

Los Angeles



Department of Water & Power

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Mayor

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MARCIE L. EDWARDS
General Manager

June 5, 2014

The Honorable City Council
City of Los Angeles
Room 395, City Hall
Los Angeles, California 90012

Honorable Members:

Subject: Los Angeles Department of Water and Power Relicensing Process Agreement
No. BP 13-062 with the California Department of Water Resources for the
State Water Project Hydropower Project No. 2426

Pursuant to Charter Section 674, enclosed for approval by your Honorable Body is Resolution No. 014 227, adopted by the Board of Water and Power Commissioners on June 3, 2014, approved as to form and legality by the City Attorney, which authorizes execution of Los Angeles Department of Water and Power Relicensing Process Agreement No. BP 13-062 with the California Department of Water Resources for the South State Water Project Hydropower Project No. 2426, including Castaic Power Plant, and Amendment No. 5 to Contract No. 10099 for Cooperative Development West Branch California Aqueduct.

If additional information is required, please contact Ms. Winifred Yancy, Director of Intergovernmental Affairs and Community Relations, at (213) 367-0025.

Sincerely,

A handwritten signature in cursive script that reads 'Barbara E. Moschos'.

Barbara E. Moschos
Board Secretary

BEM:oja

Enclosures: LADWP Resolution
Board Letter
CAO Report
Ordinance
Relicensing Process Agreement between California Department of Water Resources and The Department of Water and Power of the City of Los Angeles for the South SWP Hydropower Project No. 2426
Amendment No. 5 Contract No. 10099 for Cooperative Development West Branch, California Aqueduct.

Los Angeles Aqueduct Centennial Celebrating 100 Years of Water 1913-2013

c/enc: Mayor Eric Garcetti

Councilmember Felipe Fuentes, Chair, Energy and the Environment Committee

Gerry F. Miller, Chief Legislative Analyst

Miguel A. Santana, City Administrative Officer

Rafael Prieto, Legislative Analyst, CLA

William R. Koenig, Chief Administrative Analyst

Winifred Yancy

WHEREAS, the California Department of Water Resources (DWR) originally proposed for their California Aqueduct Project (Project) to include the construction of the Castaic Power Plant (CPP) as a 218 MW hydro-electric generating facility for the main purpose of using it as a water conveyance from Northern California to their customers in Southern California; and

WHEREAS, DWR and the Los Angeles Department of Water and Power (LADWP) entered into a Contract for Cooperative Development West Branch, California Aqueduct, LADWP Contract No. 10099 (Cooperative Agreement), adopted by Resolution No. 158 on September 1, 1966, and amended thereafter, where LADWP provided additional funding for the Project so that the planned output of the CPP could be increased to 1,200 MW and be designed as a pump-storage hydro-electric facility for LADWP's usage; and

WHEREAS, DWR originally filed a declaration of intent to construct the Project and an application for preliminary permit docketed by the Federal Power Commission (later to become the Federal Energy Regulatory Commission, hereinafter FERC) as Project No. 2426, and DWR later amended the application to account for the increased output and included LADWP as a co-licensee, and FERC later issued an order amending the license to increase CPP capacity to 1,275 MW in 1994; and

WHEREAS, CPP is a non-polluting hydro-electric generation facility with pump-storage capability, and is an essential asset in LADWP's in-basin generation system which adds to the reliability of LADWP's electric system and plays an integral part in LADWP's Renewable Portfolio Standard; and

WHEREAS, the Project's, renamed later in 2011 as the South SWP Hydropower Project (SWP), current FERC license P-2426 expires on January 31, 2022 and FERC advises that preparation for relicensing should begin approximately ten (10) years prior to its expiration; and

WHEREAS, SWP is comprised of the West Branch and the East Branch, with CPP located on the West Branch, and due to the inherent operational interdependency of all the facilities on the West Branch, LADWP and DWR pursuant to the proposed Relicensing Process Agreement No. BP13-062 will equally share in the relicensing costs of the West Branch of SWP; and

WHEREAS, the Relicensing Process Agreement No. BP13-062 details the cooperative efforts between LADWP and DWR in managing activities, resources and cost sharing for the relicensing of the West Branch of SWP; and

WHEREAS, an estimated relicensing process cost to LADWP of approximately \$50 million, including approximately \$22 million for environmental review of the Project under California Environmental Quality Act (CEQA) and/or National Environmental Protection Act (NEPA) was provided by an independent third party; and

WHEREAS, the Relicensing Process Agreement No. BP13-062 outlines the terms for cooperation and cost-sharing for the relicensing process needed for the existing hydroelectric facilities; would limit relicensing process costs to costs for obtaining a new license or licenses from FERC and all related permits, regulatory approvals, and third party agreements; would not authorize expenditure on costs associated with implementing a new license or agreements required by or related to a new license; and would not commit either LADWP or DWR to implement any new project which may result in potentially significant impacts on the physical environment; and

WHEREAS, any application for relicensing the SWP will be subject to all required analysis under CEQA and/or NEPA prior to approval by the FERC or other federal, state or local agencies; and

WHEREAS, in accordance with the CEQA it has been determined that entering into the Relicensing Process Agreement No. BP13-062 (as opposed to the actual relicensing) is not a project requiring environmental review pursuant to CEQA Guidelines Section 15378 (b) (4), inasmuch as a creation of a governmental funding mechanism that does not commit an agency to any specific project with potentially significant impacts on the physical environment is not a project, and is furthermore exempt from CEQA pursuant to the General Exemption described in CEQA Guidelines Section 15061 (b) (3), which applies in situations where it can be seen with reasonable certainty that there is no possibility that the activity in question may have a significant effect on the physical environment; and

WHEREAS, the Cooperative Agreement currently expires on January 1, 2040 and LADWP and DWR desire to synchronize the date of the renewed FERC license with the expiration date of the Cooperative Agreement and in order to continue operations of CPP, renewing its FERC license and synchronizing its expiration date with the Cooperative Agreement are recommended; and

