

JANUARY 2024

NEWSLETTER





For a Sustainable Los Angeles

California Department of Water Resources Certifies Delta Conveyance Project EIR

By Robert Yoshimura

Late in December 2023, the California Department of Water Resources (DWR) certified the final environmental impact report (EIR) for the single-tunnel Delta Conveyance Project (DCP). That action paves the way for the planning, design, and permitting of the chosen alignment of the project (the Bethany Alignment) and represents the culmination of a multitude of debates, discussions, and litigation that began more than 80 years ago.

The approved project consists of a 45-mile-long tunnel, 36 feet in diameter, that runs under the east side of the Delta at depths of 140 to 170 feet below the surface. It will have two intakes located on the Sacramento River near the town of Freeport approximately 8 miles south of downtown Sacramento. The south end of the project discharges



www.deltaconveyanceproject.com

water into the existing Bethany Reservoir located just south of Clifton Court Forebay which is considered the beginning of the California Aqueduct. A pumping station will lift the water from the Delta into Bethany Reservoir.

The total capacity of the tunnel will be 6,000 cubic feet per second (CFS). By comparison, the twin-tunnel configuration of the project proposed in 2017 by the DWR during Jerry Brown's tenure as governor was 9,000 CFS. The original Peripheral Canal project proposed (and defeated by ballot initiative) in 1982 was 23,000 CFS. Thus, the project has shrunk considerably over the years as more and more environmental concerns have been taken into consideration. The selected project addresses many of the concerns expressed about previous proposals and considers the public comments received about the Draft EIR during the public comment period.

Certification of the Final EIR includes several decision documents that satisfy the requirements of the California Environmental Quality Act (CEQA). One of those documents is a statement of overriding considerations that explains why and how the social and economic benefits of the project outweigh the adverse environmental impacts that cannot be mitigated to a level that would be considered insignificant.

This December there were significant actions supporting more reliable water supplies for California.

The California Department of Water Resources (DWR) certified the final environmental impact report (EIR) for the single-tunnel Delta Conveyance Project (DCP). This project will provide increased imports of water to Southern and Central California during wet years and additional reliability when a significant seismic event impacts the Delta.

In addition, a final environmental impact report/ environmental Impact statement for the Sites Reservoir in Glenn and Colusa counties in northern California was approved by the Sites Project Authority and the Bureau of Reclamation. With a proposed capacity of 1.5 million acre-feet, it will be the first significant new reservoir in California since the Metropolitan Water District's Diamond Valley Reservoir, constructed over two decades ago.



Refer to the articles on these two projects on pages 1 and 7.

There is also an article on the TransWest Express Transmission Project that is a high-voltage inter-regional electric transmission system. This project will provide new infrastructure that will deliver electricity generated by renewable resources in Wyoming and will strengthen the power grid that serves the Western United States on page 4.

I would like to encourage you to join us for the Water and Power Associate's annual meeting on February 10, 2024 with DWP's General Manager, Marty Adams, discussing the issues he has encountered during his term and the challenges that his successor will face. The meeting will be held at 10:00 am in the cafeteria conference center on the "A" level of the John Ferraro Building. I Hope to see you there.

Jerry Gewe, Editor



(Delta Conveyance Project EIR, continued from page 1)

The need for some type of Delta conveyance project was recognized early in the planning stages of the California Aqueduct but has never been built. That need is even greater today because of the threat climate change poses to the future flows of the Sacramento-San Joaquin River systems. Studies predict that such flows will decline by 10% by 2040. The DCP will enable the safe capture of runoff from infrequent large storms that characterize the changing climate. Had the DCP been in service during the atmospheric river storms of January 2023, enough water could have been captured and moved south into storage facilities to provide for the annual water needs of 2.3 million people. Alternatively, that additional water could have been used to reduce demand upon the Colorado River system and enabled the storage of an additional 220,000 Acre-Feet of water in Lake Mead, which is in a serious state of decline.



The above graph shows the benefit of the DCP in the face of declining water supplies and highlights its ability to slow the impacts of such declines. For these reasons, Governor Gavin Newsom and his administration fully support the project as an integral part of its water resiliency program.

Overview of the TransWest Express Transmission Project

By Saif Mogri

The TransWest Express Transmission Project (TWE) is a high-voltage interregional electric transmission system developed by TransWest Express LLC, a wholly owned affiliate of The Anschutz Corporation, a privately held company based in Denver, Colorado. The TWE is critical new infrastructure that will deliver electricity generated by renewable resources and will strengthen the power grid that serves the Western United States. For example, the TWE Project can reliably deliver cost-effective renewable wind energy produced in Wyoming to the Desert Southwest region (California, Nevada, Arizona), providing much-needed zero-carbon electricity to millions of homes and businesses every year. Wyoming's high-capacity wind energy resources complement the Desert Southwest's renewables, offering geographic diversity to help this region achieve Green House Gas (GHG) emissions reduction goals.

The TWE will provide the transmission infrastructure and transmission capacity necessary to reliably and-effectively deliver approximately 20,000 GWh/year of clean and sustainable electric energy generated in Wyoming to the Desert Southwest region, which for the purposes of the project is Arizona, Nevada and southern California.



