BEFORE THE PUBLIC UTILITIES COMMISSION

OF THE STATE OF CALIFORNIA

Application of California-American Water Company (U210W) to Obtain Approval of an Updated Cost Cap for the Monterey Peninsula Water Supply Project and Updated Ratemaking Framework.	Application _____ (Filed ____, 2026)

DIRECT TESTIMONY OF LACY CAROTHERS
PUBLIC VERSION

Cathy Hongola-Baptista
Nicholas A. Subias
California-American Water Company
550 California Street, Suite 650
San Francisco, CA 94104
(415) 293-3023
cathy.hongola-baptista@amwater.com

Lori Anne Dolqueist
Matt Menezes
Nossaman LLP
50 California Street
34th Floor
San Francisco, CA 94111
(415) 398-3600
ldolqueist@nossaman.com

Attorneys for California-American Water Company

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I. BACKGROUND

Q1. Please state your name and business address.

A1. My name is Lacy Carothers. My business address is 700 Riverpoint Drive, West Sacramento, CA 95605.

Q2. By whom are you employed and in what capacity?

A2. I have been employed by California-American Water Company ("California American Water" or the "Company") since August 2013. I am currently the Senior Director of Engineering.

Q3. Please summarize your educational background.

A3. I received a Bachelor of Science in Mathematical Sciences from University of California at Santa Barbara in September 2005 and a Master of Science in Civil Engineering from San Diego State University in December 2010.

Q4. Please summarize your employment experience.

A4. I started my career at Southern California Edison, an electric utility, in January 2010 as a Design Engineer. My career in the water industry began in August 2013 when I came to work for California American Water as a Project Engineer. In 2015, I was promoted to

Project Manager where my role was delivering capital projects through the design, permitting, and construction phase. From April 2021 – June 2023, I served as the Engineering Manager for the Northern Division. In June 2023, I began serving as the Senior Director of Engineering.

Q5. Have you testified before any regulatory agencies?

A5. I have submitted written testimony before the California Public Utilities Commission ("CPUC") in previous California American Water general rate cases, and I appeared and was cross-examined before the CPUC on April 21, 2026, in the Company's most recent general rate case.

Q6. Are you a registered professional engineer?

A6. I am a registered professional engineer in the State of California.

II. PURPOSE AND SCOPE OF TESTIMONY

Q7. What is the purpose of your testimony?

A7. The purpose of my testimony is to demonstrate from an engineering and project-delivery perspective why California American Water's requested cost cap of $825 million for the initial phase of the 4.8 million gallons per day ("MGD") desalination component of the Monterey Peninsula Water Supply Project is reasonable and necessary. My testimony addresses three subjects. First, I describe the scope of the desalination facilities the Commission authorized in D.18-09-017 and the 4.8 MGD phased configuration now being built, and I explain that the phased configuration is the initial stage of the authorized project, not a different project. Second, I present the costs incurred through June 30, 2026, the engineering basis for the estimated cost to complete, and the derivation of the proposed cap, which rests on an executed design-build contract, a mature design, and recognized cost indices. Third, I explain why costs have risen since the 2017 estimate underlying the original cap. The increase reflects nearly a decade of

construction cost escalation, permit and environmental conditions imposed after the decision, litigation, and an extended sequence of interdependent regulatory approvals. I also describe the steps the Company took throughout this period to advance the project, control costs, and manage it prudently.

Q8. Please generally describe the MPSP.

A8. The MPWSP is California American Water's long-term water supply solution for the Monterey Peninsula. The project was developed to provide a reliable, drought-resistant water supply that reduces dependence on the Carmel River and the Seaside Groundwater Basin, both of which are subject to regulatory restrictions and limitations on production. The MPWSP consists of multiple components, including seawater desalination, Aquifer Storage and Recovery ("ASR") facilities, and integration with the Pure Water Monterey project.

The MPWSP is unique among seawater desalination projects because it relies on subsurface slant wells rather than a conventional open-ocean intake system. The slant wells are drilled from an onshore location and extend beneath the shoreline and ocean floor, allowing seawater to be naturally filtered through coastal sediments before reaching the desalination facility. This approach substantially reduces marine life impacts and eliminates the need for offshore intake structures, but it requires highly specialized engineering, directional drilling techniques, and unique drilling equipment to construct the wells beneath the ocean floor.

Since 2018, when the CPUC approved the MPWSP, the project has transitioned from a long-planned water supply initiative into an active infrastructure and permitting program aimed at securing a reliable, drought-resistant water future for the Monterey Peninsula. The project was developed to address regulatory restrictions on Carmel River diversions, reduce dependence on the overdrawn Seaside Groundwater Basin, and create a

diversified water portfolio that includes desalination, Pure Water Monterey, and Aquifer Storage and Recovery along with existing supplies from the Seaside Groundwater Basin and Carmel River.

A. California Public Utilities Commission – Decision 18-09-017

Q9. Please generally describe the elements of the MPWSP that have been previously approved for construction by the CPUC.

A9. Several elements of the MPWSP were approved by the CPUC in separate proceedings prior to and as part of the overall project. In Decision 16-09-021, the CPUC approved California American Water's participation in the revised Water Purchase Agreement associated with the Groundwater Replenishment Project, known as Pure Water Monterey. Under that project, purified recycled water would be supplied for use within California American Water's Monterey Peninsula water system. The decision also approved related conveyance facilities, including the Monterey Pipeline and the Monterey Pump Station.

Subsequently, in Decision 18-09-017, the CPUC approved a modified MPWSP, certified the environmental review, adopted settlement agreements, issued a Certificate of Public Convenience and Necessity, and authorized construction of a 6.4 MGD desalination plant and associated facilities. These facilities include the desalination plant, subsurface intake wells, brine discharge and conveyance facilities, water transmission pipelines, aquifer storage and recovery system improvements, pump stations, and other infrastructure necessary to deliver desalinated water to customers within the Monterey service area. The CPUC concluded that a 6.4 MGD desalination facility represented the most reasonable project size to address the region's water supply needs.

California American Water seeks CPUC approval of updates associated with constructing the desalination facilities. As specified in my testimony, California American Water is

requesting that the CPUC find it reasonable to increase the cost cap for the desalination facilities to $825M.

Q10. What is the project scope for the desalination facilities authorized by D.18-09-017, including: (a) desalination plant capacity (MGD); (b) number and type of intake wells; (c) brine discharge system; (d) product water conveyance pipelines; (e) storage facilities; and (f) related appurtenant facilities?

A10. D.18-09-017 authorized construction and operation of the MPWSP Alternative 5a configuration consisting of a 6.4 MGD seawater desalination plant supplied by seven subsurface slant wells (one test well and six production intake wells), utilizing the Monterey One Water ("M1W") ocean outfall for brine disposal, conveying product water through approximately 34,000 feet of 36-inch transfer pipeline and related conveyance facilities, incorporating treated-water, filtered-water, brine-equalization, and backwash-reclamation storage facilities, and including associated pumps, treatment systems, electrical and control systems, ASR facilities, and administration and maintenance buildings.

Q11. What was the authorized production volume in acre-feet per year ("afy") associated with the 6.4 MGD plant capacity?

A11. D.18-09-017 authorized a 6.4 MGD desalination plant with approximately 6,250 AFY in non-drought years and approximately 7,167 AFY in drought years.[1] The increase of approximately 917 AFY reflects the plant's ability to provide additional water during drought periods when alternative sources may be limited.

Q12. What was the authorized project site location for each major component (slant wells, desal plant, brine outfall, pipelines) as described in D.18-09-017 and the Final Environmental Impact Report/Environmental Impact Statement ("FEIR/EIS")?

[1] D.18-09-017, p. 68.

A12. These locations correspond to Alternative 5a, approved by D.18-09-017. That alternative consisted of a 6.4 MGD desalination plant with intake wells at the CEMEX site.

Table 1: Alternative 5a Locations

Desalination Plant	Monterey Regional Environmental Park ("MREP") adjacent to M1W
Slant Wells	CEMEX site
Brine Discharge	Existing M1W ocean outfall in Monterey Bay
Feedwater Pipeline	CEMEX site to desalination plant
Northern Transfer Pipeline	Desalination plant to California American Water's Seaside service-area connection
Southern Transfer Pipeline	Seaside border through California American Water's Monterey system
Storage Facilities	At desalination plant site
ASR Facilities	Carmel Valley / Seaside Basin ASR system

Q13. What type of desalination technology (reverse osmosis membrane system, pre-treatment, post-treatment) was authorized in D.18-09-017?

A13. D.18-09-017 authorized a seawater reverse osmosis ("SWRO") desalination facility as part of the MPWSP. The approved treatment process consists of three primary elements: (1) source-water pretreatment facilities designed to remove suspended solids and other constituents that could adversely affect membrane performance; (2) a reverse osmosis membrane system serving as the primary desalination technology to remove dissolved salts and impurities from seawater; and (3) post-treatment facilities to condition, stabilize, and disinfect the finished water so that it complies with applicable drinking water standards prior to entering the distribution system. The authorized treatment train therefore includes pretreatment, reverse osmosis membrane treatment, and post-treatment

stabilization and disinfection processes as integral components of the approved desalination project.

Q14. What were the project objectives, as defined in D.18-09-017, that the authorized project was intended to meet?

A14. In Decision D.18-09-017, the CPUC determined that the authorized 6.4 MGD MPWSP was needed to: (1) replace water supplies that must be reduced pursuant to the State Water Resources Control Board's ("SWRCB") Cease and Desist Order ("CDO") governing Carmel River diversions by California American Water; (2) meet the reasonable water demands of California American Water's Monterey service area, including existing customers, legal lots of record, Pebble Beach entitlements, and anticipated tourism-related demand; (3) provide a reliable and secure long-term water supply; (4) include a reasonable buffer against uncertainties; and (5) satisfy maximum day and peak hour demand requirements. The CPUC concluded that the 6.4 MGD project was the most reasonable alternative to achieve these objectives and authorized construction of the project through issuance of a Certificate of Public Convenience and Necessity ("CPCN").

As stated by the CPUC:

"We conclude that a CPCN is needed to authorize Cal-Am to construct and operate the MPWSP so that it may replace water supplies for Cal-Am's Monterey District in response to the CDO issued by the State Water Resources Control Board to cease excess diversions from the Carmel River by December 31, 2021, meet reasonable demand (e.g., existing customers, lots of record, Pebble Beach, tourism rebound), provide a reliable and secure supply, include a reasonable 'buffer' against uncertainties, and satisfy all other reasonable needs."

This passage appears in Section 4.4.1 of D.18-09-017, where the CPUC explains its decision to authorize the desalination project.

Q15. What milestones followed issuance of D.18-09-017?

A15. On September 13, 2019, the CPUC issued the first Notice to Proceed, authorizing construction of the initial transmission main segment in the City of Seaside. This phase included approximately 5,300 feet of treated-water pipeline designed to support future movement of water generated from new supply sources.

Progress continued through 2020 as additional project components received regulatory authorization. In February 2020, the CPUC issued a Notice to Proceed for the Ryan Ranch-Bishop Interconnection Improvements, followed in June 2020 by authorization for the Carmel Valley Pump Station. These approvals allowed California American Water to address critical infrastructure needs that would integrate future water supplies, such as desal, Pure Water Monterey and ASR, into the existing regional distribution system.

The period between 2021 and 2022 represented an important transition for water supply operations on the Monterey Peninsula. New infrastructure projects were put in place to help meet state-mandated reductions in Carmel River withdrawals. During this time, construction of a new 36-inch pipeline, known as the Parallel Pipeline, along General Jim Moore Boulevard in Seaside was completed. The approximately 7,000-foot pipeline allows water to be both injected into and extracted from the Seaside Groundwater Basin, creating greater operational flexibility and enabling more effective use of ASR supplies.

By the end of 2021, the region had begun relying increasingly on a diversified supply portfolio. The key elements of that strategy include groundwater storage, Pure Water Monterey recycled water, ASR operations, and future desalination infrastructure. This

transition represented a significant shift away from the historic reliance on Carmel River pumping that had characterized the region's water supply system for decades.

B. California Coastal Commission – Coastal Development Permit

Q16. With the issuance of D.18-09-017 by the CPUC, could California American Water immediately move forward with construction of the desalination facilities?

A16. No. Although D.18-09-017 authorized the project, California American Water was required to obtain additional regulatory approvals, including permits and approvals from the California Coastal Commission, before construction could proceed. In 2017, California American Water anticipated that the desalination project would be operational by 2021.

Q17. When did California American Water first submit its application for a coastal development permit ("CDP") following D.18-09-017? Describe the timeline of submissions, hearings, withdrawals, and resubmissions.

A17. Two separate CDP applications were required—one for project components located within the City of Marina's Coastal Zone and subject to the City's local coastal program, and one for project components outside of the City of Marina and subject to the Coastal Commission's original jurisdiction.

On June 22, 2018, California American Water submitted a CDP application to the City of Marina for those project components of California American Water's MPWSP located within the City of Marina's Coastal Zone. On August 9, 2018, the City deemed the application incomplete pending certification of the environmental impact report from the CPUC. CPUC Decision D.18-09-017 was issued on September 13, 2018, approving a modified MPWSP, certifying the environmental impact report and granting California American Water authority to proceed with development of the project, subject to obtaining all required permits from other regulatory agencies. The City's Planning

Commission held a public hearing on the application on February 14, 2019, and on March 7, 2019, adopted a resolution denying the application. On May 10, 2019, the City issued a notice of final local action based on the Planning Commission's decision, and on May 22, 2019, California American Water appealed the City's decision to the Coastal Commission (Appeal No. A-3-MRA-19-0034). On June 11, 2019, the City challenged the appealability of the City's Planning Commission decision. The Coastal Commission held a hearing on July 11, 2019, and the Coastal Commission then determined that the City's decision was appealable to the Coastal Commission and that the appeals were valid.

Separately, on July 15, 2019, California American Water filed an application with the Coastal Commission for a CDP for the project components located within the Coastal Zone and subject to the Commission's original jurisdiction (Application 9-20-0603). The Coastal Commission consolidated review of the original jurisdiction application and the appeal from the City of Marina Planning Commission's denial.

On October 28, 2019, Coastal Commission staff issued a staff report recommending denial of the project, largely based on the assumption that expansion of Monterey One Water's Pure Water Monterey recycled water project would satisfy future demand and would have less environmental impacts on coastal resources than the desalination plant. The staff report contradicted findings made by the CPUC in Decision 18-09-017. Additionally, on November 4, 2019, Coastal Commission staff released an addendum to the staff report, concluding that additional groundwater modeling was needed.

Following release of the addendum, Coastal Commission staff and CPUC staff met to discuss the Coastal Commission staff recommendation, at which time CPUC staff raised questions about the Coastal Commission staff's findings on water supply and demand, groundwater impacts, and the viability of an expansion of the Pure Water Monterey

project. Additionally, the Coastal Commission identified unresolved issues concerning whether feasible and less environmentally damaging alternatives to the proposed desalination project had been adequately evaluated; whether sufficient information existed to assess the project's potential impacts on groundwater resources and hydrogeologic conditions; and whether the project would adversely affect coastal resources protected under the California Coastal Act, including environmentally sensitive habitat areas and related natural resources. The Coastal Commission determined that these issues warranted further consideration and technical review. Although the Coastal Commission opened its public hearing on both the appeal from the City of Marina's denial, and California American Water's application for a coastal development permit within the Coastal Commission's original jurisdiction, on November 14, 2019, Coastal Commission staff advised that no vote would be taken at the meeting because questions raised by the CPUC required further investigation. The hearing was therefore continued to September 17, 2020, without taking final action, pending receipt and evaluation of additional information, including further analysis concerning groundwater and hydrogeologic impacts.

To reduce some of the existing uncertainties to determine whether the proposed project would conform to the groundwater protection provision of Coastal Act Section 30231, Coastal Commission staff, as part of the Commission's prior review of the project, contracted with an independent licensed hydrogeologist to review some of these studies and conclusions, to conduct additional analyses, and to reach independent conclusions about these issues. The initial review, prepared in November 2019, concluded that there were several substantial remaining uncertainties about how California American Water's extraction of groundwater may affect the groundwater basin and the amount of potentially usable groundwater within the area. It also recommended that additional data collection and modeling were needed to further reduce the degree of uncertainty about expected impacts, although it also suggested that some of that uncertainty and potential

impacts could be reduced by ensuring that the screened sections of California American Water's wells extended further seaward so they could extract a greater percentage of seawater from beneath Monterey Bay. After the Commission's November 2019 hearing, California American Water agreed to fund some of the additional recommended analysis to allow for further reduction in uncertainties about the proposed project's effects on groundwater and to better determine the amount of "non-seawater" likely to be extracted by California American Water's wells. The Coastal Commission's independent consultant submitted its second review in July 2020.

On August 25, 2020, Coastal Commission staff released a staff report again recommending denial of the project. Although the report concluded that the project would have a negligible impact on groundwater resources, the report also concluded that the project would impact other coastal resources, such as environmentally sensitive habitat areas and wetlands, and the expansion of the Pure Water Monterey project remained a feasible alternative that would avoid those impacts. The staff report also noted disproportionate impacts to communities of concern. On September 16, 2020, California American Water withdrew its original jurisdiction application (the appeal remained pending). The withdrawal was to allow additional time to address staff's environmental justice and community concerns. California American Water noted that it intended to refile the application as soon as possible.

California American Water refiled the original jurisdiction application on November 6, 2020. On December 3, 2020, the Coastal Commission sent a notice of incomplete application, identifying certain additional information needed to consider the application complete. Between 2020 and 2022 California American Water undertook substantial efforts to provide additional information and address concerns raised by the Coastal Commission. California American Water proposed reducing the initial project footprint through a phased implementation approach, lowering the initial desalination production

capacity, revising pipeline construction methods to reduce impacts to environmentally sensitive habitat areas, and proposing a program to provide cost assistance to low income customers. California American Water also conducted public outreach efforts resulting in a proposal to provide the City of Marina with funds for use by the City for enhancements or amenities the City may want to develop for its residents. On September 1, 2022, the Coastal Commission deemed California American Water's application complete.

The Coastal Commission considered the resubmitted application and the appeal of the City of Marina's permit denial at the Coastal Commission's November 17, 2022, hearing. At that hearing, the Coastal Commission approved the project subject to numerous conditions. Those conditions address coastal resource protection, environmentally sensitive habitat areas, groundwater monitoring, wetlands protection, environmental justice concerns, public access, and long-term operational requirements. The approval allowed the project to move forward, subject to satisfaction of the Coastal Commission's conditions and the acquisition of additional required permits and approvals.

Q18. What specific actions did California American Water take between November 2019 and November 2022 to advance the Coastal Commission permitting and minimize delay?

A18. A significant portion of the project schedule extension resulted from the extensive review process associated with obtaining Coastal Commission approval for the desalination facilities. The Coastal Commission review process required multiple rounds of technical evaluation, environmental analysis, permit condition development, coordination with local agencies, and public hearings before final action could occur.

California American Water took a number of actions between November 2019 and November 2022 to address issues raised by Coastal Commission staff and Commissioners, revising elements of the project design (such as adopting the phased

approach), developing additional technical information, and increasing stakeholder outreach. Following concerns raised during earlier Coastal Commission review, California American Water provided additional groundwater analyses, data collection, modeling, and technical evaluations intended to address issues associated with groundwater drawdown, seawater intrusion, wetlands, and water supply impacts. The following activities to address Coastal Commission concerns took place between November 2019 and November 2022:

Community Outreach: California American Water conducted targeted outreach to both Native American tribal governments, local communities, and local governments to update them on the MPWSP and receive feedback, concerns, and questions. California American Water met with Marina officials multiple times in 2020 and 2021 to discuss potential compromises, project benefits, and possible partnerships. California American Water conducted multiple in person meetings and workshops with tribal governments and in the communities of Marina, Seaside, Sand City, Salinas, and Castroville between July and October 2022. California American Water conducted outreach to dozens of community organizations and to residents via mail, advertising, social media, and phone. Finally, California American Water compiled the input it received, prepared comprehensive responses to address comments, questions, and concerns; and California American Water identified changes to the project in response to the public's concerns and posted the document on the MPWSP website that California American Water maintains.

California American Water prepared, and submitted to the Coastal Commission, a proposal to fund certain public improvements in Marina, and California American Water developed a public access plan at the Cemex site.

- Low Income Rate Relief: Subject to CPUC approval, California American Water proposed enhancement and expansion of existing programs, and multiple new programs to assist qualifying low-income customers with rates.
- Mitigation: In November 2020, California American Water submitted a detailed Draft Habitat Mitigation and Monitoring Plan for the Cemex site and along the project pipeline route to mitigate impacts for potential environmentally sensitive habitat areas ("ESHA") from the project. California American Water worked with the Coastal Commission and revised the plan in response to comments received. California American Water then submitted an updated plan in September 2022.
- Wetlands: In 2020, California American Water's consultants prepared and submitted to the Coastal Commission a technical memorandum analyzing the influence of subsurface aquifer drawdown upon surface waters and wetlands in the vicinity of the project. The analysis concluded that pumping from the project's slant wells would not adversely affect nearby wetlands and ponds. Nevertheless, the memorandum proposed a comprehensive adaptive management program to ensure that potential impacts are avoided and, if necessary, implementation of wetland resiliency, enhancement, or restoration activities so that there would be no adverse impacts.
- Supply and Demand: In September 2022, California American Water provided the Coastal Commission with updated detailed supply and demand projections demonstrating the need for the project. California American Water also informed the Coastal Commission of the ongoing proceeding before the CPUC to receive updates on projected supply and demand.
- Project Phasing: In response to community concerns, California American Water proposed phasing construction of the project, with an initial 4.8 MGD phase, to reduce the project's footprint at the Cemex site and reduce potential impacts to ESHA.

- Groundwater: The Coastal Commission acknowledged potential impacts to groundwater had been extensively analyzed as part of the CPUC's CEQA review, operation of the slant test well, and other analyses, but that some degree of uncertainty remained. The Coastal Commission engaged, and California American Water funded, an independent hydrogeologist to review past studies and conclusions, conduct additional analyses and reach independent conclusions about these issues. An initial review prepared in November 2019 by the independent consultant concluded that the project would have a negligible impact on seawater intrusion, but some uncertainty remained. The report recommended additional data collection and modeling to reduce the degree of uncertainty. The report also indicated that some uncertainty and potential impacts could be reduced by extending the screened portions of the slant wells further seaward. California American Water funded the additional work recommended by the consultant.

In July 2020, the independent consultant submitted its second review, which recommended that additional modeling be done to further evaluate and describe potential groundwater impacts. Specifically, the consultant recommended use of a transient model and a number of specific revisions to the model. California American Water's consultants implemented the recommendations of the independent consultant, conducted additional modeling with several changed parameters recommended by the independent consultant, and in July 2022 submitted a detailed evaluation of the results of the additional work.

The most significant design modification was California American Water's adoption of a phased project approach. Rather than immediately constructing the full 6.4 MGD desalination capacity, California American Water proposed an initial 4.8 MGD phase, with expansion to 6.4 MGD upon demonstration of future need and successful operation of the first phase. The Coastal Commission staff found that this modification reduced the

initial environmental footprint of the project, including reductions in ESHA impacts and potential groundwater impacts. In addition, California American Water modified the project footprint and wellfield design to address concerns raised by the City of Marina and others regarding habitat impacts. The company agreed to a smaller footprint and project phasing and revised aspects of the well design to reduce potential impacts to ESHA. California American Water also revised portions of the pipeline design to use tunneling and trenchless construction techniques rather than open trench construction. According to the Coastal Commission staff report, these revisions reduced surface disturbance and reduced ESHA impacts by several acres compared to earlier project versions.

Q19. Is 4.8 MGD within the scope of what D.18-09-017 authorized? Please provide the engineering team's view.

A19. Yes. From an engineering perspective, the 4.8 MGD desalination facility is within the scope of the project authorized by D.18-09-017 because it represents a phased implementation of the authorized 6.4 MGD MPWSP, not a separate or standalone 4.8 MGD project. D.18-09-017 approved the 6.4 MGD desalination project as the preferred alternative and recognized that plant capacity could be adjusted through the modular addition or removal of desalination treatment trains. The decision did not require that all authorized capacity be constructed simultaneously.

The currently proposed desalination facilities are not a different project from the one approved in D.18-09-017. Rather, they are the initial phase of the authorized 6.4 MGD desalination facility and preserve the ability to achieve the full authorized capacity through future expansion. The desalination plant, intake facilities, conveyance pipelines, and related infrastructure being constructed for the 4.8 MGD facilities are integral components of the ultimate 6.4 MGD project. Accordingly, the 4.8 MGD configuration

is properly viewed as a phased implementation of the project authorized by D.18-09-017 and therefore falls within the scope of that authorization.

C. MPWSP – 4.8 MGD Desalination Facilities

Q20. What is the current scope of the MPWSP desalination facilities?

A20. The current scope of the MPWSP desalination facilities as proposed for construction includes:

- Desalination plant with a capacity of 4.8 MGD and the ability to expand to 6.4 MGD.
- 5 slant wells (4 new plus the existing test well converted to a production well) at the CEMEX site.
- Brine discharge via Monterey One's existing ocean outfall.
- Source-water, transfer, product-water, brine, and related pipelines.
- Brine storage basins/ponds and treatment storage.
- Appurtenant facilities include RO treatment, pretreatment, post-treatment, chemical systems, electrical/SCADA, administration, maintenance, pumping and ancillary infrastructure.

Q21. What is the production volume in afy associated with the 4.8 MGD desalination facilities portion of the plant, and how does it compare to the 6,250 afy associated with the 6.4 MGD plant configuration?

A21. The 4.8 MGD desalination plant corresponds to approximately 4,700 afy of production in non-drought years. Compared with 6,250 afy for the 6.4 MGD configuration, the 4.8 MGD configuration would provide approximately 1,550 afy less water, or about 25% less production capacity until the 6.4 MGD buildout is completed.

Q22. What are the engineering specifications — capacity, membrane system, pre-treatment, post-treatment — for the 4.8 MGD plant as currently designed, compared to the 6.4 MGD configuration?

A22. The 4.8 MGD facility is intended as the first phase of a project that preserves the ability to expand to the full capacity of 6.4 MGD. Consistent with what the CPUC has authorized, from a treatment-process perspective, the currently designed 4.8 MGD desalination facility employs the same fundamental desalination technology and treatment train the CPUC authorized in D.18-09-017 for the MPWSP project. The 4.8 MGD desalination facility utilizes a seawater desalination system consisting of pretreatment, reverse osmosis membrane treatment, and post-treatment stabilization and disinfection processes. With respect to pretreatment, the current design includes granular media pressure filters and cartridge filters to remove suspended solids and other constituents that could adversely affect membrane performance. These pretreatment facilities serve the same functional purpose as those the CPUC evaluated as part of the 6.4 MGD authorized desalination project. With respect to the membrane system, the current design utilizes a two-pass reverse osmosis membrane system as the primary desalination technology. Reverse osmosis membranes remove dissolved salts and other constituents from the seawater source, producing potable water that can be conditioned and delivered to the distribution system. With respect to post-treatment, the current design includes product-water stabilization and corrosion-control treatment, disinfection, and associated finished-water storage and conveyance facilities. The facility also includes the chemical feed systems and operational controls necessary to produce water that meets drinking water standards prior to entering the distribution system.

Accordingly, the engineering distinction between the currently proposed 4.8 MGD desalination facility and the 6.4 MGD facility authorized in D.18-09-017, is principally one of capacity and sizing, not treatment technology. The same overall treatment approach—pretreatment, reverse osmosis desalination, and post-treatment conditioning

and disinfection—remains unchanged. The desalination facility is designed to produce up to 4.8 MGD of potable water initially while preserving infrastructure and design features that support future expansion to the full 6.4 MGD capacity authorized by the CPUC.

Q23. What is the design basis for the 4.8 MGD plant production?

A23. The proposed desalination facility is designed to produce up to 4.8 MGD of potable water using the treatment process previously approved by the CPUC as part of the MPWSP, consisting of pretreatment, reverse osmosis desalination, and post-treatment conditioning and disinfection. The facility has a design recovery rate of 42.5 percent, which means that 42.5% of the seawater entering the reverse osmosis system is converted into drinking water while the remaining 57.5% leaves the plant as brine concentrate. The facility is designed based on an average feedwater salinity of 33.6 parts per thousand ("ppt") and an average feedwater temperature of 12 degrees Celsius. Under those design conditions, the facility's maximum electrical utilization is 24.3 kilowatt-hours per thousand gallons of treated water produced. The facility is also designed to meet potable water quality requirements, including average total dissolved solids of 300 mg/L or less and average turbidity of 0.5 NTU or less.

Q24. Does phasing to 4.8 MGD still meet the project objectives stated in D.18-09-017, including: (a) Carmel River CDO compliance; (b) Seaside Basin allocation compliance; (c) Basin replenishment obligation; (d) service to legal lots of record; and (e) meeting peak-hour demand?

A24. Yes. From an engineering perspective, the 4.8 MGD desalination facility continues to support the fundamental objectives underlying the CPUC's approval of the MPWSP when the facility is operated as part of the project's integrated water supply portfolio, which includes Pure Water Monterey, ASR, and existing system facilities. From a design and engineering standpoint, the 4.8 MGD facility is the same desalination project as the 6.4

MGD facility authorized by the CPUC, with the initial phase constructed at a lower production capacity while preserving the ability to expand to the full 6.4 MGD capacity.

The initial 4.8 MGD facility provides a new drought-resilient potable water supply that reduces reliance on Carmel River diversions and groundwater pumping, thereby supporting compliance with the Carmel River CDO and Seaside Groundwater Basin production constraints. It also remains integrated with the broader MPWSP strategy, including Pure Water Monterey and ASR operations, which together support basin replenishment objectives and long-term water supply reliability.

In addition, the engineering analysis indicates that the 4.8 MGD facility, together with existing and approved complementary water supplies, continues to provide a reliable foundation for serving existing customers and anticipated demand associated with legal lots of record. Peak demands are met through the combined operation of water production, storage, conveyance, groundwater, recycled water, and ASR facilities. The desalination facility was designed to operate within that integrated system.

Desalination is especially critical during drought periods because it provides a precipitation-independent (i.e., drought resistant) source of supply when other water sources may be constrained because of a lack of rain. As recognized by the CPUC in D.18-09-017, desalination provides additional reliability during drought conditions and helps ensure the system can continue to meet customer demands when alternative supplies are limited.

While the CPUC ultimately authorized a 6.4 MGD desalination facility and found that larger facility was the preferred alternative, the initial 4.8 MGD phase of the facility continues to advance the same fundamental project objectives by contributing to regulatory compliance, water supply reliability, and long-term portfolio resilience. The

difference between the 4.8 MGD and 6.4 MGD configurations is principally one of initial production capacity and phasing, rather than a change in the fundamental purpose, function, or engineering concept of the desalination project. The 4.8 MGD configuration represents a phased implementation approach while preserving a pathway to the full 6.4 MGD capacity previously authorized by the CPUC.

1. Slant Wells

Q25. How many subsurface slant wells were authorized in D.18-09-017, and what were the authorized locations and design specifications (depth, angle, casing, production capacity per well)?

A25. D.18-09-017 authorized a seawater intake system consisting of seven subsurface slant wells, including six new production wells and the conversion of the existing test slant well, all located at the former CEMEX/Lapis site in Marina, California.

The approved FEIR/EIS (the environmental document certified and adopted through D.18-09-017) contained substantially more detail on the slant wells than the decision itself. The decision primarily identifies the approved alternative and number of wells, while the FEIR/EIS and its supporting project-description chapters contain the engineering description used for environmental analysis. The FEIR/EIS described that each slant well was expected to produce approximately 2,000 to 2,500 gallons per minute, resulting in a total intake capacity of approximately 24.1 million gallons per day for the full ten-well project.

For Alternative 5a, which was later selected as the environmentally superior alternative and subsequently approved by the CPUC, the FEIR/EIS described a reduced-capacity project consisting of seven slant wells and an intake capacity of approximately 15.5 million gallons per day supporting a 6.4 MGD desalination plant.

The FEIR/EIS further described the wells as being approximately 800 to 1,000 feet in length, drilled at angles ranging from approximately 14 to 19 degrees below horizontal, and extending beneath the shoreline to offshore locations. The wells were expected to terminate between approximately 63 and 356 feet seaward of the mean high-water line and reach depths of approximately 190 to 250 feet below the seafloor. While the FEIR/EIS provided substantial engineering detail sufficient to support environmental analysis, it was not a final construction drawing package. The FEIR/EIS described the wells' location, length, angle, depth, pumping capacity, and screened aquifers, but it did not establish final construction specifications such as casing diameter, casing wall thickness, screen slot size, or final materials of construction.

Q26. How many slant wells are included in the current 4.8 MGD phase? What are their locations, depths, angles, casing specifications, and individual production capacities?

A26. The 4.8 MGD facilities include the construction of four new production wells and the conversion of the existing test well into a production well. The test well will be known as Slant Well 1 ("SW-1"). SW-1 was constructed at a 19-degree angle with a borehole length of 724 feet, and a depth of 202 feet below sea level. SW-1 consists of conductor casing diameters of 30", 28", and 26" with respective lengths of 63 feet, 123 feet, and 288 feet. Conductor casings are made of mild steel. SW-1 includes 200 linear feet and 55 linear feet of 18" and 14" casing respectively. SW-1 includes 180 linear feet of 18" diameter screen and 320 linear feet of 14" diameter screen. Casing and screens are constructed of 2507 Super Duplex stainless steel. Slant Well 2 ("SW-2") through Slant Well 5 ("SW-5") are designed to be constructed at a 14-degree angle with a borehole length of at least 1000 linear feet. Each well is designed to consist of 50 feet of 44" diameter conductor casing made of mild steel. SW-2 through SW-5 are designed to include 262 linear feet of 20" diameter well casing and 35 linear feet of 14" diameter casing. SW-2 & SW-3 are designed to include 320 feet and 330 feet of 20" & 14" diameter well screens respectively. SW-4 & SW-5 are designed to include 330 and 370

feet of 20" and 14" diameter well screens respectively. Well screens and casings are all designed to be constructed of 2507 Super Duplex stainless steel. SW-2 & SW-3 are designed to be constructed to a depth of 204 feet below sea level. SW-4 is designed to be constructed to a depth of 214 feet below sea level and SW-5 is designed to be constructed to a depth of 223 feet below sea level. Based on test data, SW-1 is anticipated to have a pumping capacity of approximately 2,000 gallons per minute. It is difficult to determine the capacity of a well until it has been drilled and tested. Due to the longer lengths of well screen, SW-2 through SW-5 are estimated to produce up to approximately 2,250 gallons per minute each.

Q27. Which slant wells have been or are planned to be constructed, permitted, or tested? Provide the status of each well with dates of key milestones.

A27. To date, one test slant well has been constructed, permitted, and successfully tested. The well is currently authorized as a test well and is not permitted for potable water production. To maintain the well and preserve its operational integrity, California American Water has obtained periodic CDP amendments from the Coastal Commission allowing the well to remain in place and be exercised monthly. Most recently, CDP Amendment Nos. 9-14-1735-A10 / A-3-MRA-14-0050-A10 authorized the test slant well to remain in place and be maintained through February 28, 2027.

California American Water is currently developing plans to obtain the necessary permits to convert the existing test slant well into a production well that can provide drinking water as part of the MPWSP. Upon obtaining the required approvals, the existing test well is expected to become one of the project's operational intake wells, complementing the planned construction of the remaining slant wells needed to support the desalination facility.

The current construction plan contemplates a phased development of the four new slant wells. The plan considers environmental permitting requirements, including restrictions associated with the Western snowy plover nesting season. Construction and testing activities are therefore scheduled during the non-nesting season, which generally extends from October 1 through February 28.

Under the current schedule, SW-5 is anticipated to be constructed and tested during the 2027-2028 non-nesting season. Construction of SW-3 is anticipated to begin during that same 2027-2028 season, with a portion of the drilling activities completed at that time. SW-3 is then anticipated to be completed and tested during the following 2028-2029 non-nesting season.

SW-4 is anticipated to be constructed, completed, and tested during the 2028-2029 non-nesting season. Finally, SW-2 is anticipated to be constructed, completed, and tested during the 2029-2030 non-nesting season.

Accordingly, the current sequencing anticipates: (1) SW-5 construction and testing in 2027-2028; (2) SW-3 construction beginning in 2027-2028 and completion in 2028-2029; (3) SW-4 construction and testing in 2028-2029; and (4) SW-2 construction and testing in 2029-2030. This phased approach facilitates compliance with environmental constraints while allowing the intake system to be developed in an orderly manner.

Q28. Did the November 2022 Coastal Commission CDP impose conditions on slant well construction that were not anticipated in D.18-09-017?

A28. Yes. The November 2022 CDP included special conditions governing slant-well design, construction, monitoring, and environmental protection that were not specifically prescribed in D.18-09-017. The main drivers for the special conditions were the Coastal Commission's concerns about impacts from project pumping on groundwater and

sensitive environmental resources. While the underlying slant-well intake concept remains unchanged, the Coastal Commission CDP imposed extensive design, monitoring, and environmental compliance requirements in addition to the Mitigation Monitoring and Reporting Program adopted by the CPUC as part of Decision 18-09-017. These additional requirements were developed as part of the Coastal Commission's independent Coastal Act review, and they influence project implementation and associated costs.