WHEREAS, Amendment 5 to the Cooperative Agreement, between LADWP and DWR shall extend the term of the Cooperative Agreement until the earlier of January 1, 2072, or the expiration of the second FERC license, for which DWR and LADWP will submit an application for relicense to FERC prior to the first license's expiration in 2022; and

WHEREAS, Amendment 5 also allows LADWP and DWR to adjust the benefits provided under the Cooperative Agreement to them upon the issuance of the second FERC license; and

WHEREAS, Amendment 5 would not authorize expansion of existing hydro-electric facilities or their operation at above existing levels; and would not authorize continued operation of existing hydro-electric facilities beyond expiration of the existing FERC license if for some reason the second license is not issued; and

WHEREAS, in accordance with the CEQA, it has been determined Amendment 5 to the Cooperative Agreement is exempt from environmental review under CEQA Guidelines Section 15301 (b) which applies to the operation, repair and maintenance of existing publicly-owned utility facilities used to provide electric power, natural gas, sewerage, or other public utility services, and is furthermore exempt from CEQA pursuant to the General Exemption described in CEQA Guidelines Section 15061 (b) (3), which applies in situations where it can be seen with reasonable certainty that there is no possibility that the activity in question may have a significant effect on the physical environment.

NOW, THEREFORE, BE IT RESOLVED that the Relicensing Process Agreement No. BP13-062 and the Amendment 5 to the Cooperative Agreement, by and between LADWP and DWR, copies of which are on file with the Secretary of the Board of Water and Power Commissioners (Board), approved as to form and legality by the City Attorney, be and the same are hereby approved and the Authorized Representative (as defined in the Relicensing Process Agreement No. BP13-062) is authorized to carry out the provisions of this Relicensing Process Agreement No. BP13-062, and to provide liaison between LADWP and DWR, subject to a maximum expenditure limit of \$50 million.

BE IT FURTHER RESOLVED that the Board requests that the City Council approve, by Ordinance, the Relicensing Process Agreement No. BP13-062 and the Amendment 5 to the Cooperative Agreement, by and between LADWP and DWR.

BE IT FURTHER RESOLVED, that additional contracts to provide LADWP with outside consultants or expertise per item 5 of the Relicensing Process Agreement No. BP13-062 are subject to further Board approval.

BE IT FURTHER RESOLVED, that the President or Vice President of the Board, or the General Manager, or such person as the General Manager shall designate in writing, and the Secretary, Assistant Secretary, or the Acting Secretary of the Board be and are hereby authorized and directed to execute the Relicensing Process Agreement No. BP13-062 and the Amendment 5 to the Cooperative Agreement, for and on behalf of LADWP upon approval by the City Council by ordinance pursuant to Section 674 of the Charter of the City of Los Angeles.

BE IT FURTHER RESOLVED that the Chief Accounting Employee, upon proper certification, is authorized and directed to draw demands on the Power Revenue Fund in payment of the obligations arising under this resolution.

I HEREBY CERTIFY that the foregoing is a full, true and correct copy of a resolution adopted by the Board of Water and Power Commissioners of the City of Los Angeles at its meeting held JUN 03 2014

Bonnie C. Morales
Secretary

APPROVED AS TO FORM AND LEGALITY
MICHAEL N. FEUER, CITY ATTORNEY

MAY 22 2014
BY Syndi Driscoll
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY





Los Angeles
Department of
Water & Power

RESOLUTION NO. _____

BOARD LETTER APPROVAL

Handwritten signature of Randy S. Howard in black ink.

RANDY S. HOWARD
Senior Assistant General Manager
Power System

Handwritten signature of Marcie L. Edwards in black ink.

MARCIE L. EDWARDS
General Manager

DATE: May 21, 2014

SUBJECT: Los Angeles Department of Water and Power (LADWP) Relicensing Process Agreement (RPA) No. BP 13-062 with the California Department of Water Resources (DWR) for the South State Water Project (SWP) Hydropower Project No. 2426, including Castaic Power Plant (CPP), and Amendment 5 to Contract No. 10099 for Cooperative Development West Branch California Aqueduct (Cooperative Agreement)

SUMMARY

These actions are essential steps in relicensing the Power System's CPP. The RPA details the cooperative efforts between LADWP and DWR in managing project activities, resources, and cost sharing for the relicensing of the Federal Energy Regulatory Commission (FERC) License P-2426, which includes CPP. With CPP located on the West Branch and because of the inherent operational dependency of all the facilities on the West Branch, LADWP and DWR will equally share relicensing costs on the West Branch of the SWP.

Due to the strict timeline of required submittals under the FERC's Integrated Licensing Process, the RPA includes a delegation of authority to an Authorized Representative to enter into contracts within the scope of this agreement. Pursuant to attached Resolution, LADWP's maximum cumulative expenditure under the RPA is capped at \$50 million over the expected 8-year project and the funds are budgeted. Any additional contracts LADWP chooses to enter into pursuant to Section 5 of the RPA shall be subject to further approval by the Board of Water and Power Commissioners (Board).

The purpose of Amendment No. 5 to the Cooperative Agreement is to synchronize the expiration dates for the new FERC license and the Cooperative Agreement to January 1, 2072, or until the expiration of the second FERC license, whichever occurs first. This synchronization ensures the ability for LADWP to operate CPP cooperatively

with DWR for the duration of the term of the new FERC license. Operations of CPP will only continue with permission by FERC and will not continue if a second FERC license is not issued.

To ensure proper and public reporting of the relicensing activities, a status report will be provided to the Board at the annual LADWP budget approval process.

City Council approval is required according to Los Angeles City Charter Section 674.

