WATER & POWER ASSOCIATES, INC.

APRIL 2026

NEWSLETTER

A Defining Moment: LADWP Eliminates Coal Power

By Carol Tucker and Saif Mogri

In 2013, then Los Angeles Mayor Antonio Villaraigosa, flanked by Vice President Al Gore, city leaders and LADWP Board members, announced that Los Angeles would be coal-free in 2025. That ambitious target was met in December 2025 when LADWP officially stopped receiving coal-fueled energy from the Intermountain Power Project (IPP) facility in Utah.

Rather than continue burning coal, LADWP and its partners within the Intermountain Power Agency (IPA), which owns IPP, had agreed to decommission the last two remaining coal power units in LADWP's portfolio. They have been replaced by a two unit combined-cycle natural gas generating system, with a combined output of 840-megawatts (MW), and is capable of operating with up to 30 percent clean hydrogen blended with natural gas.

The project to replace the coal generating station to operate with natural gas and clean hydrogen, dubbed IPP Renewed, will utilize clean or "green" hydrogen. Hydrogen fuel will be produced through electrolysis technology, which involves extracting hydrogen from water using renewable energy (such as wind, solar, and geothermal) to power the process. The goal is to transition the power plant to 100 percent clean hydrogen by 2045. In addition, the project also includes modernizing IPP's Southern Transmission System Direct Current transmission line.

IPP Renewed has been called groundbreaking not only in the use of green hydrogen but also by partnering with Advanced Clean Energy Storage to develop underground storage caverns in a unique salt dome located in Delta, Utah across the street from IPP. The caverns will provide seasonal storage for the green hydrogen, so it can be used when needed during peak periods, such as hot summer months. LADWP officials have said that green hydrogen is expected to be added to the fuel mix in 2026.

(Continued on page 2)

(LADWP Eliminates Coal, continued from page 1)

Los Angeles Mayor Karen Bass described the completion of IPP Renewed and divestment of coal power as a "defining moment" for Los Angeles. "LA's coal divestment is not just about discontinuing the use of coal to power our city — it's about building a clean energy economy that benefits every Angeleno. This milestone will further accelerate our transition to 100 percent clean energy by 2035," Mayor Bass said.

Plans for IPP Renewed have been in development for over a decade by IPP participants including LADWP, the Cities of Pasadena, Glendale, Burbank, Anaheim and Riverside, Utah Municipalities, and Utah Electric Cooperatives. The elimination of IPP coal power followed LADWP's earlier divestment from the coal-fired Navajo Generating Station and Mojave Generating Station and represents the fulfillment of a long-standing promise to eliminate coal from LA's energy portfolio.

These changes at the IPP Renewed facility are instrumental to LADWP's broader strategy for achieving 100 percent carbon-free energy by 2035. The city of LA has made significant investments in solar, wind, battery storage, and other renewable technologies to replace fossil fuels and is working to expand local solar, energy efficiency, and demand-response customer initiatives to further support this transition.

A New GM for LADWP

By Jim McDaniel

Janisse Quiñones concluded her service as General Manager of the Los Angeles Department of Water and Power on March 27, 2026. In her message to employees announcing her conclusion of service, Ms. Quiñones highlighted the principles of Customers, Communities, and Coworkers as pillars that she felt defined her term as General Manager. While these are certainly important qualities, there are unique and urgent challenges facing the utility and the next General Manager that require more focused attention.

The City of Los Angeles now has a unique opportunity to set a course for a successful transition to green power, increase the dependability and resiliency of its water and power systems, and maintain the rate advantage that the citizen-owners of the utility deserve.

(Continued on page 4)

President's Column

Thank you for the support you have given me during my time as President of the Water & Power Associates. At our Board Meeting on March 11, 2026, Julie Spacht was elected as President for the coming year.

Julie is well qualified by virtue of her role as the Executive Engineer in the Water Executive Office prior to her retirement and was involved with all of the issues and with the politics involving relations between the department and the City. I am sure you will give her your full support.

She will be complemented on the Board with a deep bench including:

Paul Schultz, Ken Silver, Donny Sievertson, Bill Engels, Bill Glauz and Jack Feldman from the Power System

James McDaniel, and Jerry Gewe from the Water System

Phyllis Currie, former CFO

Winifried Yancy, from the Governmental Affairs Office

During the coming year there will be many issues of great importance that will need to be addressed including modifying and implementing, as appropriate, the LA 100 plan for the Power System and the development of the Urban Water Management Plan on the Water side. There will also be a need to achieve workable procedures for procurement and hiring if the Department is to continue to provide reliable and cost-effective service to its customers in Los Angeles.

A key issue for immediate attention will be the hiring of a new CEO/GM to replace Janisse Quinones who is departing this month to take over the CEO position of LUMA Energy in Puerto Rico. We will be encouraging the City to hire from within the Department to allow for stability and a continuation of the excellent service and affordable rates that the Department has provided to Angelenos throughout its history.

Thank you for your ongoing support of the Wate & Power Associates.

Jerry Gewe, President

(New GM, continued from page 2)

The Los Angeles Department of Water and Power (LADWP) is a municipally owned utility. This means the citizens of the City own the utility, and policies are set by the elected City Council and mayoralty-appointed Board of Water and Power Commissioners. This is in contrast to investor-owned utilities that need to pay a dividend to their shareholders and are managed in a much more opaque environment. Municipal ownership has the advantages of lower rates for customers, more direct accountability to residents of the city, tax-exempt bond financing, and limited direct financial assistance to the City's general fund. This model has proven very effective for the City of Los Angeles for over 100 years.