Most notably, Special Condition 11 of the CDP requires that the intake wells be designed and constructed to extend at least 1,000 feet seaward of the proposed wellhead and shall screen wells so they extract water as far seaward as is feasible without penetrating the 400-foot aquifer to minimize potential impacts to groundwater resources. This condition establishes an additional design consideration for well alignment and construction. The completed design demonstrates compliance with this special condition.

The Coastal Commission also adopted Special Condition 12, which requires implementation of a groundwater monitoring plan to ensure that the slant well pumping does not adversely affect the quality and availability of fresh water in the aquifers that are a source of drinking water. This condition includes installation of additional monitoring wells, a comprehensive monitoring program, reporting, and response measures intended to evaluate and address potential groundwater impacts associated with well construction and operation.

The Coastal Commission also adopted Special Condition 13, requiring a wetland and vernal pond adaptive management program to protect against adverse impacts to area wetlands and vernal ponds. This condition includes data collection, a detailed monitoring plan, and proposed adaptive management actions if the data suggests the project may be having an adverse effect on wetlands or vernal ponds.

In addition, the CDP includes requirements related to protection of coastal dunes and environmentally sensitive habitat areas. These requirements include biological and environmental monitoring, impact verification, mitigation and restoration measures, long-term monitoring, and adaptive management obligations associated with construction and operation of the well field.

Q29. Is there anything unique about drilling the slant wells?

A29. Yes. The drill rig is not a conventional water-well rig or a standard horizontal directional drilling ("HDD") rig. It is a highly specialized, custom-modified piece of equipment designed specifically to construct long-reach subsurface intake wells extending beneath the ocean floor. There is only one drill rig currently available in the United States capable of performing the extended-reach directional drilling required for the MPWSP's ocean-subsurface slant wells.

The slant wells are drilled from an onshore location at approximately 14 degrees below horizontal, extending roughly 1,000 feet beneath the shoreline and seafloor to collect seawater naturally filtered through coastal sands.

The rig was modified specifically for slant-well construction. The drilling unit is a modified Foremost DR-40 dual-rotary drill rig configured for low-angle drilling. The rig's anchoring system and drilling configuration were specially adapted for the Monterey application and the demands of constructing large-diameter slant wells.

The rig provides approximately 5 million inch-pounds (about 416,000 ft-lb) of torque, roughly double the capacity of many other available rigs. This torque is necessary to install and ultimately remove the large temporary steel casings used during construction of the well.

Unlike traditional HDD operations, the MPWSP wells require progressive installation of large-diameter temporary casing strings, ultimately accommodating permanent stainless-steel well screens and casings extending beneath the ocean floor. The rig must both advance these casings and later extract them while overcoming friction, gravel-pack resistance, and the weight of the casing string.

The rig combines features of vertical water-well drilling and directional drilling. It functions more like a large vertical drilling rig that has been adapted to operate at a low inclination angle.

Q30. What is the current status of State Lands Commission lease application(s) for slant well areas?

A30. On June 23, 2026, the State Lands Commission approved the lease application for the four slant wells for the 4.8 MGD desalination plant. On July 24, 2026, the City of Marina, Monterey Peninsula Water Management District, Marina Coast Water District ("MCWD") and MCWD GSA filed a petition for writ of mandate in Monterey Superior Court challenging the State Lands Commission's approval of the lease. That matter remains pending.

Q31. What raw water quality testing has been conducted at the slant well sites, and what do results indicate about pre-treatment requirements compared to D.18-09-017 assumptions?

A31. California American Water constructed and operated a full-scale test slant well at the CEMEX site in Marina. The testing program included drilling investigations, long-term pumping tests, groundwater monitoring, and raw-water quality sampling to evaluate whether the offshore aquifer system could provide source water suitable for desalination. The results of that testing were subsequently incorporated into the MPWSP environmental review and permitting proceedings.

Extensive test-slant-well pumping and water-quality sampling were performed at the CEMEX test well beginning in 2015, and those results generally confirmed one of the core assumptions underlying the MPWSP: namely, that a subsurface slant-well intake would provide naturally filtered source water with significantly lower particulate loading than an open-ocean intake, thereby reducing pretreatment requirements.

The test results confirmed that the subsurface intake functions as a natural filtration system. Project technical presentations reported that water drawn through offshore sediments benefits from substantial natural filtration, reducing suspended solids, turbidity, algae, and other constituents commonly encountered in direct seawater intakes. The project proponents identified reduced pretreatment requirements as one of the principal operational advantages of the slant-well approach.

Results in this area were consistent with the assumptions adopted in D.18-09-017. The CPUC-approved project was premised on the use of subsurface slant wells specifically because they were expected to produce higher-quality feedwater than an open-ocean intake and thereby reduce pretreatment needs. The testing performed at the CEMEX site appears to have validated that fundamental assumption.

2. Desalination Plant

Q32. Has the proposed desalination plant site changed from what was authorized in D.18-09-017?

A32. No material desalination plant site change has been identified between D.18-09-017 and the later Coastal Commission application. The plant remains at the Monterey Regional Environmental Park / M1W area contemplated in the CPUC-approved project.

Q33. What is the current design basis document or design-build scope for the desalination plant? What engineering milestones have been completed?

A33. The current design basis for the MPWSP desalination facility is documented through the Basis of Design Report (see Attachment 3 CONFIDENTIAL) and the associated design-build contract documents between California American Water and CDM Constructors, Inc. The Basis of Design Report establishes the technical and operational requirements for the desalination facility, including the process design, hydraulic criteria, treatment capacity, conveyance interfaces, and expansion capability from the initial 4.8 MGD configuration to the ultimate 6.4 MGD configuration. The report describes a seawater reverse osmosis ("SWRO") plant designed to operate continuously at an initial capacity of 4.8 MGD, while preserving the ability for future expansion to 6.4 MGD. The design-build scope is further defined in the design build agreement. Under that scope, the desalination plant includes pretreatment filtration facilities, reverse osmosis treatment systems, post-treatment stabilization systems, brine equalization and pumping facilities, finished-water storage tanks, pumping systems, electrical systems, buildings, and associated process and operational infrastructure.

The engineering milestones completed to date include:

1. Conceptual design and project development evaluations.
2. Preliminary design, including alternatives analysis, geotechnical investigations, and Basis of Design development.
3. Draft and final permitting design packages.
4. Final design completion, including redesign associated with the phased initial 4.8 MGD facility.
5. Issued-for-Construction ("IFC") package preparation as part of the design-build delivery process.
6. Transition into construction following execution of the design-build contract in April 2026 and commencement of construction activities in August 2026.

Q34. Has the process technology (membrane type, pre-treatment approach, energy recovery) changed from what was described in the D.18-09-017 FEIR/EIS?

A34. The MPWSP's core treatment technology remains substantially unchanged from the FEIR/EIS and D.18-09-017 design basis. The project continues to rely on subsurface slant-well intakes, granular media and cartridge pretreatment, reverse osmosis with partial second-pass treatment, and energy-recovery technology.

3. Brine Discharge System

Q35. What brine discharge system is currently proposed for the 4.8 MGD facilities, and how does it compare in design and capacity to the system authorized in D.18-09-017?

A35. The currently proposed brine discharge system continues to utilize the same fundamental disposal concept that was authorized in D.18-09-017: desalination concentrate is conveyed to the M1W Regional Treatment Plant. The concentrate is then blended with M1W wastewater treatment flows and discharged through the existing M1W ocean outfall into the Monterey Bay.

Under the current design, brine generated by the desalination plant's reverse osmosis treatment process is first directed to an on-site equalization basin and associated brine storage facilities. From there, the concentrate is conveyed through a dedicated brine pipeline to the M1W treatment facility. At M1W, the brine enters a brine mixing structure where it is commingled with M1W waste streams, including secondary effluent and other treatment residual streams, before discharge through the existing 60-inch ocean outfall.

Q36. What is the current status of the brine discharge permits and related agreements?

A36. An application for amendment of M1W's discharge permit was submitted by M1W to Regional Water Quality Control Board ("RWQCB") on October 1, 2024. The alternatives analysis was approved by M1W's Board in June 2025 and was submitted to

the RWQCB on July 1, 2025. The RWQCB posted the draft NPDES permit for public comment on July 31, 2026. California American Water submitted comments on August 31. The draft permit is scheduled to be voted on at the December 2026 meeting.

An application for a CDP for the outfall improvements was submitted by M1W on April 1, 2026. On April 29, 2026, the Coastal Commission sent a notice of incomplete application. Re-submittal of the Coastal Commission permit for the outfall improvements is scheduled to be submitted in fourth quarter 2026 with a hearing anticipated for Spring 2027.

California American Water has a written agreement with M1W to negotiate the outfall lease in good faith. The agreement extends to September 2027.

Q37. What brine characterization testing has been completed since D.18-09-017? Do current brine quality projections require different treatment or discharge specifications than originally anticipated?

A37. Since D.18-09-017, additional brine characterization and discharge compliance evaluations have been performed using data from the temporary test slant well collected between April 2015 and February 2018, together with M1W operational data through August 2023. Those analyses supported development of the project's NPDES permit, Ocean Plan compliance evaluations, and the Monitoring and Reporting Plan for the California American Water Company Desalination Brine Discharge Monitoring Program, prepared by Applied Marine Sciences, dated December 10, 2024.

Based on the analyses completed to date, the project continues to utilize the same fundamental brine management approach approved in D.18-09-017, whereby desalination concentrate is conveyed to M1W, blended with other treatment facility flows, and discharged through the existing ocean outfall.

4. Production Water Conveyance Pipelines

Q38. What are the routes, diameters, materials, and specifications of the product water conveyance pipelines in the current design, and how do they compare to what was authorized in D.18-09-017?

A38. The product water conveyance system in the current design consists primarily of the Transfer Pipeline and the Castroville Pipeline. The overall conveyance corridors remain substantially consistent with those evaluated and approved as part of the MPWSP, with refinements resulting from continued engineering and permitting activities. The current alignment continues adjacent to Charles Benson Road, and utilizes Lapis Road, the Transportation Agency for Monterey County rail corridor, Lightfighter Drive, and General Jim Moore Boulevard to convey desalinated water into California American Water's Monterey distribution system.

The Transfer Pipeline originates at the proposed desalination facility, extends adjacent to Charles Benson Road and along Lapis Road, enters the TAMC rail corridor through Marina and State Parks Land, and connects to previously constructed pipeline segments along Lightfighter Drive and General Jim Moore Boulevard in Seaside. Under the current design, the newly constructed portions of the Transfer Pipeline are proposed as 24-inch diameter transmission mains. Current Division of Drinking Water permitting documents are based on 24-inch ductile iron pipe conforming to AWWA C151 standards with a Class 250 pressure rating, asphaltic coating, and restrained or push-on joints. The pipeline is designed to operate generally within a pressure range of approximately 50 to 150 psi. The design evaluation also considered PVC and HDPE materials.

The Castroville Pipeline branches from the Transfer Pipeline near Lapis Road and extends north toward Castroville. The alignment generally follows the TAMC corridor and Monte Road, crosses the Salinas River at the Monte Road Bridge, and continues to delivery points serving the Castroville Community Services District ("CCSD") and the

Castroville Seawater Intrusion Project ("CSIP"). The current design consists of a 12-inch pipeline from the Transfer Pipeline connection to the CSIP turnout and an 8-inch pipeline from that point north to the CCSD connection. In addition to supporting regional water management objectives, the Castroville Pipeline is intended to provide a connection to CCSD, a community that has historically faced drinking water reliability and water quality challenges and is recognized as a disadvantaged community. The pipeline therefore provides an important public benefit by creating the ability to deliver a reliable source of potable water to the Castroville area while also supporting the broader regional water supply strategy.

Q39. What pipeline segments have been constructed, partially completed, permitted, or designed as of the testimony filing date?

A39. The product water conveyance facilities that have been physically constructed to date are portions of the Transfer Pipeline located within the City of Seaside. Specifically, two segments of the Transfer Pipeline were installed along Lightfighter Drive and General Jim Moore Boulevard. Beyond those previously completed Transfer Pipeline segments, the remaining pipeline facilities associated with the current design have advanced through various stages of engineering design and permitting but have not yet been constructed. These include:

The Transfer Pipeline extending from the desalination plant along and adjacent to Charles Benson Road, Lapis Road, the TAMC rail corridor, Marina, and Seaside to connect with the previously installed pipeline segments. Current design documents identify this facility as a 24-inch diameter transmission main, with detailed design drawings and permit applications having been prepared.

The Feedwater Pipeline will convey seawater from the slant well intake system to the desalination plant. The July 2026 Basis of Design Report and associated pipeline plans

document the pipeline alignment, hydraulic design, and material recommendations, and permitting submittals have been prepared for the facility.

The Brine Pipeline will convey concentrate from the desalination plant to M1W's treatment facility and ocean outfall system. Design drawings, hydraulic analyses, and permitting documentation have been completed or are in draft form, but the facility has not yet been constructed.

The Castroville Pipeline will branch from the Transfer Pipeline and provide deliveries to the CCSD and the CSIP. Current design drawings and hydraulic evaluations have been prepared, including the proposed Salinas River crossing at the Monte Road Bridge, but the facility has not yet been constructed.

Q40. Have any pipeline route changes occurred since D.18-09-017?

A40. The alignments and routing of the various pipeline segments have not changed substantially and remain generally consistent with the previous design. Minor alignment refinements have been incorporated, including relocation of the Highway 1 crossing at Divarty Street in Seaside for the transfer pipeline and rerouting portions of the transfer and feedwater pipelines into Lapis Road to avoid impacts to environmentally sensitive areas.

Q41. What interconnections are included in the current pipeline design, and do these differ from the D.18-09-017 authorization?

A41. The current design incorporates several key pressure management facilities and system interconnections intended to allow treated desalinated water to be conveyed throughout California American Water's Monterey service area while also providing deliveries to other participating systems. These facilities include interconnections with California American Water's Monterey distribution system, the ASR system, California American

Water's Forest Lake Tanks, the CCSD, and the CSIP. These all remain consistent with what the CPUC previously authorized.

III. UPDATED COST ESTIMATES AND COST CAP REQUEST

A. Original Cost Cap Components

Q42. What was the basis for the original cost caps established by D.18-09-017?

A42. The 2017 Direct Testimony of Christopher Cook[2] provided the following cost estimates:

Table 2: September 2017 Update Dollars

Items	September 2017 Update (2017 Dollars) (Units in Millions)
	6.4 MGD
Base Construction Costs	
Intake Wells/Supply/Return Facilities	$48.6
Desalination Plant	$82.8
Northern Transfer Pipeline	$13.9
CAW Convey. & ASR Systems	$23.6
Base Construction Subtotal	$168.9
Implementation Costs	$55.4
ROW/Land/Outfall	$14.6
Escalation Allowance	$19.1
Contingency Allowance	$21.2
Mitigation Cost Allowance	NA
Brine & Potrero Rd	NA
Total Capital Cost	**$279**

[2] Direct Testimony of Christopher Cook, Errata Version dated September 27, 2017, Attachment 1.

Monterey Pipeline & Pump Station	$50
Total Capital Cost with Mont. PL & PS	**$329**

Q43. Did the Commission adopt California American Water's cost estimates?

A43. Yes. In D.18-09-017, the Commission adopted a cost cap of $279.1 million, in 2017 dollars. The Commission explained that "[t]he total increased cost cap of $279.1 million proposed by Cal-Am, includes the remaining amount for Cal-Am-Only Facilities ($239.2 million for the desalination plant at 6.4 MGD and the $39.9 million for the remaining Cal-Am Only Facilities)."[3]

Q44. What was the basis for the $39.9 million for the remaining Cal-Am Only Facilities?

A44. The 2017 Direct Testimony of Christopher Cook[4] provided the following cost estimates:

Table 3: 2017 Direct Testimony of Christopher Cook Cost Estimates

Item	**Sept. 2017 Update (2017 Dollars) (Units in Millions)**
	6.4 MGD
Base Construction Costs	
Transfer PL (Seaside to Term. Res.)	$9.7
So. Trans. PL (1st to Seaside Turnout)	
Monterey Pipeline	Under Construction
Monterey Transfer Pump Station	Under Construction
Valley Greens Pump Station	$1.9
Terminal Reservoir	Value Engineering
ASR Wells 5 & 6	$8.0
ASR Pipeline	$4.0

[3] D.18-09-017, p.137.

[4] Direct Testimony of Christopher Cook, Errata Version dated September 27, 2017, Attachment 1.

Base Construction Subtotal	$23.6
Implementation Costs	$7.7
ROW/Land	$2.8
Escalation Allowance	$1.2
Contingency Allowance	$4.6
Mitigation Cost Allowance	NA
Total Capital Cost	$39.9

Q45. Are updated cost estimates for the remaining Cal Am Only Facilities included in this application?

A45. No. The remaining "Cal-Am-Only Facilities" were subsequently addressed in A.21-11-024 and cost recovery was approved through D.22-12-001 and D.25-05-007. Therefore, for purposes of this application, the relevant cost cap for the desalination facilities approved in D.18-09-017 is $239.2 million. This removal of the $39.9M is reflected in the table below.

Table 4: 2017 Project Component Costs

Major Component	2017 Project Components (2017 Dollars) (Units in Millions)	2017 Cal Am Only Facilities (2017 Dollars) (Units in Millions)	2017 Desalination Only Costs (2017 Dollars) (Units in Millions)
Intake Wells / Supply & Return Facilities (slant wells and associated intake/discharge infrastructure)	$48.6	$0	$48.6
Desalination Plant	$82.8	$0	$82.8
Northern Transfer Pipeline	$13.9	$0	$13.9

CAW Conveyance & ASR System	$23.6	$23.6	$0
Base Construction Subtotal	**$168.9**	**$23.6**	**$145.30**
Implementation Costs	$55.4	$7.7	$47.7
ROW / Land / Outfall	$14.6	$2.8	$11.8
Escalation Allowance	$19.1	$1.2	$17.9
Contingency Allowance	$21.2	$4.6	$16.6
Total Capital Cost	**$279.1[5]**	**$39.9**	**$239.2**

Q46. Were there any cost items specifically excluded from the D.18-09-017 cost cap?

A46. AFUDC was excluded from the cost caps in D.18-09-017.

Q47. What dollar year was used for the D.18-09-017 cost cap?

A47. The dollar year used was 2017.

B. Costs Incurred to Date

Q48. What is the total amount of project costs incurred from project inception through June 30, 2026?

A48. Costs as of June 30, 2026, are as follows:

[5] D.18-09-017 approved a cost cap of $279.1, however, the cost estimates submitted by California American Water in A.12-04-019 total to $279.2.

Table 5: Cost to Date June 30, 2026 ($ Millions)						
Cost Category	**Desalination Plant**	**Source Wells**	**Conveyances**	**Test Slant Well**	**Implementation**	**Total**
Engineering & Construction	**$36.2**	**$15.5**	**$5.6**	**$10.8**	**$85.5**	**$153.6**
– Preliminary Engineering & Environmental		$5.4		$1.9	$6.0	$13.3
– Design	$11.7	$2.6	$4.9	$0.3	$0.6	$20.0
– Permit Acquisition & Compliance	$4.5	$7.5	>$0.1	$0.9	$45.3	$58.1
– Value Engineering	$0.1					$0.1
– Litigation Support	$1.7				$29.5	$31.2
– Community Relations					$1.7	$1.7
– Outfall Fees, Design, Coordination	$9.4					$9.4
– Program Management Support	$5.7			$0.3	$2.1	$8.1
– Fencing & Site Prep	$0.3					$0.3
– Property & Easement Acquisition	$2.8		$0.7	$0.1	$0.2	$3.8
– Construction & Materials and Supplies				$6.3		$6.3
– Post-Construction				$2.1		$2.1

Monitoring & Fees incl. Discharge Fees						
– Contributions & Grants				$(1.0)		$(1.0)
Employee Exp (travel, meals, other)					$0.1	$0.1
Company Labor & Overhead					$18.7	$18.7
Transfer Pipeline					$6.8	$6.8
Accrual					$2.6	$2.6
Grand Total						$181.8

Q49. Has California American Water tracked all incurred costs in CPUC-approved memorandum accounts?

A49. Yes, California American Water tracked all incurred costs in a CPUC-approved memorandum account, titled Project Cost Memorandum Account ("PCMA"), and covered in Section XI of Jonathan Morse's Direct Testimony.

Q50. What cost accounting methodology has California American Water used to track and categorize MPWSP costs? Are costs recorded in the same way they are presented in testimony?

A50. California American Water adheres to generally accepted accounting principles ("GAAP") and the Uniform System of Accounts ("USOA") for Class A Water Utilities to track and categorize MPWSP costs. Therefore, the tracking is of the costs incurred by California American Water for tangible utility plant including materials, supplies, labor, services and other items consumed or employed in the construction and installation of utility plant, and also the cost of preliminary studies, plans, surveys, engineering, supervision, and general expenses, which contribute directly to said utility plant without duplication of costs. Where applicable, included direct and overhead costs in the tracking

and categorization are: contract work, labor by California American Water employees, materials and supplies, transportation (for California American Water employees, materials and supplies, purchased equipment, other work equipment), casualty insurance or self-insurance, permits in connection with construction work, engineering and supervision, general administration capitalized, engineering services, applicable property taxes, and interest during construction as applicable specifically to MPWSP.

Q51. Are any costs associated with the Regional Desalination Project (A.04-09-019) reflected in the costs incurred to date?

A51. Yes, as reflected in Table 6 below, approximately $2.1 million of former RDP expenditures were associated with permitting, litigation support, preliminary engineering, environmental review, project management, and property easements. Although the RDP was not ultimately constructed, these efforts generated technical information, environmental analyses, permitting knowledge, and engineering work products that were used in the development of the MPWSP. As a result, the MPWSP benefited from prior investments in project planning, regulatory coordination, environmental review, and desalination project development undertaken as part of the former RDP.

Table 6: Former RDP Cost in MPWSP ($ whole)

	2011	2012	2013	2014	Total
Desalination Facilities					
Permit Acquisition	$401,125	$39,754	$8,890	$0	$449,770
Litigation Support	$0	$98,630	$101,230	$186,519	$386,380
Preliminary Engineering & Environmental	$1,077,378	$127,098	$0	-$1,377	$1,203,099

Other (community rel., pgm mgmt.)	$1,732	$0	$11,168	$0	$12,901
Desal – Test Slant Well					
Property or easement appraisals	$0	$0	$0	$11,850	$11,850
Total	**$1,480,235**	**$265,482**	**$121,288**	**$196,992**	**$2,063,997**

Q52. Are any costs associated with the Monterey Pipeline and Pump Station reflected in the cost incurred to date.

A52. Yes. Approximately $3.8 million in engineering overhead associated with the Monterey Pipeline and Pump Station is included in the costs incurred to date. Ordering Paragraph 6 of D.16-09-021 authorized California American Water to build the pipeline and pump station "subject to a cost cap of $50.3 million" and to file a Tier 3 advice letter if actual costs exceed the cap.

Although the Monterey Pipeline and Pump Station are used and useful independent of the desalination plant, the facilities are also integral to the operation of the broader Monterey Peninsula water supply system. They enable California American Water to maximize the use of Pure Water Monterey, ASR, and Seaside Basin supplies, and they will also provide the conveyance capability necessary to deliver water from the desalination facility to the Monterey Main system.

This capability is necessary because the geography of the Peninsula's water supply has changed. Historically, most supplies originated in the Carmel Valley. Today, major supplies, including Seaside Basin water, ASR, Pure Water Monterey, and ultimately desalinated water, are located in or enter the system from the north. The Monterey

Pipeline and Pump Station provides the infrastructure necessary to move those northern supplies south to the Monterey Peninsula and Carmel Valley, where the water is needed. Inclusion of these allocated engineering overhead costs does not depend on characterizing the Monterey Pipeline and Pump Station as facilities that exclusively serve the desalination plant. Rather, the facilities have independent system benefits while also performing a necessary function for the MPWSP by providing the conveyance capability to deliver desalinated water to the Monterey Main system.

Q53. Please discuss costs associated with environmental compliance and permit acquisition and compliance.

A53. Permitting, environmental compliance, and environmental monitoring activities for the Monterey Peninsula Water Supply Project have required extensive coordination with federal, state, and local regulatory agencies to obtain, amend, and maintain numerous project approvals, including Coastal Development Permits, Clean Water Act authorizations, California Department of Fish and Wildlife permits, California State Lands Commission approvals, and federal Endangered Species Act consultations. These efforts have involved preparation of permit applications, technical studies, biological and aquatic resource assessments, agency consultations, mitigation plans, and responses to regulatory information requests.

A substantial portion of this work has focused on implementing and documenting compliance with permit conditions and mitigation requirements through pre-construction biological surveys, construction-phase biological monitoring, habitat mitigation and monitoring, species relocation and exclusion measures, and preparation of monitoring and compliance reports. Specific monitoring activities have included protocol surveys for California red-legged frogs and California tiger salamanders, nesting bird surveys and monitoring, burrowing owl surveys, special-status bat assessments, environmental monitoring during ground-disturbing activities, verification of species avoidance buffers

and exclusion zones, monitoring of relocated wildlife, habitat restoration and mitigation site inspections, and documentation of compliance with permit conditions and approved mitigation measures. These activities have required continuous field oversight, coordination with regulatory agencies and construction contractors, preparation of technical monitoring reports, and ongoing tracking and verification of compliance to ensure environmental commitments are implemented and maintained throughout project construction.

Q54. Describe the overall scope of permitting required for the MPWSP.

A54. The MPWSP requires a broad and complex permitting effort involving coordination with federal, state, regional, and local regulatory agencies. Project approvals have included federal Endangered Species Act consultations, Clean Water Act permits and certifications, Coastal Development Permits, California Department of Fish and Wildlife authorizations, California State Lands Commission approvals, Monterey Bay National Marine Sanctuary authorizations, air quality permits, local land use approvals, and numerous construction-related permits and authorizations. Obtaining and maintaining these approvals has required preparation of permit applications, technical studies, engineering plans, biological assessments, responses to agency comments, permit amendments, and ongoing coordination among multiple regulatory jurisdictions.

Q55. Why has the permitting process been so extensive?

A55. The project traverses and affects a wide range of environmental resources and regulatory jurisdictions, including coastal resources, wetlands, groundwater resources, sensitive biological habitats, special-status species habitats, transportation corridors, and developed urban areas. As a result, multiple agencies have independent regulatory authority over different aspects of the project, each with its own permitting requirements, technical review processes, mitigation requirements, and environmental compliance obligations.

Q56. What types of environmental monitoring have been required to support permitting and construction activities?

A56. Environmental monitoring has been both extensive and ongoing. Monitoring activities have included focused botanical surveys, habitat assessments, groundwater monitoring, construction impact validation surveys, species-specific surveys, and monitoring programs for sensitive biological resources. These efforts have included protocol and pre-construction surveys for the California red-legged frog, California tiger salamander, western burrowing owl, western snowy plover, nesting birds, American badger, Monterey dusky-footed woodrat, special-status bats, and other sensitive species. Monitoring results have been used to support permit compliance, refine construction measures, and verify implementation of mitigation requirements.

Q57. Provide a specific example of the level of monitoring required.

A57. One example is the western burrowing owl monitoring program. The project has conducted burrowing owl surveys since 2016, and monthly surveys have been conducted since 2020 in areas identified as suitable habitat. These surveys are performed in accordance with California Department of Fish and Wildlife protocols and include field investigations, documentation of observations, evaluation of occupied habitat, preparation of technical reports, and regulatory coordination. The monitoring program has documented species occurrence over multiple years and provides information necessary to support ongoing compliance with applicable permit requirements and species protection measures.

Q58. In addition to permitting and monitoring, what environmental compliance activities have been required?

A58. Environmental compliance has required the preparation, implementation, and documentation of numerous management plans, monitoring plans, mitigation measures, and construction controls required by permits and agency approvals. Examples include

Habitat Mitigation and Monitoring Plans, Groundwater Monitoring Plans, Construction Environmental Awareness Programs, Stormwater Pollution Prevention Plans, Species Relocation Plans, Burrowing Owl Exclusion Plans, Spill Prevention Plans, Dust Control Plans, Archaeological Monitoring Plans, Noise Control Plans, and other resource-specific compliance documents. These requirements must be developed, implemented, monitored, documented, and, in many cases, approved by regulatory agencies before construction activities may proceed.

Q59. How does this level of environmental oversight affect project implementation?

A59. Environmental compliance is not limited to obtaining permits. It requires continuous coordination with regulatory agencies, performance of biological surveys and monitoring, implementation of avoidance and minimization measures, field oversight during construction, preparation of monitoring and compliance reports, agency notifications, and ongoing documentation demonstrating compliance with permit conditions and mitigation requirements. These activities continue throughout project development and construction and represent a significant effort that is necessary to maintain regulatory compliance and protect environmental resources.

Q60. How would you characterize the overall environmental permitting effort associated with this project?

A60. The environmental and permitting effort associated with the MPWSP has been substantial and multidisciplinary. It has required years of regulatory coordination, extensive technical studies, numerous permit applications and amendments, ongoing environmental monitoring programs, and continuous compliance activities involving multiple agencies and environmental resource areas. The scope of these efforts reflects both the complexity of the project and the comprehensive environmental review and oversight required before and during construction.

C. Estimated Cost to Complete

Q61. What is the estimated cost to complete the 4.8 MGD phase of the desalination facilities?

A61. Table 7 below shows the estimated cost to complete:

Table 7: Estimated Cost to Complete 4.8 MGD Facilities

	Cost to Date 6-2026 (millions)	Estimate to Completion (millions)	2026 Estimate (millions)
Desalination Plant	$13	$270	$283
Source Wells	$16	$67	$83
Outfall Improvements	$9	$51	$60
Conveyance Pipelines	$6	$142	$148
Construction Inspection	$ -	$20	$20
Environmental, Regulatory and Permitting	$105	$22	$127
Slant Test Well	$11		$11
Land	$3		$3
Company Labor, Overhead	$19	$14	$33
Project	$182	$586	$768
Contingency			$ 57
Total			$ 825

Q62. Are there any cost items specifically excluded from the updated cost cap?

A62. Yes, AFUDC was excluded in the updated cost caps, just as it was in D.18-09-017. The amount of AFUDC earned through June 30, 2026, is reflected in Attachment 2 and referenced by Mr. Pourtaherian in developing the revenue requirement forecast.

Q63. How does the current cost estimate for the desalination plant compare with the 2017 cost estimate?

A63. The 2017 cost estimate for the desalination plant was $123.7 million, without contingency, inclusive of implementation costs, ROW/Land and escalation allowance. The current 2026 estimate is approximately $283 million, an increase of $159.3 million, or approximately 129 percent.

Table 8: 2017 Cost Cap vs 2026 Update

	2017	2026
Desalination Plant	$123.7	$283

Q64. How does the current estimate for the source wells and supply/return facilities compare with the 2017 cost estimate?

A64. The 2017 cost estimate for the intake wells and supply/return facilities was approximately $73 million, without contingency, inclusive of implementation costs, ROW/Land and escalation allowance. The current 2026 estimate is approximately $207 million, an increase of $134 million, or approximately 184 percent.

Table 9: 2017 Cost Cap vs 2026 Update

	2017	2026
Slant Test Well	$5.7	$11
Source Wells	$21.1	$83

Feedwater Line	$10.6	$23
Brine, Castroville Pipeline	$4.2	$30
Outfall Improvements	$7	$60
Implementation, ROW/Land, escalation	$24.6	$ -
Total	$73.2	$207

Q65. How does the current cost estimate for pipelines compare with the 2017 cost estimate for pipelines?

A65. The 2017 cost estimate identified the Northern Transfer Pipeline with a cost estimate of $25.6 million, without contingency, inclusive of implementation costs, ROW/Land and escalation allowance. The current 2026 estimate for the Northern Transfer Pipeline is approximately $90 million, an increase of $64.4 million, or approximately 251 percent.

Table 10: 2017 Cost Cap vs 2026 Update

	2017	2026
Northern Transfer Pipeline	$25.6	$90

Q66. What contingency percentage was included in or excluded from the D.18-09-017 cost cap?

A66. Contingency of $21.2 million was included in the approved cost cap. The $21.2 million was calculated by giving known base costs a 10% contingency and giving unknown base costs a 25% contingency. This was addressed in The Direct Testimony of Christopher Cook, dated September 15, 2017.

Q67. What contingency is included in the estimated cost to complete? What is the basis for the contingency percentage chosen?

A67. The estimated cost to complete includes approximately $57 million of contingency, allocated by major project component based on estimate maturity, design completion, pricing certainty, procurement status, and remaining project risks. The contingency allowances are summarized below: Desalination Plant (5%), Source Wells (20%), Outfall Improvements (20%), Pipelines (11%), and Environmental Compliance/EIR (20%).

Table 11: Contingency in Estimated Cost to Complete

	2026 Estimate	Cost to Complete	Contingency	%
Desalination Plant	$283	$270	$14	5%
Source Wells	$83	$67	$13	20%
Outfall Improvements	$60	$51	$10	20%
Conveyance Pipelines	$148	$142	$16	11%
Environmental Comp/EIR	$128	$23	$4	20%
Contingency			$57	

The contingency percentages were developed using the engineering judgment of American Water's One Water Engineering Team, the company's corporate engineering and technical experts, and reflect the differing levels of uncertainty associated with each project component. Lower contingency levels were applied to components supported by executed contracts, current vendor quotations, contractor pricing, and mature designs. Higher contingency levels were applied to components with greater uncertainty, including drilling activities, marine construction, permitting, and regulatory compliance requirements.

Q68. What escalation assumptions are built into the estimated cost to complete?

A68. The estimated cost to complete reflects escalation to the anticipated procurement and construction periods for each major project component. The escalation assumptions were developed using industry-recognized construction cost indices and current market information available at the time the estimates were prepared.

For the conveyance pipelines, the engineer's estimate was developed from actual bid data obtained during the original procurement process and escalated using four recognized construction cost indices: ENR, DGS, HW, and BOR. These indices were used to project historical bid prices to current market conditions and anticipated bid timing.

For the source wells, the estimate incorporated the ENR Construction Cost Index for the Bay Area, along with RSMeans cost data, vendor quotations, contractor pricing, and Cost Estimating Division review.

For the outfall improvements, the estimate was developed using quantity-based cost estimates, construction cost databases, geographic cost adjustment factors, and recent regional bid information, with costs escalated to the anticipated bid date.

The estimates were developed in nominal dollars and reflect escalation through the anticipated procurement and construction periods for each project component. The specific base year and forecast annual escalation rates varied by estimate and are embedded within the individual estimating methodologies and cost indices used by the respective engineering teams.

Q69. What assumptions were made about labor availability and prevailing wage rates for the estimated cost to complete?

A69. The estimated cost to complete assumes that qualified construction labor will be available to support the planned construction schedule, and that labor costs will reflect applicable prevailing wage requirements. Labor pricing is embedded within the engineer's estimates, contractor quotations, vendor pricing, historical bid information, and construction cost databases used to develop the cost estimates. The estimates also assume that construction will be performed in accordance with the Project Labor Agreement ("PLA") applicable to the project. The PLA provides access to union hiring halls and a skilled, trained workforce, helping to support labor availability for the specialized trades required to construct the desalination plant, source wells, conveyance facilities, and outfall improvements. The PLA also establishes uniform work rules, wage rates, dispute resolution procedures, and no-strike/no-lockout provisions, which reduce the risk of labor disruptions during construction.

Accordingly, the labor assumptions reflected in the estimates are based on prevailing wage compensation levels and the availability of qualified union labor through the PLA framework. These assumptions are consistent with current California construction market conditions, and the labor costs reflected in the contractor pricing, engineer estimates, and market-based cost indices used to develop the cost-to-complete estimate.

The estimates do not rely on any extraordinary assumptions regarding labor availability beyond those supported by the PLA and prevailing market conditions. Rather, labor costs and availability considerations are incorporated within the underlying contractor pricing, cost databases, and estimating methodologies used for each project component.

Q70. What assumptions were made about material pricing (steel, pipe, membrane elements, electrical equipment) for the estimated cost to complete? Are any long-lead equipment items currently under contract or subject to binding quotes?

A70. The cost-to-complete estimate is based on current market pricing and incorporates contractor pricing, vendor quotations, engineer estimates, historical bid data, and industry cost databases. The estimates also assume compliance with Build America, Buy America ("BABA") and American Iron and Steel ("AIS") requirements associated with anticipated public financing, and therefore reflect the expected cost of domestically sourced materials and equipment.

Q71. Does the estimated cost to complete assume a specific construction start date? What happens to the estimate if that start date slips?

A71. Yes. The estimated cost to complete assumes construction and procurement activities proceed in accordance with the project schedule used to develop the underlying engineer's estimates, contractor pricing, and cost forecasts.

If construction is delayed beyond the assumed schedule, project costs could increase due to additional escalation in labor, materials, equipment, and contractor pricing. Delays may also extend program management, construction management, environmental compliance, permitting, and other owner costs.

To mitigate this risk, the estimates incorporate escalation assumptions based on recognized construction cost indices and current market data, as well as component-specific contingencies. However, actual costs will ultimately depend on market conditions and the timing of procurement and construction activities.

Accordingly, the cost-to-complete estimate reflects the best estimate based on the current project schedule and available market information. Material schedule delays beyond the assumed construction start dates would be expected to increase overall project costs.

Q72. What is the current anticipated construction start date, completion date, and in-service date for initial infrastructure?

A72. The initial phase of the project consists of three principal components: (1) the desalination plant, (2) the product water transmission pipelines, and (3) the intake well system. Each component has a different construction schedule and critical path.

