LADWP Contract No. BP 14-019 BPA Contract No. 14ZZ-15941 Executable Version

MEMORANDUM OF AGREEMENT ON THE PACIFIC DIRECT CURRENT INTERTIE ("PDCI")

This MEMORANDUM OF AGREEMENT ON THE PACIFIC DIRECT CURRENT INTERTIE ("Agreement"), is entered into 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"), a proprietary department organized and existing under the charter of the CITY OF LOS ANGELES, a municipal corporation organized and existing under the laws of the State of California, SOUTHERN CALIFORNIA EDISON COMPANY ("SCE"), a California Corporation, the CITY OF PASADENA ("Pasadena"), a municipal corporation organized and existing under the laws of the State of California, the CITY OF BURBANK ("Burbank"), a municipal corporation organized and existing under the laws of the State of California, and the CITY OF GLENDALE ("Glendale"), a municipal corporation organized and existing under the laws of the State of California, each individually referred to herein as a "Party" and collectively as the "Parties".

RECITALS

WHEREAS, the PDCI is a single high-voltage direct current ("DC") transmission system that includes the Celilo Converter Station ("Celilo") located in The Dalles, Oregon, the Sylmar Converter Station ("Sylmar") located in Sylmar, California, and the DC transmission line that connects Celilo and Sylmar; and

WHEREAS, the PDCI was built jointly by the Parties as a single high voltage DC system to connect the Pacific Northwest with Southern California; and

WHEREAS, the Northern Portion of the PDCI is wholly owned and operated by BPA; and

WHEREAS the Southern Portion of the PDCI is owned jointly by LADWP, SCE, Pasadena, Burbank and Glendale and operated by LADWP (collectively "Southern Owners"); and

WHEREAS, the PDCI is comprised of unique control systems that require coordination between each portion of the PDCI in order to deliver power in either direction; and

WHEREAS, the Parties wish to continue their commitment to maintain the long-term transfer capability of the PDCI with a rating of not less than 3100 MW, north-to-south or south-to-north, between the Celilo and Sylmar terminals; and

WHEREAS, BPA has authorized, in coordination with the Southern Owners, a major upgrade to the Northern Portion of the PDCI, with construction scheduled primarily

in calendar year 2015, which together with a modification to the Southern Portion of the PDCI by the Southern Owners, could increase long-term transfer capability of the PDCI to 3220 MW, and potential transfer capability of 3800 MW if a substantial upgrade to the Southern Portion is made in the future; and

WHEREAS, BPA, as Operating Agent of the Northern Portion, and LADWP, as Operating Agent of the Southern Portion, expect to enter into a separate agreement (the Pacific Direct Current Intertie Operating Agreement) to address the interconnected operation of the PDCI; and

WHEREAS, the Parties now wish to enter into a formal agreement to document their ownership, certain procedures and coordination, and obligations to each other with respect to the PDCI.

NOW, THEREFORE, the Parties understand and agree as follows:

1. TERM AND TERMINATION

This Agreement shall be effective on September 1, 2016 ("Effective Date") subject to the execution of the Agreement by all Parties and the acceptance of the Agreement by the Federal Energy Regulatory Commission and shall continue in effect until the earlier of: (i) thirty (30) years from the Effective Date; (ii) the date that the facilities, equipment and transmission elements comprising the PDCI are permanently removed from service; (iii) the date ordered by a regulatory agency or court of competent jurisdiction that the PDCI must cease operations; or (iv) the date computed upon a Party's exercise of its right to terminate this Agreement upon three (3) years advanced written notice to all of the other Parties; provided, however, in the event that a Southern Owner's ownership rights in the Southern Portion shall have terminated, then only such Southern Owner shall no longer be a party to this Agreement. All liabilities accrued hereunder shall be and are hereby preserved until satisfied.

