City of Los Angeles Department of Water and Power

Amendment No. 6 to LADWP's Open Access Transmission Tariff

General Manager's Certificate

April 17, 2024

TABLE OF CONTENTS

Attachment A: Administrative Record;

Attachment B: Redline version of LADWP's OATT, marked to show changes against its current OATT, inclusive of the Pending OATT Changes (in PDF format); and

Attachment C: Clean version of LADWP's OATT, including proposed changes (in PDF format).

Attachment D: Redline of the final proposed changes against the changes contained in the Notice.

EXECUTIVE SUMMARY

On December 26, 2023, the Los Angeles Department of Water and Power ("LADWP") released an Advance Announcement of Minor Tariff Change ("Advance Announcement")[1] where LADWP indicated its intention to modify Attachment C of its Open Access Transmission Tariff ("OATT"). Attachment C currently calculates available transfer capability based upon the North American Electric Reliability Corporation's ("NERC") MOD standards. Order No. 902 issued by the Federal Energy Regulatory Commission ("FERC" or the "Commission") on October 26, 2023 retired the MOD standards effective February 1, 2024 which are succeeded by the North American Energy Standards Board's ("NAESB") Standards for Business Practices and Communication Protocols for Public Utilities adopted by the Wholesale Electric Quadrant (WEQ) of NAESB ("NAESB Standards").[2] The proposed revisions to Attachment C of the OATT are designed to align the calculation of available transfer capability expressed in Attachment C with the NAESB Standards.

On December 28, 2023, the LADWP General Manager published a notice that officially initiated the public review and comment period for the proposed changes. The public comment period remained open for twenty business days, from December 28, 2023, through January 16, 2024. No comments were received by LADWP in response to the notice.

Upon final review of the proposed changes to Attachment C of the OATT the General Manager instructed additional changes be made to Attachment C to more closely align the expression of the methodology for calculating available transfer capability with the expression contained in the NAESB Standards. The tariff changes as revised are summarized as follows:

- **Definitions**: The specific defined terms were modified to reflect NAESB Standards contained in WEQ-000 and WEQ-023 and the *pro forma* OATT.
- **Determination of ATC**: The specific portions of Part 2 were modified to align the Available Transfer Capacity calculation with NAESB Standards.
- **Process Flow Diagram**: The specific portions of Part 3 were modified so that the Process Flow Diagram reflects NAESB Standards.
- **Determination of TTC:** The specific portions of Part 4 were modified to align the Total Transfer Capacity calculation methodology with NAESB Standards.
- **Determination of ETC:** The specific portions of Part 5 were modified to align the Existing Transmission Commitments calculation methodology with NAESB Standards.

The General Manager finds that the proposed changes to Attachment C of the OATT are necessary to ensure that the calculation of available transfer capability is consistent with the NAESB Standards. The proposed changes to Attachment C do not result in a change in the

---

[1] The stakeholder process is set forth in LADWP Tariff Change Procedures Business Practice (Oct. 5, 2023) (Version 3), available at http://www.oasis.oati.com/woa/docs/LDWP/LDWPdocs/LADWP_BP_-_Tariff_Changes_(09.12.2023)_Effective_2023-10-05.pdf (hereinafter, "Tariff Change Procedures").

[2] Electric Reliability Organization Proposal to Retire Requirements in Reliability Standards Under the NERC Standards Efficiency Review, 185 FERC ¶ 61,064 (October 26, 2023) ("Order No. 902").

calculation of available transfer capability. The proposed OATT revisions were not disputed by stakeholders, and the need for the OATT revisions has been demonstrated by LADWP.

The General Manager finds that the proposed OATT revisions are Minor Tariff Changes under Section 2 of the Tariff Change Procedures Business Practice because they are "change[s] to the non-rate terms and/or conditions of the Tariff . . . that must be approved by the Governance which will not materially affect the Rates, terms, and conditions of the Tariff."[3]

The General Manager finds that the proposed OATT revisions establish terms and conditions of service that are comparable to those under which LADWP provides transmission services and ancillary services to itself and that are not unduly discriminatory or preferential.

The General Manager recommends that the Board of Water and Power commissioners of LADWP and the Los Angeles City Council ("City Council") approve the proposed OATT revision, becoming effective on the first day of the month, following the date of City Council approval.

[3] Tariff Change Procedures at § 2.p (definition of "Minor Tariff Change").

General Manager's Certificate

PART I: INTRODUCTION

Pursuant to Section 10(b) of the Tariff Change Procedures Business Practice for the Department of Water and Power for the City of Los Angeles,[4] the General Manager of the Los Angeles Department of Water and Power ("LADWP") hereby certifies and provides the following statement with regard to the attached changes to LADWP's Open Access Transmission Tariff ("OATT").[5] No stakeholders provided written comments of the notice of proposed tariff change. Upon final review of the proposed OATT changes the General Manager instructed additional changes be made to Attachment C to more closely align the expression of the methodology for calculating available transfer capability with the expression contained in the NAESB Standards. The tariff changes as revised are summarized as follows:

- **Definitions**: The specific defined terms were modified to reflect NAESB Standards contained in WEQ-000 and WEQ-023 and the *pro forma* OATT.
- **Determination of ATC**: The specific portions of Part 2 were modified to align the Available Transfer Capacity calculation with NAESB Standards.
- **Process Flow Diagram**: The specific portions of Part 3 were modified so that the Process Flow Diagram reflects NAESB Standards.
- **Determination of TTC:** The specific portions of Part 4 were modified to align the Total Transfer Capacity calculation methodology with NAESB Standards.
- **Determination of ETC:** The specific portions of Part 5 were modified to align the Existing Transmission Commitments calculation methodology with NAESB Standards.

The General Manager certifies that the Tariff Revisions are limited to changes to the non-rate terms and/or conditions of Attachment C of LADWP's OATT and do not materially affect the rates, terms and conditions of the OATT, and thereby qualify as a Minor Tariff Change under the Tariff Change Procedures. Furthermore, the General Manager certifies that the Tariff Revisions provide terms and conditions of service that are comparable to those under which LADWP provides transmission services and ancillary services to itself and that are not unduly discriminatory or preferential.

The General Manager recommends that the Board of Water and Power commissioners of LADWP and the Los Angeles City Council ("City Council") approve the proposed OATT revision, becoming effective on the first day of the month, following the date of City Council approval.

---

[4] *See* Tariff Change Procedures at § 10(b).

[5] Capitalized terms not defined herein have the same meaning as those in the OATT and/or Tariff Change Business Practice, unless otherwise noted.

PART II: BACKGROUND

A. LADWP Is a Non-Jurisdictional Utility under the FPA.

The FPA applies to a "public utility" as defined in FPA section 201(e).[6] Excluded from the definition of "public utility" within the FPA are political subdivisions of a State and their employees "unless such provision makes specific reference thereto."[7] Section 201(f) of the FPA provides as follows:

> No provision in this subchapter shall apply to, or be deemed to include, the United States, a State or any political subdivision of a State, or any agency, authority, or instrumentality of any one or more of the foregoing, or any corporation which is wholly owned, directly or indirectly, by any one or more of the foregoing, or any officer, agent, or employee of any of the foregoing acting as such in the course of his official duty, unless such provision makes specific reference thereto.[8]

The City of Los Angeles is a charter city organized under provisions of the California Constitution. LADWP is a department of the City of Los Angeles that operates a municipal water and power system for the purpose of serving the City of Los Angeles. LADWP is therefore a political subdivision of the State of California and not a public utility within the meaning of the FPA, a legal conclusion that has been validated by the U.S. Court of Appeals for the Ninth Circuit.[9]

As a non-public utility under the FPA, LADWP is responsible for establishing its own electric transmission rates and non-rate terms and conditions of service. Nonetheless, the FPA requires that third-party customers be charged rates that are comparable to the rates LADWP charges itself, and that non-rate terms and conditions of service are applied to third parties in a non-discriminatory or preferential manner.[10] LADWP is not required to file its electric transmission rates or non-rate terms and conditions of service with FERC.[11]

B. Governance of LADWP

LADWP is governed by the Board, which consists of five members. The Board has the power and duty to make and enforce all necessary rules and regulations governing the construction, maintenance, operation, connection to, and use of LADWP's water and power

---

[6] 16 U.S.C. § 824(e) ("The term "public utility" when used in this subchapter and subchapter III of this chapter means any person who owns or operates facilities subject to the jurisdiction of the Commission under this subchapter (other than facilities subject to such jurisdiction solely by reason of section 824e(e), 824e(f),[1] 824i, 824j, 824j–1, 824k, 824o, 824o–1, 824p, 824q, 824r, 824s, 824t, 824u, or 824v of this title).").

[7] 16 U.S.C. § 824(f).

[8] *Id.*

[9] *Bonneville Power Admin., et al v FERC*, 422 F.3d 908 at 915 – 916 (9th Cir. 2005)

[10] FPA § 211, 16 U.S.C. § 824j-1(b) ("[T]he Commission may, by rule or order, require an unregulated transmitting utility to provide transmission services—(1) at rates that are comparable to those that the unregulated transmitting utility charges itself; and (2) on terms and conditions (not relating to rates) that are comparable to those under which the unregulated transmitting utility provides transmission services to itself and that are not unduly discriminatory or preferential.").

[11] *Id*. §§ 672, 675.

assets. Specifically, Los Angeles Administrative Code ("LAAC") section 23.134 authorizes the Board "to establish and set all tariffs, terms, conditions and charges, subject to approval by a simple majority vote of the City Council."[12] Thus, the Board and City Council have the authority and sole responsibility to consider the proposed Tariff Revisions.