RECOMMENDATION

It is requested that the Board adopt the attached Resolution recommending City Council's approval, by Ordinance, of RPA No. BP13-062 and Amendment 5 to the Cooperative Agreement, with DWR per Los Angeles City Charter Section 674.

ALTERNATIVES CONSIDERED

In order to continue operations at CPP, a new FERC license for hydro-power plant is required. This is a Federal Regulatory requirement. There are no other alternatives.

FINANCIAL INFORMATION

The attached Resolution sets an expenditure limit of \$50 million under the RPA. This limit is based on equal sharing of estimated expenditures with DWR along the West Branch, plus a 20 percent contingency. The estimated total cost for the relicensing of all facilities under the FERC P-2426 license is \$83 million. This estimated total was provided by an independent third party consulting firm, who based the numbers on their previous relicensing experience, as well as the cooperative nature of the project's operations between LADWP and DWR. This figure is a conservative estimate due to the uniqueness of this project and its potential for higher costs prevalent in California projects.

The terms and conditions of the RPA shall be in force from the date of execution of this Agreement until the FERC issues the new license on or about January 31, 2022. The RPA may be terminated at any time by mutual agreement between LADWP and DWR, with written notice provided to the other party no later than 18 months prior to January 31, 2017, the date when the notice of intent and pre-application documents are filed.

The RPA provides LADWP and DWR the right to review and to copy any financial records and supporting documentation pertaining to those matters in which the reviewing Licensee has a financial interest. LADWP and DWR agree to maintain such records for possible audit for a minimum of three years after final payment.

There is no additional cost in synchronizing the expiration dates of the FERC license and the Cooperative Agreement. The new expiration date of the Cooperative

Agreement will coincide with the new expiration date of the new FERC license. FERC typically renews licenses with durations of 30 to 50 years.

BACKGROUND

In 1963, DWR filed a declaration of intention to construct the California Aqueduct Project and an application for preliminary permit docketed by the Federal Power Commission (later to become FERC) as Project No. 2426. The California Aqueduct Project is a water-conveyance system comprised of canals, tunnels, and pipelines that deliver water collected from Northern California to Southern California. The preliminary permit was issued in 1964. In 1965, DWR filed an application for license for the California Aqueduct Project with CPP initially planned for 218 Megawatts (MWs).

In 1966, DWR and LADWP entered into the Cooperative Agreement for the development of CPP. LADWP provided additional funding for the project, and in return, increased the planned output of CPP to 1,200 MW and designed it as a pump storage hydroelectric facility. LADWP also constructed additional facilities, such as the Angeles Tunnel Surge Chamber, Elderberry Forebay and Dam to accommodate the additional capabilities. The Cooperative Agreement outlines the relationship between DWR's usage of the CPP as a water conveyance and LADWP's operating of it as a pump-storage facility. In 1967, DWR amended the application to account for these changes and included LADWP as a co-licensee. FERC later issued an order amending the license with an authorized rating of CPP of 1,275 MWs in 1994.

The current FERC P-2426, renamed South SWP Hydropower in 2011, expires on January 31, 2022. FERC advises to begin preparations for relicensing about 10 years prior to license expiration. Since FERC P-2426 is a joint license between LADWP and DWR, additional efforts are required to investigate, develop, and implement joint relicensing strategies. The Cooperative Agreement currently expires on January 1, 2040. A renewed FERC license and an amended Cooperative Agreement between DWR and LADWP ensure the continued cooperative operations of CPP until January 1, 2072, or until the expiration of the second FERC license, whichever occurs first.

Article 33 of the Cooperative Agreement allows the contract to be amended at any time by mutual agreement between LADWP and DWR.

SWP comprises of the West Branch and the East Branch. CPP is located on the West Branch. Other major facilities located along the West Branch include Quail Lake and Dam, Peace Valley Pipeline, Warne Power Plant, Pyramid Lake and Dam, Angeles Tunnel, Angeles Tunnel Surge Chamber, Elderberry Lake and Dam, and associated transmission lines. Major facilities located along the East Branch include Alamo Power Plant, Mojave Siphon Power Plant, Silverwood Lake, Cedar Springs Dam, San Bernardino Tunnel, Devil Canyon Power Plant and afterbays, and associated transmission lines.

CPP is an integral part of the West Branch of the California Aqueduct. Water delivered along the California Aqueduct via the West Branch must pass through CPP. A significant portion of this water is then delivered to DWR's water customers, including LADWP, through the Metropolitan Water District of Southern California. Because of its ideal geographic location and through the Cooperative Agreement, power generated by CPP through water deliveries help offset a portion of the costs associated with the power used by pumping stations required to deliver water through the California Aqueduct.

CPP is an essential asset in LADWP's in-basin, non-polluting hydro-electric generation capability. Unlike traditional steam-driven turbine generators, which may require up to three days for start-up, CPP's turbine generators can be generating on-line in a matter of minutes. This capability adds to the reliability of LADWP's electrical system since CPP can be generating electricity within minutes should any of our generating units fail. In the event of an emergency, CPP has black-start capability (to start and synchronize a unit without the need for an outside power source) and can lead in recovery efforts even if Los Angeles was isolated electrically. CPP is a pump storage facility which can pump water back to Pyramid Lake during non-peak hours of the night, when electricity costs are lower, for peak generation the next day, when higher demand commands more electricity generation.

CPP is also an integral part of our Renewable Portfolio Standard Integration as LADWP increases its renewable resources with its ability to absorb excess energy with its pumping capabilities and provide additional energy to complement these variable energy resources. CPP is currently undergoing a multi-million dollar modernization to upgrade and replace its turbines, generators, and control systems to improve its efficiency, performance, and reliability. Since LADWP plans to continue its operations of CPP, renewing its FERC license and synchronizing its expiration date with the Cooperative Agreement are mandatory.

