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LADWP's Response to CEC's 2nd 15-Day Language Revisions to the Load Management Standards

Additional submitted attachment is included below.

BEFORE THE STATE OF CALIFORNIA ENERGY RESOURCES CONSERVATION AND DEVELOPMENT COMMISSION

In the matter of:	)	Docket No. 21-OIR-03
	)	
	)	RE: Notice of Second 15-Day Public Comment Period
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COMMENTS FROM THE LOS ANGELES DEPARTMENT OF WATER AND POWER TO THE CALIFORNIA ENERGY COMMISSION ON THE NOTICE OF PROPOSED ACTION FOR THE LOAD MANAGEMENT STANDARDS REGULATIONS

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INTRODUCTION

The Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments to the California Energy Commission (Commission) regarding *the Notice of Second 15-Day Comment Period* for proposed revisions to the Load Management Standards (2nd 15-Day Regulations).

The City of Los Angeles (City of LA) is a municipal corporation and charter city organized underthe provisions set forth in the California Constitution. LADWP is a proprietary department of the City of LA, pursuant to the Los Angeles City Charter, whose governing structure includes a mayor, a fifteen-member City Council, and a five-member Board of Water and Power Commissioners (Board). LADWP is the third largest electric utility in the state, one of five California Balancing Authorities, and the nation's largest municipal utility, serving a populationof over four million people within a 478 square mile service territory that covers the City of LAand portions of the Owens Valley. LADWP exists to support the growth and vitality of the City of LA, its residents, businesses and the communities we serve, providing safe, reliable and cost-effective water and power in a customer-focused and environmentally responsible

manner.

SPECIFIC COMMENTS

LADWP recognizes and supports the end goals of the Commission's proposed load management standards, including the goals of minimizing cost, improving reliability, and promoting renewable energy resources. As such, LADWP continuously identifies and implements LADWP-centric solutions to meet these essential end goals, considering the LADWP's unique customer base. LADWP continues to follow its roadmap for providing reliable and sustainable electricity to its customers, while also preparing for the possibility of transitioning to a 100% carbon-free power supply by 2035.

LADWP would like to reiterate its previously submitted comments under Docket: 19-OIR-01 on March 16, 2020 and April 23, 2021, and the existing docket on February 7, 2022, and April 20, 2022. These comments highlighted concerns regarding the Commission's jurisdiction, technical feasibility, equity, customer adoption and impact, cost effectiveness, and cybersecurity. As of release of the 2nd 15-Day Regulations, LADWP's critical concerns remain largely unaddressed. LADWP's relevant outstanding comments are summarized below.

In addition, LADWP fully supports the comments filed by the California Municipal Utilities Association (CMUA) on July 21, 2022, requesting that the "regulations must be amended to authorize the POU governing board of the affected POUs to approve a delay, modification, or exemption from the regulations **at any point** in the process and without seeking the approval of the Commission"[1]. CMUA's recommended framework was jointly developed over a series of stakeholder meetings, including all impacted utilities.

[1] Docket Log (21-OIR-03)

I. JURISDICTIONAL CONCERNS

I. Jurisdiction Concern: The Commission's Encroachment on Rate-Setting Authority

LADWP's primary concern with the Commission's proposed amendment is the impact of the 2nd 15-Day Regulations on the affected utilities' rate setting process. This has been the fundamental and still outstanding concern. Even though the Commission's proposed regulations do not set specific rates, by requiring a specific rate structure, the proposed regulations infringe upon the ratemaking authority of the affected utilities. Further, the proposed Regulations are inconsistent with both the existing language of Public Resources Code 25403.5, which purportedly sets forth the authority and duty of the Commission to adopt Load Management Standards, and the context and legislative history of that statute[2]. Therefore, LADWP reasserts that the longstanding and continuing ratemaking authority of the California Public Utilities Commission for investor-owned utilities, and of local governing bodies for publicly-owned utilities (POUs), including LADWP, must be respected and maintained. For LADWP, the decision about what rates to design and when lies within the jurisdiction of LADWP's Board. With regard to the proposed regulations, LADWP believes that a reasonable resolution is possible.