C. Development of the Proposed Tariff Revisions

LADWP has adopted transmission business practices for the consideration of proposed changes to its OATT. Section 10(b)(2) of the Tariff Change Procedures requires an explanation of the procedures used to prepare the revisions to demonstrate that any changes are made in accordance with required procedures. The proposed revisions fall into the category of a Minor Tariff Change under Section 2 of the Tariff Change Procedures because they are "a change to the non-rate terms and/or conditions of the Tariff . . . that must be approved by the Governance which will not materially affect the Rates, terms, and conditions of the Tariff."[13] To enact a Minor Tariff Change, LADWP is required to publish an Advance Announcement of Minor Tariff Change, followed by a Notice of Proposed Tariff Change, and then hold a 20-day Comment Period.[14]

For the reasons discussed below, the General Manager finds that the OATT revisions were proposed for stakeholder consideration in accordance with the Tariff Change Procedures:

1. Advance Announcement of Minor Tariff Change[15]

Prior to the actual release of any tariff change, the Tariff Change Procedures require LADWP to issue an advance announcement that describes "generally the changes to be considered, the expected date of the Notice, and the address where Stakeholders may submit written comments in response to the announcement."[16]

On December 26, 2023, LADWP released an Advance Announcement concerning its intention to align the reliability standards contained in its OATT with the NAESB Standards for Business Practices and Communication Protocols for Public Utilities adopted by the WEQ of NAESB.[17] The Advance Announcement described the changes, stating that the proposed revisions were intended to align the LADWP OATT with FERC Order No. 902, which "replaced MOD A Reliability Standards" with the current version of the NAESB Standards by revising "Attachment C, Methodology to Assess Available Transfer Capability, to remove references to MOD

---

[12] LAAC § 23.134 states "Notwithstanding any other ordinance, rule or law of the City of Los Angeles to the contrary, the Board of Water and Power Commissioners shall have authority to establish and set all tariffs, terms, conditions and charges, subject to approval by a simple majority vote of the City Council, which relate to transmission services which would otherwise fall within the jurisdiction of the Federal Energy Regulatory Commission, or when necessary to avoid the exercise of the jurisdiction of the Federal Regulatory Commission under Section 211 of the Federal Power Act."

[13] Tariff Change Procedures § 2.p (definition of "Minor Tariff Change").

[14] No public forum was required. *See* Tariff Change Business Practice at § 8.

[15] *Id.* § 3.

[16] *Id.*

[17] All materials referenced in the Advance Announcement and Notice are available at https://www.oasis.oati.com/ldwp/index.html, under DWP Notices > LADWP 2024 OATT Stakeholder Process.

Standards and replace them with NAESB Standards." The Advance Announcement also stated that it would publish the Notice on December 28, 2023, and provided an email address for interested parties to participate in the process.[18]

2. Notice of Proposed Tariff Change[19]

The Tariff Change Procedures require that the General Manager issue a Notice concerning the Proposed Tariff Change to stakeholders.[20] The Notice must be posted on OASIS, identify the Proposed Tariff Change with a marked version of the Tariff, and explain the need for the Proposed Tariff Change. The Notice must also include any supporting documentation and any necessary non-disclosure agreement(s). Finally, the Notice must also provide a schedule for the Comment Period and the anticipated date of the General Manager's Certificate and include an email address for stakeholders to submit written comments, questions, and discovery requests.

On December 28, 2023, the General Manager published the Notice to stakeholders on its OASIS page that officially initiated the public review and comment period of the proposed revisions.[21] The Notice included redline version of Attachment C of the OATT to show changes against the current Attachment C, and a clean version of Attachment C, including the proposed changes.[22] LADWP determined that no additional supporting documentation or non-disclosure agreement was necessary beyond the information included and referenced in the Notice.

The Notice explained the need for the proposed revisions, noting that on October 26, 2023, FERC issued Order No. 902 approving the retirement of six Reliability Standards, specifically the MOD A Reliability Standards.[23] As stated in the Notice, in Order No. 676-J, the Commission revised its regulations to incorporate by reference, as mandatory enforceable requirements, the current version of NAESB's Standards for Business Practices and Communication Protocols for Public Utilities adopted by the Wholesale Electric Quadrant (WEQ) of NAESB, Version 003.3 of the NAESB WEQ Business Practice Standards (WEQ Version 003.3 Standards).[24] The Notice also recognized that the MOD A Reliability Standards are retired, and their purpose and requirements have been moved into the NAESB business practice standards, which will replace the MOD A Reliability Standards proposed for retirement.[25] As explained in the Notice, the proposed revisions to the LADWP OATT revise Attachment C, Methodology to Assess Available Transfer Capability, to comport with Order

---

[18] *Id.*

[19] Tariff Change Procedures § 4.

[20] *Id*.

[21] All materials referenced in the Advance Announcement and Notice are available at https://www.oasis.oati.com/ldwp/index.html, under DWP Notices > LADWP 2024 OATT Stakeholder Process.

[22] *Id.*

[23] *See generally* Order No. 902.

[24] Standards for Business Practices and Communication Protocols for Public Utilities, 175 FERC ¶ 61,139 (May 20, 2021) ("Order No. 676-J").

[25] *See* Order No. 902

No. 902, removing references to MOD A Reliability Standards and replacing them with appropriate NAESB Standards.[26]

The Notice included a schedule for the Comment Period and stated that publication of the Notice initiated a public comment period which remained open for twenty business days, from December 28, 2023, through January 16, 2024. Finally, the Notice included the email address to which stakeholders could submit written comments, questions, and discovery requests.

3. Comment Period

The Tariff Change Procedures require that stakeholders be able to submit written comments on the proposed revisions at any time until 20 business days after the date the Notice is published on OASIS.[27] The public comment period remained open for 20 business days, from December 28, 2023, through January 16, 2024. No comments were received by LADWP in response to the Notice.

In the following sections of this certificate, Part III "Description of LADWP's Proposed Tariff Revisions" summarizes LADWP's proposed tariff changes. Part IV "Effective Date" identifies the proposed effective date for the proposed Tariff Revisions. Part V "Attachments" identifies the attachments to this General Manager's Certificate. Part VI "General Manager Recommendations and Certification" identifies the General Manager's recommendations for the proposed Tariff Revisions and certification.

PART III: DESCRIPTION OF LADWP'S PROPOSED TARIFF REVISIONS

On October 26, 2023, FERC issued Order No. 902 approving the retirement of six Reliability Standards: the MOD A Reliability Standards.[28] In Order No. 676-J, the Commission revised its regulations to incorporate by reference, as mandatory enforceable requirements, the current version of NAESB's Standards for Business Practices and Communication Protocols for Public Utilities adopted by the Wholesale Electric Quadrant (WEQ) of NAESB, Version 003.3 of the NAESB WEQ Business Practice Standards (WEQ Version 003.3 Standards).[29] As explained in Order No. 902, as these Reliability Standards are retired, their purpose and requirements have been moved into the NAESB business practice standards and the equivalent NAESB business practice standards will replace the MOD A Reliability Standards proposed for retirement.[30]

The proposed revisions to the LADWP OATT revise Attachment C, Methodology to Assess Available Transfer Capability, to comport with Order No. 902, removing references and

---

[26] *See* Tariff Change Business Practice at Attachment C (Methodology To Assess Available Transfer Capability).

[27] Tariff Change Procedures § 6.

[28] *See generally* Order No. 902.

[29] Standards for Business Practices and Communication Protocols for Public Utilities, 175 FERC ¶ 61,139 (May 20, 2021) ("Order No. 676-J").

[30] *See* Order No. 902

definitions contained in MOD A Reliability Standards and replacing them with appropriate NAESB Standards in Parts 1, 2, 3, 4, and 5 of Attachment C.[31] The proposed revisions are Minor Tariff Changes under Section 2 of the Tariff Change Business Practice because they are "change[s] to the non-rate terms and/or conditions of the Tariff . . . that must be approved by the Governance which will not materially affect the Rates, terms, and conditions of the Tariff."[32] The revisions being proposed are more expansive than those included in the notice published on December 28, 2023; however, the additional revisions are consistent with the earlier version because they merely further align the specific language of Attachment C with that of the NAESB WEQ Business Practice Standards and *pro forma* OATT.

Specifically, the proposed revisions to Attachment C attached to this Certificate include:

- **Definitions**: The specific defined terms were modified to reflect NAESB Standards contained in WEQ-000 and WEQ-023 and the *pro forma* OATT.
- **Determination of ATC**: The specific portions of Part 2 were modified to align the Available Transfer Capacity calculation with NAESB Standards.
- **Process Flow Diagram**: The specific portions of Part 3 were modified so that the Process Flow Diagram reflects NAESB Standards.
- **Determination of TTC:** The specific portions of Part 4 were modified to align the Total Transfer Capacity calculation methodology with NAESB Standards.
- **Determination of ETC:** The specific portions of Part 5 were modified to align the Existing Transmission Commitments calculation methodology with NAESB Standards.

PART IV: EFFECTIVE DATE

The proposed OATT revisions specified in this General Manager's Certificate, if approved by the Board and City Council, shall: (1) become effective on the first day of the month, following the date of City Council approval (the "Effective Date"), and (2) be incorporated into all current and future transmission service agreements as of the Effective Date.[33]

PART V: ATTACHMENTS

Attached to the Certificate are the following:

Attachment A: Administrative Record

---

[31] *See* LADWP OATT, Attachment C (Methodology To Assess Available Transfer Capability).