2. DEFINITIONS

- (a) Cápital Improvements shall mean any additions, up-rating, upgrade, expansion, replacement or betterment undertaken either individually by BPA on the Northern Portion or either individually or collectively by any one or more of the Southern Owners on the Southern Portion of the PDCI.
- (b) City-Burbank Pacific Intertie D-C Transmission Facilities Agreement shall mean the original agreement entered into by Burbank and LADWP under DWP Agreement No. 10129 and effective on or around March 16, 1967, as may be amended from time to time, relating to the PDCI.
- (c) City-Edison Pacific Intertie D-C Transmission Facilities Agreement shall mean the original agreement entered into by SCE and LADWP under DWP Agreement No. 10078 and effective on or around March 31, 1966, as amended by DWP Agreement No. BP02-007 and as may be further amended

- from time to time, relating to the PDCI, and on file with the Federal Energy Regulatory Commission under SCE's Rate Schedule No. 448.
- (d) City-Glendale Pacific Intertie D-C Transmission Facilities
 Agreement shall mean the original agreement entered into by Glendale and
 LADWP under DWP Agreement No. 10128 and effective on or around March
 16, 1967, as may be amended from time to time, relating to the PDCI.
- (e) City-Pasadena Pacific Intertie D-C Transmission Facilities
 Agreement shall mean the original agreement entered into by Pasadena and
 LADWP under DWP Agreement No. 10130 and effective on or around March
 16, 1967, as may be amended from time to time, relating to the PDCI.
- (f) Good Utility Practice shall mean any of the practices, methods and acts engaged in or approved by a significant portion of the electric utility industry during the relevant time period, or any of the practices, methods and acts which, in the exercise of reasonable judgment in light of the facts known at the time the decision was made, could have been expected to accomplish the desired result at a reasonable cost consistent with good business practice, reliability, safety, and expedition. Good Utility Practice is not intended to be limited to the optimum practice, method, or act to the exclusion of all others, but rather to be acceptable practices, methods, or acts generally accepted in the region, including those practices required by Federal Power Act section 215(a)(4).
- (g) Interconnection Customer shall mean an entity, including the transmission provider, transmission owner or any of the affiliates or subsidiaries of either, that proposes to interconnect its generating facility or wires-to-wires facility with the PDCI.
- (h) Northern Portion shall mean the northern system of the PDCI as separated by the Nevada-Oregon state line border ("NOB"), extending through Celilo to Big Eddy Substation bus bars including all associated transmission facilities and lines controlled and operated by BPA that are used solely for the purpose of providing transmission service on the PDCI.
- (i) Operating Agent shall mean the Party responsible for the performance of Operating Work, processing of interconnection requests, and implementing Capital Improvements on the relevant portion of the PDCI.
 - (1) BPA shall be the lead Operating Agent ("Lead OA") with respect to the performance of any Operating Work, processing of interconnection requests and implementing of Capital Improvements on the Northern Portion; LADWP will be the non-lead Operating Agent ("Non-Lead OA").
 - (2) LADWP shall be the Lead OA with respect to the performance of any Operating Work, processing of interconnection requests and implementing of

Capital Improvements on the Southern Portion, BPA will be the Non-Lead OA.

- (j) Operating Work shall include, but not be limited to, any work undertaken by the Operating Agent including engineering, contract preparation, purchasing, repair, supervision, recruitment, training, expediting, inspection, accounting, testing, protection, operation, scheduling, use, management, retirement, reconstruction, and maintenance associated with operating either the Northern Portion or the Southern Portion of the PDCI.
- (k) Pacific Direct Current Intertie or PDCI shall mean the ±500 kV DC system that is operated as a continuous path, divided into the Northern Portion and the Southern Portion, and associated substation facilities.
- (1) Pacific Direct Current Intertie Operating Agreement shall mean the operating agreement, BPA No. 14TX-15783/LADWP No. BP 14-018, between BPA and LADWP.
- (m) PDCI Transfer Capability shall mean the capability of the PDCI to reliably transfer power between Big Eddy Substation and Sylmar Switching Station bus bars as measured at the output of the source DC converter terminal and not limited by alternating current ("AC") system operating constraints. The units of PDCI Transfer Capability are expressed in megawatts ("MW").
- (n) Point of Interconnection shall mean the point or alternative points identified in response to an Interconnection Customer's request to connect its facilities to the PDCI for the purpose of transferring power.
- (o) Southern Owners shall mean LADWP, SCE, Pasadena, Burbank and Glendale as joint owners of the Southern Portion of the PDCI.
- (p) Southern Portion shall mean the southern system of the PDCI as separated by the NOB extending through the D-C Transmission Facilities, as that term is defined in Article 3(a) of the City-Burbank Pacific Intertie D-C Transmission Facilities Agreement, the City-Glendale Pacific Intertie D-C Transmission Facilities Agreement and the City-Pasadena Pacific Intertie D-C Transmission Facilities Agreement and in Article 3(b) of the City-Edison Pacific Intertie D-C Transmission Facilities Agreement.
- (q) System Modifications shall mean those additions, modifications or changes to the PDCI that impact the operation, stability or reliability of the PDCI. System Modification includes any potential interconnection to the PDCI.
- (r) Tariff shall mean a Party's transmission provider's tariff through which open access transmission service and interconnection service are offered, as amended or supplemented from time to time, or any successor tariff.

