

<b>DOCKETED</b>	
<b>Docket Number:</b>	19-OIR-01
<b>Project Title:</b>	Load Management Rulemaking
<b>TN #:</b>	237542
<b>Document Title:</b>	LADWP's Response to Draft Staff Analysis of Potential Amendments to the Load Management Standards
<b>Description:</b>	N/A
<b>Filer:</b>	System
<b>Organization:</b>	Los Angeles Department of Water and Power
<b>Submitter Role:</b>	Public Agency
<b>Submission Date:</b>	4/23/2021 4:13:54 PM
<b>Docketed Date:</b>	4/23/2021

*Comment Received From: Los Angeles Department of Water and Power  
Submitted On: 4/23/2021  
Docket Number: 19-OIR-01*

**LADWP's Response to Draft Staff Analysis of Potential  
Amendments 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. 19-OIR-01
	)	
Load Management Rulemaking	)	April 12, 2021 Workshop
	)	RE: Draft Staff Analysis of
_____	)	Potential Amendments to the
		Load Management Standards

**COMMENTS FROM THE LOS ANGELES DEPARTMENT OF WATER AND POWER TO THE  
CALIFORNIA ENERGY COMMISSION ON DRAFT STAFF ANALYSIS OF POTENTIAL  
AMENDMENTS TO THE LOAD MANAGEMENT STANDARDS**

Simon Zewdu  
Director of Regulatory Compliance and Specifications  
Los Angeles Department of Water and Power  
111 North Hope Street, Suite 819  
Los Angeles, CA 90012  
Telephone: (213) 367-2525  
Email: [Simon.Zewdu@ladwp.com](mailto:Simon.Zewdu@ladwp.com)

Dated: April 23, 2021

**BEFORE THE STATE OF CALIFORNIA  
ENERGY RESOURCES  
CONSERVATION AND  
DEVELOPMENT COMMISSION**

In the matter of:

Load Management Rulemaking

---

)  
)  
)  
)  
)

Docket No. 19-OIR-01  
April 12, 2021 Workshop  
RE: Draft Staff Analysis of  
Potential Amendments to the  
Load Management Standards

**COMMENTS FROM THE LOS ANGELES DEPARTMENT OF WATER AND POWER TO THE  
CALIFORNIA ENERGY COMMISSION ON DRAFT STAFF ANALYSIS OF POTENTIAL  
AMENDMENTS TO THE LOAD MANAGEMENT STANDARDS**

**INTRODUCTION**

Los Angeles Department of Water and Power (LADWP) appreciates the opportunity to provide comments to the California Energy Commission (Commission) in follow-up to the April 12, 2021, Workshop on Draft Staff Analysis of Potential Amendments to the Load Management Standards (California Code of Regulations Title 20 §§ 1621, 1623).

The City of Los Angeles (City of LA) is a municipal corporation and charter city organized under the 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 population of over four million people within a 478 square mile service territory that covers the City of LA and portions of the Owens Valley. LADWP exists to support the growth and vitality of the City of Los Angeles, 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.

Considering that, within LADWP's service territory, the Board of Water and Power Commissioners and the Los Angeles City Council are the sole authorities that can set rates by ordinance for electric services in accordance with the Los Angeles City Charter, LADWP respectfully requests for a clarification on the extent of the Commission's authority to enforce compliance with the proposed Load Management Standards. LADWP believes that submitting a specific rate structure with certain required parameters is a core aspect of the rate setting process, therefore LADWP encourages more discussion on the proposed rate requirements and how they correlate with rate jurisdiction of the Board of Water and Power Commissioners and the Los Angeles City Council.

Regarding §§ 1621 and 1623, LADWP remains fully committed to supporting the Commission's objective to promote California's leadership toward a 100 percent clean energy future and addressing climate change. In pursuing its renewable objectives, LADWP recognizes the opportunities, as well as the unique challenges, presented by the integration of renewable resources into its grid. In addition, LADWP recognizes the importance of the role load management strategies will play in meeting these clean energy goals.

Enabling customers to automate end-use load management would require that LADWP offer a robust load management framework. As a publicly owned utility (POU), LADWP strives to develop its load management framework which will be subject to budgetary constraints, current and future rate-setting policies, and limitations on resources required to develop said

framework. In doing so, LADWP must thoroughly assess the feasibility of implementing the desired load management features.