II. Resolution to Jurisdiction Concern: Retain Local Rate-Setting Autonomy

LADWP observes that the 2nd 15-day language has not mitigated utility concerns regarding ratemaking authority. Although the proposed language allows for utilities to present their proposed rate structures to their respective ratemaking bodies, §§1621(d)-(f) enable the Commission to dictate compliance, exemption, and enforcement with regard to rate structure, a fundamental aspect of ratemaking. LADWP continues to believe that ratemaking lies within the jurisdiction of ratemaking authorities, rather than that of the Commission.

LADWP believes the 2nd 15-Day Regulations should allow for more flexibility in light of LADWP's existing challenges in implementing real-time tariffs. The current

[2] Docket 19-OIR-01: California Municipal Utilities Association Comments - on Draft Tariff Standard Amendments (See Attachment)

proposed regulations would immediately force LADWP into an administrative exemption process, which can be expected to be a complicated and costly endeavor. It is highly likely that other utilities in the State face similar challenges that would affect their attainment of the suggested milestones.

Consequently, LADWP believes that the proposed revisions by the Joint POUs, including LADWP, filed by CMUA on April 20, 2022, and entitled *Joint Proposed Modifications to 15-Day Language Revisions to Load Management Standard Regulations*, provide a viable solution that would enable load management implementation to move forward while respecting ratemaking jurisdiction.

CMUA's revisions recognize each utility governing body's authority to approve load management implementation, including plans for compliance and timeframes. The revisions also allow the governing board to approve certain exemptions based on constraints, including inequities, technological feasibility, and cost-effectiveness. The proposed CMUA changes would allow each governing body to act based on its insights into the unique constraints and opportunities specific to each utility consistent with the ratemaking authority afforded to each governing body.

LADWP, like the Commission, recognizes the benefits that load management will provide in improving grid reliability and lowering greenhouse gas emissions as the State moves toward a clean energy future. LADWP believes CMUA's proposal would allow LADWP to meet the goals of the Load Management Standards within its specific capabilities.

II. LADWP'S LONG-TERM GOALS ALIGN WITH THE COMMISSION'S

LADWP's past and current initiatives demonstrate its commitment to transitioning to a carbon-free grid, in accordance with landmark State legislation, such as Senate Bill 100, while simultaneously maintaining reliability in the face of

climate change, population growth, and transportation electrification. To this end, starting in 2017, LADWP contracted with the National Renewable Energy Laboratory (NREL) to conduct a study on pathways for attaining 100% renewable energy for its service territory. This state-of-the-art study, known as LA100, examined numerous scenarios over a varying range of assumptions regarding load electrification, customer demand, and transmission investments. The final report was publicly released in March 2021, with study results projecting the attainment of 100% clean-energy as early as 2035. Following the release of the LA100 results, Mayor Eric Garcetti and the L.A. City Council set an accelerated goal for LADWP to achieve 100% carbon-free energy by 2035, with interim milestones of 80% renewable energy and 97% carbon-free by 2030. LADWP's Strategic Long-Term Resource Plan and Equity Metrics Data Initiative will serve as a roadmap to meet Los Angeles' future energy needs while improving equity, maintaining reliable service, and achieving emission reductions in a cost-effective manner. With an ambitious grid transition underway, LADWP sees demand flexibility as a valuable tool to complement clean energy production and procurement while addressing future load growth challenges. Since LADWP's long-term goals align with the Commission's, it would be mutually beneficial to allow LADWP to implement the most optimal and cost-effective solutions on behalf of its ratepayers that meet the same end goals.