The TWE will make Wyoming's wind-generated electricity available to utilities to serve citizens in more densely populated regions. This electric power is roughly equivalent to three-fourths of the electric power used in Los Angeles alone. In addition, many experts recognize that providing more connectivity between geographically diverse and complementary renewable resources can help smooth grid operations as the grid grows "greener." Using Wyoming wind to help fill in the times when California's wind isn't blowing or the sun isn't shining, for example, helps utilities reduce their reliance on traditional peak-priced fuels and therefore helps contribute to California's GHG emissions reduction goals as well as their renewable energy goals.

The bidirectional TWE also could provide export capacity for Desert Southwest solar resources, particularly during over generation events

The TWE proposes 732 miles of high-voltage transmission infrastructure consisting of two systems: a 525kV direct current (DC) system with terminals near Sinclair, Wyoming, and Delta, Utah; and a 500kV alternating current (AC) system from the Utah terminal to southern Nevada. The HVDC system will provide 3,000 MW of transmission capacity. The HVAC system will be built at 1,500 MW of capacity.

In addition to successfully meeting all permitting and compliance requirements in order to start construction in September 2023 in Carbon County, other pre-construction activities along the TWE route such as conducting constructability reviews, coordinating subcontractors, planning procurement, and completing various design and engineering studies have been completed by the construction team. Early construction work is now underway on the TWE near Rawlins, Wyoming.

The 2023 TWE construction scope is intentionally limited to grading several miles of access roads and grading select transmission structure pads. This early earthwork is designed to allow TransWest Express LLC and its line construction contractor to test, verify and refine data gathering and reporting systems, compliance monitoring tools, and other key construction processes in the field and before winter.

When energized in late 2027, the high-voltage, interregional TWE will provide important new bulk transmission capacity and will connect three planning regions in the West: WestConnect, NorthernGrid and the California Independent System Operator.

In addition, the TWE will interconnect with the PacifiCorp system in Wyoming, Intermountain Power systems in Utah, and with the NV Energy system in Nevada, and with the California ISO. The TWE will provide the West with new access to wind-generated electricity from Carbon County, home of America's best onshore wind resources.

For more information, please go to the website: https://www.transwestexpress.net/index.shtml

California Approves Regulations for Direct Potable Reuse of Reclaimed Water

By Robert Yoshimura

The California State Water Resources Control Board on December 19, 2023 unanimously approved new regulations for the direct potable reuse of reclaimed water. This long-awaited decision will now enable water agencies to supplement their water supplies with appropriately treated reclaimed water, which effectively creates a huge new source of drinking water for the state. In Los Angeles County alone, more than 400 million gallons per day (MGD) of treated sewage is produced and disposed of to the ocean. Both the City of Los Angeles and the Metropolitan Water District of Southern California (MWD) are currently in the planning phases of water reuse projects that will ultimately produce a combined total of 360 MGD of reusable water.



A detailed technical description of the regulations was provided in the October issue of this newsletter. The adjoining diagram from Cal Matters provides a graphical description of the treatment process required to convert raw sewage into drinking water. The treatment steps called out in the diagram are:

1. Screening to remove large solid objects and debris.

- 2. Sedimentation to remove settleable solids.
- 3. Biological treatment to remove organic matter.

4. Chlorination prior to non-potable uses such as irrigation, groundwater recharge, and industrial cooling.

5. The newly adopted advanced treatment consisting of ozonation/activated carbon, reverse osmosis membranes, and ultra-violet irradiation.

6. Delivery to a conventional water treatment plant for additional treatment prior to distribution.

The water produced by step 5 of the process train will be equivalent to distilled water. Additional minerals will have to be added to it to assure a pleasant taste. Both MWD and DWP plan to accomplish this by blending it with surface water from either the California Aqueduct or the Los Angeles Aqueduct prior to further treatment.

In addition to the treatment processes, a new layer of monitoring requirements will be imposed on water suppliers to assure a triple redundant safety factor for consumers.

The long-term benefits of these new regulations will be to greatly expand the state's water supplies and provide drought resiliency to supplement water needs as climate change increases the frequency of weather extremes.

With the adoption of these regulations, California becomes the second state (after Colorado) to enable direct potable reuse of reclaimed water. Before the regulations become official, one final step is needed: approval by the State's Office of Administrative Law. That approval is expected to occur sometime next year.

Final EIR/EIS for Sites Reservoir Approved

By Jerry Gewe

On November 17, 2023 the Final EIR/EIS for the Sites Reservoir Project was approved by the Sites Project Authority and the Bureau of Reclamation. Approval came 6 years after the original Draft EIR/EIS was issued. If constructed this will be the first major reservoir constructed in California since MWD's Diamond Valley Reservoir.

This reservoir would be an off-stream reservoir in Glenn and Colusa counties in northern California with a capacity of 1.5 million acre-feet with an estimated cost of about \$4 Billion. The reservoir will capture peak storm flows in the winter from the Sacramento River that currently runoff to the ocean and make them available for environmental, urban and agricultural purposes later in the year. By operating in conjunction with other California Reservoirs, Sites Reservoir will substantially increase water supply flexibility, reliability and resiliency in drier years and will improve effectiveness of the State Water Project and Central Valley Project.