In selecting a new General Manager, the Mayor and City Council need to choose a candidate who will ensure that the advantages of public ownership are protected and maintained. Especially important here is the positive rate advantage that the LADWP maintains over its nearby investor-owned neighbors. Without this rate advantage, it is questionable whether LADWP could continue to exist as a municipal utility. There have been overtures in the not-too-distant past from the neighboring large investor-owned electric utility to purchase the assets of the Power System and absorb them into their larger system. It is not too hard to imagine a financially strapped City Council of the future seriously considering such a move to save them from a fiscal crisis. This must not be allowed to happen.

The new General Manager will have the opportunity to implement such far-reaching plans as LA100 and Pure Water Los Angeles in a manner that will protect ratepayers and provide for a greener, more resilient, and dependable system. Specifically, the new GM should:

- Make sure that funds generated by LADWP through rates be used only for utility operations.
- Maintain competitive rates for water and power to reflect the benefits of public ownership.
- Conduct the rate setting process in a transparent manner with full and accurate disclosure of future impacts to customers.
- Transitioning to 100% clean energy, while an urgent priority, must not negatively impact reliability and affordability.
- Ensure that very large investments in long-term projects have milestones and decision points along the schedule (including updates to the cost-benefit calculations of uncommitted project elements) to make sure goals, financing, and technology remain focused and do not become dated.

Specifically relating to the implementation of the LA100 Plan, a new GM needs to understand that:

- Maintaining local generation is key to maintaining power reliability.
- New wind and solar projects should be pursued based on cost-effectiveness and benefits to system reliability.
- The implementation of the LA100 Plan (which is going on now) needs to be monitored and regularly reported on to ensure it follows the City Council's motion stating that the plan “is equitable and has minimal adverse impact on ratepayers.”

With regard to the water side of the business, a new GM needs to appreciate that:

- Reuse of wastewater to augment drinking water is critical to a diverse and reliable water supply.
- Like LA100, Pure Water Los Angeles needs to be analyzed for the full impact on ratepayers and be transparently communicated before irreversible investments are made.
- The Metropolitan Water District of Southern California (which the City of Los Angeles has heavily invested in historically) should expand its water transmission system infrastructure in order to provide reliable supply to all geographic areas of Los Angeles.

A new General Manager who understands, clearly and transparently communicates with stakeholders, and works with the Board of Commissioners and City Council to incorporate these principles will successfully lead the organization into the next phase of affordable, green, resilient, and dependable water and power supplies for the citizens of Los Angeles for decades to come.

EEI Report Shows Stable US Electric Rates, for the Most Part

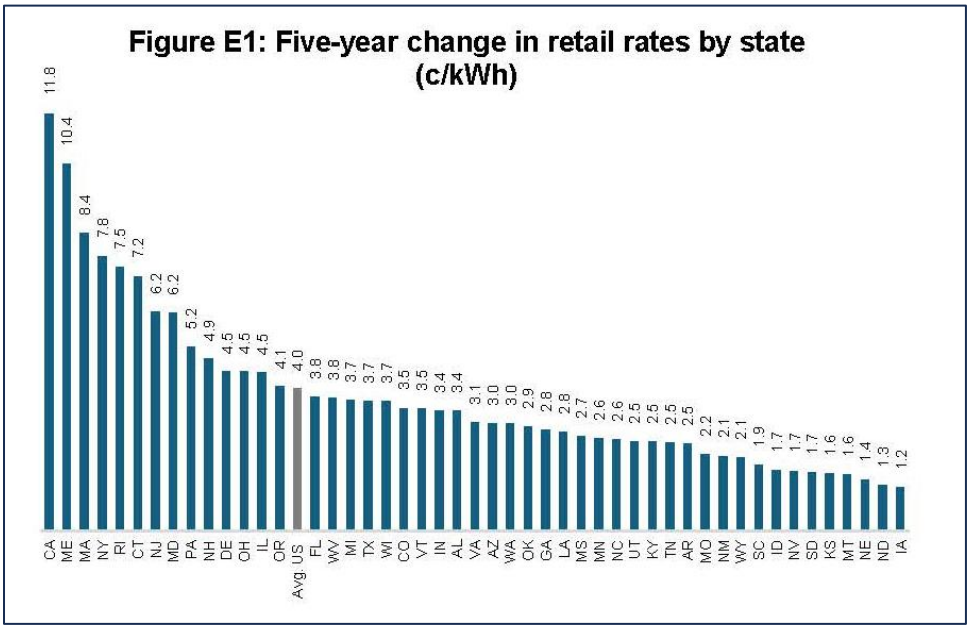
By William Glauz

In February 2026, Charles River Associates published a report prepared for the Edison Electric Institute that analyzed the changes in electric rates over the past five years across the United States. The report found that on average, residential electric rate increases tracked inflation closely. Average residential electric rates increased by about 4 ¢/kWh over the past five years. However, 34 states only increased between 1.2 to 3.8 ¢/kWh. In contrast, 14 states rates increased more than the average, with the highest increase in California, at 11.8 ¢/kWh.

Edison Electric Institute is the trade association that represents all U.S. investor-owned electric companies. EEI’s member companies provide electricity for nearly 250 million Americans and operate in all 50 states and the District of Columbia.

In general, higher rate increases can be attributed to external drivers and operating expenses—such as wholesale price increases, wildfire spending, and net metering programs. Data centers are generally not driving up rates. New data center tariffs and agreements are expected to insulate existing customers from the costs of serving data centers.