III. COST EFFECTIVENESS AND POU BUSINESS MODEL

I. Appropriate and Relevant Cost Effectiveness Studies Are Needed

As with the March 23, 2021 draft staff analysis of Potential Amendments to the Load Management Standards, the December 22, 2021 Final Staff Report[3] provides a CAISO-based cost-effectiveness analysis that, while highly insightful and compelling, contains assumptions that may not extend to LADWP's service territory.

[3] 21-OIR-03, Final Staff Report

The assumptions leading to the following derived values would likely have to be re-evaluated for an LADWP-centric scenario:

i. The $110/MWh levelized cost of storage (LCOS) for battery
ii. The $24 million Net Present Value of the cost of LMS over 15 years
iii. The $74 million Net Present Value of the cost reduction achieved by end-use or "BTM" battery charging optimization

Regarding the LCOS of Battery value, the basis of CEC staff's cost analysis was the installation of new utility-scale battery at a cost of $110/MWh. LADWP believes that additional opportunities exist to reduce these costs by looking toward real-world examples of hybrid solar plus storage facilities. For instance, the case study of LADWP's solar plus storage Eland project, which consists of 400 MW of solar PV paired with 1,200 MWh of battery storage, has an estimated levelized cost of approximately $39/MWh[4]. In addition, even more cost-effective alternatives may exist, such as the installation of new utility-scale wind or solar generation capacity. In this case, LADWP questions the basis for selecting combined solar plus storage as the default baseline for cost-effectiveness analysis given its high LCOS. LADWP recommends that the Commission consider the lower rates that POUs are paying in the marketplace as a default baseline for analyzing cost-effectiveness for use by POUs.

LADWP also has various concerns regarding the $24 million estimated cost of proposed Load Management Standards. LADWP believes that this figure is highly underestimated. LADWP notes specific concerns with the proposed cost estimates associated with Billing System upgrades and Rates Reporting. The development and implementation costs for Billing System upgrades and Rates Reporting are estimated to be $4.8 million and $150,000, respectively, for all five utilities

[4] https://clkrep.lacity.org/onlinedocs/2019/19-1081_rpt_BWP_09-20-2019.pdf, https://clkrep.lacity.org/onlinedocs/2019/19-1081_misc_1_09-20-2019.pdf

combined. As a point of comparison for billing systems, recent LADWP contracts for billing system upgrades have exceeded the $4.8 million by over an order of magnitude. Implementing real-time rates as proposed in the Load Management Standards would require LADWP to perform a complete overhaul of its billing system to accommodate marginal cost rates, which would further exceed these cost estimates. For rates reporting, LADWP roughly estimates a cost of $2 million to cover the cost of service study, unbundling its current rates, studying stranded generation costs, rate design, rates reporting, and other related items. Revising the cost estimates associated with these two elements significantly increases the estimated cost and the resulting LCOS of LMS.

One significant cost element that was not captured in the cost-effectiveness analysis was that of potential cybersecurity investments. The implementation of the proposed Load Management Standards will rely on communication infrastructure with nodes throughout each utility's service territory and create a statewide network of potentially millions of endpoints responding to common signals. Bad actors could attempt to exploit any component of the developed infrastructure for purposes such as manipulation and disruption. Ensuring the security of this infrastructure from cyber-attacks would require significant investments from utilities, the Commission, and Automation Service Providers alike, which would further inflate the cost estimates used in the cost-effectiveness analysis.

The staff analysis in the Final Staff Report identified an $74 million cost reduction achieved via end-use or "BTM" battery charging optimization. However, as the analysis was performed for the CAISO Balancing Authority Area, the same cost reduction may not hold true for LADWP's Balancing Authority Area. For example, the analysis assumes a $34.60/MWh benefit associated with avoiding renewable curtailments in CAISO's footprint; such an assumption may not apply to LADWP. Therefore, LADWP strongly encourages the Commission staff to perform

additional studies incorporating Balancing Authority specific assumptions.