The RPA is the result of several months of discussions, planning, and negotiations between LADWP and DWR for the purposes of ensuring a successful and collaborative relicensing effort. This approach to the relicensing process brings many benefits including potentially significant cost-savings through the cost-sharing of many activities that are inherent in any relicensing process, regardless of capacity or geographic size of the license, that would be born duplicatively if DWR and LADWP were relicensing on individual paths. DWR, as a relicensing partner, brings the benefit of staff relicensing experience, access to external expert legal counsel, and a well-seasoned internal process to efficiently secure consultant contracts. Efficiency in securing and administering the relicensing consultant contract for the relicensing process is critical as the FERC Integrated Licensing Process has firm and aggressive deadlines that must be met throughout the relicensing process. Therefore, efficiency and continued and consistent progress is essential. In order to meet these needs of the relicensing process, the RPA sets up the necessary joint administrative process along with the prescribed shared efficiency while ensuring continuity and a shared management approach between DWR and LADWP.

The RPA allows for the cost sharing of relicensing activities only. These are the costs needed to obtain a new license from FERC which includes all related permits, regulatory approvals, and third party agreements. It does not authorize expenditures on costs associated with implementing a new license or agreements required by or related to a new license. Additionally, it would not commit either LADWP or DWR to implement any new project which may result in potentially significant impacts on the physical environment. The application for relicensing of FERC P-2426 is subjected to all required analysis under the California Environmental Quality Act (CEQA) and the National Environmental Policy Act (NEPA) prior to approval by FERC and other federal, state, or local agencies.

DWR will take the lead with LADWP's participation in the hiring of a principal relicensing consultant to assist our efforts. DWR will follow Government Code Section 4525-4529.5 and the California Code of Regulations Title 23, Division 2, Chapter 1.7 in the procurement of this specialized professional service which basically outlines the appropriate procedures that need to be followed by a State Agency when making a Request for Qualifications (RFQ). These regulations are intended to encompass all matters needed for the DWR to carry out its mission, which includes the duty to manage the water resources of California in cooperation with other agencies, to benefit the State's people, and to protect, restore, and enhance the natural and human environments, and to fulfill its statutory mandates in an open and transparent process. After DWR advertised its RFQ, LADWP sent an e-mail notification to qualified vendors registered under eRSP and encouraged them to participate in the RFQ. Included in this e-mail is a link to the DWR procurement website.

Per Los Angeles City Charter Section 674, Los Angeles City Council (City Council) approval by Ordinance is required. Accordingly, attached is the City Administrative Officer (CAO) report dated May 8, 2014.

ENVIRONMENTAL DETERMINATION

In accordance with the California Environmental Quality Act (CEQA) it has been determined that entering into the RPA is not a project requiring environmental review pursuant to CEQA Guidelines Section 15378 (b)(4), in as much as creation of a governmental funding mechanism that does not commit an agency to any specific project with potentially significant impact on the physical environment is not a project, and is furthermore exempt from CEQA pursuant to the General Exemption described in CEQA Guidelines Sections 15061(b)(3) which applies in situations where it can be seen with reasonable certainty that there is no possibility that the activity in question may have a significant effect on the physical environment.

In accordance with CEQA, it has been determined Amendment 5 to the Cooperative Agreement is exempt from environmental review under CEQA Guidelines Section 15301 (b) which applies to the operation, repair, and maintenance of existing publicly-owned utility facilities used to provide electric power, natural gas, sewerage, or other

public utility services, and is furthermore exempt from CEQA pursuant to the General Exemption described in CEQA Guidelines Section 15061 (b)(3), which applies in situations where it can be seen with reasonable certainty that there is no possibility that the activity in question may have a significant effect on the physical environment.

CITY ATTORNEY


The Office of the City Attorney reviewed and approved the Agreement and Resolution as to form and legality.

ATTACHMENTS

- A. Resolution
- B. Agreement No. BP13-062
- C. Amendment No. 5 to Cooperative Agreement
- D. DWR-LADWP Relicensing Objective
- E. Joint Defense Agreement

REPORT FROM

OFFICE OF THE CITY ADMINISTRATIVE OFFICER

Date: May 8, 2014
To: The Mayor
From: Miguel A. Santana, City Administrative Officer 
Reference: Transmittal from the Department of Water and Power dated January 13, 2014; referred by the Mayor for report on January 23, 2014
Subject: **RELICENSING AGREEMENT NO. BP 13-062 WITH THE CALIFORNIA DEPARTMENT OF WATER RESOURCES FOR THE SOUTH STATE WATER PROJECT HYDROPOWER PROJECT NO. 2426 AND AMENDMENT NO. 5 TO CONTRACT NO. 10099 FOR COOPERATIVE DEVELOPMENT WEST BRANCH CALIFORNIA AQUEDUCT**

SUMMARY

The Los Angeles Department of Water and Power (LADWP; Department) requests approval of a proposed resolution authorizing a Relicensing Process Agreement No. BP 13-062 (RPA) and Amendment No. 5 to Cooperative Agreement No. 10099 (Cooperative Agreement) with the California Department of Water Resources (CADWR). Approval of these two agreements will establish the provisions of a joint-agreement between CADWR and LADWP relating to the relicensing of the South State Water Project (SWP) for power generating facilities located along the East and West Branch of the California Aqueduct including the Castaic Power Plant (CPP). Exhibit 1 attached provides a summary of the various facilities located on the East and West Branch. In accordance with Federal Energy Regulatory Commission (FERC) mandates, in order to continue operations at CPP beyond January 31, 2022, a new FERC license is required.

