective electricity supply. The CPUC utilizes the IRP process to assess long-term needs and identify necessary procurement to meet those needs. The IRP implements legislation added to the California Public Utilities Code to "[i]dentify a diverse and balanced portfolio of

¹² The Flex Alert program is a voluntary energy conservation program that alerts and advises consumers about how and when to conserve energy. It is an important tool for the CAISO during periods of high demand or other stressed conditions to maintain system reliability.

¹³ See CAISO, FAST FACTS, at 1 (2016), available at <u>https://www.caiso.com/Documents/Flexible</u> <u>ResourcesHelpRenewables_FastFacts.pdf</u>.

¹⁴ California established the first energy storage target in the nation in 2010 with the passage of Assembly Bill 2514, which established a procurement target of 1,325 MW of storage by 2020 for the state's three investor owned utilities (IOUs). Assembly Bill 2868 added another procurement target of 500 MW of behind-the-meter storage. A summary and history is available at <u>http://www.cpuc.ca.gov/ General.aspx?id=3462</u>.

¹⁵ CPUC Decision D.18-02-018, Order Instituting Rulemaking to Develop Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements, Rulemaking 16-02-007 (Feb. 8, 2018) (*IRP Decision*).

resources needed to ensure a reliable electricity supply that provides optimal integration of renewable energy in a cost-effective manner."¹⁶ In addition, each LSE plan must "[e]nsure system and local reliability."¹⁷ Moreover, the IRP statute requires the Commission ensure that LSE resource plans (1) meet the state's greenhouse gas emission reduction targets, (2) procure specified quantities of RPS resources, (3) strengthen the diversity, sustainability, and resilience of the transmission and distribution systems and local communities, (4) enhance demand-side energy management and distribution systems, (5) serve customers at just and reasonable rates, and (6) minimize impacts on disadvantaged communities. The CPUC coordinates the IRP process, which involves a two-year planning cycle, with other state agencies and provides both a reliability-based and public policy-based portfolio to the CAISO's transmission planning process. The IRP is the vehicle for LSEs proposing actual procurement of additional resources to meet the planning requirements adopted in the decision.

The odd-numbered years of the IRP cycle include analysis and modeling using the most recent assumptions and leading to adoption of a Reference System Plan to be used in preparing individual LSE resource plans and the CAISO's transmission planning process in even numbered years. The even numbered years of the IRP cycle include LSEs filing their IRPs. At the end of each two-year cycle, the CPUC may authorize procurement, where appropriate, that must occur within the next one-to-three years to

¹⁶ Cal. Pub. Util. Code § 454.51(a).

¹⁷ *Id.* at § 454.52(a)(1)(E).

meet targets and needs identified in the IRP process.18

On August 1, 2018, CPUC-jurisdictional LSEs filed their individual IRPs. The CPUC is reviewing these individual IRPs and expects to consider these issues: (1) whether to order specific procurement activities to implement and effectuate the individual IRPs; (2) whether the individual IRPs, when aggregated, result in an electricity system that is reliable and achievable at a reasonable cost; (3) whether there is a need to address longer-term local reliability needs of individual LSEs beyond those addressed in resource adequacy requirements; and (4) whether the aggregated LSE IRPs result in any reliability shortfalls and, if so, how to attribute responsibility for closing the gaps.¹⁹

The IRP process replaced the CPUC's prior long-term procurement planning (LTPP) process. Unlike the LTPP process that applied only to the investor-owned utilities, the IRP process incorporates all LSEs that operate within the service territories and whose customers utilize transmission and distribution services of the investor-owned utilities.²⁰ The CAISO was an active participant in LTPP proceedings and is also an active participant in IRP proceedings. The IRP is an avenue for the CAISO to provide input regarding long-term system planning, reliability and resource needs, and modeling expertise. For example, through the IRP process's Modeling Advisory Group, the CAISO regularly provides input to the CPUC and stakeholders regarding its future

¹⁸ An LSE proposing to develop new natural gas resources or re-contract with existing natural gas resources in their IRP for a term of five years or more must show why another lower emitting or preferably zero-emitting resource could not reasonably meet the need identified. *IRP Decision* at 70.

¹⁹ California Public Utilities Commission, *Amended Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge*, R.16-02-007 (May 14, 2018).

²⁰ *IRP Decision* at 14.

operational and resource needs, including flexible capacity needs.²¹

5. The CAISO's Capacity Procurement Mechanism

The Capacity Procurement Mechanism (CPM), as set forth in section 43A of the

CAISO tariff, serves as a backstop mechanism to allow the CAISO "to procure capacity

to address a deficiency or supplement resource adequacy procurement by load serving

entities, as needed, to maintain grid reliability."22 Resources designated under the CPM

are treated like resource adequacy resources and are subject to a must offer

obligation.²³ The CPM supplements the resource adequacy program rather than

supplanting or interfering with it. The CAISO may designate CPM capacity under

certain specified circumstances in CAISO tariff section 43A:24

- (1) Insufficient Local Capacity Area Resources in an annual or monthly Resource Adequacy (RA) Plan;²⁵
- (2) Collective deficiency in Local Capacity Area Resources;²⁶
- (3) Insufficient Resource Adequacy Resources in an LSE's annual or monthly Resource Adequacy Plan;²⁷

²¹ See listing of meetings, calls, webinars and documentation for the Modeling Advisory Group and IRP in general at: <u>http://www.cpuc.ca.gov/general.aspx?id=6442451195</u>.

²² Cal. Indep. Sys. Operator Corp., 153 FERC ¶ 61,001 at P 2 (2015).

²³ CAISO tariff § 43A.5.1.

²⁴ *Id.* at § 9.3.1.3.2.5 also provides that the CAISO can procure backstop capacity under the CPM if a Scheduling Coordinator for a load serving entity does not provide sufficient operationally available resource adequacy capacity to meet a substitution requirement identified by the CAISO, and the resource does not reschedule or cancel the outage after the supply plan is submitted.

²⁵ *Id.* at §§ 43A.2.1.1 and 43A.2.1.2, respectively.

²⁶ *Id.* at § 43A.2.2. A collective deficiency occurs when the local capacity resources procured by LSEs and reflected in their annual RA showings fail to ensure compliance in one or more local capacity areas with the Local Capacity Technical Study provided in tariff section 40,3,1,1, even if there is no overall deficiency in the amount of local capacity area resources that LSEs procure. In other words, no LSE may be deficient in procuring local capacity resources, but the specific resources LSEs have procured are insufficient to meet reliability in certain local areas or sub-areas. This can occur because the RA program only requires LSEs to procure their allocated quantity of local capacity resources within a broader Transmission Access Charge (TAC) area. The RA program currently does not require LSEs to procure a pro rata share of resources in each local capacity area (or sub-area) within a TAC area.

²⁷ *Id.* at § 43A.2.3.

- (4) A CPM Significant Event;²⁸
- (5) A reliability or operational need for an Exceptional Dispatch CPM;²⁹
- (6) Resources at risk of retirement within the current RA Compliance Year (because it is uneconomic for them to continue operating without an RA contract or some other form of capacity payment) that will be needed for reliability by the end of the calendar year following the current RA Compliance Year; ³⁰and
- (7) A cumulative deficiency in the total Flexible RA Capacity in the annual or monthly Flexible RA Capacity Plans, or in a Flexible Capacity Category in the monthly Flexible RA Capacity Plans.³¹

With one exception, resources designated under the CPM are compensated

based on their bids into a competitive solicitation process with a soft offer cap, or they

can cost-justify a higher rate by making a filing with the Commission based on Schedule

F of the pro forma RMR agreement in Appendix G of the CAISO tariff.³² The latter

option allows CPM resources to recover their full, annual fixed cost of service. CPM

resources retain all revenues they earn in the CAISO markets.

The risk-of-retirement CPM allows the CAISO to retain resources needed for

reliability by the end of the calendar year in which it will be designated as a CPM

resource. For example, if in 2018 a resource requests a risk-of-retirement CPM

designation for 2019, the CAISO would assess whether the resource is needed for

reliability before the end of 2020. If it is, the CAISO would issue the resource a risk-of-

Id. at § 43A.2.4. As defined in Appendix A of the CAISO tariff, a CPM Significant Event is a "substantial event, or a combination of events, that is determined by the CAISO to either result in a material difference from what was assumed in the resource adequacy program for purposes of determining the Resource Adequacy Capacity requirements, or produce a material change in system conditions or in CAISO Controlled Grid operations, that causes, or threatens to cause, a failure to meet Reliability Criteria absent the recurring use of a non-Resource Adequacy Resource(s) on a prospective basis."

²⁹ *Id.* at § 43A.2.5.

³⁰ *Id.* at § 43A.2.6.

³¹ *Id.* at § 43A.2.7.

³² *Id.* at §§ 43A.4.1.1 and 43A.4.1.1.1.

retirement CPM designation. Risk-of-retirement CPM serves as a "bridge" until the year the unit is needed for reliability. This mechanism enables the CAISO to retain resources needed for future reliability but cannot obtain an RA contract for the upcoming year. The other types of CPM designations enable the CAISO to procure non-resource adequacy resources needed for reliability in the current or upcoming year. Capacity procured under the risk-of-retirement CPM authority is not designated based on minimizing costs of offers submitted to the competitive solicitation process. This capacity instead is compensated based on its requested compensation, up to the offer cap, or based on a resource-specific rate based on Schedule F of the *pro forma* RMR agreement.

6. Reliability Must-Run Tariff Provisions

The CAISO relies on RA programs as supplemented by the CPM to secure resources needed for reliability. Sometimes the CAISO may also rely on its authority to enter reliability must run (RMR) contracts. Governed by section 41 of the CAISO tariff, these contracts are geared towards reliability on a local level.³³ The CAISO performs Local Capacity Technical Studies under tariff section 40.3.1 and other technical studies as necessary to ensure compliance with applicable reliability criteria. The CAISO will then determine what units it requires to be RMR units. Also, every time a generator notifies the CAISO of its planned retirement or announces its imminent retirement, the CAISO studies whether the resource is needed for reliability, and the CAISO can offer the resource an RMR contract if it is needed.

³³ In particular, the CAISO can procure RMR units under section 41 to meet Load demand in constrained areas and provide voltage or black start required to meet local capacity needs.

Acceptance of an RMR designation is mandatory.³⁴ RMR agreements allow a generator to recover up to all of its fixed costs and the costs associated with planned and unplanned capital expenditures and repairs that occur during the term of the agreement.³⁵ The CAISO awards these contracts to generators on a one-year basis. These contracts ensure that generators bound by the contracts can provide their output to the CAISO to meet local reliability needs.

RMR contracts permit an owner of a generator unit to select from one of two conditions of how its unit will operate when the CAISO dispatches it to address local reliability needs.³⁶ If the RMR unit owner chooses Condition 1, it is compensated a certain percentage of its annual fixed costs while still participating in CAISO markets and retaining all revenues.³⁷ If the RMR unit owner chooses Condition 2, it is paid 100 percent of the unit's fixed costs.³⁸ However, an RMR unit owner under Condition 2 may not engage in CAISO market transactions, unless the CAISO issues a relevant dispatch notice.³⁹ When the CAISO dispatches the Condition 2 RMR unit for reliability, the owner of the generator unit must bid all of its capacity at formula-based prices.⁴⁰

⁴⁰ *Id.*

³⁴ CAISO tariff § 41.2.

³⁵ A Commission-approved *pro forma* Reliability Must Run contract is set forth in Appendix G to the CAISO tariff.

³⁶ Cal. Indep. Sys. Operator Corp., 116 FERC ¶ 61,274, at P 408 (2006) ("September 2006 MRTU Order"), order on reh'g, 119 FERC ¶ 61,076 (2007), order on reh'g, 120 FERC ¶ 61,023 (2007) (April 2007 MRTU Rehearing Order), reh'g denied, 124 FERC ¶ 61,094 (2008), aff'd, Sacramento Mun. Util. Dist. v. FERC, 616 F.3d 520 (D.C. Cir. 2010).

³⁷ September 2006 MRTU Order at P 408.

³⁸ *Id.*

³⁹ Id.

The CAISO's RMR authority promotes current and upcoming-year reliability by allowing the CAISO to procure a needed resource that has no RA contract.

B. The La Paloma Complaint

The Complaint alleges that the RA program in California is unjust, unreasonable, and unduly discriminatory. The Complaint alleges that the CPUC has discriminated against existing generation and fossil fuel resources through the administration of its long-term procurement process, and that the CPUC is favoring demand response and renewable resources. The Complaint also alleges that payments to new resources vastly exceed payments to existing resources, and market revenues are inadequate to sustain existing generators, primarily because the entry of renewable resources has driven down prices. La Paloma provides no specific details regarding its cost structure, revenues, financial situation, RA status, or efforts to obtain RA contracts or CAISO backstop agreements. The Complaint argues that the CAISO must rely on backstop procurement to obtain needed resources rather than durable market mechanisms.

La Paloma insists that the Commission must direct the CAISO to implement a mandatory centralized capacity market that includes flexibility requirements. La Paloma claims that such a capacity market is the only way to generate price signals to attract and retain needed resources and to incentivize appropriate investment in new facilities. La Paloma also contends that the Commission should direct the CAISO to implement a downward sloping demand curve, uniform locational pricing, and other features. Finally, La Paloma asks the Commission to order the CAISO to implement a transitional payment mechanism until the capacity market is implemented to provide existing resources with guaranteed payments for their capacity.

III. ANSWER

A. La Paloma Fails to Satisfy the Requirements of Section 206 of the Federal Power Act

La Paloma's Complaint falls far short of meeting the requirements of section 206 of the FPA in numerous ways. La Paloma fails to meet its burden of proof. Section 206 provides that "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."⁴¹ The Courts and the Commission have long recognized that a complainant "carries the heavy burden of making a convincing showing that [a rate order] is invalid because it is unjust and unreasonable in its consequences."⁴² Only if that initial burden is met can the Commission turn to whether the proposed replacement to the current market rules is just and reasonable.⁴³ Both the demonstration that the current rules are unjust and unreasonable and the showing that the proposed modification is just and reasonable must be supported by substantial evidence.⁴⁴ This substantial evidence must be specific and include more than just general allegations.⁴⁵ Indeed, "the Commission has consistently found that a party

⁴¹ 16 U.S.C. § 824e (b).

⁴² FPC v. Hope Natural Gas Co., 320 U.S. 591, 602 (1944). Although Hope addressed section 5 of the Natural Gas Act, the Commission properly applies these bedrock principles to the analogous provisions of the FPA. See Cal. Mun. Utils. Ass'n v. Cal. Indep. Sys. Operator Corp., 126 FERC ¶ 61,315 at P 70 (2009), order on reh'g, 143 FERC ¶ 61,174 (2013).

⁴³ See Norwalk Power, LLC, 120 FERC ¶ 61,048 at P 58 (2007), order on reh'g, 122 FERC ¶ 61,273 (2008). As explained in Section III.N of this Answer, the elements of La Paloma's proposed capacity market would not be just and reasonable if grafted into the CAISO tariff.

⁴⁴ Ameren Servs. Co. v. Midwest Indep. Transmission Sys. Operator, Inc., 124 FERC ¶ 61,173 at P 9 (2008), order on reh'g, 131 FERC ¶ 61,214 (2010).

⁴⁵ See Wis. Pub. Serv. Corp. et v. Midwest Independent Syst. Operator, Inc. and PJM Interconnection, LLC, 120 FERC ¶ 61,269 at PP 45-46 (2007) (noting that WPS Companies failed to meet

challenging a rate pursuant to section 206 of the FPA will have failed to provide a sufficient evidentiary record showing the filed rate to be unjust, unreasonable or unduly discriminatory if the entirety of the challenging party's submittal is comprised of unsubstantiated speculation."⁴⁶

La Paloma's Complaint rests on general allegations regarding the RA and backstop capacity procurement provisions of the CAISO tariff. La Paloma fails to provide substantial evidence to support these allegations, relying instead on unsupported assertions and unsubstantiated speculation. The Complaint's primary claim is that the RA structure in the region cannot "assure reliable operation of the CAISO system through just and reasonable rates that are not unduly discriminatory or preferential."⁴⁷ As explained below, however, the CAISO has maintained system reliability under the current RA paradigm and capacity procurement provisions of the CAISO tariff. The Complaint does not identify any reliability violation resulting from the purported inadequate RA and capacity procurement provisions of the CAISO tariff. Nor does it provide credible proof that such reliability violations are likely in the foreseeable future because of existing tariff provisions. La Paloma admits that there is a capacity surplus and that the CPUC's procurement processes have succeeded in bringing in new resources.⁴⁸ La Paloma claims that needed resources are not receiving sufficient

their burden under section 206 to demonstrate that the PJM Interconnection, L.L.C. (PJM) and Midwest Independent Transmission System Operator tariffs are unjust and unreasonable and that their proposal replacement was a just and reasonable replacement, in part because "WPS Companies did not identify any specific transmission or electricity rate that they consider unjust and unreasonable.").

⁴⁶ *Cal. Mun. Utils. Ass'n v. Cal. Indep. Sys. Operator* Corp., 126 FERC ¶ 61,315 at P 72 (2009), *citing BP West Coast Products LLC v. SFPP, L.P.,* 121 FERC ¶ 61,239 at P 35 (2007).

⁴⁷ Complaint at 1, Affidavit of Jeffrey Tranen and Joseph Cavicchi at 2 (La Paloma Affidavit).

⁴⁸ Complaint at 35.

revenues, but points to no specific evidence to support this claim.⁴⁹ La Paloma identifies no specific resources needed for reliability that have been forced to retire due to insufficient revenues. That some resources have exited the market is not evidence that the CAISO tariff is unjust and unreasonable because not all resources in the region are needed to maintain reliability.

The Complaint relies on the false premise that the FPA guarantees all generators in the region (or at least the La Paloma generating facility) sufficient revenues to cover their costs and earn a return at levels they would like. In applying the FPA, however, the Commission properly has recognized that ISO and RTO wholesale market designs should provide wholesale suppliers an opportunity to earn such revenues, but does not guarantee such revenues.⁵⁰ A supplier cannot be assured that it will receive revenues if a willing buyer does not agree to purchase wholesale electricity from the seller. The Supreme Court recognizes that "[t]he regulatory system created by the [FPA] is premised on contractual agreements voluntarily devised by the regulated companies."⁵¹ The FPA does not guarantee revenues to generators that have not been able to negotiate contracts successfully with load-serving entities and that have not been determined to be needed for reliability under the backstop procurement provisions of the

⁴⁹ See, e.g., Complaint at 38 (claiming that payments under the Capacity Procurement Mechanism "are inadequate to compensate the generation facilities needed for resource adequacy in California, particularly in view of the rapidly increasing need for flexible resources").

⁵⁰ Regional Transmission Organizations, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 at 31,371 (2000), aff'd sub. nom. Pub. Util. Dist. No. 1 v. FERC, 272 F.3d 607 (D.C. Cir. 2001) ("The Commission's holding in Order No. 2000 did nothing contrary to the fundamental tenets of section 205 of the FPA and nothing inconsistent with the rights of utilities to have the opportunity (as opposed to a "guarantee") to recover costs associated with facilities used to provide jurisdictional service.").

⁵¹ Morgan Stanley Capital Grp., Inc. v. Pub. Util. Dist. No. 1 of Snohomish Cnty., Wash., 554 U.S. 527, 534 (2008) (Morgan Stanley), citing In re Permian Basin Area Rate Cases, 390 U.S. 747 (1968).

CAISO tariff.

La Paloma also does not satisfy section 206 because identifies no CAISO tariff provision that is unduly discriminatory or preferential. That some resources might receive lesser compensation than other resources in their bilateral contracts does not render an ISO's or RTO's market rules unduly discriminatory or preferential.⁵² More importantly, the only terms and conditions that La Paloma alleges are unduly discriminatory or preferential are wholesale power purchasing decisions of LSEs and state procurement programs overseen by the CPUC. La Paloma's undue discrimination claims are focused on the CPUC's LTPP and the loading order adopted by the CPUC.⁵³ La Paloma argues that it has been discriminated against because the LTPP process excludes existing generation and, as a result, California LSEs have elected not to enter long-term contracts for the purchase of wholesale power from La Paloma. This argument ignores that the Commission does not regulate purchases of wholesale power under the FPA.⁵⁴ Allegations of discrimination by purchasers of wholesale power are not within the scope of section 206 of the FPA.

Although the CAISO includes general RA requirements for LSEs in its tariff, the CAISO tariff does not dictate what process LSEs may use to obtain rights to capacity that satisfy the resource adequacy requirements or the prices to be paid under such

⁵² It is worth noting that La Paloma does not allege price discrimination by generation fuel type. They acknowledge that new gas-fired combined cycle resources have received high-priced contracts. La Paloma Affidavit at P 8(c) fn. 17.

⁵³ See Complaint at 6-7, 14-15, 29, 39-40. As noted above, in February 2018, the CPUC issued an order replacing its LTPP process with new IRP filing requirements.

⁵⁴ In *Prior Notice and Filing Requirements under Part II of the Federal Power Act*, the Commission noted that "the FPA regulates sales public utilities make, not their purchases. Therefore, public utilities may buy from any seller without the need for FPA review at the time of the purchase." 65 FERC ¶ 61,081 at 61,507 (1993) (footnote omitted).

contracts, and the CAISO is not a party to such contracts. As the Commission has recognized, the CPUC oversees RA for the majority of load within the CAISO balancing authority area.⁵⁵ The Commission has previously "commend[ed] the CPUC for taking responsible action to ensure that all [load-serving entities] subject to its jurisdiction have adequate resources."⁵⁶ La Paloma's Complaint does not allege that specific RA provisions of the CAISO tariff are unduly discriminatory or preferential. Instead, La Paloma discusses CPUC-administered procurement programs arguing that California state-administered programs are the issue. It is clear, starting from page 1 of the Complaint, that CPUC procurement programs are the main focus of La Paloma's objections. But claims that a state program governing purchases of wholesale power by state-regulated distribution companies is unduly discriminatory are not within the scope of FPA section 206.

B. La Paloma Fails To Show that the Commission Should Exercise Its Jurisdiction Regarding Resource Adequacy to Eliminate a Bilateral Procurement Framework and Impose a Mandatory Centralized Capacity Market

1. The Commission's Resource Adequacy Jurisdiction

La Paloma asserts that the Commission should use its jurisdiction over resource adequacy to undo completely the existing bilateral procurement framework and impose a mandatory centralized capacity market on the CAISO.⁵⁷ La Paloma refers to the significant changes the Commission adopted for the ISO New England and PJM

⁵⁵ *Cal. Indep. Sys. Operator, Inc.*, 153 FERC ¶ 61,001 at P 3 (2015) ("The [CPUC] and other local California regulatory authorities have established resource adequacy programs to ensure that CAISO has sufficient resources offered into its market to maintain reliable grid operations."); see also Cal. Indep. Sys. *Operator Corp.*, 134 FERC ¶ 61,211 at P 4 (2011).

⁵⁶ September 2006 MRTU Order 116 FERC ¶ 61,274 at P 1118 (noting that the Commission's action in that order "does not disturb or impede the CPUC's progressive efforts in this area.").

⁵⁷ Complaint at 25-28.

capacity markets as precedent for such action. As discussed below, the comparisons are inapt. There is no basis for the Commission to invoke its resource adequacy jurisdiction and impose the drastic and unprecedented changes La Paloma requests.