Construction activities for the desalination plant, starting with site preparation, began in 2026 and currently include site preparation and grading, mobilization of construction trailers and field facilities, equipment procurement activities, and review of equipment submittals and shop drawings. Based on the current project schedule, the desalination plant is anticipated to be placed into service in late 2029.

The product water transmission pipelines have completed design and are ready for construction and procurement. The current plan is to advertise the pipeline package for bid in early 2027, with construction anticipated to begin in mid to late 2027. The pipelines are expected to be completed and available by the end of 2028 so that system water can be delivered to the desalination facility for startup, commissioning, flushing, and testing of the plant's mechanical systems.

The intake wells are subject to seasonal environmental construction restrictions associated with the Western snowy plover nesting season and can generally only be constructed between October and February of each year. Under the current schedule, intake well construction is anticipated to begin during the Fall 2027 drilling season. Construction is expected to occur over three drilling seasons, with the final intake well anticipated to be completed and placed into service in early 2030.

Accordingly, based on the current schedule, major construction activities are underway, the transmission pipelines are expected to be available by end of 2028 to support plant

commissioning, the desalination plant is anticipated to enter service in late 2029, and the final intake well is anticipated to enter service in early 2030. These dates remain subject to permitting, procurement, construction, testing, and commissioning activities.

Q73. What is the total delay in months/years from the D.18-09-017 anticipated completion (December 31, 2021) to the current anticipated in-service date?

A73. The project schedule underlying D.18-09-017 contemplated replacement supplies being available by December 31, 2021. Based on the current schedule, the desalination plant is anticipated to enter service in late 2029, representing an overall schedule extension of approximately eight years.

Q74. Did the decision to build the 4.8 MGD phase first cause any delays to the overall project, or did it actually accelerate the path to construction?

A74. While the phasing decision did not affect the overall project schedule, it provided California American Water with a practical path forward to maintain project momentum and proceed with facility construction during the lengthy CDP review process.

As explained above, the phasing proposal was carefully developed in response to multiple external factors that had emerged during years of regulatory review. Those factors included ongoing public concerns regarding project size and environmental impacts, evolving regional water-supply conditions associated with the expansion of the Pure Water Monterey project, the Coastal Commission's alternatives analysis, environmental justice concerns raised by Marina stakeholders, and escalating construction costs associated with large infrastructure projects.

In announcing the phased approach, California American Water expressly stated that the purpose was to develop a needed drought-resistant water supply while providing flexibility to accommodate future regional water needs. California American Water

further stated that reducing the initial size of the desalination facility would reduce the number of slant wells required during the initial phase and would help control construction costs while preserving the ability to expand capacity in the future.

From an engineering perspective, the phased approach was based upon the conclusion that a 4.8 MGD facility could satisfy near-term reliability needs while reducing the scale of initial construction. A smaller first-phase necessarily requires fewer intake wells, less initial infrastructure, and a lower immediate construction footprint than a fully built 6.4 MGD facility. At the same time, the phased design preserved the ability to add capacity later.

From a financial perspective, reducing the initial size of the facility would be expected to assist in controlling construction costs. Given the significant inflationary pressures, labor constraints, and supply-chain disruptions affecting infrastructure projects during the 2020-2022 period, it was reasonable to evaluate methods of reducing initial capital expenditures while maintaining the ability to meet essential water-supply objectives.

The phasing proposal represented a reasonable and prudent course of action under the circumstances. The proposal allowed California American Water to continue pursuing a drought-resistant replacement water supply needed to address regulatory limits on Carmel River diversions while simultaneously reducing the scope of the initial construction effort, lowering immediate costs, decreasing the number of intake wells required, and preserving future flexibility. The phased approach also addressed concerns raised during the Coastal Commission process regarding project scale by matching initial construction more closely to near-term needs while maintaining the ability to expand in the future.

The October 2022 phasing proposal put forward by California American Water was substantially influenced by external regulatory, environmental, operational, and economic

considerations that had developed during the prolonged permitting process. The proposal is supported by engineering considerations related to project sizing and operational flexibility, as well as financial considerations related to controlling initial construction costs while retaining the ability to meet future water-supply requirements.

D. Proposed New Cost Cap

Q75. What is the proposed new maximum reasonable cost cap?

A75. The proposed new cost cap is $825 million.

Q76. How was the proposed cap amount derived?

A76. The proposed cost cap was developed by combining actual project costs incurred through June 2026 with the current engineer's estimate of the remaining cost to complete the project and then adding an appropriate contingency allowance. Costs incurred through June 2026 total approximately $182 million and the estimated cost to complete is approximately $586 million, resulting in a projected total project cost of approximately $768 million. A contingency of approximately $57 million was then added to account for remaining project execution risks, resulting in a proposed maximum reasonable cost cap of approximately $825 million.

Table 12: 2026 Estimates to Completion			
	Cost to Date 6-2026	**Estimate to Completion**	**2026 Estimate**
Desalination Plant	$13	$270	$283
Source Wells	$16	$67	$83
Outfall Improvements	$9	$51	$60
Pipelines	$6	$142	$148
Construction Inspection	$—	$20	$20
Environmental, Regulatory and Permitting	$105	$22	$127
Slant Test Well	$11	—	$11
Land	$3	—	$3
Company Labor, Overhead	$19	$14	$33
Project	**$182**	**$586**	**$768**
Contingency			$57
Total			**$825**

Q77. Is the proposed new cap expressed in nominal dollars or constant dollars?

A77. The proposed $825 million cost cap is expressed in nominal dollars. The estimate reflects actual costs incurred through June 30, 2026, together with projected future costs escalated to the anticipated procurement and construction periods for each project component. The underlying estimates incorporate current market pricing, contractor and vendor quotations, engineer's estimates, and escalation factors derived from recognized

construction cost indices. Because the proposed cap is expressed in nominal dollars, no constant-dollar base year has been applied.

Q78. How does the total proposed cost cap compare to what was authorized in D.18-09-017, both in nominal dollars and in constant-dollar terms? What is the percentage increase over the authorized cap?

A78. The desalination facilities component authorized in D.18-09-017 was approximately $239.2 million in 2017 dollars. The Company's proposed updated cost cap is $825 million. The proposed cost cap is approximately $585.9 million higher than the original authorized amount and represents an increase of approximately 246 percent or 3.5 times the original authorized desalination facilities cost estimate. Because the proposed cost cap is expressed in nominal dollars and the original authorization was expressed in 2017 dollars, this comparison reflects both project-specific cost increases and the effects of inflation, construction cost escalation, and schedule extension since 2017.

Q79. Does California American Water propose any change to the cost cap offset in Section 6.7(c) of Attachment A to Resolution W-5211?

A79. Yes. Section 6.7(c) allowed cost overruns or savings on the desalination facilities to be counted against or toward the $50.3 million cost cap for the Monterey Pipeline and Pump Station, as long as the combined caps were not exceeded. The Monterey Pipeline and Pump Station is complete and in rates, so there is no remaining cost cap to offset against. As shown in Attachment 1 to Mr. Morse's testimony, California American Water proposes to delete Section 6.7(c).

Q80. For each major cost category, what documentation exists to support the recorded costs?

A80. California American Water maintains vendor invoices, contract documents, consultant invoices, purchase orders, and SAP general ledger transaction detail supporting costs recorded for the MPWSP. Internal labor costs are derived from employee labor charges

recorded to the project, while overhead is calculated and capitalized in accordance with American Water accounting policies and applicable GAAP and USOA requirements. All project cost records are maintained electronically in SAP and are available for audit and verification.

Q81. Are cost documentation records organized in a manner that will allow the CPUC to verify and audit the historical cost record?

A81. Yes. Documentation for this project is maintained in the same manner as all of our capital projects. California American Water uses electronic systems of accounting whereby accounting records for project costs are kept electronically within the system. The specific current system is SAP. Historical accounting transactions are maintained electronically within the system, including transactions for project costs.

Q82. Are there any cost categories for which full documentation is not available?

A82. Yes, there is a small gap in documentation with respect to original invoices, but transaction detail for those records does exist. We were unable to locat approximately $263,000 worth of historic invoices, although California American Water does maintain transaction detail.

Q83. Have any costs been reclassified or reallocated since they were originally recorded? If so, explain the basis for any reclassifications.

A83. Yes. California American Water made cost reallocations and reclassifications during the MPWSP. Such classifications were consistent with established company accounting policies and procedures overseen by American Water Accounting. Many of these adjustments involved allocating costs between the desalination project and Cal Am-only facilities for project components. These reallocations were necessary because the projects were managed together for many years and shared contractors, consultants, and project resources before being separated into distinct project scopes.

IV. BASIS FOR COST INCREASES

Q84. Why have the costs increased?

A84. The original cost caps were developed using information and market conditions available in 2017. Since that time, nearly a decade has elapsed before construction authorization and implementation. During that period, industry-wide construction costs increased significantly, affecting labor, fuel, concrete, steel, electrical equipment, piping, treatment equipment, and other critical project inputs. Consequently, facilities that could have been constructed at 2017 prices are substantially more expensive to construct in 2026.

Q85. How did project requirements contribute to the increase?

A85. The increase in costs reflects not only inflation but also additional requirements associated with constructing the project. Since 2017, the project has incurred permitting, environmental compliance, legal, regulatory, labor, and construction execution requirements that were not reflected in the original cost cap. These requirements include implementation of permit conditions, environmental monitoring and mitigation measures, and PLA obligations. Together, these requirements materially increased the cost of constructing the project.

Q86. Did inflation alone cause the costs to increase?

A86. The project is not being built under 2017 market conditions. Nearly nine years have passed since the original cost caps were established. During that period, construction costs increased substantially, and the project advanced from planning-level assumptions to detailed designs supported by extensive engineering, environmental review, and permitting work. The current estimates therefore reflect both the effects of inflation and the movement from planning-level to detailed designs for the facilities, with related impacts on materials, labor, and regulatory requirements necessary to successfully construct and operate the project.

Q87. Please explain the primary reasons why the current project cost estimate is higher than the cost cap established in 2017.

A87. The increase in cost is not attributable to a single factor. It reflects the cumulative impact of nearly a decade of construction inflation, additional project requirements identified through permitting and environmental review, implementation of a PLA, increased regulatory compliance obligations, and specialized construction requirements associated with the project's intake and source well facilities. These factors significantly changed the cost environment between 2017 and 2026 and are reflected in the current estimate.

A. Inflation, COVID-19, and Supply Chain Impacts

Q88. What specific COVID-19 impacts did the project experience between 2020 and 2022?

A88. The COVID-19 pandemic materially affected the development and permitting of the MPWSP between 2020 and 2022. Those impacts included disruptions to project staffing, consultant activities, regulatory agency operations, stakeholder engagement, labor availability, and supply-chain reliability. Collectively, these conditions contributed to delays in project permitting, review, and implementation.

California American Water conducted project development activities during a period in which state and local public-health orders limited in-person meetings, imposed workplace restrictions, and required extensive reliance on remote communications. As a result, California American Water needed additional time to engage stakeholders and address community concerns before proceeding with Coastal Commission review. That is why in September 2020, California American Water withdrew its CDP application and then later refiled it. This provided additional time for the engagement process.

The pandemic also affected engineering, environmental, hydrogeologic, and regulatory consultants engaged on the project. Consultant work during this period was performed

under remote-work conditions and reduced access to traditional in-person coordination, site visits, technical meetings, workshops, and agency consultations.

Regulatory agency operations were similarly disrupted. On April 16, 2020, Governor Gavin Newsom issued Executive Order N-52-20, which found that illness associated with COVID-19 and physical-distancing requirements impeded the ability of the Coastal Commission, the SWRCB, members of the public, and other participants to comply with statutory permitting timelines. The Executive Order suspended certain Coastal Act and Permit Streamlining Act deadlines because of conditions associated with COVID-19.

The pandemic also affected construction planning and workforce availability. Between 2020 and 2022, the construction industry experienced labor shortages, employee illness, quarantine requirements, workforce restrictions, and implementation of COVID-related health and safety measures. Although major MPWSP construction activities had not yet commenced during much of that period, those industry-wide conditions affected construction scheduling, contractor availability, cost estimating, and project planning activities.

The most significant COVID-19 impacts on the MPWSP were the disruption of permitting agency operations, suspension and extension of regulatory deadlines, modification of public-hearing procedures, and constraints on project coordination among California American Water, regulatory agencies, and technical consultants. These pandemic-related conditions contributed to delays in the overall permitting and development schedule for the project during the 2020 through 2022 period.

B. Litigation Impacts

Q89. Please describe the litigation that has been filed related to the MPWSP.

A89. Since 2014, the MPWSP has been the subject of extensive and ongoing litigation initiated by various entities, principally Marina Coast Water District ("MCWD"), the City of Marina, the Water Ratepayers Association of the Monterey Peninsula ("WRAMP"), and, more recently, the Monterey Peninsula Water Management District ("MPWMD"). The legal challenges have targeted multiple regulatory approvals, environmental reviews, permits, leases, and project-related decisions issued by agencies including the Coastal Commission, California State Lands Commission, Monterey County, and the CPUC.

From 2014 to present, 10 lawsuits and one CPUC complaint have been filed seeking to invalidate or overturn approvals associated with the project's test well, environmental review process, development permits, groundwater management determinations, or related matters. In the overwhelming majority of these actions, the courts upheld the challenged agency decisions and rejected the claims brought by project opponents. Trial courts, appellate courts, and the California Supreme Court repeatedly denied petitions, dismissed appeals, or otherwise ruled against the challengers.

Notable examples include litigation challenging Coastal Commission permits for the test well, State Lands Commission approval of a test well lease, amendments to test well permits, CPUC certification of the project's environmental review and Certificate of Public Convenience and Necessity, and disputes regarding groundwater sustainability governance at the former CEMEX site. With limited exceptions, opponents' challenges were unsuccessful through all levels of judicial review.

One significant challenge filed by MCWD against Monterey County's combined development permit resulted in MCWD prevailing on certain issues at the trial court level. However, the Court of Appeal subsequently reversed those rulings favorable to MCWD and upheld the County's and California American Water's positions. The California Supreme Court declined further review.

Several matters remain pending. Since 2020, MCWD and the City of Marina have pursued litigation concerning alleged groundwater impacts, water rights issues, and the validity of a CEMEX easement associated with the MPWSP. Additional ongoing proceedings include a challenge to the Coastal Commission's coastal development permit for the project, a complaint filed before the CPUC regarding project phasing, and a 2026 lawsuit challenging State Lands Commission approval of a project lease.

In summary, the MPWSP has been subject to more than a decade of litigation involving multiple governmental agencies and stakeholders. Most completed judicial proceedings have resulted in the challenged approvals being upheld and the project moving forward, while several legal challenges remain unresolved and are currently pending.

C. Coastal Commission Permitting Delays

Q90. From D.18-09-017's anticipated 2019 construction start to the November 2022 CDP approval, what is the cumulative delay period attributable to Coastal Commission permitting, and what was the impact of that delay period?

A90. The CDP was not approved until November 2022, approximately three years after the construction start contemplated following D.18-09-017. During that period, the project underwent additional Coastal Commission review, environmental analysis, and design refinements. The delay occurred during a period of significant construction cost escalation and contributed to increased engineering, permitting, compliance, and construction costs.

Q91. Please describe the status of the CDP special conditions.

A91. As of August 2026, several key permits, approvals, and special condition requirements remain outstanding before the CDP can be issued. Most significantly, the project is awaiting issuance of the RWQCB's National Pollutant Discharge Elimination System ("NPDES") permit, currently expected to proceed to hearing in December 2026. The

Coastal Commission issued a notice of incomplete application for the Coastal Commission permit for outfall modifications and California American Water is preparing a response. Federal approvals also remain pending, including National Marine Fisheries Service concurrence and Monterey Bay National Marine Sanctuary authorization for project discharges, the latter of which is expected to follow NPDES permit issuance. At the local level, Transportation Agency for Monterey County ("TAMC") approvals associated with pipeline facilities in the TAMC right-of-way remain under development pending easement modifications and related Caltrans approvals. In addition, acquisitions of easements from private property owners are underway.

Several substantive CDP special conditions likewise remain under review or development. Habitat mitigation requirements, including acquisition of a dune habitat conservation easement and completion of Habitat Mitigation and Monitoring Plans have not yet been finalized or approved. The Groundwater Protection Monitoring and Remedial Measures Plan remains under technical review and is expected to require future Coastal Commission consideration. Revisions to the Wetlands and Vernal Ponds Adaptive Management Program are also ongoing. The Energy Minimization and Greenhouse Gas Reduction Plan and Visual Resources Plan have been submitted to the Coastal Commission for review and approval. Additional pre-CDP issuance requirements include completion and approval of the low-income ratepayer relief implementation strategy and final Coastal Commission review of the Public Access Plan. Finally, a decision from the Monterey County Superior Court in *City of Marina v. RMC Lonestar* is anticipated to be issued by the end of 2026. While important milestones have been achieved, including approval of the State Lands Lease and completion of the CPUC supply-demand proceeding, the remaining regulatory approvals and special condition submittals continue to represent the primary path to CDP issuance.

Based on the current status, the principal schedule drivers for CDP issuance are the NPDES permit process, Coastal Commission approval of the outfall modifications, completion of federal sanctuary and fisheries reviews, resolution of groundwater protection requirements, and completion of required habitat mitigation and property acquisition activities. Collectively, these remaining approvals and compliance measures are expected to extend into 2027 and will largely determine the timing of final CDP issuance.

Q92. Has the RWQCB Report of Waste Discharge been submitted? What technical requirements are imposed by the RWQCB that affect plant design?

A92. Yes, the Report of Waste Discharge ("ROWD") was submitted on October 1, 2024. The RWQCB responded with a notice of incomplete application on January 31, 2025. An amended Report of Waste Discharge was subsequently submitted in 2025.

The RWQCB permitting process has resulted in several requirements that affect the design and operation of the desalination facility. Most notably, the proposed permit framework includes minimum brine-flow requirements intended to support compliance with applicable Ocean Plan objectives. To accommodate those requirements, the project includes brine equalization and storage facilities that provide operational flexibility for management of the concentrate stream. The permitting process has also established additional monitoring requirements for source water, brine, and discharge-related water quality parameters. Those requirements necessitate additional instrumentation, monitoring equipment, sampling infrastructure, and reporting systems at the desalination facility and are expected to increase ongoing operational and compliance costs. These monitoring and reporting requirements are reflected in the proposed NPDES permit and associated monitoring programs developed following submission of the ROWD.

From an engineering perspective, these requirements do not alter the fundamental desalination treatment process or the project's brine management approach. However, they do affect facility design details, operational flexibility, monitoring infrastructure, and long-term compliance obligations.

D. CPUC Proceedings

Q93. What CPUC proceedings since D.18-09-017 have directly or indirectly affected MPWSP timing?

A93. Following issuance of D.18-09-017, several CPUC proceedings affected, either directly or indirectly, the timing of implementation of the MPWSP. Those proceedings primarily involved: (1) rehearing and modification proceedings related to D.18-09-017; (2) proceedings concerning the Pure Water Monterey expansion project; (3) proceedings updating supply and demand assumptions underlying the MPWSP; and (4) proceedings requiring California American Water to submit additional analyses, reports, and supporting information regarding project need, cost recovery, and water-supply planning.

First, after issuance of D.18-09-017, parties including the City of Marina and MCWD sought rehearing of the decision. In Decision 19-01-051, issued in January 2019, the CPUC modified certain portions of D.18-09-017, denied rehearing, and reaffirmed approval of the project. Although rehearing was ultimately denied, the associated litigation and administrative review extended the regulatory process immediately following the project's approval.

Second, in D.18-09-017, the CPUC specifically directed California American Water to "file a Tier 2 advice letter providing specific additional information and its assessment as to whether it intends to file an application with the Commission to pursue a Water Purchase Agreement ("WPA") for additional water supply to be provided by a PWM expansion." California American Water complied with this directive and actively

pursued an understanding relating to the potential associated with Pure Water Monterey expansion.

Third, California American Water did file Application ("A.") 21-11-024 to seek approval of the amended Pure Water Monterey water-purchase agreement as well as updated supply and demand estimates for the MPWSP. In that proceeding, the CPUC undertook a Phase 2 review specifically focused on revised supply and demand forecasts and assumptions for California American Water's Monterey Peninsula service area. In October 2022, the parties confirmed they were ready for hearings and provided agreed upon dates for hearings in October and December 2022. Hearings were not scheduled until November 2023 and took place in March 2024. Briefing concluded in June 2024, with a final decision issued in August 2025.

In addition, California American Water's participation necessitated additional technical analyses, expert testimony, reporting, and regulatory review, thereby diverting personnel and consultant resources and contributing to the overall timeline associated with development of the MPWSP.

Q94. What was the August 14, 2025, CPUC demand/supply decision and how did it satisfy a required CDP condition?

A94. On August 14, 2025, the CPUC issued D. 25-08-006 in A.21-11-024. The decision adopted updated demand and supply estimates for the MPWSP. The CPUC concluded that the Monterey Peninsula would continue to experience significant long-term water-supply shortfalls, estimated at approximately 815 million gallons annually by 2050. In doing so, the CPUC confirmed the continuing need for additional drought-resistant water supplies, including the MPWSP's desalination facilities. This CPUC determination satisfied a CDP condition requiring updated demand-and-supply findings before final implementation of certain project approvals. The period between the CPUC's original

approval of the MPWSP in D.18-09-017 on September 13, 2018, and the issuance of the decision on August 14, 2025, was approximately six years and eleven months.

E. State Lands Commission Delays

Q95. When was the State Lands Commission ("SLC") lease application filed for the slant well areas? What is the current status of that application?

A95. California American Water submitted its State Lands Commission ("SLC") lease application on June 5, 2023. Following a notice of incomplete application issued on July 13, 2023, California American Water provided its response on September 14, 2023, and SLC staff deemed the application complete on October 13, 2023. By the summer of 2024, the environmental review associated with the lease application was substantially complete and SLC staff indicated it was targeting an October 2024 hearing date.

Although the application and environmental review were substantially complete by the summer of 2024, the lease was not approved until June 2026. The reason for the delay in approval was because the State Lands Commission would not act on the application until A.21-11-024 was completed. As a result, approximately 20 months elapsed between the date the application was deemed complete and the date of final SLC approval. During that period, California American Water continued to meet with SLC staff and provide information requested in support of the review process.

From an engineering and project implementation perspective, the SLC lease approval was a critical path item because it is required for construction of the subsurface slant-well intake facilities located on or beneath State lands. In addition, the absence of an approved SLC lease affected other project approvals because certain agencies were reluctant to issue final approvals for project components while the SLC authorization remained unresolved. As a practical matter, the project could not advance through all

necessary permitting and into full implementation without first obtaining the underlying SLC lease approval.

Accordingly, while California American Water's lease application and environmental review were substantially complete by summer 2024, final approval was not obtained until June 2026. The timing of that approval contributed to the overall extension of the project schedule because development of the intake well facilities and related permitting activities could not fully proceed until the required State Lands authorization had been secured. The lease approval obtained in June 2026 allowed the project to move forward with implementation of the intake well program, which is currently scheduled to begin construction during the Fall 2027 drilling season.

Q96. What is the current status of the SLC Lease?

A96. As noted above, on June 23, 2026, the SLC approved California American Water's application for the SLC Lease. On July 24, 2026, the City of Marina, MPWMD, MCWD, and MCWD GSA filed a petition for writ of mandate in Monterey Superior Court challenging SLC's approval of the lease.

F. Remaining Permit Approvals

Q97. What remaining permit approvals are there for the project?

A97. California American Water must obtain a National Pollutant Discharge Elimination System permit from the California Central Coast Regional Water Quality Control Board to allow the discharge of desalination brine through M1W's existing outfall into Monterey Bay, as well as a determination that the MPWSP uses the best available site, design, technology, and mitigation measures feasible to minimize marine life mortality under California Water Code Section 13142.5(b). In addition, M1W and California American Water must obtain a CDP from the Coastal Commission and authorization from the State Lands Commission to make improvements to M1W's outfall to

accommodate the MPWSP's brine discharge. Moreover, California American Water must execute a lease agreement with M1W for the use of outfall for the brine discharge. Further, Special Condition 12 of the CDPs for the MPWSP require California American Water to obtain Coastal Commission approval of a Groundwater Monitoring and Remedial Measures Plan in the form of an amendment to those CDPs.[6] Finally, California American Water must obtain the Monterey Bay National Marine Sanctuary's authorization of the discharge of desalination brine into Monterey Bay, as well as a special use permit for the presence of a pipeline transporting seawater to a desalination facility. California American Water also will need various other permits or approvals from governmental agencies for construction and operation of the MPWSP, such as ministerial building, grading, and encroachment permits. California American Water has been working closely with the above-referenced agencies to obtain the required approvals.

V. PROJECT MANAGEMENT

Q98. How does California American Water choose its vendors for engineering and construction projects?

A98. California American Water uses several methods to choose its vendors. These include competitive bidding, qualifications-based selection, and sole source selection, depending on the circumstances. Factors that influence the method include internal policies, the type of service to be provided, the size of the contract, and the expertise required of the vendor.

Q99. Does California American Water have any written policies to guide its selection of contractors?

A99. Yes. American Water currently has a policy and procedure in place to properly manage the procurement and administration of engineering and construction contracts, attached

[6] See Application, Attachment A (CDP Findings) at p. 31.

hereto as Attachments 4 and 5 (CONFIDENTIAL). The policies and procedures set forth the process for sourcing process, supplier selection process, and methods used to process contracts, including competitive bidding and sole source requirements.

Q100. In addition to these written policies, please discuss California American Water's process for obtaining professional services?

A100. California American Water usually conducts a Request for Proposals ("RFP") process as part of its regular business of soliciting proposals for engineering work. This process typically includes a pre-bid meeting, where firms from the Company's approved list of national and regional engineering firms are invited to participate and express their interest. In addition, there may be local engineering or construction firms that are invited to participate, depending upon their expertise and experience. Depending on the capital project, the firms may be invited to participate in reviewing draft and final versions of the RFP in order to be as comprehensive and clear in presenting the work expectations as much as possible prior to the issuance of the RFP. This step allows some latitude for addressing questions or issues of concern prior to the RFP due date. The actual RFP is then distributed to interested firms, and a submittal date is selected, typically four to six weeks into the future from the distribution date. If more than two firms submit a bid on the RFP, then the bids are evaluated by no less than three engineering team members. A bid evaluation form is then completed, and the results are tabulated. After review by the team, an award memo and resulting recommendation is typically prepared for management's approval of that specific project. Thereafter, the selected firm is contacted about successfully receiving the project award.

On occasion, after going through the RFP process, California American Water may receive formal letters of non-participation from firms prior to the due date for proposals being submitted. It is also possible that other firms may choose to partner on submitting a proposal to California American Water for performing this work. In these

circumstances, it is possible that only one firm may provide a response to the RFP. Again, an evaluation of the proposal would still be conducted for qualifications, understanding of the project scope, and the price. If the single RFP response meets certain criteria, then it is possible the single RFP response can be awarded. The circumstances can vary by project, but as long as the responding firm met the requirements contained in the original RFP document, it is acceptable.

Finally, there are unique project circumstances that arise that lead to management judgment on sole-sourcing work to specialized engineering firms. One example is GeoScience Support Services, Inc. GeoScience has provided groundwater modeling, hydrogeologic analysis, litigation support, and monitoring-related services associated with the MPWSP for many years. GeoScience has been directly involved in developing and defending the technical analyses underlying the project's groundwater, source-water, and monitoring programs and has supported testimony, depositions, and compliance activities associated with Coastal Commission conditions of approval. Because GeoScience possesses extensive historical knowledge of the project, its hydrogeologic models, monitoring data, technical assumptions, and regulatory commitments – replacing the firm would have required a significant transfer of institutional knowledge and could have delayed critical regulatory and litigation support activities. For those reasons, California American Water determined that continuity of work and GeoScience's unique technical expertise justified sole-source engagement.

Another example is Denise Duffy & Associates ("DD&A"), which has provided environmental planning, permitting, biological, and compliance support services for the MPWSP since at least 2016. DD&A has supported CEQA compliance, permit acquisition and amendments, mitigation monitoring and reporting, biological surveys, agency coordination, CDP compliance, environmental documentation, and construction-related environmental monitoring. The firm has developed extensive familiarity with the

project's environmental commitments, permit conditions, mitigation requirements, agency relationships, and compliance obligations. Given the complexity of the MPWSP's environmental and permitting framework, retaining DD&A has provided continuity, reduced project risk, and ensured consistent implementation of environmental commitments that have evolved over many years. California American Water therefore concluded that DD&A's unique project knowledge and long-standing involvement supported the use of sole-source engagements for certain environmental compliance and permitting activities.

The MPWSP is a technically complex and heavily regulated infrastructure project that has been under development for more than a decade. In certain circumstances, California American Water has relied on consultants possessing unique project-specific expertise, historical knowledge, or specialized technical capabilities where continuity of work was critical to maintaining project schedule, regulatory compliance, and efficient project execution. Such procurements were undertaken to reduce risk, preserve institutional knowledge, and avoid the costs and delays that could result from replacing consultants that have been deeply integrated into key technical, environmental, and regulatory work streams.

California American Water's policies and procedures provide the rigorous standards necessary to identify and engage high-quality professional services able to provide services in a cost-effective manner.

Q101. Have any preliminary or detailed design documents been produced?

A101. Yes. Detailed engineering and basis of design documents have been prepared for the project. The desalination plant and conveyance pipeline designs are complete, the slant wells are approximately 90 percent designed, and the outfall improvements are

approximately 60 percent designed. These design documents form the basis for current cost estimates, permitting activities, and construction planning.

Q102. Have any design-build or other construction contracts been executed? If so, provide contract amounts, scope covered, and what items remain as owner-furnished costs.

A102. A design-build contract with CDM Smith Constructors was executed on April 27, 2026, for approximately $270,000,000. This contract covers the desalination plant which includes final design, permitting support, procurement, construction, startup support, quality management, and construction management services associated with the MPWSP desalination plant facilities. The scope includes treatment-process facilities, buildings, electrical and instrumentation systems, post-treatment systems, brine handling facilities, and associated site infrastructure. Separate contracts govern other project components such as the conveyance pipelines and source wells.

Q103. Have any other procurement activities (requests for proposals, vendor quotes, preliminary orders) been initiated?

A103. Bidding for construction of the other major project components is expected to begin in early 2027. To support project planning and estimating, California American Water received a direct proposal in 2025 from Boart Longyear for construction of the ocean slant wells. Boart Longyear is a specialized contractor with experience and equipment capable of performing the unique offshore slant well drilling required for the project.

Q104. Have any competitive bids been received for construction? If so, when were bids received, what were the bid amounts, and how do they compare to the D.18-09-017 estimate?

A104. The Design Build contract for the desalination plant was bid in 2015. CDM Smith Constructors was awarded the contract in 2015. In 2026, the contract was updated with a new negotiated price. California American Water plans to bid the slant well and

conveyance pipelines in early 2027. The M1W outfall improvements are expected to be bid in late 2027.

In July 2026, California American Water issued a request for proposals for construction oversight services associated with the CDM Smith scope of the desalination project. Two firms submitted proposals in August 2026. After evaluating cost and qualifications, California American Water awarded the contract to West Yost, whose proposal offered the best overall value, reflecting both the lowest price and a clear understanding of the project's construction oversight requirements.

Q105. If bids have not yet been received, what is the engineering team's basis for the cost-to-complete estimate?

A105. Conveyance Pipelines – the conveyance pipelines are 100% designed and ready for bidding. AECOM, the Engineer of Record, completed the design and prepared an updated Engineer's Estimate for the pipeline work. The estimate was developed using historical bid data from the 2015 procurement of the various conveyance pipeline alignments, which included detailed bid items and corresponding unit prices. AECOM evaluated these bid results and updated the costs by applying escalation factors derived from four widely recognized construction cost indices: Engineering News-Record ("ENR"), California Department of General Services ("DGS"), Handy-Whitman ("HW"), and the U.S. Bureau of Reclamation ("BOR"). These industry-recognized indices provided a consistent and reliable basis for projecting current construction costs and produced a relatively narrow range of estimated values. As a result, the Engineer's Estimate reflects current market conditions while maintaining a strong foundation in actual competitive bid data from the original procurement.

Outfall Improvements – The design team for the Outfall Improvements, Brown & Caldwell, developed a construction cost estimate based on the degree of completion of

the design effort. The design team broke the design of both the onshore and offshore elements into their various bid components, these were estimated based on the quantities included and compared to standard construction cost databases, the item costs were then adjusted based on factors for geographical location and vetted against recent bids in the geographical area and adjusted as needed. These costs were then escalated to the anticipated bid date.

Source Wells – The cost estimate for the civil, mechanical & electrical work for the source wells was developed by the design firm Michael Baker International (MBI) using multiple independent sources of cost information and professional judgment based on 90% design drawings. The estimate draws on cost information from comparable prior projects, including earthwork, trenching, and environmental mitigation costs; input from Construction Management staff based on recent project experience; published RS Means unit-cost data; and application of the Engineering News-Record Construction Cost Index for the Bay Area to account for regional construction pricing and cost escalation. The Cost Estimating Division of MBI also reviewed and provided input on the estimate. In addition, the estimate incorporates current vendor quotations for pipe materials, including high-density polyethylene, ductile iron, and super duplex stainless steel, as well as major mechanical components such as isolation valves, check valves, air-release valves, blowoffs, meters, and related equipment. Contractor quotations were used for selected design features and specialized construction activities, and the design consultant provided a quotation for the design of shoring required for the temporary casings. Drilling of the wells will be sole sourced to Boart Longyear. Boart Longyear has provided a preliminary estimate for drilling of the wells. Boart Longyear competitively won the bid for drilling the test slant well and is the only known contractor who has the specialized drill rig that can drill these slant wells that extend 1,000 feet under the ocean floor.

Q106. Were there any periods from 2018 to the present during which the project was not actively progressing?

A106. No. Although physical construction of the desalination plant did not proceed continuously between 2018 and 2026, the project itself remained active throughout that period. The work shifted among permitting, environmental review, engineering and redesign, regulatory proceedings, stakeholder engagement, supporting-infrastructure construction, procurement, and preconstruction activities as California American Water pursued the approvals necessary to begin plant construction.

After D.18-09-017 was issued in September 2018, California American Water pursued the required coastal development permits. The City of Marina denied the local permit in March 2019, California American Water appealed that decision in May 2019, and it separately filed an application with the Coastal Commission in July 2019. When Coastal Commission review identified additional questions concerning groundwater, wetlands, alternatives, environmental justice, and other coastal resources, California American Water funded and performed additional groundwater modeling and technical analyses, revised the project footprint and well design, developed habitat and wetlands protection measures, changed portions of the pipeline design to reduce surface disturbance, and expanded community and tribal outreach. It also proposed the phased 4.8-MGD initial facility to reduce the project's initial footprint while preserving the ability to expand to 6.4 MGD. The Coastal Commission approved the project, subject to conditions, in November 2022.

During this same general period, California American Water also advanced and constructed supporting MPWSP facilities. The Ryan Ranch-Bishop interconnection improvements were completed in March 2019, the first phase of the transfer pipeline was completed in December 2019, and the Carmel Valley Pump Station, in April 2022.

Following the November 2022 Coastal Commission approval, the focus shifted to satisfying the permit conditions and obtaining dependent approvals. California American Water pursued the CPUC supply-and-demand proceeding, the SLC lease, the NPDES and Ocean Plan review for brine discharge, federal authorizations, habitat and groundwater-monitoring plans, local permits, and CPUC Notices to Proceed. The CPUC issued NTP-5a in September 2025 for site preparation and grading and NTP-5b in May 2026 for construction of the first 4.8-MGD phase. The SLC approved the slant-well lease in June 2026.

California American Water also continued engineering and preconstruction work. The project completed preliminary and final design, permitting packages, redesign for the phased facility, and issued-for-construction documents. Construction of the desalination plant began in August 2026.

There were periods when field construction of the desalination plant could not proceed because required permits, regulatory determinations, or agency approvals remained outstanding. Those periods should not be characterized as periods of project inactivity. California American Water continued to advance the project through the work reasonably available at each stage and moved into construction once the necessary authorizations were obtained.

Q107. What cost controls, value engineering exercises, or procurement strategies did California American Water employ during this period to reduce the impact of escalating construction costs?

A107. California American Water implemented a number of cost-control, value-engineering, and procurement strategies during the period of project delay to reduce the effects of construction-cost escalation while preserving the project's ability to meet its long-term water-supply objectives. Rather than suspending project-development activities during

the permitting period, California American Water continued to evaluate opportunities to reduce initial capital expenditures, improve constructability, sequence work efficiently, and leverage available financing opportunities.

One value-engineering measure was the adoption of the phased implementation approach approved by the California Coastal Commission in 2022. Under that approach, California American Water proposed an initial 4.8 MGD desalination facility while preserving the ability to expand to the authorized 6.4 MGD capacity in the future. The phased configuration reduced the initial construction footprint, reduced the number of intake wells required and lowered the amount of infrastructure required for initial operation, and reduced initial capital expenditures. The phased approach would help control construction costs while maintaining operational flexibility and future expansion capability.

California American Water also worked with regulatory agencies and project consultants to modify facility designs in ways that reduced environmental impacts and improved constructability. These efforts included refinement of the wellfield layout, reductions in the project footprint, revisions to portions of the pipeline design, and the use of tunneling and trenchless construction techniques in certain areas to reduce impacts to environmentally sensitive habitat areas. These refinements helped advance permitting while reducing the risk of future redesigns, permitting disputes, and construction disruptions.