LADWP foresees a myriad of hurdles to meet the currently proposed standards. Core concerns regarding the draft staff analysis and its proposed amendments include existing challenges in establishing the necessary Advanced Metering Infrastructure (AMI) and associated infrastructure; customer equity; and cost effectiveness. Addressing these core concerns is an essential first step prior to LADWP implementing any load management strategy.

LADWP would also like to reiterate its previous comments, submitted on March 16, 2020. Some of the concerns identified in these previous comments include: clarifying the Commission's rate-making authority; customer adoption; and the POU business model. In addition, LADWP supports the view expressed in the California Municipal Utility Association's comments for this staff analysis.

## **SPECIFIC COMMENTS**

### **I. CORE CONCERNS WITH THE DRAFT STAFF ANALYSIS OF POTENTIAL AMENDMENTS TO THE LOAD MANAGEMENT STANDARDS**

#### **A. 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. Upon the successful implementation of this initial phase, LADWP will consider scaling up the deployment of these AMI meters to its approximately 1.5 million electric 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. 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.

## **B. CUSTOMER EQUITY**

While LADWP understands that making these 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.

## **C. COST-EFFECTIVENESS**

The draft staff analysis provides a CAISO-based cost-effectiveness analysis that, while highly insightful and compelling, contains assumptions that may not extend to LADWP's service territory. The assumptions leading to the following derived values would likely have to be re-evaluated for an LADWP-centric scenario:

- The \$110/MWh levelized cost of storage (LCOS) for battery
- The \$14 million Net Present Value of the cost of LMS over 15 years
- The \$81 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 towards 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. 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 noted various concerns for the \$14 million estimated cost of proposed Load Management Standards. LADWP believes that this figure is highly underestimated. LADWP noted 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 were estimated to be \$3.75 million and \$150,000, respectively, for all five utilities combined. As a point of comparison for billing systems, recent LADWP contracts for billing system upgrades have exceeded the \$3.75 million figure 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 identified an \$81 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. LADWP looks forward to engaging with Commission staff in performing such studies.

## **II. SUMMARY**

LADWP has various ongoing initiatives to transform its power system to incorporate clean energy resources, expand its successful energy efficiency programs, and the major redesign and overhaul of its vast transmission system to ensure the reliable delivery of power to its customers. For example, LADWP's landmark LA100 study aims to identify a range of options to attaining 100% clean energy, while its Clean Grid LA project gathers the output of the study as well as stakeholder input to develop a plan for implementation. These initiatives aim at charting the path towards a 100% clean energy future while considering the unique aspects of LADWP's service territory and geographic location.

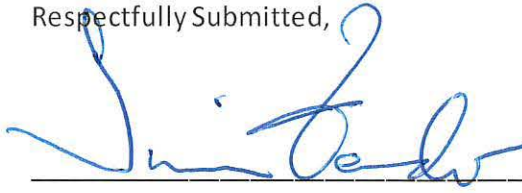
In general, LADWP recommends the proposed Load Management Standards be less prescriptive and more flexible to accommodate the unique circumstances, limitations, and challenges faced by each utility. LADWP sees load management as an important part of a larger cohesive strategy to obtaining a 100% clean energy future. As such, LADWP has taken the first steps to advance AMI and the necessary communication infrastructure and support systems. In implementing these foundational pieces and any subsequent load management program, LADWP must consider the impacts to its customers and ensure these programs and any associated costs are just and equitable. In doing so, it is critical to consider the cost-effectiveness of load management as it applies specifically to LADWP. LADWP looks forward to engaging with Commission staff to further discuss these matters.

## **III. CONCLUSION**

LADWP is grateful for the opportunity to participate in the rulemaking process and looks forward to continue working with California Energy Commission to help shape 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.

Dated: April 23, 2021

Respectfully Submitted,



---

By: Simon Zewdu  
Director of Regulatory Compliance and Specifications  
Los Angeles Department of Water and Power  
111 North Hope Street, Suite 819  
Los Angeles, CA 90012  
Telephone: (213) 367-2525  
Email: [Simon.Zewdu@ladwp.com](mailto:Simon.Zewdu@ladwp.com)