The Commission has acknowledged the complex jurisdictional concerns resource adequacy issues raise and recognized the traditional role of state and local entities over resource adequacy.⁵⁸ The Commission has stressed that its goal is appropriately to recognize state and local jurisdiction over resource adequacy while fulfilling its statutory mandate under the FPA to ensure that the rates, terms, and conditions of jurisdictional sales of electric energy and transmission are just, reasonable, and not unduly discriminatory or preferential.⁵⁹ The Commission has recognized its role as ensuring a "workable approach to resource adequacy" that "is adhered to by all LSEs" while "respecting the states' traditional role in this area."⁶⁰ The Commission's approach has meant that it need not determine all of the elements of an RA program and can defer to state and local authorities in appropriate circumstances.⁶¹

The Commission applied this "balanced jurisdictional approach" in approving the CAISO's existing resource adequacy framework.⁶² Specifically, the Commission noted that its primary responsibilities regarding resource adequacy were (1) ensuring the reliability of the transmission system, (2) ensuring RA requirements are borne by all

⁵⁹ September 2006 MRTU Order at P 1112.

⁶¹ *Id.*

⁵⁸ September 2006 MRTU Order, 116 FERC ¶ 61,274 at P 1112, order on reh'g, April 2007 MRTU Rehearing Order, 120 FERC ¶ 61,023 at P 540. "MRTU" refers to the Market Redesign and Technology Upgrade, the name for the CAISO's initiative to develop and implement a new wholesale market design based, among other things, on locational marginal pricing.

⁶⁰ *Id.* at P 1117.

⁶² *Id.* at P 1118.

LSEs so there is no "leaning" on others to the detriment of customers and grid reliability, and (3) ensuring mechanisms exist, other than energy prices, to encourage the construction of new generation when and where needed.⁶³ The Commission held that a workable RA program will ensure that energy market bid caps restrict the ability of sellers to exercise market power, but do not result in insufficient generating capacity being added to meet the longer term capacity needs of customers.⁶⁴ In its *September 2006 MRTU Order,* the Commission followed these guidelines in approving the CAISO's RA framework.

When the Commission has exercised its jurisdiction to order major foundational changes to an ISO or RTO's existing RA construct, it has done so only because there were imminent and significant threats to system reliability.⁴⁵ That was the case for both ISO New England and PJM, the two examples La Paloma invokes to support the sweeping changes its proposes. As discussed in greater detail in this answer, the CAISO does not face the same, significant reliability problems, flawed capacity market designs, and new resource needs that PJM and ISO New England faced when the Commission ordered them to overhaul their then-existing capacity market constructs. There is no basis here for the Commission to invoke its RA jurisdiction to undo the existing bilateral procurement framework in the CAISO footprint and instead impose a mandatory, centralized capacity market.

⁶³ *Id.* at PP 1113-1118; *April 2007 MRTU Rehearing Order*, 120 FERC ¶ 61,023 at PP 540-58; see also Midwest Indep. Transmission Sys. Operator, Inc., 122 FERC ¶ 61,283 at P 55 (2008).

⁶⁴ April 2007 MRTU Rehearing Order, 120 FERC ¶ 61,023 at P 552.

⁶⁵ The Commission has also made countless changes to eastern centralized capacity markets to ensure they remain well-functioning. The underpinnings for these changes are inapt here because the CAISO does not have a centralized capacity market.

2. The Reliability Problems Facing PJM That Led to PJM's Reliability Pricing Model

In 2006, the Commission approved PJM's Reliability Pricing Model (RPM) capacity market as a replacement to PJM's existing capacity obligation rules.⁶⁶ Under PJM's prior capacity procurement model, LSEs had to procure a fixed percentage of capacity above their forecasted peak load to meet forecasted load plus reserves.⁶⁷ They could acquire capacity resources by entering into bilateral agreements, building generation, or participating in PJM's capacity credit markets.⁶⁸ Under the PJM framework in place at that time, LSEs could wait to procure their required capacity until the day before the operating day, and capacity resources could be committed for periods as short as one day.⁶⁹

The Commission found that, because of a combination of factors, PJM's capacity scheme of that time was unjust and unreasonable as a long-term capacity solution. The Commission noted that the PJM capacity construct assumed that generating resources located anywhere within PJM could satisfy the capacity needs in any local area within PJM even though PJM was having difficulty in meeting reliability requirements in local areas and expected the problem to expand to other areas.⁷⁰ PJM admitted that its then-

⁶⁶ *PJM Interconnection, LLC,* 115 FERC ¶ 61,079 ("PJM RPM Order"), order denying reh'g and approving settlement, 117 FERC ¶ 61,331 (2006) ("PJM RPM Settlement Order"), order on reh'g, 119 FERC ¶ 61,318 (2007).

⁶⁷ *PJM RPM Order,* 115 FERC ¶ 61,079 at P 9.

⁶⁸ *Id.*

⁶⁹ Id.

⁷⁰ *Id.* at P 3.

existing capacity scheme failed to address inadequacies in reliability, and within the next couple of years, limitations in its capacity construct would result in multiple reliability criteria violations in eastern PJM, particularly in New Jersey, the Delmarva Peninsula, and the Baltimore-Washington area.⁷¹ PJM also anticipated that other regions in its balancing authority area were trending in the same direction.⁷² PJM stated that such violations resulted from steady load growth and insufficient generation additions.⁷³ PJM also asserted that its daily and monthly capacity credit market was suffering from significant volatility in capacity market prices that created uncertainty regarding the possibility of cost recovery, rendering generators reluctant to invest in new generation, and often leading to the cancellation of planned generation.⁷⁴ In short, PJM conceded that its capacity regime could not sustain long-term investment.

PJM stated that the existing capacity scheme suffered from several major flaws. First, it lacked "an important locational element." The result was few generation additions and high rates of retirements, including retirements in areas where load was growing the fastest.⁷⁵ Second, PJM stated that its capacity construct failed to provide incentives for supply additions because prices in the PJM capacity credit market were extremely volatile, including at or near zero for most of the 2000-2004 period, with

⁷² *Id.*

⁷¹ *Id.* at PP 11, 30-31. An affidavit provided by PJM showed that multiple reliability violations had occurred in PJM, particularly in New Jersey, due to generation retirements, and that load growth in the area was expected to increase by 9.8 percent over the next five years, with generation additions not keeping pace. *Id.* at P 31. Expected retirements led to identified reliability criteria violations for 2005 and each succeeding year through 2009. *Id.* Projected retirements were also projected to result in reliability criteria violations for the Baltimore-Washington and Delmarva regions by 2008. *Id.*

⁷³ Id.

⁷⁴ *Id.* PJM noted that it was experiencing steady load growth. *Id.* at P 10.

⁷⁵ *Id.* at P 22.

occasional price spikes.⁷⁶ Third, the rules did not look far enough into the future to secure capacity in time to meet reliability needs because the rules allowed resources to be committed for as short as one day, and capacity resources could opt out of their capacity resource status with as little as 36-hours' notice.⁷⁷ Thus, the rules failed to incentivize any forward procurement.

The Commission agreed that the existing PJM capacity construct would "fail to achieve the intended goal of ensuring reliable service," did not enable market participants to see the reliability problems in particular locations, and did not provide price signals to elicit solutions to reliability problems in particular locations.⁷⁸ Further, the Commission concluded that load growth would render the existing construct unreasonable on a long-term basis.⁷⁹ The Commission recognized that "[w]hile one or more of the elements of PJM's current capacity construct may exist and be just and reasonable in other regional transmission organizations ... the combination of these elements, results in an unjust and unreasonable capacity construct within PJM."⁸⁰ Further, net revenues from PJM's markets did not cover the cost of a new peaking unit, which was problematic because certain areas of PJM already had insufficient generation to ensure reliability, and investors likely would not finance new generation needed in these areas absent a sufficient revenue stream.⁸¹ Concerns were further

- ⁷⁷ *Id.* at P 24.
- ⁷⁸ *Id.* at P 29.
- ⁷⁹ Id.
- ⁸⁰ *Id.*
- ⁸¹ *Id.* at P 35.

⁷⁶ *Id.* at P 23.

heightened because generators in PJM could retire upon 90 days' notice, and PJM lacked any mechanism to require such resources to remain in service.⁸²

The Commission subsequently approved a settlement implementing the general RPM framework that exists today, which includes locational and forward procurement. As part of that framework and as recommended by the Commission, LSEs are able to opt out of the RPM entirely by constructing their own generation or procuring supply bilaterally to meet their capacity obligations.⁸³

3. The Reliability Problems in ISO New England That Caused the Commission to Order Major Changes to ISO New England's Capacity Market

In 2006, the Commission acted under FPA section 206 to order changes to ISO New England's capacity market and approve a new Forward Capacity Market (FCM) because there were flaws in ISO New England's existing capacity market and ISO New England was facing significant reliability problems.⁸⁴ Reserve margins were barely adequate, and deficits were predicted in the very near future.⁸⁵ There were reliability issues in certain locally constrained areas on the system. ISO New England found that the existing southwestern Connecticut power system did not meet NERC, Northeast Power Coordinating Council, and New England Power Pool (NEPOOL) reliability performance standards.⁸⁶ Absent new transmission or new resources, virtually all of the

⁸⁵ Devon I at P 63.

⁸² *Id.* at P 36.

⁸³ *PJM RPM Order,* 115 FERC ¶ 61,079 at P 6; *PJM RPM Settlement Order,* 117 FERC ¶ 61,331 at P 36.

⁸⁴ Devon Power, LLC, 115 FERC ¶ 61,340 (Devon I) (2006), order on reh'g, 117 FERC ¶ 61,133 (Devon II) (2006), order denying stay, 119 FERC ¶ 61,150 ("Devon Power") (2007).

⁸⁶ Devon Power, LLC, 107 FERC ¶ 61,240 at P 43 (2004).

existing resources in Connecticut were needed for reliability.⁸⁷ The record was replete with unchallenged statements that additional infrastructure was needed soon to avoid violations of reliability criteria.⁸⁸ At an oral argument "[t]he parties ... generally agreed that the *status quo* is failing and that generation resources are not being added at a rate necessary to maintain reliability and assure just and reasonable wholesale power prices."⁸⁹

The Commission also found significant flaws in ISO New England's capacity market (the "Installed Capacity Market") that resulted in inadequate investment in new capacity and insufficient revenues for generation owners to justify continued operation.⁹⁰ A major flaw was the capacity market's lack of a locational component that valued resources needed for reliability based on their location, inhibiting such resources from recovering their costs.⁹¹ Resources in locally constrained areas were not receiving sufficient revenues. For example, ISO New England sought approval for RMR agreements for over 1,900 MW of existing capacity in Connecticut and the constrained southwestern Connecticut area⁹² besides filing RMR contracts for resources in the Boston area.⁹³ The Commission found that a locational component was a necessary

89

⁸⁷ Devon Power, LLC, 103 FERC ¶ 61,082 at P 27 (2003).

⁸⁸ Id.

Devon II, 117 FERC ¶ 61,133 at P 12.

⁹⁰ *New England Power Pool,* 100 FERC ¶ 61,287 at P 101 (2002). The Commission stated that location was an important aspect of ensuring optimal investment in resources.

⁹¹ Devon Power, LLC, 103 FERC ¶ 61,082 at P 7 (2003), order on compliance filings and establishing hearings, 107 FERC ¶ 61,240 (2004). The ICAP market merely required load serving entities to procure a specified amount of installed capacity based on their peak loads, plus a reserve margin. Devon I, 115 FERC ¶ 61,340 at P 4 (2006).

⁹² Devon I, 115 FERC ¶61,340 at P 7 (Four NRG units and PPL Wallingford).

⁹³ Devon Power, LLC, 107 FERC ¶ 61,240 at P 35.

feature for the ISO New England capacity market.⁹⁴ Such a component would ensure that resources needed for local reliability in specific areas are procured and adequately compensated, and new infrastructure would be added where reliability problems are most imminent.⁹⁵ The Commission also noted that the forward-looking nature of ISO New England's new FCM would provide signals to investors when new infrastructure resources are necessary with sufficient lead time to allow that infrastructure to be put in place before reliability is sacrificed.⁹⁶

4. Conditions in the CAISO Are Unlike the Conditions in PJM and ISO New England That Resulted In Sweeping Changes to Their Resource Adequacy Constructs

The circumstances that led to sweeping changes in the ISO New England and PJM capacity procurement constructs do not exist in the CAISO region. The CAISO has not incurred reliability criteria violations and is not facing imminent violations. The CAISO is not facing load growth and does not need new pricing schemes to incent new generation to maintain reliability. Unlike the ISO New England and PJM capacity markets described above, the CAISO's resource adequacy framework already includes locational procurement requirements (and flexible capacity procurement requirements). Adequate mechanisms are in place to procure new resources on a long-term basis. These include increasing RPS requirements, storage procurement mandates, and the CPUC's IRP program. Unlike PJM's then-applicable capacity construct, resource adequacy under the CAISO tariff is not a daily product. Also, unlike the aforementioned circumstances in PJM, the CAISO has the means to require resources needed for

⁹⁴ Devon Power, LLC, 103 FERC ¶ 61,082 at P 37.

⁹⁵ Id.

⁹⁶ *Devon I,* 115 FERC ¶ 61,340 at P 65.

reliability to remain in service and to pay them their full cost-of-service. Finally, as discussed in Section III.K, *infra*, the CAISO expects that enhancements to California's RA program arising from the ongoing CPUC RA Refinement Proceeding and CAISO tariff amendments will make the program even more robust, further improve reliability efforts, and benefit suppliers.

The Commission recently declined to make sweeping changes to MISO's resource adequacy construct and impose a mandatory centralized capacity market, recognizing that MISO's resource adequacy construct enables the MISO region to maintain sufficient resources to meet system-wide and locational requirements.⁹⁷ Similarly, the Commission should reject La Paloma's unsupportable and overreaching request to impose a mandatory centralized capacity market on the CAISO and require CAISO ratepayers to make transition payments to resources that do not have an RA or RMR contract and that the CAISO has not found are needed for reliability under its tariff.

C. La Paloma Fails to Show the Existence of Any Reliability Problems That Justify the Unprecedented Remedy It Requests

La Paloma states that by 2020 the CAISO's flexible capacity needs from existing generators will increase to nearly 20,000 MW, but many generators that can provide this flexibility face premature retirement because they are not earning sufficient revenues in the CAISO markets.⁹⁸ La Paloma notes that the CAISO and others have recognized this issue⁹⁹ and that the CAISO has recognized the need for a durable structural

⁹⁷ MidContinent Indep. Sys. Operator, Inc., 162 FERC ¶ 61,176 at P 58 (2018) (2018 MISO RA Order).

⁹⁸ Complaint at 2.

⁹⁹ La Paloma Affidavit at P 9 (h)-(j).

process to address these challenges.¹⁰⁰ La Paloma asserts that the CAISO's 2018 Summer Loads and Resources Assessment (Summer Assessment) "bolsters this dire outlook," finding a fifty percent chance that the CAISO will need to declare a Stage 2 Emergency for at least one-hour this summer.¹⁰¹ La Paloma states this risk results in part from the retirement of 789 MW of dispatchable natural gas generation that was previously available to meet high load conditions that persist after the solar generation ramps down in the late afternoon.¹⁰² La Paloma argues that a mandatory centralized capacity market is necessary to incent appropriate investment by existing resources.

1. The CAISO Has Maintained Reliability with an RA Framework Based on Bilateral Procurement

There are no "dire" reliability problems requiring implementation of a mandatory centralized capacity market. La Paloma does not assert that the CAISO has failed to maintain reliability under an RA program based on bilateral procurement, nor does La Paloma allege that the CAISO is facing imminent reliability standards violations due to a lack of capacity. The CAISO has maintained reliability under the existing RA framework, and there is no evidence that the CAISO is facing imminent violations of reliability standard requirements that requires imposing a mandatory centralized capacity market.

Existing mechanisms, including the CPUC's RA program and Integrated Resource Planning process, and the CAISO's existing backstop mechanisms, provide

¹⁰⁰ *Id.* at 9 (h), citing *Transcript of 4/24/2017 Joint Agency IEPR Workshop on Risk of Economic Retirement for California Power Plants, Existing Power Plant Reliability Issues,* California Energy Commission, Docket No. 17-IEPR-14, at 9-10, 103, 157 (May 16, 2017) available at <u>https://efiling.energy.ca.gov/getdocument.aspx?tn=217616</u>.

¹⁰¹ Complaint at 22.

¹⁰² *Id.* at 22-23.

the basic stricture and tools to maintain reliability in the future just as it has been maintained in the past. As discussed in Section III.K, *infra*, the CAISO is actively engaged with the CPUC to ensure appropriate RA refinements are timely made to address the transforming needs of the grid and improve the efficacy of the RA program in light of emerging trends and expected future operational challenges. A mandatory centralized capacity market is unnecessary to maintain future reliability.

Over the last several years, the CAISO has no violations of transmission planning, transmission operation, or resource and demand balancing mandatory reliability standards. The bulk power system under the CAISO's operational control has remained secure under the current market and bilateral procurement RA structure. The CAISO has met its expected energy requirements and its contingency reserve requirements. In the last decade, the CAISO has declared a system emergency only once, in May 2017, due to higher than expected loads, lower than expected intertie schedules, and the forced outage of approximately 600 MW of internal generation.¹⁰³ The CAISO dispatched contingency reserves and utility interruptible load programs that were RA resources to address the situation. During the event, the CAISO met its energy requirements and recovered its required contingency reserves within the operating hour.

For its infrastructure planning responsibilities, the CAISO performs significant reliability assessments through its transmission planning process. The CAISO identifies emerging reliability issues in each year's transmission plan and identifies mitigation to

¹⁰³ See Market Performance and Planning Forum, dated May 16, 2017 at slides 4-5. <u>http://www.</u> caiso.com/Documents/Agenda-Presentation-MarketPerformance-PlanningForum-May16_2017.pdf.

address any reliability issues. Each year, the CAISO coordinates with state agencies and consults with stakeholders to develop planning assumptions and scenarios for infrastructure planning studies in the coming year. The assumptions include demand, supply, and system infrastructure elements, including how resource portfolios support local transmission operations.¹⁰⁴

The CAISO relies on load forecasts and load modifier forecasts prepared by the California Energy Commission (CEC) through its Integrated Energy Policy Report (IEPR) processes. These forecasts identify a relatively flat load forecast for the most recent 10 year planning horizon, reflecting a decline from peak load forecasts in prior years.¹⁰⁵ The declining load forecasts heavily contributed to the CAISO canceling and reducing the scope of several previously approved transmission projects in the 2015-2016 transmission plan, the 2016-2017 transmission plan, and the 2017-2018 transmission plan.¹⁰⁶ The CAISO recognized that "[c]onsistently declining load forecasts across the entire forecast period – especially for the one-in-ten peak load forecasts affected by weather normalization processes -- has led to the third year of reevaluation of previously approved upgrades."¹⁰⁷ The most recent CEC load forecast for

¹⁰⁴ More information about the CAISO's 2018-2019 transmission planning process is available on the following website: <u>http://www.caiso.com/planning/Pages/TransmissionPlanning/Default.aspx.</u>

¹⁰⁵ CAISO 2017-2018 Transmission Plan at 17-19 (March 2018) available at: <u>http://www.caiso.</u> <u>com/planning/Pages/TransmissionPlanning/2017-2018TransmissionPlanningProcess.aspx.</u>

¹⁰⁶ *Id.* at 6-7.

¹⁰⁷ *Id.* at 1. Similarly, in the 2016-2017 Transmission Plan, the CAISO cancelled 13 projects. The CAISO noted there that "[c]onsistently declining load forecasts across the entire forecast period – especially for the one-in-ten peak load forecasts – as well as higher than anticipated development of behind the meter solar photovoltaic generation have put additional downward pressure on load-driven transmission projects, leading to re-evaluation of the need for certain previously approved upgrades that were predominantly load driven." CAISO 2016-2017 Transmission Plan at 1 (March 2017) available at http://www.caiso.com/Documents/Board-Approved_2016-2017TransmissionPlan.pdf.

the average annual CAISO coincident peak growth reflects negative load growth between 2018 and 2030.¹⁰⁸

2. Resource Development is Occurring, and There Is No Need for A Different Mechanism to Incent New Generation

At the system level, the CAISO has experienced a significant generating capacity surplus on its system. In its complaint, La Paloma admits this is the case.¹⁰⁹ In its latest summer assessment, the North American Electric Reliability Corporation (NERC) identified that California had sufficient anticipated reserve margins for the 2018 summer period.¹¹⁰ The Commission, too, has noted that "the summer 2018 reserve margin for the portion of WECC that is mostly CAISO is projected to be 20 percent, which is 5 percent higher than the reference margin of 15 percent."¹¹¹ The United States Government Accountability Office (GAO) has observed that NERC projects in all regions of the country, including the CAISO, are expected to maintain projected reserve margins at 16 percent or higher from 2017 through 2021.¹¹²

The CAISO anticipates and has planned for a net future reduction of

approximately 4,900 MW of available thermal resources by the end of 2020 in

¹⁰⁸ See Cal. Energy Comm'n Cal. Energy Demand (CED) 2018-2030 Revised Electricity and Natural Gas Demand Forecast: Process, Summary of Results, and Choice of Planning Forecast at 18 (Feb. 21, 2018) available at https://efiling.energy.ca.gov/GetDocument.aspx?tn=222728.

¹⁰⁹ Complaint at 2, 35-36; La Paloma Affidavit at P 9.

¹¹⁰ NERC 2018 Summer Reliability Assessment at 7 (2018) available at <u>https://www.nerc.com/pa/</u> <u>RAPA/ra/Reliability%20Assessments%20DL/NERC_SRA_05252018_Final.pdf</u>.

¹¹¹ Commission Staff, *Summer 2018 Energy Market and Reliability Assessment*, Item No.: A-3, at 7 (May 17, 2018), available at https://docs.google.com/viewer?url=http%3A%2F%2Fwww.ferc.gov%2F CalendarFiles%2F20180517110354-A-3-staff-presentation-FINAL.pdf. NERC has a similar anticipated reserve margin for in region in 2018 and 2022. NERC, *State of Reliability Report*, at 145-149 (2018), available at https://www.nerc.com/pa/RAPA/PA/Performance%20Analysis%20DL/NERC_2018_SOR_06202018_Final.pdf.

¹¹² 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) (GAO Report) available at <u>https://www.gao.gov/assets/690/688811.pdf</u>.

compliance with the State's once-through-cooling (OTC) regulations and other announced retirements. This "net" number reflects that some OTC resources with compliance dates are being repowered or replaced, not retired. The CAISO's transmission planning process and the CPUC's procurement and long-term planning process have already taken these retirements into account in forecasting future requirements.

The CAISO interconnection queue presently contains 289 projects and 59,273 MW of generation. Based on the status of the CAISO's interconnection study process and key indicators such as whether an interconnection customer has a power purchase agreement, the CAISO expects more than 6,500 MW of additional capacity beyond the OTC-related repowering and replacements to interconnect to its transmission system in the next three years.

