

Resolution No.	

Lewey!

Senior Assistant General Manager

Power System

MARCIE L. EDWARDS General Manager

DATE:

May 27, 2015

SUBJECT:

Second Amendatory Power Sales Contract (LADWP No. 10437)

Renewal Power Sales Contract

Agreement for Sale of Renewal Excess Power Power Purchase Termination Agreement

SUMMARY

On July 9, 2009, the City of Los Angeles demonstrated environmental stewardship by declaring an aggressive goal of being coal-free by 2020. Following this announcement, LADWP began an extensive outreach process involving the public and policymakers, in the development of its 2010 Integrated Resource Plan. This process resulted in a commitment by the Power System to eliminate the use of coal-fired generation, as soon as possible.

LADWP has been a participant in the Intermountain Power Project (IPP) along with 35 other purchasers since 1980. Because IPP is a joint project, it requires the concurrence of all 36 participants to amend the existing contracts which expire in 2027. LADWP has led a strategic planning effort negotiating agreements for the last five years with IPP's owner, the Intermountain Power Agency (IPA) and the other participants. This effort by LADWP has allowed IPA to offer renewal contracts to the participants in a project that would replace coal-fired generation with natural gas-fired generation, no later than 2025, two years earlier than currently planned.

LADWP currently purchases a minimum of 48.617 percent and a maximum of 66.785 percent of electric generation from IPP that is comprised of two 950 megawatt (MW) coal-fired generating units according to the terms and conditions of the First

Amendatory Power Sales Contract (LADWP Agreement No. 10437) and the Excess Power Sales Contract (LADWP Agreement No. 10552). LADWP requests approval of the proposed Second Amendatory Power Sales Contract (Amendatory Contract), which provides for the replacement of the coal-fired generating units at IPP with combined cycle natural gas-fired units with lower design capacity (maximum of 1200 MW, instead of current 1800 MW). The Amendatory Contract will become effective upon execution by LADWP and IPA with the same termination date of June 15, 2027, provided that each of the other IPP participants (35 in total) have also executed the Amendatory Contract with IPA.

LADWP is also requesting approval to terminate LADWP Agreement No. 10050 between LADWP and IPP Participant PacifiCorp pursuant to which PacifiCorp has been selling power to LADWP equivalent to PacifiCorp's four percent IPP generation entitlement share since 1989 (1989 Agreement).

Finally, LADWP is requesting approval of delegated authority to enter into the Renewal Power Sales Contract and the Agreement for Sale of Renewal Excess Power (Renewal Contracts) to continue participating in IPP through June 15, 2077, upon IPA's making of a renewal offer. IPA will make such renewal offer within 45 days of the Amendatory Contracts taking effect.

The Renewal Contracts are an important part of LADWP's elimination of coal-fired generation from its power portfolio. Today, IPP provides over one-fourth of the energy consumed by LADWP's customers. To replace it will require additional investments in energy efficiency, demand response, renewable energy, and some level of energy production fueled by natural gas combined cycle (NGCC) units. The NGCC units replacing the coal-fired units at the IPP site will be used to integrate existing and potentially new renewable energy supplies from the region. Also, by reducing IPP's generating capacity pursuant to repowering, more transfer capability is made available on the transmission lines for renewable energy power.

Los Angeles City Council (City Council) approval is required by ordinance pursuant to Los Angeles City Charter Section 674.

RECOMMENDATION

It is requested that the Board of Water and Power Commissioners (Board) adopt the attached Resolution, approved as to form and legality by the City Attorney, recommending the City Council approve, by Ordinance, the Amendatory Contract, the Power Purchase Termination Agreement, which terminates LADWP Agreement No. 10050 with PacifiCorp and the delegation of authority to enter into Renewal Contracts and authorize the Board to act on and approve all future amendments to the respective agreements, without further approval by City Council, provided that such amendments are ministerial and administrative in nature and do not increase the costs or extend the duration of the respective agreements.

ALTERNATIVES CONSIDERED

Current California state law, enacted by Senate Bill (SB) 1368, in effect prohibits California electric utilities from entering into new or renewal long-term contracts for the purchase of power from coal-fired facilities pursuant to an Emissions Performance Standard (EPS). Thus, for the California participants involved in IPP to enter into the Renewal Contracts with a term ending in 2077, the fuel supply for power production must be converted from coal to EPS-compliant natural gas or another compliant alternative. The Amendatory Contract provides for the IPP coal-fired units to be replaced with EPS-compliant NGCC units or an Alternative Repowering.