II. POU's Business Model Would Be Negatively Impacted

Vertically integrated POUs, such as LADWP, own nearly all of their generation capacity, by design. LADWP's cost of service includes all pre-planned and established generation, and LADWP's rates and financial planning are designed to match these generation costs. Real-time pricing cannot match LADWP's exact cost of generation all the time, so there will be cost differences. An issue that arises is determining how these cost differences will be accounted for, and by whom. To resolve this, years ago, IOUs went through the transition to recover all of their generation costs, stranded costs over a period of ten years, and then implemented real-time pricing (direct access). For LADWP to allow its customers to participate in the real-time pricing market would require fee assessment onto all customers, which can be positive or negative depending on the costs, to rebalance the cost of service.

If adopted, the proposed language could require LADWP to switch its business model dramatically, possibly with unintended consequences for customers. For example, allowing individual customers to effectively participate in the real-time pricing market shifts significant risk onto them, many of whom are already economically vulnerable. In fact, residential customers, particularly low-income customers, could potentially be most impacted since they may not have the necessary information, required equipment, or funding to benefit from the real-time energy market, and might, in effect, simply be penalized by it. In addition, LADWP's service territory is highly urbanized with a high percentage of renters who may not have access to automated end devices that can respond to real-time rates. Alternatively, LADWP as a whole could continue at this time to participate in the real-time market and pass the savings to all customers entirely, not individually. For this reason, LADWP again recommends acceptance of the proposed revisions to the draft regulations by the Joint Publicly Owned Utilities, including LADWP, filed by CMUA on April 20, 2022, and entitled *Joint Proposed Modifications to 15-Day*

Language Revisions to Load Management Standard Regulations. This would allow LADWP more time to study the impacts of real-time pricing, as needed.

IV. IMPLEMENTATION CONCERNS

LADWP foresees a myriad of hurdles to implement the currently proposed standards. Core concerns regarding the implementation include existing challenges in establishing the necessary Advanced Metering Infrastructure (AMI) and associated infrastructure; communication network expansion; distribution system technology; and other system updates. Addressing these core concerns is an essential first step.

a. INFRASTRUCTURE CHALLENGES

To enable real-time load management as proposed in the 2nd 15-Day Regulations requires subject utilities to provide end users with a supportive framework:

- AMI meters, or "smart meters", which serve as the user-side endpoint of the interface between utilities and end users;
- Communications networks that enable two-way communications between AMI meters and utility computer networks; and
- System architecture and field devices to provide increased granular visibility into the electrical distribution system.

i. AMI Challenges

A prerequisite for the implementation of marginal cost rates is the establishment of AMI and associated infrastructure. Accordingly, in 2013, LADWP engaged in a pilot project to install a limited number of AMI meters in its service territory. The initiative, while valuable in advancing LADWP's understanding of its AMI requirements, encountered issues in establishing a reliable communication network, which prevented LADWP from obtaining meter data in a timely manner.

Building upon lessons learned from the previous AMI pilot project, LADWP has begun an initiative to install the necessary communication infrastructure and a limited quantity of AMI meters which will lay the groundwork for a distribution automation system. To date, approximately only 3.3 percent of LADWP's 1.6 million residential and business customers have smart meters. Upon the successful implementation of this initial phase, LADWP will consider scaling up the deployment of these AMI meters across its service territory, which will require several additional years to accomplish.

