North Gila-Imperial Valley #2 500 kV Line Project
Project Sponsor Selection Report

April 11, 2024

California Independent System Operator Corporation

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LIST OF ATTACHMENTS

1. INTRODUCTION

This report describes the competitive solicitation process conducted by the California Independent System Operator Corporation (ISO) for the North Gila-Imperial Valley #2 500 kV Line project. The ISO conducted this competitive solicitation because, in its 2022-2023 transmission planning process, the ISO identified a policy-driven need for this transmission project. As required by the ISO Tariff, the ISO undertook a comparative analysis to determine the degree to which each project sponsor and its proposal met the qualification criteria set forth in ISO Tariff Section 24.5.3.1 and the selection factors set forth in ISO Tariff Section 24.5.4 to determine the approved project sponsor to finance, construct, own, operate, and maintain the new North Gila-Imperial Valley #2 500 kV Line project. The six qualified proposals that the ISO reviewed from the five project sponsors for the North Gila-Imperial Valley #2 500 kV Line project were detailed and well supported. The ISO emphasizes that it considers all project sponsors to be qualified to finance, construct, own, operate, and maintain the North Gila-Imperial Valley #2 500 kV Line project. While conducting the comparative analysis, the ISO had to make detailed distinctions among the project sponsors' proposals in determining the approved project sponsor. The result of this competitive solicitation process is that the ISO has selected Horizon West Transmission, LLC, as the approved project sponsor to finance, construct, own, operate, and maintain the North Gila-Imperial Valley #2 500 kV Line project.

2 BACKGROUND

2.1 North Gila-Imperial Valley #2 500 kV Line Project and Competitive Solicitation Process

The ISO Tariff specifies that the ISO's transmission planning process must include a competitive solicitation process for new, stand-alone regional transmission facilities needed for reliability, economic, and/or public policy driven reasons. The ISO's 2022-2023 transmission plan identified a policy-driven need for the North Gila-Imperial Valley #2 500 kV Line project as part of the Southern Area Reinforcement Projects to address the Devers-Red Bluff 500 kV, East of Miguel, Bay Boulevard-Silvergate, Encina-San Luis Rey, Sycamore area, San Luis Rey-San Onofre, and Silvergate-Old Town constraints. The ISO governing board approved the North Gila-Imperial Valley #2 500 kV Line project on May 18, 2023.

Following approval of the transmission plan, the ISO opened a bid solicitation window on June 26, 2023, which provided project sponsors the opportunity to submit proposals to finance, construct, own, operate, and maintain the North Gila-Imperial Valley #2 500 kV Line. Project sponsors had an opportunity to express interest in collaborating with another entity during the first ten business days after the bid window opened. No project sponsor requested collaboration. In accordance with ISO Tariff Section 24.5.1 and the posted 2022-2023 Transmission Planning Process Phase 3 Sequence Schedule, the bid solicitation window remained open through September 29, 2023.

The ISO Functional Specifications for this project are located in Appendix I of the 2022-2023 transmission plan, under the title *Description and Functional Specifications of Proposed Policy-Driven North Gila-Imperial Valley #2 500 kV Line Project* (ISO Functional Specifications), as updated as of August 21, 2023.[1] In the ISO Functional Specifications, the North Gila-Imperial Valley #2 500 kV Line project is described as follows:

- A new 500 kV circuit between North Gila and Imperial Valley substations, estimated at 85 miles.

In the ISO Functional Specifications, the ISO provided estimates of costs for the entire project, but it did not break out the costs of the work between San Diego Gas & Electric (SDG&E), Arizona Public Service Company (APS), and the approved project sponsor. As stated in the ISO Functional Specifications, the ISO estimates the overall proposed project (both the part subject to competitive solicitation and the part not subject to competitive solicitation) will cost approximately $340 million. The ISO also specified that the project must be in service no later than June 1, 2032, as clarified in the question and answer matrix posted on the ISO website. Upon completion of the project, the approved project sponsor will own the new North Gila-Imperial Valley #2 500 kV transmission line, but it must turn the facilities over to ISO operational control.

[1] ISO Functional Specifications
https://www.caiso.com/Documents/Appendix-I-Board-Approved-2022-2023-Transmission-Plan-AdditionalRevisions.pdf

The ISO also identified and on July 7, 2023, posted the revised list of key selection factors for the North Gila-Imperial Valley #2 500 kV Line project.[2] After the ISO opened the bid solicitation window, the ISO hosted an informational call for interested parties on June 26, 2023, and provided a presentation describing the project and the competitive solicitation process, including the key selection factors.[3] These are the tariff criteria the ISO determined are the most important for selecting a project sponsor for this policy driven project. For purposes of this report, the ISO identified the following subsections of ISO Tariff 24.5.4 as the key selection factors:

- Section 24.5.4 (b) – "the Project Sponsor's existing rights of way and substations that would contribute to the transmission solution in question;"

- Section 24.5.4 (c) – "the experience of the Project Sponsor and its team in acquiring rights of way, if necessary, that would facilitate approval and construction, and in the case of a Project Sponsor with existing rights of way, whether the Project Sponsor would incur costs in connection with placing new or additional facilities associated with the transmission solution on such existing right of way;"

- Section 24.5.4 (d) – "the proposed schedule for development and completion of the transmission solution and demonstrated ability to meet the schedule of the Project Sponsor and its team;"

- Section 24.5.4 (e) – "the financial resources of the Project Sponsor and its team;"

- Section 24.5.4 (f) – "the technical and engineering qualifications and experience of the Project Sponsor and its team;"

- Section 24.5.4 (j) – "demonstrated cost containment capability of the Project Sponsor and its team, specifically, binding cost control measures the Project Sponsor agrees to accept, including any binding agreements by the Project Sponsor and its team to accept a cost cap that would preclude costs for the transmission solution above the cap from being recovered through the CAISO's Transmission Access Charge, and, if none of the competing Project Sponsors proposes a binding cost cap, the authority of the selected siting authority to impose binding cost caps or cost containment measures on the Project Sponsor, and its history of imposing such measures."

The ISO evaluated six proposals from five project sponsors – (1) California Grid Holdings LLC (CalGrid), a wholly owned subsidiary of Viridon Holdings LLC, (2) Horizon West Transmission, LLC (Horizon West), a wholly-owned subsidiary of NextEra Energy Transmission, LLC (NEET), (3) Lotus Infrastructure Global Operations, LLC (Lotus), (4) LS Power Grid California, LLC (LSPGC), a wholly-owned subsidiary of LS Power Associates, L.P., and (5) Valley Power Connect, LLC (VPC), a Delaware limited liability

[2] Key Selection Factors
http://www.caiso.com/InitiativeDocuments/Key-Selection-Factors-2022-2023-Transmission-Planning-Process.pdf

[3] Phase 3 TPP Presentation
http://www.caiso.com/InitiativeDocuments/Presentation-2022%E2%80%932023-Transmission-Planning-Process-Phase-3-Competitive-Solicitation-Jun262023.pdf

company and wholly owned subsidiary of Grid United, a Delaware limited liability company, in association with Citizens Energy Corporation (Citizens Energy) and Imperial Irrigation District (IID). The ISO posted a list of validated project sponsor applications on November 20, 2023.[4] The ISO found that all six of the proposals provided sufficient information to meet the minimum validation criteria as set forth in Section 24.5.2.4 of the ISO Tariff. The ISO posted a list of qualified project sponsors and proposals on January 11, 2024.[5] The ISO found that all five project sponsors and their six validated proposals met the minimum qualification criteria as set forth in Section 24.5.3 of the ISO Tariff.

2.2 The ISO Transmission Planning Process and Competitive Solicitation Tariff Structure

In 2010, the Federal Energy Regulatory Commission (FERC) approved changes to the ISO's transmission planning process that included a competitive solicitation process for new, stand-alone transmission facilities needed for reliability, economic, and/or public policy driven reasons. Subsequently, in 2012 the ISO filed tariff amendments to comply with the requirements of FERC Order No. 1000 to further promote competition in the transmission planning process. The ISO conducted its first competitive solicitation process during the 2012-2013 transmission planning cycle. Based on the experience gained during the competitive selection process and discussions with stakeholders, the ISO identified improvements to clarify and provide more transparency to the process for participating transmission owners (PTOs) and other transmission developers. The ISO conducted a competitive transmission improvement initiative in late 2013, which concluded with ISO Tariff Section 24.5 and process changes.

The framework for the 2022-2023 transmission plan competitive solicitation process is set forth in ISO Tariff Section 24.5. In addition, the ISO posted the form of the project sponsor application (Attachment 1) on its website. Also, while the bid solicitation window was open, the ISO maintained and posted on its website a question-and-answer matrix detailing questions from prospective project sponsors and the ISO's responses thereto so that all interested parties would have access to the same clarifying information.[6] In compliance with ISO Tariff Section 24.5.3.5, the ISO engaged two well-respected, international industry consulting firms to assist the ISO in its selection of the approved project sponsor. One firm primarily supports the ISO in the qualification and comparative analysis associated with the project schedule, rights-of-way acquisition, environmental permitting, design, construction, maintenance, and operating capabilities of the project sponsors. The other firm provides economic, financial, and rate expertise and provides cost of service analyses. Both firms have committed to remain unbiased and not participate with any project sponsor in the competitive solicitation process.

Each project sponsor completed the project application form, which included a series of questions and requirements in the following areas:

[4] Validated Project Sponsor Applications
http://www.caiso.com/InitiativeDocuments/List-of-Validated-Project-Sponsor-Applications-North-Gila-to-Imperial-Valley-2-500kV-Transmission-Line-Project.pdf
[5] Qualified Project Sponsor Applications
http://www.caiso.com/InitiativeDocuments/List-of-Qualified-Project-Sponsor-Applications-North-Gila-to-Imperial-Valley-2-500kV-Transmission-Line-Project.pdf
[6] Response to Comments Matrix
http://www.caiso.com/InitiativeDocuments/ISO-Responses-to-Comments-Matrix-2022-2023-Transmission-Planning-Process-Competitive-Solicitation.pdf

- Project Sponsor, Name, Organizational Structure, and Proposal Summary
- Project Qualifications
- Prior Projects and Experience
- Project Management and Schedule
- Cost Containment
- Financial
- Environment Permitting and Public Process
- Transmission or Substation Land Acquisition
- Substation Design and Engineering
- Transmission Line Design and Engineering
- Construction
- Maintenance
- Operations
- Miscellaneous
- Officer Certification
- Application Deposit Payment Instructions

The ISO provided the project sponsors opportunities to correct deficiencies in their applications. Following a project sponsor's submission of supplemental information, the ISO validated the project sponsor's application to determine if it contained sufficient information for the ISO to determine whether the project sponsor and its proposal were qualified. Once the ISO validated the applications, the ISO posted the list of validated project sponsor applications to its website on November 20, 2023, as described in Section 2.1 of this report. As also described in Section 2.1, the ISO validated all six of the applications.

Next, the ISO determined whether the project sponsors and their proposals were qualified pursuant to ISO Tariff Sections 24.5.3.1 and 24.5.3.2. The ISO evaluated the project sponsors based on the information submitted in response to the questions in the application corresponding to ISO Tariff Sections 24.5.2.1(a)-(i) to determine, in accordance with Section 24.5.3.1, whether the project sponsor had demonstrated that its team is physically, technically, and financially capable of:

(i) completing the needed transmission solution in a timely and competent manner; and
(ii) operating and maintaining the transmission solution in a manner that is consistent with good utility practice and applicable reliability criteria for the life of the project, based on the qualification criteria as set forth in ISO Tariff Section 24.5.3.1(a)-(f).

In accordance with Section 24.5.3.2, the ISO evaluated the project sponsors' proposals based on the following criteria to determine whether the transmission solution proposed by the project sponsors would be qualified for consideration:

(a) "Whether the proposed design of the transmission solution is consistent with needs identified in the comprehensive Transmission Plan;"
(b) "Whether the proposed design of the transmission solution satisfies Applicable Reliability Criteria and CAISO Planning Standards."

The ISO found that all five project sponsors and their six validated proposals met the minimum qualification criteria as set forth in ISO Tariff Sections 24.5.3.1 and 24.5.3.2 for the North Gila-Imperial Valley 500 kV Line project. Therefore, the ISO determined that no cure period was needed for the qualification phase. As described in Section 2.1 of this report, the ISO posted the list of qualified project sponsors and their proposals to its website on January 11, 2024. Section 3 of this report describes the ISO's selection process for this project.

3 SELECTION OF THE APPROVED PROJECT SPONSOR

3.1 Description of Project Sponsor Selection Process

Once the ISO has determined that two or more project sponsors are qualified, ISO Tariff Section 24.5.3.5 directs the ISO to select one approved project sponsor "based on a comparative analysis of the degree to which each project sponsor's proposal meets the qualification criteria set forth in section 24.5.3.1 and the selection factors set forth in 24.5.4." The selection factors specified in ISO Tariff Section 24.5.4 are:

(a) the current and expected capabilities of the Project Sponsor and its team to finance, license, and construct the facility and operate and maintain it for the life of the solution;
(b) the Project Sponsor's existing rights of way and substations that would contribute to the transmission solution in question;
(c) the experience of the Project Sponsor and its team in acquiring rights of way, if necessary, that would facilitate approval and construction, and in the case of a Project Sponsor with existing rights of way, whether the Project Sponsor would incur incremental costs in connection with placing new or additional facilities associated with the transmission solution on such existing right of way;
(d) the proposed schedule for development and completion of the transmission solution and demonstrated ability to meet that schedule of the Project Sponsor and its team;
(e) the financial resources of the Project Sponsor and its team;
(f) The technical and engineering qualifications and experience of the Project Sponsor and its team;
(g) if applicable, the previous record regarding construction and maintenance of transmission facilities, including facilities outside the CAISO Controlled Grid of the Project Sponsor and its team;
(h) demonstrated capability to adhere to standardized construction, maintenance and operating practices of the Project Sponsor and its team;
(i) demonstrated ability to assume liability for major losses resulting from failure of facilities of the Project Sponsor;
(j) demonstrated cost containment capability of the Project Sponsor and its team, specifically, binding cost control measures the Project Sponsor agrees to accept, including any binding agreement by the Project Sponsor and its team to accept a cost cap that would preclude costs for the transmission solution above the cap from being recovered through the CAISO's Transmission Access Charge, and, if none of the competing Project Sponsors proposes a binding cost cap, the authority of the selected siting authority to impose binding cost caps or cost containment measures on the Project Sponsor, and its history of imposing such measures; and
(k) any other strengths and advantages the Project Sponsor and its team may have to build and own the specific transmission solution, as well as any specific efficiencies or benefits demonstrated in their proposal.

In selecting the approved project sponsor, the ISO undertook a comparative analysis of the project sponsors' proposals regarding the qualification criteria described in ISO Tariff Section 24.5.3.1 and the selection factors in ISO Tariff Section 24.5.4. As part of the comparative analysis, the ISO has given particular consideration to the key selection factors for the North Gila-Imperial Valley #2 500 kV Line project as described in Section 2.1 of this report.

This report summarizes information provided by each project sponsor that was considered by the ISO to be important in analyzing their proposals regarding each of the qualification criteria and selection factors. At the beginning of each subsection of this Section 3, commencing with Section 3.4, of this report, the ISO has provided a listing of the sections of the project sponsor's application that the ISO particularly considered in undertaking its comparative analysis for that qualification criterion or selection factor. In addition, in the ISO's summaries in this report describing the information provided by each project sponsor, the ISO has provided a reference to the particular sections of the project sponsor's application that served as the source for that summary.

In undertaking its analysis of the merits of the information provided in a project sponsor's proposal, the ISO accounted for information provided regarding the experience of a project sponsor and its team as follows. In any case where a project sponsor provided a list of potential contractors to perform one of the activities that is the subject of a selection factor, the ISO used the experience of the contractor on the list with the least experience in evaluating the experience of the project sponsor and its team. This approach accounts for the possibility that the project sponsor might ultimately choose to use that contractor. Additionally, in any case where a project sponsor is a recently-formed entity -- for purposes of this report, CalGrid, the ISO evaluated the project sponsor's prior experience based on the indicated experience of the members of its team. Finally, the ISO has concluded that there is no significant difference between the two proposals submitted by VPC with regard to many aspects of the satisfaction of the selection factors. Consequently, references to VPC and its proposal in this report apply equally to both VPC's VPC proposal and VPC's Dunes proposal unless this report includes an express distinction between the two proposals.

Because this report is a summary, it does not repeat all of the information provided by the project sponsors. However, the ISO reviewed and considered all of the information provided by the project sponsors, and the ISO's failure to reference any specific information provided by a project sponsor does not indicate lack of consideration of such information.

3.2 Description of Project Sponsors for the North Gila-Imperial Valley #2 500 kV Line Project

The ISO evaluated six validated and qualified project sponsor applications for the North Gila-Imperial Valley #2 500 kV Line project submitted by five project sponsors:

- CalGrid
- Horizon West
- Lotus
- LSPGC
- VPC, which submitted two proposals -- referred to herein as the VPC proposal and the VPC Dunes proposal

All five entities are qualified and submitted strong, competitive applications supporting their proposals. As a result, the ISO had to make detailed distinctions among the five project sponsors and their six validated and qualified proposals in the comparative analysis process in selecting the approved project sponsor.

CalGrid

According to its proposal, CalGrid is a wholly owned subsidiary of Viridon Holdings LLC, which, together with its subsidiaries and affiliates, is generally known as Viridon. CalGrid indicated that it is a Delaware limited liability company established as a holding company for greenfield transmission projects in California. CalGrid indicated Viridon is headquartered in Chicago, Illinois, and was formed in 2023 by a team of experienced transmission industry leaders, with over 25 years of combined experience in the competitive transmission business, to expedite the clean energy transition by investing in and managing electric transmission facilities across North America. CalGrid indicated Viridon is a portfolio company of Blackstone Inc. (Blackstone), which is a publicly traded company. (A-5) CalGrid indicated that Blackstone's latest investment fund, Blackstone Energy Transition Partners IV (BETP IV) is the majority owner of Viridon's equity interest and that it is relying on BETP IV and its ultimate parent, Blackstone, to provide financial support and guarantees for this project. (A-5)

CalGrid indicated that it proposes to create a special purpose entity in the form of a limited liability company to finance, construct, own, and operate this transmission asset if selected as the approved project sponsor for the project. CalGrid indicated that the special purpose entity would be a wholly-owned subsidiary of CalGrid. CalGrid indicated it would utilize Viridon personnel to perform or manage all aspects of the project. CalGrid indicated that Viridon personnel are employed by Viridon Services LLC, a service company that, through intermediate holding companies, is a wholly-owned subsidiary of Viridon Holdings LLC. CalGrid indicated that although Viridon was formed in 2023, its management team has extensive experience and a deep understanding of how to design, develop, construct, own, and operate complex transmission facilities. (A-5)

CalGrid Access to Affiliate Financial Support

CalGrid indicated the project would be financed using a combination of equity and debt. CalGrid indicated that Viridon, acting through CalGrid and with the support of majority owner BETP IV, would invest 100% of the equity required to finance the project and anticipates using debt and equity throughout the project's life. CalGrid indicated that CalGrid and the special purpose entity, as wholly owned subsidiaries of Viridon and affiliates of Viridon's majority owner BETP IV, ultimate parent Blackstone, and other Blackstone entities, would benefit from all relevant capabilities and resources of the combined Viridon and Blackstone organizations. (F-1, F-5)

CalGrid's proposal included a parent support letter from Blackstone indicating support for the project by Blackstone, the ultimate parent of the project's majority owner BETP IV, and that BETP IV would benefit from Blackstone's strong reputation in the financial community. (F2.2)

CalGrid's proposal also included pro forma financial instruments to support the equity funding requirements of the project, which would be effective conditional upon selection of CalGrid as the approved project sponsor and closing of the financing. (F-2.3, F-2.4)

Horizon West

According to its proposal, Horizon West is a Delaware limited liability company formed in 2014 that is a wholly-owned subsidiary of NextEra Energy Transmission, LLC (NEET)

and an indirect subsidiary of NextEra Energy, Inc. (NextEra). Horizon West indicated that it would own this project and other assets in the ISO region as a portfolio and is not intended to be a stand-alone project company for this project. (Executive Summary, A-5, F-1)

Horizon West indicated that NextEra, its ultimate parent, and its wholly owned subsidiary NEET are headquartered in Juno Beach, Florida, and NextEra's principal subsidiaries are Florida Power & Light Company and NextEra Energy Resources, LLC. Horizon West indicated that another key entity in the NextEra organization is NextEra Energy Capital Holdings, Inc. (NEECH), which is a wholly-owned subsidiary of NextEra and owns and provides funding for NextEra's operating subsidiaries, other than Florida Power & Light Company and its subsidiaries, including NEET and Horizon West.