The Sites Project Authority is a joint powers agency established to design, build, own and operate the reservoir and related facilities with a board comprised of representatives from 9 Sacramento water agencies. There are 29 California water agencies including the Metropolitan Water District of Southern California that are participating in the project. The project includes two Main Dams, seven Saddle Dams, two Saddle Dikes, an Inlet/Outlet Tower and Tunnel, Pipelines, two Pumping and Power Generating Plants and other supporting facilities.

The current schedule calls for construction to begin in 2025 and completion in 2030, however this will likely be pushed back by challenges

from environmental organizations. Governor Newson has determined that this project will help California maintain a resilient water supply in the face of climate change, weather extremes, and water scarcity. This allowed him to certify the project for judicial streamlining under the recently passed Senate Bill 149, which requires courts to decide CEQA challenges for covered project within 270 days, to the extent feasible.

The project has received almost \$50 million in state funding for the preliminary studies and is eligible for \$875 million in Proposition 1 funding. The federal government is also expected to provide 25 percent of the funding. The remaining funding will come from the beneficiaries of the water supply.

California Joins Global Offshore Wind Alliance

By William Glauz

https://www.energy.ca.gov/news/2023-12/california-joins-global-offshore-wind-alliance-ambitiouscommitment

On December 5, 2023, California Energy Commission Chair David Hochschild announced at the 28th Conference of the Parties to the United Nations Framework Convention on Climate Change (COP 28) in Dubai that California has joined the Global Offshore Wind Alliance (GOWA), whose members collectively seek to build 380 gigawatts (GW) of offshore wind energy by 2030.



GOWA, which aims to accelerate global offshore wind capacity, was founded by the Danish Ministry of Climate, Energy, and Utilities, the International Renewable Energy Agency (IRENA) and the Global Wind Energy Council (GWEC). The alliance officially launched in 2022 at COP 27. Members include Australia, Belgium, Colombia, Denmark, Germany, Ireland, Japan, the Netherlands, Norway, Portugal, Spain, Saint Lucia, the United Kingdom, and the United States.

The State of California previously set a target of building up to 5 GW of offshore wind energy capacity by 2030 and 25 GW by 2045 as part of its transition to 100 percent clean electricity. Worldwide, installed offshore wind capacity totaled 65 GW in 2022, according to GOWA.

In addition to contributing capacity to reach the alliance's 2030 goal, California committed to information sharing and policy and technical exchanges with other members. Being a GOWA member also provides opportunities to learn from other members of the global community, share best practices and potentially strengthen new and existing supply chains.

California is home to some of the best conditions for offshore wind in the United States, a power source that can play a major role in helping the state achieve 100 percent clean electricity and carbon neutrality. Offshore wind is a critical clean energy source, complementing solar energy by providing generation at the end of the day and into the evening as the sun sets.

Offshore wind has enormous untapped potential to drive the global clean energy transition. Analysis by the World Bank based on the Global Wind Atlas estimates that technical offshore wind resources amount to over 71,000 GW globally.

Clean Hydrogen Hubs Announced

https://www.energy.gov/articles/biden-harris-administration-announces-7-billion-americas-firstclean-hydrogen-hubs-driving

On October 13, 2023, the U.S. Department of Energy (DOE) announced \$7 billion to launch seven Regional Clean Hydrogen Hubs (H2Hubs) across the nation and accelerate the commercial-scale deployment of low-cost, clean hydrogen—a valuable energy product that can be produced with zero or near-zero carbon emissions and is crucial to meeting the President's climate and energy security goals.

The seven H2Hubs will kickstart a national network of clean hydrogen producers, consumers, and connective infrastructure while supporting the production, storage, delivery, and end-use of clean hydrogen. The H2Hubs are expected to collectively produce three million metric tons of hydrogen annually, reaching nearly a third of the 2030 U.S. production target and lowering emissions from hard-to-decarbonize industrial sectors that represent 30 percent of total U.S. carbon emissions. Together, they will also reduce 25 million metric tons of carbon dioxide (CO2) emissions from end-uses each year—an amount roughly equivalent to combined annual emissions of 5.5 million gasoline-powered cars.

This Federal investment will be matched by recipients to leverage a total of nearly \$50 billion to strengthen local economies, create and maintain high-quality jobs and slash harmful emissions that jeopardize public health and pollute local ecosystems.



Clean hydrogen is a flexible energy carrier that can be produced from a diverse mix of domestic clean energy resources, including renewables, nuclear, and fossil resources with safe and responsible carbon capture. Its unique characteristics will allow the H2Hubs to substantially reduce harmful emissions from some of the most energy-intensive sectors of the economy, such as chemical and industrial

processes and heavy-duty transportation, while creating new economic opportunities across the country. It could also be used as a form of long-duration energy storage to support the expansion of renewable power.

The seven regional hydrogen hubs include: Appalachian, Gulf Coast, Heartland, Mid-Atlantic, Midwest, Pacific Northwest and California.