3. OWNERSHIP AND TITLE TO THE PDCI

BPA is owner of all facilities, equipment, transmission elements and land or land rights related to the PDCI, including any Capital Improvements that constitute the Northern Portion. BPA shall be responsible for funding of Capital Improvements and Operating Work on the Northern Portion of the PDCI initiated by and for the benefit of BPA.

The ownership of and title to all facilities, equipment, transmission elements and land or land rights related to the PDCI, including any Capital Improvements, that constitute the Southern Portion are governed by the terms and conditions set forth in the following agreements between LADWP and each of the other Southern Owners: (1) the City-Burbank Pacific Intertie D-C Transmission Facilities Agreement; (2) the City-Edison Pacific Intertie D-C Transmission Facilities Agreement; (3) the City-Pasadena Pacific Intertie D-C Transmission Facilities Agreement; and (4) the City-Glendale Pacific Intertie D-C Transmission Facilities Agreement. The Southern Owners shall be responsible for funding of Capital Improvements and Operating Work on the Southern Portion of the PDCI initiated by and for the benefit of the Southern Owners or any subset thereof. Responsibility for such costs shall be in accordance with the terms and conditions of the foregoing agreements between LADWP and each of the other Southern Owners.

The Parties shall meet and confer as necessary to discuss Capital Improvements and Operating Work proposed on one portion of the PDCI for the benefit of, or at the request of, the Party(ies) owning the other portion. Funding of such Capital Improvements and Operating Work, and ownership and title to related assets, shall be as determined under separate agreement.

4. OPERATING AGENTS

BPA is the designated Operating Agent for the Northern Portion of the PDCI. LADWP is the designated Operating Agent for the Southern Portion of the PDCI pursuant to the agreements between LADWP and each of the Southern Owners.

5. PDCI TRANSFER CAPABILITY MINIMUM

Each Party agrees and shall take commercially reasonable measures according to its ownership interest and consistent with Good Utility Practice to maintain the PDCI Transfer Capability of 3100 MW north-to-south or south-to-north between Big Eddy Substation and Sylmar Switching Station bus bars. The obligation to maintain the PDCI Transfer Capability at 3100 MW shall not apply to temporary capacity reductions due to:

- (1) System operating limits, or
- (2) Maintenance and construction under the Pacific Direct Current Intertie Operating Agreement.

In the event one or more Parties seek to increase the PDCI Transfer Capability, the Parties shall coordinate all study work and reports to identify the facility additions and modifications required to accommodate such request. The Lead OA shall

manage the coordination of any impacts and shall coordinate all study work consistent with this Agreement and pursuant to the PDCI Operating Agreement, as applicable.

6. INTERCONNECTION PROCEDURES AND COORDINATION OF STUDIES
The Parties shall seek to develop a joint or coordinated interconnection procedure for
the PDCI consistent with the Principles of Joint or Coordinated Interconnection
Procedures, attached herein as Exhibit A. Until such joint or coordinated
interconnection procedure is effective, the Lead OA shall follow the Principles of
Joint or Coordinated Interconnection Procedures to the extent that doing so will not
violate the Party's respective Tariff or existing business practices.