[32] Tariff Change Procedures at § 2.p (definition of "Minor Tariff Change").

[33] *Mw. Indep. Transmission Sys. Operator, Inc.*, 142 FERC ¶ 61,215 at PP 176-78 (2013) ("where the terms of an agreement would, if approved, be incorporated into the service agreements of all present and future customers, those terms are properly classified as tariff rates and the Mobile-Sierra presumption would not apply."), *order on reh'g*, 147 FERC ¶ 61,127 (2014), *order on reh'g*, 150 FERC ¶ 61,037 (2015).

Attachment B: Clean version of LADWP's OATT, including proposed changes (in PDF format)

Attachment C: Redline version of LADWP's OATT, marked to show changes against its current OATT, inclusive of the proposed changes (in PDF format)

Attachment D: Redline of the final proposed changes against the changes contained in the Notice

PART VI: GENERAL MANAGER RECOMMENDATIONS AND CERTIFICATION

For the reasons discussed herein, the General Manager certifies that the Tariff Revisions are limited to changes to the non-rate terms and/or conditions of Attachment C of LADWP's OATT and do not materially affect the rates, terms and conditions of the OATT, and thereby qualify as a Minor Tariff Change under the Tariff Change Procedures. Furthermore, the General Manager finds that the proposed OATT revisions establish terms and conditions of service that are comparable to those under which LADWP provides transmission and ancillary services to itself and that are not unduly discriminatory or preferential. Accordingly, the General Manager recommends that the Board and City Council approve the proposed OATT, becoming effective on the first day of the month, following the date of approval by the City Council.

This General Manager's Certificate along with its Attachments will be provided for consideration to the Board and City Council.[34]

Dated this 17th day of April 2024.

DEPARTMENT OF WATER AND POWER
OF THE CITY OF LOS ANGELES

By: _____

MARTIN L. ADAMS
General Manager and Chief Engineer

[34] Tariff Change Procedures § 12(b).

Attachment A

Administrative Record

The following documents constitute all the documents that are part of the administrative record upon which the General Manager based his decision.

Public Documents (found on OASIS)

Advanced Announcement of Minor Tariff Change, published on December 26, 2023

General Manager's Notice, published on December 28, 2023

- Exhibit A to General Manager's Notice, Redline version of LADWP's OATT, marked to show changes against its current OATT, inclusive of the Pending OATT Changes (in PDF format); and
- Exhibit B to General Manager's Notice, Clean version of LADWP's OATT, including proposed changes (in PDF format).

Attachment B

Clean version of LADWP's OATT, including proposed changes (in PDF format)

ATTACHMENT C

Methodology To Assess Available Transfer Capability

This Attachment C contains the Transmission Provider's methodology to assess Available Transfer Capability of the Transmission System. Transmission Provider posts its Available Transfer Capability Implementation Document (ATCID) on its OASIS.

1. Definitions

The following definitions only apply to Attachment C.

a. Available Transfer Capability (ATC)

A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses.

b. ATC Path

Any combination of POR(s) to POD(s) for which ATC is calculated as defined by the Transmission Operator or the Transmission Service Provider.

c. Capacity Benefit Margin (CBM)

The amount of firm transmission transfer capability preserved by the Transmission Provider for LSEs, whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements.

d. Existing Transmission Commitments (ETC)

Committed uses of a Transmission Service Provider's transmission system considered when determining ATC or AFC.

e. Postback

A variable component of the Transmission Provider's selected ATC or AFC calculation methodology that positively impacts ATC or AFC based on a change in status of a Transmission Service reservation or use of reserved capacity, or other conditions as specified by the Transmission Provider.

f. Load Serving Entity (LSE)

The responsible entity that secures energy and Transmission Service (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.

g. Total Transfer Capability (TTC)

The amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions.

h. Transmission Reliability Margin (TRM)

The amount of transmission transfer capability necessary to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change.

2. <u>Determination of ATC</u>

a. Rated System Path Methodology

Transmission Provider uses the Rated System Path Methodology to calculate ATC. The current effective version of NAESB Business Practice Standard WEQ-023 shall apply to calculate TTCs and ATCs for ATC Paths.

b. Description of the Mathematical Algorithms Used to Calculate Firm and Non-Firm ATC

The Transmission Service Provider shall use the following algorithm when calculating firm ATC for an ATC Path:

$$\mathbf{ATC_F = TTC - ETC_F - CBM - TRM + Postbacks_F + counterflows_F.}$$

Where:

ATC_F is the firm ATC for the ATC Path for that period for which ATC_F is being calculated.

TTC is the TTC of the ATC Path for that period.

ETC_F is the sum of existing firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ-023-2.2.3 during that period for which ATC_F is being calculated.

CBM is the CBM for the ATC Path during that period.

TRM is the TRM for the ATC Path during that period.

$Postbacks_F$ are changes to firm ATC due to a change in the use of Transmission Service, as defined in NAESB Business Practice Standard WEQ-023-5.

counterflows$_F$ are adjustments to firm ATC as determined by the Transmission Provider and specified in Transmission Provider's ATCID.

The Transmission Service shall use the following algorithm when calculating non-firm ATC for an ATC Path:

$$\mathbf{ATC_{NF} = TTC - ETC_F - ETC_{NF} - CBM_s - TRM_u + Postbacks_{NF} + counterflows_{NF}}.$$

Where:

ATC$_{NF}$ is the non-firm ATC for the ATC Path for that period for which ATC_{NF} is being calculated.

TTC is the TTC of the ATC Path for that period.

ETC$_F$ is the sum of existing firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ-023-2.2.3 during that period for which ATC_F is being calculated.

ETC$_{NF}$ is the sum of existing non-firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ 023-2.2.4 during that period for which ATC_{NF} is being calculated.

CBM$_S$ is the CBM for the ATC Path that has been scheduled during that period.

TRM$_U$ is the TRM for the ATC Path that has not been released for sale (unreleased) as non-firm capacity by the Transmission Service Provider during that period.

Postbacks$_{NF}$ are changes to non-firm ATC due to a change in the use of Transmission Service, as defined in NAESB Business Practice Standard WEQ-023-5.

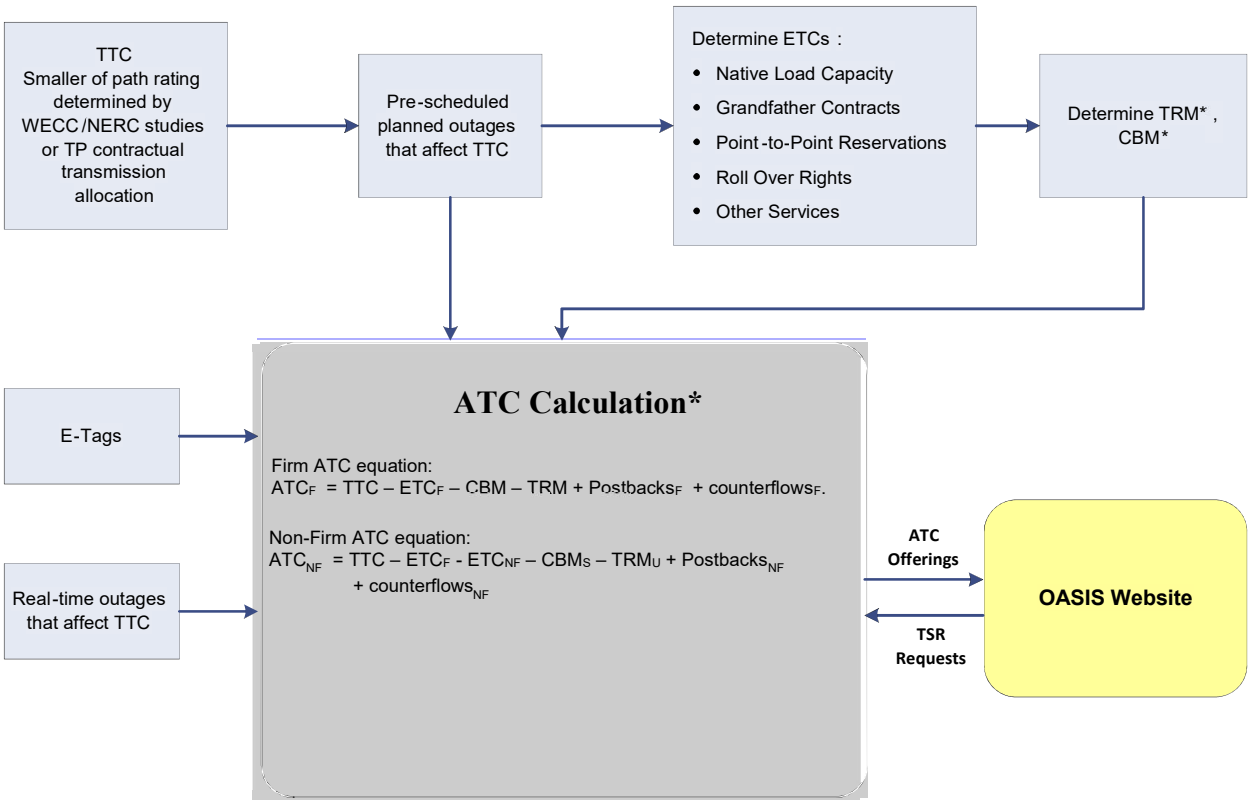
counterflows$_{NF}$ are adjustments to non-firm ATC as determined by the Transmission Service Provider and specified in its ATCID..

c. OASIS

The Transmission Provider's OASIS is provided by Open Access Technology International, Inc. (OATI) and is located at https://www.oasis.oati.com/ldwp/.