As LADWP moves forward with this initiative, it is important to account for the supporting systems and workforce necessary to realize an automated, complete, and functional AMI. In addition, a meter data management system will be needed to centralize the collection of data from the meters and facilitate the validation and utilization of that data. Challenges with the pilot project include the present and foreseeable future inability to fully integrate the deployed AMI meters into LADWP's billing system, which is an essential step for any rate structure, including real-time rates. In addition, recent supply chain issues experienced by chip manufacturers impacting smart meter suppliers may introduce unforeseen procurement challenges. The scale of AMI meter deployment and billing system upgrades required to fully implement real-time price signaling for all LADWP customers, or even specific sectors, would require a significant extension to the timeframes currently proposed in the 2nd 15-Day Regulations. Furthermore, this will require a significant transition of LADWP's workforce and implementation of change management activities to establish skilled personnel who will interface with the meter data management system. This will undoubtedly require more discussion to address specific labor and workforce development challenges.

ii. Communication Network Expansion

The real-time granularity as proposed in the 2nd 15-Day Regulations would consume significantly more bandwidth than LADWP's current time-of-use (TOU) program. LADWP has recently initiated a pilot project just to build the foundational infrastructure to support a limited number of endpoints. This project is still in its infancy and would be a prerequisite to offering next-generation, future real-time rates as part of a long-term project.

iii. Distribution System Technology

The proposed 2nd 15-Day Regulations language of offering real-time rates based upon specified locations could present challenges. To have distribution granularity would require LADWP to invest heavily in infrastructure upgrades, including intelligent field devices, control systems, communication systems, modeling tools, and the construction of an advanced distribution control center, which it currently does not have. It may be the case the time required to attain sufficient distribution granularity would extend significantly beyond the timeframe proposed in the 2nd 15-Day Regulations.

b. OTHER UNRESOLVED CONSIDERATIONS

i. Customer Equity

While LADWP understands that making the contemplated rates or programs voluntary may help address equity issues, it is also important to note that smart meter and communication infrastructure, including meter management and billing systems, and supporting workforce need to be established before LADWP can effectively engage in the proposed Load Management Standards. Equity needs to be considered as part of the resulting rate increases and mechanisms for recovering significant expenditures associated with these required foundational activities. In

doing so, LADWP needs to show the net benefits of these expenditures across its entire rate base, given that approximately 47% of the City of Los Angeles is made up of disadvantaged communities and 18% of the total population are low-income residents. To that end, LADWP requests that the Commission staff explore and provide guidance on the equitable implementation of such cost intensive efforts associated with the proposed Load Management Standards, considering LADWP's service territory and its customer base. Furthermore, allowing POUs sufficient time to evaluate the impacts of other utilities' pilot programs and avoid unforeseen issues could yield significant cost savings for their ratepayers.

ii. Customer Adoption: Outcome Unknown

The lack of a significant number of automated end devices available to respond to real-time pricing signals drastically limits the amount of load shifting benefit that can be gained. LADWP currently has limited participation in its Demand Response (DR) program[5] and has only recently initiated its residential DR program. Due to LADWP not having enough data on the performance of the program, the magnitude of successful load shifting in LADWP's service territory is still unknown.

Considering the barriers to implementing this narrowly proposed solution and its inadequately evaluated outcomes, as LADWP transitions toward its clean-energy future, it is essential that the 2nd 15-Day Regulations be revised to allow LADWP to prudently and cost-effectively study and deploy solutions that will benefit the customers it serves.

[5] https://www.ladwp.com/drprogram | https://enrollmythermostat.com/ladwp/

CONCLUSION

As outlined above, the Commission's proposed 2nd 15-Day Regulations fail to address LADWP's implementation concerns. The fundamental jurisdictional concern still exists and can be resolved should the Commission make modifications to reflect local governing boards' authority to approve any delay, modification, or exemption to the regulations. If this issue is resolved, LADWP would be able to prudently assess appropriate and feasible solutions that meet the intent of these regulations, considering equity, cost-effectiveness, potential customer adoption, and cybersecurity.

LADWP is grateful for the opportunity to participate in the rulemaking process and looks forward to continue working with the Commission to help shape appropriate and effective regulations that will benefit the health, safety, and security of all California residents. If you have any questions, please contact me at (213) 367-2525, or Mr. Scott Hirashima at (213) 367-0852.

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Respectfully Submitted,

Pjoy Chua for

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