The Integrated Resource Planning process, RA process, RPS requirements, and storage procurement targets discussed in Section II.A., *supra*, have led to surplus capacity. La Paloma does not dispute that fact and, indeed, acknowledges it.¹¹³ La Paloma has not demonstrated that the existing procurement framework has been inadequate to attract new resources and that only a mandatory centralized capacity market can foster the new of entry of resources or maintain reliability. Also, as demonstrated in Section III.D, the CAISO's use of its backstop procurement authority to address specific local area requirements on a transitional basis does not indicate a dire reliability concern requiring adoption of a mandatory centralized capacity market.

¹¹³ See, e.g., Complaint at 36.

3. The 2018 Summer Assessment Does Not Foretell Dire Reliability Problems for the CAISO System

That CAISO modeling indicated there is a 50 percent chance the CAISO will have to declare a Stage 2 Emergency for one hour in late August or early September 2018 does not, as La Paloma claims, constitute a "dire outlook" regarding overall reliability on the system. The CAISO 2018 Summer Assessment¹¹⁴ reflects a modeling exercise designed to provide the CAISO and industry an assessment of the upcoming summer supply and demand outlook and identify issues regarding upcoming operating conditions. This is a critical step in understanding potential issues and allowing the CAISO to put the preparations in place to prevent any reliability problems.

The potential declaration of a system emergency could occur if the CAISO dispatches contingency reserves to serve load and needs to recover those reserves within required timeframes. A Stage 2 Emergency means that the CAISO's operating reserves fall to a level between three and six percent. Under these conditions, the CAISO can take any number of actions including, among other things, (1) utilizing Reliability Demand Response Resources (RDRR), which are RA resources the CAISO can dispatch after it declares a warning or emergency, ¹¹⁵ (2) issuing Flex Alerts that have proven over the years to reduce peak demand, (3) manually committing units post-day-ahead and exceptionally dispatch RA resources to ensure ability to serve load and meet flexible ramping requirements; and (4) manually dispatching intertie resources that

¹¹⁴ CAISO, *Summer Assessment* (2018), available at <u>http://www.caiso.com/Documents/2018</u> <u>SummerLoadsandResourcesAssessment.pdf</u>.

¹¹⁵ 2018 Summer Assessment at 3. The MW of RDRR resources is capped at two percent of the CAISO's all-time peak.

have RA obligations tied to CAISO load.¹¹⁶

The CAISO's 2018 Summer Assessment reflected the latest available information at the time, and was driven largely by low hydro conditions experienced in the spring of 2018¹¹⁷ combined with high forecast load conditions that persist after solar generation ramps down in the late afternoon.¹¹⁸ Further, the 2018 Summer Assessment reflected a robust probabilistic approach using a stochastic production simulation model to assess the system supply and demand outlook on an hourly basis. Because the stochastic production cost modeling unit commitment and dispatch focuses on economically maintaining the minimum required reserves, it provides a conservative, *i.e.*, least cost, solution¹¹⁹ to dispatch resources before considering other mitigation solutions that could be utilized under times of system stress that would increase costs. The results therefore reflect a combination of assessing the available resources, including reduced hydro limitations and generation retirement and outages, as well as "baseline" operating assumptions regarding economic generation commitment and dispatch focused on minimizing reserves for the sake of cost management. Essentially, the CAISO considered both the availability of resources and how they would be committed and dispatched in the normal course of events. For this reason, the 2018 Summer Assessment concluded that operating conditions "**could** result in operating reserve shortfalls" (emphasis added).¹²⁰ This ensured that the CAISO would be fully

¹¹⁶ *Id.* at 10.

¹¹⁷ As reflected on page 3 of the 2018 Summer Assessment as of April 2, 2018, the statewide snow water content for the California mountain regions was 51 percent of the April 1 average.

¹¹⁸ *Id.*

¹¹⁹ 2018 Summer Assessment at 2.

¹²⁰ 2018 Summer Assessment at 10.

prepared for potential conditions it might face this summer and undertake appropriate operational planning and coordination activities. The 2018 Summer Assessment does not constitute a "dire outlook" regarding overall reliability on the system.

4. The CAISO Is Ensuring There Remains Sufficient Flexible Capacity on the System

La Paloma states that the CAISO will need to rely on existing flexible resources in the future to maintain electric grid reliability, but there is a risk needed resources will retire prematurely because they are not earning sufficient revenues in the CAISO markets. This observation is unremarkable and merely restates a conclusion the CAISO already has drawn in public reports.

The CAISO develops flexible capacity needs assessments annually under its current tariff, which informs annual bilateral procurement requirements under California's resource adequacy program. The CAISO's latest flexible capacity needs assessment forecasts a maximum monthly flexible capacity need in 2019 of 16,323 and 18,146 MW in 2021.¹²¹ Currently, the CAISO system has over 34,000 MW of flexible capacity.¹²² As described below, the CAISO has projected this situation to continue into the future in studies conducted as part of the transmission planning process.

The CAISO has recognized that the increased quantities of renewable generation being added to the grid is putting economic pressure on existing gas-fired generation, especially for those generators not obtaining RA contracts, and this potentially could

¹²¹ See CAISO Final Flexible Capacity Needs Assessment for 2019 at 9 (May 21, 2018), available at <u>http://www.caiso.com/Documents/2019FinalFlexibleCapacityNeedsAssessment.pdf</u>.

¹²² See CAISO Final Effective Flexible Capacity List for Compliance Year 2018 (2018), available at <u>http://www.caiso.com/Documents/FinalEffectiveFlexibleCapacityList-2018.xlsx</u>.

result in the economically-driven retirement of gas-fired generation.¹²³ The CAISO proactively is assessing this issue and its potential risk to future system reliability.

As indicated above, the RA program includes a flexible capacity procurement obligation for LSEs. The CAISO reassesses its flexible capacity needs annually, and they are reflected in updated annual flexible capacity RA procurement requirements for LSEs each year. La Paloma refers to specific instances of RMR and CPM backstop procurement as suggesting a need for the CAISO to procure flexible capacity out-ofmarket; however, as discussed in Section III.D, *infra*, none of that procurement was to meet a flexible capacity need or remedy a flexible capacity deficiency.

Regarding future years, the CAISO is proactively assessing flexible capacity needs and resource requirements to inform bi-lateral procurement. In the last two transmission planning cycles, the CAISO has studied the risks of early economic retirement of the gas fleet. The CAISO's base case (based on a 10 years-plus outlook) shows that capacity insufficiency (in the early evening and after sunset) starts to emerge with the retirement of 4,000-6,000 MW of gas-fired resources (above and beyond the OTC and Diablo Canyon retirements).¹²⁴ In the 2017-18 Transmission Plan, the CAISO ran a sensitivity study (based on the same timeline as the earlier study) using a significantly lower Additional Achievable Energy Efficiency (AAEE) assumption than the assumption used in the base case, which is based on AAEE levels set forth in California statute.¹²⁵ The sensitivity study showed that 1,000-2,200 MW of gas-fired capacity (again above and beyond the OTC retirements) could be retired without

¹²³ CAISO 2016-2017 Transmission Plan at 206-07.

¹²⁴ *Id.* at 206-19.

¹²⁵ CAISO 2017-2018 Transmission Plan at 284-86.

causing capacity sufficiency issues. These results also refute the claim of an imminently dire outlook for system reliability. The CAISO will continue to refine these studies in the years ahead to inform the CAISO's input into the RA Refinement Proceeding underway at the CPUC, the CPUC's IRP and RA processes, and the CAISO's consideration of the need to utilize backstop procurement mechanisms if absolutely necessary to ensure generation needed to maintain reliability does not retire.

The CAISO is also studying future flexible capacity needs and resource requirements in its ongoing Flexible Resource Adequacy Criteria and Must Offer Obligation –Phase 2 (FRACMOO 2) stakeholder process. The goal is to align the flexible RA capacity framework with changing operational needs as the system transforms. The CAISO's analyses to date show that there is sufficient flexible capacity on the system that, when aligned with enhancements the CAISO is making to its dayahead market, will ensure that flexible capacity is committed properly.¹²⁶ Sufficient existing capacity must be retained, but there is no need for any new mechanism to incent the construction of additional flexible capacity at this time. In particular, there is no need for a mandatory centralized capacity market to incentivize new generation. The CAISO is also considering enhancements to its backstop procurement mechanisms and processes in its ongoing Review of RMR and CPM stakeholder initiative.

¹²⁶ Corrected Chapter 2: Multi-Year Resource Adequacy Procurement Requirements, Rulemaking 17-09-020 Track 2 at 4-5 (filed July 10, 2018), available at <u>http://www.caiso.com/Documents/Jul10_2018</u> <u>RAProceedingTrack2Testimony-Chapter2-Multi-YearRAProcurementRequirements_ProposalNo1_R17-09-020.pdf</u>.

5. The CAISO and CPUC Are Proactively Considering RA Program Refinements to Adapt to an Evolving Grid

Notwithstanding the existing capacity surplus, the CAISO recognizes that the RA program must evolve as new trends emerge and grid conditions evolve in the future to ensure appropriate rules for counting resource capability and securing needed capacity. The CAISO's 2018 Policy Initiative Roadmap¹²⁷ recognizes that "emerging trends are altering the California resource procurement and resource adequacy landscape" (emphasis added).¹²⁸ The Roadmap recognizes that as the grid transforms the focus must change from a focus on summer peak demand. It also recognizes that revenue inadequacy may lead to potential uneconomic retirement and that some gas resources needed for reliability may require maintenance and capital investment.¹²⁹ The Roadmap specifies six ways in which the CAISO will collaborate with the CPUC to refine the RA program to align with the future needs of the transforming grid. The three steps for 2020 are to (1) establish an RA capacity assessment that assesses both capacity and energy needs to better align with operational needs of the transforming grid; (2) modify resource counting rules for non-availability and outages; and (3) vet load forecasting assumptions used to set RA requirements.¹³⁰ The three steps for 2021 are to: (1) establish multi-year RA requirements to ensure procurement of essential resources in transitioning to a grid consisting primarily of variable energy resources; (2) ensure

¹²⁷ CAISO 2018 Policy Initiatives Roadmap (2018), available at <u>http://www.caiso.com/Documents/</u> 2018FinalPolicyInitiativesRoadmap.pdf.

¹²⁸ *Id.* at 25. La Paloma's Affidavit cites to the CAISO's 2018 Policy Initiatives Roadmap as suggesting that a reliability problem exists now and supporting the need for a mandatory centralized capacity market. The Roadmap offers no such support.

¹²⁹ *Id.*

¹³⁰ *Id.* at 27.

sufficient capacity is procured in each local area; and (3) modify the RA showing timeline to better enable orderly retirement decisions.¹³¹

The CAISO and the CPUC are addressing these matters in Tracks 2 and 3 of the ongoing CPUC RA Refinement Proceeding, which is discussed in Section III.K, *infra*. The CPUC has already indicated its intent to adopt multi-year local capacity requirements for 2020. In addition, the CAISO has proposed that the CPUC adopt a multi-year RA framework that includes three-year forward procurement requirements for system, local, and flexible capacity commencing in 2020.¹³² The CAISO's proposal for multi-year capacity procurement will help ensure that capacity remains available to meet the grid's changing needs, support the orderly retirement of resources that are not needed for reliability, and provide an additional revenue stream for RA resources that can support any necessary capital maintenance. There simply is no need for a CAISO-run mandatory centralized capacity market, and a mandatory centralized capacity market would not even address many of the aforementioned action items specified in the Roadmap.

Also, the CAISO can implement the six action items referenced in the Roadmap for the 2020 and 2021 RA compliance years. Given the CAISO's starting point and the amount of time ISO New England took to develop and implement the FCM, any mandatory centralized capacity market likely could not procure capacity prior to the 2024 RA compliance year at the earliest. In any event, retaining some portion of the existing natural gas fleet with flexibility characteristics should not drive a decision to

¹³¹ *Id.*

¹³² See CAISO Reply Comments in Track 2 of CPUC Rulemaking 17-09-020, <u>http://www.caiso.com/</u> <u>Documents/Aug8_2018_ReplyComments_Track2_RAProgram_R17-09-020.pdf</u>.

impose a mandatory centralized capacity market that would procure system and local capacity as well, especially when there is no need for any new mechanism to incentivize new generation. If LSEs do not procure needed resources through the RA process, the CAISO can procure them under its backstop procurement mechanism, including the risk-of-retirement CPM.

D. The CAISO's Limited Backstop Procurement Does Not Justify Imposing a Mandatory Centralized Capacity Market

La Paloma claims the CAISO's recent increased use of RMR and Exceptional Dispatch results from decreasing net energy market revenues for resources.¹³³ To support its claim, La Paloma notes that the CAISO entered RMR contracts for approximately 700 MW of capacity in November 2017¹³⁴ and exceptionally dispatched "over 1,000 MW" of capacity "for the last three months."¹³⁵ La Paloma also notes that the CAISO has indicated its intent to enter RMR agreements with NRG's Ellwood and Ormond Beach units representing approximately 800 MW.¹³⁶ La Paloma claims that the increased reliance on RMR contracts exacerbates the revenue inadequacy problem in California because these resources are compensated separately to stay in operation, and their higher costs are not reflected in locational marginal prices.¹³⁷ Citing the Commission's order in *Devon Power LLC*, La Paloma asserts that "[e]xtensive use of

¹³³ Complaint at 33.

¹³⁴ *Id.* La Paloma also notes that NRG has notified the CAISO of its intent to retire three units prior to the 2019 resource adequacy year, and that the CAISO has indicated its intent to enter into RMR agreements for one generating unit at the Ellwood facility and one unit at the Ormond Beach facility. La Paloma Affidavit at P 9(d).

¹³⁵ Complaint at 33-34, citing La Paloma Affidavit Ex. JT/JC-9 (which shows December 2017 and January-February 2018 as "the last three months").

¹³⁶ La Paloma Affidavit at P 9(d).

¹³⁷ Complaint at 33.

RMR undermines effective market performance", "suppressed market clearing prices further erode the ability of other generators to earn competitive revenues in the market and increase the likelihood that additional units will also require RMR agreements to remain profitable", and RMR agreements should be a last resort and that the proliferation of these agreements is not in the best interest of the competitive market as they affect other suppliers participating in the market." ¹³⁸

As an initial matter, La Paloma's claim that reduced energy market revenues is resulting in increased reliance on RMR and Exceptional Dispatch procurement is misplaced. Backstop procurement under these mechanism is unrelated to the market revenues resources are earning. The CAISO can only utilize RMR and Exceptional Dispatch to meet particular reliability needs specified in the tariff.¹³⁹ Low energy market revenues are not a factor in determining whether the CAISO will enter into an RMR agreement or exceptionally dispatch a unit.

For numerous reasons, the CAISO's backstop procurement is unlike ISO New England's RMR procurement. As discussed in Section III.B.3, *supra*, the Commission rejected most of those RMR contracts and took action in that proceeding because it was concerned about the widespread use of such contracts, imminent reliability problems in ISO New England, the need to incent construction of new resources, and the lack of any local procurement framework in ISO New England's capacity market.¹⁴⁰ In contrast, the Commission approved the three RMR contracts the CAISO filed in 2017, which amounted to approximately 1,200 MW less than the total MW quantity of ISO New

La Paloma Affidavit at P 7, citing *Devon Power, LLC,* 103 FERC ¶ 61,082 at PP 29, 31 (2003).

¹³⁹ CAISO tariff §§ 41 *et seq.* (RMR) and 34.11 *et seq.* (Exceptional Dispatch).

¹⁴⁰ *Devon I*, 115 FERC ¶ 61,340 at PP 6-7, 14.

England's RMR contracts, and load in ISO New England is significantly lower than load in the CAISO. The Commission was concerned that ISO New England's capacity market at the time had no locational procurement requirement; so using stand-alone RMR agreements was ISO New England's only option to procure approximately 2,000 MW of higher cost resources in the constrained Connecticut region.¹⁴¹

Unlike ISO New England, the CAISO's resource adequacy program has a locational procurement requirement. Also, unlike the situation in New England, the CAISO is not procuring "all or nearly all units" to maintain reliable service, and the CAISO's backstop procurement does not reflect an underlying need to incent the construction of new resources.¹⁴² Most of the CAISO's recent RMR and CPM designations were transitional in nature and involved a few specific resources that the CAISO needed to meet a specific localized reliability needs for a short period because of their particular location on the system. The CAISO has identified longer-term solutions to address these needs, and such solutions are proceeding. The CAISO's backstop procurement also maintained the near-term availability of resources not required as long-term reliability solutions because of their age, their non-compliance with once-through cooling (OTC) regulations, and/or their planned replacement with longer term solutions, or for other reasons, none of which demonstrate a need to impose a mandatory centralized capacity market. These were legitimate uses of backstop procurement because resource adequacy cannot - and should not be required to – procure capacity to meet every possible contingency that might ever occur

¹⁴¹ *Devon Power, LLC,* 103 FERC ¶ 61,082 at P 29.

¹⁴² See Devon Power, LLC, 107 FERC ¶ 61,240 at PP 35-36.

on the system. La Paloma ignores that even the eastern system operators retain RMR as a backstop mechanism, and La Paloma, too, proposes that the CAISO should retain its RMR authority.¹⁴³

The Complaint discusses the CAISO's increasing need for flexible capacity. The Complaint suggests that the CAISO will "continue to rely on short-term fixes to urgent, long-term problems"¹⁴⁴ and that the only categories of resources existing in the future will be renewable resources and local and flexible capacity resources procured under the CAISO's backstop authority.¹⁴⁵ La Paloma ignores that none of the RMR and CPM designations it mentions occurred to address a flexible capacity deficiency or meet a flexible capacity need.

La Paloma's suggestion that in the future all non-RPS resources will be procured out-of-market is nonsensical. Because the RA program has local and flexible capacity requirements, LSEs must procure sufficient capacity with local and flexible attributes to satisfy their RA obligations. LSEs have consistently met their RA obligations, and CAISO backstop procurement has been limited, not the "norm" as La Paloma suggests. The CPM designations in December 2017 marked the first time under the RA program that the CAISO backstopped for a deficiency in LSE RA showings or for a collective local deficiency, and those designations are not indicative of some significant underlying problem that must be fixed with a mandatory centralized capacity market.

As discussed in Section III.K, infra, the CAISO is proposing several

¹⁴³ Complaint at 42 ("RMR could be retained as a last resort mechanism to retain capacity needed for local reliability.").

¹⁴⁴ *Id.* at 23.

¹⁴⁵ *Id.* at 2.

enhancements to the resource adequacy program in the ongoing CPUC RA Refinement Proceeding that, *inter alia*, would help reduce the CAISO's use of its backstop authority and, instead, facilitate procurement of necessary resources through the RA process. The CPUC agrees that it should consider RA program modifications to reduce backstop procurement given the CAISO's recent backstop procurement, and is assessing such modifications as a "top priority" in the RA Refinement Proceeding.¹⁴⁶

1. **RMR Designations**

a. Calpine Feather River, Yuba City, and Metcalf Units

On November 28, 2016, Calpine submitted a letter to the CAISO indicating its intent to remove from service effective January 1, 2018, four peaker units – Yuba City, Feather River, King City, and Wolfskill Energy Center – that were under resource adequacy contracts only through the end of 2017. Calpine requested that the CAISO determine the reliability need for the resources by March 31, 2017, *i.e.*, well before the October 31, 2017 deadline for annual resource adequacy showings, so Calpine would have adequate time to provide for an orderly and rational retirement of the units or decide major maintenance expenditures for 2018. Calpine stated that it would not seek a CPM designation (which is voluntary) because the timing of such designations would not provide it a sufficient "planning period, or 'runway'" to reasonably undertake such activities; whereas, the CAISO tariff would permit it to issue an RMR designation, which is mandatory.

The CAISO studied the resources and determined that the 47 MW Yuba City unit

¹⁴⁶ Scoping Memo and Ruling of Assigned Commissioner and Administrative Law Judge, 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, Rulemaking 17-09-020 (Jan. 18, 2018) (RA Refinement Proceeding Scoping Memo).

was needed to meet a local sub-area requirement, and the 47 MW Feather River unit was needed to address high operating voltages on the 115 kV system in the area. Although the Yuba City requirement was driven by a previously identified local capacity issue, the high voltage concerns necessitating the Feather River generation was a newly emerging issue requiring the CAISO to rely on the reactive power control capability of Feather River as opposed to its real power generating capacity. The CAISO tariff expressly provides that the CAISO can enter RMR contracts with resources to provide voltage support (and Black Start) in local areas.¹⁴⁷ No other resources could meet the specific reliability needs. The CAISO required these two resources specifically to meet reliability needs in a particular area. The CAISO found that Calpine's other two resources were not needed for reliability.

In its memorandum to the Board recommending RMR designations for Yuba City and Feather River, the CAISO noted that in the normal course of business it would have let resource adequacy procurement run its course and, if an LSE did not procure the resource for resource adequacy purposes, the CAISO would then explore other mechanisms such as CPM, which resources do not have to accept, or RMR.¹⁴⁸ However, because the standard time frame for resource adequacy procurement, or issuing a CPM or RMR designation, was not viable from Calpine's business perspective, and Calpine's efforts to sell the capacity were unsuccessful (in part because the local LSE did not need the capacity to meet its resource adequacy

¹⁴⁷ CAISO tariff § 41.1.

¹⁴⁸ Memorandum of Keith Casey, Vice-President, Market & Infrastructure Development, to ISO Board of Governors, *Decision on Reliability must-run designations for the Yuba City Energy Center and the Feather River Energy Center*, March 8, 2017, available at <u>https://www.caiso.com/Documents/Decision</u> <u>-RequestforReliabilityMust-RunDesignations-Memo-Mar2017.pdf</u>. A copy of Calpine's letter is attached to the Board memorandum.

obligations), the CAISO granted the units conditional RMR designations in March 2018. The conditional designations provided LSEs the opportunity first to procure the units and reflect them in their annual resource adequacy showings, which would obviate the need for the CAISO to enter an RMR contract. No LSE procured the resources for resource adequacy; so, as a last resort, the CAISO executed RMR contracts with Calpine.

The RMR designations for the Feather River and Yuba City plants are transitionary in nature because approved transmission projects already assigned to the incumbent transmission owner will obviate the need for the RMR contracts. Specifically, the CAISO's 2017-2018 Transmission Plan notes that transmission upgrades are expected to be in place no later than the end of 2020 to address the reliability need for the Yuba City RMR and by the end of 2021 to address the reliability need for Feather River RMR. The RMR arrangements simply serve as a "bridge" until the transmission upgrades are completed.

The circumstances surrounding the RMR designation of the 570 MW Metcalf Energy Center (Metcalf) unit were similar. On June 2, 2017, Calpine sent a letter to the CAISO indicating its intent to remove the Metcalf from service effective January 1, 2018, following termination of its then-existing resource adequacy contract. Calpine stated that it expected no RA contracts to materialize for 2018 and noted that the facility required major maintenance in the spring of 2018 that would cost well over \$20 million. As in its prior letter, Calpine informed the CAISO that CPM does not "allow a sufficient planning period, or 'runway'" for the complicated and transformational decisions Calpine must make regarding the facility (*i.e.*, major maintenance, budgeting, and personnel planning) and, as such, Calpine would not pursue a CPM designation. Instead, Calpine stated that if the resource was needed for reliability the CAISO could designate it as an RMR resource. Calpine asked that the CAISO assess the reliability need for Metcalf and communicate its findings "as soon as practicable."