Horizon West indicated that its immediate parent, NEET, was formed by NextEra in 2007 to leverage NextEra's experience and resources in developing, designing, constructing, owning, and operating transmission facilities across the United States and Canada and that NEET's assets include operating transmission facilities in California (the Suncrest static voltage and reactive control (VAR) compensator (SVC) facility and Trans Bay Cable, LLC (Trans Bay Cable) high voltage direct current (HVDC) facility), Nevada, Texas, New Hampshire, Illinois and Kentucky, Kansas and Oklahoma, and Ontario (Canada). (Executive Summary, A-5)

Horizon West's Access to Affiliate Financial Support

Horizon West indicated that during development, permitting, and construction of the project it would enter into debt financing arrangements and receive equity from NextEra's financing affiliate, NEECH. Upon commercial operations and throughout the life of the project, Horizon West indicated that it plans to finance the project with debt from NEECH. (F-1)

Horizon West provided a letter from NextEra indicating that NEECH would provide appropriate funding and needed guarantees to Horizon West and that those would in turn be guaranteed by NextEra as provided for through a blanket guarantee arrangement between NEECH and NextEra. (F-2, F-2e, F-2f)

Lotus

According to its proposal, Lotus specializes in deploying equity capital in energy infrastructure investment in North America, with a focus on the transmission, renewable power generation, energy storage, biofuels, and natural gas sectors. Lotus indicated that it would create a special purpose entity as an affiliate for purposes of developing the project. Lotus indicated that the special purpose entity would be managed by Lotus through Lotus Infrastructure Fund III U.S. AIV, LP. (LIF III) and affiliated investment vehicles specifically to finance, construct, own, maintain, and operate the project. (A-5, F-5)

Lotus Access to Affiliate Financial Support

Lotus indicated that it has sufficient capital through LIF III and investment affiliates to support the construction of the project and any potential liabilities. (F-1, F-2).

Lotus provided a written parent guarantee, providing financial assurance that LIF III, as the direct parent of the special purpose entity to be formed specifically for this project, would provide customary credit support and has adequate financial resources to provide the financial support for the project repairs and permitting of the project. (F-2.1)

LSPGC

According to its proposal, LSPGC is a Delaware limited liability company established to own transmission projects in California, including this project. LSPGC indicated that, through intermediate holding companies (LS Power Grid California Holdings, LLC, LSP Transmission Holdings, LLC, and LSP Generation IV, LLC), it is a wholly-owned subsidiary of LS Power Associates, L.P., which, together with its subsidiaries and affiliates, is generally known as LS Power. LSPGC indicated that a similar ownership and organization structure has been used by LS Power for its past projects, including all of its transmission projects. (A-5)

LSPGC indicated that it would utilize LS Power personnel to perform or manage all aspects of the project. LSPGC also identified six affiliates as particularly relevant to its proposal: (i) Cross Texas Transmission, LLC (Cross Texas), a transmission service provider in Texas, (ii) DesertLink, LLC (DesertLink), the owner of the Harry Allen-Eldorado 500 kV transmission line competitively selected by the ISO in 2016, (iii) Great Basin Transmission South, LLC, owner of a 75% interest in the One Nevada Transmission Line facilities in Nevada, (iv) Republic Transmission, LLC, the owner of the Duff to Coleman 345 kV transmission line in Indiana competitively awarded by MISO in 2016, (v) Silver Run Electric, LLC, the owner of the Silver Run 230 kV Substation and Silver Run-Hope Creek 230 kV transmission line competitively awarded by PJM in 2014, and (vi) LS Power Grid New York Corporation I, the owner of the Gordon Road and Princetown 345 kV gas-insulated switchgear (GIS) substations and 345 kV transmission line in New York competitively awarded by NYISO in 2019. (A-5)

LSPGC Access to Affiliate Financial Support

LSPGC indicated that it is relying on its parent LS Power to satisfy the financial criterion for this project. LSPGC provided evidence of LS Power's financial assurances to LSPGC in the form of a written guarantee. (F-2, F-2A)

LSPGC also provided an equity financing commitment from LS Power's majority owner management company indicating the majority owner's commitment to provide funding to LS Power for the project. (F-2B)

VPC

According to its proposal, VPC is a Delaware limited liability company and wholly owned subsidiary of Grid United, LLC (Grid United), also a Delaware limited liability company. VPC indicated that Grid United is backed by its ultimate parent company Centaurus Capital LP (Centaurus). (A-5)

VPC indicated that the project company is a limited liability company that is jointly owned by VPC and Southwest Transmission Partners, LLC (STP). VPC indicated that VPC would have the option to purchase additional ownership interest in the project company from STP and that IID and Citizens Energy would participate in the project pursuant to a coordination agreement. According to VPC's proposal, STP is an Arizona limited liability

company that currently owns 60% of the issued and outstanding limited liability company interests in the project company. The proposal also indicated that Citizens Energy is a Massachusetts non-profit 501(c)(4) corporation that owns Citizens Enterprises Corporation (a for-profit holding company) and IID is organized under the Water Code of the State of California. (A-5 Coordination Agreement)

VPC indicated that under the coordination agreement, IID and Citizens Energy would have the option to invest in the project in exchange for the ability to acquire leasehold interests in portions of the transmission capacity rights of the project post construction. (A-5)

VPC indicated that IID would invest in a portion of the transmission capacity associated with the project. (A-5 Coordination Agreement) VPC indicated that IID would be a non-PTO holding Transmission Ownership Rights under Article Section 17 of the ISO Tariff equal to its 20% ownership of the eastern segment of the new transmission line and for the VPC Dunes proposed project would also own 40% ownership of its new proposed Dunes 500 kV Switching Station.

VPC Access to Affiliate Financial Support

VPC indicated that funding costs incurred by the project company in the development and construction phases of the project would be provided by VPC's parent company, Grid United, which would be provided 100% project-level equity for the project from Centaurus and would also raise project-level debt. (A-5)

VPC indicated it would rely on Centaurus for the financial backing of equity for the project, which would be available to support the construction and development of the project. (F-2) VPC provided a financial commitment letter, signed by an officer, providing financial assurance that Centaurus, as the direct parent of VPC, would provide equity and has adequate financial resources to provide the financial support for the project to either VPC or Grid United for the project company. (F-2)

3.3 Selection Factor 24.5.4(a): Overall Capability to Finance, License, Construct, Operate, and Maintain the Facility

The ISO notes that the first selection factor is a broad factor that generally encompasses several subsequent narrower selection factors. The ISO will address satisfaction of this more general factor in its discussion of the applicable, more specific selection factors. The ISO will not duplicate here (1) the information provided by the project sponsors for purposes of demonstrating their capabilities and experience regarding each of the encompassed selection factors, or (2) the ISO's comparative analysis of the project sponsors' proposals in this regard, as set forth in the following sections of this report. The ISO will discuss the comparative analysis for selection factor 24.5.4(a) in Section 3.14 of this report after the discussion of the other selection factors.

3.4 Selection Factor 24.5.4(b): Existing Rights-of-Way and Substations that Would Contribute to the Project

(Executive Summary, L-1, L-4, E-1, E-2)

The second selection factor is "the Project Sponsor's existing rights of way and substations that would contribute to the transmission solution in question." As discussed

in Section 2.1, the ISO has identified this selection factor as a key selection factor because the availability of existing rights-of-way can contribute to lower project cost, reduced rights-of-way acquisition efforts, and reduction in the overall time needed to complete the project.

3.4.1 Information Provided by CalGrid

CalGrid indicated it does not have any existing land rights to support the project. (L-4)

CalGrid indicated it would acquire land rights from the U.S. Bureau of Land Management (BLM), Fort Yuma Quechan Tribe, U.S. Bureau of Reclamation, and private landowners. (E-2, L-1)

CalGrid indicated that additional discussions with the Fort Yuma Quechan Tribe would be required to acquire land rights. (L-1)

Furthermore, CalGrid indicated if negotiations with the Fort Yuma Quechan Tribe were to fail, it has an alternative route that avoids the tribal lands. (E-2)

3.4.2 Information Provided by Horizon West

Horizon West indicated it does not have any existing land rights to contribute to the project. (L-4)

Horizon West indicated it would acquire land rights from the BLM, U.S. Bureau of Reclamation, and private landowners. (E-2, L-1)

Horizon West indicated it avoided tribal lands with its proposed route. (L-1)

Horizon West indicated that it conducted a critical issues analysis and studied a number of alternative routes. Horizon West indicated that the proposed route would require approximately 1540 acres of federal managed land and 518 acres of private land. (L-1)

3.4.3 Information Provided by Lotus

Lotus indicated it does not have any existing land rights to contribute to the project. (L-4)

Lotus indicated it would acquire land rights from the BLM, Fort Yuma Quechan Tribe, U.S. Bureau of Reclamation, and private landowners. (E-2, L-1)

Lotus indicated that it had thoroughly evaluated the risk of securing land rights on the Fort Yuma Quechan Tribe Reservation, including routes that avoided the reservation and were studied as part of the 2019 Section 368 energy corridor regional reviews. (L-1)

Lotus indicated that it has a history of working with the Fort Yuma Quechan Tribe on its Ten Link West project and has had discussions with the Tribe concerning its preferred route. Furthermore, Lotus indicated if negotiations with the Fort Yuma Quechan Tribe were to fail it has an alternative route that avoids the tribal lands. (L-1)

3.4.4 Information Provided by LSPGC

LSPGC indicated it does not have any existing land rights to contribute to the project. (L-4)

LSPGC indicated it would acquire land rights from the BLM, U.S. Bureau of Reclamation, and private landowners. (E-2, L-1)

LSPGC indicated it had completed a comprehensive evaluation of suitable route alternatives for the project and selected a proposed route that minimizes impacts and supports a constructible design. LSPGC indicated that the proposed route avoids tribal land. (L-1)

LSPGC indicated that it completed a thorough review of opportunities, constraints, and concerns analysis, including a helicopter survey of the route alternatives. (L-1)

3.4.5 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC indicated it does not have any existing land rights to contribute to the project. (L-4)

VPC indicated it would acquire land rights from the BLM, U.S. Bureau of Reclamation, and private landowners. (E-2, L-1)

VPC provided a routing study that included a detailed analysis of all siting opportunities and constraints located within the study area for the proposed project and provided the rationale behind selection of the alternative routes analyzed and the selection of the proposed route. (L-1)

VPC indicated it filed a SF-299 form (Application for Transportation, Utility Systems, Telecommunications and Facilities on Federal Lands and Property) and cost recovery agreement with the BLM in 2009 and it has been serialized by the BLM and updated several times since, including the submission of a routing study and plan of development in 2019. (E-4)

VPC indicated that it had already submitted to the BLM a draft plan of development and 18 draft mitigation plans and has worked with the BLM to identify possible issues, study requirements, and mitigation measures. VPC indicated that this would allow the BLM's National Environmental Policy Act (NEPA) review and further action on the rights-of-way application to proceed quickly and efficiently after ISO award. (E-4)

3.4.6 ISO Comparative Analysis

For purposes of the comparative analysis for this factor, the ISO has considered the representations by the project sponsors regarding the rights-of-way or other land rights they possess and are proposing to contribute to this project and acquisition of land rights needed for the project.

All six proposals of the five project sponsors indicated that the project sponsors did not have existing land rights along the project route.

Subject to the following considerations, the ISO considers all five project sponsors to have sufficient plans for the acquisition of the necessary land rights for the project.

The ISO notes that VPC submitted an SF-299 package to the BLM originally in 2009 for a similar project and recently updated the information for this project. VPC also submitted a draft plan of development and a number of mitigation plans to the BLM. The ISO recognizes that all of the project sponsors will utilize the SF-299 process and submit a plan of development to the BLM, so the ISO does not consider this to give VPC a significant advantage regarding ability to acquire sufficient land rights for the project. However, the ISO recognizes that this could give VPC a potential advantage regarding the project schedule because it can take a year or more for this process. The ISO considers this potential advantage related to the VPC and VPC Dunes project schedule in Section 3.6.

The ISO also notes that the routing proposals of CalGrid and Lotus cross Fort Yuma Quechan Tribe lands, which has the potential of increasing project schedule risk and increasing project costs if there are any issues with securing land rights to cross the Fort Yuma Quechan Tribe lands. The ISO considers these potential schedule and cost risks in Sections 3.6 and 3.12 respectively. While the proposals to cross tribal lands would otherwise also result in risks to the ability of CalGrid and Lotus to acquire land rights for the project, the proposals of CalGrid and Lotus included alternate routes that would avoid the need to cross tribal lands. The ISO considers the inclusion of these proposed alternate routes to minimize the risks to the ability of CalGrid and Lotus to acquire sufficient land rights to develop the project.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this factor, the ISO has determined that, based on the specific scope of this project, there is no material difference among the six proposals of the five project sponsors regarding this factor.

3.5 Selection Factor 24.5.4(c): Experience in Acquiring Rights-of-Way

The third selection factor is "the experience of the Project Sponsor and its team in acquiring rights of way, if necessary, that would facilitate approval and construction, and in the case of a Project Sponsor with existing rights of way, whether the Project Sponsor would incur incremental costs in connection with placing new or additional facilities associated with the transmission solution on such existing right of way." As discussed in Section 2.1, the ISO has identified this selection factor as a key selection factor because experience in acquiring rights-of-way can contribute to lower project cost, reduced rights-of-way acquisition efforts, and reduction in the overall time needed to complete the project.

For the purpose of performing the comparative analysis for this factor, the ISO has initially considered the two components of the factor separately and then combined them into an overall comparative analysis for this factor. The two components are: (1) the experience of the project sponsor and its team in acquiring rights-of-way and (2) for the case of a project sponsor with existing rights-of-way, whether the project sponsor would incur incremental costs in connection with placing new or additional facilities associated with the transmission solution on such existing rights-of-way.

Experience in Acquiring Rights-of-Way

(Prior Projects and Experience Workbook)

3.5.1 Information Provided by CalGrid

CalGrid provided a list of its experience and the experience of its contractors with acquiring rights-of-way for transmission line projects. Regarding projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., the information provided included 33 transmission line projects, with one in California. (Prior Projects and Experience Workbook)

3.5.2 Information Provided by Horizon West

Horizon West provided a list of its experience and the experience of its contractors with acquiring rights-of-way for transmission line projects. Regarding projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., the information provided included 59 transmission line projects, with two in California. (Prior Projects and Experience Workbook)

3.5.3 Information Provided by Lotus

Lotus provided a list of its experience and the experience of its contractors with acquiring rights-of-way for transmission line projects. Regarding projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., the information provided included five transmission line projects, with two in California. (Prior Projects and Experience Workbook)

3.5.4 Information Provided by LSPGC

LSPGC provided a list of its experience and the experience of its contractors with acquiring rights-of-way for transmission line projects. Regarding projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., the information provided included nine transmission line projects, with none in California. (Prior Projects and Experience Workbook)

3.5.5 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC provided a list of its experience and the experience of its contractors with acquiring rights-of-way for transmission line projects. Regarding projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., the information provided included two transmission line projects, with one in California. (Prior Projects and Experience Workbook)

For the VPC Dunes proposal, VPC provided a list of its experience and the experience of its contractors with acquiring rights-of-way for substation projects. Regarding projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., the information provided showed no projects in the U.S. (Prior Projects and Experience Workbook).

VPC indicated that IID has more permitting and land acquisition experience in the project region than any other entity and would act as the California Environmental Quality Act (CEQA) lead agency for the project. (A-4)

Incremental Costs Associated with Use of Existing Rights-of-Way
(L-4)

3.5.6 Information Provided by CalGrid

CalGrid indicated it does not have any existing land rights along its proposed project route. (L-4)

3.5.7 Information Provided by Horizon West

Horizon West indicated it does not have any existing land rights along its proposed project route. (L-4)

3.5.8 Information Provided by Lotus

Lotus indicated it does not have any existing land rights along its proposed project route. (L-4)

3.5.9 Information Provided by LSPGC

LSPGC indicated it does not have any existing land rights along its proposed project route. (L-4)

3.5.10 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC indicated it does not have any existing land rights along its proposed project route. (L-4)

3.5.11 ISO Comparative Analysis

Comparative Analysis of Experience in Acquiring Rights-of-Way

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding the experience of both the project sponsor and its team members in acquiring rights-of-way, including but not limited to experience in the U.S. and California.

The ISO considers experience in acquiring rights-of-way in California to be a slight advantage over experience in rights-of-way acquisition in other jurisdictions because a significant portion of the project will be located in California and such experience will facilitate the timely, efficient, and effective undertaking of the project.

All five project sponsors and their teams have experience in acquiring land rights and site control. Regarding experience in the acquisition of land rights, the ISO has determined that there is no material difference between the experience of CalGrid and Horizon West, because they and their teams have substantial land rights acquisition experience, including experience in California. The experience described by CalGrid and Horizon West is significantly greater than the experience described by Lotus, LSPGC, and VPC, for its two proposals, and the experience of Lotus and VPC, for its

two proposals, is slightly better than the experience of LSPGC because they identified California experience in acquiring rights-of-way for transmission lines and LSGPC did not.

Comparative Analysis Incremental Costs Associated with Use of Existing Rights-of Way

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding whether the project sponsor would incur incremental costs in connection with placing new or additional facilities associated with the project on existing rights-of-way.

None of the six proposals of the five project sponsors indicated that the project sponsor expects to incur any incremental costs because of any use of existing rights-of-way for this project. As a result, the ISO has determined that there is no material difference among the six proposals regarding this component of the factor.

Overall Comparative Analysis

Regarding the two components of this factor, as described above, the ISO has determined regarding the first component [experience in the acquisition of land rights] that there is no material difference between the experience of CalGrid and Horizon West, and their experience is better than the experience of Lotus and VPC, for its two proposals, among which there is no material difference, and that the experience of Lotus and VPC, for its two proposals, is slightly better than the experience identified by LSPGC, and regarding the second component [incremental cost] that there is no material difference among the six project proposals. As a result, the ISO has determined that there no material difference between the experience of CalGrid and Horizon West, and their experience is better than the experience of Lotus and VPC, for its two proposals, among which there is no material difference, and that the experience of Lotus and VPC, for its two proposals is slightly better than the experience identified by LSPGC, regarding this factor overall.

3.6 Selection Factor 24.5.4(d): Proposed Schedule and Demonstrated Ability to Meet Schedule

The fourth selection factor is “the proposed schedule for development and completion of the transmission solution and demonstrated ability to meet the schedule of the Project Sponsor and its team.” As discussed in Section 2.1, the ISO has identified this selection factor as a key selection factor because of the need for this project by the latest in-service date specified in the ISO Functional Specifications, which is particularly important for this project because the timing of this project is critical because it is one of the Southern Area Reinforcement projects identified in the ISO’s 2022-2023 transmission plan as needed to ensure the constraints identified in the plan are addressed. The ISO used the following considerations in its analysis for this component of the factor:

- Proposed schedules
- Scope of activities specified in the proposed schedules
- Amount of schedule float
- Experience of project sponsors
- Potential risks associated with project sponsor's proposal

A proposal that best satisfies this factor will contribute significantly to ensuring that the project sponsor selected will develop the project in a prudent, efficient, cost-effective, and timely manner.

For the purpose of performing the comparative analysis for this factor, the ISO has initially considered the two components of the factor separately and then combined them into an overall comparative analysis for this factor. The two components are: (1) the proposed schedule for development and completion of the project and (2) demonstrated ability of the project sponsor and its team to meet that schedule.