Any Party in receipt of a request to interconnect a generating or wires-to-wires facility to any portion of the PDCI shall refer the Interconnection Customer to the Lead OA. The Lead OA shall notify all Parties of the request and shall coordinate with the other Parties consistent with the Principles of Joint or Coordinated Interconnection Procedures. The Parties will meet and confer with respect to PDCI impacts and mitigation obligations for an Interconnection Customer for PDCI facilities required to accommodate an interconnection request.

Prior to the start of engineering, design, procurement, and construction, the Parties shall ensure the Interconnection Customer satisfies contractual and funding obligations necessary to facilitate the interconnection consistent with the Principles of Joint or Coordinated Interconnection Procedures, including the following:

- (1) The PDCI will be studied as one system. No portion of the PDCI will be considered to be a separate third-party affected system for purposes of studying interconnection requests. PDCI impacts will be identified and mitigation solutions will be developed through the coordinated study process of an interconnection request.
- (2) The Interconnection Customer must execute an interconnection agreement with the owner(s) of the relevant portion of the PDCI on which the interconnection has been proposed.
- (3) The Interconnection Customer must execute funding and construction agreements with appropriate Party(ies) to facilitate the interconnection to address interconnection costs for system upgrades, interconnection facility costs, and mitigation of impacts to the PDCI or any portion thereof.
- (4) The Interconnection Customer must execute a single joint operating agreement with both Operating Agents.
- 7. SYSTEM MODIFICATIONS BY PARTIES OF THE PDCI
 A Party seeking any modification to its portion of the PDCI shall not undertake such
 System Modification without providing written notification and submitting details of
 the System Modification to the other Parties. A Party, either on its own behalf or on

behalf of any third Party, proposing a System Modification shall coordinate study work consistent with this Agreement and shall plan and implement such System Modification in accordance with Good Utility Practice including mitigation of any adverse effects to any portion of the PDCI, including but not limited to a permanent reduction of the PDCI Transfer Capability.

The provisions of this Section 7 relating to potential adverse effects to any portion of the PDCI including reduction of the PDCI Transfer Capability, and mitigation thereof for a System Modification shall not apply to maintenance and construction under the Pacific Direct Current Intertie Operating Agreement, except to the extent that such maintenance and construction may result in a permanent reduction of the PDCI Transfer Capability.

Mitigation of impacts to the PDCI resulting in interconnection to the PDCI shall be the responsibility of the Interconnection Customer.

8. MITIGATION OF IMPACTS TO THE PDCI

No Party waives its right to assert the need for mitigation of potential impacts that such Party otherwise may determine to be required as a result of a proposed System Modification to the PDCI.

9. INFORMATION EXCHANGE

All information supplied by a Party on behalf of itself or another (the "Disclosing Party") to another Party (the "Recipient") under this Agreement, the Pacific Direct Current Intertie Operating Agreement or any interconnection procedures in connection with the foregoing, clearly marked or otherwise designated in writing as "proprietary" or "confidential" and "subject to this Agreement No. 14ZZ-15941" on the face of the document, will be considered proprietary information; or, if the Disclosing Party orally identifies such information as confidential and proprietary at the time of oral disclosure, and, within five (5) days after such disclosure provides a written record in accordance with this Section 9 and consistent with the notice provisions of Exhibit B to the Agreement, such information will also be treated as proprietary information (all such proprietary information, considered "Proprietary Information"). The Recipient will make the same efforts to keep and protect the Proprietary Information of the Disclosing Party as it would its own Proprietary Information.

Proprietary Information will not be disclosed by the Recipient to any third party, except:

- (a) to consultants or other advisors of the Recipient who have a need to know to further the purposes set forth herein;
- (b) if such information has entered the public domain (other than through the actions of the Recipient);

- (c) as required by law, regulation, or by any authority having jurisdiction, as the Recipient's legal counsel shall determine, including under the Freedom of Information Act, 5 U.S.C. § 552 (FOIA) and the California Public Records Act,(CA. Govt. Code §§ 6250 et seq); provided the Recipient notifies the Disclosing Party as soon as practicable, and if possible before disclosing Proprietary Information;
- (d) with the prior written consent of the Disclosing Party;
- (e) if such information was in the lawful possession of the Recipient on a nonproprietary basis before receiving it from the Disclosing Party;
- if such information was independently developed by the Recipient without reference to Proprietary Information of the Disclosing Party; or
- (g) as the Parties may otherwise agree.