Most of the other states whose rates were higher than the U.S. average, besides California, were in the northeast. Seventy percent of the large increase in rates in the northeast was due to higher costs for purchased power. Most utilities in the northeast do not own generation and depend on purchasing power from the open market.



The significant increase in California residential rates for investor-owned utilities (IOUs) was primarily due to increases in wildfire spending. Among the data sources that corroborate this finding is a recent study by the California Public Utilities Commission (CPUC), submitted to the state legislature in September 2025, which reports that the state's three largest IOUs spent more than $40 billion on wildfire-related costs in the five years between 2019 and 2024, of which approximately $26.5 billion was for wildfire mitigation programs and $13.5 billion was for wildfire insurance. This makes wildfire costs one of the California IOUs' biggest expenses. The sudden emergence of new, large, and difficult to control spending items increases the likelihood of significant rate increases.

For some California customers, costs associated with the state's Net Energy Metering (NEM) rooftop solar program may have raised bills significantly. The NEM program allows utility customers who build on-site generation to use the energy they produce to offset their billed consumption. Customers who own generation are paid at a fixed rate for the energy they produce. Rooftop solar generation is the technology most installed by customers participating in the NEM program.

California's NEM rules provide customers with compensation for generation that exceeds their consumption. Customers in the NEM program that produce more than they consume can sell the excess back to the grid at a set rate. According to the CPUC's September 2025 report, the rate paid to some NEM customers who sell back to the grid has at times been significantly greater than its value. Under these circumstances, rates for customers not participating in NEM can increase. As the CPUC report explains, the NEM program participants are displacing all of their consumption and selling their excess energy at a set rate that is more than the energy is worth, resulting in a "cost shift" for the non-participating customers that can be significant. The CPUC estimates that in 2024, the cost shift for residential customers was nearly $6 billion. Impacts on rates from the NEM program can vary as a result of changes in the program participants' generation, the wholesale price of electricity, and other factors.

Mono Lake Controversy Reopened

By Jerry Gewe

On March 17, the State Water Resources Control Board (Board) received a report from the UCLA Center for Climate Science suggesting that, based upon a recent model they developed, Mono Lake is unlikely to achieve the targeted elevation increase to a level of 6,391 feet above sea level.

Based upon this study, the Mono Lake Committee is requesting that the Board require that LADWP pause its water exports from the Mono Basin to allow the lake to reach its targeted elevation. The Committee contends that this should be done since the Department recently approved a plan to increase recycled water from the Tilman Water Recycling treatment plant in the San Fernando Valley. This would generate enough supply to cover the 16,000 AF currently exported from the Mono Basin. Their request is supported by the former LADWP Commission President, Richard Katz.

Part of what is being overlooked in this analysis is the impact on Angelinos' water rates that would occur from this action. The LADWP plan for financing the new facilities at Tilman included replacing the purchase of an equivalent quantity of water from the Metropolitan Water District. In addition, the delivery of the Mono Basin Water generates almost free electricity as it travels through the LA Aqueduct to Los Angeles.

The Water System contends that the model developed by UCLA has not undergone the rigorous independent scientific and peer review that the DWP model, currently in use by the Board, has been. That model shows the target level is expected to be achieved within 26 years. Thus, it would be premature to adjust the Mono Basin export requirements at this time.

The DER Dilemma: Aligning Utility Planning Models with a Decentralized Energy Future

By Nick Tumilowicz in T&D World

Edited by Saif Mogri

The North American energy industry is undergoing a fundamental transformation, driven in part by the rapid expansion of distributed energy resources (DER). This growth presents exciting opportunities for cleaner, more resilient energy systems, but it also introduces new complexities for utility planning departments.

While DER installations are becoming increasingly common across rooftops, parking lots and industrial properties, many utilities continue to rely on legacy planning models developed for a very different world characterized by one-way power flows and stable demand profiles.

Today, the accelerating pace of DER adoption and changing grid dynamics have made proactive integration a more urgent need. As the gap between DER adoption levels and utility planning ability widens, the risks mount: grid reliability concerns, revenue recovery issues, customer satisfaction issues and the risk of costly infrastructure investments based on faulty assumptions. The question is no longer whether utilities need to alter their planning practices but how quickly can they do so before the consequences become significant.

At the heart of utility planning is load forecasting – the method of forecasting future electricity demand to guide investment in infrastructure, planning for maintenance and buying resources. Demand patterns were relatively stable and simple to predict using weather, economic growth and population changes. Electricity flowed one way: from massive, centralized power plants through transmission and distribution lines to consumers.

When customers numbering in the thousands are now both consumers and producers of electricity, traditional models of forecasting can develop blind spots. So, for example, even if a utility is seeing declining demand in specific periods of the day, that doesn't necessarily mean customers are using less electricity. They might be producing it, for example, from solar panels on their roofs. The evening peak could shift later because batteries are consuming stored solar energy. Meanwhile, charging electric vehicles (EV) can create new peak load not previously observed.

The difficulties extend from forecasting to the operation of the distribution grid itself. The one-way, passive flow design was the conventional way of operating distribution systems. Two-way power flows flip all of this on its head. When solar installations generate more electricity than a home consumes, the surplus flows back onto the grid. Multiply that by thousands of installations, add battery storage systems that can charge and discharge based on multiple inputs, and EVs that can act as rolling storage devices, and the grid begins to resemble a dynamic, multi-way marketplace rather than a simple delivery system.

Several utilities are demonstrating what this shift entails in practice. Some have implemented dynamic interconnection studies that consider time-varying grid conditions rather than worst-case conditions, which allow for more DER connections without requiring infrastructure upgrades.