Proposed Schedule

(P-3)

3.6.1 Information Provided by CalGrid

CalGrid's proposed project schedule included an in-service date of January 1, 2031, which is 17 months earlier than the ISO's latest in-service date of June 1, 2032. CalGrid indicated that there are four months of float built into its schedule. CalGrid also provided measures that it could take if faced with unanticipated delays such as utilizing, if necessary, price escalation strategies and eminent domain for rights-of-way acquisition, utilizing SB 149 and the Transmission Siting and Economic Development grant program, if applicable, to expedite permitting activities, as well as expediting construction and procurement activities. (P-3)

3.6.2 Information Provided by Horizon West

Horizon West's proposed project schedule included a planned in-service date of December 15, 2029, which is 29.5 months earlier than the ISO's latest in-service date of June 1, 2032, and guaranteed an in-service date of December 31, 2031 which is five months earlier. (P-3)

Horizon West also provided measures it could take if faced with unanticipated delays such as accelerating its permitting schedule, exploring offering higher values or eminent domain for land acquisition, and expediting its construction process by increasing staffing. (P-3)

3.6.3 Information Provided by Lotus

Lotus' proposed project schedule included an expected in-service date of April 5, 2030, which is nearly 26 months earlier than the ISO's latest in-service date of June 1, 2032. (P-3)

Lotus indicated that its schedule contains six months of float, which can be applied to permitting or construction. (P-3)

Lotus also indicated that it could take several steps to achieve an in-service date earlier than the proposed April 2030 date, which could result in some additional costs. (P-3)

3.6.4 Information Provided by LSPGC

LSPGC's proposed project schedule included an expected in-service date of December 1, 2031, which is six months earlier than the ISO's latest in-service date of June 1, 2032. (P-3)

LSPGC did not identify any additional float in its schedule. (P-3)

LSPGC also indicated several measures it could take in case of unanticipated delays, such as additional outreach in case of delays during permitting, allocating additional personnel to engage with landowners, offering incentives, and initiating condemnation proceedings earlier in case of delays in land acquisition. LSPGC also indicated that in the event of a delay during engineering, procurement, and construction, it would use additional personnel to accelerate the schedule. (P-3)

3.6.5 Information Provided by VPC for VPC and VPC Dunes Proposals

For the VPC proposal, VPC's proposed project schedule included an expected in-service date of June 1, 2032, which is same as the ISO's latest in-service date of June 1, 2032. VPC indicated that this schedule contains 173 days of float. (P-3) VPC also proposed an alternate schedule with an expected in-service date of December 31, 2029, which is 29 months earlier than the ISO's latest in-service date of June 1, 2032. VPC indicated that this schedule contains 165 days of float. (P-3)

For the VPC Dunes proposal, VPC's proposed project schedule for its Dunes project included an expected in-service date of June 1, 2032, which is same as the ISO's latest in-service date of June 1, 2032. VPC indicated that this schedule contains 173 days of float for the transmission line and 72 days of float for the switching substation. (P-3) VPC also proposed an alternate schedule with an expected in-service date of December 31, 2029, which is 29 months earlier than the ISO's latest in-service date of June 1, 2032. VPC indicated that this schedule contains 165 days of float for the transmission line and 56 days of float for the substation. (P-3)

VPC indicated that it could take several measures in the event of unanticipated delays, such as condensing the back half of its schedule in case of delays in land acquisition. VPC also indicated that in the event of land, permitting, or construction delays of up to six months, it could take steps such as securing a conditional notice to proceed from the BLM, self-funding certain construction activities prior to closing on financing, increasing the number of construction crews, beginning the construction financing process prior to fully completing permitting, and procuring major equipment from a local utility's inventory. (P-3)

Ability to Meet Schedule

(Prior Projects and Experience Workbook, A-5, P-1, P-2, P-3, P-4)

3.6.6 Information Provided by CalGrid

Past Performance

CalGrid provided schedule performance for 12 200 kV or above transmission line projects that were completed in the past ten years by its team members in the U.S. and internationally, along with their planned and actual in-service dates. The information provided by CalGrid indicated that all twelve projects were completed on or before the planned in-service date. (Prior Projects and Experience Workbook)

Project Management and Team

CalGrid indicated that its project management steps include project kickoff and scoping, schedule development, risk identification and mitigation plans, and cost estimates, and CalGrid provided detailed information for these steps. (P-1)

Regarding project kickoff and scoping, CalGrid indicated that it would host a formal project kickoff meeting where it would confirm that each team member understands the project scope, goals, objectives, and priorities and would define individual priorities and responsibilities. (P-1)

Regarding schedule development, CalGrid indicated that it would utilize the Primavera Enterprise Project Portfolio Management tools to develop a schedule that captures all key tasks and milestones. (P-1)

Regarding risk identification and mitigation plans, CalGrid indicated that its project planning team has developed a framework to provide each team member the means to populate a risk log covering functional areas of expertise and experience. (P-1)

CalGrid described its approach to project management execution, which includes project controls, project communication, quality management, risk management, procurement coordination, and safety management. (P-1)

CalGrid indicated that its construction contractor would use a technology software platform that allows real-time decision-making during all phases of the project. (P-1)

CalGrid also described its approach for developing the project schedule. CalGrid indicated that the project director would have responsibility for maintaining the master schedule from award to COD. (P-1)

CalGrid further indicated that the master project schedule would be progressed weekly and updated monthly and would be developed to ensure delivery of its project within the required commitments made by CalGrid. (P-1)

CalGrid provided information on its project management leadership team that brings decades of experience in management of projects. (P-2)

CalGrid indicated that its leadership team is supported by world-class contractors responsible for project development, planning, permitting, construction, rights-of-way acquisition, public engagement, operations, and maintenance. (P-2)

CalGrid provided the resume of the individual who would be the ISO project director for this project. (A-5)

In addition, CalGrid indicated that it has formed a project advisory team that is available to provide additional support and guidance as necessary throughout the project development, permitting, financing, and construction phases of execution. (P-2)

CalGrid indicated that the project would be executed by the project management team with a single point of contact, its project director. CalGrid indicated that it has assembled a project team with relevant experience in all areas of project execution to provide certainty to the ISO that the project would be delivered on schedule and on budget. (P-1)

Risk Management
CalGrid provided a risk log that included 67 risk items grouped into several risk categories (permitting, procurement, construction, rights-of-way, operations etc.), the risk consequence (cost, schedule) and the likelihood of the risk (low, medium, high). The risk log also included the owner of each risk (CalGrid, ISO), as well as the mitigation measure for each risk item. (P-4)

CalGrid indicated that additional discussions with the Fort Yuma Quechan Tribe would be required to acquire land rights. (L-1) Furthermore, CalGrid indicated if negotiations with the Fort Yuma Quechan Tribe were to fail, it has an alternative route that avoids the tribal lands. (E-2)

CalGrid indicated that it would be sponsoring proposals for two other ISO competitive solicitation projects: (1) Imperial Valley-North of SONGS 500 kV transmission line and substation project; and (2) North of SONGS-Serrano 500 kV transmission line project. CalGrid further indicated that if selected as the approved project sponsor for two or more projects, it would utilize other key staff members with long histories of project management and development experience to take lead project director roles for either one or both of the additional projects and add resources if gaps are identified. CalGrid also indicated that it would critically evaluate the resource availability of key contractors (environmental, engineering, design, and construction) and bid project work out to other capable and qualified contractors to ensure resource availability and timely project execution is not compromised for any additional awarded projects. (P-4)

Financial Incentive
CalGrid's proposal included a schedule completion incentive penalty that would lower the project's return on equity by 2.5 basis points for every full calendar month that the project's energization is delayed beyond June 1, 2032, up to a total of 30 basis points. (P-3)

3.6.7 Information Provided by Horizon West

Past Performance
Horizon West provided schedule performance for 53 200 kV or above transmission line projects that were completed in the past ten years in the U.S. and internationally, along with their planned and actual in-service dates. The information provided by Horizon West indicated that 49 of the 53 transmission line projects were completed on or before schedule and that four projects were delayed. Based on the schedule performance information provided by Horizon West, the average delay in schedule when a project was delayed was one month. The reasons for the delays provided by Horizon West

included delays due to permitting, PSC approval and PPA execution. (Prior Projects and Experience Workbook)

Project Management and Team
Horizon West provided information regarding its five phases of project management, which include project launch and initiation, project planning, project execution, project monitoring and controlling, and project closeout. (P-1)

Regarding project launch and initiation, Horizon West indicated that the project director would oversee the selection of consultants and contractors and allocation of internal resources, as well as identify the metrics to monitor the project during its lifecycle. (P-1)

Regarding project planning, Horizon West indicated that its team would develop a project execution plan, a master project schedule, a project budget, and a risk and issues log, and Horizon West provided additional information for these steps. (P-1)

Regarding project execution, Horizon West indicated that the project management team, led on a day-to-day basis by the project manager, would then begin working on the tasks and milestone deliverables identified within the project execution plan using specific technology platforms to facilitate the exchange of project information, engineering plans, and drawings. (P-1)

Regarding monitoring and control, Horizon West indicated that the project schedule, budget, and risk logs for the project would be updated based on current information. (P-1)

Regarding project closeout, Horizon West indicated that the project team would complete documentation and closeout, including transferring supplier agreements and paying out final invoices upon project completion. (P-1)

Horizon West indicated that Horizon West's senior management team would oversee the project. (P-2)

Horizon West also indicated that a project director would lead a core team comprised of subject matter experts on regulatory, technical services, land, environmental, engineering, construction, procurement, finance, operations and maintenance (O&M), tribal relations, FERC, and legal. (P-2)

Horizon West indicated that its project director would provide a single point of accountability for day-to-day activities, oversee all workstream leads and resources, and be responsible for reporting progress to senior management. (P-2)

Horizon West indicated that its project director would also be responsible for tracking overall progress maintaining that resources are available to keep the project under budget and on schedule. (P-2)

Horizon West provided the resumes of the individuals who would be the early and late-stage project directors for this project. (A-5)

Risk Management
Horizon West provided a risk and issue log that identified 24 high-level set of risks, category of risk, whether it affects cost or schedule, the probability of occurrence, the

impact of the occurrence, whether it is a risk during development or construction, and both completed and potential mitigation. (P-4)

Horizon West indicated that the major risks to the project include routing risk, delay in the process of acquiring a certificate of public convenience and necessity (CPCN) from the California Public Utilities Commission (CPUC), and construction cost risk and in each case identified mitigation measures. (P-4)

Horizon West indicated that it is sponsoring more than one project in the ISO's 2022-2023 competitive solicitation process and that its in-service date for each of the three projects would not be affected if selected as the approved project sponsor for two or more of the projects. (P-4)

Financial Incentive
Horizon West indicated that it has committed to a 0.2% reduction in its proposed cap on its annual revenue requirement for each month that the project is delayed beyond the guaranteed in-service date of December 31, 2031, up to a maximum of 1.2%. (P-3)

3.6.8 Information Provided by Lotus

Past Performance
Lotus provided schedule performance for one 200 kV or above transmission line project that is still under construction in the U.S., along with its planned and anticipated in-service date. The information provided by Lotus indicated that this project is delayed by four years due to multiple reasons for delays, which have been explained in quarterly reports to the ISO. (Prior Projects and Experience Workbook).

Project Management and Team
Lotus indicated that through its contractors it would develop plans that include preconstruction, coordination with APS and SDG&E, FERC filings, public outreach plan, and APS and SDG&E interconnection applications. (P-1)

Lotus also indicated that during the preconstruction phase, it would develop plans for procurement, health and safety, project execution, environmental management, electrical studies, interconnection studies, etc. (P-1)

Lotus indicated that its chief executive officer would oversee the successful completion of the project. Lotus also provided the experience of individuals chosen for key positions, such as project manager, environmental and permitting lead, asset manager, land acquisition lead, engineering, procurement, and construction lead, finance lead, and project administrator. (P-2)

Lotus indicated that this project development team has been working together for many years in similar capacities, including working in a similar structure on the project in California and Arizona. Lotus also indicated that the consultants that would support the project development team have worked with Lotus on several projects over the years, including a project in California and Arizona. (P-2)

Lotus provided the resume of the individual who would be the project manager for this project (A-5)

Risk Management
Lotus provided a list of major risks and obstacles that included lack of detailed system data for design, siting and land acquisition, environmental permitting, cost containment, and its ability to develop multiple projects simultaneously. Lotus also provided mitigation measures for these risks and obstacles. (P-4)

Regarding siting and land acquisition, Lotus identified failing to garner the willingness of landowners to participate in negotiations as the highest risk and indicated its experience in anticipating and addressing landowner questions and concerns. Lotus also indicated that its affiliates have the tools and resources to investigate land ownership changes and locate contact information to establish contact with the new landowner. (P-4)

Lotus indicated that additional discussions with the Fort Yuma Quechan Tribe would be required to acquire land rights. (L-1) Furthermore, Lotus indicated if negotiations with the Fort Yuma Quechan Tribe were to fail, it has an alternative route that avoids the tribal lands. (E-2)

Regarding environmental permitting and mitigation, Lotus indicated that its experience with this process for a similar transmission project located in both California and Arizona mitigates the risk associated with this process, which could take several years.

Lotus also indicated that if selected as the approved project sponsor for all three projects in the ISO's 2022-2023 competitive solicitation process, including this project, its team has the capability to effectively develop all three projects simultaneously. (P-4)

3.6.9 Information Provided by LSPGC

Past Performance
LSPGC provided schedule performance for eight 200 kV or above transmission line projects that were completed in the past ten years in the U.S. and internationally, along with their planned and actual in-service dates. The information provided by LSPGC indicated that seven of the eight projects were completed on or before the planned in-service date. The information provided by LSPGC also indicated that one of the eight projects was delayed by three months due to force majeure claimed by the interconnecting transmission owner related to completion of the transmission owner's facilities. LSPGC also indicated that for this project, its affiliate completed its scope of work for the project on schedule and met its obligations to the ISO. (Prior Projects and Experience Workbook).

Project Management and Team
LSPGC provided information for its project management approach, which included risk management, schedule management, cost management, project communication, quality management, issues management, and safety management. (P-1)

Regarding risk management, LSPGC indicated that its risk management process is an iterative cycle of identification, assessment, mitigation, and monitoring. (P-1)

Regarding schedule management, LSPGC indicated that the master schedule it has developed includes schedule dependencies and critical path activities and incorporates the schedules of the project team and subcontractors. (P-1)

Regarding project communication, LSPGC indicated that the project team would rely on a number of communication tools including meetings, written reports, electronic data sharing sites, open houses, planning sessions, project specific website, social media, and media releases. (P-1)

Regarding quality management, LSPGC indicated that it covers all aspects of the project and ensures the project meets all requirements of the solicitation and industry codes and complies with all applicable laws, regulations, standards, guidelines, criteria, permits, and approvals management. (P-1)

Regarding issues management, LSPGC indicated that it follows a seven-step process for the management of issues. (P-1)

LSPGC indicated that it has assembled a team with relevant experience in all areas of project execution and the technical and financial capabilities to design, construct, operate, and maintain the project. (A-5)

LSPGC indicated that it has retained specialized firms to (1) assist with routing, environmental permitting, and regulatory approvals; (2) provide engineering services; (3) construct the transmission line; and (4) provide maintenance and emergency response services. (A-5)

LSPGC indicated that the project's governance structure would utilize a project director, who would be the overall lead, supported by a team of experts organized based on their area of expertise. (P-2)

LSPGC indicated that the project director would the primary point of contact for the ISO and would be responsible for guiding LSPGC's day-to-day activities and overseeing all deliverables from selection as the approved project sponsor until the beginning of operations. (P-2)

LSPGC further indicated that the project director would be dedicated to the project and would be supported by a highly qualified team of managers and subject matter experts with responsibilities for project execution in project development, engineering and procurement, and construction. (P-2)

LSPGC provided the resume of the individual who would be the project director for this project. (A-5)

Risk Management

LSPGC provided a project risk register that included 73 risk items in six risk categories – cost containment, project management and schedule, environmental permitting and public process, land acquisition, engineering and design, and construction. Each risk item included a rating for risk likelihood, risk consequence, risk level to ISO ratepayers, and risk level to LSPGC. Each risk item also included a mitigation measure. (P-4)

LSPGC also identified major risks to the project, such as interest rate increases, equipment and materials cost increases, and regulatory mandated deviations and provided the mitigation measures that it has adopted. (P-4)

LSPGC indicated that if selected as the approved project sponsor for multiple projects in the ISO's 2022-2023 competitive solicitation process, it has the resources to complete the projects on schedule and budget. (P-4)

Financial Incentive
LSPGC indicated that its proposal includes a schedule completion incentive penalty that would lower the project's return on equity by 2.5 basis points for every full calendar month that the project is delayed beyond June 1, 2032, up to a total of 30 basis points. (P-3)

3.6.10 Information Provided by VPC for VPC and VPC Dunes Proposals

Past Performance
VPC provided schedule performance for four 200 kV or above transmission line projects that were completed in the past ten years in the U.S. and internationally, along with their planned and actual in-service dates. The information provided by VPC indicated that two of the four transmission projects were delayed. Based on the schedule performance information provided by VPC, the average delay in schedule when a project was delayed was 12 months. The reasons for the delays provided by VPC for these projects include a CPUC mandate to underground a project post award, additional tower reinforcement identified by the engineers, additional relay work to address compliance requirements, installation of substation equipment to accommodate the increase in amperage, and customer delays due to permitting or not ready to begin. (Prior Projects and Experience Workbook)

Project Management and Team
VPC indicated that its project management approach covers around twenty areas, including resource management, risk management, project administration and document control, safety monitoring and reporting, materials management, construction planning, construction management, permitting, environmental compliance, community outreach, and project close out. (P-1)

VPC indicated that its schedule would encompass all relevant functions and activities of VPC, its partners, and suppliers required for the project. VPC indicated that its project schedule would be an integrated, level 3, critical path method, including work activities, task durations, sequences, milestones, completion dates, restraints, interrelationships between tasks, and critical paths. (P-1)

VPC also indicated that the project schedule would show the interdependence of all activities, including logic ties between each activity. (P-1)

VPC indicated that it has established a dedicated project execution group focused on providing project management, project control, execution planning, and construction expertise throughout the lifecycle of the project. (P-2)

VPC indicated that its project manager would be the primary individual responsible for day-to-day project management activities and would oversee the team leads for each project area (e.g., engineering, land, permitting, public processes, etc.) and would facilitate coordination and communication between each VPC team lead and executives at Grid United, Citizens Energy, and IID. (P-2)

VPC provided the resume of the individual who would be the project manager for this project. (P-2)

VPC also provided information on individuals responsible for budget and schedule management, risk management, construction planning, and execution. (P-2)

Risk Management
VPC indicated that the major risks to the project include permitting delays, cost of private rights-of-way, material and equipment pricing, subsurface conditions, and labor availability. VPC also included the mitigation measures for these risks. In addition, VPC included a risk matrix that identified several financial risks to VPC and the ISO, their probability, impact, and mitigation measures. VPC indicated that this matrix would continue to be updated as the project continues development. (P-4)

VPC indicated that it is sponsoring only one project, which would allow VPC to focus its full attention and resources on the proposed project. (P-4)

VPC indicated it filed a SF-299 form (Application for Transportation, Utility Systems, Telecommunications and Facilities on Federal Lands and Property) and cost recovery agreement with the BLM in 2009, and it has been serialized by the BLM and updated several times since, including the submission of a routing study and draft plan of development in 2019. (E-4)

VPC indicated that it had already submitted to the BLM a draft plan of development and 18 draft mitigation plans and has worked with the BLM to identify possible issues, study requirements, and mitigation measures. VPC indicated that this would allow the BLM's NEPA review and further action on the rights-of-way application to proceed quickly and efficiently after ISO award. (E-4)

Financial Incentive
VPC indicated that its proposal includes a binding annual revenue requirement (ARR) cap for the life of the project that incentivizes it to complete the project on schedule. (P-3)

3.6.11 ISO Comparative Analysis

Comparative Analysis of Proposed Schedule

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding their proposed schedules for development of the project, including but not limited to the scope of activities specified in their schedules and the reasonableness of the timelines they have specified.

All six proposals include schedules that meet the latest in-service date of June 1, 2032, specified in the ISO Functional Specifications, as clarified in the question and answer matrix posted on the ISO website. CalGrid proposed a project schedule that would complete the project 17 months ahead of the ISO's latest in-service date of June 1, 2032. Horizon West proposed a project schedule that would complete the project 29.5 months before the ISO's latest in-service date of June 1, 2032. Lotus proposed a project schedule that would complete the project 26 months before the ISO's latest in service date of June 1, 2032. LSPGC proposed a project schedule that would complete the project 6 months ahead of the ISO's latest in-service date of June 1, 2032. VPC proposed baseline and alternate schedules for its two proposals. For both VPC proposals, the baseline schedule indicated a project completion date of June 1, 2032,

which is the same as the latest in-service date specified in the ISO Functional Specifications, and the alternate schedule indicated a project completion date of December 31, 2029. Both schedules are supported by an accelerated completion of the SF-299 process as discussed in Section 3.4.6 regarding the proposed land rights for the project. As discussed above, the ISO considers the potential benefits from an earlier in-service to be uncertain based on the information currently available to the ISO.