The proposed resolution also provides a delegation of City Council authority to the LADWP Board of Commissioners (Board) to enter into an unspecified number of contracts relating to the RPA process with durations of up to 8 years or until a new FERC license is issued and a cumulative expenditure authority not to exceed \$50 million. Though the extent and cost of the re-licensing process and studies is uncertain, LADWP asserts that the delegation of authority is necessary to meet the set timeline provided under the FERC relicensing process and that the City Charter Section 674 requirement to approve Power-related contracts by ordinance is not suitable in this instance. Furthermore, LADWP states that it could oversee the relicensing process with greater transparency and control by approving these RPA contracts and studies with Board approval.

Pursuant to Charter Section 674-Power Contracts, Los Angeles City Council approval by Ordinance is required. The proposed resolution, RPA, and Amendment No 5 have been reviewed by the City Attorney and approved as to form and legality.

FERC AND THE RELICENSING PROCESS AGREEMENT (RPA)

Under the authority of the Federal Power Act (FPA), the FERC has the exclusive authority to license most nonfederal hydropower projects located on navigable waterways or federal lands, or connected to the interstate electric grid. The Commission is composed of five members appointed by the U.S. President with the advice and consent of the U.S. Senate. FERC is supported by a staff, with environmental, engineering, and legal expertise, which evaluates hydropower license applications and makes recommendations to FERC on hydropower licensing matters.

FERC may issue an original license for up to 50 years for constructing, operating, and maintaining jurisdictional projects. When a license expires, the federal government can take over the project, the FERC can issue a new license (relicense) to either the existing licensee(s) or a new licensee(s) for a period of 30 to 50 years, or the project may be decommissioned.

The primary purpose of relicensing is to apply environmental protection requirements enacted after original licensing. The Federal Power Act requires relicensing as means for re-examination of projects based on the laws and regulations currently in effect, and based on contemporary views of the public interest. In the period since the SWP was originally approved, there has been a substantial change in state and federal environmental policies, reflecting a significant shift in public attitudes about protection of the environment including concerns for fish, wildlife, recreation, and other uses. Significant federal laws approved subsequent to CPP and impacting the relicensing process includes the National Environmental Policy Act (1970), the Endangered Species Act (1973), and the Clean Water Act (1972).

The preliminary FERC (formerly the Federal Power Commission until 1977) permit for the CPP was issued on July 16, 1964 and initially planned for 218 Megawatts (MWs). Soon after in 1966, LADWP and CADWR entered into the Cooperative Agreement to increase the planned output of CPP to 1,200 MWs. LADWP funded the expanded CPP along with construction of additional facilities such as the Angeles Tunnel Surge Chamber, Elderberry Forebay and Dam to accommodate the additional capacity. On July 10, 1967, the initial CADWR license application was amended to account for the expansion as well as to include LADWP as a co-licensee. Ultimately, FERC issued a 50-year license with conditions on January 14, 1972. In 2011, the license name was changed from the California Aqueduct Project to the South State Water Project Hydropower Project (SWP) in order to distinguish the hydropower resources from the other portions of the California Aqueduct. The current FERC license for the SWP expires on January 31, 2022.

FERC advises the Department to begin preparations for relicensing approximately 10 years prior to license expiration. As the FERC license is a joint-license between CADWR and LADWP, additional efforts are anticipated to investigate, develop, and implement joint relicensing strategies.

The relicensing process will require numerous environmental studies, legal services, technical services, and public hearings that shall occur over an approximately five-year period. The final step in the relicensing process is the issuance of the FERC decision on the license including any terms and conditions under which the SWP must be operated. In the case of relicensing, the target date for issuance of a relicensing decision is the expiration date of the original license. If

processing extends beyond this expiration date, annual licenses can be issued until action on the new license is taken. The license, which contains the terms and conditions under which the SWP must be operated, is issued by either the FERC or its delegate.

The license becomes final 30 days after the order for a license is issued, unless requests for rehearings and subsequent appeals are filed. Even if a request for rehearing and judicial review is filed, the license goes into effect when issued, unless the FERC orders otherwise.

According to FERC, a license typically contains the following:

- Description of the project works licensed;
- Description of the project operation;
- Discussion and findings of the issues raised in the proceeding;
- Term of license;
- Environmental conditions;
- Engineering conditions; and
- Administrative compliance conditions.

AMENDMENT NO. 5 TO THE COOPERATIVE AGREEMENT

The Cooperative Agreement between LADWP and CADWR was executed in 1966 to allow the cooperative development and expansion of the CPP from an initial project capacity of 218 MWs to 1,200 MWs. Additionally, the Cooperative Agreement outlines operating and funding responsibilities such as water flows, maintenance cost sharing, and electricity production. The current term of the Cooperative Agreement is scheduled to expire on January 1, 2040. Amendment No. 5 will extend the termination date to January 1, 2072, or until the expiration of a new FERC license. LADWP states that Amendment No. 5 to the Cooperative Agreement does not result in any contracting costs. Presently, the FERC License and the Cooperative Agreement terminate on separate dates; however, as proposed, the terms of the two agreements will become co-terminus.

Upon approval of the proposed RPA and Cooperative Agreement, CADWR will release and award a competitively bid contract to a principal consultant hired to implement the day-to-day activities of the relicensing process. In accordance with the RPA, CADWR will act as contract manager and will administer the consulting agreement. LADWP will reimburse CADWR for its share of the costs incurred for the relicensing activities. LADWP states that in December 2013, CADWR authorized execution of this proposed RPA with \$50 million funding for its share of the estimated expenses relating to the RPA.

COST OF RPA AND COOPERATIVE AGREEMENT

As part of the due diligence performed to support this project, LADWP contracted with URS Corporation, a third party consultant, to develop and provide a cost estimate for the relicensing process. URS outlines in a report (dated March 4, 2011) that the total joint-cost of the proposed SWP relicensing process is estimated to be \$75 million including both the West Branch and East

Branch. In acknowledgement of the uncertainty pertaining to the relicensing requirements and associated costs, URS also provided a substantial range of costs (plus/minus 10 percent) consisting of a low of \$68 million to a high of \$83 million. Additionally, LADWP includes a 20 percent contingency above the high end estimate, which already provides a 10 percent contingency from URS. Due to the location of the CPP on the West Branch and operational dependencies of all facilities on the West Branch, CADWR and LADWP agree to equally share the common costs of all activities relating to the West Branch facilities resulting in a \$50 million expense for both parties including the additional 20 percent contingency for unanticipated costs, studies, or requirements.