Throughout the permitting period, California American Water continued engineering development rather than delaying design until all permits were obtained. Preliminary engineering, final design, redesign associated with the phased configuration, permitting packages, and issued-for-construction documents were advanced while regulatory reviews continued. Continuing design activities allowed California American Water to

maintain project readiness and avoid additional schedule impacts that would otherwise have occurred once major permits were issued.

From a procurement perspective, California American Water maintained the design-build delivery model for the desalination facilities and continued coordination with CDM Constructors during the extended permitting period. Project-management, permitting, and preconstruction activities continued while approvals were pending to reduce the risk of further delay once construction authorization was received. Ongoing efforts continued to manage schedule extensions, permitting support, contractor coordination, and preconstruction planning to keep the project positioned for construction as approvals were obtained.

California American Water additionally pursued lower-cost financing opportunities to offset increasing construction costs. California American Water evaluated and pursued state and federal financing alternatives, including grants, loans, and bond funding opportunities intended to reduce the overall cost of project delivery and lessen future customer impacts. The Company also evaluated financing structures and other measures intended to reduce project financing costs while continuing to advance the project.

California American Water did not simply absorb escalating construction costs during the permitting period. Rather, it undertook a series of measures designed to control costs, including project phasing, design optimization, constructability improvements, continued design advancement, coordinated design-build implementation, and pursuit of lower-cost financing sources. Collectively, these actions were intended to reduce initial capital expenditures, manage construction risk, preserve schedule flexibility, and mitigate customer impacts while maintaining the project's ability to provide a long-term drought-resistant water supply for the Monterey Peninsula.

Q108. Why was California American Water unable to commence full construction earlier?

A108. California American Water was unable to commence full construction of the desalination facilities because multiple regulatory approvals and permitting processes required after issuance of D.18-09-017 were not completed until recently, and several remain ongoing. The project could not lawfully proceed to full implementation until those approvals were obtained. See Attachment 1 for a permitting timeline.

The most significant source of delay was the Coastal Commission permitting process. Although D.18-09-017 approved the MPWSP in September 2018, Coastal Commission review continued from 2019 through November 2022. During that period, the Coastal Commission requested additional information regarding groundwater impacts, wetlands, project alternatives, environmental justice issues, coastal resources, and project design. California American Water funded and performed additional groundwater investigations, modeling, environmental studies, stakeholder outreach, mitigation planning, and project-design refinements in order to address those concerns. The CDP was ultimately not approved until November 17, 2022.

Following Coastal Commission approval, California American Water was required to satisfy permit conditions and obtain additional approvals that remained on the project's critical path. These included the SLC lease for the slant wells, updated CPUC supply-and-demand findings, RWQCB permitting for project discharges, federal environmental authorizations, habitat mitigation requirements, groundwater monitoring requirements, and other agency approvals. Several of these approvals were dependent upon one another and could not be completed simultaneously.

The SLC lease provides an example. California American Water submitted its lease application in June 2023. Although the application and environmental review were substantially complete by summer 2024, the lease was not approved until June 2026

because the SLC deferred action pending completion of the CPUC supply-and-demand proceeding. As a result, approximately twenty months elapsed between the application being deemed complete and final approval. During that period California American Water continued supporting the review process and providing requested information.

The CPUC supply-and-demand proceeding likewise extended beyond its originally anticipated schedule. California American Water filed Application A.21-11-024 to address updated water-supply and demand forecasts and related issues. Hearings were not held until 2024, and the CPUC's final decision providing updated supply and demand estimates did not issue until August 14, 2025. That decision ultimately confirmed the continuing need for the project and satisfied a Coastal Commission permit condition, but the proceeding necessarily consumed time and resources before final implementation could proceed.

California American Water was not idle during this period but has continued engineering development, groundwater studies, environmental analyses, permit applications, stakeholder outreach, design refinement, habitat-mitigation planning, and procurement preparation. It also completed other MPWSP facilities, including transmission-pipeline and related infrastructure improvements authorized under separate Notices to Proceed. The project therefore remained active, but it could not enter full desalination-facility construction until the required approvals were obtained.

California American Water had been unable to commence full construction of the desalination facilities principally because the project required completion of an extended sequence of interrelated regulatory reviews, permit proceedings, and agency approvals following D.18-09-017. Once those approvals began to be secured, the CPUC issued NTP-5a in September 2025 and NTP-5b in May 2026, allowing the project to proceed toward construction.

Q109. Did California American Water act reasonably and prudently in managing the project?

A109. Yes. California American Water acted reasonably and prudently in managing the project under the circumstances. The project has been subject to an unusually complex and extended regulatory processes involving multiple agencies with overlapping jurisdiction, including the Coastal Commission, CPUC, SLC, RWQCB, and federal resource agencies. Throughout that process, California American Water continued to advance engineering, permitting, environmental review, stakeholder outreach, supporting infrastructure construction, and project-development activities rather than allowing the project to remain dormant.

After D.18-09-017 was issued, California American Water pursued the permits required to construct the project and responded to issues raised during the Coastal Commission review. When the Coastal Commission identified concerns regarding groundwater impacts, environmental justice, wetlands, alternatives analysis, and coastal-resource protection, California American Water funded additional technical studies, conducted groundwater monitoring and modeling, developed mitigation measures, expanded community outreach efforts, and refined project designs to address those concerns. These actions contributed to the eventual approval of the CDP in November 2022.

California American Water also demonstrated prudent project management by adapting the project as circumstances changed. Most notably, California American Water proposed the phased implementation approach that reduced the initial desalination capacity to 4.8 MGD while preserving the ability to expand to the ultimately authorized 6.4 MGD capacity. The phased approach reduced the initial construction footprint, reduced the number of intake wells required for the first phase, responded to concerns raised during the Coastal Commission process, and helped control initial capital expenditures while maintaining the project's long-term water-supply objectives.

During the extended permitting period, California American Water continued to advance engineering and preconstruction work. The project progressed through preliminary and final design, redesign associated with the phased configuration, permitting packages, issued-for-construction preparations, contractor coordination, and procurement planning. By continuing these activities while permits were under review, California American Water positioned the project to proceed once major approvals were obtained.

California American Water also continued to pursue related regulatory approvals and satisfy permit conditions as they arose. The Company participated in the CPUC supply-and-demand proceeding, continued working with SLC staff regarding the slant-well lease, pursued water-quality and discharge permits, and obtained successive Notices to Proceed from the CPUC. These activities reflect ongoing project management efforts directed toward securing all approvals necessary for construction.

In addition, California American Water continued constructing and placing into service supporting MPWSP infrastructure where authorization had been obtained. The transmission-main segment, Ryan Ranch-Bishop interconnection improvements, Carmel Valley Pump Station improvements, and related facilities were advanced while desalination permitting remained pending. This allowed progress to continue on portions of the overall water-supply program even while the desalination component remained subject to regulatory review.

California American Water did not cause the principal project delays and did not remain inactive while approvals were pending. Instead, California American Water continued to advance available work, respond to regulator concerns, adapt the project to changing circumstances, pursue cost-control measures, and obtain the approvals necessary to move the project toward construction. Under the circumstances presented, those actions were reasonable and prudent project-management decisions.

VI. CONCLUSION

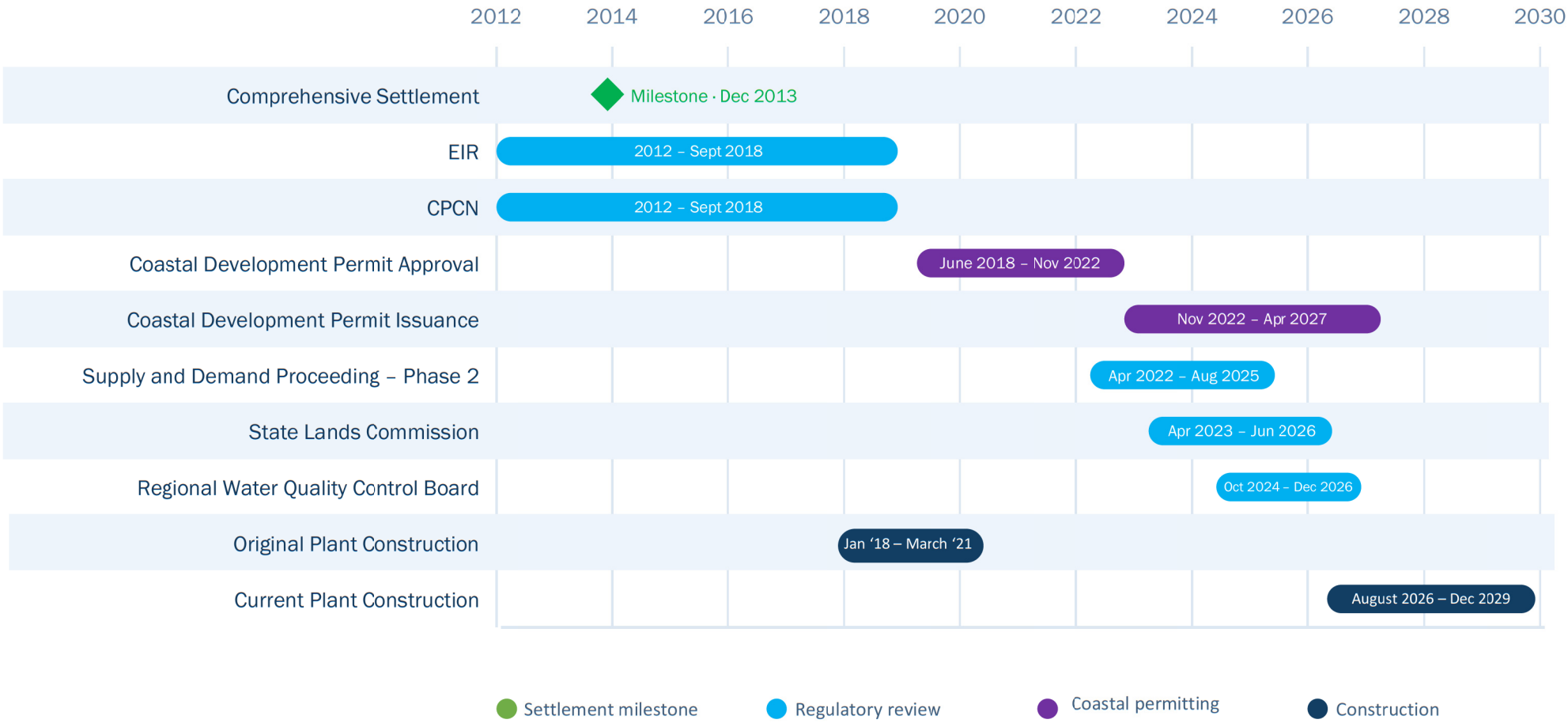
Q110. Does this conclude your testimony?

A110. Yes, it does.

ATTACHMENT 1

Project Timeline

Permitting, approvals, and construction · 2012–2029



ATTACHMENT 2

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
1	Year	Month	Prior Month AFUDC	Cash Spend	Total Investment	STD Financed	Annual STD Rate	Monthly STD Rate	STD AFUDC	Equity/LTD Financed	Authorized Equity Ratio	Equity Investment	Authorized ROE	Monthly ROE	Equity AFUDC
2	2011	1	-	-	-	-	0.40%	0.03%	-	-	53.00%	-		0.00%	-
3	2011	2	-	-	-	-	0.40%	0.03%	-	-	53.00%	-	9.99%	0.83%	-
4	2011	3	-	127,031	127,031	127,031	0.40%	0.03%	21	-	53.00%	-	9.99%	0.83%	-
5	2011	4	21	10,779	137,831	181,706	0.39%	0.03%	57	(43,876)	53.00%	(23,254)	9.99%	0.83%	(194)
6	2011	5	(137)	38,215	175,909	225,512	0.37%	0.03%	64	(49,603)	53.00%	(26,290)	9.99%	0.83%	(219)
7	2011	6	(155)	4,638	180,392	230,213	0.37%	0.03%	71	(49,821)	53.00%	(26,405)	9.99%	0.83%	(220)
8	2011	7	(149)	119,175	299,418	362,711	0.38%	0.03%	95	(63,293)	53.00%	(33,545)	9.99%	0.83%	(279)
9	2011	8	(185)	184,079	483,312	546,883	0.41%	0.03%	156	(63,570)	53.00%	(33,692)	9.99%	0.83%	(280)
10	2011	9	(125)	(216,929)	266,259	330,110	0.41%	0.03%	149	(63,851)	53.00%	(33,841)	9.99%	0.83%	(282)
11	2011	10	(133)	617	266,743	330,875	0.41%	0.03%	114	(64,133)	53.00%	(33,990)	9.99%	0.83%	(283)
12	2011	11	(169)	277,826	544,400	608,815	0.42%	0.03%	164	(64,416)	53.00%	(34,140)	9.99%	0.83%	(284)
13	2011	12	(121)	(141,790)	402,489	467,189	0.52%	0.04%	232	(64,700)	53.00%	(34,291)	9.99%	0.83%	(285)
14	2012	1	(53)	20,034	422,469	487,455	0.53%	0.04%	209	(64,985)	53.00%	(34,442)	9.99%	0.83%	(287)
15	2012	2	(77)	38,346	460,738	526,010	0.48%	0.04%	202	(65,272)	53.00%	(34,594)	9.99%	0.83%	(288)
16	2012	3	(86)	42,188	502,840	568,400	0.48%	0.04%	220	(65,560)	53.00%	(34,747)	9.99%	0.83%	(289)
17	2012	4	(69)	33,109	535,880	601,730	0.49%	0.04%	237	(65,849)	53.00%	(34,900)	9.99%	0.83%	(291)
18	2012	5	(54)	13,164	548,990	615,130	0.48%	0.04%	246	(66,140)	53.00%	(35,054)	9.99%	0.83%	(292)
19	2012	6	(46)	183,927	732,871	799,303	0.48%	0.04%	285	(66,432)	53.00%	(35,209)	9.99%	0.83%	(293)
20	2012	7	(8)	108,314	841,177	907,902	0.50%	0.04%	354	(66,725)	53.00%	(35,364)	9.99%	0.83%	(294)
21	2012	8	60	288,941	1,130,178	1,197,197	0.49%	0.04%	428	(67,019)	53.00%	(35,520)	9.99%	0.83%	(296)
22	2012	9	132	274,822	1,405,132	1,472,447	0.46%	0.04%	511	(67,315)	53.00%	(35,677)	9.99%	0.83%	(297)
23	2012	10	214	845,707	2,251,053	2,318,665	0.44%	0.04%	694	(67,612)	53.00%	(35,834)	9.99%	0.83%	(298)
24	2012	11	396	173,567	2,425,016	2,492,927	0.45%	0.04%	899	(67,910)	53.00%	(35,992)	9.99%	0.83%	(300)
25	2012	12	600	73,058	2,498,674	2,566,884	0.45%	0.04%	954	(68,210)	53.00%	(36,151)	9.99%	0.83%	(301)
26	2013	1	653	96,687	2,596,014	2,664,524	0.43%	0.04%	931	(68,511)	53.00%	(36,311)	9.99%	0.83%	(302)
27	2013	2	629	280,713	2,877,355	2,946,168	0.39%	0.03%	916	(68,813)	53.00%	(36,471)	9.99%	0.83%	(304)
28	2013	3	612	241,479	3,119,446	3,188,563	0.39%	0.03%	991	(69,117)	53.00%	(36,632)	9.99%	0.83%	(305)
29	2013	4	686	159,145	3,279,277	3,348,699	0.37%	0.03%	1,000	(69,422)	53.00%	(36,794)	9.99%	0.83%	(306)
30	2013	5	693	1,146,937	4,426,908	4,496,636	0.34%	0.03%	1,127	(69,728)	53.00%	(36,956)	9.99%	0.83%	(308)
31	2013	6	820	1,176,994	5,604,721	5,674,757	0.33%	0.03%	1,388	(70,036)	53.00%	(37,119)	9.99%	0.83%	(309)
32	2013	7	1,079	625,407	6,231,207	6,301,552	0.33%	0.03%	1,667	(70,345)	53.00%	(37,283)	9.99%	0.83%	(310)
33	2013	8	1,357	239,059	6,471,623	6,542,278	0.33%	0.03%	1,753	(70,655)	53.00%	(37,447)	9.99%	0.83%	(312)
34	2013	9	1,441	(147,884)	6,325,179	6,396,146	0.33%	0.03%	1,765	(70,967)	53.00%	(37,612)	9.99%	0.83%	(313)
35	2013	10	1,452	947,536	7,274,167	7,345,447	0.42%	0.04%	2,431	(71,280)	53.00%	(37,778)	9.99%	0.83%	(315)
36	2013	11	2,116	2,169,688	9,445,972	9,517,566	0.36%	0.03%	2,519	(71,594)	53.00%	(37,945)	9.99%	0.83%	(316)
37	2013	12	2,203	1,142,474	10,590,649	10,662,560	0.36%	0.03%	2,998	(71,910)	53.00%	(38,113)	9.99%	0.83%	(317)
38	2014	1	2,681	238,101	10,831,431	10,903,659	0.34%	0.03%	3,043	(72,228)	53.00%	(38,281)	9.99%	0.83%	(319)
39	2014	2	2,724	751,495	11,585,651	11,658,197	0.32%	0.03%	2,969	(72,546)	53.00%	(38,450)	9.99%	0.83%	(320)
40	2014	3	2,649	103,542	11,691,842	11,764,708	0.30%	0.02%	2,891	(72,866)	53.00%	(38,619)	9.99%	0.83%	(322)
41	2014	4	2,570	585,138	12,279,549	12,352,737	0.29%	0.02%	2,909	(73,188)	53.00%	(38,790)	9.99%	0.83%	(323)
42	2014	5	2,586	1,255,609	13,537,743	12,603,000	0.29%	0.02%	2,861	934,743	53.00%	495,414	9.99%	0.83%	4,124
43	2014	6	8,001	1,181,510	14,727,254	12,603,000	0.29%	0.02%	2,870	2,124,254	53.00%	1,125,854	9.99%	0.83%	9,373
44	2014	7	14,550	1,085,330	15,827,134	15,901,456	0.29%	0.02%	3,675	(74,321)	53.00%	(39,390)	9.99%	0.83%	(328)
45	2014	8	3,266	926,260	16,756,660	16,831,391	0.28%	0.02%	3,881	(74,730)	53.00%	(39,607)	9.99%	0.83%	(330)
46	2014	9	3,470	515,729	17,275,859	17,351,000	0.28%	0.02%	4,041	(75,141)	53.00%	(39,825)	9.99%	0.83%	(332)
47	2014	10	3,628	489,333	17,768,820	17,844,374	0.29%	0.02%	4,265	(75,554)	53.00%	(40,044)	9.99%	0.83%	(333)
48	2014	11	3,850	949,632	18,722,301	17,922,317	0.33%	0.03%	4,881	799,984	53.00%	423,992	9.99%	0.83%	1,765
49	2014	12	7,515	1,315,683	20,045,499	17,921,775	0.40%	0.03%	5,963	2,123,725	53.00%	1,125,574	9.99%	0.83%	6,468
50	2015	1	15,616	845,960	20,907,075	17,880,015	0.39%	0.03%	5,839	3,027,060	53.00%	1,604,342	9.99%	0.83%	11,490
51	2015	2	22,986	4,579,500	25,509,561	17,770,263	0.44%	0.04%	6,476	7,739,298	53.00%	4,101,828	9.99%	0.83%	24,045
52	2015	3	42,359	1,652,954	27,204,874	17,722,403	0.54%	0.04%	7,969	9,482,471	53.00%	5,025,710	9.99%	0.83%	38,192
53	2015	4	64,966	2,170,960	29,440,800	17,721,323	0.62%	0.05%	9,124	11,719,477	53.00%	6,211,323	9.99%	0.83%	46,920
54	2015	5	79,145	1,152,144	30,672,089	17,720,149	0.54%	0.05%	8,017	12,951,940	53.00%	6,864,528	9.99%	0.83%	54,605
55	2015	6	89,508	948,085	31,709,681	17,719,118	0.47%	0.04%	6,964	13,990,563	53.00%	7,414,999	9.99%	0.83%	59,638
56	2015	7	95,965	1,324,524	33,130,171	17,710,694	0.43%	0.04%	6,357	15,419,477	53.00%	8,172,323	9.99%	0.83%	65,113
57	2015	8	103,528	94,621	33,328,320	17,709,874	0.44%	0.04%	6,451	15,618,446	53.00%	8,277,776	9.99%	0.83%	68,704

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
58	2015	9	108,981	2,497,733	35,935,035	16,955,868	0.42%	0.04%	5,976	18,979,167	53.00%	10,058,958	9.99%	0.83%	78,231
59	2015	10	121,911	727,410	36,784,355	16,936,988	0.42%	0.04%	5,996	19,847,367	53.00%	10,519,104	9.99%	0.83%	85,967
60	2015	11	133,396	291,180	37,208,932	16,935,433	0.43%	0.04%	6,114	20,273,499	53.00%	10,744,955	9.99%	0.83%	88,809
61	2015	12	137,726	1,644,223	38,990,881	16,922,072	0.59%	0.05%	8,265	22,068,808	53.00%	11,696,468	9.99%	0.83%	93,746
62	2016	1	147,193	1,274,433	40,412,507	16,798,522	0.73%	0.06%	10,234	23,613,985	53.00%	12,515,412	9.99%	0.83%	101,379
63	2016	2	160,493	188,264	40,761,264	16,796,609	0.74%	0.06%	10,399	23,964,655	53.00%	12,701,267	9.99%	0.83%	105,323
64	2016	3	166,502	972,643	41,900,409	16,792,931	0.75%	0.06%	10,519	25,107,478	53.00%	13,306,963	9.99%	0.83%	108,635
65	2016	4	171,531	415,321	42,487,262	16,707,332	0.76%	0.06%	10,562	25,779,930	53.00%	13,663,363	9.99%	0.83%	112,831
66	2016	5	177,794	1,357,597	44,022,652	16,477,228	0.75%	0.06%	10,269	27,545,424	53.00%	14,599,075	9.99%	0.83%	118,542
67	2016	6	185,966	769,140	44,977,758	16,413,304	0.77%	0.06%	10,466	28,564,454	53.00%	15,139,161	9.99%	0.83%	124,337
68	2016	7	194,751	295,701	45,468,210	16,411,037	0.79%	0.07%	10,764	29,057,173	53.00%	15,400,302	9.99%	0.83%	127,555
69	2016	8	199,819	1,233,459	46,901,487	16,395,112	0.77%	0.06%	10,579	30,506,376	53.00%	16,168,379	9.99%	0.83%	131,881
70	2016	9	206,045	710,042	47,817,574	16,003,342	0.79%	0.07%	10,501	31,814,232	53.00%	16,861,543	9.99%	0.83%	138,806
71	2016	10	216,231	808,225	48,842,030	15,811,644	0.79%	0.07%	10,390	33,030,386	53.00%	17,506,104	9.99%	0.83%	143,955
72	2016	11	223,752	1,485,992	50,551,774	15,667,009	0.78%	0.06%	10,170	34,884,765	53.00%	18,488,925	9.99%	0.83%	150,642
73	2016	12	233,442	1,078,463	51,863,680	14,620,065	0.92%	0.08%	11,249	37,243,615	53.00%	19,739,116	9.99%	0.83%	161,949
74	2017	1	251,280	846,036	52,960,996	12,914,194	1.00%	0.08%	10,723	40,046,803	53.00%	21,224,805	9.99%	0.83%	174,830
75	2017	2	269,846	364,960	53,595,802	12,603,000	0.98%	0.08%	10,292	40,992,802	53.00%	21,726,185	9.99%	0.83%	180,065
76	2017	3	277,175	557,373	54,430,350	12,603,000	1.07%	0.09%	11,199	41,827,350	53.00%	22,168,496	9.99%	0.83%	183,323
77	2017	4	282,910	708,863	55,422,123	12,603,000	1.21%	0.10%	12,685	42,819,123	53.00%	22,694,135	9.99%	0.83%	187,365
78	2017	5	290,386	1,015,823	56,728,332	12,603,000	1.20%	0.10%	12,559	44,125,332	53.00%	23,386,426	9.99%	0.83%	192,451
79	2017	6	297,799	723,811	57,749,942	12,603,000	1.27%	0.11%	13,380	45,146,942	53.00%	23,927,879	9.99%	0.83%	197,603
80	2017	7	306,256	642,816	58,699,013	12,603,000	1.37%	0.11%	14,393	46,096,013	53.00%	24,430,887	9.99%	0.83%	201,969
81	2017	8	313,739	933,573	59,946,326	12,603,000	1.37%	0.11%	14,359	47,343,326	53.00%	25,091,963	9.99%	0.83%	206,831
82	2017	9	318,082	625,214	60,889,621	12,603,000	1.35%	0.11%	14,203	48,286,621	53.00%	25,591,909	9.99%	0.83%	211,673
83	2017	10	325,036	420,778	61,635,435	12,603,000	1.36%	0.11%	14,263	49,032,435	53.00%	25,987,191	9.99%	0.83%	215,415
84	2017	11	338,124	1,159,466	63,133,025	12,603,000	1.37%	0.11%	14,430	50,530,025	53.00%	26,780,913	9.99%	0.83%	220,393
85	2017	12	345,775	1,020,537	64,499,338	12,603,000	1.53%	0.13%	16,037	51,896,338	53.00%	27,505,059	9.99%	0.83%	226,728
86	2018	1	356,907	(3,328,875)	61,527,370	12,603,000	1.73%	0.14%	18,210	48,924,370	55.40%	27,104,101	9.20%	0.77%	214,868
87	2018	2	339,710	3,485,921	65,353,000	12,603,000	1.78%	0.15%	18,738	52,750,000	55.40%	29,223,500	9.20%	0.77%	216,644
88	2018	3	342,895	(1,192,252)	64,503,643	12,603,000	2.06%	0.17%	21,685	51,900,643	55.40%	28,752,956	9.20%	0.77%	222,971
89	2018	4	355,309	634,414	65,493,366	12,603,000	2.35%	0.20%	24,645	52,890,366	55.40%	29,301,263	9.20%	0.77%	223,296
90	2018	5	358,756	78,956	65,931,078	12,603,000	2.32%	0.19%	24,391	53,328,078	55.40%	29,543,755	9.20%	0.77%	226,334
91	2018	6	363,048	865,697	67,159,823	12,603,000	2.36%	0.20%	24,772	54,556,823	55.40%	30,224,480	9.20%	0.77%	229,883
92	2018	7	368,738	946,153	68,474,714	12,603,000	2.40%	0.20%	25,155	55,871,714	55.40%	30,952,930	9.20%	0.77%	235,296
93	2018	8	377,221	2,036,333	70,888,268	12,603,000	2.39%	0.20%	25,083	58,285,268	55.40%	32,290,039	9.20%	0.77%	243,232
94	2018	9	382,418	1,567,297	72,837,983	12,603,000	2.35%	0.20%	24,698	60,234,983	55.40%	33,370,181	9.20%	0.77%	252,510
95	2018	10	395,661	343,280	73,576,925	12,603,000	2.40%	0.20%	25,170	60,973,925	55.40%	33,779,554	9.20%	0.77%	258,248
96	2018	11	404,564	979,914	74,961,403	12,603,000	2.54%	0.21%	26,706	62,358,403	55.40%	34,546,555	9.20%	0.77%	262,776
97	2018	12	412,752	1,194,097	76,568,251	12,603,000	2.78%	0.23%	29,180	63,965,251	55.40%	35,436,749	9.20%	0.77%	269,146
98	2019	1	423,617	1,327,843	78,319,710	12,603,000	2.84%	0.24%	29,844	65,716,710	55.39%	36,400,486	9.20%	0.77%	276,251
99	2019	2	434,745	2,173,937	80,928,392	12,603,000	2.84%	0.24%	29,795	68,325,392	55.39%	37,845,434	9.20%	0.77%	285,532
100	2019	3	448,299	384,262	81,760,953	12,603,000	2.80%	0.23%	29,452	69,157,953	55.39%	38,306,590	9.20%	0.77%	292,868
101	2019	4	458,709	1,584,613	83,804,275	12,603,000	2.78%	0.23%	29,165	71,201,275	55.39%	39,438,386	9.20%	0.77%	298,996
102	2019	5	467,404	1,552,701	85,824,380	12,603,000	2.73%	0.23%	28,696	73,221,380	55.39%	40,557,323	9.20%	0.77%	307,643
103	2019	6	477,177	1,307,688	87,609,246	12,603,000	2.65%	0.22%	27,842	75,006,246	55.39%	41,545,960	9.20%	0.77%	315,742
104	2019	7	488,131	1,942,214	90,039,592	12,603,000	2.56%	0.21%	26,873	77,436,592	55.39%	42,892,128	9.20%	0.77%	324,716
105	2019	8	500,243	1,067,339	91,607,174	12,603,000	2.33%	0.19%	24,468	79,004,174	55.39%	43,760,412	9.20%	0.77%	333,230
106	2019	9	510,251	1,641,319	93,758,743	12,603,000	2.24%	0.19%	23,497	81,155,743	55.39%	44,952,166	9.20%	0.77%	341,148
107	2019	10	520,823	772,871	95,052,437	12,603,000	2.15%	0.18%	22,572	82,449,437	55.39%	45,668,743	9.20%	0.77%	348,486
108	2019	11	530,595	1,506,210	97,089,242	12,603,000	1.90%	0.16%	19,980	84,486,242	55.39%	46,796,929	9.20%	0.77%	355,578
109	2019	12	538,342	1,161,730	98,789,314	12,603,000	1.85%	0.15%	19,423	86,186,314	55.39%	47,738,599	9.20%	0.77%	363,529
110	2020	1	549,376	(343,688)	98,995,002	12,603,000	1.79%	0.15%	18,757	86,392,002	55.39%	47,852,530	9.20%	0.77%	367,599
111	2020	2	554,643	842,751	100,392,396	12,603,000	1.73%	0.14%	18,143	87,789,396	55.39%	48,626,546	9.20%	0.77%	371,014
112	2020	3	559,007	441,560	101,392,964	12,603,000	1.80%	0.15%	18,901	88,789,964	55.39%	49,180,761	9.20%	0.77%	376,115
113	2020	4	567,202	324,222	102,284,387	12,603,000	1.56%	0.13%	16,399	89,681,387	55.39%	49,674,520	9.20%	0.77%	380,150
114	2020	5	568,162	380,895	103,233,444	12,603,000	0.85%	0.07%	8,897	90,630,444	55.39%	50,200,203	9.20%	0.77%	384,059
115	2020	6	566,335	1,222,671	105,022,451	12,603,000	0.26%	0.02%	2,718	92,419,451	55.39%	51,191,134	9.20%	0.77%	389,869

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
116	2020	7	565,966	692,026	106,280,442	12,603,000	0.22%	0.02%	2,271	93,677,442	55.39%	51,887,935	9.20%	0.77%	396,338
117	2020	8	574,864	2,062,907	108,918,214	12,603,000	0.20%	0.02%	2,096	96,315,214	55.39%	53,348,997	9.20%	0.77%	404,629
118	2020	9	569,538	1,993,030	111,480,782	12,603,000	0.18%	0.01%	1,863	98,877,782	55.39%	54,768,403	9.20%	0.77%	415,659
119	2020	10	584,774	1,488,335	113,553,891	12,603,000	0.20%	0.02%	2,117	100,950,891	55.39%	55,916,699	9.20%	0.77%	425,535
120	2020	11	598,877	1,778,784	115,931,552	12,603,000	0.22%	0.02%	2,346	103,328,552	55.39%	57,233,685	9.20%	0.77%	435,015
121	2020	12	612,401	437,391	116,981,344	12,603,000	0.24%	0.02%	2,490	104,378,344	55.39%	57,815,165	9.20%	0.77%	442,321
122	2021	1	622,791	584,194	118,188,328	12,603,000	0.22%	0.02%	2,277	105,585,328	55.39%	58,483,713	9.20%	0.77%	447,135
123	2021	2	605,983	362,491	119,156,802	12,603,000	0.18%	0.02%	1,935	106,553,802	55.39%	59,020,151	9.20%	0.77%	451,718
124	2021	3	611,829	508,803	120,277,433	12,603,000	0.17%	0.01%	1,814	107,674,433	55.39%	59,640,869	9.20%	0.77%	456,166
125	2021	4	617,714	32,792	120,927,939	12,603,000	0.17%	0.01%	1,794	108,324,939	55.39%	60,001,184	9.20%	0.77%	459,939
126	2021	5	622,788	404,675	121,955,402	12,603,000	0.17%	0.01%	1,802	109,352,402	55.39%	60,570,296	9.20%	0.77%	463,513
127	2021	6	627,621	1,162,418	123,745,442	12,603,000	0.12%	0.01%	1,303	111,142,442	55.39%	61,561,798	9.20%	0.77%	469,506
128	2021	7	635,214	824,755	125,205,410	12,603,000	0.13%	0.01%	1,391	112,602,410	55.39%	62,370,475	9.20%	0.77%	476,422
129	2021	8	644,640	698,074	126,548,124	12,603,000	0.13%	0.01%	1,357	113,945,124	55.39%	63,114,204	9.20%	0.77%	482,393
130	2021	9	652,668	471,591	127,672,383	12,603,000	0.13%	0.01%	1,373	115,069,383	55.39%	63,736,931	9.20%	0.77%	487,648
131	2021	10	659,779	999,441	129,331,603	12,603,000	0.12%	0.01%	1,298	116,728,603	55.39%	64,655,973	9.20%	0.77%	493,574
132	2021	11	667,704	349,642	130,348,949	13,781,723	0.13%	0.01%	1,549	116,567,226	55.39%	64,566,586	9.20%	0.77%	494,268
133	2021	12	668,893	234,760	131,252,602	13,776,385	0.18%	0.02%	2,080	117,476,227	55.39%	65,070,077	9.20%	0.77%	498,372
134	2022	1	674,965	536,511	132,464,078	13,775,446	0.19%	0.02%	2,219	118,688,633	55.39%	65,741,634	9.20%	0.77%	502,880
135	2022	2	681,190	324,439	133,469,708	13,769,286	0.22%	0.02%	2,480	119,700,421	55.39%	66,302,063	9.20%	0.77%	507,627
136	2022	3	687,860	241,022	134,398,590	13,768,165	0.35%	0.03%	3,979	120,630,425	55.39%	66,817,192	9.20%	0.77%	511,753
137	2022	4	694,931	348,925	135,442,445	13,766,364	0.47%	0.04%	5,414	121,676,082	55.39%	67,396,382	9.20%	0.77%	515,965
138	2022	5	702,051	(559,390)	135,585,106	13,757,464	0.69%	0.06%	7,930	121,827,643	55.39%	67,480,331	9.20%	0.77%	518,537
139	2022	6	708,041	599,476	136,892,623	13,743,596	1.30%	0.11%	14,869	123,149,027	55.39%	68,212,246	9.20%	0.77%	521,688
140	2022	7	719,234	263,165	137,875,022	13,733,443	1.86%	0.16%	21,317	124,141,579	55.39%	68,762,020	9.20%	0.77%	526,617
141	2022	8	732,336	423,830	139,031,188	13,723,719	2.35%	0.20%	26,910	125,307,469	55.39%	69,407,807	9.20%	0.77%	531,227
142	2022	9	744,154	1,578,929	141,354,270	13,708,462	2.71%	0.23%	30,901	127,645,809	55.39%	70,703,013	9.20%	0.77%	538,704
143	2022	10	758,240	1,155,606	143,268,117	13,686,172	3.35%	0.28%	38,252	129,581,944	55.39%	71,775,439	9.20%	0.77%	547,825
144	2022	11	777,906	1,733,052	145,779,074	13,668,537	4.02%	0.34%	45,817	132,110,537	55.39%	73,176,026	9.20%	0.77%	557,336
145	2022	12	798,313	1,090,065	147,667,452	13,636,015	4.32%	0.36%	49,120	134,031,437	55.39%	74,240,013	9.20%	0.77%	566,859
146	2023	1	814,474	317,276	148,799,202	13,612,562	4.48%	0.37%	50,792	135,186,639	55.39%	74,879,880	9.20%	0.77%	573,405
147	2023	2	831,008	1,071,304	150,701,514	13,588,730	4.65%	0.39%	52,676	137,112,783	55.39%	75,946,771	9.20%	0.77%	579,984
148	2023	3	841,842	796,402	152,339,758	13,563,878	4.73%	0.39%	53,415	138,775,880	55.39%	76,867,960	9.20%	0.77%	587,630
149	2023	4	852,985	463,085	153,655,828	13,475,643	5.05%	0.42%	56,710	140,180,185	55.39%	77,645,804	9.20%	0.77%	594,301
150	2023	5	865,358	90,059	154,611,245	13,448,319	5.25%	0.44%	58,811	141,162,926	55.39%	78,190,145	9.20%	0.77%	599,267
151	2023	6	874,215	1,245,754	156,731,214	13,341,925	5.24%	0.44%	58,273	143,389,290	55.39%	79,423,327	9.20%	0.77%	606,267
152	2023	7	883,203	1,061,623	158,676,039	13,313,014	5.32%	0.44%	59,021	145,363,025	55.39%	80,516,580	9.20%	0.77%	615,040
153	2023	8	895,887	983,163	160,555,089	13,204,898	5.44%	0.45%	59,862	147,350,191	57.04%	84,048,549	9.50%	0.79%	663,165
154	2023	9	939,637	1,220,674	162,715,400	13,127,357	5.45%	0.45%	59,620	149,588,043	57.04%	85,325,020	9.50%	0.79%	672,734
155	2023	10	953,271	1,345,481	165,014,152	13,038,135	5.46%	0.46%	59,324	151,976,017	57.04%	86,687,120	9.50%	0.79%	683,235
156	2023	11	966,924	1,478,839	167,459,916	13,006,608	5.46%	0.46%	59,180	154,453,308	57.04%	88,100,167	9.50%	0.79%	694,121
157	2023	12	981,241	389,378	168,830,535	12,904,884	5.51%	0.46%	59,273	155,925,650	57.04%	88,939,991	9.50%	0.79%	703,229
158	2024	1	993,434	745,739	170,569,708	12,786,131	5.51%	0.46%	58,679	157,783,577	57.04%	89,999,752	10.20%	0.85%	763,190
159	2024	2	1,050,413	150,121	171,770,241	12,753,223	5.41%	0.45%	57,527	159,017,059	57.04%	90,703,307	10.20%	0.85%	770,614
160	2024	3	1,058,908	1,407,796	174,236,946	12,687,421	5.43%	0.45%	57,411	161,549,525	57.04%	92,147,849	10.20%	0.85%	779,844
161	2024	4	1,070,786	1,111,304	176,419,035	12,603,000	5.43%	0.45%	57,029	163,816,035	57.04%	93,440,666	10.20%	0.85%	791,552
162	2024	5	1,085,617	402,641	177,907,293	12,603,000	5.43%	0.45%	57,029	165,304,293	57.04%	94,289,569	10.20%	0.85%	800,485
163	2024	6	1,097,226	892,168	179,896,687	12,603,000	5.43%	0.45%	57,029	167,293,687	57.04%	95,424,319	10.20%	0.85%	808,944
164	2024	7	1,108,218	1,552,207	182,557,112	12,603,000	5.38%	0.45%	56,503	169,954,112	57.04%	96,941,825	10.20%	0.85%	820,243
165	2024	8	1,122,375	709,028	184,388,514	12,603,000	5.36%	0.45%	56,288	171,785,514	57.04%	97,986,457	10.20%	0.85%	831,166
166	2024	9	1,136,354	880,694	186,405,562	12,603,000	5.19%	0.43%	54,514	173,802,562	57.04%	99,136,981	10.20%	0.85%	840,529
167	2024	10	1,146,747	1,537,530	189,089,840	12,603,000	4.87%	0.41%	51,169	176,486,840	57.04%	100,668,093	10.20%	0.85%	851,952
168	2024	11	1,158,245	1,862,421	192,110,506	12,603,000	4.76%	0.40%	49,943	179,507,506	57.04%	102,391,081	10.20%	0.85%	865,809
169	2024	12	1,175,026	2,144,712	195,430,244	12,603,000	4.69%	0.39%	49,227	182,827,244	57.04%	104,284,660	10.20%	0.85%	881,220
170	2025	1	1,194,337	482,350	197,106,930	12,603,000	4.56%	0.38%	47,898	184,503,930	57.04%	105,241,042	10.20%	0.85%	893,380
171	2025	2	1,208,807	1,131,600	199,447,338	12,603,000	4.52%	0.38%	47,502	186,844,338	57.04%	106,576,010	10.20%	0.85%	903,153
172	2025	3	1,221,112	730,104	201,398,554	12,603,000	4.56%	0.38%	47,891	188,795,554	57.04%	107,688,984	10.20%	0.85%	913,586
173	2025	4	1,235,059	1,326,451	203,960,064	12,603,000	4.61%	0.38%	48,437	191,357,064	57.04%	109,150,070	10.20%	0.85%	924,560