All six proposals indicate that the project sponsor could complete the project by the latest in-service date in the ISO Functional Specifications if the start date were to be delayed by six months.

The ISO has determined that all six proposal schedules contain all the expected major activities for the project and contain potentially achievable associated timelines given the ISO's understanding of how long similar activities have taken on projects that have been completed in the recent past in California. In addition, the ISO considers the project sponsors' proposed schedule delay mitigation measures to be comparable.

Several project sponsors proposed schedules with an expected in-service date earlier than the ISO's latest in-service date. However, for the purpose of the comparative analysis for this component of the factor, the ISO considers the potential benefits from an in-service date for this project before the latest in-service date specified in the ISO Functional Specifications to be uncertain based on the information currently available to the ISO. With this in mind, the ISO has chosen to evaluate the project based on the project's ability or likelihood of achieving the latest in-service date specified in the ISO Functional Specifications.

The ISO has determined that, although there are differences in the details in the schedules proposed by each project sponsor, each proposed project schedule includes activities that show that the project sponsors understand the risks they would need to mitigate in order to complete the project by the latest in-service date of June 1, 2032, specified in the ISO Functional Specifications

Overall
The ISO has determined that the schedules in all six proposals of the five project sponsors meet the latest in-service date specified in the ISO Functional Specifications and can meet this date even if the start date were to be delayed by six months and there is no value in completing the project ahead of the latest in-service date. On that basis, the ISO has determined that there is no material difference among the six proposals of the five project sponsors regarding this component of the factor.

Comparative Analysis of Ability to Meet Schedule

The ISO's analysis for this component of the factor focused primarily on the ability of the project sponsors to complete the project by the latest in-service date specified in the ISO Functional Specifications and any potential risks associated with each project sponsor's proposal that might affect completion of the project in a timely manner. For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding their experience, including but not limited to the information in their proposed schedules and their past experience in constructing projects on schedule, accounting for risk management, and performing project management, as well as any other indicated factors that might impact the date of completion.

Previous Experience
The project sponsors and their team members have different levels of experience with previous transmission line projects. CalGrid provided information on 12 transmission line projects, Horizon West provided information for 53 projects, LSPGC for eight projects, and VPC for four projects that were transmission line projects at voltage levels 200 kV or above and completed in the past ten years. Lotus provided information for one project in the U.S. that is 200 kV or above that is still under construction.

Based on the foregoing analysis, the ISO has determined that regarding experience with transmission line projects operating at 200 kV or higher completed in the past ten years, the experience of CalGrid, Horizon West, LSPGC, and VPC is better than the experience of Lotus because its experience is limited to one project.

Regarding completing projects on schedule, the ISO considers that CalGrid, Horizon West, and LSPGC have demonstrated a reasonable degree of success in meeting previous project schedules, although some project sponsors demonstrated more success than others. The schedule performance information provided by these three project sponsors showed that 100% of CalGrid's projects, 92% of Horizon West's projects, and 88% of LSPGC's projects were completed on or ahead of schedule. VPC's schedule performance information showed that 50% of its prior projects were completed on or ahead of schedule. Lotus' schedule performance information showed that it has had relatively less recent experience and success in meeting project schedules. The schedule performance information showed that Lotus has experience with only one transmission line project in the last ten years that is still under construction and is expected to completed past the scheduled date by four years due to multiple reasons.

The schedule performance information provided by CalGrid, Horizon West, LSPGC, and VPC showed an average delay of zero, one, three, and 12 months, respectively, for prior projects that were not completed on schedule. The schedule performance information provided by Lotus for its one prior project showed a delay of four years.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this consideration, the ISO has determined that, based on the specific scope of this project, there is no material difference among the experience of CalGrid, Horizon West, and LSPGC in completing previous projects on schedule and considers their experience to be better than the experience described by Lotus and VPC, for its two proposals. Further, the ISO has determined the experience of VPC, for its two proposals, to be better than that of Lotus in this regard.

Project Management and Team
All five project sponsors have described a reasonable approach to professional project management for their six proposals. All five project sponsors laid out detailed project management programs, as well as identified the teams that will be working on each task of the project.

The project manager or director identified by each project sponsor has at least twenty years of experience, which the ISO considers sufficient.

Based on the foregoing analysis, the ISO has determined that regarding project management and team there is no material difference among the proposals of CalGrid, Horizon West, Lotus, LSPGC, and VPC, for its two proposals.

Project Risk and Management
All five project sponsors included a thorough approach to identifying risks to the project schedule and possible mitigations for those risks. All project sponsors that submitted proposals for more than one project confirmed their ability to work on multiple projects simultaneously, if awarded more than one. VPC indicated that it is submitting proposals for only the North Gila-Imperial Valley #2 500 kV Line project. All project sponsors indicate that they have taken steps to reduce schedule risk.

The ISO has noted in Section 3.4.6 regarding the proposed land rights for the project that the routing proposals of CalGrid and Lotus cross Fort Yuma Quechan Tribal lands, which has the potential of increasing project schedule risk if there are any issues with securing land rights. CalGrid's proposal includes a float of 17 months. Lotus' proposal includes a float of 26 months with an expected in-service date of April 5, 2030. The proposals from both CalGrid and Lotus identified alternative routes in the event they are unable to secure land rights across tribal lands. The ISO has determined that both proposals have substantial float that would be available in case of any delays associated with securing land to cross the Fort Yuma Quechan Tribal lands, which not only would provide additional time to secure tribal land rights but also would provide sufficient time to procure land rights for the alternative routes should tribal land rights be unavailable.

Regarding risks associated with the acquisition of land rights needed for the project, the ISO notes that VPC submitted an SF-299 package to the BLM originally in 2009 for a similar project and recently updated the information for this project. Also, VPC has already submitted a draft plan of development to the BLM. While all proposed schedules of the other project sponsors account for this permitting process, the ISO considers that this gives VPC an advantage regarding a reduction of risk to its project schedule since it can take a year or more for this process.

Based on the foregoing analysis, the ISO has determined that, regarding project risk and risk management, VPC, for its two proposals, has a slight advantage due to its more advanced permitting activities and there is no material difference among the proposals of CalGrid, Horizon West, Lotus, and LSPGC.

Financial Incentive
The proposals of CalGrid and LSPGC include an incentive that would reduce the project return on equity by 2.5 basis points for each full calendar month that the project is delayed beyond June 1, 2032, up to a total of 30 basis points. The proposal of Horizon West includes an incentive that would reduce the annual revenue requirement cap by 0.2% for each month the project is delayed beyond the guaranteed in-service date of December 31, 2031, up to a maximum of 1.2%. The proposals of Lotus and VPC, for its two proposals, do not include any specific incentives for on-time completion of the project. The ISO does not consider VPC's proposed ARR cap to constitute a specific incentive for on-time completion of the project.

The ISO has determined that there is no material difference among the incentives proposed by CalGrid, Horizon West, and LSPGC, and that they are better than the proposals of Lotus and VPC, for its two proposals, because Lotus and VPC did not include any form of specific on-time completion financial incentive.

Overall Component
The ISO has determined that there is no material difference among the six proposals of the five project sponsors regarding project management and team.

The ISO has determined that due to its more advanced permitting activities, the proposals from VPC are slightly better than the proposals of CalGrid, Horizon West, Lotus and LSPGC, among which there is no material difference with respect to project risk.

The ISO has determined that the proposals of CalGrid, Horizon West, and LSPGC are better than the proposals of Lotus and VPC, for its two proposals, regarding the amount of experience constructing transmission line projects over the past ten years and the timely completion of projects over that same time period. Further, the ISO has determined that the two proposals of VPC are better than the proposal of Lotus regarding the amount of experience constructing transmission line projects over the past ten years and the timely completion of projects over that same time period.

The ISO has determined that regarding offering a schedule incentive, that there is no material difference among the proposals of CalGrid, Horizon West, and LSPGC and that they are better than the proposals of Lotus and VPC, for its two proposals, because Lotus and VPC did not include any form of an on-time completion financial incentive.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this component of the factor, the ISO has determined that, based on the specific scope of this project, there is no material difference among the proposals of CalGrid, Horizon West, and LSPGC, which are slightly better than the two proposals of VPC, between which there is no material difference, and which are better than the proposal of Lotus, regarding this component of the factor.

Overall Comparative Analysis

The ISO considers the two components of this factor to be of roughly equal importance in the selection process for this project. As discussed above, the ISO has determined that there is no material difference among the proposals of CalGrid, Horizon West, Lotus, LSPGC, and VPC, for its two proposals, regarding the first component of this factor (proposed schedule).

Regarding the second component (demonstrated ability to meet the proposed schedule), based on the foregoing analysis, the ISO has determined that, based on the specific scope of this project, there is no material difference among the proposals of CalGrid, Horizon West, and LSPGC, which are slightly better than the two proposals of VPC, between which there is no material difference, and which are better than the proposal of Lotus, regarding this component of the factor.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this factor, the ISO has determined that, based on the specific scope of this project, there is no material difference among the proposals of CalGrid, Horizon West, and LSPGC, which are slightly better than the two proposals of VPC, between which there is no material difference, and which are better than the proposal of Lotus, regarding this factor overall.

3.7 Selection Factor 24.5.4(e): The Financial Resources of the Project Sponsor and Its Team

(Prior Projects and Experience Workbook, F-1 through F-13)

The fifth selection factor is the "financial resources of the Project Sponsor and its team."

The ISO notes that the project sponsors provided substantial information regarding their finances in their applications; however, the ISO has only incorporated relatively limited and general financial information from the project sponsors' proposals in the summaries below due to the sensitive nature of some of the financial information provided.

As discussed in Section 2.1, the ISO has identified this selection factor as a key selection factor because the North Gila-Imperial Valley #2 500 kV Line project will cost hundreds of millions of dollars and require significant financial resources.

Project sponsors provided information regarding their experience in developing and financing similar projects, annual financial results including key financial metrics, credit ratings, proposed financing sources, and other financial-oriented information requested by the ISO. In performing the comparative analysis, the ISO has considered all of the financial information provided by the project sponsors. The ISO has also utilized two metrics – tangible net worth and Moody's Analytics Estimated Default Frequency ("EDF")[7] – based on information provided in the project sponsors' annual reports. Moody's Analytics EDF has an associated equivalent rating, also provided by Moody's Analytics as part of its EDF calculation, that provides the ISO another metric similar to the agency credit ratings.

Although a company's net worth is sometimes used in financial analysis, it can be misleading because asset and liability values may change dramatically over time. For instance, derivative assets have the potential of changing daily. In addition, there is no prescribed way to value intangible assets. To compensate for these limitations, where possible, the ISO relies on tangible net worth[8], which removes certain assets and liabilities from the net worth calculation. For the purpose of evaluating the financial resources of the project sponsors and their teams for this project, the ISO considers tangible net worth to be more meaningful because it better represents assets that are more immediately available for project funding.

Likewise, the ISO considers that agency credit ratings can have important but limited usefulness in financial analysis because they are largely based on historical performance. In the general course of its business, the ISO has recognized the limitation of credit ratings and has begun to rely on EDF as a more forward-looking measure of a company's financial health. It produces a forward-looking default probability by combining financial statement and equity market information into a highly

[7] Estimated Default Frequency is a proprietary scoring model developed by Moody's Analytics, Inc., a subsidiary of Moody's Corporation (NYSE: MCO).

[8] The ISO Tariff defines "Tangible Net Worth" as total assets minus assets (net of any matching liabilities, assuming the result is a positive value) the CAISO reasonably believes to be restricted or potentially unavailable to settle a claim in the event of a default (examples include restricted assets and Affiliate assets) minus intangible assets (*i.e.*, those assets not having a physical existence such as patents, trademarks, franchises, intellectual property, and goodwill) minus derivative assets (net of any matching liabilities, assuming the result is a positive value) minus total liabilities.

predictive measurement of stand-alone credit risk. EDF provides the ISO an additional metric in assessing a project sponsor's ability to see the project through to the end. In addition, the equivalent rating associated with the EDF provides another metric similar to the agency credit ratings. The ISO has utilized both of these additional measures of financial health in its comparative analysis of the financial resources of the project sponsors and their teams for this project.

For the purpose of performing the comparative analysis for this factor, the ISO has considered the following components of the factor:

- Project financing experience
- Project financing proposal
- Financial resources
- Credit ratings
- Financial ratio analysis

The ISO has initially considered these components separately and then developed an overall comparative analysis for financial resources and creditworthiness.

For the consideration of this factor, the ISO has concluded that there are no significant differences between the two proposals submitted by VPC with regard to financial information provided. Consequently, references to VPC and its proposal in this section apply equally to both VPC's proposal without the Dunes Substation and VPC's Dunes proposal.

3.7.1 Information Provided by CalGrid

Project Financing Experience

CalGrid provided a list of several transmission and substation projects that its parent company and affiliated entities have financed in the past ten years. (Prior Projects and Experience Workbook) CalGrid provided information regarding financing of representative projects through its parent and affiliated entities that were similar in type but larger in cost than the expected cost of this project. CalGrid indicated that the representative projects were financed using a project-level financing approach. CalGrid indicated that construction financing would be funded by financial institutions and converted to long-term debt after completion. (F-1, F-11)

Project Financing Proposal

CalGrid indicated that it proposes to create a special purpose entity that would own the assets and facilitate project-level financing to support the construction and operations of the project. CalGrid indicated that it would rely on BETP IV, and its ultimate parent Blackstone, to provide financial support and guarantees for this project. (A-5, F-5)

CalGrid indicated the project would be financed using a combination of debt and equity. CalGrid indicated that Viridon, acting through CalGrid and with the support of the majority owner BETP IV, would invest 100% of the equity required to finance the project and anticipates using debt and equity throughout the project's life. (F-1)

CalGrid indicated that it would act on behalf of Viridon and BETP IV to invest any required equity in the project, would be responsible for arranging the debt associated

with the construction of the project, and would service the debt after placing the project in service. CalGrid indicated that it proposes to access the debt markets to lead placement of limited-recourse financing at the project level to support the construction and long-term operation of the project. (F-2, F-5)

CalGrid indicated that BETP IV intends to make a financial commitment to lenders upon financial closing to support the equity requirements of the project and would also provide the appropriate assurances that capital will be sufficient to complete all phases of the construction program account upfront. (F-12)

CalGrid also indicated that it is investigating the possibility of securing project financing through Western Area Power Administration's (WAPA) Transmission Infrastructure Program and various Department of Energy (DOE) programs. (F-12)

To provide further evidence of financial support for the project, CalGrid provided letters of support from two commercial banks. The letters state that they are non-binding and should not be construed as a commitment to finance the project. (F-12.1, F-12.2)

Financial Resources

CalGrid's proposal included a parent support letter signed by an officer from Blackstone indicating support for the project by Blackstone, the ultimate parent of the project's majority owner BETP IV, and that BETP IV would benefit from Blackstone's strong reputation in the financial community. (F-2.2)

CalGrid indicated that CalGrid and the special purpose entity, as wholly owned subsidiaries of Viridon and affiliates of Viridon's majority owner BETP IV, ultimate parent Blackstone, and other Blackstone entities, would benefit from all relevant capabilities and resources of the combined Viridon and Blackstone organizations. (F-5)

CalGrid provided a letter of financial support for the project sponsor financial obligations signed by an officer of BETP IV indicating that appropriate financial assurance instruments would be provided prior to the close of the project's financings and as required by lenders pursuant to the financings of the project. (F-2.1)

CalGrid provided pro forma financial assurance instruments to support the equity funding requirements of the project, which would be effective conditional upon selection of CalGrid as the approved project sponsor and closing of the financing. (F-2.3, F-2.4)

CalGrid provided Blackstone, Inc.'s annual audited financial statements for 2018-2022 and quarterly unaudited financial statements for 2023. (F-3, F-4) CalGrid provided the following information from Blackstone, Inc.'s latest audited financial statements:

Total assets
Total liabilities
Net worth

Credit Ratings

CalGrid indicated that Blackstone, Inc. is a public company and has been rated investment grade by two of the three credit rating agencies. CalGrid provided the following credit ratings and associated credit rating reports for Blackstone, Inc.: (F-6)

Moody's: NR
S&P: A+
Fitch: A+

Financial Ratio Analysis

CalGrid provided the following financial ratios based on Blackstone, Inc.'s audited financial statements: (F-9, F-10)

Funds from operations (FFO)/interest coverage
FFO/total debt
Total debt/total capital
Total assets/total projected capital costs

3.7.2 Information Provided by Horizon West

Project Financing Experience

Horizon West provided a list of several transmission and substation projects that its parent company, NextEra, financed in the past ten years. (Prior Projects and Experience Workbook) Horizon West provided information regarding NextEra's financing of representative projects that were similar in type but primarily larger in cost than the expected cost of this project. (F-11A) Horizon West indicated that the representative projects were financed using limited-recourse term and senior secured variable rate term loans. Horizon West indicated that debt sources included commercial banks. (F-11)

Project Financing Proposal

Horizon West indicated that during the development and construction of the project it would enter into debt financing arrangements and receive equity from NEECH. Upon commercial operations and throughout the life of the project, Horizon West indicated that it plans to finance the project with debt from NEECH and may consider sourcing project financing from the capital markets. Horizon West indicated that it may consider third-party project financing and is exploring debt financing from the DOE. (F-1)

Horizon West provided a letter from NextEra indicating that NEECH would provide appropriate funding and needed guarantees to Horizon West and that those would, in turn, be guaranteed by NextEra as provided for through a blanket guarantee arrangement between NEECH and NextEra. Horizon West indicated that execution of a guaranty would be dependent on the ISO selecting Horizon West as the approved project sponsor and the execution of a mutually agreeable Approved Project Sponsor Agreement with the ISO. (F-2, F-2a, F-2c)

Horizon West indicated that the project would be supported 100% through corporate parent debt and equity funding. Horizon West also indicated that it plans to pursue a variety of DOE programs as a source of debt funding as this type of funding could reduce rates significantly when compared with commercial rates. (F-13)

Financial Resources

Horizon West provided a letter from NextEra, signed by an officer of NextEra, indicating NextEra's financial assurance by guaranteeing the financial obligations of the project. (F-2a)

Horizon West provided NextEra's annual audited financial statements for 2018-2022 and quarterly unaudited financial statements for 2023. Horizon West also provided Horizon West's annual audited FERC Form 1 financial statements for 2022 and FERC Form 3-Q quarterly unaudited financial statements for 2023. (F-3, F-3a, F-4) Horizon West provided the following information from NextEra's latest audited financial statements:

Total assets
Total liabilities
Net worth

Credit Ratings

Horizon West indicated that NextEra is a public company and has been rated investment grade by all three credit rating agencies for the past five years. Horizon West provided the following credit ratings and associated credit rating reports for NextEra: (F-6)

Moody's: Baa1
S&P: A-
Fitch: A-

Financial Ratio Analysis

Horizon West provided the following financial ratios based on NextEra's audited financial statements: (F-9, F-10)

FFO/interest coverage
FFO/total debt
Total debt/total capital
Total assets/total projected capital costs

3.7.3 Information Provided by Lotus

Project Financing Experience

Lotus provided a list of transmission and substation projects that it has financed in the past ten years. (Prior Projects and Experience Workbook) Lotus provided information regarding its financing for representative projects that were similar in type to this project. Lotus provided information showing financing for three projects that were larger in cost than the expected cost of this project. Lotus indicated that the representative projects were financed using project-specific non-recourse construction and permanent debt sourced from institutions. (F-11, Prior Projects and Experience Workbook)

Project Financing Proposal

Lotus indicated that the project would be funded using a combination of debt and equity and that different banks have expressed interest in providing debt financing for the project. Lotus indicated that it would create a special purpose entity as an affiliate for purposes of developing the project. Lotus indicated that the special purpose entity would be managed by Lotus through LIF III and affiliated investment vehicles specifically to finance, construct, own, maintain, and operate the project. (A-5, F-5)

Lotus indicated that the financial structure for construction and working capital would rely on LIF III and that it intends to utilize the WAPA Transmission Infrastructure Program for debt financing. (F-1, F-12)

Lotus indicated that it has received a letter of interest and support confirming WAPA's intent to collaborate with Lotus on the project, but the letter of interest and support is clear that it is not a commitment to fund the project. (F-13)

To provide further evidence of financial support for the project, Lotus provided a letter of support from a commercial bank. The letter is clear that it is non-binding and should not be construed as a commitment to finance the project. (F-1.1) Lotus also provided a parent guarantee letter for financial backing of the project. (F-2.1)