The planning gap underlying DER adoption is not imaginary and is increasing. But it's not unbridgeable. With proper investments, approaches and attitude, utilities can bridge the gap and develop planning systems sufficient for the distributed, dynamic, decarbonized grid of tomorrow.

Colorado River Update

By Jerry Gewe

The Colorado river is one of the 4 major supplies of water for the City of Los Angeles. This supply is purchased through the Metropolitan Water District of Southern California. The Colorado River Aqueduct that delivers the water was designed by William Mullholand and staff from LADWP, who initially managed the project.

The legal rights to the Water were established by the Colorado River Compact of 1922 which apportioned the water among the Upper Basin States (Colorado, Wyoming, Utah, and New Mexico) and the Lower Basin States (California, Arizona, and Nevada) with each of the basins receiving rights to half of the expected 15 MAF (million acre-feet) of water supply. In 1944 an additional 1.5 MAF was granted to Mexico.

Currently, it is recognized that the allocations exceed the available supplies. Since this was acknowledged, collaborative agreements were established in 2003 and 2007 and in the 2019 drought contingency plans (DCPs) for the Upper and Lower Colorado River Basins. In May 2023, the Department of the Interior and basin states announced a consensus-based proposal in which the three Lower Basin states would conserve a total of 3 MAF prior to 2026, with 2.3 MAF of these reductions compensated by the federal government using appropriated funds.

Despite these efforts, the water in storage within the basin has continued to decline and it is accepted that the allocations must be reduced. However, this has led to serious division between the basins. The Lower Basin claims it should get recognition for the steps already taken to reduce demands through conservation during the last two decades and that the Upper Basin should accept a reduction in their allocation, while the Upper Basin, who have not reduced their demands believe that the shortfall should be shared equally between the Basins.

In addition to the above inter-basin issues, there are issues around the establishment of water rights for Indian interests within the basins that will need to be dealt with prior to a final resolution of the issues.

The parties have missed several deadlines to come to agreement, and the federal government is preparing to issue a directive on how the reductions will be allocated in the future. Several of the states, have begun appropriating substantial funds to support litigation, if the directive is not to their liking.

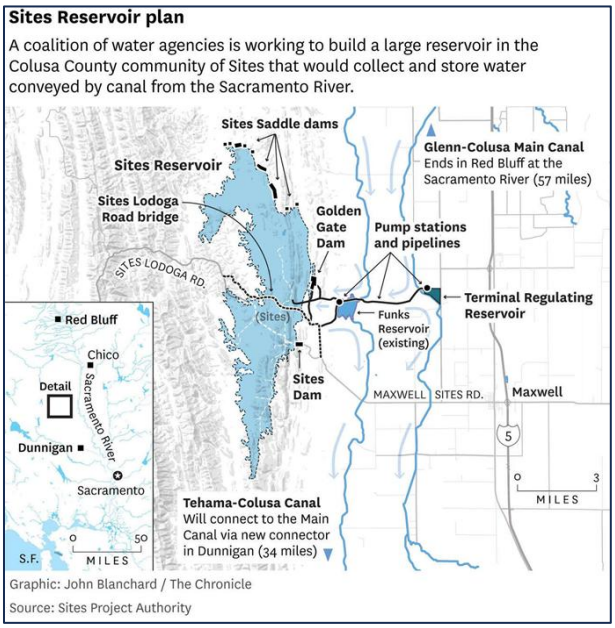
If a satisfactory agreement is not reached, it portends a very expensive and protracted legal battle, before a settlement is reached, and probably no one will be satisfied.

Sites Reservoir Approval

By Jerry Gewe

On March 20, 2026, the State Water Resources Control Board (Board) issued a Draft Approval for the Water Right Permit for the Sites Reservoir Project to the Sites Project Authority. This action, if finalized, will provide the water right required for the construction of this reservoir. Comments regarding the approval of the water right for the proposed reservoir will be accepted by the Board through May 22, 2026.

The only remaining approval required for the project to proceed is the Water Quality Certification which is required by the Corps of Engineers (Corps) and the Board. A previous application for this certification was denied by the Corps due to their need for additional information. The parties involved in this process believe that this can and will be resolved with only a minor impact on the schedule.



The Sites Reservoir is a proposed 1.5 million acre-foot off stream reservoir. It is designed to adapt to changing climate conditions, providing a more flexible water supply for California through capturing water from extreme storm events. The Sites Reservoir Project is specifically intended to fulfill both water supply and environmental needs while compensating for the consequences of climate change. As the planet slowly warms, less precipitation is expected to fall as snow and contribute to the Sierra snowpack which historically has provided about 30% of the state's water storage. Instead, more precipitation will fall as rain, particularly during atmospheric river storms. When such heavy rains occur, water will be diverted from the Sacramento River and stored in Sites Reservoir. During dry years, the stored water will be reintroduced to the Sacramento River to be used downstream for sustaining the ecosystem of the River and the Delta, as well as providing a supplemental water supply for both the State Water Project and the Central Valley Project.

If the project had been operational, it is estimated that it would have been able to capture more than 168,000 acre-feet of water from late December 2025 through the end of January 2026.

The Sites Reservoir Project is led by the Sites Project Authority, a joint powers authority made up of irrigation agencies, water districts, cities, and counties in the Sacramento Valley. Participation in Sites Reservoir is broad and diverse including the Bureau of Reclamation, the State of California, public irrigation districts in the Sacramento and San Joaquin Valleys, as well as urban areas in Southern California (Including MWD) and the Bay Area.