Even though the current Power Sales Contracts have 12 years of remaining life, there are several reasons for LADWP and the IPP participants to act now to provide for the gas repowering of IPP generation. The principal reason is that LADWP and other IPP participants need certainty as to whether they can count on IPP generation remaining in their portfolio beyond 2027. This requires the undertaking of the gas repowering of IPP generation as provided by the Amendatory Contracts in order to enable LADWP and the other IPP participants to enter into the Renewal Contracts. If the IPP gas repowering and the renewal of the current IPP Power Sales Contracts are not to be provided, LADWP will need the time remaining in the IPP Power Sales Contract to make and execute plans to replace its generating capacity currently supplied by IPP through other means and other locations. Today, IPP provides approximately 25 percent of all of the energy used in LADWP's power system and because of the considerable amount of such generation, its replacement would be expensive to construct and time consuming to obtain needed permits and to build. LADWP would need to find a suitable replacement site; obtain right-of-ways for transmission; obtain water, fuel, and emission credits; perform environmental studies; and garner community approval to be able to proceed to construct the power plant, water conveyance system, fuel pipeline, and transmission lines.

The Amendatory Contract will provide for a reduction in the electric generating capacity at IPP. There will be at least a one-third reduction in the IPP generating capacity, and depending on how the subscription to the Renewal Contracts plays out there could be an even greater reduction in the IPP generating capacity. LADWP will be replacing its current share of IPP energy with a combination of energy efficiency, renewable energy, and a much smaller state-of-the-art, high efficiency NGCC facility. The result will be at least a two-thirds reduction in carbon emissions from the IPP source today. LADWP has determined that NGCC units are needed in this location to reliably integrate renewable energy currently being imported from this location. By reducing the current generating capacity of IPP through replacement by the smaller NGCC units, more transfer capability is made available on the existing transmission resources for additional renewable energy that could become available in the area.

FINANCIAL INFORMATION

The Amendatory Contract provides for the construction of two combined-cycle natural gas power blocks, each with a capacity not exceeding 600 MWs (for a total capacity of 1200 MWs) that will replace the current coal-fired units which have a net capacity of 1800 MWs. The final combined-rated capacity of the replacement units may be less (in the range of 600 to1,200 MWs) and will not be known until after the renewal offer subscription phase has been completed for the Renewal Contracts, and it is later determined whether any of the other California IPP participants exercise a subsequent right to exit the project or reduce their generation entitlement shares. The Renewal Contracts allow each of the other five California IPP participants to altogether exit the project or reduce their generation entitlement shares by up to 20 percent up until November 1, 2019. If one or more of the California IPP participants should exercise such exit or reduction right, the generating capacity of the IPP gas units would be reduced proportionally, except to the extent that LADWP takes the IPP generation entitlement share or shares of any California IPP participant(s) exercising such right.

The natural gas units would utilize existing infrastructure, staffing, and transmission assets as much as possible. Such repowering of IPP from a coal-fired facility to a smaller NGCC facility would only take place if the Renewal Contracts are subsequently entered into with full subscription to IPP's generation.

In addition, the Amendatory Contract allows for the possibility of an Alternative Repowering to include other technologies, such as renewable and/or energy storage, if approved by at least 80 percent of the IPP participants pursuant to the voting requirements of the coordinating committees established under the Amendatory Contracts and Renewal Contracts. Such Alternative Repowering would have to similarly comply with all applicable laws and regulations, including California's EPS pursuant to SB 1368. Furthermore, any vote by LADWP at the coordinating committees in favor of an Alternative Repowering would first require going back to the Board of Water and Power Commissioners (Board) for its consideration and approval before LADWP could vote in such manner.

The permitting and construction of the natural gas units or the Alternative Repowering would be required to begin no later than January 1, 2020, and be completed and commercially operational no later than July 1, 2025. Such completion by 2025 would ensure that the natural gas units would be on-line before the current IPP Power Sales Contracts expire in 2027 and after all current debt obligations with respect to the coal-fired power plant have been paid. The current debt for the coal-fired units matures in 2023. This would result in IPP coal-fired generation ending at least two years sooner than under current contractual provisions.

The total costs to LADWP under the Renewal Contracts will depend upon the size of the NGCC facility or Alternative Repowering selected and the share that will be adopted by LADWP. The balance of the generation costs under the Renewal Contracts will be paid

by the other IPP participants. The cost estimates will be determined in greater detail well before construction commences. LADWP will periodically brief the Board on the progress during the financing and construction phases of the project.