Estimated Cost of FERC Re-licensing for the South State Water Project Hydropower Facilities

Licensees	URS Estimate	URS +10% Contingency	Net Estimate	Addtl 20% Contingency	Total Net Estimate
LADWP share	\$37,500,000	\$4,000,000	\$41,500,000	\$8,500,000	\$50,000,000
CADWR share	\$37,500,000	\$4,000,000	\$41,500,000	\$8,500,000	\$50,000,000
TOTAL	\$75,000,000	\$8,000,000	\$83,000,000	\$17,000,000	\$100,000,000

Costs associated with the East Branch do not have any common costs and will be the sole responsibility of CADWR; although, the costs of the East Branch have not been identified separately from the total estimated cost of the FERC re-licensing process. LADWP states that the costs of the East Branch will be negligible due to the relatively simple power generating stations along the East Branch. The CPP is a pump-storage facility that LADWP anticipates will receive environmental scrutiny to address this unique capability. LADWP also contends that this estimate is conservative due to the uniqueness of this project and the potential for higher costs assumed to be prevalent in California projects. Furthermore, there is uncertainty about the total costs due to the uncertain nature and extent of the numerous environmental studies that will be required during the FERC relicensing process.

This Office notes concern about the level of financial uncertainty including the possibility that non-LADWP costs associated with the East Branch could be indistinguishable from the common costs of the West Branch that are shared between LADWP and CADWR. Additionally, comparisons to other agencies undertaking the same relicensing effort were not provided to validate the reasonableness of the cost estimate. Also, this Office notes that the URS report was released three-years ago on March 4, 2011, so the data provided may not reflect adjustments for current costs associated with the relicensing process or adjustments to the Consumer Price Index (CPI). If the LADWP share of the costs exceeds the proposed \$50 million spending authority, a future request for additional funding will require approval by the Mayor, City Council, and LADWP Board. The following table identifies the estimated cost of categories of work for the relicensing project provided by the URS Corporation:

SWP Cost Elements	Total Estimated Costs	LADWP Share of Costs
Stakeholder Outreach, Document Management and Project Management and Coordination.	\$12,000,000	\$12,000,000
Environmental Impact Reports, Studies and Field Activity Support with areas of concern including: Aesthetics, Agricultural/Forestry, Air Quality, Biological Resources, Cultural Resources, Geology and Soils, Hazards and Hazardous Materials, Hydrology and Water Quality, Land Use and Planning, Mineral Resources, Noise, Population and Housing, Public Health, Public Services, Recreation, Transportation / Traffic, Utilities and Service Delivery Systems, Climate Change, Power Needs, and Socioeconomic.	\$46,000,000	\$23,000,000
Re-licensing Process Plan Preparation, Application Preparation, and Followup.	\$10,000,000	\$5,000,000
CADWR – LADWP Coordination	\$1,000,000	\$500,000
Legal Services	\$6,000,000	\$3,000,000
Net Estimate	\$75,000,000	\$37,500,000
Additional 10 Percent Contingency by URS	\$8,000,000	\$4,000,000
Additional 20 Percent Contingency	\$17,000,000	\$8,500,000
Total Net Estimate	\$100,000,000	\$50,000,000

It's particularly important to note is that the \$50M estimate of relicensing costs provides only for the relicensing process and not for any subsequent costs associated with potential conditions and requirements of a new FERC license. It is anticipated that numerous conditions and requirements will be mandated to achieve compliance with Federal and State legislation relating to environmental protection, mitigation, research, in addition to extensive (i.e. expensive) capital improvement projects. LADWP states that a separate agreement will be negotiated to determine the method for allocating costs associated with any conditions and requirements of a new license.

The experience of other utilities with the relicensing process is difficult to find for comparison as it is estimated that 10 similar pump-storage facilities exist throughout the United States. CADWR is currently in the process of completing a FERC hydropower relicensing project in Oroville, California, that utilized a collaborative process to consult with Federal and State resource agencies, Indian tribes, local organizations, non-governmental organizations, and other interested parties. CADWR expected that a collaborative process could offer the best opportunity to obtain input and feedback from a broad array of interests. While the anticipated length of a relicensing process is estimated by FERC to be up to 10 years, the Oroville relicensing, initiated in 1998, is still proceeding and not complete after approximately 16 years. And although the costs related to the relicensing have not been identified or made available, the conditions and requirements for a new Oroville license are estimated to be approximately \$1-billion over the 50 year license term

consisting of the following: \$454 million for environmental protection and mitigation; \$438 million for recreation area purposes; \$77 million for the protection of nearby sacred tribal sites; \$62 million for discretionary supplemental community benefit funds under local control; and \$7 million for land use and management. The Oroville relicensing project has demonstrated a collaborative process which provided adequate opportunities for involvement by numerous stakeholders; although, it has continued longer than expected with considerable costs.

It is anticipated by LADWP that there could be significant interest in this type of relicensing project and that process transparency is important for consideration of any potential conditions and requirements applied to a new CPP license. To ensure transparency and public reporting, DWP states that it will provide a status report on the relicensing activities to the LADWP Board during the annual budget approval process.

The above-mentioned aspects of the proposed Agreement, and this report, are based upon information received from the Department subsequent to the initial request submittal.

RECOMMENDATION

That the Mayor:

1. Approve the proposed resolution authorizing Relicensing Process Agreement No. BP 13-062 (RPA) and Amendment No. 5 to Cooperative Agreement No. 10099 (Cooperative Agreement) between the Los Angeles Department of Water and Power and the California Department of Water Resources; and
2. Return the proposed resolution to the Department for further processing, including Council consideration.