Financial Resources

Lotus indicated it would rely on existing funds or affiliated investment vehicles for financial backing of the project. Lotus indicated that the funds of LIF III and other affiliated investment vehicles are available to support the construction of the project. (F-2)

Lotus provided a written parent guarantee, signed by an officer, providing financial assurance that LIF III, as the direct parent of the special purpose entity that would be formed specifically for this project, would provide customary credit support and has adequate financial resources to provide the financial support for the project repairs and permitting of the project. (F-2.1)

Lotus indicated that it would have limited-recourse debt and plans to support the project once it goes into service. Although lenders would not have financial recourse to Lotus, Lotus indicated that LIF III has sufficient capital to support the construction of the project and any potential liabilities. (F-2)

Lotus provided the following information for LIF III based on quarterly unaudited financial information for 2023 within a letter in lieu of financial statements for 2023: (F-3.2)

Total assets
Total liabilities
Net worth

Credit Ratings

Lotus indicated that LIF III does not have a credit rating. (F-6)

Financial Ratio Analysis

Lotus did not provide audited financial statements or financial ratios. Lotus provided a letter in lieu of financial statements, which Lotus asserted demonstrates that LIF III could meet the financial requirements of the project. (F-3.2)

The ISO calculated the following financial ratio based on the letter in lieu of financial statements provided by Lotus:

Total assets/total projected capital costs

3.7.4 Information Provided by LSPGC

Project Financing Experience

LSPGC provided a list of several transmission and substation projects that its parent, LS Power, financed in the past ten years. (Prior Projects and Experience Workbook) LSPGC provided information regarding LS Power's financing of representative projects that were similar in type to, but some less in cost than, the expected cost of this project. LSPGC indicated that the representative projects were financed with equity-to-debt contributions using a variety of debt sources, including project-specific financing through a number of commercial banks. (F-11) LSPGC also provided information regarding LS Power's previous debt financings and a history of its ability and experience in utilizing the debt markets to consistently raise increasing amounts of capital for financing projects. (F-6)

Project Financing Proposal

LSPGC indicated it is relying on its parent LS Power to satisfy the financial criterion for this project. LSPGC indicated that LS Power intends to access the debt markets to lead placement of limited-recourse financing at LSPGC to support the construction and long-term operation of the project. LSPGC indicated that it would own the assets of the project, would be responsible for arranging the debt associated with construction of the project, and would service the debt after placing the project into service. (F-1)

LSPGC indicated that under the terms of the limited-recourse financing, LSPGC's lenders would not have recourse to LSPGC's parent company, LS Power, but lenders would have access to LSPGC's specific assets, and under an irrevocable equity commitment, they would have recourse to LSPGC's committed equity. LSPGC indicated that LS Power intends to make a financial commitment to the lenders upon financial closing in the form of a letter of credit or other credit support deemed satisfactory by the lenders to support the equity requirements of the project. LSPGC indicated that this equity commitment to lenders would be irrevocable, thereby providing assurances that capital is sufficient to complete all phases of the construction program account upfront. (F-2) LSPGC indicated that it would convert debt used during development and construction or issue new long-term financing to support operations. (F-5)

LSPGC provided evidence of LS Power's financial assurances to LSPGC in the form of a written guarantee. (F-2A)

LSPGC also indicated that it plans to explore federal funding opportunities to obtain lower cost debt for the project and that its parent company, LS Power, has experience in obtaining funding from the DOE. (F-13)

Financial Resources

LSPGC provided a written financial guarantee from LS Power, signed by an officer of LS Power's general partner, indicating LS Power's financial assurance for the project. (F-2A)

LSPGC also provided an equity financing commitment letter, signed by an officer of LS Power's majority owner management company, indicating the majority owner's commitment to provide funding to LS Power for the project. (F-2B)

LSPGC provided LS Power's annual audited financial statements for 2018-2022 and quarterly unaudited financial statements for 2023. (F-3, F-4) LSPGC provided the following information from LS Power's latest annual audited financial statements:

Total assets
Total liabilities
Net worth

Credit Ratings

LSPGC indicated that LSPGC and LS Power are privately held companies that are not rated by credit rating agencies. (F-6)

Financial Ratio Analysis

LSPGC provided the following financial ratios based on LS Power's audited financial statements: (F-9, F-10)

FFO/interest coverage
FFO/total debt
Total debt/total capital
Total assets/total projected capital costs

3.7.5 Information Provided by VPC for VPC and VPC Dunes Proposals

Project Financing Experience

VPC provided a list of several transmission and substation projects financed in the past ten years by companies proposed to be participating in the project. (Prior Projects and Experience Workbook) VPC provided information for three representative projects that were similar in type but primarily larger in cost than the expected cost of this project. VPC indicated that the representative projects of the participating companies were debt financed using either rate-funded financing or commercial banks. (F-11) VPC also provided information regarding the cost and benefits to customers of having participants join the project. (A-4)

Project Financing Proposal

VPC indicated that the project would be funded using a combination of debt and equity. VPC indicated that it is a special purpose entity created for managing the development and construction of the project and that all contracts would ultimately be executed or otherwise assigned to an existing minority owned project company. VPC indicated that the funding costs incurred by the project company in the development and construction phases of the project would be provided by VPC's parent company, Grid United, which would be provided 100% project-level equity for the project from Centaurus and would also raise project-level debt. (A-5)

VPC indicated that IID and Citizens Energy would participate in the project pursuant to a coordination agreement. VPC indicated that it currently owns 40% interest in the project company and through the execution of the coordination agreement, it would have the option to purchase the remaining 60% ownership interest in the project company from STP, and that VPC would be responsible for all of the development costs of the project.

VPC indicated that both IID and Citizens Energy would provide support deposits concurrent with execution of the coordination agreement. (A-5 Coordination Agreement)

VPC indicated that after the award it plans to exercise its option to purchase, and then, at the commercial operation date, IID would purchase a portion of the transmission capacity associated with the project and Citizens Energy would have the option to lease a portion of the transmission capacity through the use of a wholly owned subsidiary. VPC indicated that both capacity transactions would require investments by the participants in amounts equal to a proportion of development costs incurred less the amount of each of their deposits. (A-5 Coordination Agreement)

VPC also provided a separate agreement indicating that conditionally Citizens Energy would have the option to purchase a portion of the equity interest of the project company in lieu of the option to lease transmission capacity per the coordination agreement. (A-5 Citizens Energy letter agreement)

VPC indicated that it is tracking federal funding programs to identify opportunities to lower the cost of the project. (F-13)

To provide further evidence of financial support for the project, VPC provided a letter of support from a commercial bank. The letter is clear that it is non-binding and should not be construed as a commitment to finance the project. (F-2)

Financial Resources

VPC indicated it would rely on Centaurus, its parent company, for the financial backing of equity for the project, which would be available to support the construction and development of the project. (F-2) VPC provided a financial commitment letter, signed by an officer, providing financial assurance that Centaurus, as the direct parent of VPC, would provide equity and has adequate financial resources to provide the financial support for the project to either VPC or Grid United for the project company. (F-2)

VPC indicated that with the assistance of Grid United it expects to raise debt financing for the project and any remaining capital requirements for the project. VPC indicated that debt financing could include a combination of bank and private placement issuances. (F-2)

VPC provided a coordination agreement describing the roles and responsibilities of the participating entities that would support the project during development and once it goes into service. The agreement indicated that VPC has an option agreement to purchase 100% of the equity interest in the project company but that all assets of the project would be owned by the project company. (A-5) VPC indicated that it is a special purpose entity created for the project and would not have financial recourse to Grid United, its parent Centaurus, or any affiliated entities. (F-2)

VPC provided the following information for Grid United based on annual audited financial statements for 2021 and 2022. VPC also provided the following information for VPC based on annual unaudited financial statements for 2022 and quarterly unaudited financial statements for 2023 for Grid United and VPC: (F-3, F-4)

Total assets
Total liabilities
Net worth

Credit Ratings

VPC indicated that neither VPC nor Grid United has credit ratings. (F-6)

Financial Ratio Analysis

VPC provided financial ratios for Grid United based on audited financial statements with and without IID's participation in the project. VPC asserted that Grid United's equity commitment from Centaurus and VPC's equity investment demonstrate that VPC could meet the financial requirements of the project. (F-9, F-10)

FFO/interest coverage
FFO/total debt
Total debt/total capital
Total assets/total projected capital costs

3.7.6 ISO Comparative Analysis

For the purpose of performing the comparative analysis for this factor, the ISO has considered the following components of the factor:

- Project financing experience
- Project financing proposal
- Financial resources
- Credit ratings
- Financial ratio analysis

The ISO has initially considered these components separately and then developed an overall comparative analysis for financial resources.

The ISO's analysis of the financial resources of the project sponsor and its team has focused primarily on whether each project sponsor has adequate financial resources and creditworthiness to finance the project and whether constructing, operating, and maintaining the facilities would significantly impair the project sponsor's creditworthiness or financial condition.

For purposes of the comparative analysis for this factor, the ISO has primarily considered the project sponsors' representations. In addition, the ISO considered each project sponsor's audited financial statements, credit ratings, and associated ratings reports from one or more of the credit rating agencies. In instances where a project sponsor is looking to an affiliated entity (e.g., a corporate parent) for financial support on the project, the ISO used financial statements and credit ratings of the affiliated entity if the affiliated entity provided a letter of assurance, signed by an officer of the company, stating that it would provide unconditional financial support to the project.

Although there are slight differences among project sponsors regarding some of the components considered, including the financial strength of the company ultimately backing the project and that company's credit ratings, the ISO does not consider these differences significant enough to materially affect any one project sponsor's ability to complete this project, considering the project cost estimates. Consequently, this comparative analysis relies in large part on minor degrees of difference.

Project Financing Experience

Based on the information provided and representations by the project sponsors, the ISO has determined that over the past ten years, Horizon West identified considerably more transmission project financing experience than CalGrid, LSPGC, Lotus, and VPC. Although CalGrid, LSPGC, and Lotus identified less transmission project financing experience than Horizon West, their financing experience exceeded the experience of VPC during the past ten years. CalGrid provided information showing financing of multiple projects of similar type but larger in cost than the expected cost of this project. Horizon West provided information showing financing of transmission projects of similar type but primarily larger in cost than the expected cost of this project. Lotus provided information showing the financing of three transmission projects that were of similar type but larger in cost than the expected cost of this project. LSPGC provided information showing financing of some similar types of transmission projects, but some were lower in cost than the expected cost of this project. VPC provided information regarding financing of participant company projects that were of similar type but primarily larger in cost than the expected cost of this project.

Although Horizon West demonstrated more transmission project financing experience than CalGrid, Lotus, LSPGC, and VPC in the past ten years, and CalGrid, Lotus, and LSPGC demonstrated more transmission project financing experience than VPC in the past ten years, the ISO has concluded that CalGrid, Lotus, LSPGC, and VPC sufficiently demonstrated their ability to secure project financing for this project. Consequently, the ISO considers the project financing experience of all five project sponsors for their six proposals to be sufficient such that there is no material difference among them regarding the extent to which their project financing experience has a bearing on their ability to finance this particular project.

Project Financing Proposal

Based on the financial proposals provided by each of the project sponsors, all project sponsors will finance the project using a combination of both equity and debt. Equity for the project will be provided by the parent or an affiliate company of the project sponsor. Debt will be provided directly through the existing capital and/or credit facilities of the parent or through capital markets or financial institutions by either the project sponsor or the parent company. Debt provided during construction by the parent company may be converted into long-term debt once the project goes into operation. Some project sponsors intend to use limited-recourse debt financing with lenders. The project sponsors' capital structures are generally within a close range of each other regarding debt and equity.

Each of the project sponsors provided either a letter of financial assurance or guarantee from its parent company or affiliate for the financial obligations of the project.

As an alternative to sourcing financing from the capital markets, CalGrid, LSPGC, Horizon West, Lotus, and VPC indicated they are investigating the possibility of securing project financing through WAPA's Transmission Infrastructure Program or one or more of the DOE's programs. Lotus received a letter of interest and support confirming WAPA's interest in leading a financing to support bids by Lotus for the project, but the letter of interest and support is clear that it is not a commitment to fund the project.

Based on all five project sponsors' reliance on parent funding and access to the capital markets, the ISO finds no material difference in their funding proposals.

Financial Resources

Each project sponsor has access to a parent or an affiliate and the capital markets and financial institutions for financing this project. All of the parent or affiliate companies of the project sponsors will provide equity for the project based on equity to total capital ratios that are in accordance with industry practice. Some of the project sponsors have debt financing experience with the capital markets or financial institutions, and all of the project sponsors have access to parent or affiliate funding to fulfill the balance of debt required to cover the cost of the project. The parent or affiliate companies of the project sponsors also provided either a letter of guarantee or financial assurance to support the financial obligations of the project.

Based on the information provided by the project sponsors, the ISO has determined that CalGrid's parent company, Blackstone, and Horizon West's parent company, NextEra, are strongest regarding this particular measure, followed by LSPGC's parent company, LS Power, which is stronger than both Lotus' affiliate company, LIF III, and VPC's parent company, Centaurus. Strength in this factor can help minimize the financial risk that a project may not be completed.

The ISO also calculated a tangible net worth for the parent companies of three of the project sponsors and has concluded that the parents of CalGrid and Horizon West have shown higher tangible net worth than LSPGC's parent company over the past five years. Lotus and VPC did not provide sufficient information for the ISO to calculate a tangible net worth for Lotus' or VPC's affiliates; thus, the ISO was unable to compare Lotus and VPC to the other project sponsors regarding this measure of financial strength.

Having the financial capacity to continue to bid on, win, and finance projects, although dependent in part on the financial resources of a company, also depends on the breadth and strength of a company's partners and banking relationships. The ISO has concluded that the proposals of CalGrid and Horizon West are the strongest in this regard, followed by LSPGC's proposal, then Lotus' proposal, and then VPC for its two proposals. LSPGC, Lotus, and VPC have developed banking relationships as evidenced by various banks providing support for this project. Consequently, the ISO considers LSPGC, Lotus, and VPC, for its two proposals, to have sufficient financial resources to complete this project, although CalGrid and Horizon West, for their proposals, are stronger with regard to this consideration. Given the cost estimates for this project, considering the analysis discussed above, and given the inability of the ISO to calculate a tangible net worth for Lotus and VPC and their affiliates, the ISO considers LSPGC and its proposal to be stronger than Lotus and VPC and their proposals regarding this particular measure of financial strength.

Credit Ratings and Estimated Default Frequency

Public companies are typically rated by three major credit rating agencies, Moody's, S&P, and Fitch. Credit ratings are opinions about a company's relative creditworthiness. They provide a common standard for lenders to determine whether or not a company will pay its debts on time and in full.

Of the five project sponsors, two of their parent or affiliate companies are public and three are private. Both of the public companies had investment grade ratings from each

of the credit agencies for the past five years. Investment grade ratings are an indication that the company is at low risk of default for creditworthiness purposes.

CalGrid and Horizon West are backed by independently rated, investment grade companies. Although their individual ratings vary somewhat, the ISO does not consider these differences to be material for purposes of assessing the ability of these companies to obtain sufficient funding to construct this project. LSPGC's parent LS Power and Lotus' and VPC's affiliate companies are not independently rated by any of the three major credit rating agencies. The lack of a credit rating is not unusual, and the ISO has not considered it an adverse factor in this analysis or prior analyses.

In addition to available credit ratings, the ISO also used Moody's Analytics Estimated Default Frequency (EDF) report and equivalent credit ratings to assess whether a company is likely to default on its loan payments over a given period where the assets of a company go below its outstanding debt obligations that need to be paid. EDF reports were available for three of the five parent or affiliate companies of the project sponsors, for each of the past five years.

The EDF scores and equivalent ratings of the parent companies of CalGrid and Horizon West were lower than LSPGC's parent company's EDF scores and equivalent ratings for each of the five years. Lotus and VPC did not provide sufficient information to generate the EDF report for Lotus' or VPC's affiliate companies; thus, the ISO was unable to compare Lotus and VPC to the other project sponsors regarding this measure of financial strength.

Additionally, each of the project sponsors declared that neither it nor its parent or affiliate company had a history of payment default or bankruptcy in the past five years.

Given the information provided and based on the Moody's Analytics EDF report and the resulting Moody's Analytics equivalent rating for the past five years, the ISO considers the proposals of CalGrid and Horizon West to be stronger than the proposal of LSPGC. The ISO relies on the EDF report and equivalent ratings as an additional financial metric to assess the probability that a company will default on its payments within a specified period of time. None of the EDF scores and equivalent ratings were unacceptable, but there were differences in the EDF scores and equivalent ratings of CalGrid and Horizon West compared to LSPGC, as discussed above. As noted, the ISO was unable to compare Lotus and VPC, for its two proposals, to the other project sponsors regarding this consideration.

Financial Ratio Analysis

CalGrid, Horizon West, and LSPGC provided audited financial statements for the past five years for their parent companies. Based on this information, CalGrid, Horizon West, and LSPGC provided interest and debt coverage, debt to capital, and total assets to projected capital costs of the project ratios in their proposals. These financial ratios provide insight into the operational trends of the parent companies of those three project sponsors over the past five years.

Financial ratios provide the ISO insight into a project sponsor's ability to pay interest and service debt out of funds from its operating activities as well as how leveraged a company is in terms of its total debt obligations. The interest and debt coverage ratios are an indicator of how many times interest and debt are covered by the parent company's operating income in each of the past five years.

The coverage ratios vary depending on industry and the capital-intensity of a company's operations. Based on the prior project and financing experience and other information provided in the project proposals of CalGrid, Horizon West, and LSPGC, their parents are involved with large infrastructure projects, and the timing of cash flows of certain projects may be unpredictable and thus should not by itself affect their ability to finance the project.

The total debt to capital ratio of each of CalGrid's, Horizon West's, and LSPGC's parent companies for each of the past five years indicated no risk of extensive financial leverage because the company's debt obligations do not exceed its capital balance.

Based on a comparison of the project sponsors' financial ratios, the ISO considers the interest and debt coverage ratios and debt to capital ratios of CalGrid and Horizon West to be better than LSPGC's financial ratios for those measures. Lotus did not provide information on which the ISO could base a determination of all of the financial ratios that the ISO typically uses to evaluate the financial strength of a project sponsor. VPC provided less than five years of information, which was not enough information for the ISO to base a determination of all of the financial ratios that the ISO typically uses to evaluate the financial strength of a project sponsor. The ISO was unable to calculate financial ratios other than total assets to total project cost for Lotus and was unable to use the information from VPC to make appropriate comparisons; thus the ISO was unable to compare Lotus and VPC to the other project sponsors regarding this measure of financial strength.

As discussed above, CalGrid and Horizon West have better financial ratios than LSPGC, the ISO was unable to calculate financial ratios for Lotus, and VPC provided less than five years of financial ratio history, precluding the ISO from making a comparison regarding its financial ratios. As a result, the ISO considers the proposals of CalGrid and Horizon West to be stronger than the proposal of LSPGC, and the ISO is unable to compare these proposals to Lotus and VPC, for its two proposals, regarding this consideration.

Overall Analysis

In performing the comparative analysis for this factor, the ISO considered all of the financial information provided by the project sponsors as well as the additional information developed by the ISO described above. The ISO's assessment of the financial resources of the project sponsors and their teams is necessary for the ISO to determine which of the project sponsors can bring the strongest financial resources to bear in order to fully finance the project over its life span at a competitive cost and to complete the project under a range of possible scenarios (*e.g.*, construction delays, cost escalation, regulatory interventions, etc.). This comparative analysis relies in large part on minor degrees of difference.

Based on the information provided by the project sponsors, the ISO has concluded that each project sponsor has sufficiently demonstrated the experience and financial resources to undertake a project of this scope and cost. Also, as discussed above, the ISO considers there to be no material differences among the project sponsors and their proposals regarding project financing experience and project financing proposals, especially when compared to the other differences among the project sponsors and their proposals. As discussed in detail above, the ISO considers CalGrid and Horizon West to have an advantage over LSPGC, Lotus, and VPC in the area of financial resources

and considers LSPGC to have an advantage over Lotus and VPC in this area. The ISO also considers CalGrid and Horizon West to have an advantage over LSPGC in the area of credit ratings and EDF and the area of financial ratio analysis. The ISO is unable to compare Lotus and VPC to the other project sponsors regarding credit ratings and EDF and regarding financial ratio analysis.