The California Hydrogen Hub will produce hydrogen exclusively from renewable energy and biomass. It will provide a blueprint for decarbonizing public transportation, heavy duty trucking, and port operations—key emissions drivers in the state and sources of air pollution that are among the hardest to decarbonize. This H2Hub has committed to requiring Project Labor Agreements for all projects connected to the hub, which will expand opportunities for disadvantaged communities and create an expected 220,000 direct jobs—130,000 in construction jobs and 90,000 permanent jobs. The funding for this Hub will be up to \$1.2 billion and is supported by Edison International, PG&E and Sempra.

US Energy Information Agency Sees Continued Solar Growth While Coal Declines

https://www.eia.gov/outlooks/steo/report/total.php

The US Energy Information Agency (EIA) issued it's December Forecast for electricity generation and emissions. Investment in solar photovoltaic (PV) generating capacity contributes to solar being the fastest growing source of U.S. electric power generation. EIA expects 23 gigawatts of new solar generating will come online in 2023 (a 33% increase from 2022) and 37 GW will come online in 2024 (up 39% from 2023). This new solar generating capacity is accompanied by 9 GW of new U.S. battery storage capacity in 2023, doubling the total amount compared with what was operating at the end of 2022.

The large increase in solar capacity will likely slow growth in electricity generation from natural gas-fired power plants, which had been the largest source of growth in recent years. After growing 7% from 2022 to 2023, EIA forecasts U.S. natural gas generation in 2024 to grow 1% from 2023, reaching about 1,714 billion kilowatt-hours (kWh).



Generation from coal-fired power plants has the sharpest decline in

the forecast as a result of growing renewable energy sources, low natural gas prices, and continuing retirements of coal-fired power plants. EIA forecasts that coal-fired power plants will generate less in 2024 (599 billion kwh) than the combined generation from solar and wind (688 billion kWh) for the first time on record.



Primarily because of the reduction in coal fired electricity generation, U.S. energy-related carbon dioxide (CO2) emissions decreased in 2023 by 3%, with coal-related CO2 emissions declining by 18% from 2022. Emissions from petroleum use remained unchanged, and emissions from natural gas increased by 1% in 2023.

EIA expects total CO2 emissions to fall by another 1% in 2024, primarily because of continued reductions in coal consumption.

Toyota and SDG&E Collaborate on Electric Vehicle to Grid Research

https://pressroom.toyota.com/toyota-expands-vehicle-to-grid-v2g-research-with-san-diego-gaselectric-company-collaboration/

Toyota Motor North America (Toyota) and San Diego Gas & Electric Company (SDG&E), announced in November that they have agreed to collaborate on vehicle-to-grid (V2G) research for battery electric vehicles (BEVs) using a Toyota bZ4X. The V2G research will explore bidirectional power flow technology that enables BEV owners to both charge their vehicle's batteries from the electric grid and discharge electricity from the batteries back to the grid. V2G technology has the potential to support customer needs through improved energy reliability and resilience, the integration of renewables, and the possibility of reduced electricity costs.

Understanding the needs of BEV owners, their charging habits, and when they use their vehicles will be crucial in driving widespread adoption of V2G. Nearly 80 percent of owners

currently charge their BEVs at home overnight, when grid demand is lower. With bidirectional capability, these vehicles could send power back to the grid during peak demand hours or at other critical times, such as during rotating outages due to shortage in electricity supplies. The collaboration between SDG&E and Toyota's Electric Vehicle Charging Solutions (EVCS) team aims to find synergies between the needs of BEV owners and the needs of the electricity grid, as well as explore how to communicate with BEV owners about the potential benefits of bidirectional capabilities.

SDG&E's service territory, which encompasses 25 communities in San Diego and southern Orange Counties, represents one of the largest Toyota BEV and plug-in hybrid electric vehicle (PHEV) ownership regions in California. The Golden State is the fastest-growing EV market in the nation, making it an excellent area in which to conduct this research.

The V2G research will take place at SDG&E's campus in San Diego, California, using Fermata Energy's bidirectional charger and V2G platform. With insight gained from the V2G research collaboration, SDG&E and Toyota aim to identify current and future customer benefits that can be achieved through new products and services. The pilot will also assist SDG&E in understanding the infrastructure needed to enable the rapid growth of EV charging infrastructure, both in public and private settings, and to further stabilize the power grid during peak hours.

Plugging Inequality: Analyzing the Pros and Cons of California's Income Graduated Fixed Charge Proposal

By Jack Feldman



The current conversation about setting electricity rates in California to incentivize electrification is gaining attention. The State is looking at a novel approach to electric billing, incorporating individuals' income alongside their power consumption. Establishing an income-based fixed charge is designed to help lower-income customers who are straining to keep up with rising utility bills. This potential shift, slated for implementation by July 2024, marks a national first and is viewed by some as a fair strategy to encourage cleaner energy.

However, there are growing concerns about the undisclosed actions of those supporting the Income Graduated Fixed Charge (IGFC). Critics argue that a regulation of such significance, affecting 80% of Californians, should not be developed behind closed doors. (It's important to note that this doesn't currently apply to LADWP, as it would require a City Charter change).

Various stakeholders, including California Assembly members and a former President of the California Public Utilities Commission (CPUC), have raised issues with the proposed IGFC. They emphasize the need for public hearings to ensure transparency and the availability of evidence on how IGFC would support electrification. Critics also highlight that the suggested fixed charges are notably higher than the national average and deviate from the utilities' previous rate proposals.