3. Process Flow Diagram

The process Transmission Provider uses to calculate ATC is illustrated as follows:



* Transmission Provider does not use TRM or CBM but may use them in the future.

4. Determination of TTC

a. Calculation Methodology

The current effective version of NAESB Business Practice Standard WEQ-023 is used to calculate TTCs for ATC Paths.

The TTC posted is the LADWP ownership or contractual share of the line capacity.

Transmission Provider models its system in segments. A segment or a path can be one or more lines in parallel. A posted path usually consists of one or more segments in series. For a posted path with multiple segments, the segment with the most limiting capacity will determine the TTC for the posted path.

TTC for Transmission Provider's internal paths are mostly flow-limited, so the TTC is determined by thermal rating.

b. **Databases used in TTC Assessments**

Transmission Provider uses the applicable WECC developed system seasonal power operating flow base cases.

c. Assumptions Used in TTC Assessments

The assumptions that LADWP uses in its TTC assessments, including load levels, generation dispatch, and modeling of planned and contingency outages, are set out in the current effective version of NAESB Business Practice Standard WEQ-023. The load and generation in the applicable WECC seasonal operating base case are adjusted to maximize transfers for the path under study.

5. <u>Determination of ETC</u>

a. **<u>Calculation Methodology</u>**

The Transmission Service Provider shall use the following algorithm when calculating firm ETC for an ATC Path:

$$\mathbf{ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F}$$

Where:

$\mathbf{ETC_F}$ is the firm ETC for the ATC Path.

$\mathbf{NL_F}$ is the firm capacity set aside to serve peak NL forecast commitments, to include losses, and NL growth, not otherwise included in TRM or CBM.

$\mathbf{NITS_F}$ is the firm capacity reserved for NITS serving load, to include losses, and Load growth, not otherwise included in TRM or CBM.

$\mathbf{GF_F}$ is the firm capacity set aside for grandfathered contracts for energy and/or Transmission Service, where executed prior to the effective date of Transmission Provider's Tariff .

$\mathbf{PTP_F}$ is the firm capacity reserved for confirmed PTP.

$\mathbf{ROR_F}$ is the firm capacity reserved for rollover rights for contracts granting Transmission Customers the ROFR to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

$\mathbf{OS_F}$ is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

The Transmission Service Provider shall use the following algorithm when calculating non-firm ETC for an ATC Path:

$$\mathbf{ETC_{NF} = NITS_{NF} + GF_{NF} + PTP_{NF} + OS_{NF}}$$

Where:

$\mathbf{ETC_{NF}}$ is the non-firm ETC for the ATC Path.

$\mathbf{NITS_{NF}}$ is the non-firm capacity reserved for Secondary Network Transmission Service to include losses, and load growth not otherwise included in TRM or CBM.

$\mathbf{GF_{NF}}$ is the non-firm capacity set aside for grandfathered contracts for energy and/or Transmission Service, where executed prior to the effective date of Transmission Provider's Tariff.

$\mathbf{PTP_{NF}}$ is non-firm capacity reserved for confirmed PTP.

$\mathbf{OS_{NF}}$ is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

b. Transmission Capacity Set Aside for Native Load Customers and Network Load

Capacity is necessary to meet the forecast load of Native Load Customers and Network Load (including transmission capacity for designated resources or new resources that are needed for load growth or to replace existing resources). As required by the OATT, Transmission Provider on behalf of its Native Load Customers and each Network Load submit to the Transmission Provider updates to the capacity needed for load and resources, annually and in the event of a material change. Additional periodic update of load and resources within the year may be required as described in the Transmission Provider's business practices.

c. Incorporation of Point-to-Point Transmission Service Requests

Existing, confirmed requests for Point-to-Point Transmission Service are modeled using the specified megawatt quantity, Point(s) of Receipt, and Point(s) of Delivery.

d. **Accounting for Rollover Rights**

Transmission Provider, in the absence a Transmission Customer providing notice to

terminate rights, assumes that a Transmission Customer will exercise rollover for existing long-term Transmission rights. To account for this assumption, transmission in the amount of the confirmed Transmission Service request is set aside. If a Transmission Customer does not exercise its rollover right, that amount may be removed from ETC.

e. Process to Ensure that Non-Firm Capacity is Released Properly

In the scheduling horizon, reserved capacity that is not scheduled will be posted back as non-firm ATC. This Postback occurs automatically based on the tags or schedules submitted which are compared against transmission reservations and existing commitments.

6. AFC Methodology

Transmission Provider does not currently use a Flowgate Methodology as described in NAESB Business Practice Standard WEQ-023 to calculate ATC.

7. **Determination of TRM**

Transmission Provider does not use TRM but may use TRM in the future.

8. Determination of CBM

Transmission Provider does not use CBM but may CBM in the future.

Attachment C

Redline version of LADWP's OATT, marked to show changes against its current OATT, inclusive of the proposed changes (in PDF format)

ATTACHMENT C

Methodology To Assess Available Transfer Capability

This Attachment C contains the Transmission Provider's methodology to assess Available Transfer Capability of the Transmission System. Transmission Provider posts its Available Transfer Capability Implementation Document (ATCID) on its OASIS.

1. Definitions

The following definitions only apply to Attachment C.

a. Available Transfer Capability (ATC)

~~ATC means the~~A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. ~~It is defined as Total Transfer Capability less Existing Transmission Commitments (including retail customer service), less a Capacity Benefit Margin, less a Transmission Reliability Margin, plus Postbacks, plus counterflows.~~

b. ATC Path

~~ATC Path means any~~Any combination of ~~Point of Receipt and Point of Delivery~~POR(s) to POD(s) for which ATC is calculated~~, and any Posted Path~~ as defined by the Transmission Operator or the Transmission Service Provider.

c. Capacity Benefit Margin (CBM)

~~CBM means the~~The amount of firm transmission transfer capability preserved by the ~~transmission provider~~Transmission Provider for ~~Load-Serving Entities (~~LSEs~~),~~ whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements. ~~Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies. CBM_s is the CBM for the ATC Path that has been scheduled during that period.~~

~~d. Counterflows~~

~~Counterflows are adjustments to the Firm or Non-firm ATC on a path when there are Firm or Non-firm Transmission Service scheduled to flow in the opposite direction of the~~

~~same path.~~

~~c.~~d. Existing Transmission Commitments (ETC)

~~ETC means committed~~Committed uses of a Transmission Service Provider's ~~Transmission~~transmission system considered when determining ATC~~. The commitments can be firm (ETC_F)~~ or ~~non-firm (ETC_{NF}).~~AFC.

~~**f. Operating Horizon**~~

e. ~~Operating Horizon means a specified number~~**Postback**

A variable component of ~~hours extending past~~ the ~~end of the Scheduling Horizon.~~

~~**g. Planning Horizon**~~

~~Planning Horizon means a specified number of days extending past the end of the Operating Horizon.~~

~~**h. Postbacks**~~

~~Postbacks are changes to Firm or Non-firm~~Transmission Provider's selected ATC or AFC calculation methodology that positively impacts ATC or AFC based on a change in status of a ~~transmission service~~Transmission Service reservation or use of reserved capacity, or other conditions as specified by the Transmission Provider ~~in the ATCID.~~ .

~~i.~~f. Load Serving Entity (LSE)

~~LSE means Secures~~The responsible entity that secures energy and Transmission Service (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.

~~**j. Scheduling Horizon**~~

~~Scheduling Horizon means a specified number of hours extending past the current hour.~~

~~k.~~g. Total Transfer Capability (TTC)

~~TTC means the~~The amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions.

~~l.~~h. Transmission Reliability Margin (TRM)

~~TRM means the~~The amount of transmission transfer capability necessary to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change. ~~TRM_U is the~~

~~TRM for the ATC Path that has not been released for sale (unreleased) as non-firm capacity by the Transmission Provider during that period.~~

2. **Determination of ATC**

a. Rated System Path Methodology

Transmission Provider uses the Rated System Path Methodology to calculate ATC. The ~~currently~~current effective version of ~~NERC Reliability~~NAESB Business Practice Standard ~~MOD-029 ("Rated System Path Methodology")~~WEQ-023 shall apply to calculate TTCs and ATCs for ATC Paths.

b. Description of the Mathematical Algorithms Used to Calculate Firm and Non-Firm ATC

~~To determine firm and non-firm ATC, the~~ The Transmission Service Provider ~~uses~~shall use the following ~~algorithms~~algorithm when calculating firm ATC for ~~the Scheduling Horizon, Operating Horizon and Planning Horizon.~~

~~The equation to calculate firm~~ an ATC ~~is:~~Path:

$$\mathbf{ATC_F = TTC - ETC_F - CBM - TRM + Postbacks_F + \sout{Counterflows_F} counterflows_F}.$$

Where:

ATC_F is the firm ATC for the ATC Path for that period for which ATC_F is being calculated.

TTC is the TTC of the ATC Path for that period.

ETC_F is the sum of existing firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ-023-2.2.3 during that period for which ATC_F is being calculated.

CBM is the CBM for the ATC Path during that period.

TRM is the TRM for the ATC Path during that period.

$Postbacks_F$ are changes to firm ATC due to a change in the use of Transmission Service, as defined in NAESB Business Practice Standard WEQ-023-5.

$counterflows_F$ are adjustments to firm ATC as determined by the Transmission Provider and specified in Transmission Provider's ATCID.