The CAISO found Metcalf was needed to meet a specific local capacity requirement in the South Bay-Moss Landing sub-area of the Greater Bay Area local capacity area. In an October 25, 2017 memorandum to its Board, the CAISO recommended a conditional RMR designation for Metcalf noting that the conditional designation did not preclude an LSE from procuring the resource as an RA resource.¹⁴⁹ The memorandum acknowledged that the normal course would have been to let the resource adequacy procurement process run its course, but given Calpine's stated need for an early decision and the likelihood Metcalf would not receive a resource adequacy contract, the CAISO recommended a conditional RMR designation, subject to the annual resource adequacy showings. No LSE procured the resources for resource adequacy; so the CAISO executed an RMR contract with the owner.

In the 2017-2018 Transmission Plan, the CAISO identified transmission mitigations already underway that address the reliability need necessitating the Metcalf RMR designation. These upgrades are moving forward such that, barring any unforeseen event, the Metcalf RMR is not required for 2019 to meet that specific reliability need.

¹⁴⁹ Memorandum of Keith Casey, Vice-President, Market & Infrastructure Development, to ISO Board of Governors, *Decision on reliability must-run designation for Metcalf Energy Center*, October 30, 2017, available at <u>http://www.caiso.com/Documents/Decision_ReliabilityMust-RunDesignation_Metcalf</u> <u>EnergyCenter-UpdatedMemo-Nov2017.pdf</u>. Calpine's letter is available at <u>http://www.caiso.com/</u> <u>Documents/Decision_ReliabilityMust-Run_Designation_MetcalfEnergyCenter-Attachment-Nov2017.pdf</u>.

In all three of the circumstances, the CAISO issued conditional RMR designations for the resources before annual resource adequacy showings because the resource owner demonstrated a business need for a prompt decision regarding any reliability need for the resources. When Calpine submitted its requests, each of the units was under an RA contract, and Calpine was seeking an RMR agreement to commence after termination of the respective RA contract. Although CPM process improvements focusing on the timing concerns and reasonable business needs expressed by Calpine may lead to greater efficacy of the procurement and backstop processes, in all three cases the backstop procurement ensured continued reliability by providing a "bridge" from reliance on generation to having transmission upgrades in place. None of these requirements necessitate imposing a mandatory centralized capacity market. Further, the Feather River RMR was driven by the need to access the generator's reactive power control capability, not its real power generating capacity. Procuring voltage support is outside the purview of a capacity market.

The foregoing RMR designations are not evidence that a mandatory centralized capacity market is required to retain the operation of existing resources in the long-run and do not indicate that additional price signals are needed to incent the construction of additional resources.

b. NRG Ellwood and Ormond Beach Units

On February 28, 2018, NRG notified the CAISO it was intending to shut down and retire the Ormond Beach Generating Station (Ormond Beach), effective October 1, 2018 and the Ellwood Generating Station (Ellwood), effective January 1, 2019, when their respective resource adequacy contracts terminate. The CAISO's 2017-2018

- 61 -

Transmission Plan approved by the CAISO Board of Governors in March 2018 anticipated the retirement of Ormond Beach coincident with its once-through cooling compliance date of December 31, 2020. Although the 54 MW Ellwood plant does not rely on once-through-cooling, the CAISO expected it to retire in the 2022-2027 time frame due to its age, the identified need for refurbishment, and unsuccessful attempts by Southern California Edison Company (SCE) to obtain regulatory approval for a longterm contract with Ellwood. In that regard, SCE sought contract approvals that would have obviated the need for the CAISO to designate Ellwood as RMR, and the CPUC rejected them.¹⁵⁰

As noted in the CAISO's 2017-2018 Transmission Plan, the following activities are underway to mitigate the reliability impacts of these retirements: (1) the CAISO-approved Pardee-Moorpark 230 kV transmission project that will address the local capacity concern in the Moorpark sub-area and has an in-service date of December 31, 2020; and (2) SCE is procuring new resources and storage to meet the Santa Clara sub-area need, and these resources and storage are expected to be on-line in 2021. These steps will meet local reliability needs and enable the retirement of both generating stations consistent with the Ormond Beach once-through cooling compliance date. The CAISO's 2019 Local Capacity Technical Study showed that Ellwood and one of the two Ormond Beach generating units are required for reliable operation of the transmission system of the Moorpark sub-area and Santa Clara sub-area, respectively,

¹⁵⁰ CPUC Decision D.17-09-034, *Application of S. Cal. Edison Co. (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for Offers for the Moorpark Sub-Area, Application 14-11-016 (Sept. 28, 2017); CPUC Decision D.16-05-050, Application of S. Cal. Edison Co.; (U338E) for Approval of the Results of Its 2013 Local Capacity Requirements Request for Offers for the Moorpark Sub-Area, Application 14-11-016 (May 26, 2016); CPUC Resolution E-4781 (May 26, 2016).*

in 2019 and until the replacement solutions come on-line.

At its July 2018 Board meeting, the CAISO Board approved conditional RMR designations for the two units. The decisional memo to the Board noted that the conditional RMR designations did not preclude LSEs from entering into bilateral resource adequacy contracts for the two units and noted that the CPUC's 2019 RA decision directed SCE to consider negotiating a contract for the resources.¹⁵¹

The record shows that the CAISO's backstop procurement of Ellwood and one Ormond Beach unit was transitional, following termination of their RA contracts, and to "bridge" the period until transmission or other mitigation solutions are in place. Neither of these resources were expected to be part of the long-term resource mix in the CAISO balancing authority area. The CAISO needed these specific resources in their specific locations to meet specific local sub-area needs for a limited period. The conditional RMR designations are not evidence that a mandatory centralized capacity market is required to retain the operation of existing resources in the long-run and do not indicate that additional price signals are needed to incent the construction of additional resources.

¹⁵¹ Memorandum of Keith Casey, Vice-President, Market & Infrastructure Development to ISO Board of Governors, *Decision on reliability must-run designation for the Ellwood Generating Station and the Ormond Beach Generating Station*, at 3 (July 18, 2018) available at <u>http://www.caiso.com/Documents/</u> <u>Decision_ReliabilityMustRunDesignation_EllwoodGeneratingStation_OrmondBeachGeneratingStation-Memo-Jul2018.pdf</u>. See also Proposed Decision, *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*, Rulemaking 17-09-020 (May 22, 2018). The final decision ultimately directed SCE to negotiate contracts for these resources, if possible. CPUC Decision D.18-06-030, 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*, Rulemaking 17-09-020, at 35 (June 21, 2018) (RA Refinement Proceeding Track 1 Decision).

2. CPM Designations

La Paloma's claim that the CAISO issued over 1,000 MW of exceptional dispatch CPM designations during the months of December 2017-February 2018 is incorrect.¹⁵² On December 5, 2017, the CAISO issued Exceptional Dispatch CPMs totaling 560 MW (for 60-day terms) to Mandalay 7, Unit nos. 1, 2, and 3.¹⁵³ The CAISO issued no other exceptional dispatch CPM designations during the period December 2017-February 2018.

The CAISO designated the Mandalay units to protect load serving capability in the Santa Clara sub-area in the Ventura area in response to a fire that presented an N-4 contingency. The CAISO notes that, prior to the fires, the CAISO had approved the retirement of these units, and they are now retired. Before allowing the units to retire, the CAISO followed its standard practice and conducted studies to determine whether the three Mandalay units were needed to meet reliability under applicable reliability criteria. The CAISO found they were not needed to meet existing reliability standards. Neither NERC reliability standards nor the CAISO's more stringent CAISO Planning Standards¹⁵⁴ require the CAISO to plan transmission upgrades to mitigate an N-4 contingency. Thus, the CAISO's designation of the three Mandalay units does not support the need for a mandatory centralized capacity market.

La Paloma may have mistakenly counted two year-ahead local resource adequacy deficiency/collective deficiency CPM designations as exceptional dispatch

¹⁵² Complaint at 33-34.

See CAISO Exceptional Dispatch CPM Designation Report (Dec. 5, 2017), available at http://www.caiso.com/Documents/December5_2017ExceptionalDispatchCPMDesignationReport.pdf.
 See http://www.caiso.com/Documents/December5_2017ExceptionalDispatchCPMDesignationReport.pdf.

¹⁵⁴ See <u>http://www.caiso.com/Documents/ISOPlanningStandards-November22017.pdf</u>.

CPM designations. In that regard, on December 22, 2017 the CAISO designated Encina Power Station, Unit nos. 4 and 5, and Moss Landing 2, Unit no. 1, based on Scheduling Coordinators' failure to demonstrate sufficient local capacity in individual annual resource adequacy plans (CAISO tariff section 43A.2.1.1) and failure collectively to procure sufficient capacity to ensure compliance with the Local Capacity Technical Study criteria (CAISO tariff section 43A.2.2).¹⁵⁵

The CAISO identified the Encina generation as necessary until the Carlsbad Energy Center comes online in mid-2018. The CAISO identified this need well in advance, and necessitated the CAISO pursuing an extension of Encina's once-throughcooling compliance date of December 31, 2017 from the State Water Resources Control Board (SWRCB).

San Diego Gas & Electric Company (SDG&E) could not procure Encina because of limitations set by the CPUC in Decision 12-04-046.¹⁵⁶ That decision does "not allow the utility to continue to purchase or receive power generated using noncompliant OTC [once-through-cooling facilities] beyond that date [OTC compliance date] even if SWRCB [State Water Resources Control Board] extends the compliance date."¹⁵⁷ Based on this language, SDG&E determined that it was precluded from procuring

¹⁵⁵ See CAISO Year Ahead Local CPM Designation Report (Dec. 22, 2017), available at <u>http://www.caiso.com/Documents/December222017YearAheadLocalCPMDesignationReport.pdf</u>. Designations under tariff section 43A.2.2 are Collective Deficiency CPM designations. LSEs procured sufficient resources to meet there local RA capacity procurement obligations, but the specific mix of local area capacity resources they procured did not effectively meet all of the requirements of each and every local sub-area. The CAISO allocates the costs associated with Collective Deficiency CPM designations to all LSEs in the TAC area because the procurement was not caused by LSEs failing to meet their RA procurement obligations.

¹⁵⁶ CPUC Decision, D.12-04-06, Order Instituting Rulemaking to Integrate and Refine Procurement Policies and Consider Long-Term Procurement Plans, Rulemaking 10-05-006 (Apr. 24, 2012).

¹⁵⁷ *Id.* at 27.

capacity from Encina for the 2018 resource adequacy compliance year, which was beyond the resource's original OTC compliance date, even though the SWRCB had extended the OTC compliance date. This led to the unique situation of there being both a resource adequacy showing deficiency in the local area for certain LSEs and a collective local deficiency. The CAISO designated two Encina units as CPM until the under-construction Carlsbad Energy Center can be shown as RA capacity (which is expected to be in the latter part of 2018).¹⁵⁸ The circumstances that led to the Encina CPM designation are unique and transitional, and do not justify adopting a mandatory centralized capacity market.

On December 22, 2017, the CAISO also designated the Moss Landing capacity to address a specific sub-area need in the Greater Bay Area local capacity area. In other words, the CAISO needed a resource in a specific location. The CAISO selected the Moss Landing capacity for a CPM designation from among other eligible capacity under the CPM competitive solicitation process in CAISO tariff section 43A.4. Almost all of the designated Moss Landing capacity filled a collective deficiency. Most LSEs satisfied their annual local capacity resource adequacy showing obligation for every month of the year (some even providing local resource adequacy capacity over their obligation), with some small LSEs falling short by only a handful of MWs in certain months.

The Moss Landing designation highlights an aspect of the existing RA program that the CAISO is seeking to modify in the ongoing CPUC RA Refinement Proceeding in

¹⁵⁸ The Carlsbad Energy Center will replace Encina, and Encina will cease to operate when Carlsbad is placed in service.

Rulemaking 17-09-020. LSEs can meet local capacity requirements by procuring resources within any local capacity area in their Transmission Access Charge area. However, the CAISO establishes local capacity needs based on transmission constraints into specific, much smaller, sub-local capacity areas within a broader local area. Both are geographically smaller than a TAC area. Stated differently, a TAC area can have multiple local capacity areas within its confines, and these local capacity areas can have sub-local areas. This potentially can result in LSEs meeting all of their local RA procurement requirements, but because they did not procure all of the "right" resources in all of the "right" places, unmet needs can remain in local sub-areas. This can lead to a collective deficiency, as described in Section II.B.5, *supra*, and result in CAISO collective deficiency backstop procurement to address the residual need. December 2017 was the first time the CAISO has issued a collective deficiency or RA deficiency CPM. The unique circumstances surrounding Encina were partially responsible for this.

As discussed in Section III.K, *infra*, to reduce the need for CAISO collective deficiency backstop procurement and instead facilitate procurement of specifically needed resources through the RA process, the CAISO is proposing in the RA Refinement Proceeding that the CPUC require LSEs to procure adequate local resource adequacy capacity in each individual local capacity area.¹⁵⁹ The CAISO's proposal also includes a means to provide advance notice to LSEs and resource owners if there are

¹⁵⁹ California Independent System Operator Corporation Track 2 Testimony, Chapter 1: Introduction and Background at 5-6, available at <u>http://www.caiso.com/Documents/Jul10_2018_RAProceedingTrack2</u> <u>Testimony-Chapter1-Introduction_Background_R17-09-020.pdf</u>. The CAISO discusses its Track 2 RA proposals in Section III.K, *infra*.

any essential reliability resources (ERRs) that must be procured.¹⁶⁰ The CAISO's local capacity technical studies already identify capacity needs in local areas and sub-areas and also identify resources – and their effectiveness factors – that can meet the needs. The CAISO is proposing to provide additional information about any ERRs when a local area or sub-area depends on one specific resource or set of resources and there is no viable competition or alternative. This will facilitate resource adequacy procurement decisions and reduce the need for CAISO backstop procurement.

The CAISO's refinement will address sub-area procurement needs and reduce the use of the CAISO's backstop procurement authority, while still retaining the basic bilateral procurement framework of the existing resource adequacy program. There is no need to impose a mandatory centralized capacity market to address this narrow issue.

E. The Planning Reserve Margin Is Not Unjust and Unreasonable

1. There Is No Basis to Change the Planning Reserve Margin Provisions of the CAISO Tariff

La Paloma alleges that because RA requirements are fixed at 15 percent, they function as a vertical demand curve for capacity.¹⁶¹ La Paloma argues that, because the purported demand curve does not value incremental capacity above the minimum needed to maintain reliability, prices will remain unreasonably low because there is surplus capacity.¹⁶² La Paloma further claims that the current bilateral procurement

¹⁶⁰ California Independent System Operator Corporation Track 2 Testimony, Chapter 3: Resource Adequacy Compliance Timeline and Central Buyer at 7, available at <u>http://www.caiso.com/Documents/</u>Jul10_2018_RAProceedingTrack2Testimony-Chapter3-RAComplianceTimeline_CentralBuyer_Proposal No2_R17-09-020.pdf.

¹⁶¹ La Paloma Affidavit at P 8(d); see also Complaint at 35.

¹⁶² Complaint at 35-36. La Paloma recognizes that actual reserve margins have been "well above

framework with a vertical demand curve will cause capacity pricing that is not conducive to investment because some units get payments, whereas other units purportedly necessary for reliability receive no RA payments.¹⁶³ La Paloma contends that thermal resources needed for reliable operation of the grid are not compensated for the incremental reliability they provide to the grid.¹⁶⁴

As an initial matter, planning reserve requirements are not "fixed" at 15 percent in the CAISO tariff. The CAISO tariff provides for a *default* planning reserve margin of "no less than fifteen percent (15%)" *if the applicable regulatory authority has not established a planning reserve margin*.¹⁶⁵ Any complaint regarding reserve margins applicable to specific LSEs should be against the regulatory authorities that set those reserve margins or against the concept of a default reserve margin.

On two occasions, the Commission has approved the CAISO's default planning reserve margin as just and reasonable, first in approving the CAISO's Interim Reliability Requirements Program¹⁶⁶ and again in approving a more durable resource adequacy program as part of the CAISO's Market Restructuring and Technology Upgrade.¹⁶⁷ In the *September 2006 MRTU Order*, the Commission rejected the CAISO's proposal to establish a 15 percent planning reserve margin requirement and instead ordered that it merely be a *default* reserve margin.¹⁶⁸ In both orders, the Commission noted that a 15

¹⁶⁴ *Id.*

^{15%.&}quot; La Paloma Affidavit at P 8(d).

¹⁶³ La Paloma Affidavit at P 30.

¹⁶⁵ CAISO tariff § 40.2.2.1 (b) (emphasis added).

¹⁶⁶ Cal. Indep. Sys, Operator Corp., 115 FERC ¶ 61,172 (2006) (IRRP Order).

¹⁶⁷ September 2006 MRTU Order, 116 FERC ¶ 61,274 (2006).

¹⁶⁸ *Id.* at P 1155. The Commission noted that it similarly had approved a temporary default planning

percent planning reserve margin is comparable to what is used in many parts of the country.¹⁶⁹ The Commission similarly approved *default* reserve margins for MISO.¹⁷⁰

The Commission noted that he Western Electricity Coordinating Council (WECC) had no formal planning reserve margin but did have Minimum Operating Reliability Criteria (MORC) requirements that ranged from five to seven percent.¹⁷¹ The Commission stated that any planning reserve margin adopted by a local regulatory authority must equal or exceed the MORC requirements.¹⁷² This followed California law that resource adequacy requirements be consistent with NERC and WECC requirements.¹⁷³ The Commission concluded that applying a default 15 percent reserve margin for LSEs whose Local Regulatory Authority has not implemented a reserve margin was appropriate unless or until WECC sets a different standard, as required by state law.¹⁷⁴

La Paloma cites no changed circumstances – such as changes in state law or WECC standards – that would require the CAISO to adopt a different default planning reserve margin than that previously approved by the Commission. Nor do such changed circumstances exist. The CAISO has successfully maintained reliability with

reserve margin of 12 percent for MISO. IRRP Order at P 38, citing *Midwest Indep. Transmission Sys. Operator, Inc.,* 108 FERC ¶ 61,163 (2004), order on reh'g, 109 FERC ¶ 61,157 (2004).

¹⁶⁹ *IRRP Order,* 115 FERC ¶ 61,172 at P 36; *September 2006 MRTU Order,* 116 FERC ¶ 61,274 at P 1155.

¹⁷⁰ Like the paradigm in the CAISO, states in MISO can set reserve margins that are higher or lower than the default margins set by MISO. *Midwest Indep. Transmission Sys. Operator, Inc.,* 122 FERC ¶ 61,283 at P 90 (2008).

¹⁷¹ September 2006 MRTU Order, 116 FERC ¶ 61,274 at P 1154.

¹⁷² *Id.*

¹⁷³ *Id.* at P 1153.

¹⁷⁴ *Id.* at P 1154.

its default planning reserve margin and requires no higher planning reserve margin. If circumstances change, the CAISO can seek a higher planning reserve margin under FPA Section 205. There has been a change in WECC standards, but that change requires no change in the CAISO's default planning reserve margin. WECC Standard BAL-002-WECC2a –Contingency Reserve requires that a balancing authority area maintain a minimum amount of contingency reserve equal to the greater of (1) loss of the most severe single contingency, or (2) the sum of three percent of hourly integrated load plus three percent of hourly integrated generation. When the Commission approved the 15 percent default planning reserve margin, WECC's contingency reserve requirements were the greater of (1) the loss of generating or transmission capacity resulting from the most severe single contingency, or (2) the sum of five percent of the load served by hydro generation and seven percent of the load served by thermal generation. The changed standard requires no change in the default planning reserve margin. Also, La Paloma does not allege -- and does not show -- any "leaning" by LSEs that is jeopardizing reliability.

The CAISO also notes that on August 7, 2018, the Commission approved the Southwest Power Pool's (SPP) proposed resource adequacy program based on bilateral procurement, including a 12 percent planning reserve margin (9.89 percent for LSEs with a resource mix that is at least 75 percent hydro).¹⁷⁵ This further supports the justness and reasonableness of the CAISO's PRM provisions.

La Paloma's claim that a fixed reserve margin means that some units get

¹⁷⁵ Southwest Power Pool, Inc., 164 FERC ¶ 61,092 at P 9 (2018). If an LSE has a resource mix that is at least 75 percent hydro-based, the planning reserve margin is 9.89 percent. *Id.*

payments while other units "equally necessary to maintain reliability receive nothing" is misplaced.¹⁷⁶ Annually, the CAISO determines its local and flexible capacity needs, consistent with applicable reliability criteria. Capacity over these requirements is not "equally necessary" on an annual basis. System resource adequacy requirements are based on monthly peak load levels, plus a planning reserve margin. In both the CAISO and MISO, the Commission has deferred to state and local regulatory authorities to set planning reserve requirements.¹⁷⁷ Given that the CAISO has system reliability and has not incurred any reliability standard violations based on established system reserve levels, there is no basis in the record to require CAISO ratepayers to make annual capacity payments to additional resources (roughly 10 percent or more reserves according to La Paloma's affidavit).¹⁷⁸ As the Commission has previously stated, its "primary responsibility is to ensure that a workable program exists and is adhered to by all LSEs."¹⁷⁹ A workable framework exists, and it will be augmented with targeted enhancements arising out of the CPUC's RA Refinement Proceeding and CAISO tariff amendments. Also, if the CAISO must supplement RA procurement to maintain shortterm reliability based on specific circumstances that arise, it has ample authority to do so under its RMR and CPM tariff provisions, and it can make capacity payments to nonresource adequacy capacity for terms from 1-12 months. The Complaint does not allege – and does not show – that the terms and conditions of such backstop authority

¹⁷⁶ La Paloma Affidavit at P 30.

¹⁷⁷ September 26 MRTU Order, 116 FERC ¶ 61,274 at P 1117-1118, 1153; *Midwest Indep. Transmission Sys. Operator, Inc.,* 122 FERC ¶ 61,283 at PP 52, 90-92 (2008).

¹⁷⁸ La Paloma Affidavit at P 17.

¹⁷⁹ September 2006 MRTU Order, 116 FERC ¶ 61,274 at P 1117.

are unjust and unreasonable.

2. There Is No Basis to Require the CAISO to Adopt a Sloped Demand Curve

La Paloma argues that the Commission should require the CAISO to adopt a downward sloped demand curve.¹⁸⁰ A specified sloped demand curve does not make sense in a bilateral procurement regime overseen by state and local regulators (as opposed to a centralized capacity market operated by the CAISO). These regulators approve LSE procurement and can approve procurement levels above 15 percent. The Commission has previously recognized that the CPUC, which oversees RA procurement for most of the load in the CAISO balancing authority area, has permitted LSEs to demonstrate that they have acquired capacity to serve their forecasted retail customer load and a 15-17 percent reserve margin.¹⁸¹ Thus, the CPUC's RA program can accommodate procurement over the default 15 percent planning reserve margin. Further, other local regulators have the authority to approve LSE procurement above a 15 percent reserve margin. The CAISO tariff does not preclude such procurement.

As discussed throughout this Answer, a mandatory centralized capacity market is unnecessary and would not be just and reasonable given circumstances in the CAISO BAA. Further, the Commission has never established a general requirement that a sloped demand curve should establish all ISO and RTO procurement levels. The

¹⁸⁰ Complaint at 44-45.