The IGFC concept faces additional criticism for its mandatory link to income without a clear connection to cost causation. Opponents argue that its approval could lead to a political

backlash, especially considering that Californians already have some of the highest electricity rates in the U.S. Critics also challenge the academic perspective employed by IGFC proponents, pointing out that low-income households, despite receiving a 35% electricity discount, may not benefit enough to afford energy-efficient technologies.

Another concern is that the claim of reduced bills for the majority overlooks the potential negative impact on customers who have made energy-saving investments, penalizing those who have been prudent in energy use or invested in solar power. The shift to fixed fees is seen as disproportionately favoring affluent customers while potentially increasing consumption and jeopardizing the reliability of the electric grid.

Critics argue that the IGFC proposal does not consider the practical realities of low-income households, many of whom live in rental housing and lack control over appliances or heating choices. They emphasize that advancing electrification requires a comprehensive approach involving various policies, programs, and rates, rather than being distracted by a high fixed charge.

In conclusion, the proposed Income Graduated Fixed Charge (IGFC) in California, aimed at incentivizing electrification, has sparked a nuanced debate with both pros and cons. On the positive side, the intention to assist lower-income customers grappling with escalating utility bills is commendable. The innovative approach of tying electricity rates to individuals' income represents a novel strategy to promote cleaner energy and address social equity concerns.

However, the criticisms surrounding the undisclosed actions of IGFC supporters raise valid concerns about transparency and public involvement in the decision-making process. The need for public hearings and scrutiny from various stakeholders, including Assembly members and former CPUC officials, underscores the importance of a thorough examination before implementing such a significant regulation affecting 80% of Californians.

Note: The article was written with the assistance of ChatGPT.

Glendale City Council Unanimously Approves Power Rate Increases

By Jerry Gewe

On November 28, 2023, the City Council of Glendale unanimously approved rate adjustments to their electric rates which will take place over the next 5 years. These increases were determined to be necessary to maintain the reliability of electric service to the customers in Glendale and also to support key sustainability initiatives.

The rates were established, after a comprehensive electric Cost of Service Analysis, with a goal of achieving fairness and equity among all the utility's customers. The first increase took effect on January 1, 2024 with an increase of 14.8%. There will be additional increases of 11.3% on July 1, 2024 and 11.3% on July 1, 2026.



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1, 2025. There are no increases proposed for fiscal years 2026-27 and 2027-2028.

These adjustments are required to fund critical projects including the Grayson Repowering project (upgrading the current in-city generating station) and the Scholl Canyon Biogas Renewable Generation Project (new environmentally friendly project). In addition to these two major projects, the increased funds will be used to implement the City Solar initiatives and its commitment to building and fleet electrification. Finally, the adjustments will be used to meet the rising costs of wholesale purchased power, renewable energy projects, and fuel purchases.

In order to reduce the impact of these increases, the City Council also approve increases in their Care Program benefits by \$3.00 per month concurrent with the rate increases.

Mystery History Question

Presented by Jack Feldman



The 40 ft. water wheel seen above was used to raise a portion of the Los Angeles River water supply to a height permitting gravity flow to homes, fields, and storage.

Which of the following men originally built this water wheel? He was granted a franchise by the City Council to construct a water system for the early inhabitants of Los Angeles.

- A) Prudent BeaudryD) Damien MarchessaultB) William DrydenE) Jean L. Sainsevain
- C) John S. Griffen

What year was the original water wheel constructed?

A) 1847	D) 1877
B) 1857	E) 1887
C) 1867	

Answers on page 19, or Click <u>HERE</u> or go to the following link:

https://waterandpower.org/museum/Mystery History.html

GUEST SPEAKERS

Summaries by Robert Yoshimura

GUESTS OF THE MONTH OCTOBER 2023

MATHEW HALE, Director of Legislative and Intergovernmental Affairs for DWP UPDATE ON KEY ISSUES AND HOW W&PA CAN HELP

Matthew (Matt) Hale, Director of Legislative and Intergovernmental Affairs for DWP provided a presentation on how W&PA can be more effective in influencing policy issues and an update on current issues his organization is dealing with. Matt hails from the City of Los Angeles where he served on the staff of a City Councilman. Prior to that, he served on the staff of a state Assemblyman representing a part of Los Angeles. He was hired to DWP a little over a year ago by General Manager Marty Adams for the purpose of monitoring and influencing decisions by various governmental agencies and legislative bodies that affect the interests of DWP and its rate payers.



Since his arrival, he has been developing relationships with Los Angeles' City Hall, legislators in Sacramento, and other government and non-government agencies. He is particularly focused on new legislators because six council members and one third of both houses of the state legislature are newly elected. Jerry Gewe noted that in his own experience in Sacramento, he found very little interest in water issues on the part of our local elected representatives. Matt responded that the many years of drought since then have created a critical focus on water supply issues among all representatives.

During Matt's one-year plus tenure in his new job, a number of legislative and policy issues have arisen. Earlier this year, the state legislature passed a bill allowing the extension of operation of the Diablo Canyon Nuclear Power Plant. That bill was helpful in convincing the State Water Resources Control Board to approve DWP's application for an extension of its operating permit for Scattergood Power Plant until 2029, which was granted.