Based on the foregoing, in conjunction with all the other considerations included in the ISO's analysis for this factor, the ISO has determined that, based on the scope of this particular project, there is no material difference between CalGrid and its proposal and Horizon West and its proposal, and they are better than LSPGC and its proposal, which is slightly better than Lotus and its proposal and VPC and its two proposals, among which there is no material difference, regarding this factor.

3.8 Selection Factor 24.5.4(f): Technical (Environmental Permitting) and Engineering Qualifications and Experience

The sixth selection factor is "the technical and engineering qualifications and experience of the Project Sponsor and its team." As discussed in Section 2.1, the ISO has identified this selection factor as a key selection factor because experience with environmental permitting and transmission project engineering can contribute to lower project cost, reduced permit acquisition efforts, and reduction in the overall time needed to complete the project.

For the purpose of performing the comparative analysis for this factor, the ISO has initially considered the two components of the factor separately and then combined them into an overall comparative analysis for this factor. The two components are: (1) the technical (environmental permitting) qualifications and experience of the project sponsor and its team and (2) the engineering qualifications and experience of the project sponsor and its team.

Technical (Environmental Permitting) Qualifications and Experience

(Prior Projects and Experience Workbook, E-1, E-2, E-3, E-4, E-5a)

3.8.1 Information Provided by CalGrid

CalGrid indicated that it and its team would submit an application for a CPCN and Proponent's Environmental Assessment with the CPUC.

CalGrid indicated that it and its team would submit permit applications to the following federal agencies:

- BLM rights-of-way (permanent and temporary)
- U.S. Army Corps of Engineers Clean Water Act-Section 10.
- U.S. Fish and Wildlife Service Endangered Species Act Section 7.
- U.S. Bureau of Reclamation rights-of-way and use authorization.
- Department of Defense consultation for flight paths near military facilities.
- Federal Aviation Administration consultation for flight paths near civilian airports.
- Bureau of Indian Affairs Trustee for Fort Yuma Quechan Tribe rights-of-way grant
- Advisory Council on Historic Preservation Section 106 consultation.
- Department of Homeland Security / Border Patrol consultation
- U.S. Department of Agriculture resource conservation consultation

- Environmental Protection Agency Comprehensive Environmental Response, Compensation and Liability Act. Phase 1 review.

Expected California permits:

- CPUC CPCN and CEQA review. AB 52 tribal consultation.
- Colorado River Basin Regional Water Quality Control Board water discharge permit.
- California Department of Fish and Wildlife Section 2081 incidental take permit and 2081.1 determination for effects on species that are both state and federally listed, mitigation plan for rare plants, lake and streambed alteration permit.
- California State Historic Preservation Office Section 106 consultation.
- California State Lands Commission rights-of-way for Colorado River crossing.

Expected Arizona permits:

- Arizona Corporations Commission (ACC) certificate of environmental compatibility
- Arizona State Land Department rights-of-way Colorado River.
- Arizona Department of Game and Fish consultation.
- Arizona Regional Water Quality Control Board general construction stormwater permit.
- Arizona Advisory Council on Historic Preservation Section 106 consultation.

Expected local permits:

- Imperial County encroachment permit, grading permit, traffic control permit, transportation permit, and air quality permit.

CalGrid indicated it contacted a representative of the Fort Yuma Quechan Tribe and was told additional discussions were required. (E-1, E-2, E-3, E-4, E-5a)

Furthermore, CalGrid indicated if negotiations with the Fort Yuma Quechan Tribe failed, it has an alternative route that avoids the tribal lands. (E-2)

CalGrid provided a list of its experience and the experience of its contractors with obtaining permits for transmission line projects. This list included 26 transmission line projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., with 19 in California. (Prior Projects and Experience Workbook)

3.8.2 Information Provided by Horizon West

Horizon West indicated that it and its team would submit an application for a CPCN and Proponent's Environmental Assessment with the CPUC.

Horizon West indicated that it and its team would submit permit applications to the following federal agencies:

- BLM rights-of-way (permanent and temporary)
- U.S. Bureau of Reclamation rights-of-way and use authorization.
- U.S. Army Corps of Engineers Clean Water Act Section 404, NWP 57
- U.S. Fish and Wildlife Service Endangered Species Act Section 7

Expected California permits:

- CPUC CPCN and CEQA review
- Colorado River Basin Regional Water Quality Control Board Section 401 water quality certification, storm water pollution protection plan
- California Department of Fish and Wildlife Section 2081 incidental take permit and 2081.1 consistency with federal species mitigation plan for rare plants, Section 1600 lake and streambed alteration permit
- California State Lands Commission lease, Colorado River

Expected Arizona permits:

- ACC certificate of environmental compatibility
- Arizona Department of Environmental Quality Clean Water Act Section 401 WQC
- Arizona Department of Environmental Quality general construction stormwater permit
- Arizona State Land Department rights-of-way Colorado River

(E-1, E-2, E-3, E-4, E-5a)

Horizon West provided a list of its experience and the experience of its contractors with obtaining permits for transmission line projects. This list included 210 transmission line projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., with 37 in California. (Prior Projects and Experience Workbook)

3.8.3 Information Provided by Lotus

Lotus indicated that it and its team would submit an application for a CPCN and Proponent's Environmental Assessment with the CPUC.

Lotus indicated that it and its team would submit permit applications to the following federal agencies:

- BLM rights-of-way (permanent and temporary)
- U.S. Bureau of Reclamation rights-of-way and use authorization
- U.S. Army Corps of Engineers Clean Water Act Section 404, NWP 57
- U.S. Fish and Wildlife Service Endangered Species Act Section 7
- Bureau of Indian Affairs rights-of-way grant
- Advisory Council on Historic Preservation- Section 106 consultation

Expected California permits:

- CPUC CPCN and CEQA review
- Colorado River Basin Regional Water Quality Control Board Section 401 water quality certification, storm water pollution protection plan
- California Department of Fish and Wildlife Section 1602 lake and streambed alteration permit.
- California Department of Parks and Recreation encroachment permit
- Caltrans encroachment permit
- California State Lands Commission lease, Colorado River

Expected Arizona permits:

- ACC certificate of environmental compatibility
- Arizona Department of Environmental Quality Clean Water Act Section 401 WQC
- Arizona Department of Environmental Quality general construction stormwater permit
- Arizona State Land Department rights-of-way Colorado River

(E-2, E-3)

Lotus indicated it would seek for this project to be included under Title 41 of the Fixing America's Surface Transportation Act (FAST-41). If the project were to be included as a FAST-41 covered project, Lotus indicated that the Federal Permitting Improvement Steering Council would coordinate all federal environmental reviews and authorizations for this project. (E-1)

Lotus indicated it has not finalized negotiations with representatives from the Fort Yuma Quechan Tribe concerning the route across tribal lands. Furthermore, Lotus indicated if negotiations with the Fort Yuma Quechan Tribe failed, it has identified an alternative route that avoids the tribal lands. (L-1, E-1, E-2, E-3, E-4, E-5a)

Lotus provided a list of its experience and the experience of its contractors with obtaining permits for transmission line projects. This list included 11 transmission line projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., with seven in California. (Prior Projects and Experience Workbook)

3.8.4 Information Provided by LSPGC

LSPGC indicated that it and its team would submit an application for a CPCN and Proponent's Environmental Assessment with the CPUC.

LSPGC indicated that it and its team would submit permit applications to the following federal agencies:

- BLM rights-of-way (permanent and temporary)
- BLM Section 106 programmatic agreement (historic preservation)
- U.S. Bureau of Reclamation rights-of-way and use authorization
- U.S. Army Corps of Engineers Clean Water Act Section 404, NWP 57, Rivers and Harbors Act Section 10
- U.S. Fish and Wildlife Service Endangered Species Act Section 7 biological opinion, incidental take permit

Expected Arizona permits:

- ACC certificate of environmental compatibility
- Arizona State Land Department rights-of-way Colorado River
- Arizona Department of Transportation encroachment permit

Expected California permits:

- CPUC CPCN and CEQA review
- Colorado River Basin Regional Water Quality Control Board Section 401 water quality certification

- California Department of Fish and Wildlife Section 2081 incidental take permit and 2081.1 consistency with federal species, Section 1600 lake and streambed alteration permit
- Caltrans encroachment permit
- California State Lands Commission lease, Colorado River

(E-1, E-2, E-3, E-4, E-5a)

LSPGC provided a list of its experience and the experience of its contractors with obtaining permits for transmission line projects. This list included ten transmission line projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., with one project in California. (Prior Projects and Experience Workbook).

3.8.5 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC indicated that it and its team would submit an application for a CPCN with the CPUC and a CEQA review with the Imperial Irrigation District.

VPC indicated that it and its team would submit permit applications to the following federal agencies:

- BLM rights-of-way (permanent and temporary)
- BLM Section 106 programmatic agreement (historic preservation)
- U.S. Bureau of Reclamation rights-of-way and use authorization
- U.S. Army Corps of Engineers Clean Water Act Section 404, NWP 57
- U.S. Fish and Wildlife Service Endangered Species Act Section 7 biological opinion, incidental take permit.
- Department of Defense consultation to confirm no effect
- U.S. Border Patrol consultation for project near the border
- Federal Aviation Authority confirmation of no hazard

Expected Arizona permits

- ACC certificate of environmental compatibility
- Arizona State Land Department rights-of-way Colorado River
- Arizona Game and Fish Department consultation
- Arizona Department of Environmental Quality general construction activity stormwater permit
- Arizona State Historic Preservation Office Section 106 consultation

Expected California permits

- Imperial Irrigation District CEQA review
- CPUC CPCN
- Colorado River Basin Regional Water Quality Control Board Section 401 water quality certification
- California Department of Fish and Wildlife Section 2081 incidental take permit and 2081.1 consistency with federal species, Section 1600 lake and streambed alteration permit
- Caltrans encroachment permit
- California State Historic Preservation Office Section 106 consultation
- California State Lands Commission rights-of-way, Colorado River

VPC indicated it currently has an accepted SF-299 form and cost recovery agreement before the BLM, which was filed in 2009 and recently updated for this project. VPC indicated that it had already submitted to the BLM a draft plan of development and 18 draft mitigation plans and has worked with the BLM to identify possible issues, study requirements, and mitigation measures. VPC indicated that this would allow the BLM's NEPA review and further action on the rights-of-way application to proceed quickly and efficiently after ISO award. (E-1, E-2, E-3, E-4, E-5a)

VPC provided a list of its experience and the experience of its contractors with obtaining permits for transmission line projects. This list included 12 transmission line projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., with four in California. (Prior Projects and Experience Workbook)

For the VPC Dunes proposal, VPC provided a list of its experience and the experience of its contractors with obtaining permits for substation projects. This list included three substation projects that operate at voltages above 200 kV, are ongoing or have been completed in the past ten years, and are located in the U.S., with two in California. (Prior Projects and Experience Workbook).

Engineering Qualifications and Experience

(Prior Projects and Experience Workbook, A-5, QP-1, QP-2, P-4, P-5, S-1 through S-8, T-1 through T-8)

3.8.6 Information Provided by CalGrid

CalGrid provided a list of its experience and the experience of its contractors with designing transmission line projects. The list included 31 transmission line projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years and are located in the U.S., with 11 in California. (Prior Projects and Experience Workbook)

CalGrid indicated that the proposed transmission line design is consistent with the ISO Functional Specifications for the project. (QP-1) CalGrid indicated that that the proposed design satisfies applicable reliability criteria and ISO planning standards. (QP-2) CalGrid indicated that it had evaluated several risk categories (permitting, procurement, construction, rights-of-way, operations etc.), the risk consequence (cost, schedule), and the likelihood of the risk (low, medium, high) and developed mitigation measures. (P-4) CalGrid identified common design and construction risks and challenges that its general construction contractor could encounter, including permitting, access work complications, landowner relations, federal and indigenous engagement, geotechnical and environmental issues, and designing for crossing bodies of water, critical (threatened or endangered) species habitats, or railroads. (P-5)

CalGrid provided detailed design criteria and identified a list of standards and requirements that it would use in the design of the 500 kV transmission line, including codes and standards and CPUC General Order (GO) 95 and National Electrical Safety Code (NESC) requirements. CalGrid identified structure types, a two-conductor bundle ACSS (aluminum conductor steel supported), span lengths of 1,000 feet, transmission line crossing, and rights-of-way width and provided the ampacity for an ambient temperature of 50°C, total impedance, and termination at existing substations. (T-1 to T-8)

3.8.7 Information Provided by Horizon West

Horizon West provided a list of its experience and the experience of its contractors with designing transmission line projects. The list included 15 transmission line projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with one in California. Horizon West also indicated that it has prior experience with three out of five of its proposed contractors with design experience. (Prior Projects and Experience Workbook)

Horizon West indicated that its proposal satisfies the ISO Functional Specifications for the project. (QP-1) Horizon West indicated that the design has been verified to satisfy all applicable reliability planning standards, criteria, and guidelines and has applied design and performance criteria from the North American Electric Reliability Corporation (NERC), Western Electricity Coordinating Council (WECC), and ISO. (QP-2) Horizon West indicated that potential engineering risks associated with the project include unexpected subsurface conditions, route changes, FAA hazard determination, and requirements to change conductor, structures, or foundations. (P-4) Horizon West indicated that it has faced design-related risks and challenges similar to those foreseen for the project, such as field conditions that are inconsistent with initial design basis, and further indicated that it has mitigated this risk by including an upfront assessment of the project-specific requirements. (P-5)

Horizon West provided detailed design criteria for an 82-mile 500 kV transmission line that included codes and standards and CPUC GO 95 and NESC requirements and detailed engineering routing criteria. Horizon West identified structure types, a two-conductor bundle ACSR (aluminum conductor steel reinforced), span lengths of 1,500 feet, transmission line crossings, termination at existing substations, right-of-way width, and the ampacity for an ambient temperature of 50°C and total impedance. (T-1 to T-8)

3.8.8 Information Provided by Lotus

Lotus provided a list of its experience and the experience of its contractors with designing transmission line projects. The list included 43 transmission line projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with 13 in California. Lotus also indicated that it has prior experience with two of its proposed contractors that would be involved with project design and engineering. (Prior Projects and Experience Workbook)

Lotus indicated that the project has been designed to meet or exceed the requirements of the functional specification. (QP-1) Lotus indicated that ISO Tariff Sections 24.5.3.2 (a) & (b) and the ISO Planning Standards were considered in designing the proposed project and that it would be designed with two diverse forms of telecommunication to support the WECC guidelines. (QP-2) Lotus indicated that the major risks to the project include lack of detailed system data, siting and land acquisition, environmental permitting, and mitigation cost containment. (P-4) Lotus indicated that the engineering risks associated with the project are similar to most transmission lines constructed in the desert southwest and that Lotus and its design and construction contractor have encountered and successfully overcome challenges on multiple projects in this region

and identified specific risks for physical foundation design and interconnection coordination and engineering requirements with the incumbent utilities. (P-5)

Lotus provided detail design criteria for a 72.5-mile 500 kV transmission line that included codes and standards and CPUC GO 95 and NESC requirements and detailed routing criteria, including environment concerns. Lotus identified structure types, a two-conductor bundle "TR" (aluminum conductor with carbon fiber core), span lengths of 1,750 feet, transmission line crossings, termination at existing substations, right-of-way width, and the ampacity for an ambient temperature of 50°C and total impedance. (T-1 to T-8)

3.8.9 Information Provided by LSPGC

LSPGC provided a list of its experience and the experience of its contractors with designing transmission line projects. The list included 12 transmission line projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with none in California. LSPGC also indicated that it has prior experience with both of its proposed design and engineering contractors. (Prior Projects and Experience Workbook)

LSPGC indicated that the project has been designed to meet or exceed the needs identified in the ISO transmission plan, including the ISO Functional Specifications and all applicable standards, and that all transmission components meet or exceed the requirements of CPUC General Order No. 95, Grade B requirements, the NESC, Grade. (QP-1) LSPGC indicated that the design satisfies all applicable reliability criteria and ISO planning standards, including the ISO Functional Specifications and that the project would meet all NERC reliability guidelines. LSPGC also indicated that the transmission line design for the project meets or exceeds applicable IEEE, ASCE, CPUC GO 95, and NESC requirements. (QP-2) LSPGC indicated that major risks to the project include the route, design, schedule, and monitoring and mitigation strategy and that the project route and design were carefully crafted to avoid impacts to sensitive areas or minimize impacts when sensitive areas could not be completely avoided. (P-4) LSPGC's proposal included a list of potential project engineering risks that included final structure placement, FAA hazard determination, wetlands impacts, changes to detail design, unforeseen soil conditions, errors and omissions in design, and the possibility that final electrical studies may require modifications to design. (P-5)

LSPGC provided detail design criteria for an 87-mile, 500 kV transmission line that included codes and standards and CPUC GO 95 and NESC requirements and detailed engineering routing criteria. LSPGC identified structure types, a three- conductor bundle ACSR (aluminum conductor steel supported), span lengths of 1,330 feet, transmission line crossings, termination at existing substations, right-of-way width, and the ampacity for an ambient temperature of 50°C and total impedance. (T-1 to T-8)

3.8.10 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC provided a list of its experience and the experience of its contractors with designing transmission line projects. The list included 15 transmission line projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with six in California. VPC also indicated that it has prior experience with one of three proposed design contractors. (Prior Projects and Experience Workbook)

For the VPC Dunes proposal, VPC provided a list of its experience and the experience of its contractors with designing substation projects. The list included 22 substation projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with 11 in California.

VPC indicated that the proposed design not only satisfies but exceeds the functional specification for the project. (QP-1)

For the VPC's Dunes proposal, VPC indicated that the proposed design not only satisfies but exceeds the functional specification for the project. VPC indicated that its proposal enhances the solution by adding a new 500 kV switching station for accessing an additional 1,622 MW of in-state geothermal, solar, and battery storage. (QP-1)

VPC indicated that the project has been under development for over ten years and has completed the WECC three phase rating process with the added requirement for peer review of all aspects of the local, regional, and NERC and WECC reliability criteria and planning standards. VPC also indicated that it has completed interconnection studies with APS and SDG&E as part of the wires-to-wires interconnection, confirming that the interconnection solutions for the project meet applicable reliability criteria. (QP-2) VPC indicated that potential risks to the project include reroutes to accommodate landowner concerns, reroute for three dairy farms, engineering to avoid a variance with DOT for the I-8 freeway, and missed or modified scope. (P-4)

VPC indicated potential project engineering risks include subsurface conditions, limited construction access, additional grounding, outages for crossing existing transmission lines not available when originally planned, and existing underground utilities or pipelines undiscovered. (P-5)

For the VPC's Dunes proposal, VPC provided the GPS coordinates for Dunes Switching Station, detailed design criteria, standards, description of the major electrical equipment, protection, relays, SCADA, and a representation that the site was recommended by BLM. VPC indicated that the diverse communication paths would be separate OPGW on the project 500 kV line. VPC indicated that it had completed 30% design of the Dunes 500 kV Switching Station, providing detailed engineering and design estimates as well as a full set of station layout and expansion drawings, and indicated that it has selected the location of the substation in consultation with the BLM. (S-1-S-8)

VPC provided detail design criteria for an 85 mile, 500 kV transmission line that included codes and standards and CPUC GO 95 and NESC requirements and routing criteria that included analysis of potential routes and options. VPC identified structure types, a two conductor bundle ACSR (aluminum conductor steel supported), span lengths of 1,300 to 1,500 feet, transmission line crossings, termination at existing substations, right-of-way width, and the ampacity for an ambient temperature of 50°C and total impedance. (T-1 to T-8) VPC indicated that it had performed advanced transmission line engineering work completing 60% of the detailed transmission line design. (C-4, A-4, QP-2)

3.8.11 ISO Comparative Analysis

Comparative Analysis of Technical (Environmental Permitting) Qualifications and Experience

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding the qualifications and experience of both the project sponsor and its team members in obtaining and complying with environmental permits for a transmission project, including but not limited to (1) the permitting experience of the project sponsor and its team for projects it has developed, (2) the permitting experience for similar projects of the project sponsor's team member or members that have been designated as having responsibility for project permitting, and (3) how much of the experience of the project sponsor and its team is in the U.S. and in California.

U.S. environmental permitting laws, rules, regulations, and processes are unique to the U.S., and California environmental permitting laws, rules, regulations, and processes are unique to the state of California. For example, compliance with the California Environmental Quality Act (CEQA) is particularly unique to the state of California.