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
174	2025	5	1,249,865	1,984,811	207,194,740	12,603,000	4.60%	0.38%	48,326	194,591,740	57.04%	110,995,128	10.20%	0.85%	938,647
175	2025	6	1,268,059	3,021,209	211,484,008	12,603,000	4.59%	0.38%	48,197	198,881,008	57.04%	113,441,727	10.20%	0.85%	956,931
176	2025	7	1,306,828	1,154,886	213,945,723	12,603,000	4.58%	0.38%	48,135	201,342,723	57.04%	114,845,889	10.20%	0.85%	973,390
177	2025	8	1,328,415	1,439,647	216,713,784	12,603,000	4.55%	0.38%	47,755	204,110,784	57.04%	116,424,791	10.20%	0.85%	986,121
178	2025	9	1,344,778	964,203	219,022,766	12,603,000	4.42%	0.37%	46,380	206,419,766	57.04%	117,741,834	10.20%	0.85%	998,468
179	2025	10	1,359,644	2,828,167	223,210,577	12,603,000	4.23%	0.35%	44,468	210,607,577	57.04%	120,130,562	10.20%	0.85%	1,014,254
180	2025	11	1,383,935	2,092,142	226,686,654	12,603,000	4.10%	0.34%	43,113	214,083,654	57.04%	122,113,316	10.20%	0.85%	1,032,891
181	2025	12	1,407,193	2,415,152	230,508,999	12,603,000	4.01%	0.33%	42,068	217,905,999	57.04%	124,293,582	10.20%	0.85%	1,050,641
182	2026	1	1,429,588	2,464,679	234,403,266	12,603,000	3.84%	0.32%	40,349	221,800,266	57.04%	126,514,871	10.20%	0.85%	1,069,402
183	2026	2	1,452,646	2,162,663	238,018,574	12,603,000	3.85%	0.32%	40,460	225,415,574	57.04%	128,577,044	10.20%	0.85%	1,087,652
184	2026	3	1,476,873	1,246,824	240,742,271	12,603,000	3.95%	0.33%	41,442	228,139,271	57.04%	130,130,640	10.20%	0.85%	1,103,038
185	2026	4	1,498,227	1,762,142	244,002,640	12,603,000	4.07%	0.34%	42,701	231,399,640	57.04%	131,990,355	10.20%	0.85%	1,117,646
186	2026	5	1,518,712	1,346,150	246,867,503	12,603,000	4.01%	0.33%	42,160	234,264,503	57.04%	133,624,472	10.20%	0.85%	1,132,545
187	2026	6	1,537,847	1,743,440	250,148,790	12,603,000	4.00%	0.33%	41,975	237,545,790	57.04%	135,496,118	10.20%	0.85%	1,147,491
188				113,135,903,570					3,563,045						63,786,176
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1	**Authorized LTD Ratio**	**LTD Investment**	**Actual Weighted Ave. LTD Rate**	**Monthly Actual LTD Rate**	**LTD AFUDC**	**Total Monthly AFUDC**	**Ending Investment**
2	47.00%	-		0.00%	-	-	-
3	47.00%	-		0.00%	-	-	-
4	47.00%	-		0.00%	-	21	127,052
5	47.00%	(20,621)		0.00%	-	(137)	137,694
6	47.00%	(23,313)		0.00%	-	(155)	175,754
7	47.00%	(23,416)		0.00%	-	(149)	180,243
8	47.00%	(29,748)		0.00%	-	(185)	299,233
9	47.00%	(29,878)		0.00%	-	(125)	483,188
10	47.00%	(30,010)		0.00%	-	(133)	266,126
11	47.00%	(30,142)		0.00%	-	(169)	266,573
12	47.00%	(30,275)		0.00%	-	(121)	544,279
13	47.00%	(30,409)		0.00%	-	(53)	402,435
14	47.00%	(30,543)		0.00%	-	(77)	422,392
15	47.00%	(30,678)		0.00%	-	(86)	460,652
16	47.00%	(30,813)		0.00%	-	(69)	502,771
17	47.00%	(30,949)		0.00%	-	(54)	535,826
18	47.00%	(31,086)		0.00%	-	(46)	548,944
19	47.00%	(31,223)		0.00%	-	(8)	732,863
20	47.00%	(31,361)		0.00%	-	60	841,237
21	47.00%	(31,499)		0.00%	-	132	1,130,310
22	47.00%	(31,638)		0.00%	-	214	1,405,346
23	47.00%	(31,778)		0.00%	-	396	2,251,449
24	47.00%	(31,918)		0.00%	-	600	2,425,616
25	47.00%	(32,059)		0.00%	-	653	2,499,327
26	47.00%	(32,200)		0.00%	-	629	2,596,642
27	47.00%	(32,342)		0.00%	-	612	2,877,967
28	47.00%	(32,485)		0.00%	-	686	3,120,132
29	47.00%	(32,628)		0.00%	-	693	3,279,970
30	47.00%	(32,772)		0.00%	-	820	4,427,727
31	47.00%	(32,917)		0.00%	-	1,079	5,605,800
32	47.00%	(33,062)		0.00%	-	1,357	6,232,564
33	47.00%	(33,208)		0.00%	-	1,441	6,473,063
34	47.00%	(33,354)		0.00%	-	1,452	6,326,632
35	47.00%	(33,502)		0.00%	-	2,116	7,276,284
36	47.00%	(33,649)		0.00%	-	2,203	9,448,175
37	47.00%	(33,798)		0.00%	-	2,681	10,593,330
38	47.00%	(33,947)		0.00%	-	2,724	10,834,156
39	47.00%	(34,097)		0.00%	-	2,649	11,588,300
40	47.00%	(34,247)		0.00%	-	2,570	11,694,411
41	47.00%	(34,398)		0.00%	-	2,586	12,282,134
42	47.00%	439,329	5.55%	0.46%	1,015	8,001	13,545,744
43	47.00%	998,399	5.55%	0.46%	2,307	14,550	14,741,804
44	47.00%	(34,931)	5.55%	0.46%	(81)	3,266	15,830,400
45	47.00%	(35,123)	5.55%	0.46%	(81)	3,470	16,760,130
46	47.00%	(35,316)	5.55%	0.46%	(82)	3,628	17,279,487
47	47.00%	(35,510)	5.55%	0.46%	(82)	3,850	17,772,669
48	47.00%	375,993	5.55%	0.46%	869	7,515	18,729,816
49	47.00%	998,151	5.55%	0.46%	3,184	15,616	20,061,115
50	47.00%	1,422,718	5.55%	0.46%	5,657	22,986	20,930,061
51	47.00%	3,637,470	5.55%	0.46%	11,839	42,359	25,551,920
52	47.00%	4,456,761	5.55%	0.46%	18,804	64,966	27,269,840
53	47.00%	5,508,154	5.55%	0.46%	23,101	79,145	29,519,945
54	47.00%	6,087,412	5.55%	0.46%	26,885	89,508	30,761,597
55	47.00%	6,575,565	5.55%	0.46%	29,363	95,965	31,805,647
56	47.00%	7,247,154	5.55%	0.46%	32,059	103,528	33,233,699
57	47.00%	7,340,670	5.55%	0.46%	33,827	108,981	33,437,301

	P	Q	R	S	T	U	V
58	47.00%	8,920,208	5.43%	0.45%	37,705	121,911	36,056,945
59	47.00%	9,328,262	5.43%	0.45%	41,433	133,396	36,917,751
60	47.00%	9,528,545	5.43%	0.45%	42,803	137,726	37,346,658
61	47.00%	10,372,340	5.43%	0.45%	45,182	147,193	39,138,073
62	47.00%	11,098,573	5.43%	0.45%	48,879	160,493	40,573,000
63	47.00%	11,263,388	5.43%	0.45%	50,781	166,502	40,927,766
64	47.00%	11,800,515	5.43%	0.45%	52,377	171,531	42,071,941
65	47.00%	12,116,567	5.43%	0.45%	54,401	177,794	42,665,056
66	47.00%	12,946,349	5.43%	0.45%	57,154	185,966	44,208,618
67	47.00%	13,425,293	5.43%	0.45%	59,948	194,751	45,172,509
68	47.00%	13,656,871	5.43%	0.45%	61,500	199,819	45,668,029
69	47.00%	14,337,997	5.43%	0.45%	63,585	206,045	47,107,532
70	47.00%	14,952,689	5.43%	0.45%	66,924	216,231	48,033,805
71	47.00%	15,524,281	5.43%	0.45%	69,407	223,752	49,065,782
72	47.00%	16,395,839	5.43%	0.45%	72,631	233,442	50,785,217
73	47.00%	17,504,499	5.43%	0.45%	78,082	251,280	52,114,960
74	47.00%	18,821,997	5.43%	0.45%	84,293	269,846	53,230,842
75	47.00%	19,266,617	5.43%	0.45%	86,817	277,175	53,872,977
76	47.00%	19,658,855	5.43%	0.45%	88,388	282,910	54,713,260
77	47.00%	20,124,988	5.43%	0.45%	90,336	290,386	55,712,509
78	47.00%	20,738,906	5.43%	0.45%	92,789	297,799	57,026,131
79	47.00%	21,219,063	5.43%	0.45%	95,273	306,256	58,056,198
80	47.00%	21,665,126	5.43%	0.45%	97,378	313,739	59,012,753
81	47.00%	22,251,363	5.28%	0.44%	96,892	318,082	60,264,408
82	47.00%	22,694,712	5.28%	0.44%	99,160	325,036	61,214,657
83	47.00%	23,045,244	5.67%	0.47%	108,446	338,124	61,973,559
84	47.00%	23,749,112	5.67%	0.47%	110,952	345,775	63,478,800
85	47.00%	24,391,279	5.67%	0.47%	114,141	356,907	64,856,244
86	44.60%	21,820,269	5.67%	0.47%	106,632	339,710	61,867,079
87	44.60%	23,526,500	5.67%	0.47%	107,514	342,895	65,695,896
88	44.60%	23,147,687	5.67%	0.47%	110,654	355,309	64,858,953
89	44.60%	23,589,103	5.67%	0.47%	110,815	358,756	65,852,122
90	44.60%	23,784,323	5.67%	0.47%	112,323	363,048	66,294,126
91	44.60%	24,332,343	5.67%	0.47%	114,084	368,738	67,528,561
92	44.60%	24,918,784	5.67%	0.47%	116,770	377,221	68,851,935
93	44.60%	25,995,230	5.36%	0.45%	114,102	382,418	71,270,686
94	44.60%	26,864,803	5.36%	0.45%	118,454	395,661	73,233,645
95	44.60%	27,194,370	5.36%	0.45%	121,146	404,564	73,981,488
96	44.60%	27,811,848	5.36%	0.45%	123,270	412,752	75,374,154
97	44.60%	28,528,502	5.32%	0.44%	125,291	423,617	76,991,867
98	44.61%	29,316,224	5.32%	0.44%	128,650	434,745	78,754,455
99	44.61%	30,479,957	5.32%	0.44%	132,973	448,299	81,376,691
100	44.61%	30,851,363	5.32%	0.44%	136,389	458,709	82,219,662
101	44.61%	31,762,889	5.32%	0.44%	139,243	467,404	84,271,680
102	44.61%	32,664,058	5.23%	0.44%	140,839	477,177	86,301,558
103	44.61%	33,460,286	5.23%	0.44%	144,547	488,131	88,097,377
104	44.61%	34,544,464	5.23%	0.44%	148,655	500,243	90,539,835
105	44.61%	35,243,762	5.23%	0.44%	152,553	510,251	92,117,424
106	44.61%	36,203,577	5.23%	0.44%	156,178	520,823	94,279,566
107	44.61%	36,780,694	5.23%	0.44%	159,537	530,595	95,583,032
108	44.61%	37,689,312	5.23%	0.44%	162,784	538,342	97,627,584
109	44.61%	38,447,715	5.23%	0.44%	166,424	549,376	99,338,690
110	44.61%	38,539,472	5.23%	0.44%	168,287	554,643	99,549,645
111	44.61%	39,162,850	5.23%	0.44%	169,850	559,007	100,951,403
112	44.61%	39,609,203	5.23%	0.44%	172,185	567,202	101,960,165
113	44.61%	40,006,867	5.16%	0.43%	171,614	568,162	102,852,549
114	44.61%	40,430,241	5.16%	0.43%	173,379	566,335	103,799,780
115	44.61%	41,228,317	5.08%	0.42%	173,379	565,966	105,588,417

	P	Q	R	S	T	U	V
116	44.61%	41,789,507	5.08%	0.42%	176,255	574,864	106,855,307
117	44.61%	42,966,217	4.60%	0.38%	162,813	569,538	109,487,752
118	44.61%	44,109,378	4.60%	0.38%	167,252	584,774	112,065,556
119	44.61%	45,034,193	4.60%	0.38%	171,225	598,877	114,152,768
120	44.61%	46,094,867	4.60%	0.38%	175,040	612,401	116,543,953
121	44.61%	46,563,179	4.60%	0.38%	177,980	622,791	117,604,134
122	44.61%	47,101,615	4.00%	0.33%	156,571	605,983	118,794,311
123	44.61%	47,533,651	4.00%	0.33%	158,176	611,829	119,768,630
124	44.61%	48,033,565	4.00%	0.33%	159,734	617,714	120,895,147
125	44.61%	48,323,755	4.00%	0.33%	161,055	622,788	121,550,727
126	44.61%	48,782,107	4.00%	0.33%	162,306	627,621	122,583,024
127	44.61%	49,580,643	4.00%	0.33%	164,405	635,214	124,380,655
128	44.61%	50,231,935	4.00%	0.33%	166,827	644,640	125,850,049
129	44.61%	50,830,920	4.00%	0.33%	168,917	652,668	127,200,792
130	44.61%	51,332,452	4.00%	0.33%	170,758	659,779	128,332,162
131	44.61%	52,072,630	4.00%	0.33%	172,832	667,704	129,999,307
132	44.61%	52,000,639	4.00%	0.33%	173,076	668,893	131,017,842
133	44.61%	52,406,140	4.00%	0.33%	174,513	674,965	131,927,567
134	44.61%	52,946,999	4.00%	0.33%	176,091	681,190	133,145,269
135	44.61%	53,398,358	4.00%	0.33%	177,753	687,860	134,157,568
136	44.61%	53,813,233	4.00%	0.33%	179,198	694,931	135,093,520
137	44.61%	54,279,700	4.00%	0.33%	180,673	702,051	136,144,496
138	44.61%	54,347,311	4.00%	0.33%	181,574	708,041	136,293,147
139	44.61%	54,936,781	4.00%	0.33%	182,677	719,234	137,611,857
140	44.61%	55,379,558	4.00%	0.33%	184,403	732,336	138,607,358
141	44.61%	55,899,662	4.00%	0.33%	186,017	744,154	139,775,342
142	44.61%	56,942,795	4.00%	0.33%	188,635	758,240	142,112,511
143	44.61%	57,806,505	4.00%	0.33%	191,829	777,906	144,046,022
144	44.61%	58,934,511	4.00%	0.33%	195,160	798,313	146,577,387
145	44.61%	59,791,424	4.00%	0.33%	198,494	814,474	148,481,926
146	44.61%	60,306,760	4.12%	0.34%	206,810	831,008	149,630,209
147	44.61%	61,166,013	4.12%	0.34%	209,183	841,842	151,543,356
148	44.61%	61,907,920	4.12%	0.34%	211,941	852,985	153,192,743
149	44.61%	62,534,380	4.12%	0.34%	214,347	865,358	154,521,186
150	44.61%	62,972,781	4.12%	0.34%	216,138	874,215	155,485,460
151	44.61%	63,965,962	4.12%	0.34%	218,662	883,203	157,614,417
152	44.61%	64,846,446	4.12%	0.34%	221,826	895,887	159,571,926
153	42.96%	63,301,642	4.12%	0.34%	216,611	939,637	161,494,726
154	42.96%	64,263,023	4.14%	0.35%	220,917	953,271	163,668,671
155	42.96%	65,288,897	4.14%	0.35%	224,366	966,924	165,981,076
156	42.96%	66,353,141	4.14%	0.35%	227,940	981,241	168,441,157
157	42.96%	66,985,659	4.14%	0.35%	230,931	993,434	169,823,968
158	42.96%	67,783,824	4.06%	0.34%	228,544	1,050,413	171,620,120
159	42.96%	68,313,711	4.06%	0.34%	230,767	1,058,908	172,829,149
160	42.96%	69,401,676	4.06%	0.34%	233,531	1,070,786	175,307,731
161	42.96%	70,375,369	4.06%	0.34%	237,037	1,085,617	177,504,652
162	42.96%	71,014,724	4.06%	0.34%	239,712	1,097,226	179,004,519
163	42.96%	71,869,368	4.06%	0.34%	242,245	1,108,218	181,004,904
164	42.96%	73,012,286	4.06%	0.34%	245,629	1,122,375	183,679,487
165	42.96%	73,799,057	4.06%	0.34%	248,900	1,136,354	185,524,868
166	42.96%	74,665,581	4.06%	0.34%	251,704	1,146,747	187,552,310
167	42.96%	75,818,746	4.06%	0.34%	255,124	1,158,245	190,248,085
168	42.96%	77,116,425	4.06%	0.34%	259,274	1,175,026	193,285,532
169	42.96%	78,542,584	4.06%	0.34%	263,889	1,194,337	196,624,580
170	42.96%	79,262,889	4.06%	0.34%	267,530	1,208,807	198,315,738
171	42.96%	80,268,328	4.06%	0.34%	270,457	1,221,112	200,668,450
172	42.96%	81,106,570	4.06%	0.34%	273,581	1,235,059	202,633,613
173	42.96%	82,206,995	4.06%	0.34%	276,867	1,249,865	205,209,929

	P	Q	R	S	T	U	V
174	42.96%	83,596,611	4.06%	0.34%	281,086	1,268,059	208,462,799
175	42.96%	85,439,281	4.27%	0.36%	301,700	1,306,828	212,790,837
176	42.96%	86,496,834	4.27%	0.36%	306,890	1,328,415	215,274,138
177	42.96%	87,685,993	4.27%	0.36%	310,903	1,344,778	218,058,563
178	42.96%	88,677,931	4.27%	0.36%	314,796	1,359,644	220,382,410
179	42.96%	90,477,015	4.34%	0.36%	325,213	1,383,935	224,594,512
180	42.96%	91,970,338	4.34%	0.36%	331,189	1,407,193	228,093,847
181	42.96%	93,612,417	4.34%	0.36%	336,880	1,429,588	231,938,587
182	42.96%	95,285,394	4.34%	0.36%	342,896	1,452,646	235,855,911
183	42.96%	96,838,531	4.34%	0.36%	348,751	1,476,873	239,495,447
184	42.96%	98,008,631	4.34%	0.36%	353,697	1,498,227	242,240,498
185	42.96%	99,409,286	4.34%	0.36%	358,365	1,518,712	245,521,352
186	42.96%	100,640,030	4.34%	0.36%	363,142	1,537,847	248,405,350
187	42.96%	102,049,671	4.43%	0.37%	375,166	1,564,632	251,713,421
188					22,972,131	90,321,352	
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1	Year	Month	Prior Month AFUDC	Cash Spend	Total Investment	STD Financed	Annual STD Rate	Monthly STD Rate	STD AFUDC	Equity/LTD Financed	Authorized Equity Ratio	Equity Investment	Authorized ROE	Monthly ROE	Equity AFUDC
2	2011	1	-	-	-	-	0.40%	0.03%	-	-	53%	-	10%	0.83%	-
3	2011	2	-	-	-	-	0.40%	0.03%	-	-	53%	-	10%	0.83%	-
4	2011	3	-	-	-	-	0.40%	0.03%	-	-	53%	-	10%	0.83%	-
5	2011	4	-	-	-	-	0.39%	0.03%	-	-	53%	-	10%	0.83%	-
6	2011	5	-	-	-	-	0.37%	0.03%	-	-	53%	-	10%	0.83%	-
7	2011	6	-	2,938	2,938	2,938	0.37%	0.03%	0	-	53%	-	10%	0.83%	-
8	2011	7	0	-	2,938	2,938	0.38%	0.03%	1	-	53%	-	10%	0.83%	-
9	2011	8	1	44	2,983	2,983	0.41%	0.03%	1	-	53%	-	10%	0.83%	-
10	2011	9	1	-	2,984	2,984	0.41%	0.03%	1	-	53%	-	10%	0.83%	-
11	2011	10	1	-	2,985	2,985	0.41%	0.03%	1	-	53%	-	10%	0.83%	-
12	2011	11	1	-	2,986	2,986	0.42%	0.03%	1	-	53%	-	10%	0.83%	-
13	2011	12	1	-	2,987	2,987	0.52%	0.04%	1	-	53%	-	10%	0.83%	-
14	2012	1	1	-	2,988	2,988	0.53%	0.04%	1	-	53%	-	10%	0.83%	-
15	2012	2	1	-	2,990	2,990	0.48%	0.04%	1	-	53%	-	10%	0.83%	-
16	2012	3	1	-	2,991	2,991	0.48%	0.04%	1	-	53%	-	10%	0.83%	-
17	2012	4	1	1,407	4,399	4,399	0.49%	0.04%	1	-	53%	-	10%	0.83%	-
18	2012	5	1	-	4,400	4,400	0.48%	0.04%	2	-	53%	-	10%	0.83%	-
19	2012	6	2	-	4,402	4,402	0.48%	0.04%	2	-	53%	-	10%	0.83%	-
20	2012	7	2	-	4,404	4,404	0.50%	0.04%	2	-	53%	-	10%	0.83%	-
21	2012	8	2	-	4,406	4,406	0.49%	0.04%	2	-	53%	-	10%	0.83%	-
22	2012	9	2	-	4,408	4,408	0.46%	0.04%	2	-	53%	-	10%	0.83%	-
23	2012	10	2	376	4,785	4,785	0.44%	0.04%	2	-	53%	-	10%	0.83%	-
24	2012	11	2	1,035	5,822	5,822	0.45%	0.04%	2	-	53%	-	10%	0.83%	-
25	2012	12	2	108	5,931	5,931	0.45%	0.04%	2	-	53%	-	10%	0.83%	-
26	2013	1	2	-	5,934	5,934	0.43%	0.04%	2	-	53%	-	10%	0.83%	-
27	2013	2	2	5	5,940	5,940	0.39%	0.03%	2	-	53%	-	10%	0.83%	-
28	2013	3	2	205	6,147	6,147	0.39%	0.03%	2	-	53%	-	10%	0.83%	-
29	2013	4	2	-	6,149	6,149	0.37%	0.03%	2	-	53%	-	10%	0.83%	-
30	2013	5	2	1,495	7,646	7,646	0.34%	0.03%	2	-	53%	-	10%	0.83%	-
31	2013	6	2	6,959	14,607	14,607	0.33%	0.03%	3	-	53%	-	10%	0.83%	-
32	2013	7	3	-	14,610	14,610	0.33%	0.03%	4	-	53%	-	10%	0.83%	-
33	2013	8	4	12,466	27,080	27,080	0.33%	0.03%	6	-	53%	-	10%	0.83%	-
34	2013	9	6	-	27,086	27,086	0.33%	0.03%	7	-	53%	-	10%	0.83%	-
35	2013	10	7	37,105	64,198	64,198	0.42%	0.04%	16	-	53%	-	10%	0.83%	-
36	2013	11	16	-	64,214	64,214	0.36%	0.03%	19	-	53%	-	10%	0.83%	-
37	2013	12	19	32,454	96,687	96,687	0.36%	0.03%	24	-	53%	-	10%	0.83%	-
38	2014	1	24	-	96,711	96,711	0.34%	0.03%	27	-	53%	-	10%	0.83%	-
39	2014	2	27	11,116	107,854	107,854	0.32%	0.03%	27	-	53%	-	10%	0.83%	-
40	2014	3	27	-	107,881	107,881	0.30%	0.02%	27	-	53%	-	10%	0.83%	-
41	2014	4	27	31,768	139,676	139,676	0.29%	0.02%	30	-	53%	-	10%	0.83%	-
42	2014	5	30	14,832	154,538	154,538	0.29%	0.02%	35	-	53%	-	10%	0.83%	-
43	2014	6	35	25,506	180,079	180,079	0.29%	0.02%	40	-	53%	-	10%	0.83%	-
44	2014	7	40	29,123	209,241	209,241	0.29%	0.02%	47	-	53%	-	10%	0.83%	-
45	2014	8	47	9,040	218,328	218,328	0.28%	0.02%	51	-	53%	-	10%	0.83%	-
46	2014	9	51	-	218,378	218,378	0.28%	0.02%	52	-	53%	-	10%	0.83%	-
47	2014	10	52	20,540	238,970	238,970	0.29%	0.02%	55	-	53%	-	10%	0.83%	-
48	2014	11	55	21,741	260,766	260,766	0.33%	0.03%	68	-	53%	-	10%	0.83%	-
49	2014	12	68	-	260,834	260,834	0.40%	0.03%	87	-	53%	-	10%	0.83%	-
50	2015	1	87	5,154	266,076	266,076	0.39%	0.03%	86	-	53%	-	10%	0.83%	-
51	2015	2	86	13,689	279,850	279,850	0.44%	0.04%	99	-	53%	-	10%	0.83%	-
52	2015	3	99	5,907	285,857	285,857	0.54%	0.04%	127	-	53%	-	10%	0.83%	-
53	2015	4	127	8	285,993	285,993	0.62%	0.05%	147	-	53%	-	10%	0.83%	-
54	2015	5	147	-	286,140	286,140	0.54%	0.05%	129	-	53%	-	10%	0.83%	-
55	2015	6	129	-	286,269	286,269	0.47%	0.04%	113	-	53%	-	10%	0.83%	-
56	2015	7	113	945	287,327	287,327	0.43%	0.04%	103	-	53%	-	10%	0.83%	-
57	2015	8	103	(0)	287,430	287,430	0.44%	0.04%	105	-	53%	-	10%	0.83%	-
58	2015	9	105	94,529	382,064	382,064	0.42%	0.04%	118	-	53%	-	10%	0.83%	-
59	2015	10	118	2,252	384,433	384,433	0.42%	0.04%	136	-	53%	-	10%	0.83%	-
60	2015	11	136	59	384,628	384,628	0.43%	0.04%	139	-	53%	-	10%	0.83%	-
61	2015	12	139	1,538	386,305	386,305	0.59%	0.05%	188	-	53%	-	10%	0.83%	-
62	2016	1	188	15,318	401,812	401,812	0.73%	0.06%	240	-	53%	-	10%	0.83%	-
63	2016	2	240	-	402,052	402,052	0.74%	0.06%	249	-	53%	-	10%	0.83%	-

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
64	2016	3	249	213	402,514	402,514	0.75%	0.06%	252	-	53%	-	10%	0.83%	-
65	2016	4	252	10,491	413,257	413,257	0.76%	0.06%	258	-	53%	-	10%	0.83%	-
66	2016	5	258	28,622	442,137	442,137	0.75%	0.06%	267	-	53%	-	10%	0.83%	-
67	2016	6	267	7,756	450,160	450,160	0.77%	0.06%	285	-	53%	-	10%	0.83%	-
68	2016	7	285	-	450,444	450,444	0.79%	0.07%	295	-	53%	-	10%	0.83%	-
69	2016	8	295	1,703	452,443	452,443	0.77%	0.06%	291	-	53%	-	10%	0.83%	-
70	2016	9	291	48,879	501,613	501,613	0.79%	0.07%	313	-	53%	-	10%	0.83%	-
71	2016	10	313	20,609	522,535	522,535	0.79%	0.07%	337	-	53%	-	10%	0.83%	-
72	2016	11	337	14,636	537,508	537,508	0.78%	0.06%	344	-	53%	-	10%	0.83%	-
73	2016	12	344	3,626	541,478	541,478	0.92%	0.08%	415	-	53%	-	10%	0.83%	-
74	2017	1	415	16,138	558,032	558,032	1.00%	0.08%	457	-	53%	-	10%	0.83%	-
75	2017	2	457	20,357	578,845	578,845	0.98%	0.08%	464	-	53%	-	10%	0.83%	-
76	2017	3	464	5,431	584,741	584,741	1.07%	0.09%	517	-	53%	-	10%	0.83%	-
77	2017	4	517	36,089	621,347	613,220	1.21%	0.10%	617	8,126	53%	4,307.02	10%	0.83%	-
78	2017	5	617	22,943	644,907	217,319	1.20%	0.10%	217	427,589	53%	226,621.91	10%	0.83%	1,836.01
79	2017	6	2,938	11,234	659,079	217,319	1.27%	0.11%	231	441,761	53%	234,133.16	10%	0.83%	1,924.37
80	2017	7	3,083	47,364	709,526	217,319	1.37%	0.11%	248	492,208	53%	260,870.10	10%	0.83%	2,067.25
81	2017	8	3,312	4,385	717,224	217,319	1.37%	0.11%	248	499,905	53%	264,949.69	10%	0.83%	2,196.03
82	2017	9	3,472	34,400	755,096	217,319	1.35%	0.11%	245	537,777	53%	285,021.87	10%	0.83%	2,296.92
83	2017	10	3,618	(10,211)	748,502	217,319	1.36%	0.11%	246	531,184	53%	281,527.45	10%	0.83%	2,366.24
84	2017	11	3,803	10,745	763,051	217,319	1.37%	0.11%	249	545,733	53%	289,238.33	10%	0.83%	2,384.20
85	2017	12	3,833	34,895	801,780	217,319	1.53%	0.13%	277	584,461	53%	309,764.37	10%	0.83%	2,501.81
86	2018	1	4,038	524,860	1,330,677	217,319	1.73%	0.14%	314	1,113,359	55%	616,689.44	9%	0.77%	3,613.53
87	2018	2	5,722	8,084	1,344,483	217,319	1.78%	0.15%	323	1,127,164	55%	624,336.36	9%	0.77%	4,769.41
88	2018	3	7,460	11,155	1,363,099	217,319	2.06%	0.17%	374	1,145,780	55%	634,647.57	9%	0.77%	4,841.95
89	2018	4	7,620	12,109	1,382,827	217,319	2.35%	0.20%	425	1,165,509	55%	645,575.27	9%	0.77%	4,923.70
90	2018	5	7,793	(14,130)	1,376,491	217,319	2.32%	0.19%	421	1,159,172	55%	642,065.51	9%	0.77%	4,952.50
91	2018	6	7,832	32,218	1,416,541	217,319	2.36%	0.20%	427	1,199,222	55%	664,249.25	9%	0.77%	5,024.17
92	2018	7	7,946	13,429	1,437,915	217,319	2.40%	0.20%	434	1,220,597	55%	676,088.53	9%	0.77%	5,154.83
93	2018	8	8,148	(110,678)	1,335,385	217,319	2.39%	0.20%	433	1,118,067	55%	619,297.18	9%	0.77%	4,982.95
94	2018	9	7,754	8,127	1,351,266	217,319	2.35%	0.20%	426	1,133,948	55%	628,093.61	9%	0.77%	4,798.13
95	2018	10	7,476	-	1,358,742	217,319	2.40%	0.20%	434	1,141,423	55%	632,234.43	9%	0.77%	4,847.13
96	2018	11	7,556	-	1,366,298	217,319	2.54%	0.21%	460	1,148,979	55%	636,419.64	9%	0.77%	4,879.22
97	2018	12	7,630	5,502	1,379,429	217,319	2.78%	0.23%	503	1,162,110	55%	643,693.00	9%	0.77%	4,923.30
98	2019	1	7,719	169	1,387,318	217,319	2.84%	0.24%	515	1,169,999	55%	648,062.47	9%	0.77%	4,968.12
99	2019	2	7,796	10,971	1,406,085	217,319	2.84%	0.24%	514	1,188,767	55%	658,457.84	9%	0.77%	5,024.88
100	2019	3	7,879	74	1,414,038	217,319	2.80%	0.23%	508	1,196,719	55%	662,862.69	9%	0.77%	5,081.79
101	2019	4	7,956	11,593	1,433,586	217,319	2.78%	0.23%	503	1,216,268	55%	673,690.74	9%	0.77%	5,140.35
102	2019	5	8,037	(2,227)	1,439,396		2.73%	0.23%	-	1,439,396	55%	797,281.57	9%	0.77%	6,117.22
103	2019	6	8,918	1,603	1,449,917	1,449,917	2.65%	0.22%	3,201	-	55%	-	9%	0.77%	-
104	2019	7	3,201	10,368	1,463,486	1,463,486	2.56%	0.21%	3,109	-	55%	-	9%	0.77%	-
105	2019	8	3,109	7,417	1,474,013	1,474,013	2.33%	0.19%	2,854	-	55%	-	9%	0.77%	-
106	2019	9	2,854	10,855	1,487,722	1,487,722	2.24%	0.19%	2,764	-	55%	-	9%	0.77%	-
107	2019	10	2,764	(5,448)	1,485,038	1,485,038	2.15%	0.18%	2,665	-	55%	-	9%	0.77%	11.57
108	2019	11	2,681	2,317,673	3,805,393	3,805,393	1.90%	0.16%	4,196	-	55%	-	9%	0.77%	-
109	2019	12	4,196	10,426	3,820,014	3,820,014	1.85%	0.15%	5,879	-	55%	-	9%	0.77%	-
110	2020	1	5,879	7,752	3,833,645	3,833,645	1.79%	0.15%	5,700	-	55%	-	9%	0.77%	-
111	2020	2	5,700	1,052,032	4,891,377	4,891,377	1.73%	0.14%	6,284	-	55%	-	9%	0.77%	-
112	2020	3	6,284	5,346	4,903,007	4,903,007	1.80%	0.15%	7,349	-	55%	-	9%	0.77%	-
113	2020	4	7,349	11,171	4,921,527	4,921,527	1.56%	0.13%	6,396	-	55%	-	9%	0.77%	-
114	2020	5	6,396	470,904	5,398,828	5,398,828	0.85%	0.07%	3,645	-	55%	-	9%	0.77%	-
115	2020	6	3,645	14,117	5,416,590	5,416,590	0.26%	0.02%	1,167	-	55%	-	9%	0.77%	-
116	2020	7	1,167	(48)	5,417,709	5,417,709	0.22%	0.02%	976	-	55%	-	9%	0.77%	0.10
117	2020	8	976	17,726	5,436,411	5,436,411	0.20%	0.02%	903	-	55%	-	9%	0.77%	-
118	2020	9	903	5	5,437,319	5,437,319	0.18%	0.01%	804	-	55%	-	9%	0.77%	-
119	2020	10	804	9,042	5,447,165	5,447,165	0.20%	0.02%	914	-	55%	-	9%	0.77%	-
120	2020	11	914	3,224	5,451,303	5,451,303	0.22%	0.02%	1,015	-	55%	-	9%	0.77%	-
121	2020	12	1,015	528,186	5,980,504	5,980,504	0.24%	0.02%	1,129	-	55%	-	9%	0.77%	-
122	2021	1	1,129	3,182	5,984,816	5,984,816	0.22%	0.02%	1,081	-	55%	-	9%	0.77%	-
123	2021	2	1,081	1	5,985,898	5,985,898	0.18%	0.02%	919	-	55%	-	9%	0.77%	-
124	2021	3	919	6,904	5,993,721	5,993,721	0.17%	0.01%	862	-	55%	-	9%	0.77%	-
125	2021	4	862	182,280	6,176,863	6,176,863	0.17%	0.01%	866	-	55%	-	9%	0.77%	-
126	2021	5	866	1,047	6,178,776	6,178,776	0.17%	0.01%	883	-	55%	-	9%	0.77%	-
127	2021	6	883	7,335	6,186,995	6,186,995	0.12%	0.01%	639	-	55%	-	9%	0.77%	-