Another helpful bill was the implementation of a 270-day "shot clock" on challenges to environmental documents created by the proposers of climate change mitigation projects such as the conversion of the power grid to 100% renewable energy. Other critical projects such as those involving energy resiliency will benefit as well. DWP has been requesting such relief from the CEQA (California Environmental Quality Act) process for many years because it does not believe a conversion to 100% clean energy by 2035 is possible without CEQA relief. Under the new law, all challenges to Environmental Impact documentation must be resolved in 270 days or less. While NEPA (National Environmental Policy Act) has no such shot clock, intra-state projects not involving Federal Agencies should be unhindered by NEPA procedures. The Federal Department of Energy is aware of potential delays in energy conversion projects elsewhere and is reportedly working on solutions. DWP no longer has a presence in Washington D.C. The Mayor's office has one staff member in D.C. and the Port of L.A. has two. DWP had contracts with two lobbying firms, one for water and one for power. The water lobbyist went out of business and its one staffer involved in DWP water issues has been incorporated into the power lobbying contract. The long-term goal is to have DWP staff in both Sacramento and Washington D.C. Matt's current staff consists of people who can fulfill such roles but are not yet familiar with DWP. He believes a better solution is to find long-term DWP employees who are willing to relocate.

Recently, DWP qualified for a second round of payments under the federal water and wastewater arrearage repayment program. It initially received \$70 million for the period from the start of the pandemic through June 2021 and will now receive an additional amount for the period from June 2021 to February 2023. The combined water and wastewater payment for the second period will be \$135 million.

A bill proposed by Assemblyman Chris Holden to rebuild CAISO (California Independent System Operators) into a regional energy market was being discussed in the legislature and by utilities. The DWP was uncomfortable with that direction fearing losses of its existing power contracts in the region and proposed focusing on developing the Enhanced Day Ahead Market (EDAM) on a regional basis instead. The legislature in fact decided to do exactly that and a new discussion regarding regionalization is beginning. Regardless of how the regional market is structured, DWP is concerned about its ability to continue to procure energy contracts independently. Matt's organization is now gearing up to prepare for those discussions and expects DWP to be a significant participant therein.

An infrastructure bond will appear on the November ballot that provides \$100 million in funding for expansion of MWD's distribution system to allow Los Angeles access to MWD's eastern pool of water.

The next big issue to be discussed in the state legislature is hydrogen. Questions that need to be resolved are how it is to be used in the conversion to renewable energy, what are the different types of hydrogen (green, blue, brown, gray, etc.), and who is proposing its use. This Friday, the U.S. Department of Energy is expected to announce grant funding for hydrogen projects totaling as much as \$1 billion. If the full amount is allocated, DWP expects \$150 million will go to the development and equipment costs for the conversion of Scattergood Power Plant to use hydrogen as a fuel. DWP is optimistic about its chances for obtaining such a grant because it is a leader in hydrogen technology and, in Scattergood, it has a specific project with specific customers and uses that portend a successful outcome.

A number of stalled water bills are expected to come out of their houses of origin and move onto the other house of the state legislature soon. Thus, Matt's team is preparing to act quickly in responding to those bills depending on how they ultimately are configured.

DWP has been engaged in discussions with the Mono Lake Committee, Great Basin Air Pollution Control District, and other interested parties regarding water rights at Mono Lake. As reported in August in the W&PA Board meeting, those entities are advocating that DWP cede its water rights and stop diverting water from the Mono Lake watershed. One outstanding question at this point is whether to conduct a hearing on that issue. Matt is of the opinion that we should because the lake has been managed so well by DWP that it is in the best health of any salt lake in the western U.S. However, that decision is pending and will be determined by Water System management. Jerry Gewe urged Matt to consider the recent article by Jim Newton, former journalist for the Los Angeles Times, regarding the tradeoffs between environmental benefits to Mono Lake if exports are stopped vs. the global environmental harm that such an action will cause.

GUESTS OF THE MONTH NOVEMBER 2023

ANSELMO COLLINS, Assistant General Manager - Water UPDATE ON KEY ISSUES CURRENTLY FACING THE WATER SYSTEM

<u>MWD Groundwater Banking Program with AVEK:</u> We are now emerging from a three-year drought, during which a problem became apparent involving the inability of the MWD distribution system to deliver Colorado River water to the western-most regions of its service area including the west Valley area of Los Angeles. Consequently, LADWP and five other water agencies were required to either enforce strict lawn irrigation cutbacks or to live on a strict monthly water budget. Los Angeles chose the budget and did an optimal job of managing that budget. However, DWP has demanded that MWD find a solution to that problem. One step in resolving the problem is an agreement MWD is working on with AVEK (the Antelope Valley-East Kern Water Agency) who owns capacity in the High Desert Water Bank that will allow MWD to store up to 70,000 AF of water from the east branch of the State Water Project (SWP) during wet years for use during dry years. Ultimately, MWD will have to invest \$200 million to construct a pipeline from the East Branch to the location of the water bank. DWP is also advocating for MWD to build an east-west pipeline to convey Colorado River water to the LA Aqueduct Filtration Plant from which DWP can deliver water anywhere in its distribution system.