The ISO considers experience in the U.S. and California to be an advantage over experience in environmental permitting in other jurisdictions because a significant portion of the project will be located in California and there are special aspects of environmental regulation and processes in the U.S. and California for which experience is an advantage.

All five project sponsors' teams have experience permitting projects in the U.S. and in California, including experience with the environmental permitting process for transmission lines in California, although the amount of experience varied among the project sponsors and their proposed teams.

Regarding its analysis of this component of the factor, the ISO considers the environmental permitting teams identified by the project sponsors as part of their teams to be qualified and fully capable of handling the environmental permitting work associated with this project.

The ISO has determined that there is no material difference among CalGrid, Horizon West, Lotus, and VPC regarding their U.S. and California environmental permitting experience and that their U.S. and California experience is slightly better than LSPGC's U.S. and California experience.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this factor, the ISO has determined that, based on the specific scope of this project, there is no material difference among the proposals of CalGrid, Horizon West, Lotus, and VPC and that their proposals are slightly better than LSPGC's proposal regarding this component of the factor due to LSPGC's limited California experience.

Comparative Analysis of Engineering Qualifications and Experience

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding the qualifications and experience of both the project sponsor and its team members in engineering and designing transmission line and substation projects, including but not limited to (1) the engineering experience for similar projects of the project sponsor and its team member or members who have been designated as having responsibility for project engineering, and (2) how much of the experience of the project sponsor and its team is in the U.S. and in California.

The ISO considers experience in the U.S. and California to be an advantage over transmission line engineering and design experience in other countries because a significant portion of the project will be located in California and there are special aspects of engineering and design codes and regulations in the U.S. and California for which this experience is an advantage.

U.S. engineering and design codes and regulations are unique to the U.S., and California engineering and design laws, rules, regulations, and processes are unique to the state of California. For example, projects developed in the United States must adhere to the National Electrical Safety Code (NESC) published by the Institute of Electrical and Electronics Engineers (IEEE). In addition, the process that must be followed for engineering and design of transmission lines and substations in California includes adherence to requirements of the California Building Standards Commission, the California Energy Commission, the California Environmental Protection Agency, California Occupational Safety and Health Administration (OSHA), California High Voltage Electrical Safety Orders, California Building Code Title 24, and county and city planning and permitting requirements.

The ISO has considered the engineering and design qualifications and experience of the project sponsor and its team. The ISO considers the engineering team identified by CalGrid, Horizon West, Lotus, LSPGC, and VPC, for its two proposals, as part of their teams to be highly qualified and have substantial experience.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis of this component of the factor, the ISO has determined that there is no material difference among the proposals of CalGrid, Lotus, and VPC, for its two proposals, and that their proposals are better than Horizon West's proposal, which identified only one transmission line 200 kV or greater designed by its team in California in the past ten years, but which is better than LSPGC's proposal because the information provided by LSPGC indicated that neither it or its contractors has experience designing a 200 kV or greater transmission line in California over the past ten years.

Overall Comparative Analysis

The ISO considers the two components of this factor to be of roughly equal importance in the selection process for this project.

The ISO has determined that, regarding the first component of the factor (environmental permitting experience, including experience in California), there is no material difference

among the proposals of CalGrid, Horizon West, Lotus, and the two VPC proposals and that their proposals are slightly better than LSPGC's proposal.

The ISO has determined that, regarding the second component (engineering experience), there is no material difference among the proposals of CalGrid, Lotus, and VPC, for its two proposals, and that their proposals are better than Horizon West's proposal, which is better than LSPGC's proposal.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this factor, the ISO has determined that, based on the specific scope of this project, there is no material difference among the proposals of CalGrid, Lotus, and VPC, for its two proposals, and that their proposals are better than Horizon West's proposal, which is slightly better than LSPGC's proposal, regarding this factor overall.

3.9 Selection Factor 24.5.4(g): Previous Record Regarding Construction and Maintenance of Transmission Facilities

The seventh selection factor is "if applicable, the previous record regarding construction and maintenance of transmission facilities, including facilities outside the ISO Controlled Grid of the Project Sponsor and its team."

For the purpose of performing the comparative analysis for this factor, the ISO has initially considered the two components of the factor separately and then combined them into an overall comparative analysis for this factor. The two components are: (1) the previous record regarding construction including facilities outside the ISO controlled grid of the project sponsor and its team and (2) the previous record regarding maintenance including facilities outside the ISO controlled grid of the project sponsor and its team.

Construction Record

(Prior Projects and Experience Workbook; P-5, C-8)

3.9.1 Information Provided by CalGrid

CalGrid provided a list of its experience and the experience of its contractor with construction of transmission line projects. The list included 18 transmission line construction projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years and are located in the U.S., with two in California. CalGrid also indicated that it does not have any prior experience with its proposed construction contractor. (Prior Projects and Experience Workbook)

CalGrid provided a list of risks that its contractor has encountered when constructing transmission lines, which included access, landowner relations, federal and indigenous engagement, geotechnical and environmental issues, crossing water, and critical or threatened habitats. (P-5)

CalGrid indicated that neither it nor its construction contractor has had any safety, litigation, or environmental legal violations, fines, or other notices related to construction in the past ten years and is not under investigation or a defendant in any legal proceeding. (C-8)

3.9.2 Information Provided by Horizon West

Horizon West provided a list of its experience and the experience of its contractor with construction of transmission lines. The list included 34 transmission line construction projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with 25 in California. Horizon West also indicated that it has prior experience with one of its two proposed construction contractors. (Prior Projects and Experience Workbook)

Horizon West indicated that it has faced similar construction challenges and that its team and construction contractor have completed a number of projects in the same region. Horizon West indicated that it would draw on the vast experience of its parent company, gained through the successful execution of both transmission line and substation projects, and that the Horizon West project team will leverage lessons learned from recent projects to successfully execute and deliver the project. (P-5)

Horizon West indicated that neither it nor any of its affiliates has been subject to any violations or fines related to construction in the past ten years. (C-8)

3.9.3 Information Provided by Lotus

Lotus indicated that it has not yet chosen a construction contractor and submitted a list of four possible construction contractors along with experience of each of the contractors.

Lotus provided a list of its experience and the experience of its contractor with construction of transmission lines. The list included three transmission line construction projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with three in California. Lotus also indicated that it has prior experience with its construction contractor. (Prior Projects and Experience Workbook)

Lotus indicated that risks anticipated for construction are similar to the ones experienced in other southwest region transmission line projects where poor soil conditions affected access and foundation installation, requiring additional procedures to ensure excavation integrity, and that it is expected that similar conditions would be encountered where dunes are present. (P-5)

Lotus indicated that the construction subcontractor to a subsidiary of Lotus, and the approved project sponsor of the ISO competitively awarded Delaney-Colorado River 500 kV transmission line project, also known as Ten West Link, received four minor construction notices of violation and that no stop work notices were issued and Lotus took immediate action in response to these notices of violation to the acceptance of the CPUC. (C-8a) Lotus indicated that no additional violations or investigations have happened in the past ten years. (C-8b-C-8f)

3.9.4 Information Provided by LSPGC

LSPGC provided a list of its experience and the experience of its contractors with construction of transmission lines. The list included 15 transmission line construction projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with one in California. LSPGC also

indicated that it has prior experience with one of its two proposed construction contractors. (Prior Projects and Experience Workbook)

LSPGC indicated that it has demonstrated experience successfully constructing projects with risks and challenges similar to those involved with constructing high-voltage transmission lines in remote arid environments similar to this project. LSPGC indicated that effective coordination would be required for the overcrossing of multiple transmission lines between 69 kV and 500 kV lines, Interstate 8, and termination at substations. (P-5)

LSPGC indicated that it has not been subject to any violations or fines in the past ten years related to construction but that a LSPGC affiliate, LSPGC Grid New York Corporation, received notices of violation from the New York Department of Public Service. LSPGC indicated that it has not been subject to any fines or investigation in the past ten years. (C-8b-C8f)

3.9.5 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC provided a list of its experience and the experience of its contractors with construction of transmission lines. The list included 19 transmission line construction projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with four in California. VPC also indicated that it does not have prior experience with its proposed construction contractor. (Prior Projects and Experience Workbook)

For the VPC Dunes proposal, VPC provided a list of its experience and the experience of its contractors with construction of substations. The list included 10 substation construction projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with seven in California. (Prior Projects and Experience Workbook)

VPC indicated that the project team has completed the construction of many large transmission lines and substation projects and that many of these projects have been located within the proposed project area and similar terrains.

VPC indicated risks that included endangered species, landowner concerns, archaeological discoveries, noxious weeds, storm water management, grounding, clearances, and existing underground utilities. (P-5)

VPC indicated that no construction-related law violations have occurred within the past ten years. (C-8)

Maintenance Record

(Prior Projects and Experience Workbook; P-5, M-4, M-5, M-6, M-7)

3.9.6 Information Provided by CalGrid

CalGrid provided a list of its experience and the experience of its contractors with the maintenance of transmission lines. The list included 11 transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years and are located in the U.S., with three in California. (Prior Projects and Experience Workbook)

CalGrid indicated that its O&M contractor has a successful record of providing operations and maintenance services to 15 transmission line projects in 12 states in the U.S., totaling more than 200 miles of line. CalGrid indicated that its O&M contractor's experience includes overhead and underground transmission lines, submarine cables, DC transmission cables, substations, and converter stations. (M-4)

CalGrid indicated that its management personally led the development and implementation of wildfire mitigation plans in California and would do the same for CalGrid. (M-5)

CalGrid indicated that as a recently formed entity, it does not currently have historical audit reports for maintenance of facilities. However, CalGrid provided the inspection reports from its O&M contractor performed for third parties that covered maintenance activities such as condition of tower, foundation, and ground straps, condition of conductors and hardware, including spacers, insulators and splices, vegetation, and other threats. These reports indicated that no anomalies were observed and that no vegetation was encroaching on the transmission line and concluded that the power lines appear to be in good condition with no loose or failing hardware. The reports included additional information on vegetation management.

CalGrid listed facilities for which its team members have been responsible for maintenance. (M-6)

CalGrid indicated that its O&M subcontractor regularly reports on availability measures for transmission systems under its management and is capable of capturing the necessary information to report on availability measures as described in Transmission Control Agreement (TCA) Appendix C Section 4.3. (M-7)

CalGrid indicated that it has encountered a number of operations and maintenance challenges that are comparable to the risks and challenges posed by the project, including wildfire risk, environmental impact, access challenges, and weather challenges. (P-5)

3.9.7 Information Provided by Horizon West

Horizon West provided a list of its experience and the experience of its contractors with the maintenance of transmission lines. The list included 59 transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years, and are located in the U.S., with six in California. (Prior Projects and Experience Workbook)

Horizon West indicated that it is an ISO PTO and has experience with transmission line and substation maintenance practices that are consistent with the ISO transmission maintenance standards and that have been approved by the ISO. (M-4)

Horizon West indicated that with its ability to rely on the combined experience of three ISO PTOs (Horizon West, GridLiance, and Trans Bay Cable) and its affiliate, Florida Power & Light Company, Horizon West has the capability to update its substation and transmission line maintenance practices as it pertains to the proposed project's equipment. (M-4) Horizon West indicated that NextEra would provide vegetation management services and that it has experience managing vegetation alongside over

80,000 miles of power lines and has done so for about the past one hundred years. (M-5)

Horizon West indicated that its vegetation management team has experience managing transmission lines in similar rural and weather conditions for other NextEra projects in California. (M-5)

Horizon West provided the annual maintenance audit reports of Horizon West's maintenance practices by the ISO for the years 2012 through 2022, which showed generally good compliance with Horizon West and Trans Bay Cable standards.

Horizon West also provided a document describing experience creating and reporting wildfire mitigation plans. (M-6)

Horizon West indicated that it has experience providing the ISO with availability measures in accordance with TCA Appendix C. Horizon West indicated that its procedures describe how it would track operational performance and availability of facilities to adequately report the facilities' performance to the ISO and other stakeholders. Horizon West provided copies of monitoring procedures and reports. (M-7)

Horizon West indicated that it has faced maintenance-related risks and challenges similar to those foreseen for the project, such as vegetation management and maintenance of underground cables, and provided several examples of projects where it had faced similar risks and challenges. (P-5)

3.9.8 Information Provided by Lotus

Lotus provided a list of its experience and the experience of its contractors with the maintenance of transmission lines. The list included two transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years, and are located in the U.S., with none in California. (Prior Projects and Experience Workbook)

Lotus indicated that its O&M contractor has a successful record of providing operations and maintenance services to 15 transmission line projects in 12 states in the U.S., totaling more than 200 miles of line, and tying in more than 10,000 MW of energy. (M-4)

Lotus indicated that in order to ensure compliance with its own standards, its O&M contractor performs assessments on its facilities on a three-year basis in which every program and procedure (including operations, maintenance, and NERC) is assessed to ensure compliance. (M-6)

Lotus also provided an annual inspection report, performed by a third party, at a substation operated and maintained by its O&M contractor. The report noted some discrepancies and recommended corrective actions. (M-6)

Lotus provided an annual transmission line and structure report for a line operated and maintained by its O&M contractor. The report covered 56 transmission structures and included both visual and thermal evaluations. (M-6)

Lotus indicated that its O&M contractor regularly reports on availability measures as described in TCA Appendix C Section 4.3 for its clients. (M-7)

Lotus indicated that it has faced maintenance-related risks and challenges similar to those foreseen for the project, such as wildfire risk, environmental impact, access, and weather challenges and provided specific examples of a project in California and two other projects where it had faced maintenance-related risks and challenges. (P-5)

3.9.9 Information Provided by LSPGC

LSPGC provided a list of its experience and the experience of its contractors with the maintenance of transmission lines. The list included five transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years, and are located in the U.S., with none in California. (Prior Projects and Experience Workbook)

LSPGC indicated that a recent maintenance report submitted to the ISO by DesertLink tabulated maintenance and inspection tasks and indicated the number of planned and actual occurrences. The report indicated that in all cases the actual number equaled or exceeded the planned number.

LSPGC provided a sample vegetation management inspection report that covered the inspection of six transmission lines in Texas and identified no vegetation related outages.

LSPGC provided a five-year maintenance report that covered a maintenance outage on a transmission line and described the work performed, the findings, and corrective actions taken. (M-6)

LSPGC indicated that it currently complies with the requirements of TCA Appendix C Section 4.3 and provided DesertLink's 2022 Availability Measures report, which indicated a 100% availability.

LSPGC provided a summary of availability data for all LS Power grid transmission facilities, which indicated that the availability data tabulated considers only forced outages. The data indicated that LS Power's availability ranged from 99.43% to 100% over the period 2018 to 2022. LSPGC indicated that LS Power represented that the lowest number was caused by a major ice storm that affected the area. (M-7)

LSPGC indicated that it has faced operations and maintenance-related risks and challenges similar to those foreseen for the project that includes operating and maintaining a line in a desert environment and provided specific example of a project in Texas where it faced similar challenges. (P-5)

3.9.10 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC provided a list of its experience and the experience of its contractors with the maintenance of transmission lines. The list included 12 transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years, and are located in the U.S., with six in California. (Prior Projects and Experience Workbook)

For the VPC Dunes proposal, VPC provided a list of its experience and the experience of its contractors with the maintenance of substations. The list included 13 substation projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with ten in California. (Prior Projects and Experience Workbook)

VPC indicated that it and its parent Grid United do not have any operating facilities at this time; however, members of the project sponsor's team, including its third-party O&M provider have extensive compliance experience.

VPC indicated that its O&M contractor's compliance experience with standards for inspection, maintenance, repair, and replacement of similar facilities include proven programs and scalable processes.

VPC provided compliance reports from its O&M contractor for work performed for third parties for transmission and distribution facilities within the ISO footprint that indicated that no anomalies were observed and that no vegetation was encroaching on the transmission line and concluded that the power lines appear to be in good condition with no loose or failing hardware. (M-6)

VPC indicated that its O&M contractor regularly reports on Availability Measures as described in TCA Appendix C Section 4.3 for its clients. (M-7)

VPC indicated that it has faced operations and maintenance risks similar to those foreseen for the proposed project and provided several examples, including noxious weed management, timeframe for post-construction reclamation, and limited construction access. (P-5)

3.9.11 ISO Comparative Analysis

Comparative Analysis of Construction Record

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding the record and experience of both the project sponsor and its team members in constructing transmission line projects, and how much of the experience of the project sponsor and its team is in the U.S. and in California. The ISO considers experience in the U.S. and California to be an advantage over transmission line construction experience in other jurisdictions because a significant portion of the project will be located in California and there are special aspects of construction codes and regulations in the U.S. and California for which this experience is an advantage.

U.S. construction laws, rules, regulations, and processes are unique to the U.S., and California construction laws, rules, regulations, and processes are unique to the state of California. For example, the process that must be followed in California includes adherence to requirements of Cal OSHA, the California Air Resources Board, the California Office of Historic Preservation, Title 22 regarding hazardous waste, and city and county codes. U.S. laws, rules, regulations, and processes applicable to construction include federal OSHA, NEPA, Storm Water Pollution Prevention Plan, and U.S. Fish and Wildlife Service requirements, Fair Labor Standards Act regulations, and National Electric Code standards.

The ISO has considered the construction qualifications and experience of the project sponsors and their teams. Regarding its analysis of this component of the factor, the ISO considers the construction contractors identified by CalGrid, Horizon West, Lotus, LSPGC, and VPC as part of their teams to be qualified, experienced, and capable of handling the construction work associated with this project. Although the number of transmission facilities constructed varies among the project sponsors' proposed teams, all five project sponsors' teams have established experience in the construction of transmission line projects in the U.S. and California.

Based on the foregoing considerations, and considering the specific nature and scope of the construction involved with this project, in conjunction with all the other considerations included in the ISO's analysis of project sponsor and contractor construction qualifications and experience, the ISO has determined that there is no material difference among the proposals of CalGrid, Horizon West, Lotus, LSPGC, and VPC regarding this component of the factor.

Comparative Analysis of Maintenance Record

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding the record and experience of both the project sponsor and its team members in maintaining transmission projects, including but not limited to experience with compliance with NERC standards.

The ISO has determined that all of the project sponsors and their proposed teams have demonstrated the basic capability to manage the maintenance of the project; however, the amount of past experience with extra high voltage (EHV) transmission facilities varies among the project sponsors and their proposed teams.

The ISO has determined that the proposal of Horizon West demonstrated significantly more experience in maintaining EHV transmission lines than the proposals of the other project sponsors. The ISO also determined that the proposals of CalGrid and VPC demonstrated more experience in maintaining EHV transmission lines than the proposals of Lotus and LSPGC.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this component of the factor, the ISO has determined that, based on the specific scope of this project, the proposal of Horizon West is slightly better than the proposals of CalGrid and VPC, among which there is no material difference, which are slightly better than the proposals of Lotus, and LSPGC, between which there is no material difference.

Overall Comparative Analysis

The ISO considers the two components of this factor to be of roughly equal importance in the selection process for this project.

Regarding the first component of the factor (previous record regarding construction of transmission facilities), the ISO has determined that there is no material difference among the proposals of CalGrid, Horizon West, Lotus, LSPGC, and VPC regarding this component of the factor.

Regarding the second component of the factor (previous record regarding maintenance), the ISO has determined that the proposal of Horizon West is slightly better than the proposals of CalGrid and VPC, among which there is no material difference, which are slightly better than the proposals of Lotus and LSPGC, between which there is no material difference, regarding this component of the factor.

Based on the combination of the ISO's analyses of the two components of this factor, the ISO has determined that the proposal of Horizon West is slightly better than the proposals of CalGrid and VPC, among which there is no material difference, which are slightly better than the proposals of Lotus and LSPGC, between which there is no material difference, regarding this factor overall.

3.10 Selection Factor 24.5.4(h): Adherence to Standardized Construction, Maintenance, and Operating Practices

The eighth selection factor is "demonstrated capability to adhere to standardized construction, maintenance and operating practices of the Project Sponsor and its team."

For the purpose of performing the comparative analysis for this factor, the ISO has initially considered the three components of this factor separately and then combined them into an overall comparative analysis for this factor. The three components are:
(1) demonstrated capability to adhere to standardized construction practices,
(2) demonstrated capability to adhere to standardized maintenance practices, and
(3) demonstrated capability to adhere to standardized operating practices.