Unless the Parties otherwise agree in writing, information designated as Proprietary Information will no longer be deemed Proprietary Information upon the earlier of: (i) the Disclosing Party notifies the Recipient that it no longer is Proprietary Information, or (ii) five (5) years from the date that the Disclosing Party supplied such Proprietary Information to the Recipient.

Subject to the terms of this Section 9, each Party may use Proprietary Information solely to fulfill its obligations to another Party under this Agreement or to satisfy its regulatory requirements.

10. ANNUAL MEETING

The Parties shall meet annually, or as the Parties otherwise determine necessary, to discuss any upcoming events that will or may impact the operations, maintenance, financial, legal or regulatory responsibilities of the Parties, or any other matter relating to the PDCI.

11. DISPUTE RESOLUTION PROCEDURES

In the event a Party has a dispute, or asserts a claim, that arises out of or in connection with this Agreement, such Party (the "Disputing Party") shall provide the other Parties with written notice of the dispute or claim ("Notice of Dispute"). Such dispute or claim shall be referred to a designated senior representative of each Party for resolution on an informal basis as promptly as practicable after receipt of the Notice of Dispute by the other Parties. No Party shall commence any proceedings or actions, or seek any declaratory or other orders, in connection with a dispute or claim noticed in a Notice of Dispute for at least thirty (30) calendar days after receipt of the Notice of Dispute by the other Parties. The Parties are not obligated to continue dispute resolution efforts after the thirty (30) calendar days have expired.

While attempts are being made pursuant to this Section 11 to resolve a dispute or claim noticed in a Notice of Dispute, the Parties will continue to perform all obligations under this Agreement and will continue to comply with all terms of this Agreement without waiver of any remedies available at law or equity.

12. UNCONTROLLABLE FORCES

The Parties shall not be in breach of their respective obligations to the extent the failure to fulfill any obligation is due to an Uncontrollable Force. "Uncontrollable Force" means an event beyond the reasonable control of, and without the fault or negligence of, the Party claiming the Uncontrollable Force that prevents that Party from performing its contractual obligations under this Agreement and which, by exercise of that Party's reasonable care, diligence and foresight, such Party was unable to avoid. Uncontrollable Forces include, but are not limited to:

- (a) strikes or work stoppage;
- (b) floods, earthquakes, or other natural disasters; terrorist acts; and
- (c) final orders or injunctions issued by a court or regulatory body having competent subject matter jurisdiction which the Party claiming the Uncontrollable Force, after diligent efforts, was unable to have stayed, suspended, or set aside pending review by a court of competent subject matter jurisdiction.

Neither the unavailability of funds or financing, nor conditions of national or local economies or markets shall be considered an Uncontrollable Force. The economic hardship of any Party shall not constitute an Uncontrollable Force. Nothing contained in this provision shall be construed to require any Party to settle any strike or labor dispute in which it may be involved.

If an Uncontrollable Force prevents a Party from performing any of its obligations under this Agreement, such Party shall: (1) immediately notify the other Parties of such Uncontrollable Force by any means practicable and confirm such notice in writing as soon as reasonably practicable; (2) use its best efforts to mitigate the effects of such Uncontrollable Force, remedy its inability to perform, and resume full performance of its obligation hereunder as soon as reasonably practicable; (3) keep the other Parties apprised of such efforts on an ongoing basis; and (4) provide written notice of the resumption of performance. Written notices sent under this section must comply with Exhibit B, Notices.

13. LIMITATION OF LIABILITY

No Party shall be liable to any Party under any circumstances, under any theory of liability at law or in equity, whether such liability is known or unknown at the time of signing this agreement, or any time thereafter, for consequential damages including but not limited to any loss of use of equipment, cost of replacement power, lost revenue or profit, downtime costs, business interruption, incidental, or indirect, damages as a result of the operation, maintenance, and/or construction of the PDCI

line pursuant to this Agreement and/or the Pacific Direct Current Intertie Operating Agreement. This limitation of liability shall not affect or alter the rights and obligations of any of the Parties under any other agreement.