FISCAL IMPACT STATEMENT

Approval of the proposed resolution provides a delegation of authority to the LADWP Board of Commissioners to enter into various contracts within the scope of the Relicensing Process Agreement No. BP 13-062 (RPA) with a maximum cumulative expenditure authority not to exceed \$50 million from the Power Revenue Fund over the estimated 8-year process or until the FERC issues the new license on or about January 31, 2022. There is no impact to the City's General Fund. The proposed Agreement complies with the Department's adopted Financial Policies.

TIME LIMIT FOR COUNCIL ACTION

The City Attorney advises that there is no time limitation for items approved by ordinance.

Exhibit 1 – SWP Facilities on the West and East Branch

WEST BRANCH: SWP facilities in the West Branch include Quail Dam and Lake and Lower Quail Canal, Peace Valley Pipeline, the Warne Powerplant, Pyramid Dam and Lake, Angeles Tunnel and surge chamber, Castaic Powerplant, the Elderberry Dam and Forebay, and associated transmission lines and other facilities. Below is a summary of the significant facilities.

Quail Dam

Quail Dam and Lake provides regulatory water storage for power generation at Warne Powerplant during peak demand periods. Constructed in 1967, Quail Lake has an operating storage capacity of 7,580 acre-feet. When water is released, it flows from the lake through the Lower Quail Canal into Peace Valley Pipeline.

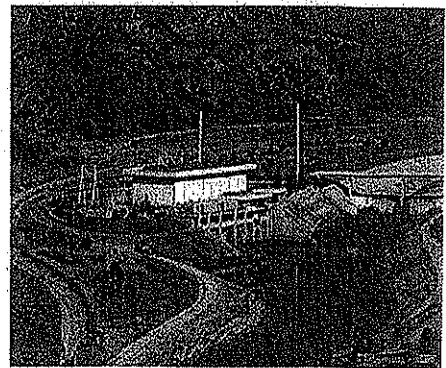


Quail Lake

Peace Valley Pipeline and Warne Powerplant

Peace Valley Pipeline serves as the penstock for Warne Powerplant. The pipeline is 5.5 miles long with a diameter of 12 feet and an overall capacity of 1,564 cfs.

Warne Powerplant, located on the Gorman Creek arm of Pyramid Lake, generates power by taking advantage of the 725-foot drop through the Peace Valley Pipeline to Pyramid Lake. This plant, with a maximum rated capacity of 78 megawatts and 2 generators, can generate up to 358 million kilowatt-hours a year.



Warne Powerplant

Pyramid Dam, Pyramid Lake, and Angeles Tunnel

Pyramid Dam is located on Piru Creek and was constructed between 1969 and 1973. The dam has a height of 400 feet, with a spillway for passing excess inflow into Piru Creek. The spillway consists of a concrete-lined channel controlled by a 40-foot wide by 31-foot high radial gate and a 365-foot long over pour weir with crest set 1 foot above the maximum operating water surface elevation of 2,578 feet.



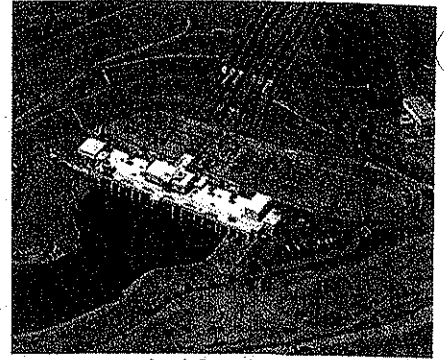
Pyramid Lake

Pyramid Lake has a maximum capacity of 171,200 acre-feet and serves as an afterbay for Warne Powerplant and forebay for Castaic Powerplant.

Angeles Tunnel Water from Pyramid Lake flows through the 30-foot diameter and 7.2 mile long Angeles Tunnel and generates power at Castaic Powerplant.

Castaic Powerplant

Castaic Powerplant, designed, built, and operated under a cooperative agreement between CADWR and LADWP, is located at the northern end of Castaic Lake's west branch. Regulatory storage for Castaic Powerplant is provided by Pyramid Lake and Elderberry Forebay. Castaic Powerplant has 7 generators with a maximum rated capacity of 1,275 megawatts.



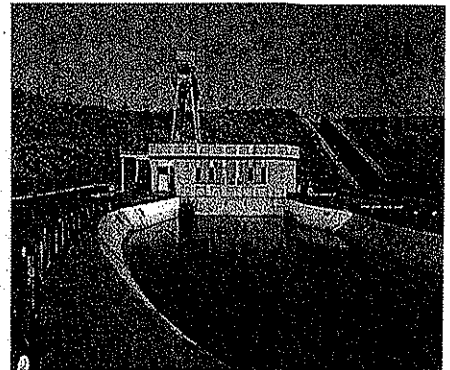
Castaic Powerplant

Water from Pyramid Lake flows through Castaic Powerplant into Elderberry Forebay, also operated by LADWP, and it can be pumped back through the plant into Pyramid Lake. This type of operation is called pumped storage. Elderberry Forebay has a maximum storage capacity of 32,480 acre-feet and also provides submergence of the pump-generator units when the lake is at its lowest operating levels. Water from Elderberry Forebay is ultimately delivered to Castaic Lake. Castaic Dam and Lake, the terminal reservoir on the West Branch of the SWP, is located downstream of Elderberry Forebay and is therefore not part of the P-2426 FERC license. The lake has a storage capacity of 323,700 acre-feet and is located about 45 miles northwest of Los Angeles.