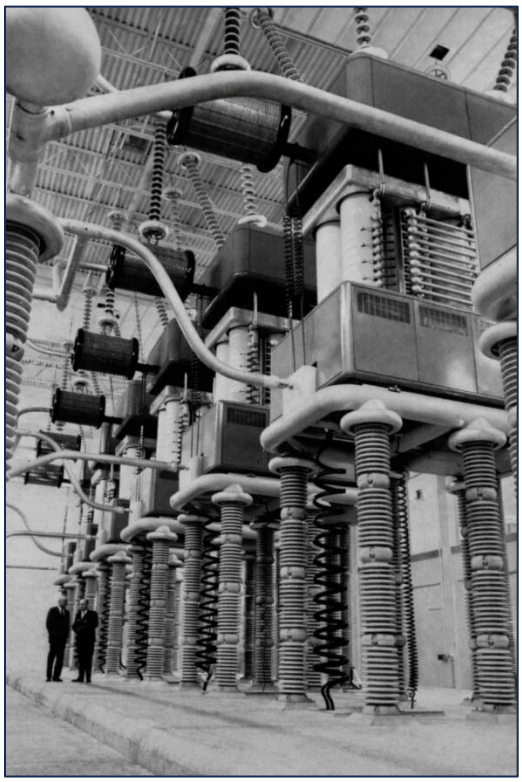
Barnard Construction Company, Inc. was selected for the Reservoir Package Construction Manager at Risk (CMAR) contract to construct the up to $6.8 billion reservoir and roads package of the Sites Reservoir Project (Project). This initial award is for pre-construction planning, so the contractor can provide collaborative input as the Project moves from 30 percent design to construction. Barnard is the contractor that constructed a major part of the Owens Lake Dust mitigation facilities.

A Gateway for Power from the Pacific Northwest

By Jack Feldman

High in the northern San Fernando Valley stands one of the most important electric power facilities serving Los Angeles. The Sylmar Converter Station forms the southern gateway of a transmission system that connects Southern California with hydroelectric and wind energy resources in the Pacific Northwest.

Completed in 1969, the station anchors the Pacific DC Intertie, an approximately eight-hundred-mile transmission system that allows electricity to move efficiently between regions with different climates and seasonal demand. At full capacity, the system can carry about 3,100 megawatts of electricity, often described as enough power to serve roughly three million homes.



Unlike conventional transmission lines, the Intertie uses high-voltage direct current. Electricity is converted from alternating current to direct current for the long-distance journey, then converted back again for use in local systems. This process reduces energy losses and allows operators to precisely control the flow of power.

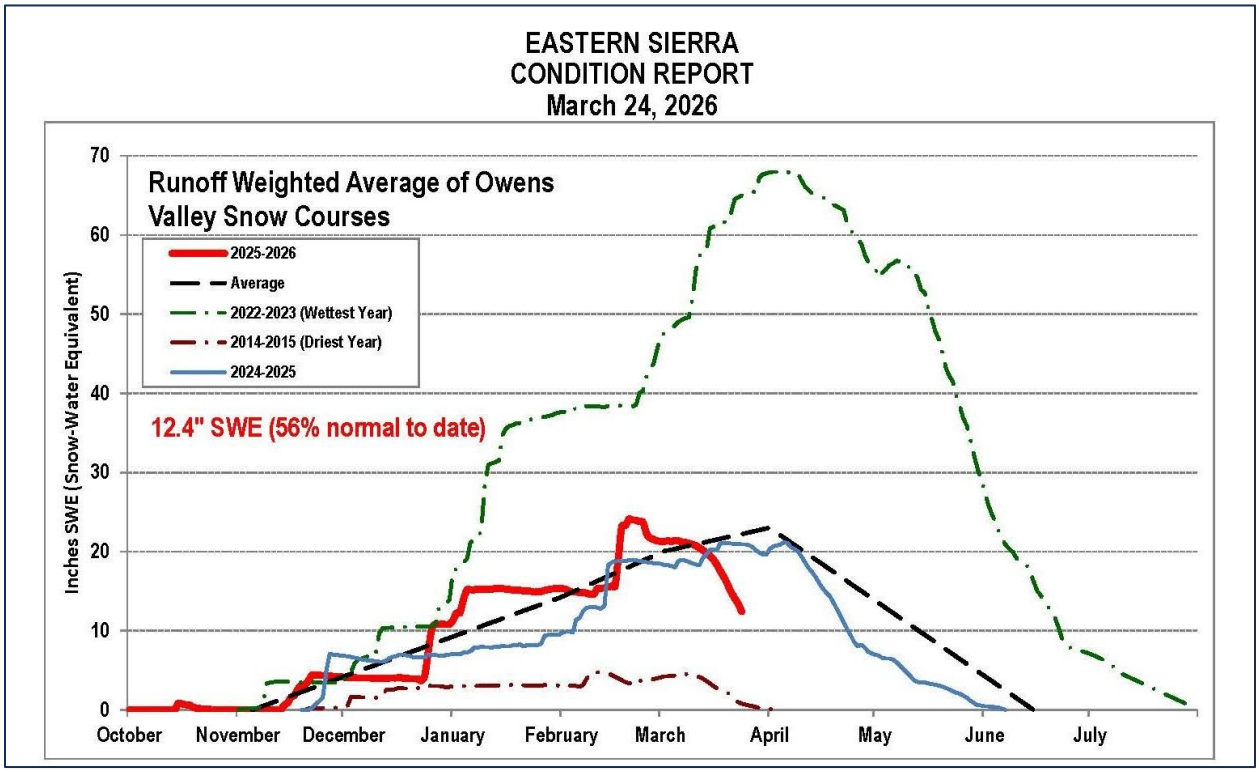
One of the system's most important features is flexibility. During hot summer months, electricity typically flows south into California when demand is high. During colder winter periods, power can sometimes move north when demand increases in the Pacific Northwest and Southern California requires less electricity.