14. GENERAL PROVISIONS

(a) Clarifications

In this Agreement, except as otherwise expressly provided or as the context otherwise requires:

- (1) headings and captions are for convenience only and are not intended as a guide to interpretation of this Agreement or any portion thereof;
- (2) the words "include" and "including" when following any general statement or term, are not to be construed as limiting the general statement or term to the specific items or matters set forth or to similar items or matters, but rather as permitting the general statement or term to refer to all other items or matters that could reasonably fall within its broadest possible scope;
- (3) words importing the singular number, where the context requires, include the plural and vice-versa and words importing the masculine gender include the feminine gender and the neuter and vice-versa, as appropriate;
- (4) unless otherwise noted, a reference to a section or exhibit means a section or exhibit of this Agreement;
- (5) a reference to an entity includes any successor to that entity; and
- (6) if any conflict arises between provisions contained within the body of this Agreement and those contained within the exhibits to this Agreement, the body of the Agreement shall prevail.

(b) Severability

Wherever possible, each provision of this Agreement will be interpreted in such a manner as to be effective, valid and enforceable under applicable law. If any provision of this Agreement is or becomes illegal, invalid or unenforceable under applicable law, such provision will be deemed severed from this Agreement to the extent of such illegality, invalidity or unenforceability and its illegality, invalidity or unenforceability will not affect the legality, validity or enforceability of the remaining provisions of this Agreement, unless such illegality, invalidity or unenforceability materially or adversely affects the spirit or intent of this Agreement.

(c) Assignment

This Agreement is binding on any successors and assigns of the Parties. No Party may otherwise transfer or assign this Agreement, in whole or in part,

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Los Angeles Department of Water and Power, Southern California Edison Company, City of Pasadena, City of Burbank, City of Glendale without the other Parties' written consent. Such consent shall not be unreasonably withheld.

(d) Waiver

No waiver of any provision or breach of this Agreement shall be effective unless such waiver is in writing and signed by the waiving Party, and any such waiver shall not be deemed a waiver of any other provision of this Agreement or any other breach of this Agreement.

(e) Enurement

This Agreement will enure to the benefit of and be binding upon the Parties and their respective successors and permitted assigns.

(f) No Partnership

This Agreement shall not be interpreted or construed to create an association, joint venture, partnership or agency among the Parties or to impose any partnership obligations or liability upon any Party. Further, no Party shall have any right, power or authority to enter into any agreement or undertaking for or on behalf of, to act as or be an agent or representative of, or to otherwise bind another Party.

(g) Amendments and Exhibit Revisions

Except where this Agreement explicitly allows one Party to unilaterally amend a provision or revise an exhibit, no amendment or exhibit revision to this Agreement shall be of any force or effect unless set forth in a written instrument signed by authorized representatives of each Party.

(h) Entire Agreement

This Agreement, including documents expressly incorporated by reference, constitutes the entire agreement among the Parties. It supersedes all previous communications, representations, or contracts, either written or oral, which purport to describe or embody the subject matter of this Agreement.

(i) Exercise of Rights

Nothing contained in this Agreement will be construed as affecting in any way the ability of any Party to exercise its rights under relevant governing laws or pursuant to any rules and regulations of a commission with jurisdiction.

(j) No Third Party Beneficiaries

This Agreement is made and entered into for the sole benefit of the Parties, and the Parties intend that no other person or entity shall be a direct or indirect beneficiary of this Agreement.

(k) Governing Law

This Agreement shall be governed by and construed in accordance with Federal Law without reference to conflicts of law among the several states. To the degree that no Federal law applies, the laws of the State of California will apply.

(l) Surviving Obligations

Termination or expiration of this Agreement for any reason shall be without prejudice to any rights that have accrued to the benefit of one or more Parties with respect to coordination of individual interconnection requests under Section 6 or information exchange requirements under Section 9 prior to such termination or expiration. Such termination or expiration does not relieve a Party from obligations that are expressly indicated to survive the termination or expiration of this Agreement.