The ~~equation to calculate~~Transmission Service shall use the following algorithm when calculating non-firm ATC ~~is~~for an ATC Path:

$$\mathbf{ATC_{NF} = TTC - ETC_F - ETC_{NF} - CBM_s - TRM_u + Postbacks_{NF} + ~~Counterflows_{NF}~~ counterflows_{NF}}.$$

~~**c. Specific Mathematical Algorithms Used to Calculate Firm and Non-Firm ATC**~~

~~The specific mathematical algorithms used to calculate firm and~~**Where:**

ATC_{NF} is the non-firm ATC for the ATC Path for that period for which ATC_{NF} is being calculated.

TTC is the TTC of the ATC Path for that period.

ETC_F is the sum of existing firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ-023-2.2.3 during that period for which ATC_F is being calculated.

ETC_{NF} is the sum of existing non-firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ 023-2.2.4 during that period for which ATC_{NF} is being calculated.

CBM_S is the CBM for the ATC Path that has been scheduled during that period.

TRM_U is the TRM for the ATC Path that has not been released for sale (unreleased) as non-firm capacity by the Transmission Service Provider during that period.

$Postbacks_{NF}$ are ~~located on LADWP's OASIS website at:~~changes to non-firm ATC due to a change in the use of Transmission Service, as defined in NAESB Business Practice Standard WEQ-023-5.

~~https://www.oasis.oati.com/LDWP/LDWPdocs/ATC_Algorithms.pdf.~~**counterflows$_{NF}$** are adjustments to non-firm ATC as determined by the Transmission Service Provider and specified in its ATCID..

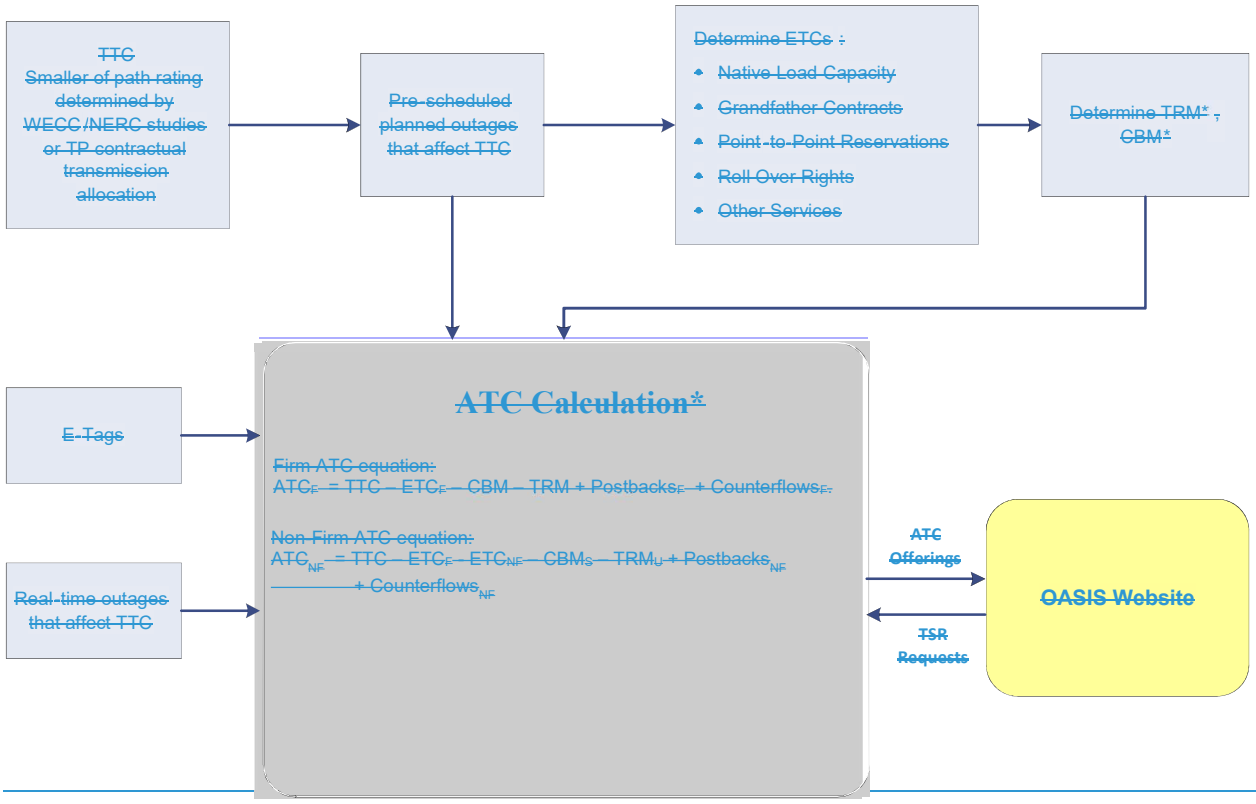
~~d.~~c. OASIS

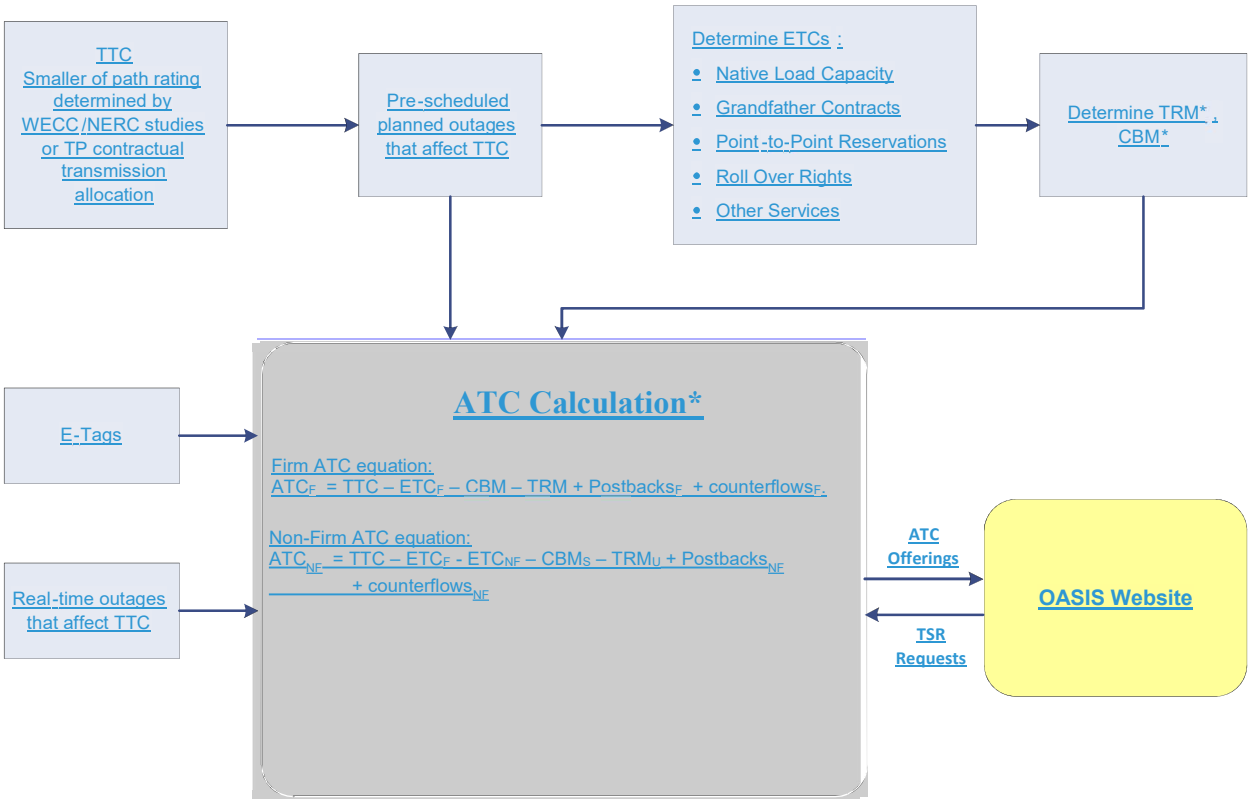
The Transmission Provider's OASIS is provided by Open Access Technology International, Inc. (OATI) and is located at

https://www.oasis.oati.com/ldwp/.

3. Process Flow Diagram

The process Transmission Provider uses to calculate ATC is illustrated as follows:





* Transmission Provider does not use TRM or CBM but may use them in the future.

4. Determination of TTC

a. Calculation Methodology

The ~~currently~~current effective version of ~~NERC Reliability~~NAESB Business Practice Standard ~~MOD-029 ("Rated System Path Methodology")~~WEQ-023 is used to calculate TTCs for ATC Paths.

The TTC posted is the LADWP ownership or contractual share of the line capacity.

Transmission Provider models its system in segments. A segment or a path can be one or more lines in parallel. A posted path usually consists of one or more segments in series. For a posted path with multiple segments, the segment with the most limiting capacity will determine the TTC for the posted path.

TTC for Transmission Provider's internal paths are mostly flow-limited, so the TTC is determined by thermal rating.

b. **Databases used in TTC Assessments**

Transmission Provider uses the applicable WECC developed system seasonal power operating flow base cases.

c. Assumptions Used in TTC Assessments

The assumptions that LADWP uses in its TTC assessments, including load levels, generation dispatch, and modeling of planned and contingency outages, are set out in ~~Requirement R2 of~~ the ~~currently~~current effective version of ~~NERC Reliability~~NAESB Business Practice Standard ~~MOD-029 ("Rated System Path Methodology").~~WEQ-023. The load and generation in the applicable WECC seasonal operating base case are adjusted to maximize transfers for the path under study.