The system is shared by several western utilities, including the Bonneville Power Administration, the Los Angeles Department of Water and Power, Southern California Edison, and the municipal utilities of Burbank, Glendale, and Pasadena. LADWP operates the southern portion of the system at Sylmar.

The photograph above shows rebuilt inverter equipment inside the Sylmar Converter Station following the 1971 San Fernando earthquake. The workers provide a sense of scale, illustrating the enormous size of the equipment required to convert and control the flow of electricity across the western power grid.

For more information on the Sylmar Converter Station, visit the Water and Power Associates website:
https://waterandpower.org/museum/Early_Power_Substations.html#Sylmar_Converter_Station

Aerial view looking northeast showing the original Sylmar Converter Station west of Interstate 5 shortly after completion. Interstate 5 runs diagonally in the distance, with a portion of the Van Norman Reservoir visible at lower left. Photo date: July 18, 1969.



This has been a very unusual winter in the eastern Sierra. As you can see from the graph the historical average snow pack rises through early April and then decreases until it is gone in mid-June. This year the snow came in a few large events yielding an above normal snow pack in mid-January, a lack of snow until mid-February, and then one more significant storm. At that point the snow ceased and the water content has fallen to well below normal. While some additional snow is possible, it is probable that the April 1 snow pack, upon which the projections for the year's runoff are made, will likely be in the 75% of normal range. However, the loss of water supply for Los Angeles will be offset by the increase in groundwater available from the San Fernando basin, due to the recent investments in LADWP's San Fernando Valley Water Quality Treatment Plants.

Mystery History Questions

Presented by Jack Feldman 🦹‍♂️

What Are You Looking At?

A worker stands beside one of the enormous electrical devices inside the original Sylmar Converter Station around 1970. These towering components were part of one of the most advanced power transmission systems of its time.

Questions

1. What was the primary purpose of the Sylmar Converter Station?
   A) Generate hydroelectric power
   B) Convert electricity between alternating current and direct current
   C) Store electricity
   D) Distribute solar power

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2. This facility is connected to a transmission system linking Los Angeles with which region?
   A) Northern California
   B) The Pacific Northwest
   C) Arizona
   D) Nevada

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3. Why was direct current used for this system?
   A) It eliminated transmission towers
   B) It allowed electricity to travel long distances more efficiently
   C) It stored energy underground
   D) It reduced the need for power plants

4. What unique capability does this system provide?
   A) Stores electricity for emergencies
   B) Sends electricity in either direction depending on demand
   C) Generates power from earthquakes
   D) Operates without operators

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5. The large devices shown in the photograph are known as:
   A) Transformers
   B) Turbines
   C) Mercury arc valves
   D) Switchgear

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6. What event damaged the original station in 1971?
   A) Flood
   B) Fire
   C) Earthquake
   D) Storm

Bonus Question

Why did engineers from around the world visit this facility in the early 1970s?

A) It was the first solar plant
B) It demonstrated one of the largest high-voltage direct-current systems ever built at the time
C) It operated without wires
D) It powered only Los Angeles

Think you got them all right?

Check your answers and explore more about Los Angeles's early hydroelectric power system at:

https://waterandpower.org/museum/Early_Power_Substations.html#Sylmar_Converter_Station

Answers can also be found in the article on page 11 or on the answer sheet on page 19.

GUEST SPEAKERS

Summaries by Robert Yoshimura

GUEST OF THE MONTH
JANUARY 2026

Evelyn Cortez-Davis
Director of Strategic Initiatives – Water System
Los Angeles Department of Water & Power

STRATEGIC ISSUES FACING THE WATER SYSTEM IN 2026

Evelyn Cortez-Davis began her presentation with a brief explanation of her role within the Water System. She is one of seven Director-level managers, five of whom are the heads of the traditional divisions (Water Resources, Water Quality, Water Engineering, Water Distribution, and Water Operations), plus a liaison with the Palisades fire coordinating center, and the first-ever Director of Strategic Initiatives.

Because strategic planning is an integral part of the operation of every division, her focus will be on broader initiatives that cross those division boundaries and affect all operations. For example, wildfire mitigation requires participation by every division, and she is coordinating the development of procedures that cover all aspects of wildfire mitigation. Unlike the Power System, the Water System has not yet aligned nor incorporated its standard operating procedures into the Wildfire Mitigation Plan, and such activities will be on her agenda in the coming months.

Another example is resilience planning which clearly crosses division boundaries within the Water System, and in many cases crosses System boundaries and requires integration and coordination with the Power System and other organizations at LADWP. The Water System has focused on supply resilience and infrastructure resilience for many years; however, other resiliency issues exist such as financial, regulatory, organizational, and disaster response which will require coordinated planning across the entire Department. Resilience planning needs to be long-term (longer than the 25-year horizon of the state-mandated Urban Water Management Plan) to accommodate projects such as Pure Water LA and be flexible enough to accommodate changes that may arise unexpectedly. Evelyn is now working on a framework for resilience planning that will be completed this year.