	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O
128	2021	7	639	4,313	6,191,947	6,191,947	0.13%	0.01%	683	-	55%	-	5%	0.77%	-
129	2021	8	683	6,607	6,199,237	6,199,237	0.13%	0.01%	667	-	55%	-	5%	0.77%	-
130	2021	9	667	5,601	6,205,504	6,205,504	0.13%	0.01%	676	-	55%	-	5%	0.77%	-
131	2021	10	676	7,831	6,214,011	6,214,011	0.12%	0.01%	640	-	55%	-	5%	0.77%	-
132	2021	11	640	3,626	6,218,277	6,218,277	0.13%	0.01%	699	-	55%	-	5%	0.77%	-
133	2021	12	699	4,639	6,223,615	6,223,615	0.18%	0.02%	939	-	55%	-	5%	0.77%	-
134	2022	1	939	-	6,224,554	6,224,554	0.19%	0.02%	1,003	-	55%	-	5%	0.77%	-
135	2022	2	1,003	5,157	6,230,714	6,230,714	0.22%	0.02%	1,122	-	55%	-	5%	0.77%	-
136	2022	3	1,122	-	6,231,835	6,231,835	0.35%	0.03%	1,801	-	55%	-	5%	0.77%	-
137	2022	4	1,801	-	6,233,636	6,233,636	0.47%	0.04%	2,451	-	55%	-	5%	0.77%	-
138	2022	5	2,451	6,448	6,242,536	6,242,536	0.69%	0.06%	3,596	-	55%	-	5%	0.77%	-
139	2022	6	3,596	10,272	6,256,404	6,256,404	1.30%	0.11%	6,763	-	55%	-	5%	0.77%	-
140	2022	7	6,763	3,389	6,266,557	6,266,557	1.86%	0.16%	9,724	-	55%	-	5%	0.77%	-
141	2022	8	9,724	-	6,276,281	6,276,281	2.35%	0.20%	12,307	-	55%	-	5%	0.77%	-
142	2022	9	12,307	2,950	6,291,538	6,291,538	2.71%	0.23%	14,179	-	55%	-	5%	0.77%	-
143	2022	10	14,179	8,110	6,313,828	6,313,828	3.35%	0.28%	17,635	-	55%	-	5%	0.77%	-
144	2022	11	17,635	-	6,331,463	6,331,463	4.02%	0.34%	21,223	-	55%	-	5%	0.77%	-
145	2022	12	21,223	11,299	6,363,985	6,363,985	4.32%	0.36%	22,904	-	55%	-	5%	0.77%	-
146	2023	1	22,904	548	6,387,438	6,387,438	4.48%	0.37%	23,832	-	55%	-	5%	0.77%	-
147	2023	2	23,832	-	6,411,270	6,411,270	4.65%	0.39%	24,853	-	55%	-	5%	0.77%	-
148	2023	3	24,853	-	6,436,122	6,436,122	4.73%	0.39%	25,345	-	55%	-	5%	0.77%	-
149	2023	4	25,345	62,889	6,524,357	6,524,357	5.05%	0.42%	27,324	-	55%	-	5%	0.77%	-
150	2023	5	27,324	-	6,551,681	6,551,681	5.25%	0.44%	28,651	-	55%	-	5%	0.77%	-
151	2023	6	28,651	77,743	6,658,075	6,658,075	5.24%	0.44%	28,910	-	55%	-	5%	0.77%	-
152	2023	7	28,910	-	6,686,986	6,686,986	5.32%	0.44%	29,646	-	55%	-	5%	0.77%	-
153	2023	8	29,646	78,470	6,795,102	6,795,102	5.44%	0.45%	30,627	-	57%	-	10%	0.79%	-
154	2023	9	30,627	46,915	6,872,643	6,872,643	5.45%	0.45%	31,107	-	57%	-	10%	0.79%	-
155	2023	10	31,107	58,114	6,961,865	6,961,865	5.46%	0.46%	31,544	-	57%	-	10%	0.79%	-
156	2023	11	31,544	(16)	6,993,392	6,993,392	5.46%	0.46%	31,820	-	57%	-	10%	0.79%	0.04
157	2023	12	31,820	69,903	7,095,116	7,095,116	5.51%	0.46%	32,428	-	57%	-	10%	0.79%	-
158	2024	1	32,428	86,325	7,213,869	7,213,869	5.51%	0.46%	32,908	-	57%	-	10%	0.85%	-
159	2024	2	32,908	-	7,246,777	7,246,777	5.41%	0.45%	32,688	-	57%	-	10%	0.85%	-
160	2024	3	32,688	33,114	7,312,579	7,312,579	5.43%	0.45%	33,015	-	57%	-	10%	0.85%	-
161	2024	4	33,015	62,515	7,408,109	7,397,000	5.43%	0.45%	33,330	11,109	57%	6,336.42	10%	0.85%	-
162	2024	5	33,330	53,968	7,495,407	7,397,000	5.43%	0.45%	33,349	98,407	57%	56,131.41	10%	0.85%	346.29
163	2024	6	33,799	33,279	7,562,486	7,397,000	5.43%	0.45%	33,396	165,486	57%	94,393.02	10%	0.85%	721.67
164	2024	7	34,334	13,647	7,610,466	7,397,000	5.38%	0.45%	33,133	213,466	57%	121,761.19	10%	0.85%	1,001.89
165	2024	8	34,435	39,280	7,684,181	7,397,000	5.36%	0.45%	32,949	287,181	57%	163,807.99	10%	0.85%	1,297.15
166	2024	9	34,635	-	7,718,816	7,397,000	5.19%	0.43%	31,996	321,816	57%	183,563.63	10%	0.85%	1,560.29
167	2024	10	34,023	24,492	7,777,331	7,397,000	4.87%	0.41%	29,983	380,331	57%	216,941.00	10%	0.85%	1,784.62
168	2024	11	32,302	-	7,809,633	7,397,000	4.76%	0.40%	29,312	412,633	57%	235,365.92	10%	0.85%	2,000.61
169	2024	12	31,912	48,316	7,889,861	7,397,000	4.69%	0.39%	28,798	492,861	57%	281,128.02	10%	0.85%	2,272.46
170	2025	1	31,751	17,435	7,939,048	7,397,000	4.56%	0.38%	28,079	542,048	57%	309,184.08	10%	0.85%	2,585.80
171	2025	2	31,439	22,366	7,992,853	7,397,000	4.52%	0.38%	27,838	595,853	57%	339,874.48	10%	0.85%	2,834.71
172	2025	3	31,521	-	8,024,374	7,397,000	4.56%	0.38%	28,109	627,374	57%	357,854.26	10%	0.85%	3,041.76
173	2025	4	32,061	23,254	8,079,690	7,397,000	4.61%	0.38%	28,384	682,690	57%	389,406.25	10%	0.85%	3,253.58
174	2025	5	32,612	25,083	8,137,385	7,397,000	4.60%	0.38%	28,316	740,385	57%	422,315.55	10%	0.85%	3,528.88
175	2025	6	32,901	25,397	8,195,684	7,397,000	4.59%	0.38%	28,240	798,684	57%	455,569.18	10%	0.85%	3,810.77
176	2025	7	33,252	-	8,228,935	7,397,000	4.58%	0.38%	28,251	831,935	57%	474,535.97	10%	0.85%	4,033.56
177	2025	8	33,557	-	8,262,492	7,397,000	4.55%	0.38%	28,028	865,492	57%	493,676.65	10%	0.85%	4,196.25
178	2025	9	33,547	-	8,296,040	7,397,000	4.42%	0.37%	27,222	899,040	57%	512,812.15	10%	0.85%	4,358.90
179	2025	10	32,955	-	8,328,994	7,397,000	4.23%	0.35%	26,099	931,994	57%	531,609.55	10%	0.85%	4,518.68
180	2025	11	32,067	-	8,361,061	7,397,000	4.10%	0.34%	25,304	964,061	57%	549,900.56	10%	0.85%	4,674.15
181	2025	12	31,477	1,713	8,394,251	7,397,000	4.01%	0.33%	24,688	997,251	57%	568,832.02	10%	0.85%	4,830.92
182	2026	1	31,068	176	8,425,495	7,397,000	3.84%	0.32%	23,681	1,028,495	57%	586,653.48	10%	0.85%	4,986.13
183	2026	2	30,266	(19)	8,455,742	7,397,000	3.85%	0.32%	23,747	1,058,742	57%	603,906.64	10%	0.85%	5,133.25
184	2026	3	30,526	329	8,486,597	7,397,000	3.95%	0.33%	24,323	1,089,597	57%	621,506.22	10%	0.85%	5,282.01
185	2026	4	31,299	(27)	8,517,869	7,397,000	4.07%	0.34%	25,062	1,120,869	57%	639,343.44	10%	0.85%	5,434.49
186	2026	5	32,239	-	8,550,108	7,397,000	4.01%	0.33%	24,745	1,153,108	57%	657,732.69	10%	0.85%	5,590.73
187	2026	6	32,128	-	8,582,236	7,397,000	4.00%	0.33%	24,636	1,185,236	57%	676,058.59	10%	0.85%	5,746.50
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	P	Q	R	S	T	U	V
1	Authorized LTD Ratio	LTD Investment	Actual Weighted Ave. LTD Rate	Monthly Actual LTD Rate	LTD AFUDC	Total Monthly AFUDC	Ending Investment
2	47%	-		0.00%	-	-	-
3	47%	-		0.00%	-	-	-
4	47%	-		0.00%	-	-	-
5	47%	-		0.00%	-	-	-
6	47%	-		0.00%	-	-	-
7	47%	-		0.00%	-	0.46	2,938.02
8	47%	-		0.00%	-	0.92	2,938.94
9	47%	-		0.00%	-	1.01	2,983.88
10	47%	-		0.00%	-	1.01	2,984.90
11	47%	-		0.00%	-	1.03	2,985.92
12	47%	-		0.00%	-	1.04	2,986.96
13	47%	-		0.00%	-	1.29	2,988.25
14	47%	-		0.00%	-	1.31	2,989.56
15	47%	-		0.00%	-	1.19	2,990.76
16	47%	-		0.00%	-	1.20	2,991.96
17	47%	-		0.00%	-	1.49	4,400.44
18	47%	-		0.00%	-	1.78	4,402.22
19	47%	-		0.00%	-	1.77	4,403.99
20	47%	-		0.00%	-	1.83	4,405.82
21	47%	-		0.00%	-	1.79	4,407.61
22	47%	-		0.00%	-	1.69	4,409.30
23	47%	-		0.00%	-	1.68	4,786.92
24	47%	-		0.00%	-	1.98	5,823.52
25	47%	-		0.00%	-	2.21	5,933.60
26	47%	-		0.00%	-	2.11	5,935.72
27	47%	-		0.00%	-	1.94	5,942.16
28	47%	-		0.00%	-	1.95	6,149.09
29	47%	-		0.00%	-	1.88	6,150.97
30	47%	-		0.00%	-	1.98	7,648.20
31	47%	-		0.00%	-	3.04	14,609.77
32	47%	-		0.00%	-	4.07	14,613.84
33	47%	-		0.00%	-	5.69	27,085.63
34	47%	-		0.00%	-	7.39	27,093.02
35	47%	-		0.00%	-	16.15	64,214.19
36	47%	-		0.00%	-	19.18	64,233.38
37	47%	-		0.00%	-	23.90	96,711.27
38	47%	-		0.00%	-	27.29	96,738.55
39	47%	-		0.00%	-	26.92	107,881.18
40	47%	-		0.00%	-	26.63	107,907.81
41	47%	-		0.00%	-	29.85	139,705.54
42	47%	-		0.00%	-	35.15	154,572.80
43	47%	-		0.00%	-	39.98	180,118.48
44	47%	-	5.55%	0.46%	-	46.58	209,287.93
45	47%	-	5.55%	0.46%	-	50.69	218,378.42
46	47%	-	5.55%	0.46%	-	51.63	218,430.05
47	47%	-	5.55%	0.46%	-	55.42	239,025.28
48	47%	-	5.55%	0.46%	-	68.05	260,834.35
49	47%	-	5.55%	0.46%	-	86.79	260,921.14
50	47%	-	5.55%	0.46%	-	86.05	266,161.58
51	47%	-	5.55%	0.46%	-	99.49	279,949.80
52	47%	-	5.55%	0.46%	-	127.21	285,984.41
53	47%	-	5.55%	0.46%	-	147.24	286,139.98
54	47%	-	5.55%	0.46%	-	129.45	286,269.43
55	47%	-	5.55%	0.46%	-	112.50	286,381.94
56	47%	-	5.55%	0.46%	-	102.96	287,429.68
57	47%	-	5.55%	0.46%	-	104.70	287,534.38
58	47%	-	5.43%	0.45%	-	117.99	382,181.60
59	47%	-	5.43%	0.45%	-	135.71	384,568.90
60	47%	-	5.43%	0.45%	-	138.84	384,767.23
61	47%	-	5.43%	0.45%	-	188.29	386,493.50
62	47%	-	5.43%	0.45%	-	240.14	402,051.94
63	47%	-	5.43%	0.45%	-	248.90	402,300.84

	P	Q	R	S	T	U	V
64	47%	-	5.43%	0.45%	-	252.07	402,765.59
65	47%	-	5.43%	0.45%	-	257.93	413,514.78
66	47%	-	5.43%	0.45%	-	266.64	442,403.43
67	47%	-	5.43%	0.45%	-	284.58	450,444.41
68	47%	-	5.43%	0.45%	-	295.45	450,739.86
69	47%	-	5.43%	0.45%	-	291.39	452,734.51
70	47%	-	5.43%	0.45%	-	313.11	501,926.52
71	47%	-	5.43%	0.45%	-	336.58	522,871.92
72	47%	-	5.43%	0.45%	-	344.15	537,851.82
73	47%	-	5.43%	0.45%	-	415.23	541,893.38
74	47%	-	5.43%	0.45%	-	456.65	558,488.44
75	47%	-	5.43%	0.45%	-	464.41	579,309.35
76	47%	-	5.43%	0.45%	-	517.18	585,257.87
77	47%	3,819.43	5.43%	0.45%	-	617.21	621,964.11
78	47%	200,966.60	5.43%	0.45%	885.22	2,937.79	647,844.81
79	47%	207,627.52	5.43%	0.45%	927.82	3,082.92	662,162.11
80	47%	231,337.64	5.43%	0.45%	996.71	3,312.14	712,838.40
81	47%	234,955.38	5.28%	0.44%	1,028.75	3,472.38	720,695.97
82	47%	252,755.24	5.28%	0.44%	1,076.01	3,617.83	758,713.45
83	47%	249,656.42	5.67%	0.47%	1,191.23	3,803.42	752,305.81
84	47%	256,494.37	5.67%	0.47%	1,200.27	3,833.30	766,884.51
85	47%	274,696.70	5.67%	0.47%	1,259.48	4,037.82	805,817.40
86	45%	496,669.36	5.67%	0.47%	1,794.01	5,721.54	1,336,398.86
87	45%	502,828.04	5.67%	0.47%	2,367.87	7,460.38	1,351,943.30
88	45%	511,132.48	5.67%	0.47%	2,403.88	7,619.74	1,370,718.30
89	45%	519,933.43	5.67%	0.47%	2,444.47	7,793.13	1,390,620.35
90	45%	517,106.74	5.67%	0.47%	2,458.77	7,831.86	1,384,322.62
91	45%	534,973.08	5.67%	0.47%	2,494.35	7,945.67	1,424,486.53
92	45%	544,508.20	5.67%	0.47%	2,559.22	8,147.80	1,446,063.05
93	45%	498,769.59	5.36%	0.45%	2,338.48	7,753.94	1,343,139.23
94	45%	505,854.05	5.36%	0.45%	2,251.75	7,475.75	1,358,741.93
95	45%	509,188.98	5.36%	0.45%	2,274.74	7,555.89	1,366,297.83
96	45%	512,559.67	5.36%	0.45%	2,289.80	7,629.52	1,373,927.34
97	45%	518,417.49	5.32%	0.44%	2,292.78	7,719.24	1,387,148.25
98	45%	521,936.58	5.32%	0.44%	2,313.65	7,796.38	1,395,113.95
99	45%	530,308.79	5.32%	0.44%	2,340.09	7,878.73	1,413,963.87
100	45%	533,856.38	5.32%	0.44%	2,366.59	7,956.24	1,421,993.82
101	45%	542,577.07	5.32%	0.44%	2,393.86	8,037.12	1,441,623.45
102	45%	642,114.66	5.23%	0.44%	2,800.46	8,917.68	1,448,313.92
103	45%	-	5.23%	0.44%	-	3,201.34	1,453,117.95
104	45%	-	5.23%	0.44%	-	3,109.46	1,466,595.23
105	45%	-	5.23%	0.44%	-	2,854.47	1,476,867.03
106	45%	-	5.23%	0.44%	-	2,763.61	1,490,485.95
107	45%	-	5.23%	0.44%	5.30	2,681.44	1,487,719.51
108	45%	-	5.23%	0.44%	-	4,195.67	3,809,588.36
109	45%	-	5.23%	0.44%	-	5,879.24	3,825,893.41
110	45%	-	5.23%	0.44%	-	5,699.97	3,839,344.97
111	45%	-	5.23%	0.44%	-	6,284.30	4,897,661.13
112	45%	-	5.23%	0.44%	-	7,349.28	4,910,356.58
113	45%	-	5.16%	0.43%	-	6,396.46	4,927,923.84
114	45%	-	5.16%	0.43%	-	3,644.91	5,402,473.01
115	45%	-	5.08%	0.42%	-	1,166.66	5,417,756.17
116	45%	-	5.08%	0.42%	0.04	976.24	5,418,684.91
117	45%	-	4.60%	0.38%	-	902.78	5,437,313.90
118	45%	-	4.60%	0.38%	-	803.82	5,438,122.97
119	45%	-	4.60%	0.38%	-	914.36	5,448,079.25
120	45%	-	4.60%	0.38%	-	1,014.55	5,452,317.84
121	45%	-	4.60%	0.38%	-	1,129.47	5,981,633.72
122	45%	-	4.00%	0.33%	-	1,080.97	5,985,896.89
123	45%	-	4.00%	0.33%	-	918.84	5,986,817.04
124	45%	-	4.00%	0.33%	-	862.10	5,994,582.87
125	45%	-	4.00%	0.33%	-	866.10	6,177,729.34
126	45%	-	4.00%	0.33%	-	883.49	6,179,659.98
127	45%	-	4.00%	0.33%	-	639.46	6,187,634.23

	P	Q	R	S	T	U	V
128	45%	-	4.00%	0.33%	-	682.94	6,192,629.89
129	45%	-	4.00%	0.33%	-	667.10	6,199,903.65
130	45%	-	4.00%	0.33%	-	675.58	6,206,180.05
131	45%	-	4.00%	0.33%	-	639.64	6,214,650.47
132	45%	-	4.00%	0.33%	-	698.83	6,218,975.58
133	45%	-	4.00%	0.33%	-	939.42	6,224,554.36
134	45%	-	4.00%	0.33%	-	1,002.67	6,225,557.03
135	45%	-	4.00%	0.33%	-	1,121.58	6,231,835.41
136	45%	-	4.00%	0.33%	-	1,801.00	6,233,636.42
137	45%	-	4.00%	0.33%	-	2,451.38	6,236,087.79
138	45%	-	4.00%	0.33%	-	3,596.44	6,246,132.72
139	45%	-	4.00%	0.33%	-	6,763.35	6,263,167.65
140	45%	-	4.00%	0.33%	-	9,724.11	6,276,281.26
141	45%	-	4.00%	0.33%	-	12,306.74	6,288,588.00
142	45%	-	4.00%	0.33%	-	14,178.85	6,305,717.30
143	45%	-	4.00%	0.33%	-	17,635.29	6,331,463.03
144	45%	-	4.00%	0.33%	-	21,223.06	6,352,686.09
145	45%	-	4.00%	0.33%	-	22,904.31	6,386,889.54
146	45%	-	4.12%	0.34%	-	23,832.10	6,411,269.64
147	45%	-	4.12%	0.34%	-	24,852.75	6,436,122.40
148	45%	-	4.12%	0.34%	-	25,345.45	6,461,467.85
149	45%	-	4.12%	0.34%	-	27,324.34	6,551,681.25
150	45%	-	4.12%	0.34%	-	28,651.05	6,580,332.29
151	45%	-	4.12%	0.34%	-	28,910.48	6,686,985.93
152	45%	-	4.12%	0.34%	-	29,645.64	6,716,631.57
153	43%	-	4.12%	0.34%	-	30,626.60	6,825,728.12
154	43%	-	4.14%	0.35%	-	31,106.72	6,903,750.11
155	43%	-	4.14%	0.35%	-	31,544.27	6,993,408.88
156	43%	-	4.14%	0.35%	0.01	31,820.02	7,025,212.44
157	43%	-	4.14%	0.35%	-	32,427.92	7,127,543.65
158	43%	-	4.06%	0.34%	-	32,908.16	7,246,777.15
159	43%	-	4.06%	0.34%	-	32,688.40	7,279,465.55
160	43%	-	4.06%	0.34%	-	33,014.50	7,345,593.77
161	43%	4,772.31	4.06%	0.34%	-	33,329.98	7,441,438.72
162	43%	42,275.69	4.06%	0.34%	103.70	33,799.31	7,529,206.41
163	43%	71,092.64	4.06%	0.34%	216.11	34,333.90	7,596,819.56
164	43%	91,705.14	4.06%	0.34%	300.02	34,434.54	7,644,900.87
165	43%	123,372.92	4.06%	0.34%	388.44	34,634.72	7,718,815.63
166	43%	138,251.99	4.06%	0.34%	467.24	34,023.26	7,752,838.88
167	43%	163,390.35	4.06%	0.34%	534.42	32,301.76	7,809,633.10
168	43%	177,267.18	4.06%	0.34%	599.10	31,912.17	7,841,545.28
169	43%	211,733.17	4.06%	0.34%	680.51	31,751.29	7,921,612.48
170	43%	232,863.75	4.06%	0.34%	774.34	31,439.30	7,970,487.13
171	43%	255,978.39	4.06%	0.34%	848.88	31,521.35	8,024,374.22
172	43%	269,519.97	4.06%	0.34%	910.88	32,061.23	8,056,435.46
173	43%	293,283.53	4.06%	0.34%	974.31	32,612.15	8,112,301.93
174	43%	318,069.35	4.06%	0.34%	1,056.75	32,901.43	8,170,286.33
175	43%	343,114.51	4.27%	0.36%	1,201.46	33,251.73	8,228,935.42
176	43%	357,399.46	4.27%	0.36%	1,271.70	33,556.61	8,262,492.03
177	43%	371,815.38	4.27%	0.36%	1,322.99	33,547.50	8,296,039.53
178	43%	386,227.38	4.27%	0.36%	1,374.27	32,954.77	8,328,994.30
179	43%	400,384.75	4.34%	0.36%	1,448.88	32,066.98	8,361,061.28
180	43%	414,160.73	4.34%	0.36%	1,498.73	31,476.74	8,392,538.02
181	43%	428,419.07	4.34%	0.36%	1,549.00	31,067.58	8,425,318.67
182	43%	441,841.40	4.34%	0.36%	1,598.76	30,266.14	8,455,761.02
183	43%	454,835.72	4.34%	0.36%	1,645.94	30,526.30	8,486,268.66
184	43%	468,090.94	4.34%	0.36%	1,693.64	31,298.57	8,517,895.74
185	43%	481,525.14	4.34%	0.36%	1,742.53	32,239.22	8,550,107.80
186	43%	495,375.11	4.34%	0.36%	1,792.62	32,128.15	8,582,235.95
187	43%	509,177.36	4.43%	0.37%	1,878.78	32,261.68	8,614,497.63
188						1,674,719.32	

	A	B	C	D	E	F	G	H	I	J	K	L
1	**2021**											
2												Preliminary
3	Debt			Principal	Unamortized Issuance/Prepmt	Unamortized Bond	Net	Annualized	Amort of Debt	Amort of		Cost of
4	Issue	Issued	Due	Amount	Costs	Discount	Proceeds	Interest	Expense	Discount	Total	Debt
5	7.33%	5/1/1996	5/1/2026	$ 10,000,000	$ 58,290		$ 9,941,710	$ 733,000	$ 13,462	$ -	$ 746,462	7.51%
6	6.76%	12/1/1993	12/1/2023	$ 10,000,000	$ 7,105		$ 9,992,895	$ 676,000	$ 3,701	$ -	$ 679,701	6.80%
7	6.76%	12/1/1993	12/1/2033	$ 10,000,000	$ 23,397		$ 9,976,603	$ 676,000	$ 1,963	$ -	$ 677,963	6.80%
8	0.60%	8/18/2020	9/1/2023	$ 35,000,000	$ 911,047		$ 34,088,953	$ 210,000	$ 548,823	$ -	$ 758,823	2.23%
9	3.85%	11/20/2013	3/1/2024	$ 25,000,000	$ 64,711	$ 30,753	$ 24,904,536	$ 962,500	$ 29,821	$ 14,172	$ 1,006,493	4.04%
10	2.50%	4/1/2013	3/1/2033	$ 84,526			$ 84,526	$ 2,113	$ -	$ -	$ 2,113	2.50%
11	4.30%	8/13/2015	9/1/2045	$ 30,000,000	$ 258,259	$ 323,215	$ 29,418,526	$ 1,290,000	$ 10,897	$ 13,638	$ 1,314,535	4.47%
12	3.75%	8/10/2017	9/1/2047	$ 30,940,000	$ 285,489	$ 84,534	$ 30,569,977	$ 1,160,250	$ 11,109	$ 3,289	$ 1,174,648	3.84%
13	4.20%	8/9/2018	9/1/2048	$ 85,000,000	$ 816,600	$ 42,373	$ 84,141,027	$ 3,570,000	$ 133,708	$ 1,587	$ 3,705,295	4.40%
14	4.15%	5/13/2019	6/1/2049	$ 30,003,000	$ 295,753	$ 150,389	$ 29,556,858	$ 1,245,125	$ 10,794	$ 5,489	$ 1,261,407	4.27%
15	0.00%	2/4/2020	4/1/2027	$ 1,184,721			$ 1,184,721	$ -	$ -	$ -	$ -	0.00%
16	3.45%	4/14/2020	5/1/2050	$ 15,000,000	$ 155,243	$ 30,169	$ 14,814,588	$ 517,500	$ 5,466	$ 1,062	$ 524,029	3.54%
17	0.00%	6/24/2020	1/1/2038	$ 2,040,131			$ 2,040,131	$ -	$ -	$ -	$ -	0.00%
18	3.25%	5/14/2021	6/1/2051	$ 1,000,000			$ 1,000,000	$ 32,500	$ -	$ -	$ 32,500	3.25%
19	3.25%	5/14/2021	6/1/2051	$ 34,200,000	$ 3,881,525	$ 416,724	$ 29,901,751	$ 1,111,500	$ 132,025	$ 14,174	$ 1,257,699	4.21%
20	3.25%	6/14/2021	6/1/2051	$ 110,000,000			$ 110,000,000	$ 3,575,000	$ -	$ -	$ 3,575,000	3.25%
21				$ 429,452,378	$ 6,757,419	$ 1,078,157	$ 421,616,802	$ 15,761,488	$ 901,769	$ 53,411	$ 16,716,668	3.96%
22												
23	Remove SRF											
24	2.50%	4/1/2013	3/1/2033	$ 84,526	$ -		$ 84,526	$ 2,113	$ -	$ -	$ 2,113	2.50%
25	0.00%	2/4/2020	4/1/2027	$ 1,184,721	$ -		$ 1,184,721	$ -	$ -		$ -	0.00%
26	3.25%	5/14/2021	6/1/2051	$ 1,000,000			$ 1,000,000	$ 32,500	$ -	$ -	$ 32,500	3.25%
27	0.00%	6/24/2020	1/1/2038	$ 2,040,131	$ -		$ 2,040,131	$ -	$ -		$ -	0.00%
28	Total Net of Specific			$ 425,143,000	$ 6,757,419	$ 1,078,157	$ 417,307,424	$ 15,726,875	$ 901,769	$ 53,411	$ 16,682,055	4.00%
29												
30												
31												
32												
33	**2022**											
34												Effective
35	Debt			Principal	Unamortized Issuance	Unamortized Bond	Net	Annualized	Amort of Debt	Amort of		Cost of
36	Issue	Issued	Due	Amount	Costs	Discount	Proceeds	Interest	Expense	Discount	Total	Debt
37	7.33%	5/1/1996	5/1/2026	$ 10,000,000	$ 44,828		$ 9,955,172	$ 733,000	$ 13,462	$ -	$ 746,462	7.50%
38	6.76%	12/1/1993	12/1/2023	$ 10,000,000	$ 3,404		$ 9,996,596	$ 676,000	$ 3,404	$ -	$ 679,404	6.80%
39	6.76%	12/1/1993	12/1/2033	$ 10,000,000	$ 21,434		$ 9,978,566	$ 676,000	$ 1,963	$ -	$ 677,963	6.79%
40	0.60%	8/18/2020	9/1/2023	$ 35,000,000	$ 362,224		$ 34,637,776	$ 210,000	$ 362,224	$ -	$ 572,224	1.65%
41	3.85%	11/20/2013	3/1/2024	$ 25,000,000	$ 34,890	$ 16,581	$ 24,948,529	$ 962,500	$ 29,821	$ 14,172	$ 1,006,493	4.03%
42	2.50%	4/1/2013	3/1/2033	$ 79,318	$ -	$ -	$ 79,318	$ 1,983	$ -	$ -	$ 1,983	2.50%
43	4.30%	8/13/2015	9/1/2045	$ 30,000,000	$ 247,362	$ 309,577	$ 29,443,061	$ 1,290,000	$ 10,897	$ 13,638	$ 1,314,535	4.46%
44	3.75%	8/10/2017	9/1/2047	$ 30,940,000	$ 274,380	$ 81,245	$ 30,584,375	$ 1,160,250	$ 11,109	$ 3,289	$ 1,174,648	3.84%
45	4.20%	8/9/2018	9/1/2048	$ 85,000,000	$ 682,892	$ 40,786	$ 84,276,322	$ 3,570,000	$ 138,911	$ 1,587	$ 3,710,498	4.40%
46	4.15%	5/13/2019	6/1/2049	$ 30,003,000	$ 284,959	$ 144,900	$ 29,573,141	$ 1,245,125	$ 10,794	$ 5,489	$ 1,261,407	4.27%
47	0.00%	2/4/2020	4/1/2027	$ 965,010	$ -	$ -	$ 965,010	$ -	$ -	$ -	$ -	0.00%
48	3.45%	4/14/2020	5/1/2050	$ 15,000,000	$ 149,777	$ 29,107	$ 14,821,117	$ 517,500	$ 5,466	$ 1,062	$ 524,029	3.54%
49	0.00%	6/24/2020	1/1/2038	$ 1,913,183	$ -	$ -	$ 1,913,183	$ -	$ -	$ -	$ -	0.00%
50	3.25%	5/31/2021	5/31/2051	$ 1,000,000	$ -	$ -	$ 1,000,000	$ 32,500	$ -	$ -	$ 32,500	3.25%

	A	B	C	D	E	F	G	H	I	J	K	L
51	3.25%	5/31/2021	5/31/2051	$ 34,200,000	$ 3,749,500	$ 402,550	$ 30,047,950	$ 1,111,500	$ 132,025	$ 14,174	$ 1,257,699	4.19%
52	3.25%	11/30/2021	11/30/2051	$ 110,000,000	$ -	$ -	$ 110,000,000	$ 3,575,000	$ -	$ -	$ 3,575,000	3.25%
53	4.45%	5/5/2022	6/1/2032	$ 40,000,000	$ 340,602	$ 126,800	$ 39,532,598	$ 1,780,000	$ 36,234	$ 13,489	$ 1,829,724	4.63%
54				$ 469,100,511	$ 6,196,252	$ 1,151,546	$ 461,752,714	$ 17,541,358	$ 756,310	$ 66,900	$ 18,364,569	3.98%
55												
56	Remove SRF											
57	2.50%	4/1/2013	3/1/2033	$ 79,318	$ -	$ -	$ 79,318	$ 1,983	$ -		$ 1,983	2.50%
58	0.00%	2/4/2020	4/1/2027	$ 965,010	$ -	$ -	$ 965,010	$ -	$ -		$ -	0.00%
59	0.00%	6/24/2020	1/1/2038	$ 1,913,183	$ -	$ -	$ 1,913,183	$ -	$ -		$ -	0.00%
60	3.25%	5/31/2021	5/31/2051	$ 1,000,000	$ -	$ -	$ 1,000,000	$ 32,500	$ -		$ 32,500	3.25%
61	Total Net of Specific			$ 465,143,000	$ 6,196,252	$ 1,151,546	$ 457,795,203	$ 17,506,875	$ 756,310	$ 66,900	$ 18,330,086	4.00%
62												
63												
64												
65												
66												
67												
68												
69												
70	**2023**											
71												Effective
72	Debt			Principal	Unamortized Issuance	Unamortized Bond	Net	Annualized	Amort of Debt	Amort of		Cost of
73	Issue	Issued	Due	Amount	Costs	Discount	Proceeds	Interest	Expense	Discount	Total	Debt
74	7.33%	5/1/1996	5/1/2026	$ 10,000,000	$ 31,366		$ 9,968,634	$ 733,000	$ 13,462	$ -	$ 746,462	7.49%
75	6.76%	12/1/1993	12/1/2033	$ 10,000,000	$ 19,471		$ 9,980,529	$ 676,000	$ 1,963	$ -	$ 677,963	6.79%
76	3.85%	11/20/2013	3/1/2024	$ 25,000,000	$ 5,070	$ 2,409	$ 24,992,521	$ 962,500	$ 5,070	$ 2,409	$ 969,979	3.88%
77	2.50%	4/1/2013	3/1/2033	$ 74,110	$ -	$ -	$ 74,110	$ 1,853	$ -	$ -	$ 1,853	2.50%
78	4.30%	8/13/2015	9/1/2045	$ 30,000,000	$ 236,465	$ 295,939	$ 29,467,596	$ 1,290,000	$ 10,897	$ 13,638	$ 1,314,535	4.46%
79	3.75%	8/10/2017	9/1/2047	$ 30,940,000	$ 263,272	$ 77,955	$ 30,598,773	$ 1,160,250	$ 11,109	$ 3,289	$ 1,174,648	3.84%
80	4.20%	8/9/2018	9/1/2048	$ 85,000,000	$ 543,982	$ 39,199	$ 84,416,819	$ 3,570,000	$ 144,534	$ 1,587	$ 3,716,121	4.40%
81	4.15%	5/13/2019	6/1/2049	$ 30,003,000	$ 274,165	$ 139,412	$ 29,589,423	$ 1,245,125	$ 10,794	$ 5,489	$ 1,261,407	4.26%
82	0.00%	2/4/2020	4/1/2027	$ 745,299	$ -	$ -	$ 745,299	$ -	$ -	$ -	$ -	0.00%
83	3.45%	4/14/2020	5/1/2050	$ 15,000,000	$ 144,310	$ 28,044	$ 14,827,646	$ 517,500	$ 5,466	$ 1,062	$ 524,029	3.53%
84	0.00%	6/24/2020	1/1/2038	$ 1,786,235	$ -	$ -	$ 1,786,235	$ -	$ -	$ -	$ -	0.00%
85	3.25%	5/31/2021	5/31/2051	$ 1,000,000	$ -	$ -	$ 1,000,000	$ 32,500	$ -	$ -	$ 32,500	3.25%
86	3.25%	5/31/2021	5/31/2051	$ 34,200,000	$ 3,617,476	$ 388,375	$ 30,194,149	$ 1,111,500	$ 132,025	$ 14,174	$ 1,257,699	4.17%
87	3.25%	11/30/2021	11/30/2051	$ 110,000,000	$ -	$ -	$ 110,000,000	$ 3,575,000	$ -	$ -	$ 3,575,000	3.25%
88	4.45%	5/5/2022	6/1/2032	$ 40,000,000	$ 304,368	$ 113,311	$ 39,582,321	$ 1,780,000	$ 36,234	$ 13,489	$ 1,829,724	4.62%
89				$ 423,748,644	$ 5,439,945	$ 1,084,644	$ 417,224,055	$ 16,655,228	$ 371,554	$ 55,137	$ 17,081,920	4.09%
90	Remove SRF											
91	2.50%	4/1/2013	3/1/2033	$ 74,110	$ -	$ -	$ 74,110	$ 1,853	$ -	$ -	$ 1,853	2.50%
92	0.00%	2/4/2020	4/1/2027	$ 745,299	$ -	$ -	$ 745,299	$ -	$ -	$ -	$ -	0.00%
93	0.00%	6/24/2020	1/1/2038	$ 1,786,235	$ -	$ -	$ 1,786,235	$ -	$ -	$ -	$ -	0.00%
94	3.25%	5/31/2021	5/31/2051	$ 1,000,000	$ -	$ -	$ 1,000,000	$ 32,500	$ -		$ 32,500	3.25%
95	Total Net of Specific			$ 420,143,000	$ 5,439,945	$ 1,084,644	$ 413,618,411	$ 16,620,875	$ 371,554	$ 55,137	$ 17,047,567	4.12%
96												
97	**Sep-23**											
98												
99	Debt			Principal	Unamortized Issuance	Unamortized Bond	Net	Annualized	Amort of Debt	Amort of		Cost of
100	Issue	Issued	Due	Amount	Costs	Discount	Proceeds	Interest	Expense	Discount	Total	Debt