5. Determination of ETC

a. **Calculation Methodology**

The Transmission Service Provider ~~uses~~shall use the following ~~algorithms for Scheduling Horizon, Operating Horizon and Planning Horizon to calculate Firm and Non-Firm Existing Transmission Commitments, as provided in R5 and R6 of MOD-029-1a, respectively.~~

~~The equation to calculate~~algorithm when calculating firm ETC ~~is~~for an ATC Path:

$$\mathbf{ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F}$$

Where:

ETC_F is the firm ETC for the ATC Path.

NL_F is the firm capacity set aside to serve peak ~~Native Load~~NL forecast commitments ~~for the time period being calculated~~, to include losses, and ~~Native Load~~ NL growth, not otherwise included in ~~Transmission Reliability Margin~~TRM or ~~Capacity Benefit Margin.~~ CBM.

$NITS_F$ is the firm capacity reserved for ~~Network Integration Transmission Service~~NITS serving load, to include losses, and ~~load~~Load growth, not otherwise included in ~~Transmission Reliability Margin~~TRM or ~~Capacity Benefit Margin.~~CBM.

GF_F is the firm capacity set aside for grandfathered ~~Transmission Service and~~ contracts for energy and/or Transmission Service, where executed prior to the effective date of Transmission Provider's ~~Open Access Transmission Tariff or "safe harbor tariff."~~Tariff .

PTP_F is the firm capacity reserved for confirmed ~~Point-to-Point Transmission Service.~~PTP.

ROR_F is the firm capacity reserved for ~~Roll-over~~rollover rights for contracts granting Transmission Customers the ~~right of first refusal~~ROFR to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

The ~~equation to calculate~~Transmission Service Provider shall use the following algorithm when calculating non-firm ETC ~~is~~for an ATC Path:

$$\mathbf{ETC_{NF} = \sim\sim NL_{NF} + \sim\sim NITS_{NF} + GF_{NF} + PTP_{NF} + \sim\sim ROR_{NF} + \sim\sim OS_{NF}}$$

Where:

~~**NL_{NF}** is the non-firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.~~

ETC_{NF} is the non-firm ETC for the ATC Path.

$NITS_{NF}$ is the non-firm capacity ~~set aside~~reserved for Secondary Network ~~Integration~~ Transmission Service ~~serving~~ to include losses, and load ~~(i.e., secondary network service), to include losses, and load~~ growth not otherwise included in ~~Transmission Reliability Margin~~ TRM or ~~Capacity Benefit Margin~~CBM.

GF_{NF} is the non-firm capacity set aside for grandfathered ~~Transmission Service and~~ contracts for energy and/or Transmission Service, where executed prior to the effective date of Transmission Provider's ~~Open Access Transmission Tariff or "safe harbor tariff."~~ Tariff.

~~**ROR_{NF}** is the non-firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.~~

PTP_{NF} is non-firm capacity reserved for confirmed ~~Point-to-Point Transmission Service~~PTP.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

b. Transmission Capacity Set Aside for Native Load Customers and Network Load

Capacity is necessary to meet the forecast load of Native Load Customers and Network Load (including transmission capacity for designated resources or new resources that are needed for load growth or to replace existing resources). As required by the OATT, Transmission Provider on behalf of its Native Load Customers and each Network ~~Customer on behalf of its Network~~ Load submit to the Transmission Provider updates to the capacity needed for load and resources, annually and in the event of a material change. Additional periodic update of load and resources within the year may be required as described in the ~~transmission provider's~~Transmission Provider's business practices.

c. Incorporation of Point-to-Point Transmission Service Requests

Existing, confirmed requests for Point-to-Point Transmission Service are modeled using the specified megawatt quantity, Point(s) of Receipt, and Point(s) of Delivery.

d. Accounting for Rollover Rights

Transmission Provider, in the absence a Transmission Customer providing notice to terminate rights, assumes that a Transmission Customer will exercise rollover for existing long-term Transmission rights. To account for this assumption, transmission in the amount of the confirmed ~~transmission service~~Transmission Service request is set aside. If a Transmission Customer does not exercise its rollover right, that amount may be removed from ETC.

e. Process ~~for~~to Ensure that Non-Firm Capacity is Released Properly

In the scheduling horizon, reserved capacity that is not scheduled will be posted back as non-firm ATC. This Postback occurs automatically based on the tags or schedules submitted which are compared against transmission reservations and existing commitments.

6. AFC Methodology

Transmission Provider does not currently use a ~~flowgate methodology~~Flowgate Methodology as described in NAESB Business Practice Standard WEQ-023 to calculate ATC.

7. Determination of TRM

Transmission Provider does not use TRM but may use TRM in the future.

8. Determination of CBM

Transmission Provider does not use CBM but may CBM in the future.

Attachment D

Redline of the final proposed changes against the changes contained in the December 28, 2023 Proposal

ATTACHMENT C

Methodology To Assess Available Transfer Capability

This Attachment C contains the Transmission Provider's methodology to assess Available Transfer Capability of the Transmission System. Transmission Provider posts its Available Transfer Capability Implementation Document (ATCID) on its OASIS.

1. Definitions

The following definitions only apply to Attachment C.

a. Available Transfer Capability (ATC)

~~ATC means the~~A measure of the transfer capability remaining in the physical transmission network for further commercial activity over and above already committed uses. ~~It is defined as Total Transfer Capability less Existing Transmission Commitments (including retail customer service), less a Capacity Benefit Margin, less a Transmission Reliability Margin, plus Postbacks, plus counterflows.~~

b. ATC Path

~~ATC Path means any~~Any combination of ~~Point of Receipt and Point of Delivery~~POR(s) to POD(s) for which ATC is calculated~~, and any Posted Path~~ as defined by the Transmission Operator or the Transmission Service Provider.

c. Capacity Benefit Margin (CBM)

~~CBM means the~~The amount of firm transmission transfer capability preserved by the ~~transmission provider~~Transmission Provider for ~~Load-Serving Entities (~~LSEs~~),~~ whose loads are located on that Transmission Service Provider's system, to enable access by the LSEs to generation from interconnected systems to meet generation reliability requirements. ~~Preservation of CBM for an LSE allows that entity to reduce its installed generating capacity below that which may otherwise have been necessary without interconnections to meet its generation reliability requirements. The transmission transfer capability preserved as CBM is intended to be used by the LSE only in times of emergency generation deficiencies. CBM_s is the CBM for the ATC Path that has been scheduled during that period.~~

~~d. Counterflows~~

~~Counterflows are adjustments to the Firm or Non-firm ATC on a path when there are Firm or Non-firm Transmission Service scheduled to flow in the opposite direction of the same path.~~

~~c.~~d. Existing Transmission Commitments (ETC)

~~ETC means committed~~Committed uses of a Transmission Service Provider's ~~Transmission~~transmission system considered when determining ATC~~. The commitments can be firm (ETC_F)~~ or ~~non-firm (ETC_{NF}).~~AFC.

~~**f. Operating Horizon**~~

e. ~~Operating Horizon means a specified number~~Postback

A variable component of ~~hours extending past~~ the ~~end of the Scheduling Horizon.~~

~~**g. Planning Horizon**~~

~~Planning Horizon means a specified number of days extending past the end of the Operating Horizon.~~

~~**h. Postbacks**~~

~~Postbacks are changes to Firm or Non-firm~~Transmission Provider's selected ATC or AFC calculation methodology that positively impacts ATC or AFC based on a change in status of a ~~transmission service~~Transmission Service reservation or use of reserved capacity, or other conditions as specified by the Transmission Provider ~~in the ATCID.~~ .

~~i.~~f. Load Serving Entity (LSE)

~~LSE means Secures~~The responsible entity that secures energy and Transmission Service (and related Interconnected Operations Services) to serve the electrical demand and energy requirements of its end-use customers.

~~**j. Scheduling Horizon**~~

~~Scheduling Horizon means a specified number of hours extending past the current hour.~~

~~k.~~g. Total Transfer Capability (TTC)

~~TTC means the~~The amount of electric power that can be moved or transferred reliably from one area to another area of the interconnected transmission systems by way of all transmission lines (or paths) between those areas under specified system conditions.

~~l.~~h. Transmission Reliability Margin (TRM)

~~TRM means the~~The amount of transmission transfer capability necessary to provide reasonable assurance that the interconnected transmission network will be secure. TRM accounts for the inherent uncertainty in system conditions and the need for operating flexibility to ensure reliable system operation as system conditions change. ~~TRM_U is the TRM for the ATC Path that has not been released for sale (unreleased) as non-firm capacity by the Transmission Provider during that period.~~

2. Determination of ATC

a. Rated System Path Methodology

Transmission Provider uses the Rated System Path Methodology to calculate ATC. The ~~currently~~current effective version of NAESB Business Practice Standard WEQ-023 shall apply to calculate TTCs and ATCs for ATC Paths.

b. Description of the Mathematical Algorithms Used to Calculate Firm and Non-Firm ATC

~~To determine firm and non-firm ATC, the~~ The Transmission Service Provider ~~uses~~shall use the following ~~algorithms~~algorithm when calculating firm ATC for ~~the Scheduling Horizon, Operating Horizon and Planning Horizon.~~

~~The equation to calculate firm~~ an ATC ~~is:~~Path:

$$\mathbf{ATC_F = TTC - ETC_F - CBM - TRM + Postbacks_F + \sim\sim Counterflows_F \sim\sim counterflows_F}.$$

Where:

ATC_F is the firm ATC for the ATC Path for that period for which ATC_F is being calculated.