¹⁸¹ *IRRP Order*, 115 FERC ¶ 61,172 at P 4, citing CPUC Decision D.05-10-42 Order Instituting Rulemaking to Promote Policy and Program Coordination and Integration in Electric Utility Resource Planning, Rulemaking 04-04-003 (Oct. 27, 2005); see also CPUC Decision D.04-10-035, Order Instituting Rulemaking to Promote Policy and Program Coordination and Integration in Electric Utility Resource Planning, Rulemaking 04-04-003 (Oct. 28, 2004) and CPUC Decision D.04-01-050, Order Instituting Rulemaking to Establish Policies and Cost Recovery Mechanisms for Generation Procurement and Renewable Resource Development, Rulemaking 01-01-024 (Jan. 22, 2004).

Commission accepted the MISO proposal for a vertical demand curve because it was "consistent with tariff provisions previously approved by the Commission."¹⁸² The Commission recently reaffirmed this determination, as "MISO's use of a vertical demand curve continues to be just and reasonable."¹⁸³ The Commission found that a vertical demand curve is appropriate for MISO in part because, "The vast majority . . . of MISO's load is served by vertically integrated utilities over which state and local authorities play an active role in ensuring resource adequacy."¹⁸⁴ Similarly the CPUC and local regulatory authorities actively ensure their jurisdictional LSEs are resource adequate. As the Commission has repeatedly recognized, "there is not a single just and reasonable method for satisfying capacity obligations."¹⁸⁵

La Paloma cites precedent it contends indicate a Commission-preference for sloped demand curves.¹⁸⁶ Although La Paloma tries to use prior Commission orders as support, those proceedings differ considerably from this complaint proceeding. In those instances, ISOs and RTOs requested under FPA Section 205 the Commission permit them to implement sloped demand curves. La Paloma acknowledges these ISOs and RTOs proposed sloped demand curves, noting that in the three ISOs/RTOs where the Commission has approved a slope demand curve, in every instance the ISO/RTO

¹⁸² *Midwest Indep. Transmission Sys. Operator, Inc.*, 139 FERC ¶ 61,199 at P 245 (2012); *on reh'g*, 153 FERC ¶ 61,229 at P 6 (2015).

¹⁸³ 2018 MISO RA Order, 162 FERC ¶ 61,176 at P 67.

¹⁸⁴ *Id.*

¹⁸⁵ See Midwest Indep. Transmission Sys. Operator, Inc., 139 FERC ¶ 61,199 at P 245 (2012), order on reh'g, 153 FERC ¶ 61,229 (2015) (citing Devon I, 115 FERC ¶ 61,340 at P 151 (2006) and PJM RPM Order 115 FERC ¶ 61,079 at P 103 (2006)) (internal quotations omitted).

¹⁸⁶ See Complaint at 36-38.

proposed the modifications itself.¹⁸⁷ The context in those ISOs/RTOs differs from these circumstances, where a generator has argued for a change to an ISO's market rules under FPA Section 206.

Any "preference" for using sloped demand curves is misplaced. Regions face different challenges and obstacles, and a "one-size fits all" approach for markets is infeasible. The Commission has noted that although it "has acknowledged the benefits of sloped demand curves for . . . RTOs/ISOs as with other elements of capacity constructs, [it] continue[s] to evaluate the slope of the demand curve within the context of the specific attributes of the region."¹⁸⁸ La Paloma provides no evidence and fails to carry its burden that the specific attributes of the CAISO region require the adoption of a sloped demand curve.

F. Alleged Low Prices Arising from a Capacity Surplus Do Not Justify Undoing the Existing Resource Adequacy Framework

The Complaint and the La Paloma Affidavit acknowledge that a capacity surplus exists and state that the large influx of intermittent renewable resources delivering increasing amounts of energy at lower prices has driven down energy prices and the energy required from thermal resources.¹⁸⁹ The Complaint and the La Paloma Affidavit both claim that the drop in utilization of thermal resources is causing a drop in the net market revenues these resources receive, and the net energy market and ancillary service revenues of thermal units is now dropping near or below an estimate of their

¹⁸⁷ See id.

¹⁸⁸ 2018 *MISO RA Order*, 162 FERC ¶ 61,176 at P 68.

¹⁸⁹ La Paloma Affidavit at P 9(b) - (c); Complaint at 32-33.

going forward costs.¹⁹⁰ The text of the Complaint goes a step further than the La Paloma Affidavit and also claims that RA prices are low due to surplus capacity and unable to compensate suppliers to keep needed resources in the market.¹⁹¹

1. Low Prices Resulting from a Capacity Surplus Does Not Render the CAISO Tariff Unjust and Unreasonable

La Paloma fails to support its claim that low prices in the CAISO energy and ancillary services markets demonstrate that the CAISO's RA tariff provisions are unjust and unreasonable or require imposing a mandatory centralized capacity market on the CAISO.¹⁹² Any low prices in the CAISO markets are a product of a capacity surplus and the availability of lower marginal cost resources in the region. La Paloma acknowledges throughout the Complaint and in the La Paloma Affidavit that a capacity surplus is causing lower prices.¹⁹³

The Commission previously has recognized that surplus capacity leads to lower prices. Earlier this year, the Commission rejected arguments by some suppliers in the MISO region that MISO's resource adequacy construct was not just and reasonable because capacity 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

¹⁹⁰ La Paloma Affidavit at P 9 (d); Complaint at 33.

¹⁹¹ Complaint at 35.

¹⁹² See *id.* at 35-36.

¹⁹³ *Id.* at 35 (prices will remain low as long as there is excess capacity, and the CPUC's long-term procurement plan process will ensure continued capacity surplus). *See also* Complaint at 2 (the entry of so many new resources has exerted downward pressure on prices); Complaint at 36 (California is consistently long in capacity as a result of the LTPP and a vertical demand curve will result in low capacity prices); La Paloma Affidavit at P 9 (state programs have induced the entry of substantial new capacity in the region, including but not limited to renewable resources, and that has driven down the energy required from thermal generators).

are "more indicative of a well-functioning capacity procurement construct than it is of an unjust and unreasonable construct."¹⁹⁴ In an earlier order addressing the MISO resource adequacy construct, the Commission similarly noted that:

low prices, in and of themselves, do not demonstrate that a market is not just and reasonable. For instance, such prices are justified in instances where a region contains substantial excess capacity unrelated to intentional uneconomic entry.¹⁹⁵

La Paloma provides no evidence demonstrating that low prices result from intentional uneconomic entry. La Paloma acknowledges that the capacity surplus is arising from the CPUC's implementation of increasing RPS requirements and the state's preference for cleaner, more environmentally friendly resources.¹⁹⁶ In addition, among other policies, the state has established storage procurement targets, adopted regulations requiring the retirement or reconfiguration of resources that rely on once-through-cooling, and adopted procurement requirements that seek to limit pollutants in disadvantaged communities. These are all legitimate state policy objectives. Further, because RA capacity that satisfies the CAISO tariff requirements does not have to clear a centralized capacity market, there is no ulterior incentive for LSEs to encourage uneconomic entry to suppress capacity market prices.

La Paloma's Complaint assumes that its combined cycle unit and similarlysituated generators are entitled to full cost recovery. This is an erroneous assumption. Suppliers conducting sales under Commission-approved market-based rates cannot expect to recover all of their costs. The Commission has been clear that suppliers in

¹⁹⁴ 2018 MISO RA Order, 162 FERC ¶ 61,176 at P 60.

¹⁹⁵ *Midwest Indep. Transmission Sys. Operator, Inc.*, 153 FERC ¶ 61,229 at P 110 (2015).

¹⁹⁶ Complaint at 2, 32, 35-36; La Paloma Affidavit at P 9 (b)-(c).

competitive wholesale electricity markets are not guaranteed cost recovery.¹⁹⁷ In a competitive wholesale electricity market, the Commission must only provide a utility with "the *opportunity* to recover its costs."¹⁹⁸

Because cost recovery is not guaranteed to all resources, some resources may leave wholesale markets because they are not profitable or are not earning enough money to continue to warrant market participation. That some resources may leave the market is not evidence that a market design is unjust and unreasonable. Truly competitive wholesale electricity markets will result in both financially successful generators and those not as successful. That every participant in the CAISO's energy markets is not a "winner" is not a valid reason to overhaul the entire market design.

The La Paloma Affidavit references how DMM, in its Annual Report on Market Issues & Performance (DMM Annual Report), has estimated net market revenues for certain thermal units "*without RA contracts* is now dropping near or below an estimate of their going forward cost." (Emphasis added).¹⁹⁹ The La Paloma Affidavit cites this as support for its claim that in the next five years more resources will likely retire or declare bankruptcy, as La Paloma previously did.²⁰⁰ This claim overlooks that resources needed for reliability also receive revenues from bilateral RA contracts (besides spot market revenues). The DMM Annual Report recognized that revenues also come from bilateral contracts, but it only compared *spot market revenues from the CAISO energy*

¹⁹⁷ See Bridgeport Energy, LLC, 113 FERC ¶ 61,311 at P 29 (2005) ("While we do not deny Bridgeport's right to file for a cost-based rate, the Commission has no obligation in a competitive marketplace to guarantee Bridgeport its full traditional cost-of-service.").

¹⁹⁸ *Id.* (emphasis in original).

¹⁹⁹ La Paloma Affidavit at P. 9(d) (footnote omitted).

²⁰⁰ *Id.*

markets to the costs of a hypothetical new combustion turbine and a combined cycle unit. ²⁰¹ Thus, in concluding that "net operating revenues for *many older* existing gasfired generators *may be lower* than their going-forward costs" (emphasis added),²⁰² DMM did *not* assess revenues from RA contracts. The La Paloma Affidavit acknowledges this recognizing that the net revenue estimates applied to "thermal units without RA contracts."²⁰³

Besides claiming that energy market prices are low, La Paloma also claims in the text of the Complaint that "pricing in Resource Adequacy transactions is not adequate to compensate suppliers to keep needed resources in the market."²⁰⁴ La Paloma provides no evidentiary support for this conclusory claim. The closest thing to a supportive statement La Paloma provides are general allegations that "[p]rices in Resource Adequacy transactions will remain low so long as there is surplus capacity in the market" and that with a vertical demand curve "[i]f…there is a surplus of capacity in the market, prices will plummet."²⁰⁵ These statements provide no support for La Paloma's specific claim and merely reinforce that any allegedly inadequate RA prices result from a capacity surplus. As discussed above, the Commission has rejected similar arguments regarding low capacity prices twice before in MISO.

La Paloma also objects that unlike new thermal resources, existing older

²⁰⁵ *Id.*

²⁰¹ CAISO Dep't of Market Monitoring, 2017 Annual Report on Market Issues & Performance at 58-66, (2018).

²⁰² *Id. at 17.*

La Paloma Affidavit at P 9(d).

²⁰⁴ Complaint at 35.

resources are not being paid a "new-entry" price under bilateral contracts.²⁰⁶ This is not evidence that specific existing resources needed for reliability are receiving insufficient revenues under RA contracts (and from market participation) to recover their going forward costs. La Paloma's own exhibits appear to undercut this claim. Examining the data points in Exhibits JT/JC-1 and JT/JC-4 to the La Paloma Affidavit together suggests that the combination of RA contract prices and estimated market revenues existing resources have received have far exceeded going forward costs.

La Paloma also fails to show that any resource with an RA contract or backstop capacity designation for its entire plant is failing to receive sufficient revenues to remain in service. La Paloma provides no specific details regarding its or any other specific resource's costs, revenues (both market and contract), market bids compared to clearing prices, RA status, or financial situation. La Paloma identifies no specific resource needed for reliability that was forced to retire due to earning insufficient revenues to cover its costs. The La Paloma Affidavit notes that some units recently designated as RMR had RA contracts and indicated their intent to retire.²⁰⁷ This statement is misleading. As discussed in Section III.D, *supra*, these resources had expiring RA contracts, and the resource owners indicated their intent to retire the resources following the expiration of such RA contracts absent an RA contract or a CAISO determination of need. They were not seeking to retire their resources during the term of the RA contracts, were insufficient to keep them in service during the term of

²⁰⁶ *Id.* at 40.

²⁰⁷ La Paloma Affidavit at P 9 (d).

such contracts. La Paloma does not show otherwise.

La Paloma also argues that thermal generators will not undertake necessary investments to improve flexibility if they cannot reasonably expect to receive revenues that allow them to recover their investment (including a return on that investment).²⁰⁸ As the Commission recognized in the 2018 MISO RA Order, however, the "fact prices have not signaled to independent generators a need to build, retro-fit, or even simply maintain existing resources is more indicative of a well-functioning capacity procurement construct than it is of an unjust and unreasonable construct."209 RA contracts for resources needed to maintain reliability, including those necessary to meet the flexible capacity requirements of the CAISO tariff, can support the investment required for major maintenance and required improvements. As discussed in Section III.K, *infra*, the multi-year RA procurement framework that is being considered in the CPUC's RA Refinement Proceeding would further enhance these opportunities. Also, if specific resources are needed to meet reliability, and LSEs do not enter into RA contracts with them, the CAISO can procure such resources under its backstop provisions, including RMR contacts and CPM designations. These mechanisms allow for full fixed cost recovery (including a return on investment).²¹⁰

²⁰⁸ *Id.* at P 28.

²⁰⁹ 2018 MISO RA Order, 162 FERC ¶ 61,176 at P 60.

²¹⁰ *Pro Forma* RMR Agreement, CAISO Tariff, Appendix G, §§ 7.4-7.6; *Cal. Indep. Sys. Operator Corp.,* 153 FERC ¶ 61,001 at P 29 (2015) (CPM competitive solicitation provisions should "allow sufficient recovery of fixed costs plus return on capital to facilitate incremental upgrades and improvements by resources.")

2. Low Prices Do Not Necessitate a Mandatory Centralized Capacity Market

The CAISO notes that suppliers in MISO argued that "a long string of very low or zero auction prices" in MISO's capacity market was unduly discriminatory and unjust and unreasonable and required a mandatory centralized capacity market.²¹¹ The Commission rejected their request to impose a mandatory centralized capacity market on MISO. Similarly, any low RA prices arising from a capacity surplus cannot support imposing a mandatory centralized capacity market on the CAISO.

Contrary to La Paloma's claims, subsidized suppliers in the CAISO's markets does not render the CAISO tariff unjust and unreasonable. La Paloma argues that suppliers receiving subsidies incent them to offer electricity at zero or negative prices, which would depress CAISO locational marginal pricing (LMP) for electricity.²¹² La Paloma further contends that "[i]n 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."²¹³ This argument is irrelevant because the CAISO has no capacity market, and La Paloma is not proposing to change the rules for the CAISO's energy markets. That subsidized resources are bidding into the energy markets does not necessitate imposing a completely separate and distinct centralized capacity market that procures a different product than is procured in the energy markets.

La Paloma's argument also ignores that government subsidies have long

²¹¹ 2018 MISO RA Order, 162 FERC ¶61,176 at P 16.

²¹² Complaint at 32.

²¹³ *Id.* (footnote omitted).

coexisted with wholesale energy markets and reduced the prices of fossil-fuel and other resources. The Commission has never suggested that ISO or RTO energy markets will become unjust and unreasonable because state-subsidized resources participate in those markets. Even the Commission's recent order directing significant changes to the PJM capacity market because subsidized resources could affect capacity market prices in PJM, found that out-of-market resources could still participate in energy and ancillary services markets.²¹⁴ Moreover, the Supreme Court has acknowledged that state subsidies of generation can exist in harmony with Commission-regulated wholesale capacity markets if state programs do not attempt to undercut the Commission-established prices realized by generators participating in such markets. In *Hughes v. Talen*, the Court noted that, "[n]othing in this opinion should be read to foreclose. . . States from encouraging production of new or clean generation through measures 'untethered to a generator's wholesale market participation.²¹⁵ The existence of state subsidies for resources does not render the CAISO tariff unjust and unreasonable.

La Paloma's claims that the CAISO tariff provides insufficient compensation to resources because it is an "energy-only market" is based on an inappropriately narrow characterization of the CAISO market design.²¹⁶ The CAISO tariff includes resource adequacy and backstop capacity procurement provisions that provide an opportunity for resources needed for reliability to earn capacity payment revenues over those they can earn in the CAISO's energy and ancillary service markets. These tariff provisions can

²¹⁴ Calpine Corp. et al v. PJM Interconnection, LLC, 163 FERC ¶61,236. at PP 160, 162 (2018), rehearing pending (Calpine)

²¹⁵ *Hughes v. Talen*, 136 S.Ct. at 1299.

²¹⁶ See Complaint at 30-31.

address the "missing money" issue referenced in the Complaint.

Finally, La Paloma claims there are only two options to address the "missing money" issue – a mandatory centralized capacity market or a scarcity pricing mechanism comparable to what has been implemented in ERCOT.²¹⁷ This ignores the third option that the Commission approved for the CAISO markets – a resource adequacy mechanism with locational and flexible capacity requirements -- and the RA frameworks the Commission approved for MISO and SPP.

Despite La Paloma's claims to the contrary, the CAISO markets include scarcity pricing. Specifically, the Commission approved a scarcity pricing mechanism in the CAISO markets that "during periods of operating reserve shortages, applies predetermined prices to energy and ancillary services to more accurately reflect their value in such an emergency."²¹⁸ The scarcity pricing mechanism applies when supply cannot meet the CAISO's ancillary service procurement requirements within an ancillary service region or sub-region.²¹⁹ This is yet another aspect of the Complaint that is unsupported.

²¹⁷ The Complaint's references to ERCOT is inapt. *Id.* First, ERCOT is not subject to the FPA. Unlike the ISOs and RTOs regulated by the Commission under the FPA, ERCOT has neither a centralized capacity market nor a bilateral resource adequacy program. *See* Potomac Economics Independent Market Monitor for ERCOT, 2017 State of the Market Report for the ERCOT Electricity Markets at 113(May 2018) available at <u>https://www.potomaceconomics.com/wp-content/uploads/2018</u> /05/2017-State-of-the-Market-Report.pdf.

²¹⁸ See Cal. Indep. Sys. Operator Corp., 131 FERC ¶ 61,280 at P 1 (2010), order on compliance and reh'g, 133 FERC ¶ 61,113 at PP 1, 11 (2010) ("As discussed below, we find that the compliance filing fully complies with the directives set forth in the Scarcity Pricing Order.").

²¹⁹ *Id.* at P 5, order on reh'g, 133 FERC ¶ 61,113 at PP 1, 11 (2010).

G. Allegations That the State's Procurement Policies Are Unduly Discriminatory Is not Within the Scope of the Federal Power Act

La Paloma claims that the CPUC's long-term procurement planning process has unduly discriminated against existing generation and gas-fired generation because it does not consider such resources in the process.²²⁰ La Paloma argues that, under the CPUC's process, contracting with these resources cannot meet new generation requirements.²²¹ In addition, La Paloma states that the CPUC mandates that load serving entities favor renewable and demand-side resources by requiring their long-term procurement plans to comply with the state's loading order, which requires that entities invest first in energy efficiency and demand-side resources, followed by renewable resources, and then conventional electricity supply.²²² La Paloma argues that the Commission should eliminate this approach to procurement and require that capacity be procured through a centralized capacity market.

La Paloma's undue discrimination claims against the CPUC's procurement policies fail to state an actionable claim under the FPA. Further, they support no complaint against the CAISO whose tariff does not specify such procurement practices. La Paloma ignores overwhelming judicial and Commission precedent that states have exclusive jurisdiction over resource planning and determining the mix of resources their LSEs procure, not the Commission. The courts have recognized the broad powers of

²²⁰ Complaint at 39. As discussed in Section II.B.4, *supra*, under the CPUC's Integrated Resource Planning process that replaced the long term procurement plan process, an LSE can propose to develop new natural gas resources or re-contract with existing natural gas resources, provided it shows why another lower emitting or preferably zero-emitting resource could not reasonably meet the need identified.

²²¹ *Id.*

²²² Id.

states to direct the resource procurement decisions of utilities under their jurisdiction.

The following is a representative sampling of relevant precedent:

- The need for new power facilities and their economic feasibility are areas characteristically governed by the States. *Hughes v. Talen Energy Marketing, LLC, 136 S Ct. 1288, 1292 (2016) (citing Pac. Gas, & Elec. Co. v. State Energy Res. Conservation & Dev. Comm'n, 461 U.S. 190, 205 (1983).*
- States and municipal authorities retain the right to forbid new entrants from providing capacity, to require retirement of existing generators, to limit construction to more expensive, environmentally friendly units, or to take any other action in their role as regulators of generation facilities without direct interference from the Commission. *Conn. Dep't of Pub. Util. Control v. FERC,* 569 F.3d 477, 481 (D.C. Cir. 2009).
- States can develop whatever capacity resources they wish and use such resources to any extent they wish if the states' choices do not adversely affect wholesale capacity rates in a capacity market. *N. J. Board of Public Utilities et al. v. FERC*, 744 F.3d 74 (3d Cir. 2013).
- States may select the type of generation to be built (*e.g.*, wind or solar) and where to build the facility, or may elect to build no generation. States may require procurement of new generation resources and can take actions that affect the supply and demand in the wholesale market. States have authority over local energy matters, including the construction of power plants. States can subsidize generators if the subsidies do not set wholesale prices. *PPL EnergyPlus, et al. v. Solomon,* 766 F.3d 241 (3d Cir. 2014).
- States retain "authority in traditional areas as the authority over local service issues, including reliability of local service; administration of integrated resource planning and utility buy-side and demand-side decisions, including DSM [demand side management]; authority over utility generation and resource portfolios; and authority to impose nonbypassable distribution or retail stranded cost charges." *N. Y. v. FERC*, 535 US 1 (2002), citing *Promoting Wholesale Competition Through Open Access Non-Discriminatory Transmission Services by Public Utilities and Transmitting Utilities*, Order No. 888, FERC Stats & Regs., ¶ 31,036 at 31,782, n. 453 (1996), order on reh'g, Order No. 888-A, 62 FR 12274 (May 14 1997), FERC Stats. & Regs. ¶31,048, order on reh'g,, Order No. 888-B, 81 FERC ¶61,248 (1997), order on reh'g, Order No. 888-C, 82 FERC ¶61,046 (1998), aff'd in relevant part sub nom., Transmission Access Policy Study Group v. FERC, 225 F.3d 667 (D.C. Cir. 2000), aff'd sub nom., N.Y. v FERC, 535 U.S. 1 (2002).

- States can determine how to provide required resources and can place controls on the amount or type of generation capacity built within the state or at particular locations. *Conn. Dep't of Pub. Util. Control v. FERC*, 569 F. 3d 477, 482 (D.C. Cir. 2009), citing *ISO New England*, 120 FERC ¶ 61,234 at 61,978 (2007).
- States have broad powers under state law to direct the planning and resource decisions of utilities under their jurisdiction. States may order utilities to build renewable generators themselves, or order utilities to purchase renewable generation. *Entergy Nuclear Vt. Yankee, LLC v. Shumlin,* 733 F. 3d 393, 417 (2d Cir. 2013) *citing S. Cal. Edison. Co. and San Diego Gas & Elec. Co.,* 71 FERC ¶ 61,269 (1995).
- States may subsidize the construction of new generators, and direct load serving entities to build or contract for any self-supply they believe is necessary. *New England Power Generators Ass'n, Inc. v. FERC,* 757 F. 3d 283, 291 (D.C. Cir. 2014).
- States retain authority over the need for new electrical generating facilities. *Pac. Gas & Elec. Co. v. State Energy Resources Conservation & Devel. Comm'n*, 461 U.S. 190 (1983).
- States can use any resource they wish to secure the capacity they need. *N. J. Board of Pub. Utils. v. FERC,* 744 F.3d 74, 97 (3d Cir. 2014).
- State or public service commission action related to the siting or building of a physical generation facility, the direct financing of constructing a power plant, or the encouragement of or limitations on certain types of power plants within its borders (such as environmental-related regulation) are not be field pre-empted by the Federal Power Act. *PPL Energyplus, LLC v. Nazarian*, 974 F. Supp 2d 790 (D. Md. 2013), aff'd, *PPL EnergyPlus, v, Nazarian,* 753 F.3d 467 (4th Cir. 2014), *cert. granted,* 136 S.Ct. 382 (2015) and 136 S.Ct. 356 (2015) (consolidated).
- Specifying the sizes and types of generators that may bid into a request for proposals lies well within a state's power to regulate. *ALLCO Finance Limited v. Klee*, 861 F.3d 82 (2d Cir. 2017).

