



Agenda Report

February 29, 2016

TO: Honorable Mayor and City Council

FROM: Water and Power Department

SUBJECT: AUTHORIZE THE CITY MANAGER, OR DESIGNEE, TO EXECUTE THE MEMORANDUM OF AGREEMENT ON THE PACIFIC DIRECT CURRENT INTERTIE ("PDCI")

RECOMMENDATION:

It is recommended that the City Council:

1. Find that the recommended action is an administrative activity and not a project subject to the California Environmental Quality Act (CEQA) as defined in Section 21065 of CEQA and Section 15378 of the State CEQA Guidelines and, as such, no environmental document pursuant to CEQA is required; and
2. Authorize the City Manager or designee to execute the "Memorandum of Agreement on the Pacific Direct Current Intertie ("PDCI")" among the United States Of America, Department of Energy, acting by and through the Bonneville Power Administration ("BPA"), the Los Angeles Department of Water and Power ("LADWP"), Southern California Edison Company ("SCE"), the City of Burbank ("Burbank"), the City of Glendale ("Glendale"), and the City of Pasadena ("Pasadena").

BACKGROUND:

In 1967, the City of Pasadena entered into the Pacific Intertie D-C Transmission Facilities Agreement with the Los Angeles Department of Water and Power ("LADWP"), Pasadena Contract #7367, for a 2.3% share (currently 72 MW) of the PDCI. The PDCI enables Pasadena to access low cost hydroelectric energy from the Pacific Northwest during the spring and summer, and provides a potential market for excess resources during the winter. Historically, Pasadena has used the PDCI to facilitate economic seasonal exchanges of electric capacity and energy with utilities in the northwest.

The PDCI is a high voltage (500 kilovolt) direct current transmission line that extends 846 miles from the Celilo converter station at The Dalles, Oregon to the Sylmar converter station near Los Angeles (see map provided as Attachment 1). The converter stations transform electricity from the alternating current ("AC") used in most households and businesses to direct current ("DC") for long-distance transmission, and back to AC again at the end of the transmission line. The PDCI is the longest commercial transmission line of its kind in the nation, serving as an electron superhighway between the Pacific Northwest and Southern California. The PDCI was commissioned in 1970 to efficiently exchange electrical power between two regions with diverse load patterns and power generation. Pacific Northwest loads typically peak in the winter, while Southern California loads typically peak in the summer. The Pacific Northwest has an abundance of hydroelectric generating resources, while Southern California still relies predominately on natural gas-fired thermal generation. The ability to exchange power between regions will remain valuable in the future, as California increases its proportion of renewable energy. There are an increasing number of hours in the year when the amount of non-dispatchable renewable generation (e.g., solar and wind) plus the minimum amount of flexible thermal generation required for reliability will exceed the load demands of California. The excess must either be exported or curtailed. Each region can help the other serve loads reliably and at lower costs by exchanging surplus power, which can also displace traditional coal and natural-gas fired generation to some extent, reducing overall carbon emissions.

This report refers to four separate documents: (i) The original Transmission Facilities Agreement that addresses the construction, ownership, operation, maintenance and right to use capacity on the southern portion of the PDCI, (ii) The Memorandum of Agreement among all six of the PDCI owners, including Pasadena, that is the subject of this request for authorization, (iii) the Operating Agreement, that is to be executed by BPA and LADWP only, and (iv) the resolution that has been signed by Pasadena and the other Southern Owners under the existing Transmission Facilities Agreement authorizing LADWP to sign the Operating Agreement as Operating Agent on their behalf.

Under the Transmission Facilities Agreement, Pasadena acquired a 2.308% share of the southern facilities, together with LADWP (40%), SCE (50%), and the Cities of Burbank (3.846%) and Glendale (3.846%) (the "Southern Owners"). Pasadena funds its 2.308% share of capital, operation and maintenance costs, and recovers those costs, including an approximate 8% return on its capital investment, through its FERC approved Transmission Revenue Requirement as a participating transmission owner in the California Independent System Operator ("CAISO") balancing authority area.

The 265-mile northern portion of the PDCI from the Celilo converter station to the Nevada-Oregon border is owned and operated by the Bonneville Power Administration, a federal power marketing agency. The southern portion from the Nevada-Oregon border to Sylmar is owned by the Los Angeles Department of Water and Power ("LADWP"), Southern California Edison ("SCE"), and the cities of Burbank, Glendale and Pasadena (the "Southern Owners"). The southern portion is operated by the

LADWP, under Transmission Facilities Agreements between the LADWP and the other Southern Owners. Pasadena's current share of the PDCI is 2.308% of the 3,100 megawatt ("MW") PDCI capacity, or 72 MW. It is possible that the PDCI will be updated to as much as 3,800 MW over the next few years.

Although the Transmission Facilities Agreements between the Southern Owners establish general guidelines for the ownership, operation and maintenance of the *southern portion* of the PDCI, a formal agreement between BPA and the Southern Owners to coordinate the operation and maintenance of the PDCI *between* the northern and southern portions has never been executed. Since the project's inception, the entirety of the PDCI has been maintained, repaired, and upgraded under a tacit (unwritten) agreement between BPA and the Southern Owners, consistent with "good utility practices."

Over the decades that the PDCI has been in operation, the electricity market and its regulatory structure have evolved. The Federal Energy Regulatory Commission ("FERC") has issued a number of orders affecting the use and operation of interstate transmission lines. A prominent one was Order 888 "Promoting Wholesale Competition Through Open Access Non-discriminatory Transmission Services by Public Utilities." The North American Electric Reliability Corporation ("NERC") has also modified a number of regulations affecting the operation of the national electric grid.