Among the cost-cutting initiatives that affect all divisions, Workforce Development will be another focal point that Evelyn will be working on with the Employment Services Division. Efforts will focus on training, recruitment, and retention and will be cohesive and unified to align

with organizational goals. For example, training will be designed in such a way that not only will our technical and operational needs be fulfilled but will also encourage employees to remain with LADWP for 30+ years and maximize the investment in them. Regarding recruitment, the Department has critical shortages in several blue-collar job categories. It is now partnering with trade schools and junior colleges to increase interest in these types of jobs and to provide appropriate pre-training that would make students better candidates for those critical jobs.

As her final topic, Evelyn discussed the Palisades wildfire of January 2025 and the actions planned or taken since then to restore service to the area and improve the water infrastructure to better serve the community in the future. She summarized those actions as described in a report titled January 2025 Wildfires – One Year Update. The full report can be found here: January 2025 Wildfires - One-Year Update. The actions summarized are as follows:

- Assessing Water Infrastructure for Resilience
- Working on a Water Resilience Plan – to be completed in 2026
- Enhancing Efficiency of Hydrant Inspections and Repairs – as of July 2025, all 61,000 hydrants in the city were inspected by the Fire Department and were quickly repaired/replaced as needed
- Continuing to Monitor and Maintain Water Quality
- Replacing 99,700 feet of water mainline pipe – a $77.7 million project to replace the oldest mainlines most at risk to leaks and replacing old pipelines in areas with geological hazards with a seismically resilient network
- Upgrading an Existing Pressure Regulator Station in the Palisades
- Completed Emergency Repairs to the Santa Ynez Reservoir Floating Cover - placed the reservoir back in service
- Improving the Pumping and Water Storage Facilities in the Palisades
- Assessing Innovations and New Technologies

Evelyn is currently a team of one and additional personnel are being sought to fill out her team to accomplish these initiatives starting this year.

GUEST OF THE MONTH
MARCH 2026

John Vanacore, Director of Advanced Technologies Infrastructure
Kevin Mount, Assistant Director of Advanced Technologies Infrastructure
Los Angeles Department of Water & Power

UPDATE ON ADVANCED METERING INFRASTRUCTURE IMPLEMENTATION

The Advanced Metering Infrastructure Program (AMI) is being developed to modernize meter reading and billing by using a digital communications network. This system will allow usage data to be transmitted wirelessly from meters directly to the current billing platform. When fully built out, the system will also provide operational benefits by enabling monitoring and a limited degree of control of system operating criteria.

The program began eleven years ago and much of the infrastructure has been installed and is operational. Eighteen months ago, John Vanacore was called upon to head a new Advanced Technologies Infrastructure Division comprised of over 1,000 employees whose goal is to complete the AMI system. Since then, as of early March 2026, nearly 13,000 new smart meters have been installed and the integration of head-end (meters) to billing system has been completed. By the end of the second quarter of 2026, both the Outage Management System and Distribution Management System will be operational.

Aclara I-210+C Smart meter

The LADWP distribution system consists of 800,000 water meters and 1.5 million power meters that require replacement with smart meters for the AMI system to work. John has set a goal of installing 1,000 new meters per day. He is in the process of hiring 18 new installers and will subsequently hire 18 more. Ultimately 400 new meter technicians will be hired, some from the current pool of meter readers, to maintain the complex new smart meters.

Initially, installations started in the Lincoln Heights area using internal resources. However, a Request for Proposal is being developed for a contractor to install the bulk of the new meters citywide. Currently, only power meters are being installed while a variety of different brands and types of water meters are being tested for their efficiency. Unlike power meters, water smart meters are battery-operated such that the life span of their batteries contributes significantly to the cost of operation. Anticipated completion of all smart meters is expected to take three to five years based on the experience of other similarly sized utilities.

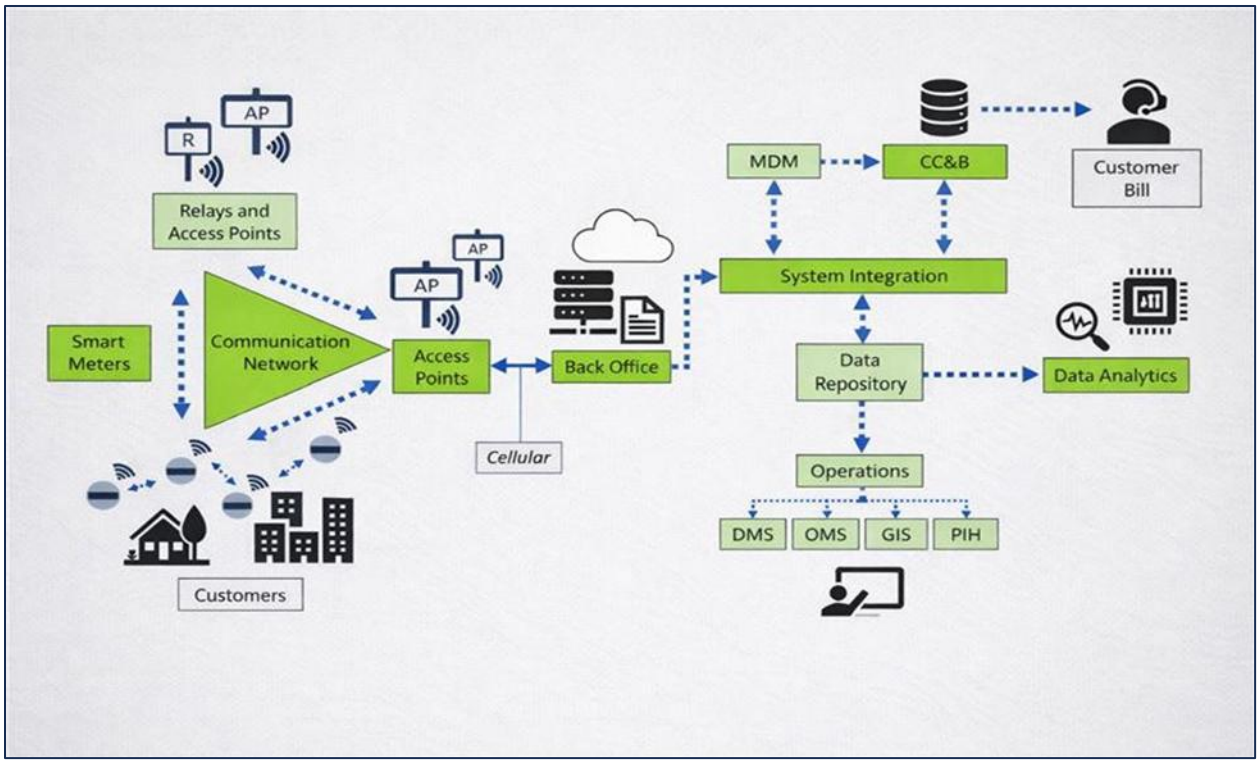
The communications platform that forms the basis for the AMI system is the Itron Gen5 mesh network which is designed for large networks with millions of endpoints (in this case, the smart meters) in an urban environment. The field network consists of Access Points and Relays located on poles throughout the city. The Access Points collect data from the endpoints and transmit that data to the appropriate LADWP system. The Relays function as repeaters that extend coverages and add flexibility to the communications network. This architecture allows for two-way communications with smart meters, distribution automation devices, and future technologies as well.