The Commission has similarly recognized state authority to determine the types

of resources their load serving entities procure:

• States have the authority to dictate the generation resources from which utilities may procure electric energy. *Cal. Pub. Utils. Comm'n, et al,* 134 FERC ¶ 61,044 at P 30 (2011).

- Permissible state programs may require local utilities purchase a percentage of electricity from a particular generator or from renewable resources, or the creation of renewable energy certificates to be independently used by utilities in compliance with state requirements. *Midwest Power Sys., Inc.* 78 FERC ¶ 61,067 at ¶ 61,246 (1997) (Iowa statute not preempted to the extent it requires state utilities to purchase from certain types of generating facilities.).
- A state may act within its borders to ensure resource adequacy or to favor particular types of new generation. *PJM Interconnection, LLC,* 135 FERC ¶ 61,022 at P 142 (2011).
- States may require procurement of new generation resources even if the price signals in the regional wholesale capacity market indicate that no new resources are needed. *ISO New England, Inc., et al,* 135 FERC ¶ 61,029 at P 171 (2011), *order clarified on reh'g,* 138 FERC ¶ 61,027 (2012).
- States have general authority concerning resource planning and resource decisions. *So. Cal. Edison Co., et al,* 71 FERC ¶ 61,269 (1995).
- Although the Commission is responsible for maintaining well-functioning markets, states have jurisdiction over generation and setting renewable resource targets and renewable portfolio standards. *ISO New England Inc. and New England Power Pool Participant's Committee*, 158 FERC ¶ 61,138 at P 9 (2017).
- California's ability under its authorities over electric utilities subject to its jurisdiction can favor particular generation technologies over others. Also, "under state authority, a state may choose to require a utility to construct generation capacity of a preferred technology or to purchase power from the supplier of a particular type of resource." So. Cal. Edison Co. et al., 70 FERC ¶ 61,215 at ¶ 61,676 (1995).

The foregoing decisions make clear La Paloma's claim that the Commission can

find the CPUC's procurement policies to be unduly discriminatory is not sustainable

under the FPA. States may pursue resource procurement policies that chose new

resources over existing resources (or vice-versa), more expensive resources over

cheaper ones, and renewable resources instead of fossil fuel resources.

Although the Commission is responsible for maintaining well-functioning markets,

the states have jurisdiction over generation, resource portfolios, renewable portfolio standards, and integrated resource planning. As the Supreme Court has clarified, state programs interfere with the Commission's authority only when they disregard an interstate wholesale rate required by the Commission.²²³ Nothing precludes states from encouraging production of new or clean energy through measures "untethered to a generator's wholesale market participation."²²⁴ If "a State does not condition payment of funds on capacity clearing the auction," the state's resource procurement program does not raise jurisdictional concerns.²²⁵

The CPUC's procurement programs do not suffer from such a fatal defect, nor does La Paloma claim they do. The pricing conflict found to exist in *Hughes v. Talen* does not exist in regions, such as the CAISO, where load serving entities, overseen by state and local regulatory authorities, meet their capacity obligations by procuring capacity through bilateral contracts or self-supply, and there is no mandatory centralized

Hughes v. Talen, 136 S. Ct. at 1299. The state procurement program at issue in Hughes v. Talen guaranteed a resource a certain price for capacity sales into PJM's centralized capacity market irrespective of the clearing price and, as such, the state program ran afoul of the Federal Power Act. By adjusting an interstate wholesale rate established by the centralized capacity market, the state program violated the Commission's regulatory turf. *Id.* at 1297, 1299. Similarly, the Third Circuit Court of Appeals found state procurement policies to impinge on the Commission's jurisdiction when they set the rates generators receive for their wholesale capacity contrary to the price established in the Commission-approved centralized capacity market. *PPL EnergyPlus, LLC v. Solomon,* 766 F.3d 241 (3d Cir. 2014).

²²⁴ Hughes v. Talen, 136 S.Ct. at 1299.

Id. The limited scope of Hughes v Talen is illustrated by the Second Circuit's finding that a Connecticut program to procure renewable generation did not run afoul of the Federal Power Act because it did not override the terms of ISO New England's centralized capacity market or require transfer of ownership through such Commission-approved auction. Instead, the Second Circuit found that this program transferred ownership of electricity from one party to another by contract, independent of the capacity auction. The court found these were traditional bilateral contracts (*i.e.*, the types of bilateral contracts CPUC-jurisdictional LSEs enter into to satisfy their RA obligations) that were "untethered to a generators wholesale market participation" and did not "condition payment of funds on capacity clearing the auction." *ALLCO Fin. Ltd. v. Klee*, 861 F. 3d 82 at 99-102 (2d. Cir. 2017), *cert denied*, 138 S.Ct. 926 (2018). Accordingly, they were the type of arrangements that "the Hughes court placed outside of its limited holding." *Id.* at 99.

capacity market. The CAISO does not require that resource adequacy capacity clear through a centralized capacity market, and the CPUC's procurement practices do not disregard wholesale rates under a Commission-approved tariff.²²⁶

If La Paloma is complaining that the CPUC's procurement decisions are increasing the capacity in the region, and causes lower energy market prices, such actions are not preempted by the FPA. The law of supply and demand is not the law of preemption. When a state regulates within its sphere of influence, as is the case here, the regulation's effect on interstate commerce does not render the regulation invalid.²²⁷ States may require the procurement of new resources and can take other actions that affect supply and demand in the wholesale market. State actions are not preempted simply because they increase the supply of electric capacity that affects market clearing prices.²²⁸ Indirect effects on prices are not the basis for preemption.²²⁹ For example, in Allco v. Klee, the Second Circuit Court of Appeals rejected the claim that because contracts arising from a request for proposals for renewable resources would affect wholesale prices by placing downward pressures on the avoided cost the petitioner's qualifying facilities would receive, they infringed on the Commission's jurisdiction. The court stated that "[t]his incidental effect on wholesale prices does not, however, amount to a regulation of the interstate wholesale electricity market that infringes on FERC's

²²⁶ See id.

²²⁷ PPL Energyplus v. Solomon, 766 F. 3d 241, 255 (3d Cir. 2014) (citing Nw. Cent. Pipeline Corp. v. State Corp. Comm'n of Kan., 489 U.S. 493, 514 (1989)).

²²⁸ *Id.* at 255.

²²⁹ *Id.;* see also Oneok, Inc. v. Learjet, Inc., 135 S. Ct. 1591, 1599-1600 (2015); Nw. Cent. Pipeline Corp.., 489 U.S. at 514.

jurisdiction."230

If the Commission upheld La Paloma's theories, the implications would be staggering. Arguably, the same logic could apply to undo the bilateral contracting resource adequacy frameworks in effect in MISO and SPP²³¹, and every Commission-regulated utility in a non-market region that relies on utility-owned generation and bilateral contracts to meets its resource adequacy requirements. La Paloma's logic would invalidate every state statute/regulation that promotes the construction and procurement of certain generation types. The CPUC's procurement policies fall squarely within the state's jurisdiction and, as such, La Paloma's undue discrimination claim falls outside the scope of FPA section 206.

H. Compensating Existing Resources Differently Than New Resources under Bilateral Contracts Does Not Support a Complaint against the CAISO

La Paloma states that, for the period 2011-2016 capacity payments to new thermal resources under bilateral contracts were four-to-seven times higher than the payments received by existing thermal resources with resource adequacy contracts.²³² La Paloma claims that such pricing is unduly discriminatory against existing resources.²³³

Claiming that bilateral contract prices are unduly discriminatory cannot support a complaint against the CAISO under the FPA and does not show that the CAISO tariff is

²³⁰ Allco v. Klee, 861 F. 3d at 101, citing Hughes v. Talen, 136 S.Ct. at 1298.

Recently, the Commission approved SPP's tariff provisions to implement a resource adequacy program that is based on bilateral procurement. *Southwest Power Pool, Inc.,* 164 FERC ¶ 61,092 (2018).

La Paloma Affidavit at P 8 (c).

²³³ *Id.;* Complaint at 39-40.

unjust and unreasonable. The CAISO tariff does not set the prices for bilateral resource adequacy contracts, and the CAISO is not a party to those contracts.

La Paloma ignores that the Federal Power Act regulates sellers of electricity and the wholesale sales they make but does not regulate buyers of electricity.²³⁴ Section 206 provides that if the Commission finds that any price charged or collected for any transmission or sale subject to the Commission's jurisdiction is unjust, unreasonable, or unduly discriminatory it may determine the just and reasonable rate and fix such rate. La Paloma, however, claims because *buyers* of electricity may have paid higher prices for the capacity of new generating units electricity under bilateral contracts than they did for capacity from existing generating units, such *buyers* have engaged in undue discrimination. This does not constitute undue discrimination within the scope of the FPA.²³⁵

La Paloma also ignores that the CAISO tariff resource adequacy requirements are not based on a market that clears all supply and demand. Rather, the tariff allows LSEs to satisfy these requirements through individual bilateral contracts negotiated between willing buyers and sellers. Prices established at arms-length through good faith negotiations are presumed reasonable, and the Commission may abrogate a valid contract only if it harms the public interest.²³⁶ Unlike capacity cleared through a market,

²³⁴ In *Prior Notice and Filing Requirements under Part II of the Federal Power Act*, the Commission noted that "the FPA regulates sales public utilities make, not their purchases. Therefore, public utilities may buy from any seller without the need for FPA review at the time of the purchase." 65 FERC ¶ 61,081 at 61,507 (1993) (footnote omitted).

²³⁵ Even if La Paloma's claim fell within the jurisdictional confines of the FPA, it would be based on the individual contracts and involve the individual parties to those contracts. It would not support a general claim that the CAISO tariff is unjust and unreasonable or that a resource adequacy program based on bilateral contracting is *per se* unjust and unreasonable.

²³⁶ Hughes v. Talen, 136 S. Ct. at 1292-93, *citing Morgan Stanley*, 554 U.S. at 546-48.

capacity procured under bilateral contracts typically have different terms and conditions. In a bilateral procurement framework numerous individual LSEs are procuring capacity from different suppliers in separate transactions. New resources and existing resources also have different cost structures that can affect prices paid under bilateral contracts. A yet-to-be built resource needs a long-term contract based on its costs or else it may not obtain the necessary financing to be constructed. Existing resources already have been financed and constructed. Commission-approved pricing schemes such as RMR reflect such cost differences.

The CAISO notes that suppliers in the region have previously contended that price discrimination exists between new and existing units because new units being constructed were being paid a higher price and/or were receiving longer-term contracts. The Commission has rejected the contention that existing generators are subject to undue price discrimination under such circumstances.²³⁷ The Commission should again reject this contention.

I. The Commission Does Not Require ISOs and RTOs to Have Mandatory Centralized Capacity Markets

La Paloma claims that Commission policy has been clear that "resource adequacy is to be achieved through a durable, transparent market mechanism that facilitates robust competition and orderly entry into and exit from the market."²³⁸ La Paloma also claims that the Commission "has held that centralized resource adequacy procurement is vital to 'attract and retain sufficient capacity' to meet system planning

²³⁷ Cal. Indep, Sys. Operator Corp., 125 FERC ¶ 61,053 at PP 102-104 (2008); Cal. Indep. Sys. Operator Corp., 123 FERC ¶ 61,229 at PP 94, 98 (2008), order on reh'g, 143 FERC ¶ 61,100 (2013).

²³⁸ Complaint at 41, citing *ISO New England, Inc.*, 162 FERC ¶ 61,205 at P 21 (2018).

requirements and provide necessary pricing signals for entry and exit from the market."²³⁹ La Paloma further claims that, other than modifying the bid caps in the markets to allow scarcity pricing, the "only other solution" that has proven to be effective is centralized resource adequacy procurement.²⁴⁰ To support these arguments, La Paloma points to the centralized capacity markets the Commission approved for PJM and ISO New England.²⁴¹

As an initial matter, La Paloma's claim that "FERC policy has been clear that RA is to be achieved through a durable, transparent market mechanism that facilitates robust and orderly entry and exit from the market"²⁴² mischaracterizes the Commission's statement in the cited order. The Commission was discussing the principles applicable to capacity markets, not resource adequacy generally.²⁴³ In that regard, the Commission's exact statement was: "capacity market should facilitate robust competition for capacity supply obligations, provide price signals that guide the orderly entry and exit of capacity resources, result in the selection of the least-cost set of resources that possess the attributes sought by the markets, provide price transparency, shift risk as appropriate from customers to private capital and mitigate market power." The CAISO has no capacity market, so, these principles literally do not apply.

Similarly, La Paloma mischaracterizes the Commission's statement in the ISO

 ²³⁹ *Id.* at 31-32, citing *ISO New England and New England Power Pool*, 125 FERC ¶ 61,102 at PP 43, 77 (2008).

²⁴⁰ *Id.* at 31.

²⁴¹ *Id.* at 27-28, 31-32; 36-37, 42-43.

²⁴² *Id.* at 41, citing *ISO New England, Inc.*, 162 FERC ¶ 61,205 at P 21 (2018).

²⁴³ ISO New England, Inc., 162 FERC ¶ 61,205 at P 21 (2018).

New England order. The portion of the Commission's order La Paloma quotes came from the following statement: "The purpose of the New England FCM is to attract and retain sufficient capacity to maintain ISO-NE's Installed Capacity Requirement, and to do so, FCM capacity prices will need to average out over time to the cost of new entry."²⁴⁴ Nowhere in this statement does the Commission find that a centralized capacity market is "vital" for all ISOs and RTOs to attract and retain sufficient capacity. La Paloma's claim that the Commission views centralized capacity markets as necessary to maintain resource adequacy is also belied by the Commission's approving resource adequacy frameworks that do not involve centralized capacity markets mechanisms and rejecting requests to impose mandatory capacity markets on other ISOs.

The Commission has never required that ISOs and RTOs must have centralized capacity markets to address resource adequacy. To the contrary, the Commission has consistently allowed for regional differences in the ISO/RTO context, rejected a "one-size-fits-all" model for resource adequacy, and recognized there can be more than one just and reasonable rate.²⁴⁵ The resource adequacy frameworks of the CAISO, MISO,²⁴⁶ and SPP all are based primarily on bilateral procurement by load serving entities, not a mandatory, centralized capacity market. A centralized capacity market is not required for the CAISO's resource adequacy framework to be just and

See ISO New England and New England Power Pool, 125 FERC ¶ 61,102 at P 43 (2008).

²⁴⁵ See, e.g., 2018 MISO RA Order, 162 FERC ¶ 61,176 at P 57; Southwest Power Pool, Inc., 158 FERC ¶ 61.063 at P 13 (2017); Midwest Indep. Transmission Sys. Operator, Inc., 127 FERC ¶ 61,054 at P 30 (2009); Midwest Indep. Transmission Sys. Operator, Inc., 116 FERC ¶ 61,292 at P 53 (2006).

²⁴⁶ MISO also has a voluntary, one-year ahead capacity market, but LSEs procure very little capacity through such market. *2018 MISO RA Order*, 162 FERC ¶ 61,176 at P 64.

reasonable.²⁴⁷ Further, the Commission has recognized on numerous occasions that a rate need not be the most reasonable rate possible, it need only be just and reasonable.²⁴⁸

Forcing the CAISO to convert from a bilateral procurement resource adequacy framework to a centralized capacity market would be a far-reaching, unprecedented action. In at least seven separate orders, the Commission has rejected suppliers' requests to impose a mandatory centralized capacity market on MISO, with the most recent of these orders issued on February 28, 2018.²⁴⁹ Leading up to the February 2018 order, suppliers claimed there was a "significant risk of serious capacity shortfalls", no "mechanism to ensure long-term resource adequacy," an "imminent reliability risk in retail choice areas", and the short-term nature of MISO's capacity market and very low or zero prices rendered the market unable to provide price signals for longer-term resource planning. The Commission found these arguments insufficient to support requests that the Commission impose a mandatory, centralized capacity market (with a

²⁴⁷ Even the Supreme Court has recognized that wholesale transactions in deregulated markets typically occur through two mechanisms—bilateral contracting and competitive auctions such as a capacity market. *Hughes v. Talen,* 136 S. Ct. at 1293.

See, e.g., ISO New England, Inc., et al, 162 FERC ¶ 61,206 at P 33 (2018) ("[T]he question before the Commission . . . is whether ISO-NE has demonstrated that its [proposals] are just and reasonable, not whether ISO-NE's proposal is more or less just and reasonable than protesters' proposed alternatives.") (footnote omitted); *Louisville Gas & Elec. Co., et al,* 114 FERC ¶ 61,282 at P 29 (2006), *order on reh'g*, 116 FERC ¶ 61,020 (2006) (finding that "the just and reasonable standard under the FPA is not so rigid as to limit rates to a 'best rate' or 'most efficient rate' standard."); *City of Bethany v. FERC*, 727 F. 2d 1131, 1136 (D.C. Cir. 1984) (when determining whether a proposed rate was "just and reasonable", as required by the FPA, the Commission properly did not consider "whether a proposed rate schedule is more or less reasonable than the alternative rate designs").

²⁴⁹ 2018 MISO RA Order, 162 FERC ¶ 61,176 (rejecting requests to adopt a minimum offer pricing rule and sloped demand curve for MISO's voluntary capacity market); *Midwest Indep. Transmission Sys. Operator, Inc.,* 139 FERC ¶ 61,199; *Midwest Indep. Transmission Sys. Operator, Inc.,* 127 FERC ¶ 61,054 (2009); *Midwest Indep. Transmission Sys. Operator, Inc.,* 125 FERC ¶ 61,061 (2008); *Midwest Indep. Transmission Sys. Operator, Inc.,* 122 FERC ¶ 61,283 (2008); *Midwest Indep. Transmission Sys. Operator, Inc.,* 116 FERC ¶ 61,292 (2006).

sloped demand curve and minimum offer pricing rule) on MISO. 250

Over the years, the Commission has found that a mandatory centralized capacity market is unnecessary to maintain resource adequacy in MISO for many reasons including, inter alia: (1) MISO's regulatory framework has provided for resource sufficiency for a significant period;²⁵¹ (2) MISO's resource adequacy construct ensures access to resources to meet coincident peak demand and local peak demand on the system:²⁵² (3) the vast majority of MISO load is served by LSEs subject to state or local integrated resource planning processes, and such processes typically consider resource needs multiple years into the future;²⁵³ (4) the MISO region will continue to maintain sufficient resources through 2022;²⁵⁴(5) MISO states opposed the centralized capacity markets found in the eastern regional transmission organizations;²⁵⁵ (6) low prices reflect a surplus of capacity, not systemic defects;²⁵⁶ (7) unlike eastern ISOs, MISO had no long-standing history of procuring capacity as a former power pool;²⁵⁷ and (8) state and local integrated resource planning processes diminish the need for, and benefits of, forward price signals.²⁵⁸ The Commission should decline to impose a mandatory centralized capacity market on the CAISO for similar reasons. Like MISO,

²⁵⁰ See, e.g., 2018 MISO RA Order, 162 FERC ¶ 61,176 at PP 16-17, 28.

²⁵¹ Midwest Indep. Transmission Sys. Operator, Inc., 153 FERC ¶ 61,229 at P 46.

²⁵² 2018 MISO RA Order, 162 FERC ¶ 61,176 at P 56.

²⁵³ *Id.* at P 73.

²⁵⁴ *Id.* at P 58.

²⁵⁵ Midwest Indep. Transmission Sys. Operator, Inc., 127 FERC ¶ 61,054 at P 25.

²⁵⁶ *Midwest Indep. Transmission Sys. Operator, Inc.,* 153 FERC ¶ 61,229 at P 51.

²⁵⁷ Midwest Indep. Transmission Sys. Operator, Inc., 127 FERC ¶ 61,054 at P 30.

²⁵⁸ 2018 MISO RA Order, 162 FERC ¶ 61,176 at P 73.

the CAISO did not arise from a power pool and has no history of procuring resources for the load serving entities in its footprint (other than backstop procurement). Resource adequacy and integrated resource planning in both regions is based on bilateral procurement by load serving entities overseen by state and local regulatory authorities. Even community choice aggregators and energy service providers are subject to the CPUC's jurisdiction regarding resource adequacy and integrated resource plans.²⁵⁹ An RA program based on bilateral procurement has maintained reliability. There is a capacity surplus in both regions.

An important purpose of a capacity market is to send price signals regarding when and where new resources are needed.²⁶⁰ However, a mandatory centralized capacity market is not needed to incent the construction of new capacity in the CAISO. The Integrated Resource Plan process described in Section II.A.4, *supra*, which addresses resource needs in future years, along with increasing RPS requirements and storage procurement mandates "diminish the need for and, thus, benefits of forward price signals."²⁶¹ La Paloma admits state procurement processes and compensation levels have been sufficient compensation to incent new resources.²⁶² Further, the CAISO is facing generally declining load forecasts.

²⁵⁹ CPUC Decision D.18-02-108, Order Instituting Rulemaking to Develop Integrated Resource Planning Framework and to Coordinate and Refine Long-Term Procurement Planning Requirements, Rulemaking 16-02-007 (Feb. 8, 2018).

²⁶⁰ ISO New England and New England Power Pool Participants Comm., 158 FERC ¶ 61,138 at P 9 (2017).

²⁶¹ See 2018 MISO RA Order at P 73 (long-term planning processes such as integrated resource planning processes that consider resource needs multiple years in the future diminish the need for and benefits of forward price signals).

²⁶² La Paloma Affidavit at P 7 (c) and Complaint at 40; La Paloma Affidavit Exhibit JT/JC-1; Complaint at 36 (California is consistently long in capacity as a result of its long-term planning process)

The circumstances surrounding formation of the current capacity market constructs in PJM and ISO New England do not support the Commission imposing a similar construct in the CAISO. Both PJM's RPM and ISO New England's FCM were the product of settlements the regional transmission organizations filed with the Commission with broad stakeholder support. Both PJM and ISO New England had preexisting capacity markets, which the Commission had found to be defective because, *inter alia*, they failed to provide for locational procurement. The FCM settlement arose from litigation over ISO New England's proposed tariff changes to implement locational procurement (*i.e.*, the LICAP proposal). The RPM settlement arose following PJM's filing of tariff and agreement changes to implement proposed changes to its capacity markets to address deficiencies acknowledged by PJM.