COUNTERPART EXECUTION 15. This Agreement may be executed in counterparts, each of which shall be an original and all of which, when executed, shall constitute the same Agreement. 16, **SIGNATURES** The Parties have executed this Agreement-as-of the last date indicated-below. LOS ANGELES DEPARTMENT OF UNITED STATES OF AMERICA WATER AND POWER Department of Energy Bonneville Power Administration By: By: Young S. Linn Name: Name: (Print/Type) (Print/Type) Title: Senior Transmission Account Executive Title: Date: Date: SOUTHERN CALIFORNIA CITY OF PASADENA **EDISON COMPANY** By: By: Name: Name: (Print/Type) Title: Title: Date: Date: CITY OF BURBANK CITY OF GLENDALE By: By: Name: Name:

(Print/Type)

Title:

Date:

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	Name:	(Print/Type)	Name:	Young S. Linn (Print/Type)
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COUNTERPART EXECUTION

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	Bonneville Power Administration
By:	Ву:
Name: (Print/Type)	Name: Young S. Linn (Print/Type)
Title:	Title: Senior Transmission Account Executive
Date:	Date:
SOUTHERN CALIFORNIA EDISON COMPANY	CITY OF PASADENA
Ву:	By:
Name: (Print/Type)	Name: (Print/Type)
Title:	Title:
Date:	Date:
CITY OF BURBANK	CITY OF GLENDALF
By:	Ву:
Name:	Name: Scott Ochoa
(Print/Type) Title:	Title: City Manager
Date:	Date: 1/24/15
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	Principal Assistant City Attorney
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Los Angeles Department of Water and Power, Southern California Edison Company, City of Pasadena, City of Burbank, City of Glendale

Memorandum of Agreement on the Pacific Direct Current Intertie (PDCI)

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WATER AND POWER	Department of Energy
	Bonneville Power Administration
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By:[] 시경한 David H. Wright	By: Jesy S. M.
Manager	Name: Young S. Linn (Print/Type)
	Title: Senior Transmission Account Executive
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Barbara E. Moschos	Date: 7/13/2016
Board Secretary	1111/20.0
SOUTHERN CALIFORNIA	CITY OF PASADENA
EDISON COMPANY	
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Ву:	By:
Name:	Name:
(Print/Type)	(Print/Type)
Title:	Title:
Date:	Date:
CITY OF BURBANK	CITY OF GLENDALE
By:	By:
by:	
Name:	Name:
(Print/Type)	(Print/Type)
Title:	Title:
	
Date:	Date:

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EXHIBIT A PRINCIPLES OF JOINT OR COORDINATED INTERCONNECTION PROCEDURES

- 1. Any Party in receipt of an interconnection request shall refer the Interconnection Customer to the appropriate Lead OA responsible for the portion of the line on which the request is proposed.
- 2. The Lead OA will review and validate the interconnection request and put it in its queue.
- 3. The Lead OA will notify the other Parties of the PDCI within a reasonable time period following the validation of the interconnection request.
- 4. The Lead OA will set up the scoping meeting with the Interconnection Customer within a reasonable time and will invite the other Parties to the meeting. The other Parties may attend at their option and expense.
- 5. The Lead OA will initiate the coordinated study process with the Non-Lead OA. The validated interconnection requests will be studied in order of the Lead OA's queue. However, the studies will include all valid interconnection requests in both Operating Agents' queues based on the date received.
- 6. The Lead OA will tender/execute the individual study agreements with the Interconnection Customer for the Feasibility Study, System Impact Study/Harmonic Analysis Study, and Facilities Study.
 - a. The Lead OA will coordinate study reviews with the Non-Lead OA. The Operating Agents will coordinate with each other in order to accommodate deadlines and other timing constraints. The Non-Lead OA will make best efforts to complete its study reviews within the timeline established by the Lead OA.
 - b. The Non-Lead OA will tender/execute applicable study funding agreement(s) with the Interconnection Customer and will perform studies as necessary to be included in the Lead OA report.
 - c. The study agreements will allow for sharing of Interconnection Customer data/information with the Operating Agents and owners of the PDCI to the extent necessary to carry out coordinated studies.
 - d. All Parties will be notified and invited to attend the study review meetings at their expense.
 - e. Both Operating Agents will sign off on the study results.