THE PROPOSED PDCI MEMORANDUM OF AGREEMENT:

The PDCI owners recognize that future projects to increase the capacity of the PDCI, preparing responses to requests for transmission access under FERC Orders, and complying with NERC reliability standards may require greater transparency and formalized rules of practice and procedures for the operation and maintenance of the PDCI. The Memorandum of Agreement to be executed by the six facility owners (including Pasadena), and the Operating Agreement to be executed only by LADWP and BPA, were prepared in response to these needs.

The Memorandum of Agreement addresses the following points:

- Ownership and title to the PDCI between BPA (Northern Portion) and the Southern Owners (Southern Portion). The Parties are to meet and confer as necessary, and at least annually, to discuss capital improvements and operating work. The original Transmission Facilities Agreements addresses funding, ownership and title to related assets among the Southern Owners, and these are unchanged by the Memorandum of Agreement. The annual meeting will also address any upcoming events that may impact financial, legal or regulatory responsibilities of the parties, or any other matter relating to the PDCI.
- Operating Agents. BPA is to be the Operating Agent for the Northern Portion, and LADWP is to be the Operating Agent for the Southern Portion pursuant to the Transmission Facilities Agreements between LADWP and the Southern Owners.

- PDCI Transfer Capability. The parties agree to take commercially reasonable measures according to their ownership interests and consistent with good utility practice to maintain the electrical transfer capability of the PDCI of at least 3100 MW, unless restricted due to system operating limits, or maintenance and construction under the PDCI Operating Agreement. The parties will coordinate all study work and reports regarding facility additions and modifications to increase the capacity.
- Interconnection Procedures and Coordination of Studies. The Memorandum of Agreement describes development of joint or coordinated interconnection procedures, and the coordination between the lead Operating Agent and other parties with respect to interconnection requests.
- Limits on System Modifications to the PDCI. A party seeking to modify its portion of the PDCI must provide written notice and details to the other parties, coordinate the work, and follow good utility practice to mitigate any adverse effects on the PDCI. Mitigation of impacts resulting from an interconnection to the PDCI will be the responsibility of the Interconnection Customer.
- Information Exchange. The Memorandum of Agreement addresses the exchange of proprietary or confidential information among the parties.
- Dispute Resolution Procedures and other Administrative Matters.

Additionally, the Operating Agreement between the Operating Agents, BPA and LADWP, is necessary to formally separate and define the roles and obligations of the two Operating Agents within and between their respective portions of the PDCI. BPA and LADWP have agreed to the terms and conditions of the Operating Agreement between themselves, and those terms have been reviewed and approved by the other owners.

The Advisory Committee, made up of the Southern Owners of the PDCI, including Pasadena, has authorized LADWP to execute the Operating Agreement by signing a resolution that is Exhibit C of the Operating Agreement. The resolution signifies the various owners' agreement to the division of duties and roles as described in the Operating Agreement. The Advisory Committee was established under the original PDCI Transmission Facilities Agreements.

Execution by Pasadena of the recommended Memorandum of Agreement will not materially affect ownership, entitlement shares, operating costs, or capital improvements to replace aging infrastructure or increase PDCI capacity. The Memorandum of Agreement and the Operating Agreement will simply document procedures that have been practiced since the inception of the PDCI. BPA will remain the operator of the northern portion, and LADWP will remain the operator of the southern portion under the control of the Southern Owner's PDCI Advisory Committee.

COUNCIL POLICY CONSIDERATION:

Approval of the recommended action will ensure that the PDCI is maintained and operated in accordance with good utility practices, NERC reliability standards and FERC Orders. It will help PWP efficiently and reliably serve load, while meeting its Renewable Portfolio Standard and the City Council's Strategic Planning Goals of improving and maintaining infrastructure, improving the quality of life, enhancing public safety, and complying with national laws and regulations.

ENVIRONMENTAL ANALYSIS:

The execution of the PDCI Memorandum of Agreement is not subject to the California Environmental Quality Act (CEQA) in accordance with Section 21065 of CEQA and State CEQA Guidelines Sections 15060 (c)(2), 15060 (c)(3), and 15378. It is an administrative action that would not cause either a direct physical change in the environment or a reasonably foreseeable indirect physical change in the environment. Therefore, the proposed action of executing the PDCI Memorandum of Agreement does not constitute a "project" subject to CEQA, as defined in Section 21065 of CEQA and Section 15378 of the State CEQA Guidelines. Since the action does not constitute a project subject to CEQA, no environmental document is required.

FISCAL IMPACT:

There is no fiscal impact to execute the PDCI Memorandum of Agreement. The proposed PDCI agreements serve only to codify current PDCI operations and practices. Executing the Memorandum of Agreement will have no impact on Pasadena Water and Power ratepayers and there are no anticipated impacts to other operational programs or capital projects as a result of this action.

Pasadena's share of PDCI operation and maintenance costs are funded by the Light and Power Fund operating account. Pasadena's share of PDCI capital projects are funded by the Light and Power Fund CIP account. Pasadena's share of the Fiscal Year 2015 PDCI operation and maintenance budget was approximately \$320,000. For Fiscal Year 2017, Pasadena's share of the PDCI capital budget will be approximately \$2 million. These costs are recovered from the CAISO through Pasadena's Transmission Revenue Requirement.

Respectfully submitted,



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Approved by:



STEVE MERMELL
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Attachment: PDCI Map