The PJM and ISO New England settlements do not, and cannot, constitute precedent for the Commission unilaterally to dissolve the existing resource adequacy framework in the CAISO and replace it with a mandatory, centralized capacity market. Further, as discussed in Section III.B, *supra*, the basis for the Commission's approval of the PJM and ISO New England settlements was based on the significant reliability problems they were facing – reliability standard violations, the immediate need to incent new generation to address potential capacity shortages, and flaws in their then-existing capacity markets, in particular the lack of locational procurement. As discussed above, the CAISO does not face similar circumstances. The PJM and ISO New England circumstances do not justify imposing a mandatory centralized capacity market on the CAISO.

La Paloma's Complaint boils down to a claim that a resource adequacy

framework based on bilateral procurement (such as the resource adequacy frameworks in effect in the CAISO, MISO, and SPP) is per se unjust and unreasonable and that a mandatory centralized capacity mechanism is the only just and reasonable means to ensure resource adequacy. Such a claim is contrary to Commission precedent and not supported by the facts. La Paloma also ignores that, in providing guidance on PJM's initial RPM proposal, the Commission found that PJM should permit states and load serving entities to opt-out of the capacity market entirely by self-supplying or contracting for capacity, ²⁶³ and the RPM construct it approved included such an opt-out provision.²⁶⁴ More recently, the Commission has suggested that it may be just and reasonable for PJM to allow load serving entities to remove individual state-sponsored resources and commensurate load from the centralized capacity market.²⁶⁵ In a region with robust RPS standards and environmental policies that guide procurement, and where regulators strongly oppose a mandatory centralized capacity market and prefer bilateral procurement, it simply does not make sense to spend considerable time and effort – and incur significant costs – to design and implement a CAISO-run centralized capacity market, particularly when parties likely will opt out of such a market.

J. There Is No Reason to Conclude Centralized Capacity Markets Implemented by Other ISOs and RTOs Are Superior To the CAISO's Resource Adequacy Provisions

La Paloma claims that centralized capacity markets are the only proven approach to address the "missing money" problem in a manner consistent with

²⁶³ *PJM RPM Order,* 115 FERC ¶ 61,079 at P 6.

²⁶⁴ *PJM RPM Settlement Order,* 117 FERC ¶ 61,331 at P 36.

²⁶⁵ Calpine Corp., 163 FERC ¶ 61,236 at PP 160-161.

Commission requirements.²⁶⁶ As explained below, even if a capacity market is workable for other ISOs and RTOs in the context of their own market designs and regional characteristics, there is no reason to conclude that a mandatory centralized capacity market would be just and reasonable if interposed into the CAISO's market design. La Paloma ignores the significant challenges that have confronted centralized capacity markets fueling the need for constant changes and leading to litigation before the Commission and courts. Ironically, La Paloma cites to the CAISO's ongoing refinement of its resource adequacy requirements and capacity procurement mechanisms, in concert with the CPUC's efforts to update its resource adequacy program, as evidence that the CAISO's approach to resource adequacy must be replaced by a mandatory centralized capacity market.²⁶⁷ This history is not at all remarkable, however, especially when compared to the considerable controversy and uncertainty that continues to face centralized capacity markets. As noted in a December 2017 Government Accountability Office (GAO) report, the Commission has estimated there were 190 proposals to change centralized capacity markets from 2012-2017 of which the Commission approved 125 that resulted in changes to the markets.²⁶⁸ The GAO report recognizes that frequent rule changes may create uncertainty for market participants.²⁶⁹ The following is an illustrative list of some changes to ISO-NE's capacity market in recent years:

In 2016, the Commission conditionally accepted two sets of changes to

La Paloma Affidavit at PP 14-21; Complaint at 42.

²⁶⁷ Complaint at 3-5.

²⁶⁸ GAO Report to Congressional Committees, *Electricity Markets Four Regions Use Capacity Markets to Help Ensure Adequate Resources but FERC has not Fully Assessed their Performance*, p. 22 (Dec 2017) (GAO Report).

²⁶⁹ *Id.*

ISO-NE's forward capacity market rules to provide a means for capacity suppliers to price the potential retirement of existing resources and to address the potential exercise of market power associated with the retirement of existing resources. *ISO New England Inc.*, 155 FERC ¶ 61,029 (2016).

- In 2017, the Commission granted, in part, a section 206 complaint alleging that ISO-NE's Peak Energy Rent ("PER") Adjustment mechanism, which was part of ISO-NE's forward capacity market rules, had become unjust and unreasonable. *New England Power Generators Ass'n, Inc., v. ISO New England Inc.*, 158 FERC ¶ 61,034 (2017).
- In February of this year, the Commission accepted a range of modifications to ISO-NE's forward capacity market rules, including changes to establish a new capacity market bilateral transaction known as an Annual Reconfiguration Transaction (ART) to replace the capacity market's existing bilateral contracting mechanism. *ISO New England Inc.*, 162 FERC ¶ 61,175 (2018).
- In March of this year, the Commission accepted ISO-NE's Competitive Auctions with Sponsored Policy Resources (CASPR) proposal to revise its forward capacity market to address the New England states' increased renewable targets and the development of state-subsidized new generation resources. *ISO New England Inc.*, 162 FERC ¶ 61,205 (2018).

PJM has similarly dealt with constant revisions and challenges to its capacity

market rules. This year alone, the Commission has issued these orders addressing the

PJM capacity markets:

- In February, the Commission accepted PJM's proposal to revise three areas of its capacity market rules: resource "aggregation" for submitting combined capacity market sell offers; granting of winter-period Capacity Interconnection Rights, and demand resource measurement and verification. *PJM Interconnection, L.L.C.,* 162 FERC ¶ 61,159 (2018).²⁷⁰
- In February, the Commission also convened a technical conference to address two separate complaints addressing the procurement of capacity in PJM's Reliability Pricing Model (RPM) capacity market and the participation of certain resources in RPM auctions. *Old Dominion Elec. Coop. and Direct Energy Bus., LLC v. PJM Interconnection, L.L.C.,* 162 FERC ¶ 61,160 (2018).

²⁷⁰ This order affirmed the acceptance of these revisions by delegated authority when the Commission did not have a quorum.

- In May, the Commission rejected a PJM proposal to revise its Reliability Assurance Agreement (RAA) to reform PJM's capacity market Incremental Auctions and PJM's approach to addressing excess capacity. *PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,101 (2018).
- In May, the Commission also rejected two separate proposals (one from PJM and the other from Calpine) to address concerns that statesubsidized resources are having a suppressive effect on PJM's RPM capacity market. The Commission also initiated a new section 206 proceeding and directed an expedited paper hearing to address a proposed approach in which PJM would: (i) modify its Minimum Offer Price Rule (MOPR) such that it would apply to new and existing resources that receive out-of-market payments, regardless of resource type, but would include few to no exemptions; and (ii) establish an option that would allow, on a resource-specific basis, resources receiving out-of-market support remove themselves from the PJM capacity market, along with a commensurate amount of load, for some period of time, similar to PJM's existing Fixed Resource Requirement (FRR). *Calpine Corp., et al v. PJM Interconnection, L.L.C.*, 163 FERC ¶ 61,236 (2018).

These orders highlight there is no accepted approach to reconciling state

procurement initiatives, including RPS, with centralized capacity markets. ISO-NE's CASPR proposal was one attempt to update capacity market rules to reflect state policy initiatives, but many New England states and other stakeholders opposed the proposal. Although the Commission approved the CASPR proposal, that proceeding illustrated a diversity of views among the Commissioners, including the lack of consensus whether a MOPR should be the "standard solution" to address state policies.²⁷¹ Similar issues remain unresolved in the high profile paper hearing concerning the interplay between state policy initiatives and PJM's capacity markets recently initiated by the Commission. The Commission's order also indicates a diversity of views on how centralized capacity markets should accommodate state policies. Given the numerous state procurement

See ISO New England Inc., 162 FERC ¶ 61,205 (2018) (Comm'r La Fleur concurring in part, Comm'r Powelson dissenting, and Comm'r Glick, dissenting in part and concurring in part).

programs and clean power initiatives in the CAISO's footprint, requiring the CAISO to adopt a mandatory centralized capacity market would only subject CAISO customers and stakeholders to similar challenges that have proven to be so contentious in PJM and ISO-NE. On the other hand, retaining a bilateral procurement framework allows LSEs to procure capacity to satisfy state policy requirements without having to address how such procurement affects the capacity market or can be accommodated in a capacity market framework.

La Paloma argues that the Commission should require the CAISO to adopt a mandatory centralized capacity market to avoid reliance on out-of-market options such as RMR agreements or the CAISO's capacity procurement mechanism.²⁷² This argument ignores that ISOs and RTOs with centralized capacity markets also need backstop procurement mechanisms to maintain reliability in the face of changing system conditions and resource retirements. ISO-NE, has long had tariff authority to enter into RMR contracts to address locational reliability needs that are not addressed through the ISO-NE capacity markets. The Commission also recently directed ISO-NE to develop tariff provisions that will support a new category of cost-of-service agreements to address reliability threats resulting from region-wide fuel security issues.²⁷³ The PJM tariff also has provisions that allow for PJM to enter RMR agreements if a needed resource proposes to deactivate and PJM has exercised this tariff authority.²⁷⁴ In recent years, the Commission has directed the NYISO to develop comparable tariff provisions

²⁷² Complaint at 41.

²⁷³ ISO New England Inc., 164 FERC ¶ 61,003 (2018).

²⁷⁴ See PJM tariff, Part V, section 113.1-113.2; see also Exelon Generation Co., LLC, 132 FERC ¶ 61,219 (2010).

which provide for the NYISO to enter RMR agreements in certain circumstances in response to circumstances when a generator needed for New York system reliability proposed to retire.²⁷⁵ The need to rely on options such as RMR contracts therefore is more properly seen as addressing a nationwide trend of resource retirements and transitioning to long-term replacement solutions rather than evidence that the CAISO traiff is unjust and unreasonable.

K. The CAISO and CPUC Are Pursuing Enhancements to the Resource Adequacy Program

The Commission has consistently "recognize[d] the states' historical role in ensuring resource adequacy"²⁷⁶ and, in the context of the CAISO, has specifically noted that the CPUC plays an important role in "taking responsible action to ensure that all LSEs subject to its jurisdiction have adequate resources."²⁷⁷ The Commission has applied a "balanced jurisdictional approach" that allows the CAISO to work with local regulatory authorities, including the CPUC, to develop and maintain a resource adequacy framework that ensures the reliable operation of the grid.²⁷⁸ To accomplish this, the CAISO and the CPUC actively coordinate on resource adequacy issues. CPUC Energy Division staff participate in CAISO resource adequacy stakeholder processes, and the CAISO staff actively participates in CPUC resource adequacy proceedings.

Currently, the CPUC is engaged in a rulemaking - the RA Refinement

²⁷⁸ *Id.*

²⁷⁵ *N.Y. Indep. Sys. Operator, Inc.*, 150 FERC ¶ 61,116 (2015).

²⁷⁶ September 2006 MRTU Order, 116 FERC ¶ 61,274 at P 1117.

²⁷⁷ *Id.* at P 1118.

Proceeding -²⁷⁹ to consider modifications to the resource adequacy program in light of recent trends "so that it can continue to ensure ratepayer value and secure a generation fleet that meets California's needs."280 Trends the CPUC is considering in the proceeding include: (1) recent out-of-market procurement of resources for local reliability; (2) growth in Community Choice Aggregation; (3) gas fleet transition considerations driven by the analysis conducted in the CPUC's IRP proceeding, and by consideration off impacts on disadvantaged communities; and (4) more variable weather and more weather-correlated generation.²⁸¹ The CPUC is considering modifications and refinements to its resource adequacy program in multiple tracks. In Track 1, the CPUC signaled its intent to adopt multi-year local capacity procurement requirements starting in 2020.²⁸² In Track 2 of the RA Refinement Proceeding, which is ongoing, the CPUC is primarily considering adopting multi-year resource adequacy requirements and refinements to local capacity area procurement.²⁸³ In Track 3, the CPUC will consider counting rules for weather sensitive and local demand responses resources and other modifications or refinements proposed by Energy Division staff and other parties.²⁸⁴ Because these proceedings and CAISO tariff amendment filings to reflect these and other RA and backstop procurement related enhancements, the RA framework La Paloma claims is unjust and unreasonable likely will not be the RA

²⁸⁴ *Id.*

²⁷⁹ Order Instituting Rulemaking to Oversee the Resource Adequacy Program, Consider Program Refinements, and Establish Annual Local and Flexible Procurement Obligations for the 20190 and 2020 Compliance Years, Rulemaking R. 17-09-020, October 4, 2017.

²⁸⁰ RA Refinement Proceeding Scoping Memo at 3.

²⁸¹ *Id.*

²⁸² RA Refinement Proceeding Track 1 Decision.

²⁸³ RA Refinement Proceeding Scoping Memo at 7-8.

paradigm that exists commencing with the 2020 RA compliance year.

The CAISO is an active participant in the RA Refinement Proceeding. As discussed below, the CAISO is proposing certain RA program enhancements to adapt the program to emerging trends on the grid including, *inter alia*, adopting a multi-year forward resource adequacy procurement framework for local, system, and flexible capacity and more granular local capacity area procurement requirements. These modifications will help support future reliability, reduce the need for CAISO backstop procurement, provide additional revenue streams to existing generators, and enable them to undertake any necessary capital maintenance. Many of the modifications are reflected in the CAISO's Policy Development Roadmap, as discussed in Section III.C, *supra*. These changes would further obviate the need for any mandatory centralized capacity market.

1. The CPUC Has Already Adopted Significant Improvements to its RA Program that Will Support Local Reliability in Future Years and Reduce the Need For CAISO Backstop Procurement.

In the RA Refinement Proceeding, with substantial input from the CAISO, the CPUC has already addressed some important local resource adequacy issues. The CPUC appropriately prioritized improvements to reduce CAISO backstop procurement, and in its Track 1 decision stated that it intends to adopt multi-year local resource adequacy requirements for the 2020 RA compliance year in Track 2 of the proceeding.²⁸⁵ The RA Refinement Proceeding Track 1 Decision provides that the multi-year local RA requirements must (1) have a three-to-five-year duration, (2) provide

285

RA Refinement Proceeding Track 1 Decision at 27-28.

for 100% procurement in first year and at least 95% procurement in the second year of the cycle, and (3) must have a central buyer structure to conduct some portion of the multi-year forward procurement.²⁸⁶ These RA program improvements will ensure that units needed for local reliability have adequate multi-year revenue streams. In the RA Refinement Track 1 Decision, the CPUC stated that it may consider expanding multi-year requirements to flexible and/or system RA, but noted that because of anticipated changes to the flexible RA capacity construct it might not be appropriate to adopt multi-year flexible capacity requirements at this time.²⁸⁷ In that regard, the CAISO is assessing potential changes to the existing flexible capacity RA construct in it Flexible Resource Adequacy Criteria and Must Offer Obligation—Phase 2 (FRACMOO2) stakeholder initiative.

2. In Track 2, the CAISO and the CPUC Are Assessing Implementation Details for the Multi-Year Local RA Procurement Framework and Other RA Enhancements

a. Multi-Year Procurement

The implementation details of the multi-year local resource adequacy framework are being addressed in Track 2 of the CPUC's RA Refinement Proceeding. Interested parties, including the CAISO, filed proposals on July 10, 2018. There is significant stakeholder support for adopting and implementing multi-year local resource adequacy requirements for the 2020 compliance year.

In its Track 2 testimony, the CAISO has proposed that the CPUC adopt a holistic three-year procurement framework for all capacity types (*i.e.*, local, system, and flexible)

²⁸⁶ *Id.* at 28-32.

²⁸⁷ *Id.* at 28.

commencing with the 2020 RA compliance year.²⁸⁸ The CAISO's testimony stated that adopting a multi-year procurement framework for all three capacity products will provide significant benefits, including simplifying multi-year capacity allocations, ensuring more optimal and effective resource procurement, better align RA procurement with procurement under the Commission's Integrated Resource Planning proceeding and other procurement proceedings, help inform the orderly retirement of non-essential gasfired generation, and provide an additional revenue stream to existing resources that are needed, allowing them to undertake necessary capital maintenance.

The CAISO's proposal recognizes that the process of refining flexible RA procurement obligations is ongoing. The CAISO's FRACMOO2 stakeholder initiative, which is considering future flexible capacity procurement obligations, is substantively aligned with the CAISO's Day-Ahead Market Enhancement (DAME) initiative by ensuring that forward procurement of flexible resource attributes support the CAISO's operational needs. To facilitate a multi-year flexible capacity requirement starting in 2020, while recognizing the ongoing status of the DAME and FRACMOO2 initiatives, the CAISO has proposed a 100 percent flexible RA capacity procurement obligation in 2020 and an 80 percent procurement obligation for 2021 and 2022.²⁸⁹

b. Measures to Reduce the Need for CAISO Backstop Procurement

As discussed in greater detail in Section III.D, supra, the CAISO has also

²⁸⁸ Corrected Chapter 2: Multi-Year Resource Adequacy Procurement Requirements, Rulemaking 17-09-020 Track 2 at 1 (filed July 10, 2018), available at <u>http://www.caiso.com/Documents/Jul10_2018_</u> <u>RAProceedingTrack2Testimony-Chapter2-Multi-YearRAProcurementRequirements_ProposalNo1_R17-09-020.pdf</u>.

²⁸⁹ *Id.* at 4-5.

proposed that the CPUC require its LSEs to procure adequate capacity in each local capacity area, compared to the existing framework that allows them to meet local capacity requirements by procuring resources within any local capacity area in their Transmission Access Charge area.²⁹⁰ Several other parties, including the CPUC's Energy Division, have proposed to disaggregate local areas for procurement. Also, as discussed in Section III.D, the CAISO has indicated that it will identify any essential reliability resources (ERRs), defined as specific resources in a local area or sub-area that are needed for reliability and for which there are no viable competition or alternatives.²⁹¹ These ERRs are necessary to ensure local area or sub-area reliability and must be procured to meet local reliability requirements. By identifying essential reliability resources, the CAISO will provide LSE's (and the CPUC-designated central buyer if LSEs do not procure ERRs) with critical information to ensure that all resources necessary for local reliability will be procured. These two enhancements will facilitate RA procurement of resources needed for reliability and reduce the need for the CAISO to engage in backstop procurement. The CPUC has stated that "top priority" modifications include RA reforms to maintain reliability and reduce backstop procurement.²⁹²

²⁹⁰ CAISO, Testimony, Chapter 1, Rulemaking 17-09-020 Track 2, at 5-6; CAISO Reply Comments, Rulemaking 17-09-020, p. 5 (Aug. 8, 2018).

²⁹¹ CAISO Testimony, Chapter 3: Resource Adequacy Compliance Timeline and Central Buyer, Rulemaking 17-09-020, Track 2 at 6-7, available at <u>http://www.caiso.com/Documents/Jul10_2018</u> <u>RAProceedingTrack2Testimony-Chapter3-RAComplianceTimeline_CentralBuyer_ProposalNo2_R17-09-020.pdf</u>.

²⁹² RA Refinement Proceeding Scoping Memo at 6.

c. Other RA Enhancements the CAISO Is Proposing

In its Track 2 proposals, the CAISO has also proposed other RA enhancements designed to address emerging issues at both the local and system level. Specifically, the CAISO has proposed that the CPUC (1) adopt an updated effective load carrying capability (ELCC) methodology to properly reflect the reliability contributions of solar and wind resources,²⁹³ (2) consider availability limitations (such as maximum runtime and call events) in meeting local capacity needs,²⁹⁴ and (3) adopt a higher demand forecast to establish system resource adequacy requirements in months that exhibit greater peak demand variability.²⁹⁵ In its Reply Comments filed on August 8, 2018, the CAISO urged the Commission to focus primarily on establishing multi-year year requirements and refinements to local capacity procurement in Track 2 to ensure such requirements are in place for the 2020 RA compliance year. To support achieving that goal, the CAISO recommended that the foregoing issues and other matters be deferred to Track 3.²⁹⁶

The RA Refinement Proceeding and the RA enhancements the CAISO is proposing show that the CAISO and the CPUC recognize that the grid is transforming and are proactively preparing for the grid of the future. La Paloma fails to demonstrate

²⁹³ CAISO, Testimony, Chapter 5: Effective Load Carrying Capacity, Rulemaking 17-09-020 Track 2 (filed July 10, 2018), available at <u>http://www.caiso.com/Documents/Jul10_2018_RAProceedingTrack2</u> Testimony-Chapter5-ELCC_ProposalNo4_R17-09-020.pdf.

²⁹⁴ CAISO, Testimony, Corrected Chapter 6: Availability Limited Resources, Rulemaking 17-09-020 Track 2 (filed July 10, 2018), available at <u>http://www.caiso.com/Documents/Jul10_2018_RAProceeding</u> <u>Track2Testimon-Chapter6-AvailabilityLimitedResources_ProposalNo5_R17-09-020.pdf</u>.

²⁹⁵ CAISO, Testimony, Corrected Chapter 4: System Resource Adequacy Demand Forecasts, Rulemaking 17-09-020 Track 2 (filed July 10, 2018), available at <u>http://www.caiso.com/Documents/Jul10_2018_RAProceedingTrack2Testimony-Chapter4-SystemRA</u> <u>DemandForecasts_ProposalNo3_R17-09-020.pdf</u>.

²⁹⁶ CAISO Reply Comments, Rulemaking 17-09-020. pp. 1, 4.

that a mandatory centralized capacity market is needed to maintain reliability or identify any problem that requires undoing an RA framework based on bilateral procurement.

L. There Is No Justification for Usurping the Respective Roles of the CAISO and State and Local Regulators in Developing Fundamental Aspects of the Resource Adequacy/Backstop Procurement Framework

Even assuming aspects of the CAISO's existing RA and backstop capacity procurement tariff provisions structure could be found to be unjust and unreasonable, La Paloma offers no basis for mandating that the CAISO abandon the long-standing resource adequacy paradigm in its tariff for a completely different paradigm. The CAISO is already working in coordination with the CPUC and stakeholders to develop enhancements to the RA program and the CAISO's backstop capacity procurement provisions that it expects will result in future CAISO tariff amendment filings.

The Commission has long recognized that ISOs and RTOs are responsible for developing and implementing any needed modifications their own wholesale market designs. For example, when the Commission directed ISOs and RTOs to develop modifications to allow demand response to participate in wholesale electric markets, the Commission "allow[ed] each RTO or ISO to work with stakeholders to develop the appropriate implementation rules for its own market design" in an approach that "allows for regional variation."²⁹⁷ Updating their own market designs is at the heart of what ISOs and RTOs do.

The current CAISO tariff results from the CAISO fulfilling its role as the primary architect of its own market design. After the Commission issued orders in 2000 and

²⁹⁷ Wholesale Competition in Regions with Organized Electric Markets, Order No. 719, FERC Stats. & Regs., ¶ 31, 281 at P 62 (2008), order on reh'g, Order No. 719-A, FERC Stats. & Regs., ¶ 31,292, order on reh'g, Order No. 719-B, 129 FERC ¶ 61,252 (2009).