	A	B	C	D	E	F	G	H	I	J	K	L
101	7.33%	5/1/1996	5/1/2026	$ 10,000,000	$ 31,366		$ 9,968,634	$ 733,000	$ 13,462	$ -	$ 746,462	7.49%
102	6.76%	12/1/1993	12/1/2033	$ 10,000,000	$ 19,471		$ 9,980,529	$ 676,000	$ 1,963	$ -	$ 677,963	6.79%
103	6.76%	12/1/1993	12/1/2023	$ 10,000,000			$ 10,000,000	$ 676,000			$ 676,000	6.76%
104	3.85%	11/20/2013	3/1/2024	$ 25,000,000	$ 5,070	$ 2,409	$ 24,992,521	$ 962,500	$ 5,070	$ 2,409	$ 969,979	3.88%
105	2.50%	4/1/2013	3/1/2033	$ 74,110	$ -	$ -	$ 74,110	$ 1,853	$ -	$ -	$ 1,853	2.50%
106	4.30%	8/13/2015	9/1/2045	$ 30,000,000	$ 236,465	$ 295,939	$ 29,467,596	$ 1,290,000	$ 10,897	$ 13,638	$ 1,314,535	4.46%
107	3.75%	8/10/2017	9/1/2047	$ 30,940,000	$ 263,272	$ 77,955	$ 30,598,773	$ 1,160,250	$ 11,109	$ 3,289	$ 1,174,648	3.84%
108	4.20%	8/9/2018	9/1/2048	$ 85,000,000	$ 543,982	$ 39,199	$ 84,416,819	$ 3,570,000	$ 144,534	$ 1,587	$ 3,716,121	4.40%
109	4.15%	5/13/2019	6/1/2049	$ 30,003,000	$ 274,165	$ 139,412	$ 29,589,423	$ 1,245,125	$ 10,794	$ 5,489	$ 1,261,407	4.26%
110	0.00%	2/4/2020	4/1/2027	$ 745,299	$ -	$ -	$ 745,299	$ -	$ -	$ -	$ -	0.00%
111	3.45%	4/14/2020	5/1/2050	$ 15,000,000	$ 144,310	$ 28,044	$ 14,827,646	$ 517,500	$ 5,466	$ 1,062	$ 524,029	3.53%
112	0.00%	6/24/2020	1/1/2038	$ 1,786,235	$ -	$ -	$ 1,786,235	$ -	$ -	$ -	$ -	0.00%
113	3.25%	5/31/2021	5/31/2051	$ 1,000,000	$ -	$ -	$ 1,000,000	$ 32,500	$ -	$ -	$ 32,500	3.25%
114	3.25%	5/31/2021	5/31/2051	$ 34,200,000	$ 3,617,476	$ 388,375	$ 30,194,149	$ 1,111,500	$ 132,025	$ 14,174	$ 1,257,699	4.17%
115	3.25%	11/30/2021	11/30/2051	$ 110,000,000	$ -	$ -	$ 110,000,000	$ 3,575,000	$ -	$ -	$ 3,575,000	3.25%
116	4.45%	5/5/2022	6/1/2032	$ 40,000,000	$ 304,368	$ 113,311	$ 39,582,321	$ 1,780,000	$ 36,234	$ 13,489	$ 1,829,724	4.62%
117	3.63%	8/15/2023	6/15/2026	$ 40,000,000	$ 447,384		$ 39,552,616	$ 1,450,000	$ 91,380		$ 1,541,380	3.90%
118	3.70%	9/1/2023	9/1/2028	$ 35,000,000	$ 293,325		$ 34,706,675	$ 1,295,000	$ 62,855		$ 1,357,855	3.91%
119				$ 508,748,644	$ 6,180,654	$ 1,084,644	$ 501,483,346	$ 20,076,228	$ 525,789	$ 55,137	$ 20,657,155	4.12%
120												
121	Remove SRF											
122	2.50%	4/1/2013	3/1/2033	$ 74,110	$ -	$ -	$ 74,110	$ 1,853	$ -	$ -	$ 1,853	2.50%
123	0.00%	2/4/2020	4/1/2027	$ 745,299	$ -	$ -	$ 745,299	$ -	$ -	$ -	$ -	0.00%
124	0.00%	6/24/2020	1/1/2038	$ 1,786,235	$ -	$ -	$ 1,786,235	$ -	$ -	$ -	$ -	0.00%
125	3.25%	5/31/2021	5/31/2051	$ 1,000,000	$ -	$ -	$ 1,000,000	$ 32,500	$ -		$ 32,500	3.25%
126	Total Net of Specific			$ 505,143,000	$ 6,180,654	$ 1,084,644	$ 497,877,702	$ 20,041,875	$ 525,789	$ 55,137	$ 20,622,802	4.14%
127												
128												
129												
130												
131												
132												
133	**2024**											
134												
135	Debt			Principal	Unamortized Issuance	Unamortized Bond	Net	Annualized	Amort of Debt	Amort of		Cost of
136	Issue	Issued	Due	Amount	Costs	Discount	Proceeds	Interest	Expense	Discount	Total	Debt
137	7.33%	5/1/1996	5/1/2026	$ 10,000,000	$ 25,561		$ 9,974,439	$ 733,000	$ 10,884	$ -	$ 743,884	7.46%
138	6.76%	12/1/1993	12/1/2033	$ 10,000,000	$ 17,963		$ 9,982,037	$ 676,000	$ 1,800	$ -	$ 677,800	6.79%
139	3.85%	11/20/2013	3/1/2024	$ 25,000,000	$ 5,070	$ 2,409	$ 24,992,521	$ 962,500	$ 5,070	$ 2,409	$ 969,979	3.88%
140	2.50%	4/1/2013	3/1/2033	$ 71,500	$ -		$ 71,500	$ 1,788	$ -	$ -	$ 1,788	2.50%
141	4.30%	8/13/2015	9/1/2045	$ 30,000,000	$ 226,837	$ 283,414	$ 29,489,749	$ 1,290,000	$ 10,452	$ 13,267	$ 1,313,719	4.45%
142	3.75%	8/10/2017	9/1/2047	$ 30,940,000	$ 320,647	$ 75,025	$ 30,544,328	$ 1,160,250	$ 13,536	$ 3,170	$ 1,176,956	3.85%
143	4.20%	8/9/2018	9/1/2048	$ 85,000,000	$ 728,014	$ 37,779	$ 84,234,207	$ 3,570,000	$ 29,496	$ 1,531	$ 3,601,027	4.28%
144	4.15%	5/13/2019	6/1/2049	$ 30,003,000	$ 264,512	$ 134,513	$ 29,603,975	$ 1,245,125	$ 10,404	$ 5,292	$ 1,260,820	4.26%
145	0.00%	2/4/2020	4/1/2027	$ 624,192	$ -	$ -	$ 624,192	$ -	$ -	$ -	$ -	0.00%
146	3.45%	4/14/2020	5/1/2050	$ 15,000,000	$ 139,361	$ 27,084	$ 14,833,555	$ 517,500	$ 5,292	$ 1,028	$ 523,820	3.53%
147	0.00%	6/24/2020	1/1/2038	$ 1,671,747	$ -	$ -	$ 1,671,747	$ -	$ -	$ -	$ -	0.00%
148	3.25%	5/31/2021	6/1/2051	$ 1,000,000	$ -	$ -	$ 1,000,000	$ 32,500	$ -	$ -	$ 32,500	3.25%
149	3.25%	5/31/2021	6/1/2051	$ 37,000,000	$ 330,558	$ 88,818	$ 36,580,624	$ 1,202,500	$ 12,498	$ 3,362	$ 1,218,360	3.33%
150	3.25%	11/30/2021	6/1/2051	$ 107,200,000	$ 3,444,691	$ 277,554	$ 103,477,755	$ 3,484,000	$ 116,943	$ 10,507	$ 3,611,450	3.49%

	A	B	C	D	E	F	G	H	I	J	K	L
151	4.45%	7/1/2022	6/1/2032	$ 40,000,000	$ 283,097	$ 93,369	$ 39,623,534	$ 1,780,000	$ 33,612	$ 8,253	$ 1,821,865	4.60%
152	3.63%	8/15/2023	6/15/2026	$ 40,000,000	$ 447,384		$ 39,552,616	$ 1,450,000	$ 91,380		$ 1,541,380	3.90%
153	3.70%	9/1/2023	9/1/2028	$ 35,000,000	$ 293,325		$ 34,706,675	$ 1,295,000	$ 62,855		$ 1,357,855	3.91%
154	3.85%	11/20/2013	3/1/2024	$ 25,000,000	$ 5,070	$ 2,409	$ 24,992,521	$ 962,500	$ 5,070	$ 2,409	$ 969,979	3.88%
155				$ 523,510,439	$ 6,532,090	$ 1,022,374	$ 515,955,975	$ 20,362,662	$ 409,293	$ 51,228	$ 20,823,183	4.04%
156												
157	Remove SRF											
158	2.50%	4/1/2013	3/1/2033	$ 71,500	$ -	$ -	$ 71,500	$ 1,788	$ -		$ 1,788	2.50%
159	3.25%	5/31/2021	5/31/2051	$ 939,170	$ -	$ -	$ 939,170	$ 30,523	$ -	$ -	$ 30,523	3.25%
160	0.00%	2/4/2020	4/1/2027	$ 624,192	$ -	$ -	$ 624,192	$ -	$ -		$ -	0.00%
161	0.00%	6/24/2020	1/1/2038	$ 1,671,747	$ -	$ -	$ 1,671,747	$ -	$ -		$ -	0.00%
162	Total Net of Specific			$ 520,203,830	$ 6,532,090	$ 1,022,374	$ 512,649,366	$ 20,330,351	$ 409,293	$ 51,228	$ 20,790,872	4.06%
163												
164												
165												
166												
167												
168	**Jun-25**											
169												Effective
170	Debt			Principal	Unamortized Issuance	Unamortized Bond	Net	Annualized	Amort of Debt	Amort of		Cost of
171	Issue	Issued	Due	Amount	Costs	Discount	Proceeds	Interest	Expense	Discount	Total	Debt
172	7.33%	5/1/1996	5/1/2026	$ 10,000,000	$ 22,807		$ 9,977,193	$ 733,000	$ 11,615	$ -	$ 744,615	7.46%
173	6.76%	12/1/1993	12/1/2033	$ 10,000,000	$ 17,506		$ 9,982,494	$ 676,000	$ 1,929	$ -	$ 677,929	6.79%
174	2.50%	4/1/2013	3/1/2033	$ 64,177	$ -		$ 64,177	$ 1,788	$ -	$ -	$ 1,788	2.79%
175	4.30%	8/13/2015	9/1/2045	$ 30,000,000	$ 224,193	$ 283,414	$ 29,492,393	$ 1,290,000	$ 11,160	$ 13,267	$ 1,314,427	4.46%
176	3.75%	8/10/2017	9/1/2047	$ 30,940,000	$ 316,993	$ 75,025	$ 30,547,981	$ 1,160,250	$ 11,412	$ 3,170	$ 1,174,832	3.85%
177	4.20%	8/9/2018	9/1/2048	$ 85,000,000	$ 725,225	$ 37,779	$ 84,236,996	$ 3,570,000	$ 31,464	$ 1,531	$ 3,602,995	4.28%
178	4.15%	5/13/2019	6/1/2049	$ 30,003,000	$ 261,883	$ 134,513	$ 29,606,603	$ 1,245,125	$ 11,096	$ 5,292	$ 1,261,512	4.26%
179	0.00%	2/4/2020	4/1/2027	$ 525,589	$ -	$ -	$ 525,589	$ -	$ -	$ -	$ -	0.00%
180	3.45%	4/14/2020	5/1/2050	$ 15,000,000	$ 138,021	$ 27,084	$ 14,834,895	$ 517,500	$ 5,642	$ 1,028	$ 524,170	3.53%
181	0.00%	6/24/2020	1/1/2038	$ 1,595,812	$ -	$ -	$ 1,595,812	$ -	$ -	$ -	$ -	0.00%
182	3.25%	5/31/2021	6/1/2051	$ 35,200,000	$ 339,863	$ 88,818	$ 34,771,319	$ 1,235,000	$ 13,330	$ 3,362	$ 1,251,692	3.60%
183	3.25%	11/30/2021	6/1/2051	$ 110,000,000	$ 1,060,890	$ 277,554	$ 108,661,556	$ 3,484,000	$ 41,657	$ 10,507	$ 3,536,164	3.25%
184	4.45%	7/1/2022	6/1/2032	$ 40,000,000	$ 274,594	$ 93,369	$ 39,632,037	$ 1,780,000	$ 35,865	$ 8,253	$ 1,824,118	4.60%
185	3.63%	8/15/2023	6/15/2026	$ 40,000,000	$ 443,141		$ 39,556,859	$ 1,450,000	$ 214,315		$ 1,664,315	4.21%
186	3.70%	9/1/2023	9/1/2028	$ 35,000,000	$ 307,864		$ 34,692,136	$ 1,295,000	$ 74,352		$ 1,369,352	3.95%
187	5.15%	5/15/2024	3/1/2034	$ 30,000,000	$ 246,604		$ 29,753,396	$ 1,532,300	$ 25,503		$ 1,557,803	5.24%
188	5.45%	5/15/2024	3/1/2054	$ 30,000,000	$ 318,461		$ 29,681,539	$ 1,617,644	$ 10,734		$ 1,628,377	5.49%
189	5.25%	3/15/2025	3/1/2035	$ 30,000,000	$ 193,268		$ 29,806,732	$ 1,564,853	$ 10,394		$ 1,575,248	5.28%
190				$ 563,328,578	$ 4,891,315	$ 1,017,556	$ 557,419,708	$ 23,152,459	$ 510,469	$ 46,410	$ 23,709,339	4.25%
191												
192	Remove SRF											
193	2.50%	4/1/2013	3/1/2033	$ 64,177	$ -	$ -	$ 64,177	$ 1,788	$ -	$ -	$ 1,788	2.79%
194	0.00%	2/4/2020	4/1/2027	$ 525,589	$ -	$ -	$ 525,589	$ -	$ -	$ -	$ -	0.00%
195	0.00%	6/24/2020	1/1/2038	$ 1,595,812	$ -	$ -	$ 1,595,812	$ -	$ -	$ -	$ -	0.00%
196	Total Net of Specific			$ 561,143,000	$ 4,891,315	$ 1,017,556	$ 555,234,129	$ 23,150,672	$ 510,469	$ 46,410	$ 23,707,551	4.27%
197												
198												
199												
200	**Oct-25**											

	A	B	C	D	E	F	G	H	I	J	K	L
201												Effective
202	Debt			Principal	Unamortized Issuance	Unamortized Bond	Net	Annualized	Amort of Debt	Amort of		Cost of
203	Issue	Issued	Due	Amount	Costs	Discount	Proceeds	Interest	Expense	Discount	Total	Debt
204	7.33%	5/1/1996	5/1/2026	$ 10,000,000	$ 22,807		$ 9,977,193	$ 733,000	$ 11,615	$ -	$ 744,615	7.46%
205	6.76%	12/1/1993	12/1/2033	$ 10,000,000	$ 17,506		$ 9,982,494	$ 676,000	$ 1,929	$ -	$ 677,929	6.79%
206	2.50%	4/1/2013	3/1/2033	$ 64,177	$ -		$ 64,177	$ 1,788	$ -	$ -	$ 1,788	2.79%
207	4.30%	8/13/2015	9/1/2045	$ 30,000,000	$ 224,193	$ 283,414	$ 29,492,393	$ 1,290,000	$ 11,160	$ 13,267	$ 1,314,427	4.46%
208	3.75%	8/10/2017	9/1/2047	$ 30,940,000	$ 316,993	$ 75,025	$ 30,547,981	$ 1,160,250	$ 11,412	$ 3,170	$ 1,174,832	3.85%
209	4.20%	8/9/2018	9/1/2048	$ 85,000,000	$ 725,225	$ 37,779	$ 84,236,996	$ 3,570,000	$ 31,464	$ 1,531	$ 3,602,995	4.28%
210	4.15%	5/13/2019	6/1/2049	$ 30,003,000	$ 261,883	$ 134,513	$ 29,606,603	$ 1,245,125	$ 11,096	$ 5,292	$ 1,261,512	4.26%
211	0.00%	2/4/2020	4/1/2027	$ 525,589	$ -	$ -	$ 525,589	$ -	$ -	$ -	$ -	0.00%
212	3.45%	4/14/2020	5/1/2050	$ 15,000,000	$ 138,021	$ 27,084	$ 14,834,895	$ 517,500	$ 5,642	$ 1,028	$ 524,170	3.53%
213	0.00%	6/24/2020	1/1/2038	$ 1,595,812	$ -	$ -	$ 1,595,812	$ -	$ -	$ -	$ -	0.00%
214	3.25%	5/31/2021	6/1/2051	$ 35,200,000	$ 339,863	$ 88,818	$ 34,771,319	$ 1,235,000	$ 13,330	$ 3,362	$ 1,251,692	3.60%
215	3.25%	11/30/2021	6/1/2051	$ 110,000,000	$ 1,060,890	$ 277,554	$ 108,661,556	$ 3,484,000	$ 41,657	$ 10,507	$ 3,536,164	3.25%
216	4.45%	7/1/2022	6/1/2032	$ 40,000,000	$ 274,594	$ 93,369	$ 39,632,037	$ 1,780,000	$ 35,865	$ 8,253	$ 1,824,118	4.60%
217	3.63%	8/15/2023	6/15/2026	$ 40,000,000	$ 443,141		$ 39,556,859	$ 1,450,000	$ 214,315		$ 1,664,315	4.21%
218	3.70%	9/1/2023	9/1/2028	$ 35,000,000	$ 307,864		$ 34,692,136	$ 1,295,000	$ 74,352		$ 1,369,352	3.95%
219	5.15%	5/15/2024	3/1/2034	$ 30,000,000	$ 246,604		$ 29,753,396	$ 1,532,300	$ 25,503		$ 1,557,803	5.24%
220	5.45%	5/15/2024	3/1/2054	$ 30,000,000	$ 318,461		$ 29,681,539	$ 1,617,644	$ 10,734		$ 1,628,377	5.49%
221	5.25%	3/15/2025	3/1/2035	$ 30,000,000	$ 193,268		$ 29,806,732	$ 1,564,853	$ 10,394		$ 1,575,248	5.28%
222	1.80%	8/19/2025	7/1/2044	$ 12,222,058	$ -		$ 12,222,058	$ 219,997	$ -		$ 219,997	1.80%
223	5.70%	9/15/2025	9/1/2055	$ 30,000,000	$ 324,915		$ 29,675,085	$ 1,691,460	$ 452		$ 1,691,932	5.70%
224				$ 605,550,637	$ 5,216,230	$ 1,017,556	$ 599,316,851	$ 25,063,936	$ 510,922	$ 46,410	$ 25,621,268	4.28%
225												
226	Remove SRF											
227	2.50%	4/1/2013	3/1/2033	$ 64,177	$ -	$ -	$ 64,177	$ 1,788	$ -	$ -	$ 1,788	2.79%
228	0.00%	2/4/2020	4/1/2027	$ 525,589	$ -	$ -	$ 525,589	$ -	$ -	$ -	$ -	0.00%
229	0.00%	6/24/2020	1/1/2038	$ 1,595,812	$ -	$ -	$ 1,595,812	$ -	$ -	$ -	$ -	0.00%
230	1.80%	8/19/2025	7/1/2044	$ 12,222,058	$ -	$ -	$ 12,222,058	$ 219,997	$ -	$ -	$ 219,997	1.80%
231	Total Net of Specific			$ 591,143,000	$ 5,216,230	$ 1,017,556	$ 584,909,214	$ 24,842,151	$ 510,922	$ 46,410	$ 25,399,484	4.34%
232												
233												
234												
235												
236	**Jun-26**											
237												Effective
238	Debt			Principal	Unamortized Issuance	Unamortized Bond	Net	Annualized	Amort of Debt	Amort of		Cost of
239	Issue	Issued	Due	Amount	Costs	Discount	Proceeds	Interest	Expense	Discount	Total	Debt
240	6.76%	12/1/1993	12/1/2033	$ 10,000,000	$ 17,506		$ 9,982,494	$ 676,000	$ 1,929	$ -	$ 677,929	6.79%
241	2.50%	4/1/2013	3/1/2033	$ 64,177	$ -		$ 64,177	$ 1,788	$ -	$ -	$ 1,788	2.79%
242	4.30%	8/13/2015	9/1/2045	$ 30,000,000	$ 224,193	$ 283,414	$ 29,492,393	$ 1,290,000	$ 11,160	$ 13,267	$ 1,314,427	4.46%
243	3.75%	8/10/2017	9/1/2047	$ 30,940,000	$ 316,993	$ 75,025	$ 30,547,981	$ 1,160,250	$ 11,412	$ 3,170	$ 1,174,832	3.85%
244	4.20%	8/9/2018	9/1/2048	$ 85,000,000	$ 725,225	$ 37,779	$ 84,236,996	$ 3,570,000	$ 31,464	$ 1,531	$ 3,602,995	4.28%
245	4.15%	5/13/2019	6/1/2049	$ 30,003,000	$ 261,883	$ 134,513	$ 29,606,603	$ 1,245,125	$ 11,096	$ 5,292	$ 1,261,512	4.26%
246	0.00%	2/4/2020	4/1/2027	$ 525,589	$ -	$ -	$ 525,589	$ -	$ -	$ -	$ -	0.00%
247	3.45%	4/14/2020	5/1/2050	$ 15,000,000	$ 138,021	$ 27,084	$ 14,834,895	$ 517,500	$ 5,642	$ 1,028	$ 524,170	3.53%
248	0.00%	6/24/2020	1/1/2038	$ 1,595,812	$ -	$ -	$ 1,595,812	$ -	$ -	$ -	$ -	0.00%
249	3.25%	5/31/2021	6/1/2051	$ 35,200,000	$ 339,863	$ 88,818	$ 34,771,319	$ 1,235,000	$ 13,330	$ 3,362	$ 1,251,692	3.60%

	A	B	C	D	E	F	G	H	I	J	K	L
250	3.25%	11/30/2021	6/1/2051	$ 110,000,000	$ 1,060,890	$ 277,554	$ 108,661,556	$ 3,484,000	$ 41,657	$ 10,507	$ 3,536,164	3.25%
251	4.45%	7/1/2022	6/1/2032	$ 40,000,000	$ 274,594	$ 93,369	$ 39,632,037	$ 1,780,000	$ 35,865	$ 8,253	$ 1,824,118	4.60%
252	3.63%	8/15/2023	6/15/2026	$ 40,000,000	$ 443,141		$ 39,556,859	$ 1,450,000	$ 214,315		$ 1,664,315	4.21%
253	3.70%	9/1/2023	9/1/2028	$ 35,000,000	$ 307,864		$ 34,692,136	$ 1,295,000	$ 74,352		$ 1,369,352	3.95%
254	5.15%	5/15/2024	3/1/2034	$ 30,000,000	$ 246,604		$ 29,753,396	$ 1,532,300	$ 25,503		$ 1,557,803	5.24%
255	5.45%	5/15/2024	3/1/2054	$ 30,000,000	$ 318,461		$ 29,681,539	$ 1,617,644	$ 10,734		$ 1,628,377	5.49%
256	5.25%	3/15/2025	3/1/2035	$ 30,000,000	$ 193,268		$ 29,806,732	$ 1,564,853	$ 10,394		$ 1,575,248	5.28%
257	1.80%	8/19/2025	7/1/2044	$ 12,222,058	$ -		$ 12,222,058	$ 219,997	$ -		$ 219,997	1.80%
258	5.70%	9/15/2025	9/1/2055	$ 30,000,000	$ 324,915		$ 29,675,085	$ 1,691,460	$ 452		$ 1,691,932	5.70%
259	5.20%	5/15/2026	4/1/2036	$ 100,000,000	$ 641,863		$ 99,358,137	$ 5,166,623	$ 34,813		$ 5,201,436	5.24%
260				$ 695,550,637	$ 5,835,285	$ 1,017,556	$ 688,697,795	$ 29,497,559	$ 534,120	$ 46,410	$ 30,078,089	4.37%
261												
262	Remove SRF											
263	2.50%	4/1/2013	3/1/2033	$ 64,177	$ -	$ -	$ 64,177	$ 1,788	$ -	$ -	$ 1,788	2.79%
264	0.00%	2/4/2020	4/1/2027	$ 525,589	$ -	$ -	$ 525,589	$ -	$ -	$ -	$ -	0.00%
265	0.00%	6/24/2020	1/1/2038	$ 1,595,812	$ -	$ -	$ 1,595,812	$ -	$ -	$ -	$ -	0.00%
266	1.80%	8/19/2025	7/1/2044	$ 12,222,058	$ -	$ -	$ 12,222,058	$ 219,997	$ -	$ -	$ 219,997	1.80%
267	Total Net of Specific			$ 681,143,000	$ 5,835,285	$ 1,017,556	$ 674,290,159	$ 29,275,775	$ 534,120	$ 46,410	$ 29,856,304	4.43%
268												

	A	B	C	D	E	F	G	H	I	J
1	Year	Month	**Prior Month AFUDC**	**Cash Spend**	**Total Investment**	**STD Financed**	**Annual STD Rate**	**Monthly STD Rate**	**STD AFUDC**	**Equity/LTD Financed**
2	2016	1	-	-	-			0%	-	-
3	2016	2	-	-	-			0%	-	-
4	2016	3	-	-	-			0%	-	-
5	2016	4	-	-	-			0%	-	-
6	2016	5	-	-	-			0%	-	-
7	2016	6	-	-	-			0%	-	-
8	2016	7	-	-	-			0%	-	-
9	2016	8	-	-	-			0%	-	-
10	2016	9	-	-	-			0%	-	-
11	2016	10	-	13,745.00	13,745			0%	-	13,745
12	2016	11	61	-	13,805			0%	-	13,806
13	2016	12	61	324,963.15	338,830			0%	-	338,830
14	2017	1	1,495	63,284.63	403,609			0%	-	403,609
15	2017	2	1,781	110,115.41	515,506			0%	-	515,506
16	2017	3	2,275	33,617.69	551,398			0%	-	551,398
17	2017	4	2,433	115,528.71	669,359			0%	-	669,359
18	2017	5	3,998	131,225.08	804,582			0%	-	804,582
19	2017	6	4,831	274,174.65	1,083,588			0%	-	1,083,588
20	2017	7	6,187	16,608.52	1,106,383			0%	-	1,106,383
21	2017	8	7,178	146,421.95	1,259,983			0%	-	1,259,983
22	2017	9	7,687	12,932.10	1,280,602			0%	-	1,280,602
23	2017	10	8,253	241,709.62	1,530,565			0%	-	1,530,565
24	2017	11	9,131	374,440.32	1,914,136			0%	-	1,914,136
25	2017	12	11,396	552,941.55	2,478,473			0%	-	2,478,473
26	2018	1	14,531	504,171.72	2,997,176			0%	-	2,997,176
27	2018	2	17,447	205,874.42	3,220,497			0%	-	3,220,497
28	2018	3	19,814	74,540.64	3,314,851			0%	-	3,314,851
29	2018	4	20,831	159,808.50	3,495,491			0%	-	3,495,491
30	2018	5	21,708	43,899.37	3,561,099			0%	-	3,561,099
31	2018	6	22,493	15,178.75	3,598,771			0%	-	3,598,771
32	2018	7	22,824	-	3,621,595			0%	-	3,621,595
33	2018	8	23,017	-	3,644,612			0%	-	3,644,612
34	2018	9	22,741	(62,120.94)	3,605,233			0%	-	3,605,233
35	2018	10	22,689	373,815.17	4,001,737			0%	-	4,001,737
36	2018	11	23,803	198,511.48	4,224,052			0%	-	4,224,052
37	2018	12	25,737	(281,485.15)	3,968,304			0%	-	3,968,304
38	2019	1	25,639	46,718.23	4,040,662			0%	-	4,040,662
39										

	K	L	M	N	O	P	Q	R
1	**Authorized Equity Ratio**	**Equity Investment**	**Authorized ROE**	**Monthly ROE**	**Equity AFUDC**	**Authorized LTD Ratio**	**LTD Investment**	**Actual Weighted Ave. LTD Rate**
2	53.00%	-	10%	0.83%	-	47%	-	5.43%
3	53.00%	-	10%	0.83%	-	47%	-	5.43%
4	53.00%	-	10%	0.83%	-	47%	-	5.43%
5	53.00%	-	10%	0.83%	-	47%	-	5.43%
6	53.00%	-	10%	0.83%	-	47%	-	5.43%
7	53.00%	-	10%	0.83%	-	47%	-	5.43%
8	53.00%	-	10%	0.83%	-	47%	-	5.43%
9	53.00%	-	10%	0.83%	-	47%	-	5.43%
10	53.00%	-	10%	0.83%	-	47%	-	5.43%
11	53.00%	7,285	10%	0.83%	61	47%	6,460	5.43%
12	53.00%	7,317	10%	0.83%	61	47%	6,489	5.43%
13	53.00%	179,580	10%	0.83%	1,495	47%	159,250	5.43%
14	53.00%	213,913	10%	0.83%	1,781	47%	189,696	5.42%
15	53.00%	273,218	10%	0.83%	2,275	47%	242,288	5.42%
16	53.00%	292,241	10%	0.83%	2,433	47%	259,157	5.42%
17	53.00%	354,760	10%	0.83%	2,699	47%	314,599	5.42%
18	53.00%	426,429	10%	0.83%	3,261	47%	378,154	5.42%
19	53.00%	574,301	10%	0.83%	4,176	47%	509,286	5.42%
20	53.00%	586,383	10%	0.83%	4,845	47%	520,000	5.42%
21	53.00%	667,791	10%	0.83%	5,236	47%	592,192	5.27%
22	53.00%	678,719	10%	0.83%	5,622	47%	601,883	5.27%
23	53.00%	811,199	10%	0.83%	6,220	47%	719,365	5.27%
24	53.00%	1,014,492	10%	0.83%	7,620	47%	899,644	5.58%
25	53.00%	1,313,591	10%	0.83%	9,716	47%	1,164,882	5.58%
26	55.39%	1,660,136	9%	0.77%	11,657	45%	1,337,040	5.67%
27	55.39%	1,783,833	9%	0.77%	13,239	45%	1,436,664	5.67%
28	55.39%	1,836,096	9%	0.77%	13,918	45%	1,478,755	5.67%
29	55.39%	1,936,152	9%	0.77%	14,505	45%	1,559,339	5.67%
30	55.39%	1,972,492	9%	0.77%	15,029	45%	1,588,606	5.67%
31	55.39%	1,993,359	9%	0.77%	15,250	45%	1,605,412	5.67%
32	55.39%	2,006,001	9%	0.77%	15,379	45%	1,615,594	5.67%
33	55.39%	2,018,751	9%	0.77%	15,477	45%	1,625,862	5.36%
34	55.39%	1,996,938	9%	0.77%	15,442	45%	1,608,294	5.36%
35	55.39%	2,216,562	9%	0.77%	16,200	45%	1,785,175	5.36%
36	55.39%	2,339,702	9%	0.77%	17,516	45%	1,884,350	5.36%
37	55.39%	2,198,044	9%	0.77%	17,449	45%	1,770,261	5.36%
38	55.39%	2,238,123	9%	0.77%	17,060	45%	1,802,539	5.31%
39								

	S	T	U	V
1	**Monthly Actual LTD Rate**	**LTD AFUDC**	**Total Monthly AFUDC**	**Ending Investment**
2	0.45%	-	-	-
3	0.45%	-	-	-
4	0.45%	-	-	-
5	0.45%	-	-	-
6	0.45%	-	-	-
7	0.45%	-	-	-
8	0.45%	-	-	-
9	0.45%	-	-	-
10	0.45%	-	-	-
11	0.45%	-	61	13,806
12	0.45%	-	61	13,867
13	0.45%	-	1,495	340,325
14	0.45%	-	1,781	405,390
15	0.45%	-	2,275	517,780
16	0.45%	-	2,433	553,831
17	0.45%	1,299	3,998	673,357
18	0.45%	1,570	4,831	809,413
19	0.45%	2,011	6,187	1,089,775
20	0.45%	2,333	7,178	1,113,561
21	0.44%	2,450	7,687	1,267,670
22	0.44%	2,631	8,253	1,288,855
23	0.44%	2,911	9,131	1,539,695
24	0.47%	3,776	11,396	1,925,531
25	0.47%	4,815	14,531	2,493,004
26	0.47%	5,790	17,447	3,014,622
27	0.47%	6,575	19,814	3,240,311
28	0.47%	6,913	20,831	3,335,683
29	0.47%	7,204	21,708	3,517,199
30	0.47%	7,464	22,493	3,583,592
31	0.47%	7,574	22,824	3,621,595
32	0.47%	7,638	23,017	3,644,612
33	0.45%	7,264	22,741	3,667,354
34	0.45%	7,248	22,689	3,627,922
35	0.45%	7,603	23,803	4,025,541
36	0.45%	8,221	25,737	4,249,789
37	0.45%	8,190	25,639	3,993,943
38	0.44%	7,933	24,993	4,065,655
39			375,034	

	A	B	C	D	E	F	G	H	I
1								7/14 through 8/15	
2	Begins	Ends	Rate	Amount	Interest			Begins	Ends
3	Jun-15	10/15/2017	1.60%	25,000,000	400,000			Jun-15	10/15/2017
4									
5		3/1/2024	3.85%	25,000,000	962,500				3/1/2024
6		8/1/2040	5.25%	35,000,000	1,837,500				8/1/2040
7		12/21/2016	5.52%	10,000,000	552,000				12/21/2016
8		12/21/2018	5.62%	52,300,000	2,939,260				12/21/2018
9		12/21/2021	5.77%	75,700,000	4,367,890				12/21/2021
10		12/1/2023	6.76%	10,000,000	676,000				12/1/2023
11		12/1/2033	6.76%	10,000,000	676,000				12/1/2033
12		5/1/2026	7.33%	10,000,000	733,000				5/1/2026
13		6/1/2021	9.22%	10,000,000	922,000				6/1/2021
14		6/1/2020	9.71%	6,000,000	582,600				6/1/2020
15	Aug-15		4.50%	30,000,000	1,350,000				
16	Jul-16		4.50%	44,000,000	1,980,000				
17	Jul-17		4.50%	50,000,000	2,250,000				
18	Jul-18		4.50%	50,000,000	2,250,000				
19	Jul-19							Early Redemption debt costs	
20	Ave Debt Rate		5.07%	443,000,000	22,478,750			Ave Debt Rate	
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

	J	K	L	M	N	O	P	Q	R	S
1						9/15 through 8/16				
2	Rate	Amount	Interest			Begins	Ends	Rate	Amount	Interest
3	1.60%	25,000,000	400,000			Jun-15	10/15/2017	1.60%	25,000,000	400,000
4										
5	3.97%	25,000,000	992,500				3/1/2024	3.97%	25,000,000	992,500
6	5.44%	35,000,000	1,904,000				8/1/2040	5.44%	35,000,000	1,904,000
7	5.57%	10,000,000	557,000				12/21/2016	5.57%	10,000,000	557,000
8	5.67%	52,300,000	2,965,410				12/21/2018	5.67%	52,300,000	2,965,410
9	5.81%	75,700,000	4,398,170				12/21/2021	5.81%	75,700,000	4,398,170
10	6.83%	10,000,000	683,000				12/1/2023	6.83%	10,000,000	683,000
11	6.83%	10,000,000	683,000				12/1/2033	6.83%	10,000,000	683,000
12	7.41%	10,000,000	741,000				5/1/2026	7.41%	10,000,000	741,000
13	9.43%	10,000,000	943,000				6/1/2021	9.43%	10,000,000	943,000
14	10.10%	6,000,000	606,000				6/1/2020	10.10%	6,000,000	606,000
15						Aug-15	9/1/2045	4.38%	30,000,000	1,314,000
16										
17										
18										
19			47,195			Early Redemption debt costs				47,195
20	5.55%	269,000,000	14,920,275			Ave Debt Rate		5.43%	299,000,000	16,234,275
21										
22										
23										
24										
25										
26										
27										
28										
29										
30										
31										
32										