TTC is the TTC of the ATC Path for that period.

ETC_F is the sum of existing firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ-023-2.2.3 during that period for which ATC_F is being calculated.

CBM is the CBM for the ATC Path during that period.

TRM is the TRM for the ATC Path during that period.

$Postbacks_F$ are changes to firm ATC due to a change in the use of Transmission Service, as defined in NAESB Business Practice Standard WEQ-023-5.

$counterflows_F$ are adjustments to firm ATC as determined by the Transmission Provider and specified in Transmission Provider's ATCID.

The ~~equation to calculate~~Transmission Service shall use the following algorithm when calculating non-firm ATC ~~is~~for an ATC Path:

$$\mathbf{ATC_{NF} = TTC - ETC_F - ETC_{NF} - CBM_s - TRM_u + Postbacks_{NF} + \sim\sim Counterflows_{NF} \sim\sim counterflows_{NF}}.$$

~~c. Specific Mathematical Algorithms Used to Calculate Firm and Non-Firm ATC~~

~~The specific mathematical algorithms used to calculate firm and~~**Where:**

ATC_{NF} is the non-firm ATC for the ATC Path for that period for which ATC_{NF} is being calculated.

TTC is the TTC of the ATC Path for that period.

ETC_F is the sum of existing firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ-023-2.2.3 during that period for which ATC_F is being calculated.

ETC_{NF} is the sum of existing non-firm commitments for the ATC Path as specified in NAESB Business Practice Standard WEQ 023-2.2.4 during that period for which ATC_{NF} is being calculated.

CBM_S is the CBM for the ATC Path that has been scheduled during that period.

TRM_U is the TRM for the ATC Path that has not been released for sale (unreleased) as non-firm capacity by the Transmission Service Provider during that period.

$Postbacks_{NF}$ are ~~located on LADWP's OASIS website at:~~changes to non-firm ATC due to a change in the use of Transmission Service, as defined in NAESB Business Practice Standard WEQ-023-5.

~~https://www.oasis.oati.com/LDWP/LDWPdocs/ATC_Algorithms.pdf.~~**counterflows$_{NF}$** are adjustments to non-firm ATC as determined by the Transmission Service Provider and specified in its ATCID..

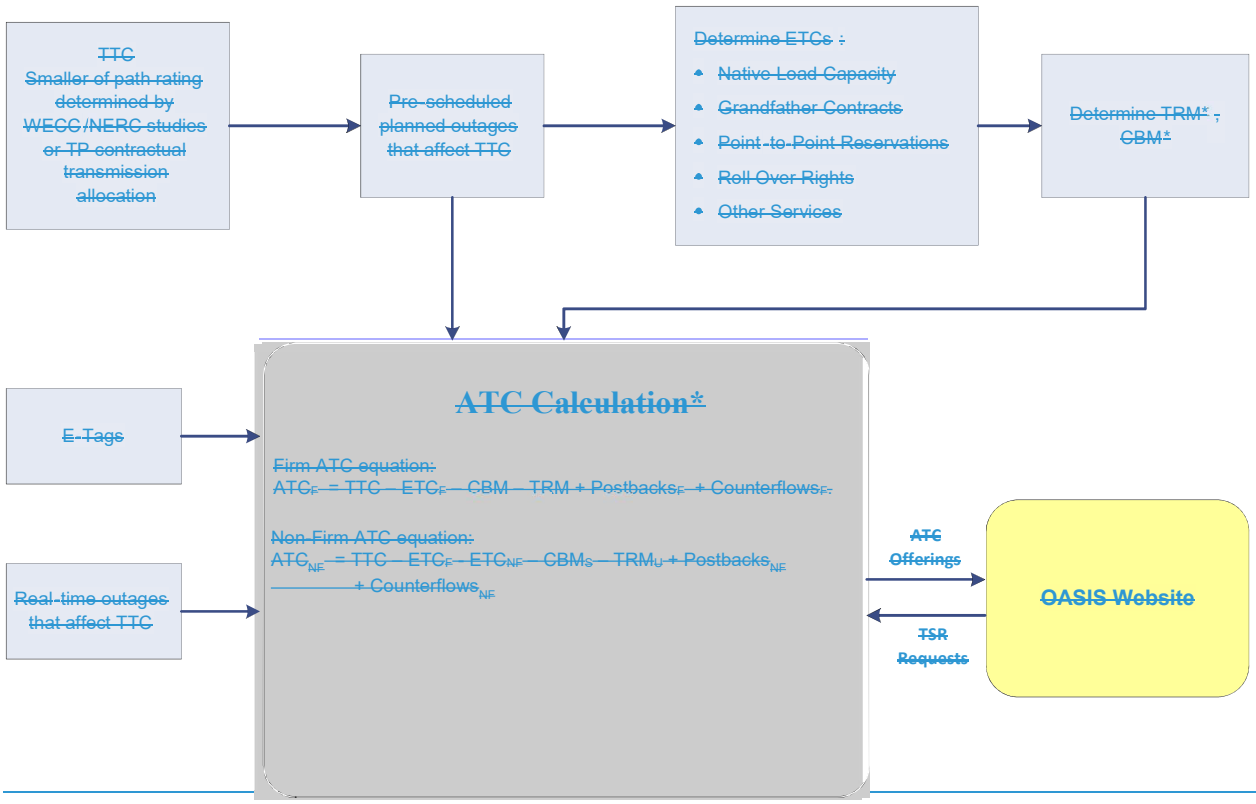
~~d.~~**c. OASIS**

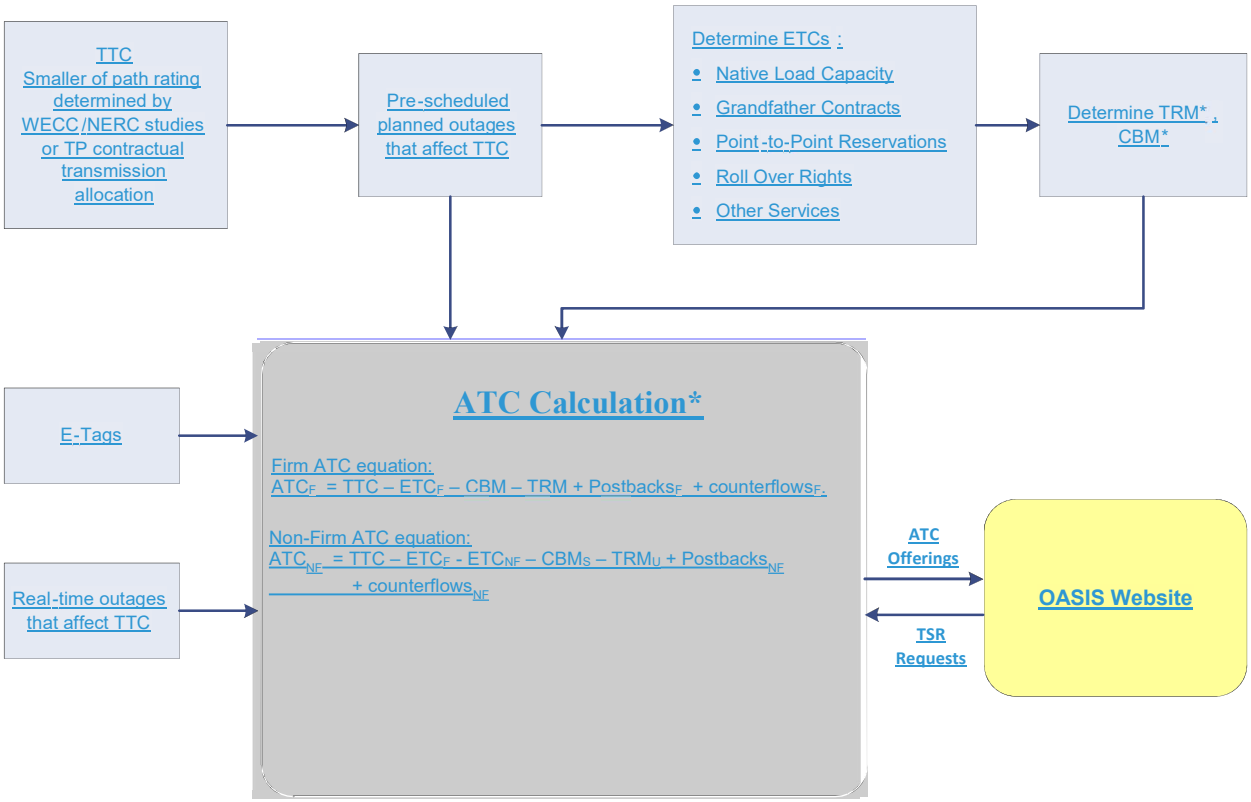
The Transmission Provider's OASIS is provided by Open Access Technology International, Inc. (OATI) and is located at

https://www.oasis.oati.com/ldwp/.

3. Process Flow Diagram

The process Transmission Provider uses to calculate ATC is illustrated as follows:





* Transmission Provider does not use TRM or CBM but may use them in the future.

4. Determination of TTC

a. Calculation Methodology

The ~~currently~~current effective version of NAESB Business Practice Standard WEQ-023 is used to calculate TTCs for ATC Paths.

The TTC posted is the LADWP ownership or contractual share of the line capacity.