<u>Recycled Water</u>: DWP has requested \$1.8 billion for recycled water projects from the Bond Issue that will be on the November Ballot. However, due to the State's limited bonding capacity and a large number of competing requests for bonds to fund other types of programs, it is unclear if all of our request will be granted. However, costs of the DWP's Operation NEXT program are estimated to be in the \$20 billion range and MWD's Pure Water SoCal project are in the \$10 billion range, so it is clear that some sources of outside funding will be needed to complete these recycled water programs.

DWP's goal for its Operation NEXT program is to use 75% of its product for direct potable reuse (DPR) and the remainder for groundwater recharge in the West and Central Basins using existing distribution infrastructure. However, the achievement of this goal will require the resolution of a number of complex economic and political issues including the location of advanced treatment facilities needed to comply with the state's DPR regulations which are still being developed.



Image from Mono Lake Committee

<u>Mono Basin:</u> Earlier this year, the Mono Lake Committee requested the California Department of Water Resources (DWR) to direct DWP to stop all exports from Mono Basin based on a false narrative that a land bridge had formed from the Mono Lake shoreline to one of the islands where seagull nesting occurs. The land bridge would allow coyotes and other predators to devastate the seagull population. DWR denied the request and instead called for a workshop that took place in February. At the workshop, DWP used photographic evidence and water elevation data to prove that no such land bridge had been formed.

<u>Infrastructure:</u> The Water System is making excellent progress with regard to its infrastructure replacement programs. Ninety-eight percent of last year's goal of replacing 210,000 linear feet of mainline pipelines was achieved, which is remarkable considering the bad weather and supply chain issues encountered. This year's goal is 225,000 linear feet as well as the replacement of 34,000 water meters (of 739,000 total). The smart meter conversion program is being held up due to their need for batteries, which have a short lifespan of only 10 years. That would require the replacement of nearly 100,000 batteries per year when the program is built out. Overall, the infrastructure program is moving along very well.

<u>Staffing:</u> The Department recently rolled out an accelerated hiring program for Civil Engineering Associates where a team of interviewers sat on remote interviews for two straight days and managed to hire 9 new employees. Offers were made on the spot and all paperwork was completed the same day. Hiring needs will grow in the immediate future because of anticipated growth in personnel to staff new programs and facilities such as Operation NEXT. The current Water System staffing level is 2,300 budgeted positions, and that is expected to grow to 3,000 when Operation NEXT is online.

DWP has signed a Memorandum of Agreement with the City's Personnel Department to reduce the timeline for hiring to 4 to 5 months from the time a request is made until a civil service hiring list is established. The current time frame is about 12 to 14 months. The Personnel Department will also hire an additional 18 people dedicated to administering only DWP positions.

Difficulties in training employees has led to the concept of a System-wide training center that will be known as the Water System University. It will be budgeted in the Operations Division where the most training needs exist, but will serve the entire Water System across all classes of employees.

John Ferraro Building (JFB) Retrofit: Asbestos issues in the JFB will require the entire building to be retrofitted to assure the removal of all asbestos-containing materials. DWP believes the quickest and most efficient way to accomplish this project is to vacate the entire building and complete all work at once. The project will take 2-1/2 years to complete. During the construction period, JFB employees will work from home, at hubs containing office equipment and desk space, and at leased offices in the downtown area.

<u>San Fernando Groundwater</u>: Groundwater remediation projects in the San Fernando Basin are nearing completion and will soon enable withdrawal of the City's full entitlement of 98,500 AF/year plus stormwater capture and recycled water recharged into the basin. The North Hollywood West remediation project will be completed during the first quarter of 2024. North Hollywood Central and Tujunga remediation projects should be done in the second half o 2024. During the first two years of operation, DWP will be limited to pumping only the remediation wells to accelerate the removal of contaminants from the basin. Full beneficial use of the basin will occur thereafter.

Additionally, expansion of the Tujunga Spreading Grounds will ultimately enable the capture of 150,000 AF of stormwater annually, and the completion of the Tillman Water Reuse project will add another 21,000 AF of recharge annually. All water recharged into the basin by DWP will be available for extraction and use. The storage capacity of San Fernando Basin is 550,000 AF and another 450,000 AF is available in the Central and West Basins. Thus significant storage is available for stormwater and recycled water to manage future demand and take advantage of heavy rainfall years.

GUESTS OF THE MONTH DECEMBER 2023

DR. FRED PICKEL, LA Ratepayer Advocate PERSPECTIVES ON THE CHALLENGES FACING THE DEPARTMENT And WHAT IS HAPPENING WITH THE CITY'S SEARCH FOR HIS REPLACEMENT

The Los Angeles Department of Water & Power is a large utility that ranks number 16 in the nation in terms of power revenues and number 10 in terms of total revenues (water and electricity). However, because it is a municipally owned enterprise, it is not rate regulated by the state's Public Utilities Commission. Consequently, in 2011, a voter approved charter amendment created the Office of Public Accountability (OPA) to observe its operations and finances and serve as an independent watchdog to



analyze and report on proposed increases in water and power rates. Dr. Pickel was subsequently selected by a citizen's committee to serve as the Executive Director/Ratepayer Advocate of the OPA.