BACKGROUND

IPP includes: (1) a two-unit coal-fired steam electric generation station with a net nominal capability of 1,800 MW, an alternating current (AC) switchyard and associated facilities located near Lynndyl, Utah (IGS); (2) the Southern Transmission System (STS) consisting of a 488-mile, 500-kiloVolt (kV) direct current (DC) bi-polar transmission line which originates at the AC/DC converter station adjacent to the IGS AC Switchyard, transverses parts of Utah, Nevada and California and terminates at the AC/DC converter station located near Adelanto, California (both AC/DC converter stations are included as part of the facilities of the STS); and (3) the Northern Transmission System (NTS) consisting of two 50-mile, 345-kV AC transmission lines from the IGS AC Switchyard to PacifiCorp's Mona Switchyard near Mona, Utah and a 144-mile, 230-kV AC transmission line from the IGS AC Switchyard to the Gonder Switchyard located near Ely, Nevada where it connects with the facilities of Mt. Wheeler Power, Inc. IPP facilities also include a microwave communications system, water rights and Intermountain Railcar (a railcar service facility) in Springville, Utah.

LADWP's existing generation entitlement share in the range of 48.617 percent to 66.785 percent corresponds to an output of 875 MW to a maximum of 1202 MW. LADWP's current transmission capacity share on the STS is 59.534 percent or 1428 MW.

The Amendatory Contract and Renewal Contracts are a result of a five-year strategic planning effort involving all 36 IPP participants. The strategic planning process developed consensus around the idea that efforts should be made to keep the IPP site operating beyond 2027, to utilize existing infrastructure as much as possible, to maintain a trained, highly skilled workforce and to continue to provide a significant tax base for the Utah economy. To accomplish these goals, the Amendatory Contract was developed to provide the legal basis for future repowering of IPP generation with natural gas.

To achieve the Strategic Plan goals, Utah state law needed to be changed to allow natural gas to be used as a generation fuel at the IPP site. Utah Senate Bill (SB) 94 was approved by the Utah Legislature and signed by the Utah Governor in March 2012 to effectuate those changes. IPA also had to amend its existing Intermountain Power Agency Organization Agreement (IPA Organization Agreement) to extend its life and allow for a fuel other than coal at IPP. The IPA Board approved the Fourth Amendment to the IPA Organization Agreement in September 2012 to effectuate these changes. The 23 Utah cities that comprise IPA have since ratified the Fourth Amendment to the IPA Organization Agreement.

Another reason for taking action now is that it provides IPP's owner, IPA, with the ability to meet future environmental and regulatory requirements. While IPP is

currently in compliance with all environmental regulations, the Environmental Protection Agency could enact rules, such as the Clean Power Plan, that could affect the continued operation of IPP as a coal-fired power plant or impact the future cost-effectiveness of coal power at the site. In such event, the Amendatory Contract, in providing for the gas repowering of IPP generation, would also provide for IPA and the coordinating committees to take action and begin the gas repowering at an even earlier date which could help mitigate against such actions.

Since renewal of the IPP Power Sales Contracts is essential to the undertaking of replacing the coal-fired generating units with the combined cycle natural gas-fired units, if IPA's renewal offer is not accepted and fully subscribed by IPP participants and the Renewal Contracts do not become effective, the Amendatory Contracts will terminate (except that the provisions for termination of PacifiCorp's participation in IPP as discussed below will survive).

One of the current 36 IPP participants, PacifiCorp, currently has a four percent IPP generation entitlement share under its IPP Power Sales Contract with IPA. Pursuant to the 1989 Agreement between PacifiCorp and LADWP, PacifiCorp has been selling power to LADWP that is equivalent to its four percent IPP generation entitlement share on the same terms and conditions and for the same price as provided for under PacifiCorp's IPP Power Sales Contract. The 1989 Agreement is binding on LADWP until June 15, 2027: a date identical to the termination date of both LADWP's and PacifiCorp's Power Sales Contracts with IPA. In addition, under the 1989 Agreement. PacifiCorp has no obligation to provide any power to LADWP unless the power is produced by IPP. In other words, since 1989, PacifiCorp's four-percent IPP generation entitlement share has been delivered to LADWP and would continue being delivered to LADWP until June 15, 2027. PacifiCorp now desires to terminate its participation in IPP as it has not procured any energy from the IPP facility since 1989 and, instead, has sold that energy to LADWP pursuant to the 1989 Agreement. To make it possible for PacifiCorp to exit IPP, LADWP's IPP generation entitlement share would be increased by such four percent IPP generation entitlement share pursuant to the Amendatory Contract so that LADWP would continue procuring that four percent IPP generation entitlement share directly under its Power Sales Contract with IPA, rather than pursuant to the 1989 Agreement. As a result, PacifiCorp's Power Sales Contract with IPA will terminate, as will the 1989 Agreement between PacifiCorp and LADWP. Deliveries of IPP energy to LADWP and the other IPP participants will remain the same. The only difference will be a streamlining of contractual arrangements and the elimination of PacifiCorp from IPP.