Transmission Provider models its system in segments. A segment or a path can be one or more lines in parallel. A posted path usually consists of one or more segments in series. For a posted path with multiple segments, the segment with the most limiting capacity will determine the TTC for the posted path.

TTC for Transmission Provider's internal paths are mostly flow-limited, so the TTC is determined by thermal rating.

b. Databases used in TTC Assessments

Transmission Provider uses the applicable WECC developed system seasonal power operating flow base cases.

c. Assumptions Used in TTC Assessments

The assumptions that LADWP uses in its TTC assessments, including load levels, generation dispatch, and modeling of planned and contingency outages, are set out in the ~~currently~~current effective version of NAESB Business Practice Standard WEQ-023. The load and generation in the applicable WECC seasonal operating base case are adjusted to maximize transfers for the path under study.

5. Determination of ETC

a. Calculation Methodology

The Transmission Service Provider ~~uses~~shall use the following ~~algorithms for Scheduling Horizon, Operating Horizon and Planning Horizon to calculate Firm and Non-Firm Existing Transmission Commitments, as provided in NAESB Business Practice Standard WEQ-023.~~

~~The equation to calculate~~algorithm when calculating firm ETC ~~is~~for an ATC Path:

$$\mathbf{ETC_F = NL_F + NITS_F + GF_F + PTP_F + ROR_F + OS_F}$$

Where:

ETC_F is the firm ETC for the ATC Path.

NL_F is the firm capacity set aside to serve peak ~~Native Load~~NL forecast commitments ~~for the time period being calculated~~, to include losses, and ~~Native Load~~ NL growth, not otherwise included in ~~Transmission Reliability Margin~~TRM or ~~Capacity Benefit Margin.~~ CBM.

$NITS_F$ is the firm capacity reserved for ~~Network Integration Transmission Service~~NITS serving load, to include losses, and ~~load~~Load growth, not otherwise included in ~~Transmission Reliability Margin~~TRM or ~~Capacity Benefit Margin.~~CBM.

GF_F is the firm capacity set aside for grandfathered ~~Transmission Service and~~ contracts for energy and/or Transmission Service, where executed prior to the effective date of Transmission Provider's ~~Open Access Transmission Tariff or "safe harbor tariff."~~Tariff .

PTP_F is the firm capacity reserved for confirmed ~~Point-to-Point Transmission Service.~~PTP.

ROR_F is the firm capacity reserved for ~~Roll-over~~rollover rights for contracts granting Transmission Customers the ~~right of first refusal~~ROFR to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.

OS_F is the firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using Firm Transmission Service as specified in the ATCID.

The ~~equation to calculate~~Transmission Service Provider shall use the following algorithm when calculating non-firm ETC ~~is~~for an ATC Path:

$ETC_{NF} = NL_{NF} + NITS_{NF} + GF_{NF} + PTP_{NF} + ROR_{NF} + OS_{NF}$

Where:

NL_{NF} ~~is the non-firm capacity set aside to serve peak Native Load forecast commitments for the time period being calculated, to include losses, and Native Load growth, not otherwise included in Transmission Reliability Margin or Capacity Benefit Margin.~~

ETC_{NF} is the non-firm ETC for the ATC Path.

$NITS_{NF}$ is the non-firm capacity ~~set aside~~reserved for Secondary Network ~~Integration~~ Transmission Service ~~serving~~ to include losses, and load ~~(i.e., secondary network service), to include losses, and load~~ growth not otherwise included in ~~Transmission Reliability Margin~~ TRM or ~~Capacity Benefit Margin~~CBM.

GF_{NF} is the non-firm capacity set aside for grandfathered ~~Transmission Service and~~ contracts for energy and/or Transmission Service, where executed prior to the effective date of Transmission Provider's ~~Open Access Transmission Tariff or "safe harbor tariff."~~ Tariff.

ROR_{NF} ~~is the non-firm capacity reserved for Roll-over rights for contracts granting Transmission Customers the right of first refusal to take or continue to take Transmission Service when the Transmission Customer's Transmission Service contract expires or is eligible for renewal.~~

PTP_{NF} is non-firm capacity reserved for confirmed ~~Point-to-Point Transmission Service~~PTP.

OS_{NF} is the non-firm capacity reserved for any other service(s), contract(s), or agreement(s) not specified above using non-firm transmission service as specified in the ATCID.

b. Transmission Capacity Set Aside for Native Load Customers and Network Load

Capacity is necessary to meet the forecast load of Native Load Customers and Network Load (including transmission capacity for designated resources or new resources that are needed for load growth or to replace existing resources). As required by the OATT, Transmission Provider on behalf of its Native Load Customers and each Network ~~Customer on behalf of its Network~~ Load submit to the Transmission Provider updates to the capacity needed for load and resources, annually and in the event of a material change. Additional periodic update of load and resources within the year may be required as described in the ~~transmission provider's~~Transmission Provider's business practices.

c. Incorporation of Point-to-Point Transmission Service Requests

Existing, confirmed requests for Point-to-Point Transmission Service are modeled using the specified megawatt quantity, Point(s) of Receipt, and Point(s) of Delivery.

d. **Accounting for Rollover Rights**

Transmission Provider, in the absence a Transmission Customer providing notice to terminate rights, assumes that a Transmission Customer will exercise rollover for existing long-term Transmission rights. To account for this assumption, transmission in the amount of the confirmed ~~transmission service~~Transmission Service request is set aside. If a Transmission Customer does not exercise its rollover right, that amount may be removed from ETC.

e. Process ~~for~~to Ensure that Non-Firm Capacity is Released Properly

In the scheduling horizon, reserved capacity that is not scheduled will be posted back as non-firm ATC. This Postback occurs automatically based on the tags or schedules submitted which are compared against transmission reservations and existing commitments.

6. AFC Methodology

Transmission Provider does not currently use a ~~flowgate methodology~~Flowgate Methodology as described in NAESB Business Practice Standard WEQ-023 to calculate ATC.

7. **Determination of TRM**

Transmission Provider does not use TRM but may use TRM in the future.

8. Determination of CBM

Transmission Provider does not use CBM but may CBM in the future.

City of Los Angeles Department of Water and Power

Amendment No. 6 to LADWP's Open Access Transmission Tariff

Supplemental General Manager's Certificate

July 30, 2024

Amended General Manager's Certificate

On April 17, 2024, the General Manager of the Los Angeles Department of Water and Power ("LADWP") issued a General Manager' Certificate related to Amendment No. 6 to LADWP's Open Access Transmission Tariff ("OATT") (the "General Manager's Certificate").[1] The purpose of Amendment No. 6 was to align the calculation of available transfer capability with the North American Energy Standards Board's ("NAESB") Standards for Business Practices and Communication Protocols for Public Utilities adopted by the Wholesale Electric Quadrant (WEQ) of NAESB ("NAESB Standards").[2]

On April 22, 2024, the City of Burbank, California's Department of Water and Power ("Burbank" or "BWP") and the City of Glendale, California's Department of Water and Power ("Glendale" or "GWP") (collectively, the "Cities") provided LADWP with notice disputing the General Manager's Certificate and on May 1, 2024 provided LADWP with a description of the issues in dispute.[3] On May 15, 2024, LADWP, BWP and GWP, along with stakeholders that participated, met to resolve the issues in dispute.[4] This Supplement to the General Manager's Certificate is intended to document the resolution of the issues in dispute.

I. Access to NAESB Standards

The Cities requested access to the NAESB Standards upon which LADWP based the proposed changes to Attachment C of the OATT, as the Cities are not members of NAESB and did not otherwise have access to the NAESB Standards.

LADWP obtained a limited license from NAESB allowing the appliable NAESB Standards to be provided to the Cities and pursuant to that limited license provided copies of the NAESB Standards to the Cities. After review of the NAESB Standards, no concerns have been raised by the Cities with regard to the proposed changes to Attachment C of the OATT attached to the General Manager's Certificate. The General Manager therefore concludes that the Cities concerns related to Amendment No. 6 are resolved.

II. Attachments

No changes are proposed to the proposed OATT contained in the General Manager's Certificate.

III. Conclusion

---

[1] LADWP has changed the title of "General Manager and Chief Engineer" to "Chief Executive Officer and Chief Engineer" effective May 14,2024. Other than the title itself, the roles and responsibilities remain the same. The Chief Executive Officer and Chief Engineer has the authority to opine on all issues involving LADWP's OATT, and issue the General Manager's Certificate and any supplemental certificates thereafter.

[2] Electric Reliability Organization Proposal to Retire Requirements in Reliability Standards Under the NERC Standards Efficiency Review, 185 FERC ¶ 61,064 (October 26, 2023) ("Order No. 902").

[3] Departments of Water and Power for the Cities of Burbank and Glendale, California, *Appeal Brief* (May 1, 2024), *available at* http://www.oasis.oati.com/ldwp.

[4] *See* LADWP OATT-Amendments 5 and 6 Dispute Resolution Process Meeting, *Agenda*, *available at* http://www.oasis.oati.com/ldwp.

The General Manager continues to recommend that the Board and City Council approve the proposed OATT changes attached to the General Manager's Certificate, and that they become effective the first day of the month, following the date of approval by the City Council.

The proposed OATT changes along with this Supplemental General Manager's Certificate and the General Manager's Certificate will be provided for consideration to the Board and City Council.[5]

Dated this 30th day of July 2024.

By _____ 7/30/24
Janisse Quiñones
Chief Executive Officer and Chief Engineer
Los Angeles Department of Power and Water

[5] Tariff Change Procedures § 12(b).