Under the terms of the Charter Amendment, the Executive Director reports to the Board of Commissioners (but is not instructed by them) and administers OPA affairs. Specific duties include the management of OPA employees, preparation of the annual budget, managing the expenditure of OPA funds, and performing other duties prescribed by ordinance.

From the 2011 Ballot Arguments in Favor of the charter amendment, the purpose of the OPA is to create greater transparency, hold DWP accountable to its customers, and to increase consumer protection.

OPA relies additionally on outside guidance to carry out its legally defined responsibilities. Utility knowledge gleaned from the industry is used to assess the long-term investment cycle, environmental management, the need for high reliability, and utility cost management. OPA also uses supplementary information from utility regulators to guide its assessments of nondiscriminatory service, just and reasonable standards, standards for revenue requirements, and standards for rate structure based on cost of service.

The mission of OPA as prescribed in Ordinance 182494 is:

- To improve DWP's reasonableness of rates, strategic plans, and other policies, procedures, decisions, contracts, and programs.
- Provide information and recommendations to the Board, Mayor, City Council, and the public.
- Provide information and advice to DWP, the Mayor, and City Council (who are not obligated to accept or act upon such advice).

The authority of the Executive Director includes certain special powers unique to the OPA. He can focus on material impacts on rates, he can contract within budget and for terms under 3 years without Mayor or Council approval (City Attorney approval is required), and he can access any information necessary to fulfill OPA responsibilities. There are also special challenges associated with the Executive Director's duties. There is a very fine line between the need for transparency and the need to protect confidential, legally privileged, and closed session issues. This is a particular problem within utilities because protracted litigation is common and frequent. Furthermore, the scope of the Executive Director's responsibilities is internal to the City, although he will engage outside issues if requested by the umbrella of authority around DWP.

The OPA's typical schedule while addressing its responsibilities involves working directly with DWP in advance of proposals on rates, budgets, long-term plans, and projects. This close communication is accomplished through biweekly meetings between OPA and DWP Financial Services. The OPA also tracks and participates in numerous meetings including the DWP Board (twice monthly), the Council Energy and Environment Committee (twice monthly), the City Council when DWP items appear on the agenda (up to three times per month), special groups like NREL LA 100 study and the SLTRP (monthly), and intracity coordination on rates when rate increases are being planned.

The current Executive Director's term ended on December 12, 2023. The next Executive Director will be selected by a citizen's committee consisting of 2 members appointed by the mayor, 2 members appointed by the president of the Council, and 1 member appointed by the chair of the Energy and Environment Committee of the Council. Both the Mayor and the Council must approve the selection made by the citizen's committee.

Successes enjoyed during Dr. Pickel's tenure included:

- Establishing the office, including the hiring of staff (mostly exempt personnel for flexibility), and developing and implementing all administrative processes.
- Building transparency via benchmarking on DWP's employee compensation, which revealed that the highest paid employees were paid the worst, and the lowest paid employees were paid the best compared to equivalent positions in the broader labor market. OPA also benchmarked functional costs such as IT and found that DWP was understaffed and thus lacked resiliency in responding to unusual events.
- Conducted two full rate reviews and one interim review. OPA should be working on their fourth review, but the rate process was slowed by the Covid pandemic.
- Conducted reviews of large capital programs including the Twin Tunnels Delta project, Operation NEXT, IPP (post-coal), Once-Through-Cooling, LA 100, and SLTRP-22. One significant finding of these reviews was the high cost of the accelerated option in converting to 100% renewable energy by 2035 compared to the SB 100 deadline of 2045. The accelerated option will cost each customer \$100 to \$200 per month in additional charges for electricity.

Specific challenges pointed out by Dr. Pickel for DWP include upgrades to the IT and project management functions to align them with industry wide practices. OPA feels that DWP is 20 years behind the industry in these functions. Other challenges include building middle management and improving staffing levels in certain areas, especially in the field. However, some modifications to the Civil Service processes will likely be needed to accomplish such improvements. Finally, Dr. Pickel mentioned the challenges that face a utility operating within a municipal entity because of the political oversight processes that must be endured. Other key challenges include policy support and administrative changes within the OPA.



Mystery History Answers

William Dryden, 1857

More information at: https://waterandpower.org/museum/Mystery_History. html OR Click <u>HERE</u>

SAVE THE DATE

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	GUEST OF	MARTY ADAMS	FEBRUARY 10, 2024
Y		GENERAL MANAGER	What Does Marty See In
		LADWP	The Future For LADWP?
n	Meetings in Person	Location:	Cafeteria Conference Center
7	Room 1471, JFB and Via	BILL HAZENCAMP	MARCH 13, 2024
	Zoom, Check your WPA	METROPOLITAN WATER	Water Supply Issues for
3	Emails for the Zoom Link	DISTRICT	Southern California
1		SPEAKER TBD	APRIL 10, 2024
5		LADWP	LADWP Transmission and
+			Distribution Plans
Ň	WATER & POWER	SPEAKER TBD	MAY 8, 2024
2	ASSOCIATES, INC.	LADWP	This Year's Water Supply
N			Outlook for Los Angeles

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ANNUAL MEMBERSHIP \$30	EMAILCOMPANY, TITLE/POSITION, RETIRED
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