These contractual changes will go into effect only if all IPP participants approve their respective Amendatory Contracts, but the provisions relating to the termination of PacifiCorp's participation in IPP would survive even if the Renewal Contracts are not later executed. To reiterate, these contractual changes do not result in any additional coal-fired power being delivered to Los Angeles; rather, they will facilitate the opposite result by ending coal-fired power production at IPP even sooner than current contractual arrangements provide.

Certain of the Utah participants and certain of the California Purchasers are parties to the Excess Power Sales Agreement, entered into as of December 1, 1980, as amended, for the purchase by such California participants of certain excess electric capacity and associated energy of the Project from such Utah participants during the term of the Original Power Sales Contracts. A similar continuing arrangement has been negotiated pursuant to the Agreement for Sale of Excess Renewal Power for the period under the Renewal Power Sales Contracts.

Each of the California participants that enter into a Renewal Power Sales Contract, other than Los Angeles, may elect to enter into the Agreement for Sale of Renewal Excess Power and, thereby, be a California Excess Power Purchaser. Los Angeles shall be a California Excess Power Purchaser. As such, under the Renewal Contracts, LADWP could potentially procure up to 100 percent of IPP generation as both an IPP participant and a California Excess Power Purchaser.

LADWP seeks authority to subscribe to a minimum generation entitlement share of 48.617 percent (583 MW) and up to a maximum generation entitlement share of 100 percent (1200 MW) under the Renewal Contracts. LADWP's exact share will be dependent upon whether the other California IPP Participants decide to exit the project or reduce their generation entitlement shares, and will also be dependent upon the percentage of generation entitlement shares the Sellers under the Agreement for Sale of Renewal Excess Power declare excess to their needs. As stated earlier, LADWP will also have the opportunity to downsize the repowered project once the final generation entitlement shares are unconditionally determined. LADWP's Integrated Resource Plan identifies the replacement of LADWP's existing IPP coal-fired generation entitlement share (which currently ranges up to 1200 MWs), with a repowered natural gas-fired generation entitlement share which could also range up to 1200 MWs of IPP NGCC.

Pursuant to SB 1368 requirements, LADWP will give notice to the California Energy Commission and interested parties that the Board is deliberating on a Covered Procurement.

The Mayor's Office issued an Executive Directive No. 4 waiver on May 19, 2015.

ENVIRONMENTAL DETERMINATION

In accordance with the California Environmental Quality Act (CEQA), it has been determined that approving the Amendatory Agreement and Renewal Contracts with IPA is exempt from CEQA for the following reasons:

 The approval of the Amendatory Contract and Renewal Contracts is categorically exempt pursuant to CEQA Guidelines section 15301 as a minor alteration to an existing facility used to provide electric power.

- 2. The approval of the Amendatory Contract and Renewal Contracts is categorically exempt pursuant to CEQA Guidelines section 15301 as a replacement or reconstruction of existing utility systems and/or facilities involving negligible or no expansion of capacity. Repowering pursuant to the Contracts would replace 1,800 MW of coal-fired electric generation units with not more than 1,200 MW of gas-fired Electric generation units (Repowering).
- 3. The approval of the Amendatory Contract and Renewal Contracts would not have a significant effect on the environment and is, therefore, exempt from CEQA under the "common sense exemption" set forth in CEQA Guidelines section 15061(b)(3).
- 4. No unusual circumstances exist and, thus, the categorical exemptions are not subject to any applicable exception. IPA's existing facility IPP has been in operation since the 1980s, and Repowering pursuant to the Amendatory Contract would reduce air emissions compared to baseline conditions. There is nothing unusual about the Amendatory Contract, Renewal Contracts, or the Repowering.

CITY ATTORNEY

The Office of the City Attorney reviewed and approved the Agreements and Resolution as to form and legality that are listed below.

ATTACHMENTS

- Resolution
- Second Amendatory Power Sales Contract (LADWP No. 10437)
- Renewal Power Sales Contract
- Agreement for Sale of Renewal Excess Power
- Power Purchase Termination Agreement