The back-office environment includes the Head-End System (HES) that manages meter communications and performs device-level operation. HES integrates with the existing Customer Care and Billing (CCB) platform, ITS Snowflake (a cloud native data platform for data warehousing and analytics), Outage Management System (OMS), and Distribution Management System (DMS). The combination of the Itron Gen5 mesh and the enterprise systems mentioned above creates the foundation for over-the-air billing, real-time operational monitoring, and future grid modernization initiatives. The flow of information from the smart meters located at each customer facility to access points and relays and subsequently through the back-office environment and ultimately to the CCB platform is graphically depicted in the figure below.

AMI deployment begins with Aclara meters (models I-210+C and KV2C) which have been thoroughly tested by the Department. The capabilities of the current AMI system at the outset include:

- Billing over the air – enabled by the February 2026 completion of HES-to-CCB integration, allowing interval reads from the Aclara meters to flow directly into billing.

- Outage management integration – Real time meter and restoration signals improve situational awareness and help refine OMS/DMS operations.



In the future, LADWP will phase in additional capabilities that are within the planned scope of the AMI system. These include:

- Remote Disconnect/Reconnect (RDR)
- Revenue security and loss-detection analytics – including tamper alerts, anomaly detection and pattern analysis.
- Advanced consumption insights – such as customer usage profiling and targeted energy/water efficiency analysis.
- Customer portal enhancements – integration of AMI interval data for near-real-time usage charts, alerts, billing forecasting, and personalized notifications.
- Grid-edge operational capabilities – such as voltage monitoring and other related capabilities.
- Future rate design and demand flexibility tools – leveraging short read intervals for dynamic pricing, demand response, and peak-shifting initiatives.

The initial focus of AMI implementation is to enable automated meter reading, over-the-air billing, improved billing accuracy and outage detection. The transition to automated meter reading will achieve employee safety, fuel consumption reduction, and carbon footprint objectives. From the customer's perspective, AMI will result in more accurate billing and improved communication during outages. Ultimately, grid modernization enabled by the AMI system will support LADWP's plans for electrification (vehicles and buildings) and integration of distributed energy resources (DERs) such as rooftop solar, electric vehicles, and battery storage systems. The interval data provided by smart meters will also enable LADWP to make more informed decisions about operation and maintenance, infrastructure investments load management, and system resilience as demand patterns evolve.

Mystery History Answers

Sylmar Converter Station

Answers

1. **B** – The Sylmar Converter Station converts electricity between alternating current and direct current, allowing efficient long-distance transmission.
2. **B** – The system connects Los Angeles with the Pacific Northwest.
3. **B** – High-voltage direct current allows electricity to travel long distances more efficiently with lower losses.
4. **B** – The system can send electricity in either direction depending on seasonal demand.
5. **C** – The devices shown are mercury arc valves, used to convert electricity between AC and DC.
6. **C** – The 1971 San Fernando earthquake caused major damage to the original facility.

Bonus Answer

B – The Sylmar Converter Station was part of one of the largest high-voltage direct-current systems ever built at the time, attracting engineers from around the world.

For additional information click:

https://waterandpower.org/museum/Early_Power_Substations.html#Sylmar_Converter_Station

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2026 CALENDAR

GUEST OF THE MONTH

Meetings in Person
Room 1471, JFB and Via Zoom, Check your WPA Emails for the Zoom Link

EMIL ABDELSHEHID **Director, Power New Business** **LADWP**	**APRIL 8, 2026** **Power Distribution Conceirge** **Plans for New Bus Customers**
ANSELMO COLLINS **AGM Water** **Plus Water Resources Staff** **LADWP**	**MAY 12, 2026** **Current Water System Issues** **Plus Update on Water Supply**
SPEAKER TBD	**JUNE 11, 2026** **TBD**

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