	T	U	V	W	X	Y	Z	AA	AB
1			9/16 thru 12/16						
2			Begins	Ends	Rate	Amount	Interest		
3			Jun-15	10/15/2017	1.60%	25,000,000	400,000		
4									
5				3/1/2024	3.97%	25,000,000	992,500		
6				8/1/2040	5.44%	35,000,000	1,904,000		
7				12/21/2016	5.57%	10,000,000	557,000		
8				12/21/2018	5.67%	52,300,000	2,965,410		
9				12/21/2021	5.81%	75,700,000	4,398,170		
10				12/1/2023	6.83%	10,000,000	683,000		
11				12/1/2033	6.83%	10,000,000	683,000		
12				5/1/2026	7.41%	10,000,000	741,000		
13				6/1/2021	9.43%	10,000,000	943,000		
14				6/1/2020	10.10%	6,000,000	606,000		
15			Aug-15	9/1/2045	4.38%	30,000,000	1,314,000		
16									
17									
18									
19			Early Redemption debt costs				47,195		
20			Ave Debt Rate		5.43%	299,000,000	16,234,275		
21									
22									
23									
24									
25									
26									
27									
28									
29									
30									
31									
32									

	AC	AD	AE	AF	AG	AH	AI	AJ
1	1/17 thru 7/17							8/17 thru 10/17
2	Begins	Ends	Rate	Amount	Interest			Begins
3	Jun-15	10/15/2017	1.60%	25,000,000	400,000			Jun-15
4								
5		3/1/2024	3.97%	25,000,000	992,500			
6		8/1/2040	5.44%	35,000,000	1,904,000			
7								
8		12/21/2018	5.67%	52,300,000	2,965,410			
9		12/21/2021	5.81%	75,700,000	4,398,170			
10		12/1/2023	6.83%	10,000,000	683,000			
11		12/1/2033	6.83%	10,000,000	683,000			
12		5/1/2026	7.41%	10,000,000	741,000			
13		6/1/2021	9.43%	10,000,000	943,000			
14		6/1/2020	10.10%	6,000,000	606,000			
15	Aug-15	9/2/2045	4.38%	30,000,000	1,314,000			Aug-15
16								Aug-17
17								
18								
19	Early Redemption debt costs				47,195			Early Redemption debt costs
20	Ave Debt Rate		5.42%	289,000,000	15,677,275			Ave Debt Rate
21								
22								
23								
24								
25								
26								
27								
28								
29								
30								
31								
32								

	AK	AL	AM	AN	AO	AP	AQ	AR	AS
1							11/17 thru 12/17		
2	Ends	Rate	Amount	Interest			Begins	Ends	Rate
3	10/15/2017	1.60%	25,000,000	400,000					
4									
5	3/1/2024	3.97%	25,000,000	992,500				3/1/2024	3.97%
6	8/1/2040	5.44%	35,000,000	1,904,000				8/1/2040	5.44%
7									
8	12/21/2018	5.67%	52,300,000	2,965,410				12/21/2018	5.67%
9	12/21/2021	5.81%	75,700,000	4,398,170				12/21/2021	5.81%
10	12/1/2023	6.83%	10,000,000	683,000				12/1/2023	6.83%
11	12/1/2033	6.83%	10,000,000	683,000				12/1/2033	6.83%
12	5/1/2026	7.41%	10,000,000	741,000				5/1/2026	7.41%
13	6/1/2021	9.43%	10,000,000	943,000				6/1/2021	9.43%
14	6/1/2020	10.10%	6,000,000	606,000				6/1/2020	10.10%
15	9/2/2045	4.38%	30,000,000	1,314,000			Aug-15	9/1/2045	4.38%
16		3.84%	30,940,000	1,189,423			Aug-17		3.84%
17									
18									
19				47,195			Early Redemption debt costs		
20		5.27%	319,940,000	16,866,698			Ave Debt Rate		5.58%
21									
22			31,500,000						
23			351,440,000.00						
24									
25									
26									
27									
28									
29									
30									
31									
32									

	AT	AU	AV	AW	AX	AY	AZ	BA
1					1/18 thru 7/18			
2	Amount	Interest			Begins	Ends	Rate	Amount
3								
4								
5	25,000,000	992,500				3/1/2024	3.97%	25,000,000
6	35,000,000	1,904,000				8/1/2040	5.44%	35,000,000
7								
8	52,300,000	2,965,410				12/21/2018	5.67%	52,300,000
9	75,700,000	4,398,170				12/21/2021	5.81%	75,700,000
10	10,000,000	683,000				12/1/2023	6.83%	10,000,000
11	10,000,000	683,000				12/1/2033	6.83%	10,000,000
12	10,000,000	741,000				5/1/2026	7.41%	10,000,000
13	10,000,000	943,000				6/1/2021	9.43%	10,000,000
14	6,000,000	606,000				6/1/2020	10.10%	6,000,000
15	30,000,000	1,314,000			Aug-15		4.38%	30,000,000
16	30,940,000	1,189,423			Aug-17		3.84%	30,940,000
17								
18								
19		47,195			Early Redemption debt costs			
20	294,940,000	16,466,698			Ave Debt Rate		5.67%	294,940,000
21								
22	31,500,000	WRAM Specific						
23	326,440,000.00	Total						
24								
25								
26								
27								
28								
29								
30								
31								
32								

	BB	BC	BD	BE	BF	BG	BH	BI	BJ
1				8/18 thru 12/18					
2	Interest			Begins	Ends	Rate	Amount	Interest	
3									
4									
5	992,500				3/1/2024	3.97%	25,000,000	992,500	
6	1,904,000				8/1/2040	5.44%	35,000,000	1,904,000	
7									
8	2,965,410				12/21/2018	5.67%	52,300,000	2,965,410	
9	4,398,170				12/21/2021	5.81%	75,700,000	4,398,170	
10	683,000				12/1/2023	6.83%	10,000,000	683,000	
11	683,000				12/1/2033	6.83%	10,000,000	683,000	
12	741,000				5/1/2026	7.41%	10,000,000	741,000	
13	943,000				6/1/2021	9.43%	10,000,000	943,000	
14	606,000				6/1/2020	10.10%	6,000,000	606,000	
15	1,314,000			Aug-15		4.38%	30,000,000	1,314,000	
16	1,189,423			Aug-17		3.84%	30,940,000	1,189,423	
17				Aug-18		4.28%	85,000,000	3,637,400	
18									
19	313,365			Early Redemption debt costs				313,365	
20	16,732,868			Ave Debt Rate		5.36%	379,940,000	20,370,268	
21									
22							31,500,000	WRAM Specific	
23							411,440,000	Total	
24									
25									
26									
27									
28									
29									
30									
31									
32									

	BK	BL	BM	BN	BO	BP
1		1/19 thru 5/19				
2		Begins	Ends	Rate	Amount	Interest
3						
4						
5			3/1/2024	3.97%	25,000,000	992,500
6			8/1/2040	5.44%	35,000,000	1,904,000
7						
8						
9			12/21/2021	5.81%	75,700,000	4,398,170
10			12/1/2023	6.83%	10,000,000	683,000
11			12/1/2033	6.83%	10,000,000	683,000
12			5/1/2026	7.41%	10,000,000	741,000
13			6/1/2021	9.43%	10,000,000	943,000
14			6/1/2020	10.10%	6,000,000	606,000
15		Aug-15		4.38%	30,000,000	1,314,000
16		Aug-17		3.84%	30,940,000	1,189,423
17		Aug-18		4.28%	85,000,000	3,637,400
18						
19		Early Redemption debt costs				313,365
20		Ave Debt Rate		5.31%	327,640,000	17,404,858
21						
22					31,500,000	WRAM Specific
23					359,140,000	Total
24						
25						
26						
27						
28						
29						
30						
31						
32						

ATTACHMENT 3

THIS IS THE PUBLIC VERSION.

CONFIDENTIAL ATTACHMENT(S) HAVE BEEN OMMITTED.

Contact below to request access:
Demetrio A. Marquez
Manager, Paralegal
California-American Water Company
550 California Street, Suite 650
San Francisco, CA 94104
Phone: (415) 293-3027
Email: demetrio.marquez@amwater.com

ATTACHMENT 4

Procurement Policy

Applicability:	American Water Works Company Inc., and its controlled subsidiaries (together "American Water" or the "Company")	Last Updated: May 13, 2026 Executive Sponsor: EVP, Chief Financial Officer & EVP, General Counsel & Corporate Secretary Policy Owner: Vice President, Supply Chain

I. PURPOSE

This policy provides requirements to conduct procurement activities, execute contracts and process payments to suppliers. It addresses timing, key methods, approvals, reporting, and roles/responsibilities. The policy applies to the procurement activities of the Regulated Business (defined below). The Market Based Business (MBB) Procurement and Contract Procedure explains the requirements for purchasing on behalf of the MBB.

This policy establishes requirements for all employees involved in procuring goods or services in an effort to:

- Ensure the Company leverages its spending and achieves the best value when procuring goods and services
- Protect the Company from risks and liabilities in the procurement process
- Ensure the Company engages suppliers that share its values and ethics
- Ensure fair and equitable competition among suppliers
- Ensure appropriate use, review, and inclusion of contracts in relevant Company systems such as Coupa and SharePoint to protect the Company's assets and interests
- Grant permission, as appropriate, to execute procurement contracts
- Specify the best and most appropriate method of payment for a good or service

II. POLICY STATEMENT

Unless otherwise specified, this policy establishes requirements that are to be followed by all Regulated Business employees involved in procurement and payment activities. More detailed guidance can be found in the referenced policies or procedures.

1. Requirement to Engage Supply Chain

a. The Business is responsible for determining its material and service needs. Supply Chain will work jointly with the Business to source the need, select a supplier(s) capable of fulfilling the need, and negotiate and execute a contract.

b. To ensure your good or service is purchased with your need date in mind, the Business must engage Supply Chain as early as possible in the process.

c. All regulated employees must contact a representative of Supply Chain for advice and direction for any new purchase not already under contract as outlined in this section, including:

i. Any purchase that involves computer hardware, software, integration of any software or device with Company systems, or other projects requiring supplier access to Company systems.

ii. Any purchase of a good or service involving hazardous materials or chemicals.

iii. Any purchase involving Company confidential information or personally identifiable information (PII) of employees or customers.

iv. Any software or service that uses or is expected to use Artificial Intelligence (AI) in the solution or work product.

v. Any service that involves a supplier performing work on Company property or performing work on behalf of the Company in the public.

vi. Any one-time purchase or total annual purchase of a good or service expected to be greater than $25,000.

d. The intent of this section is not to cause undue burden to the Business or significantly impact operations. The Business and Supply Chain shall jointly employ common sense to ensure the spirit of this section is met while also meeting business needs. Emergencies and immediate needs outside normal business hours shall follow section II.7.

e. For the purchase of goods and services already under contract or not meeting the requirements of section II.1.c such as inventory, catalog, P-Card, or travel purchases, refer to Table 1, Buying Channel Matrix in Appendix A for instructions on using the most appropriate buying channel to secure these items.

2. Competitive Bidding and Bidding Exceptions

a. A competitive bid is required for any one-time purchase or total annual purchase expected to be greater than $250,000 (not including the value of change orders). A competitive bid ensures the Company receives fair-market pricing, considers a wide range of suppliers, and ensures transparency in the award and contracting process. The following exceptions apply:

i. A

1. The Sole Source Justification form must be:

a. Completed by the Business using the Construction and Engineering Sole Source Justification Form for engineering or capital projects, and the standard Sole Source Justification Form for all other procurement activities
b. Approved as follows:
    i. For Engineering and Construction: State or function lead of grade 60 or higher, Corporate Engineering, Director of Engineering Project Delivery, and VP of Supply Chain
    ii. For all other procurement needs: State or Function Lead of Grade 60 or higher and a Supply Chain leader of Grade 50 or higher
c. The State President or Function Executive must be informed prior to execution of the contract
d. Reviewed if there is a material change in the contract scope through change orders or amendments
e. Re-approved prior to any contract renewal or extension

ii. **Previously Competitively Bid Contract**: A competitive bid is not required where there is an active contract or framework agreement in place that was established through a competitive sourcing process and includes unitized pricing, rate cards, or other competitively determined commercial constructs for the good or service, provided that:
    1. The competitively bid pricing is no more than three (3) years old (or has market-based escalators defined in the contract), and
    2. The purchase remains within the scope, pricing structure, and commercial intent of the original competitive bid and contract
    3. The three-year period may be extended up to five (5) years where:
        a. A documented market price benchmark assessment is completed and stored in the CMS system with the corresponding contract
        b. The assessment demonstrates that pricing remains competitive and that a competitive bid is reasonably expected to result in higher cost, increased risk, or diminished supply / service assurance or the cost of switching to a new supplier would be cost prohibitive
        c. The benchmark assessment must be included with the contract extension in the Contract Management System

iii. The Good or service is governed by a Documented Strategy approved by a business unit leader of Grade 60 or higher and a Supply Chain leader of Grade 50 or higher

iv. **Emergency Purchases:** Purchases considered an emergency per Section II.7 are excluded from competitive bidding requirements.

b. All competitive bids are encouraged to be electronic in nature, facilitated using the Electronic Bid Platform system of record. This will streamline the bid process, maintain the bid for the required retention period, and facilitate easier collaboration with suppliers and key stakeholders.

c. All competitive bids greater than $250,000 shall be electronic and facilitated using the Electronic Bid Platform system of record unless the bid is conducted by a Supply Chain approved third-party supplier. In that case, all bid records shall be electronically provided to the Company upon completion and stored with the related contractual documents.

d. For record retention purposes, email is not an acceptable method of bidding.

e. Reference the Procurement Procedure for more details pertaining to competitive bidding and sole sourcing.

3. ***Supplier Selection and Set-Up***

a. Selecting a supplier is the joint responsibility of the Business and Supply Chain. Consideration must always be given to the total value or total cost of ownership, including safety, assurance of supply, quality, service, innovation, and regulatory requirements.

b. All supplier award decisions, including evaluation matrices, shall be documented and uploaded to the company's Contract Management System.

c. Supplier Master Data is required to set up a supplier for use in the Company's contracting and procurement systems.

i. Supply Chain is responsible for creating and maintaining supplier master files within the Company's enterprise systems.

ii. All efforts should be made to use existing approved suppliers before engaging new suppliers.

iii. If it is necessary to add a new supplier, Supply Chain will conduct a supplier assessment prior to creating a new supplier.

d. Except in the case of an emergency, purchase orders may not be placed and services shall not commence from a supplier until the supplier assessment is complete, a certificate of

insurance, when required, is on file, the supplier has met all contractor safety requirements, a supplier record is created, and a fully executed contract is in place.

4. *Contract Requirement*

a. A written contract is required for Company transactions with a third-party, including procurement activities covered by this Policy; however, certain purchasing transactions are governed by the Procurement Card Policy and outside the scope of this Policy.
b. For additional information on non-procurement contracts including, for example, Non-Disclosure Agreements and data sharing agreements, please see the Contract Policy.

c. Contract types used in procurement activity include, but are not limited to:

   i. Master Agreement and Statements of Work and Task Orders associated with an MA
   ii. License and subscription agreements
   iii. Standalone goods agreements
   iv. Standalone services agreements
   v. Amendments and change orders
   vi. Letter of Intent – only used with the approval of the Chief Procurement Officer and Legal when timing is critical, but a final agreement has yet to be executed.
   vii. Purchase Orders

d. Supply Chain is responsible for working with Legal to determine the appropriate type of Contract and will engage additional stakeholders to assist with the contracting process as needed. The responsibility to understand the contractual obligations for both the supplier and the Company is with the Business Owner(s) using the applicable goods and services.

e. **No Company employee may execute a purchase without a valid contract in place except in accordance with the Purchasing Card Policy.** A valid contract is one that has been approved by the appropriate stakeholders in the CMS, signed by the appropriate employee and properly uploaded into the CMS, or a purchase order generated by the company's procurement system after the appropriate approvals have been granted.
f. An employee may sign a contract on behalf of the Company if that contract has been approved as set forth in Table 2 in Appendix A of this Policy, which outlines who is authorized to approve a contract for a good or service covered under this Policy.

g. Certain contracts require review by the Legal Department, Finance Department and/or Supply Chain before they are approved and signed.
h. The requirements for review and approval of contracts prior to execution and other post-execution contract administration responsibilities are explained in the Contract Administration Procedure. Please note that such review will add time to the overall procurement process so employees must engage Supply Chain as early as possible with a purchasing request.

5. ***Post Contract Execution Responsibilities***

a. Business Owner(s) are responsible for understanding the terms of the contract and fulfilling the Company/s obligations under the contract. If the Business Owner(s) needs assistance in understanding the terms of a contract, they should seek advice and assistance from Supply Chain and Legal.
b. Supplier Performance Issues

i. The line of business utilizing a good or service is accountable for the overall performance of the supplier under contract. This includes a responsibility to understand the applicable contractual terms, service requirements, and performance expectations, and to actively manage the supplier's day-to-day performance. The Business is expected to provide clear direction to the supplier, monitor performance against contractual obligations, and engage directly with the supplier to communicate expectations and provide timely, constructive feedback. This responsibility applies to all locally sourced goods and services. For suppliers under national agreements, the Business retains responsibility for performance management and must coordinate feedback and any material concerns with Supply Chain through the designated representative.

ii. Should supplier performance not meet contractual requirements, the Business must make reasonable, good-faith efforts to address and correct the issue directly with the supplier. This includes clearly communicating deficiencies, setting expectations for corrective action, and providing the supplier with an opportunity to remediate. If performance issues persist after repeated attempts to resolve, the Business must formally document the performance deficiencies, including records of communications and corrective actions requested, and promptly engage Supply Chain for guidance on next steps. Supply Chain will support escalation, enforce

contractual remedies, and coordinate any required actions in alignment with Company policy and supplier management practices.

c. Per section II.1., the Business Owner(s) shall engage Supply Chain in a timely manner before your contract expires to determine the best course of action if you will continue to need goods and/or services from a supplier.

6. *Method of Payment*

a. Reference Table 1, Buying Channel Matrix in Appendix A for instructions on using the most appropriate method of payment to compensate suppliers for your need.

b. Using a prohibited payment method may either disrupt a project or result in suspension of your privileges under that payment method.

c. If you have questions regarding the most appropriate method of payment, consult your Supply Chain representative or an accounts payable representative.

7. *Emergency Procurement*

a. Emergency work is typically work related to restoring customer service in an outage, work related to a life-saving event, work related to an incident with the potential to cause immediate and significant environmental impact or non-compliance or work involved to protect Company or customer property.

b. Within 24 hours of the initiating event, either the State President, State Operations functional lead, State Engineering functional lead, or Service Company functional lead shall be informed of the emergency purchase via email, and this email shall be forwarded to the appropriate Supply Chain contact for tracking.

c. Poor planning or failing to communicate a need in a timely manner does not constitute an emergency. All employees are encouraged to use common sense when following the emergency procedures in this section II.7.

d. During emergencies, efforts should be made to engage contractors and suppliers with whom the Company has an existing agreement for the service or materials required. If such contractor or supplier is not available, other contractors or suppliers should be utilized as necessary.

e. In the case of an emergency, process the purchase requisition when the urgency of the event has passed and you have agreed to the cost with the contractor or supplier.

The emergency services or goods needed for the services will require a purchase requisition to confirm the agreed cost with the supplier and allow the supplier to put a Purchase Order number on their invoice.

8. ***Procurement Transactions Outside the Scope of this Policy***

a. Fleet procurement needs shall follow the provisions of the Fleet Policy.

b. Travel expenses must follow the provisions of the Employee Travel and Business Expenditure Policy.

c. Engagement Letters engaging legal counsel as well as other providers of legal services (expert witnesses, etc.) are the responsibility of Legal.

d. Contingent Labor and Independent Contractor needs are the responsibility of the Talent Acquisition department.

e. Real estate transactions such as the buying, selling, leasing and/or mortgaging of real property.

f. Purchases made with a P-card are governed by the P-Card Policy.

g. Contracts entered into by American Water Works Company, Inc.'s Board of Directors.

h. Contracts related to the Company's independent auditor as approved by shareholders at the annual meeting.

9. ***Small Business and Supplier Engagement and Development***

a. Consistent with federal and state requirements, the Company is committed to providing opportunities for a broad range of suppliers to compete for contracts across the range of goods and services it procures.

b. The team facilitating the RFP must require that award decisions are made per sections II.2 and II.3 of this Policy.

c. Refer to the Supplier Engagement and Development Procedure for additional information.

10. Ethical Sourcing

a. Ethical sourcing is the process of ensuring products and services are obtained through responsible and sustainable methods.

b. The Company will not procure goods or services from sources who engage in the following behaviors:

   i. Fail to pay their employees a fair and legal wage

   ii. Violate the human rights of their employees

   iii. Fail to keep their places of business clean and safe

   iv. Engage in environmental abuses

   v. Any other abuse, infraction or violation of law deemed serious enough by the Company to disqualify a supplier from doing business with the Company.

c. Refer to the Supplier Code of Conduct for additional details.

d. Any issues or concerns related to ethical sourcing should be reported immediately to the Chief Procurement Officer and to the Chief Compliance Officer or the Confidential Ethics Helpline at 877-207-4888.

11. Federal and State Purchasing Acts

a. The Company is required to follow the provisions of certain federal and state acts including Buy America, Davis-Bacon, etc. in cases where federal funds are used for certain construction projects.

b. Supply Chain and the Business shall collaborate in determining the applicable federal laws for a given project.

c. Buy America is the most common federal act related to Company projects and its provisions only apply to iron, steel, and manufactured goods used in the construction of a federally funded project.

d. Buy America provisions are not to be confused with the Buy American Act of 1933 which does not apply to the Company.

e. Refer to the Buy America Procedure for details associated with Buy America provisions.

12. Energy Procurement

a. Electricity supply is a significant operating expense for the Company, and the market is highly volatile and, therefore, represents significant price risk for acceptable budget management. Effective price risk management requires the Company to react quickly to favorable market price changes and to minimize the time between a price offer and agreement signature.

b. Price management opportunities in the electricity market must consider these factors:
   i. Energy - Liquid forward market allows for multiple fixed price hedging opportunities.

   ii. Capacity – Grid operator auction determines the price for most of our market. Prior to the auction for a period, a supplier can offer a fixed price but will likely include a risk premium to cover price risk associated with the auction price. In addition, demand response markets also use the auction price for market participant's revenue.

   iii. Transmission – FERC approved tariff-based price. Suppliers can offer a fixed transmission price, but historically, they have used the Change in Law contract language to pass through an increased price.

   iv. Ancillary Services and other Miscellaneous Costs – These costs are typically a small portion of the overall price and suppliers can provide fixed pricing for these prices. Price volatility is typically not high in this area, but prices can follow a high energy market in extreme conditions.

c. Electricity Procurement Policy Directives:

   i. Energy – At least 50% fixed one (1) month prior to the month of consumption for a contract. Ideally, Supply chain will seek to contract no later than six (6) months prior to consumption on a contract; however, market conditions may dictate otherwise. A contract with index pricing exceeding 50% needs to be approved by the Chief Procurement Officer or Supply Chain equivalent and the VP of FP&A or Finance equivalent.

ii. Capacity – Contracts should be structured to allow pass-through capacity pricing. If a supplier offers a fixed capacity price, make sure Legal reviews the contract language to ensure the Change in Law language does not allow a supplier to pass through a price increase from subsequent capacity auctions. The Company can provide some capacity cost hedging through participation in the demand response market.

iii. Transmission – Contracts should be structured to allow pass-through transmission pricing. If a supplier offers a fixed transmission price, make sure Legal reviews the contract language to make sure the Change in Law language does not allow a supplier to pass through a price increase from FERC approved tariff pricing.

iv. Ancillary Services and other Miscellaneous Costs – Contracts should fix these costs due to the potential for higher costs in a volatile energy market. The only exception are line loss costs, which is a tariff-based percentage of usage delivery.

v. Renewable Energy – Renewable Energy options including buying Renewable Energy Certificates should be considered to help meet ESG goals. The State VP of Ops, Chief Engineering Officer, ESG leadership and Supply Chain shall collaborate regarding these decisions.

vi. Buying Authority – **Supply Chain has the ultimate buying decision and signature authority**. Prior to executing electricity supply contracts, Supply Chain will consult with the appropriate State Vice President of Operations regarding buying strategy. Furthermore, Supply Chain will communicate any price changes to the appropriate State Operating Company and Finance for budget management purposes.

vii. The Company will not be a party to any derivative agreements as part of any electric supply agreement unless specifically approved by the Chief Financial Officer.

viii. Contracts will be executed in the name of American Water Works Service Company, Inc. for the benefit of the appropriate Operating Company or affiliate.

ix. All electricity invoices will be submitted and paid through the Company's energy expense management platform (currently Engie Insights).

d. Roles and Responsibilities in Energy Procurement:

i. Supply Chain:

1. Monitor electricity markets on an ongoing basis.

2. Develop short and long-term strategies to manage electricity prices at the state level and amend as market conditions require.

3. Seek feedback from the Business and Finance on strategy and prior to executing buying decisions.

4. Inform the Business and Finance as contracts are executed.

5. Obtain final decision and signature authority for all electricity procurement contracts.

ii. State Leadership:

1. Review electricity purchasing strategies presented by Supply Chain in a timely manner.

2. Provide feedback on strategies as it relates to current and future budget impacts.

iii. Finance:

1. Review strategies provided by Supply Chain to determine budget requirements.

2. Update state-level budgets based on executed buying decisions.

e. Any exception to this energy procurement process shall be approved by Supply Chain in writing before any activities occur.

III. RESPONSIBILITIES

All employees are responsible for understanding and applying these rules to the Procurement Policy and contacting the appropriate Company resource with questions. See RACI diagram in Table 3 of Appendix A for a matrix of responsibilities.

IV. DEFINITIONS

Ancillary Services and Other Miscellaneous Costs (Energy)- Ancillary services are services that help maintain the reliability of the grid and maintain a balance between supply and demand. The Miscellaneous costs are typically associated with line losses and other small credits or costs associated with grid management.

Business Unit or the "Business" – Line of business requesting the need and who will work with Supply Chain to source and contract the need.

Business Owner(s) – Any individual(s) using the contracted good or service. Examples include the Project Manager for a capital project; a Plant Superintendent using chemicals to treat water at his or her plant; the Supervisor overseeing a hydrant replacement project. Delegation of ordering responsibilities to another individual does not absolve a manager of his or her Business Owner obligations.

Buy America Act – An act passed by Congress that requires Department of Transportation-funded projects to use US-made steel, iron, and other manufactured products. This act is different from Buy American, which does not apply to private companies.

Capacity (Energy) - Capacity markets are mechanisms in the Energy market that pay generators for the capacity they promise to make available. The capacity price is determined in many markets by an auction that sets pricing for a 12-month period.

Certificate of Insurance – Certificate issued by an insurance company as proof of coverages a named business entity carries.

Competitive Supply Market (Energy) – Electricity markets where competing suppliers offer their electricity output to retailers. The retailers then reprice the electricity and take it to market. In American Water's footprint, NJ, PA, MD, IL, and CA are competitive markets.

Contract Management System ("CMS") is the current application(s) of record utilized by the Company to support the creation, approval, and ongoing administration of contracts. Examples include the SharePoint Contracts Management Portal and Coupa.

Contract – Any legally binding agreement between two or more persons or entities to do or not to do a particular thing.

Company- American Water Works Company, Inc. and its subsidiaries.

Coupa – Enterprise procurement system which includes an electronic catalog, sourcing, contract management, and supplier information management. Purchasing requests are to be made through this system.

Documented Strategy – Functional leadership and Supply Chain leadership jointly agree on a specific supplier or approach that will be taken for a documented period of time related to a good or service. Example: US Pipe is our preferred pipe supplier, so routine purchases made through US Pipe do not need to be competitively bid.

Energy - Electric supply produced as output from an electric generation facility and delivered to the electric grid for ultimate delivery to consuming facilities. Typically, 50 to 70% of the agreement's value.

Goods – Tangible items such as materials, equipment and chemicals used in the everyday operation of the business. For the purposes of this policy, purchased water is excluded.

Letter of Intent - A document that outlines the preliminary terms of an agreement. While most of the document is typically non-binding, it serves to formalize the intent of the parties and sets the stage for a more detailed, legally binding contract later.

Master Agreement - Is a contract that sets out standard terms that apply to all the transactions entered into between the Company and a supplier. Each time that a transaction is entered into, the terms of the *master agreement* do not need to be re-negotiated and apply automatically.

Purchasing Card (P-Card) – Company credit card used to purchase business related travel, meals or for other business-related emergency needs.

Personally Identifiable Information (PII) – Any information used to identify a person and distinguish them from another person. Example: employee identification number, social security number, home address.

Purchase Order (PO) – Document issued to a supplier authorizing them to provide a good or service in return for a certain consideration.

Purchase Request (PR) – Request submitted internally for the purchase of a specific good or service and once approved by an authorized approver via delegation of authority, converts to a PO.

Regulated Business – Includes all of the regulated state affiliates as well as American Water Works Service Company, Inc.

Request for Proposal (RFP) – Document used as a part of the competitive solicitation process to request commercial information such as pricing, delivery terms, contract terms, etc. for a good or a service. Other variants are Request for Solution, Request for Information, etc.

SAP – Enterprise resource planning system for the regulated business.

Statement of Work (SOW) - A contract, controlled by the terms of a Master Agreement, that defines the entire scope of the work involved for a supplier and clarifies deliverables, costs and timeline for the work or project.

Service – Activities provided by people such as physical labor or consulting.

Sole Source – The award of a contract to a supplier or suppliers without executing a formal RFP process.

Stand Alone Agreement - A one-time contract for the purchase of goods and services with terms that apply only to that specific purchase.

Supplier Master Data – Information required by the Company to set up a supplier in Company ERP systems. Supplier Master Data includes a supplier's name, address, contact information, default payment terms and method, Taxpayer Identification Number, etc.

Task Order (TO) – Similar to an SOW, a TO is a contract, controlled by the terms of a Master Agreement, that defines the entire scope of the work involved for the supplier and clarifies deliverables, costs and timeline for the work or project.

Transmission (Energy) - The process by which electricity is transported from generation facilities to local utilities for delivery to end-users. The price is determined by a Federal Energy Regulatory Commission (FERC) approved tariff.

VOW – Value of Work. This is a type of purchase order used for capital projects and is issued via the SAP system.

V. WAIVERS; MODIFICATIONS

Any waiver or exception from this policy requires the prior written approval of the Document Owner of this policy. Each person or department receiving a waiver or exception is responsible for retaining documentation of the waiver that was granted.

VI. NON-COMPLIANCE

Any employee who violates or circumvents this Policy may be subject to disciplinary action up to and including termination.

Employees should promptly report any potential misconduct or violations of this, or any other, Company policy to the appropriate Company resource, which could be your supervisor, the Policy owner, Human Resources, Legal, or the Compliance & Ethics department. The Company does not allow any form of retaliation against employees who make good faith reports or who participate in a Company investigation.

VII. CONTACT INFORMATION; MONITORING

Any questions related to this policy shall be directed to individuals in the following order:

- Initial Contact: Director, Supply Chain Support Services
- 1st Escalation: Director, National Categories and Corporate Procurement or Director, State Procurement
- 2nd Escalation: Chief Procurement Officer

Appendix A – Policy Exhibits

Table 1: Buying Channel Matrix

Procurement / Payment Method	Description of Method		Allowable Uses	Prohibited Uses
Purchase Order	Purchase orders are the preferred method of procuring most goods and services. Whenever a specific request is being made for the delivery of goods or services, a PO shall be used		• Goods and services	• Suppliers that do not provide an invoice (See EDR) • Suppliers that will not accept a PO (see P-Card and Standard Invoice)
	Material Requirements Planning (MRP)	MRP is an option for inventory purchases where the system recommends what, when, and how much to buy	• Inventory items • Materials that have a part number	• Materials without an SAP part number
	Purchase Requisitions (PR's)	PR's are used to generate most purchase orders, with the exception of capital projects	• Inventory items • Other goods and services	• Capital services • Capital services with goods or materials
	Value of Work (VOW)	VOW PO's are a specific type within the SAP system designed to automatically accrue work in progress based on a set schedule	• None	• This method of purchase order is no longer available
	Urgent PO	Urgent PO's are PO's created directly in SAP by Supply Chain. They are used for emergencies and situations that other PO types cannot address.	• Emergencies when purchase requisitions in myPurchasing are not available • Meter warranty returns • Other inventory returns	• Any purchase not constituting an allowable use
Standard Invoice	Paying via an invoice is on an exception basis only and shall be used only in cases		• Leases • Legal fees and expenses	• Any purchase not constituting an allowable use

	where POs are not accepted or per the allowable uses section.	• Suppliers who will not accept a PO	
Electronic Disbursement Request / Check Request	EDR's / Check Requests are used only for those suppliers that do not provide an invoice	• Government payments • Customer refunds • Donations • Easements and land purchases	• Goods and services
Purchasing Card (P-Card)	P-Cards are used for high volume, low value transactions (generally < $ 500) and where other payment methods are not accepted. P-Cards are the preferred payment method for purchases from on-line Company specific supplier portals. P-Card's may be used for travel and entertainment.	• Travel, meals, & entertainment • Purchases from supplier portals when not available through myPurchasing • Subscriptions • Training and seminars • Emergency purchases	• Any purchase not constituting an allowable use • Transactions over P-Card transaction limit where other methods are accepted (split purchases are prohibited)

Table 2: Authorized Approvers or Signatories of Procurement Contracts Covered by this Policy:

Contract approvals must follow the company's Delegation of Authority (DOA) Policy. Any delegation of system approval must be completed within the MyPurchasing system for record-keeping purposes, Approval of delegation may also be granted via email, which must be documented as an attachment to a contract in the MyPurchasing system. The table below sets forth the requirements for approval under the DOA Policy which is required before an employee can sign a contract or required by the person signing a Contract if no prior approval has been obtained.

Contract Type	Supply Chain	Subsidiary	Service Company
Service Company Master Agreement	Grade 40 and up for all Service Company Agreements, based on the estimated annual spend	None	Any officer of the Service Company, following the DOA based on the estimated annual spend
Subsidiary Master Agreement	None	Any functional lead or officer of the subsidiary, following the DOA based on the estimated annual spend	None
Service Company Stand-Alone Agreement	Shall follow the DOA according to the monetary value of the agreement	None	Shall follow the DOA according to the dollar value of the agreement and shall only be approved by an individual in the function purchasing the good or service
Subsidiary Stand-Alone Agreement	None	Shall follow the DOA according to the dollar value of the agreement and shall only be approved by an individual in the subsidiary purchasing the good or service	None
Service Company Scope of Work	Shall follow the DOA according to the monetary value of the agreement	None	Follows Delegation of Authority according to the dollar value of the agreement and shall only be approved by an individual in the function purchasing the good or service
Subsidiary Scope of Work	None	Shall follow the DOA according to monetary value of the agreement	None
Non-Disclosure Agreements with Potential Suppliers	Grade 40 and up	None	Any officer of the Company or member of the legal department of Grade 50 and up
Letter of Intent (not a contract)	None	None	General Counsel or Attorney supporting Supply Chain
Amendments	Amendments to an agreement shall follow the same signature permissions as the parent agreement being amended		

Table 3: RACI Diagram

The RACI diagram in the table below outlines roles and responsibilities associated with the different activities discussed in this policy.

R = Responsible: person who performs an activity or does the work

A = Accountable: person who is ultimately accountable and has Yes/No/Veto

C = Consulted: person who needs feedback and contributes to the activity

I = Informed: person who needs to know of the decision or action

	Supply Chain	Functional and Operating Units	Legal	Accounts Payable
Policy Management	A, R	C, I	C, I	C, I
Requesting a good or service	C, I	A, R	C	
Sourcing a good or service	R, C	A, R, C	C	
Sole Source Justification	C, I	A, R		
Procurement Strategies	A*, R, C	A*, R, C		
Contract Negotiations and Execution	A*, R, C	A*, R, C	R, C	I
Payments to Suppliers	C	R		A
Supplier Master Data	A, R	I		C, I
Supplier Performance Feedback and Management	A*, R, C, I	A*, R, C, I	C	C
Submitting a Purchase Request	C, I	A, R		
Supplier Engagement and Development in the Procurement Process	R, C	A, R, C		
Ethical Sourcing in the Procurement Process	R, C	A, R, C		
Federal Acts and Buy America in the Procurement Process	R, C	A, R, C		

A* = Functional and Operating Units are accountable in cases where the event is at the subsidiary level. Supply Chain is accountable in cases where the event is at the national level.

ATTACHMENT 5

THIS IS THE PUBLIC VERSION.

CONFIDENTIAL ATTACHMENT(S) HAVE BEEN OMMITTED.

Contact below to request access:
Demetrio A. Marquez
Manager, Paralegal
California-American Water Company
550 California Street, Suite 650
San Francisco, CA 94104
Phone: (415) 293-3027
Email: demetrio.marquez@amwater.com