EAST BRANCH: SWP facilities in the East Branch include the Alamo Powerplant, Mojave Siphon Powerplant, Cedar Springs Dam and Silverwood Lake, Devil Canyon Powerplant and Afterbays, and associated transmission lines and other facilities. On the East Branch, the FERC Project has two separate reaches. The first is about 0.9 miles in length on both sides of Alamo Powerplant, south of the Tehachapi Afterbay. The second reach begins at the intake to the Mojave Siphon and extends about 9.4 miles to Devil Canyon Afterbay. This reach includes Mojave Siphon Powerplant, Silverwood Lake, the San Bernardino Tunnel and Devil Canyon Powerplant and afterbays.

Alamo Powerplant

Alamo Powerplant is located approximately 1.5 miles southeast of the bifurcation of the West and East Branches. It was constructed between 1982 and 1985 and has one generator with a capacity of 18 megawatts.



Alamo Powerplant

Mojave Siphon and Mojave Siphon Powerplant

The Mojave Siphon includes 3, 12-foot diameter, pipelines conveying water under the Las Flores Valley floor into the 3 generators of Mojave Siphon Powerplant situated near Cedar Springs Dam. The plant, completed in 1995, has a generating capacity of 29.4 megawatts.



Mojave Siphon Powerplant

Silverwood Lake

Silverwood Lake formed by the 249-foot tall Cedar Springs Dam, is located at an elevation of 3,355 feet and is the highest reservoir in the SWP. The dam spillway is an ungated, 120 feet-wide, rectangular, lined chute located directly over the outlet works tunnel. The lake was constructed to provide regulatory and emergency storage with a maximum operating capacity of 74,970 acre-feet. The lake serves as an afterbay for the Mojave Siphon Powerplant and a forebay to the Devil Canyon Powerplant. From the south end of the lake, water is discharged into the San Bernardino Tunnel intake.



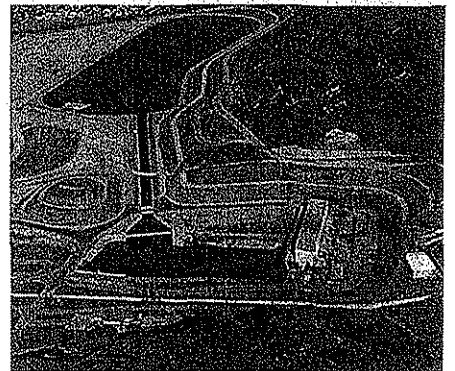
Silverwood Lake

Devil Canyon Powerplant

Devil Canyon Powerplant is a power recovery facility that receives water from Silverwood Lake via the 20,064 feet long, 12.75 feet diameter, San Bernardino Tunnel. Water flows from the tunnel into two parallel penstocks, each over one-mile long and is distributed to the powerplant. The 1,400-foot difference in elevation from Silverwood Lake, gives Devil Canyon the highest hydraulic head among the plants in the SWP. Flows in the Devil Canyon Powerplant discharge in the first afterbay, constructed from 1969 to 1974. The afterbay provides a nominal 50 acre-feet maximum amount of storage, so construction of a second 850 acre-feet afterbay began in 1992 and was completed in 1995. The second afterbay is connected to the first afterbay by a 152-foot wide overflow weir that discharges into a 1,100 feet long and 40 feet wide cross channel, increasing the powerplant's operational flexibility and capacity. Though the FERC project boundary ends at the Devil Canyon facilities, the SWP system continues with the Santa Ana Pipeline conveying water to Lake Perris, the final reservoir on the SWP's East Branch, and the East Branch Extension to eastern Riverside County.



Devil Canyon Powerplant



Devil Canyon Facilities

ORDINANCE NO. _____

An ordinance approving Relicensing Process Agreement for the South SWP Hydropower Project No. 2426, DWP Contract No. BP13-062 and Amendment 5 to the Contract for Cooperative Development for the West Branch, California Aqueduct, DWP Contract No. 10099 between the California Department of Water Resources and the City of Los Angeles, acting by and through the Department of Water and Power and to provide the Board of Water and Power Commissioners and the General Manager of the Department of Water and Power the authority to enter into contracts related to the Relicensing Process Agreement.

**THE PEOPLE OF THE CITY OF LOS ANGELES
DO ORDAIN AS FOLLOWS:**

Section 1. The Relicensing Process Agreement for the South SWP Hydropower Project No. 2426, DWP Contract No. 13-062, and the Amendment No. 5 to the Contract for Cooperative Development for the West Branch, California Aqueduct, DWP Contract No. 10099, approved by the Board of Water and Power Commissioners (Board), by the adoption of Resolution No. XXXX that are on file with the City Clerk are hereby approved, and the Authorized Representative (as defined in the Relicensing Process Agreement No. BP13-062) is authorized to carry out the provisions of this Relicensing Process Agreement, and to provide liaison between LADWP and DWR, subject to a maximum expenditure limit of \$50 million without further City Council approval.

Section 2. The City Clerk shall certify to the passage of this ordinance and have it published in accordance with City Council policy, either in a daily newspaper circulated in the City of Los Angeles or by posting for ten days in three public places in the City of Los Angeles: one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall; one copy on the bulletin board located at the Main Street entrance to the Los Angeles City Hall East; and one copy on the bulletin board located at the Temple Street entrance to the Los Angeles County Hall of Records.

I hereby certify that this ordinance was passed by the Council of the City of Los Angeles, at its meeting of _____.

HOLLY L. WOLCOTT, Interim City Clerk

By _____
Deputy

Approved _____

Mayor

Approved as to Form and Legality
MICHAEL N. FEUER, City Attorney

By _____
SYNDI DRISCOLL
Deputy City Attorney

APPROVED AS TO FORM AND LEGALITY
CARMEN A. TRUTANICH, CITY ATTORNEY

JAN 09 2014

Date _____

BY _____
SYNDI DRISCOLL
DEPUTY CITY ATTORNEY

File No. _____