2001 which required the CAISO to redesign the CAISO congestion management system and to create a day-ahead energy market, the CAISO developed a comprehensive market redesign with stakeholder input presented to the Commission first in a series of conceptual filings and later in detailed implementing tariff filings.²⁹⁸ This comprehensive market redesign included the general resource adequacy paradigm that exists today.²⁹⁹ In approving the resource adequacy framework, the Commission recognized the important role of the CAISO and state and local regulatory authorities.³⁰⁰

La Paloma not only ignores this precedent, it also asks the Commission to supersede the well-established process by which the CPUC considers changes to resource adequacy procurement in coordination with the CAISO's efforts to develop market design enhancements with stakeholder input.³⁰¹ La Paloma suggests that the Commission took a more preemptive approach in connection with PJM's RPM. That is incorrect. PJM worked with stakeholders for several years to develop a solution for the reliability concerns with its prior capacity market construct.³⁰² Because stakeholders could not reach a consensus on a single solution to the issue, PJM filed its RPM proposal under Sections 205 and 206 of the FPA, and ultimately PJM settled with stakeholders that the Commission approved.³⁰³ Unlike the circumstances in PJM, there are no immediate reliability problems that require the CAISO to develop drastic changes

²⁹⁸ See, e.g., Cal. Indep. Sys. Operator Corp., 105 FERC 61,140, at PP 5-13 (2003).

²⁹⁹ September 2006 MRTU Order, 116 FERC ¶ 61,274 at PP 1144-1326, order on reh'g, 119 FERC ¶ 61,076 at PP 521-638.

³⁰⁰ September 2006 *MRTU* Order at PP 1112-1119.

³⁰¹ See La Paloma Affidavit at PP 41-45.

³⁰² *PJM RPM Order,* 115 FERC ¶ 61,079 and *PJM RPM Settlement Order,* 117 FERC ¶ 61,331.

³⁰³ *PJM RPM Settlement Order,* 117 FERC ¶ 61,331.

to the bilateral procurement RA framework. Here a single market participant has filed a complaint asking the Commission to completely undo the existing resource adequacy program and replace it with a far-reaching alternative that does not have broad support.

The CAISO notes that, although La Paloma objects vociferously to the CPUC's resource adequacy procurement framework, other resource owners in the region are following the established framework for pursuing RA enhancements and are proposing substantive changes to the RA program in the CPUC's RA Refinement Proceeding. La Paloma, however, is not participating in the proceeding. Based on the Complaint, La Paloma seems more interested in securing transition payments for resources that have not received RA contracts or backstop procurement designations from the CAISO because they have not been found to be needed for reliability.

Particularly in these circumstances, a single market participant should not be permitted to dictate fundamental aspects of an ISO's or RTO's market design. The Commission should permit the CAISO, CPUC, and local regulators to develop any appropriate remedies under established processes in a way that does not upend fundamental aspects of the existing market design.³⁰⁴

M. Elements of the Proposed Capacity Market Are Not Just and Reasonable If Applied To the CAISO

The mandatory centralized capacity market proposed by La Paloma would not be effective or just and reasonable given the circumstances that exist in the CAISO balancing authority area. The capacity markets of eastern ISOs and RTOs only procure

³⁰⁴ Even the Commission's more proscriptive directives, such as the recent order initiating a new section 206 proceeding and paper hearing concerning PJM's capacity market, did not direct fundamental changes to an ISO's or RTO's market design and allowed the ISO and RTO to develop alternatives to the replacement rules contemplated by the Commission. *See Calpine Corp., L.L.C.*, 163 FERC ¶ 61,236 at P 172.

generic capacity. Even with that limited objective, these capacity markets are already highly complex and controversial. Capacity procurement in the CAISO footprint requires many more considerations. The CAISO requires resources with specific attributes, such as flexibility, to meet operational needs in a transforming grid that will comprise more weather-driven energy resources.

La Paloma acknowledges the importance of flexibility attributes for the reliability of the CAISO system and suggests that its proposed capacity market should include flexibility requirements.³⁰⁵ La Paloma fails to acknowledge, however, that no existing ISO or RTO centralized capacity markets procure flexible capacity. La Paloma urges abandoning the existing Commission-approved foundation for procuring flexible capacity by the CAISO for a conceptual and unproven feature to be grafted onto a central capacity market model.

Other features of La Paloma's proposed central capacity market are ill-defined or problematic when applied to the CAISO market design or circumstances in the CAISO. An August 2017 Department of Energy Staff Report states that changing circumstances are challenging centrally-organized wholesale markets.³⁰⁶ Flat demand, Federal and state policy interventions and a massive economic shift in the relative economics of natural gas compared to other fuels are creating stresses on wholesale markets. The DOE Staff Report concludes that the changing circumstances portend potential long-term problems for centrally–organized markets *and, to a lesser extent,* bilateral

³⁰⁵ Complaint at 3, 43.

³⁰⁶ U.S. Dep't of Energy, Staff Report to the Secretary on Electricity Markets and Reliability, August 2017 (DOE Staff Report).

markets.³⁰⁷ These challenges exist in the CAISO, and a bilateral resource adequacy procurement framework can address these challenges more effectively than can a mandatory centralized capacity market.

As discussed in Section II.B.4, *supra*, state law requires that procurement by California load-serving entities result in a balanced portfolio that: produces a diverse and balanced resource mix; ensures system and local reliability; optimally integrates renewable energy; is cost-effective; minimizes impacts on disadvantaged communities; promotes grid resilience; and meets greenhouse gas emission targets and RPS goals.³⁰⁸ La Paloma does not explain how a CAISO-operated centralized capacity market could produce a resource portfolio that better meets these state policy attributes, which do not translate easily in a computerized algorithm. Resource adequacy procurement directed by state and local regulators can better accommodate these myriad state requirements, and with input and studies from the CAISO, ensure the CAISO's reliability needs are satisfied. The DOE Staff Report supports this conclusion recognizing that "[m]arket mechanisms are designed to incentivize individual resources rather than develop balanced portfolios."309 The DOE Staff Report recognizes that, through their bilateral procurement and integrated resource planning processes, California, MISO, and SPP incorporate considerations other than economic efficiency into their resource choices, such as portfolio diversity, job retention or creation, environmental protection, and other factors.³¹⁰

³⁰⁷ *Id.* at 102.

³⁰⁸ See Section II.A.4, supra.

³⁰⁹ DOE Staff Report at 102.

³¹⁰ *Id.* at 107.

A resource adequacy approach based on bilateral procurement also avoids the double payment issue that can exist where capacity markets intersect with state procurement initiatives. The Commission and others have recognized that a centralized capacity market can cause customers to pay twice for capacity, first for capacity procured through the capacity market, and second for renewable and other resources procured outside of the market to meet state policies and resource attribute requirements.³¹¹ The Commission has stated that it does not take this concern lightly.³¹² Although this is an issue that must be addressed in ISOs and RTOs that have adopted a centralized capacity market, La Paloma offers no justification why this problem should be imposed on a region that has chosen a different RA paradigm that does not result in double payments. La Paloma would force a problem on the CAISO that does not exist today, unjustly and unreasonably increasing total procurement costs compared to the current resource adequacy paradigm. It is not just and reasonable to impose a framework that could force CAISO ratepayers to pay twice for capacity.

La Paloma seeks to downplay this risk by suggesting that because many resources needed to meet state RPS requirements are already in service, they would not be subject to a minimum offer price rule (MOPR) and would be counted in any centralized capacity market.³¹³ La Paloma ignores that California law provides for a 50 percent RPS by 2030, and the state likely will increase that standard. Thus, there will be new RPS resources not exempted from any MOPR that the Commission might

³¹¹ Calpine Corp., 163 FERC ¶ 61,236 at P 159; ISO New England and New England Power Pool Participants Committee, 158 FERC ¶ 61,138 at P 9 (2017).

³¹² Calpine Corp., 163 FERC ¶ 61,236 at P 159.

³¹³ La Paloma Affidavit at P 64.

require as part of a CAISO centralized capacity market. Further, the CPUC has established targets for the procurement of new storage resources. These are not existing resources, so the state policies resulting in new storage must also be considered if a capacity market were imposed on the CAISO. Finally, La Paloma ignores that in PJM the Commission has proposed expanding the MOPR to existing resources.³¹⁴ Particularly given the California's policy goals supporting the procurement of new RPS resources, storage, and demand response, and its opposition to a mandatory centralized capacity market, the Commission should not impose a paradigm that would cause ratepayers paying twice for capacity.

The failure of La Paloma to support its centralized capacity market proposal is yet another way in which the Complaint falls short of the requirements of the FPA. In a section 206 proceeding, "[i]t . . . is the [c]omplainants' responsibility to demonstrate, on the basis of substantial evidence, both that the rate in effect is unjust and unreasonable and that their proposed alternative rate is just and reasonable."³¹⁵ But La Paloma leaves innumerable details out of its proposal, including details regarding implementation, transition payments, performance incentives, minimum offer pricing rule, and seller-side market power mitigation. La Paloma acknowledges that coordination between the CAISO, CPUC, and stakeholders will be necessary to successfully implement the mandatory centralized capacity market.³¹⁶ Even had La Paloma met its burden regarding the first prong of section 206 (which it has not), La

³¹⁴ Calpine Corp., LLC, 163 FERC ¶ 61,236 at P 167.

³¹⁵ Ameren Servs. Co. v. Midwest Indep. Transmission Sys. Operator, Inc., 124 FERC ¶ 61,173 at P 9 (2008).

³¹⁶ Complaint at 3, 49.

Paloma has not proved that its proposed changes are just and reasonable.

La Paloma's insistence that a mandatory centralized capacity market is the only way to provide needed resources with compensation for fixed costs contradicts the Commission's acknowledgement there may be alternatives to meeting resource adequacy requirements through a centralized capacity auction—such a construct is not a "be all, end all." PJM's fixed resource requirement (FRR) alternative allows a loadserving entity to submit a fixed capacity resource requirement plan to PJM and meet that requirement, as opposed to participating in the RPM.³¹⁷ The FRR allows a state and its load-serving entities effectively to "opt out" of the PJM capacity markets. The Commission's recent endorsement of an "FRR Alternative" that would apply on a resource-specific basis to resources receiving out-of-market support suggests that the Commission is open to additional options to meeting resource adequacy needs outside of a capacity market.³¹⁸ La Paloma fails to account for the implications of the FRR construct, acknowledging the FRR only in a footnote to the complaint's affidavit.³¹⁹ In a state where regulators oppose a centralized capacity market and would have their LSEs opt out of any such a market, it does not make sense to design, develop, and implement any such market in the first place.

The Commission also has approved alternatives to a MOPR. Although, the Commission has noted that it intends to use the MOPR to address state policy impacts on capacity markets, it recently found "that there can be more than one valid method of

³¹⁷ *PJM Interconnection, L.L.C.*, 129 FERC ¶ 61,081 at P 48 n.28 (2009); see also *PJM Interconnection, L.L.C.*, 135 FERC ¶ 61,022 at P 137 n.73 (2011).

³¹⁸ See Calpine Corp., 163 FERC ¶ 61,236 at PP 160-170.

³¹⁹ La Paloma Affidavit at P 57, n. 97.

managing such impacts, and that methods may be tailored to the specific challenges posed by the state policies in a given region."³²⁰ The Commission noted that, although the MOPR would be the "standard solution," it would "consider supplemental or alternative proposals to manage the impact of state policies, provided that those proposals are sufficiently consistent with the . . . principles of capacity markets."³²¹ The Commission has approved several MOPR exemptions, but the Complaint fails to acknowledge or account for this precedent. The Complaint also ignores that the Commission has refused to impose a MOPR in the MISO capacity market.³²² Imposing a MOPR would aggravate the double payment issue described above.

La Paloma also ignores the significant time and cost it would take for the CAISO, which has no pre-existing capacity market, to develop and implement from scratch a centralized capacity market that would be more complex than the capacity markets in the east. Payments arising from the multi-year resource adequacy enhancements the CPUC is contemplating and the CAISO is proposing in the RA Refinement proceeding would occur much sooner than any capacity payments under the La Paloma's proposed centralized capacity market. The RA refinements the CAISO and CPUC are considering are much more tailored to specific issues in the CAISO region and far less complicated than a mandatory centralized capacity market.

La Paloma relies heavily on the fact that, in a prior CPUC proceeding – Rulemaking 05-12-013 – the CAISO was supportive of a centralized capacity market

³²⁰ ISO New England Inc., 162 FERC ¶ 61,205 at P 22 (2018).

³²¹ *Id.*

³²² 2018 MISO RA Order, 162 FERC ¶ 61,176 at PP 75-82, *citing Midwest Indep, Transmission Sys. Operator, Inc.,* 153 FERC ¶ 61,229 at PP 105-120 (2015).

construct.³²³ First, it is worth noting that, after considering the record in a multi-year proceeding, the CPUC decided in 2010 to reject the concept of a centralized capacity market.³²⁴ Moreover, the CAISO's own views have also evolved. Recent experience, new information, and changed circumstances - all discussed above - indicate that a mandatory centralized capacity market is not needed to maintain reliability and would not be just and reasonable based on the CAISO's circumstances at this time. Given a capacity surplus, generally declining load forecasts, robust RPS and storage procurement policies, and integrated resource planning processes, a new mechanism is not needed at this time to incentivize the construction of new generation. In addition, since the CPUC proceeding on centralized capacity markets that terminated in 2010, the need for flexible capacity procurement has become more prominent. The CAISO, working with the CPUC and stakeholders has developed – and continues to refine and incorporate into the RA program – flexible capacity requirements. A mandatory centralized capacity market is unnecessary to enable the procurement of flexible capacity resources, and the eastern capacity markets do not procure flexible capacity. La Paloma is asking the CAISO to abandon a workable construct with an untested one. Nor is a CAISO-operated centralized capacity market the optimal approach to address the numerous state procurement policies discussed above. Lastly, the capacity markets implemented by other ISOs and RTOs have been faced with constant litigation and controversy, including the challenge of effectively accommodating state policies in a mandatory centralized capacity market framework. Mandatory centralized capacity

³²³ See, e.g., La Paloma Affidavit at P 31.

³²⁴ *Id.* at P 22.

markets also can cause double-paying for capacity, a risk that does not exist under the existing framework.

For all these reasons, La Paloma has failed to justify imposing its proposed mandatory centralized capacity market as a just and reasonable alternative for the CAISO region.

N. There Is No Basis for La Paloma's Transition Payment Proposal

La Paloma also requests that the Commission require the CAISO to make transition payments to generators until the CAISO implements a centralized capacity market.³²⁵ La Paloma claims that a transitional mechanism is needed to ensure that existing resources are justly compensated for the capacity they provide.³²⁶ As support for its request, La Paloma refers to the transitional payment mechanism that ISO New England implemented for the interim period leading up to implementation of its Forward Capacity Market (FCM).³²⁷ The Complaint does not discuss the level of the capacity payments or describe the methodology for determining specifically which generating units would receive transmission payments. Instead, La Paloma offers only the conclusory statement that "[i]mplementation of a transitional payment mechanism would also involve coordination among CAISO, CPUC, and relevant stakeholders."³²⁸

There is no basis or need for the Commission to impose such a drastic and unsupportable requirement on CAISO ratepayers. The proposal violates a fundamental

³²⁵ Complaint at 48-49.

³²⁶ *Id.* at 49.

³²⁷ *Id.*, citing *Devon Power II*, 117 FERC ¶ 61,113 (2006).

³²⁸ Complaint at 49.

tenet of the Commission's market-based rate program that resources only have an opportunity to recover their costs associated with their service, but are not guaranteed cost recovery.³²⁹ The FPA does not guarantee revenues to generators that cannot negotiate RA contracts and the CAISO does not find to be needed to meet reliability under its backstop procurement provisions.

Transition payments are unnecessary – and inappropriate – to compensate resources without RA contracts, RMR agreements, or CPM designations. The resource adequacy and backstop procurement framework in place in the CAISO already compensates resources providing reliability services. The existing RA requirements for load serving entities include procuring sufficient resources to meet their system, local, and flexible capacity obligations. If additional resources are needed to maintain reliability, the CAISO can procure them under its RMR and CPM backstop mechanisms that provide for fixed cost recovery. The CAISO also has a risk-of-retirement CPM provision that allows it to look out two years to determine whether a resource will be needed for reliability (*e.g.*, the CAISO can assess in 2018 whether a resource will be needed by the end of 2020).³³⁰

La Paloma's proposal would require California ratepayers to make long-term capacity payments to additional resources the CAISO has not found to be needed for reliability.³³¹ If a resource has no RA contract, RMR contract, or a CPM designation,

See, e.g., Regional Transmission Organizations, Order No. 2000-A, FERC Stats. & Regs. ¶ 31,092 at 31,371 (2000), aff'd sub nom. Pub. Util. Dist. No. 1 v. FERC, 272 F.3d 607 (D.C. Cir. 2001) (noting in an order on rehearing that Order No. 2000 was not "inconsistent with the rights of utilities to have the opportunity (as opposed to a 'guarantee') to recover costs associated with facilities used to provide jurisdictional service.").

³³⁰ CAISO tariff § 43A.2.6.

³³¹ La Paloma's request for a transition payment scheme is contrary to a fundamental underpinning

there is no justification for guaranteeing that resource capacity payments for a several year "transition" period. ³³² Also, by requiring LSEs to pay for specified types of resources not procured under RA contracts or reliability backstop procurement mechanisms, the transition payment proposal would encroach on state jurisdiction over generation, integrated resource planning and LSE procurement, as discussed in Section III.G.

The ISO New England proceeding referenced by La Paloma does not serve as precedent to impose the proposed transition payment scheme on CAISO ratepayers. The transition payment framework adopted in ISO New England was the product of a comprehensive settlement, and transition payments were an essential element of that settlement. That settlement does not serve -- and cannot serve -- as precedent for imposing a similar scheme on the CAISO under significantly different circumstances. The Commission itself recognized that the transition payments were "not ideal" as a single market design element,³³³ but when considered as part of a comprehensive settlement agreement package, consistent with the *Trailblazer* precedent, they served

of its own complaint, *i.e.*, that market mechanisms should determine which resources are procured. *See*, *e.g.*, Complaint at 41, 48-49. Transition payments essentially constitute large-scale, out-of-market procurement. Whereas RA and CAISO backstop procurement are targeted to meeting specific reliability requirements, making transition payments to all resources is completely divorced from such requirements.

³³² La Paloma suggests that all the capacity market details can be worked out in a few months, but ignores that it took many years to develop, design, and implement ISO New England's forward capacity market (and there was already a capacity market in existence unlike the circumstances here). In that regard, parties executed the settlement setting forth the FCM design principles on March 6, 2006, the Commission approved the settlement on June 16, 2006, the first forward capacity auction was held on February 4-6, 2008, and that auction did not secure resource commitments until the 2010-2011 timeframe. Any transition payment scheme in the CAISO would likely be in place for much longer ISO New England's scheme was in effect given the CAISO's starting point with no pre-existing capacity market and the details of any such market not already in place.

³³³ Devon I, 115 FERC ¶ 61,340 at P 89.

as a reasonable transitory mechanism to enable ISO New England to shift to its FCM.³³⁴

There are several other important differences between ISO New England's situation and the CAISO's that support a finding that imposing a transition payment requirement is unjustifiable. First, ISO New England was operating under a pre-existing capacity market under which resources were procured. On the other hand, the CAISO operates under a bilateral procurement regime. Many LSEs have negotiated long-term contracts. The Complaint fails to address how transition payments would be handled for resources with RA and other contracts. There is no basis in the record to replace existing contracts with transition payments. This issue did not exist for ISO New England, which was procuring capacity through a pre-existing capacity market.

Second, as discussed in Section III.B.3, *supra*, ISO New England was facing significant reliability issues, particularly in locally constrained areas, and ISO New England's existing capacity market framework had no means for securing resources needed to meet locational requirements. The transition payments (and associated obligations for resources receiving them) provided a means to ensure that resources needed to meet local reliability needs and provide enhanced customer protection would remain available.³³⁵ These facts do not apply to the CAISO RA program that already has local (and flexible) capacity procurement requirements (that will be further augmented in the RA Refinement Proceeding). Unlike ISO New England, the CAISO is

³³⁴ *Id.* at PP 89-90, citing *Trailblazer Pipeline Co.*, 85 FERC ¶ 61,345 (1998), *order on reh'g*, 87 FERC ¶ 61,110 (1999) (*Trailblazer*). Under the second approach of *Trailblazer*, even if some individual aspects of a settlement may not be just and reasonable standing alone, the Commission may approve a contested settlement as a package if the overall result of the settlement is just and reasonable. *Trailblazer*, 85 FERC ¶ 61,345 at ¶ 62,341.

³³⁵ Devon I, 115 FERC ¶ 61,340 at P 104.

not facing imminent reliability problems and has surplus capacity.

Finally, the Commission approved the specific transition payments in ISO New England because the settled payment level fell within the reasonable range of capacity payments based on record evidence, and the contesting parties would be in no worse a position than if they litigated the case.³³⁶ There is no comprehensive settlement package here to justify imposing any transition payment scheme. In the litigated proceeding involving ISO New England, parties had filed a range of rates that could have resulted from the proceeding. Here, however, there is not one iota of record evidence what a just and reasonable transition capacity payment price (or any other capacity payment price) would be. Indeed, the Complaint does not even propose a specific transition payment price. Thus, there is no factual basis to approve any specific transition payment.

La Paloma's transition payment proposal constitutes a thinly-veiled attempt to end-run the RA and backstop procurement processes and secure capacity payments for additional resources that are not needed for reliability. The Commission should reject it as unnecessary, unjust, and unreasonable.

³³⁶ *Id.* at P 89.

IV. COMMUNICATIONS

Communications regarding this filing should be addressed to the following. The

individuals identified with an asterisk are the persons whose names should be placed

on the official service list established by the Secretary regarding this submittal:

*Anthony J. Ivancovich Deputy General Counsel, Regulatory *Andrew Ulmer, Director, Federal Regulatory Affairs *Jordan Pinjuv, Senior Counsel The California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (916) 351-4400 Fax: (916) 608-7222 E-mail: <u>aivancovich@caiso.com</u>

*Sean Atkins Alston & Bird LLP The Atlantic Building 950 F Street, NW Washington, D.C. 20004 Tel: (202) 239-3072 Fax: (202) 654-4872 E-mail: <u>sean.atkins@alston.com</u>

V. CONCLUSION

For all the foregoing reasons, the Commission should deny La Paloma's

complaint in its entirety.

Respectfully submitted,

<u>/s/ Anthony Ivancovich</u> Roger E. Collanton, General Counsel, Anthony J. Ivancovich Deputy General Counsel, Regulatory, Andrew Ulmer, Director, Federal Regulatory Affairs Jordan Pinjuv, Senior Counsel

The California Independent System Operator Corporation 250 Outcropping Way Folsom, CA 95630 Tel: (916) 351-4400 Fax: (916) 608-7222 E-mail: <u>aivancovich@caiso.com</u>

Sean Atkins Alston & Bird LLP The Atlantic Building 950 F Street, NW Washington, D.C. 20004 Tel: (202) 239-3072 Fax: (202) 654-4872 E-mail: sean.atkins@alston.com

Counsel for the California Independent System Operator Corporation

CERTIFICATE OF SERVICE

I certify that I have served the foregoing document upon the parties listed on the official service list in the captioned proceedings, in accordance with the requirements of Rule 2010 of the Commission's Rules of Practice and Procedure (18 C.F.R. § 385.2010).

Dated at Folsom, California this 24th day of August, 2018.

<u>/s/ Martha Sedgley</u> Martha Sedgley