- 7. The PDCI will be studied as one system. No portion of the PDCI will be considered to be a separate third-party affected system for purposes of studying interconnection requests.
 - a. PDCI impacts will be identified and mitigation solutions will be developed, through the coordinated study process of an interconnection request.
 - b. Any impact outside of the PDCI facilities will be studied separately as an affected system.
- 8. Following the Facilities Study, the Lead OA will prepare an interconnection agreement for execution with the Interconnection Customer.
 - a. Based on the coordinated study results, the Operating Agents jointly will develop technical requirements necessary to accommodate the interconnection and to ensure that PDCI impacts will be mitigated. The interconnection agreement will incorporate the jointly-developed technical requirements.
 - b. The Non-Lead OA will tender a separate agreement to the Interconnection Customer to fund necessary upgrades or improvements or to mitigate impacts on the Non-Lead-OA's portion of the PDCI.
 - c. The interconnection agreement will require the Interconnection Customer to enter into a single operating agreement with both Operating Agents, which incorporates any operational requirements required to accommodate the interconnection, including the jointly-developed technical requirements.
 - d. The interconnection agreement will incorporate applicable commercial requirements consistent with the Lead OA's Tariff and other policies. The Lead OA will tender the interconnection agreement to the Interconnection Customer.
 - e. Additional conditions and agreements may be required.
- 9. Nothing in these principles is intended to require an Operating Agent or Party to act inconsistently with its Tariff or existing business practices.

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Principles of Joint or Coordinated Interconnection Procedures

EXHIBIT B NOTICES

1. NOTICES RELATING TO PROVISIONS OF THE MEMORANDUM OF AGREEMENT

Any notice required under this Agreement shall be in writing and shall be delivered in person, email; or with proof of receipt by a nationally recognized delivery service or by United States Certified Mail. Notices are effective when received. Any Party may change the name or address for receipt of notice by providing notice of such change to the other Parties. The Parties shall deliver notices to the following persons and addresses:

If to LADWP:

Los Angeles Department of Water and Power

111 North Hope Street Los Angeles, CA 90012

Attention: Director of Power System

Planning & Development

Title: Power Engineering Manager

Phone (213) 367-0381

E-mail:

If to SCE:

Grid Contracts Management 2244 Walnut Grove Avenue Rosemead, California 91770 Attention: William Law

Attention: William Law Title: Manger Grid Contracts

Phone: (626)302 9640 Fax: (626) 302 1152

E-mail: William.Law@sce.com

If to Pasadena:

Pasadena Water and Power 150 So. Los Robles, Suite 200

Pasadena, CA 91101

Attention: General Manager

Phone: (626) 744-4462 Fax: (626) 744-6640

E-mail: cityweb-

service@cityofpasadena.net

If to BPA:

Attention: Transmission Account Executive for Los Angeles Department of Water and Power, Southern California Edison Company, City of Pasadena, City of Burbank, City of Glendale – TSE/TPP-2

Phone: (360) 619-6016 Fax: (360) 619-6940

If by First Class Mail:

Bonneville Power Administration P.O. Box 61409 Vancouver, WA 98666

If by Overnight Delivery Service:

Bonneville Power Administration 901 NE 11th Avenue Portland, OR 97232 If to Burbank: General Manager Burbank Water and Power 164 W. Magnolia Blvd. Burbank, CA 91503-0631

Phone: 818-238-3550 Fax: 818-238-3560

E-mail: rdavis@burbankca.gov

If to Glendale:

City of Glendale 141 N. Glendale Avenue, Level 4 Glendale, CA 91206

Attention: Stephen M. Zurn

Title: General Manager – Glendale

Water & Power Phone: 818-548-2107 Fax: 818-5552-2852

E-mail: szurn@glendale.gov

With a copy, which shall not constitute notice to: Glendale City Attorney's Office 613 E. Broadway, Suite 220 Glendale, CA 91206 Attn: GWP Counsel

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