Construction Practices

(P-5, C-1, C-2, C-3, C-4, C-5, C-6, C-7, C-8)

3.10.1 Information Provided by CalGrid

CalGrid identified common construction risks and challenges that its construction contractor has encountered when constructing transmission lines, which included access work complications, landowner relations, federal and indigenous engagement, geotechnical and environmental issues, and critical (threatened or endangered) species habitats or railroads. (P-5)

CalGrid indicated that it has selected a construction contractor and that its contractor would develop inspection and test plans. CalGrid also indicated that the construction contractor uses a detailed process for receiving and inspecting materials and equipment delivered to the project and identified five primary laydown areas. (C-1, C-2)

CalGrid indicated that it does not anticipate clearances being required to cross transmission lines. (C-3)

CalGrid indicated that a multi-disciplinary team would complete constructability reviews. CalGrid indicated that constructability planning would also include procurement strategies, construction execution, and periodic drawing and specification reviews. (C-4)

CalGrid indicated that it does not currently possess any easements, orders of possession, or permits for the project. (C-5)

CalGrid indicated that it uses Primavera P6 software to develop a project schedule using the critical path method and that the schedule includes all project milestones and is structured so that it can be rolled up and presented at various levels of detail, and includes all aspects of the project. (C-6)

CalGrid indicated that it does not anticipate the need for any unique or special construction techniques for the construction of the project.

CalGrid indicated a key aspect of project construction would involve wildfire prevention and mitigation. (C-7)

CalGrid indicated that each construction crew would be staffed with one team member who would be solely responsible for wildfire detection and mitigation. (C-7)

3.10.2 Information Provided by Horizon West

Horizon West indicated that construction would be in high-heat temperature areas and remote locations and that it would hire adequate help to relieve others during high-heat temperatures. Horizon West indicated that it is sensitive to the presence of valley fever and to mitigate its impacts and ensure the safety of personnel, a site assessment would be completed prior to construction. (P-5)

Horizon West indicated that its construction management and inspection team would be active through all phases of construction and the engineer(s) of record would perform site visits, inspections, walk-downs, and witnessing of tests prior to energization. (C-1)

Horizon West indicated that it would establish material laydown yards close to the project and these yards are anticipated to be approximately five to six acres in size and would be fenced, screened, and staffed with full-time, on-site security personnel. (C-2)

Horizon West indicated that it would develop a plan to establish a procedure required for outages, as well as the necessary steps required to restore the equipment to service. (C-3)

Horizon West indicated that it would coordinate design and constructability reviews and these reviews would encompass all aspects of the design. (C-4)

Horizon West indicated it has not secured any easements. (C-5)

Horizon West indicated that it would use Primavera P6 for the project schedule and that the project manager and construction superintendent would have overall responsibility and oversight of the project schedule. (C-6)

Horizon West indicated that standard construction techniques would be used for the project. (C-7)

3.10.3 Information Provided by Lotus

Lotus indicated that risks for construction are similar to the ones experienced on the Ten West Link and other southwest region transmission line projects and that poor soil conditions affected access and foundation installation, requiring additional procedures to

ensure excavation integrity, and that it is expected that similar conditions would be encountered where dunes are present. (P-5)

Lotus indicated that its quality control manager would conduct daily field inspections of the construction operations, including those by subcontractors, and perform tests on materials for self-performed work and indicated that construction yards would be identified and sized for multiple uses. (C-1, C-2)

Lotus indicated that it would coordinate with the ISO and impacted utility operations and management teams regarding all outages, crossings, and tie-ins to existing stations. (C-3)

Lotus indicated that constructability reviews would be completed at 30%, 60%, 90%, and issue for construction milestones. (C-4)

Lotus indicated that it does not currently possess any easement. (C-5)

Lotus indicated that project sequencing would rely on build-up of project activities so that it would not need unique lags or constraints and throughout the progression of the project the project manager would maintain and update the schedule regularly. (C-6)

Lotus indicated that a helicopter would be used for wire pulling operations. (C-7)

3.10.4 Information Provided by LSPGC

LSPGC indicated that it has demonstrated experience successfully constructing projects with risks and challenges similar to those involved with constructing high-voltage transmission lines in remote arid environments similar to this project. LSPGC indicated that effective coordination would be required for the overcrossing of multiple transmission lines between 69 kV and 500 kV lines, Interstate 8, and termination at substations. (P-5)

LSPGC indicated that it has assembled a skilled and experienced team to complete and oversee construction activities for the project and that the quality assurance and quality control plan would detail the inspection program and provided a detailed list of the items to be inspected. (C-1)

LSPGC indicated that it would directly purchase the major material for the transmission line and would establish three material yards to support construction of the project and that LSPGC would coordinate with impacted transmission owners with the negotiation of interconnection and crossing agreements. (C-2, C-3)

LSPGC indicated that it has completed advanced design of the project and that all designs and specifications go through a rigorous series of quality assurance and quality control checks before being implemented on the project. (C-4)

LSPGC indicated that it has completed a routing study, consultation with regulatory and permitting agencies, identification of all rights-of-way and land rights necessary to implement the project, detailed engineering, and a detailed implementation schedule. (C-4) LSPGC indicated that its general construction contractor would prepare and maintain a detailed “P6” schedule and that LSPGC would then incorporate this information into

the master project schedule and these would be reviewed during the kick-off, weekly, and monthly meetings. (C-6)

LSPGC indicated that it does not anticipate the use of unique construction techniques for this project. (C-7)

LSPGC indicated it would require its construction contractor to establish fire prevention measures in a construction fire prevention plan as part of the site-specific safety plan. (Response to qualification questions re Question Matrix questions 34 & 35)

3.10.5 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC indicated that its project team has completed the construction of many large transmission lines and substation projects and that many of these projects have been located within the proposed project area and similar terrains. VPC indicated risks that included endangered species, landowner concerns, archaeological discoveries, noxious weeds, storm water management, grounding, clearances, and existing underground utilities. (P-5)

VPC indicated that it would negotiate with its construction contractor to perform periodic inspection during construction, including during critical activities, and that inspections would include factory, access road, foundations, structures, and wire installation. (C-1)

VPC indicated that two material yard locations would be identified and that it would work with IID to use their existing material laydown yards. (C-2)

VPC indicated that transmission operators and the ISO would be contacted for the purpose of coordinating any required outages. (C-3)

VPC indicated that it has completed a preliminary constructability review on completion of the 60% design and would complete a structure-by-structure desktop review of the project with a final constructability review to be completed after receipt of all approvals. (C-4)

VPC indicated that it does not have any existing rights-of-way and that mitigation measures and permit conditions would be identified in the project's final plan of development that would be filed with the BLM. (C-5)

VPC indicated that its approach to construction schedule development would be based on past project experience, utilization of subject matter experts, and input from contractors and suppliers and that its construction contractor has developed a project construction schedule for the project. (C-6)

VPC indicated limited water resources, extreme weather, environmental sensitivities, and access as challenges to construction and provided mitigation. (C-7)

Maintenance Practices

CC-3, CC-4, CC-5, M-1 through M-10)

3.10.6 Information Provided by CalGrid

CalGrid provided a list of maintenance activities proposed by its O&M contractor, as well as the frequency of those activities, such as monthly, semi-annually, or annually. This list included transmission tower and line maintenance, surge arrestor maintenance, conductors, optical ground/static/shield/ ground wires, and associated hardware maintenance, and vegetation management. (CC-3)

CalGrid indicated that one employee would be assigned to oversee the O&M contractor. (CC-4)

Regarding the number of contractor personnel assigned for maintenance, CalGrid estimated four to six full time employees (FTEs). (CC-5)

CalGrid provided a copy of the signed memorandum of understanding between it and its O&M contractor and indicated that it would enter into a maintenance services agreement with this contractor.

CalGrid indicated that it has encountered a number of operations and maintenance challenges that are comparable to the risks and challenges posed by the project, including wildfire risk, environmental impact, access challenges, and weather challenges. (P-5)

CalGrid indicated that its O&M contractor's training program encompasses all aspects of training, including management, operations, maintenance, environmental considerations, safety programs, and administration, to ensure that it has qualified, skilled, and experienced O&M personnel assigned to the transmission project. (O-3)

CalGrid described how anticipated maintenance responsibilities would be divided among itself, its O&M contractor, and other subcontractors. (M-1)

CalGrid indicated that it would utilize subcontractors through its O&M contractor for maintenance work.

CalGrid indicated that it and its O&M contractor would work with subcontractors to ensure that only appropriately skilled and credentialed individuals would perform their respective tasks and described the skills required for field personnel. (M-2)

CalGrid indicated that its O&M contractor would administer training for maintenance personnel based on training programs successfully used at other facilities operated by it. CalGrid indicated that the O&M contractor training program encompasses all aspects of training, including management, operations, maintenance, environmental considerations, safety programs, and administration. (M-3)

CalGrid indicated that the maintenance program of its O&M contractor for transmission line projects includes all of the elements listed in TCA Appendix C Sections 5.2.1 (Transmission Line Circuit Maintenance) and 5.2.2 (Station Maintenance). (M-4)

CalGrid indicated that the O&M contractor's vegetation management plan complies with the National Electric Safety Code, ANSI A300 Part 7: American Operations Integrated Vegetation Management and Electric Utility Rights-of-Way, and the ISA best management practices. CalGrid indicated that the project would comply with vegetation management standards required by the NERC and WECC vegetation management guidelines. (M-5)

CalGrid indicated that as a recently formed entity, it does not currently have historical audit reports for maintenance of facilities. CalGrid indicated that its O&M contractor has provided five years of examples of third-party inspection reports for a 230-kV line in California against industry standards implemented for an existing confidential client with no anomalies observed. (M-6)

CalGrid indicated that its O&M contractor regularly reports on availability measures for transmission systems under its management. CalGrid indicated that its current system is capable of capturing the necessary information to report on availability measures as described in TCA Appendix C Section 4.3. (M-7)

CalGrid indicated that it does not anticipate any exceptions to the TCA to integrate the project into the ISO controlled grid. (M-8)

CalGrid indicated that its team is experienced in coordinating outages for scheduled and unscheduled maintenance with the ISO and non-participating generators and described the steps that it would take to ensure compliance with TCA Section 7. (M-9)

CalGrid indicated that its O&M contractor plans to subcontract maintenance for the project to a qualified maintenance provider in the same locale as the project, which would allow for a quick response to any issues that may arise.

CalGrid indicated that within four hours of an event occurring, on-call local response personnel would be on-site to perform in-person assessment of an event and within four to eight hours repair crews, equipment, and material would be on-site for live-line or typical corrective repairs. CalGrid also estimated that repairs for small-scale emergency events would be completed within 48 hours and large-scale events within 72 hours of an event. (M-10)

CalGrid indicated that its O&M contractor is currently in the process of finalizing selection of a contractor for emergency maintenance services. CalGrid indicated that its O&M contractor has consulted with this subcontractor to develop the emergency response times for the project.

CalGrid indicated that it would seek to join the Western Region Mutual Assistance group, which provides mutual aid to its members in the event restoration is needed. (O-13

CalGrid indicated that an emergency response and spare equipment program is being evaluated and discussions are underway on how to maximize the ability to respond to such events, including the use of the O&M contractor and other providers to maximize ability to respond, minimize costs, and provide these services in accordance with good utility practice.

CalGrid indicated that for hardware and insulators, its construction contractor would procure and hold a small percentage (2-3%) of construction spares for loss and

breakage during construction and would transfer any unused spares to CalGrid and the O&M contractor to have at project startup. (O-15)

CalGrid indicated that during commercial operations its O&M contractor would carry an inventory stock of 1-3% for hardware and insulators as O&M spares for use when damage or issues are noted during inspections in accordance with prudent utility practice. (O-15)

CalGrid indicated that it would adhere to industry leading programs, processes, and operations procedures that would be documented in a CPUC-ratified wildfire mitigation plan. CalGrid provided an outline of its envisioned plans for mitigation and operations under extreme conditions for facilities in High Fire Threat Districts. (Attachment G1_1 Wildfire Plans and Procedures)

3.10.7 Information Provided by Horizon West

Horizon West indicated that it has experience in accordance with the ISO maintenance procedures.

Horizon West provided the frequency of its proposed transmission line maintenance activities, such as maintenance associated with rights-of-way, vegetation management, foundations, structures, bonding, and grounding, guys, and anchors, among others. (CC-3)

Horizon West indicated that three FTEs would be required for performing O&M functions and provided additional information on the number of FTEs that would be used for various O&M job categories and their estimated utilization. (CC-4)

Horizon West indicated it plans to supplement its O&M capability as needed with services from an O&M contractor. (CC-5)

Horizon West indicated that the project's maintenance operations would be undertaken by its field operations team and that the maintenance base would be at the existing Horizon West Suncrest SVC facility in Alpine, California. Horizon West indicated that its affiliates, which have experience maintaining transmission assets under the ISO, would provide maintenance support services such as vegetation management and compliance, maintenance audit, inspection reviews, safety, security, wildfire and environmental management, land management, and maintenance compliance. (M-1)

Horizon West listed certifications and experience requirements for the personnel who undertake maintenance activities. Horizon West indicated that its maintenance and emergency support vendor has agreed to provide qualified maintenance personnel, tools, and equipment as necessary to assist in substation, line, and protection maintenance. Horizon West described the training and qualification requirements of various of its emergency support vendor's engineers, technical specialists, line foremen, linemen, and apprentice linemen. (M-2)

Horizon West indicated that it has a rigorous system maintenance personnel training program and continued education requirement. (M-3)

Horizon West indicated that it is an ISO PTO and has transmission line and substation maintenance practices that are consistent with the ISO transmission maintenance standards, which have been approved by the ISO. (M-4)

Horizon West indicated that its field maintenance team members have experience addressing a wide variety of operating challenges, ranging from wildfires, seismic, hurricanes, tornadoes, and other high wind conditions to dust contamination, avian interaction, and lightning. (M-4)

Horizon West indicated that NextEra would provide vegetation management services. Horizon West indicated that NextEra manages vegetation alongside over 80,000 miles of power lines and has done so for about the past one hundred years.

Horizon West indicated that its vegetation management team manages lines in similar rural and weather conditions for other NextEra projects in California. (M-5)

Horizon West indicated that its vegetation management procedures address wildfire precautions and landowner-controlled field-burning requirements. Horizon West indicated it has a California wildfire mitigation plan filed with the CPUC. (M-5)

Horizon West provided the annual maintenance audit reports of its maintenance practices by the ISO for the years 2012 through 2022, which showed generally good compliance with Horizon West and Trans Bay Cable standards.

Horizon West also provided a document describing experience creating and reporting wildfire mitigation plans. (M-6)

Horizon West indicated that it has experience providing the ISO with availability measures in accordance with TCA Appendix C 4.3 and the ISO maintenance procedures. Horizon West indicated that its procedures describe how it would track operational performance and availability of facilities to adequately report the facilities' performance to the ISO and other stakeholders. Horizon West provided copies of monitoring procedures and reports. (M-7)

Horizon West indicated that adding the project to the ISO controlled grid is not expected to require any changes or exceptions to the provisions of the TCA. (M-8)

Horizon West indicated that it is an ISO PTO operating in accordance with TCA Section 7. (M-9)

Horizon West indicated that it and its affiliates have a team of approximately 150 technical staff in California and that over a third of this team are located within a 90-minute drive from the project. Horizon West further indicated that the project maintenance team would have two dedicated staff based in the project vicinity. (M-10)

Horizon West indicated that it and its affiliates have experience in and are capable of establishing and managing their own standards of inspection, maintenance, repair, replacement, and maintaining the rating and technical performance of its facilities in accordance with the ISO applicable reliability criteria and the performance standards established under Section 14 of the TCA. (O-12)

Horizon West indicated that it is fully capable of managing emergencies and fulfilling its obligations for system emergency reports under TCA Section 9.2 and 9.3. Horizon West

indicated that it is a signatory to the ISO TCA in connection with the Suncrest SVC Project and has operated that project in compliance with the responsibilities of TCA Section 9.2 and 9.3 requirements.

Horizon West also provided information on NextEra's corporate emergency management plan framework for organizational readiness for threats and hazards. (O-13)

Horizon West indicated that it would maintain a spare stock of critical transmission line components, hardware, wire, and structures to ensure expedient recovery in the event of an emergency.

Horizon West indicated that it would use the NextEra integrated supply chain computerized spares asset management program that manages the spares stock and restocking, oversees the spares holding location, and dispatches spare parts for delivery within hours.

Horizon West indicated that in addition to spares on-site, it would have access to its affiliate-wide spares sharing program, specifically Florida Power & Light Company spares, and strategic support of equipment suppliers. (O-15)

Horizon West indicted it has a CPUC-approved wildfire mitigation plan and maintains active fire-prevention programs. Horizon West indicated it would extend its wildfire mitigation plan to include the new project.

Horizon West indicated it employs a wildfire prediction and tracking program that would be extended to include the project's assets. (O-13)

3.10.8 Information Provided by Lotus

Lotus provided a list of transmission line maintenance activities, which included maintenance related to conductor and shield wire, pole-top switches, structure grounds, guys, and anchors, insulators, and vegetation management, among others. (CC-3)

Lotus indicated that it would utilize its existing in-house asset management team consisting of five FTEs to oversee the O&M contractor. (CC-4)

Regarding the number of contractor personnel assigned for maintenance, Lotus estimated four to six FTEs. (CC-5)

Lotus indicated that it has extensive experience working with its O&M contractor to provide O&M services for several of its power generation projects. Lotus indicated that the same O&M contractor is providing O&M services for its Ten West Link and Cielo Azul projects.

Lotus indicated that it and its O&M contractor and specialty subcontractors as necessary would work together to execute the planned and unplanned maintenance plan for the project. (M-1)

Lotus indicated that its O&M contractor would be responsible for hiring maintenance personnel for the project and described the qualification and experience requirements for the O&M contractor's project manager and field personnel. (M-2)

Lotus indicated that its O&M contractor would administer training for maintenance personnel based on training programs successfully used at other facilities that it operates. (M-3)

Lotus indicated that for maintenance work that is subcontracted, its O&M contractor would ensure and verify that the maintenance company is properly qualified, and its employees are trained and certified to conduct transmission line, substation, or vegetation management maintenance. (M-3)

Lotus indicated that the maintenance program of its O&M contractor for transmission line projects includes all the elements listed in TCA Appendix C Sections 5.2.1 (Transmission Line Circuit Maintenance) and 5.2.2 (Station Maintenance). (M-4)

Lotus indicated that in accordance with the vegetation management procedure of its O&M contractor, vegetation management would be conducted on a 5-year cycle, with 20 percent of the transmission project being completed every year. (M-5)

Lotus indicated that its O&M contractor's vegetation management plan complies with the National Electric Safety Code, American National Standards Institute (ANSI) A300 Part 7: American Operations Integrated Vegetation Management and Electric Utility rights-of-way, and the International Society of Arboriculture best management practices. Additionally, the project sponsor would comply with vegetation management standards required by the NERC and WECC vegetation management guidelines. (M-5)

Lotus indicated that its O&M contractor regularly reports on availability measures for its clients and can capture the necessary information to report on availability measures as described in TCA Appendix C Section 4.3. (M-7)

Lotus indicated that it does not anticipate any exceptions to the TCA to integrate the project into the ISO controlled grid. (M-8)

Lotus indicated that its team is experienced in coordinating outages for scheduled and unscheduled maintenance with the ISO and non-participating generators. (M-9)

Lotus indicated that its O&M contractor plans to subcontract maintenance for the project with a qualified maintenance provider in the same locale as the project, as well as hire a project manager who would be located near the project. (M-10)

Lotus estimated that within two hours of an event occurring, on-call local response field maintenance personnel would be on-site and corrective repairs and necessary O&M actions would begin within 24 hours and repairs would be completed within 72 hours for small-scale events and within 96 hours for large-scale events. (M-10, O-13)

Lotus also identified the resources available to respond to major problems, including its O&M contractor's project manager and subcontractor's maintenance team. (O-13

Lotus indicated that for hardware and insulators, its construction contractor would procure and its O&M contractor would carry a small percentage of construction spares for loss and breakage during construction. Lotus indicated that during commercial operations, its O&M contractor would plan to carry an inventory stock of one to three percent for hardware and insulators as O&M spares for use when damage or issues are noted during inspections. (O-15)

Lotus indicated that the project would be required to have a wildfire mitigation plan and its O&M contractor would implement and develop emergency protocols for extreme conditions and emergency events as part of this plan. (P-5)

3.10.9 Information Provided by LSPGC

LSPGC provided a maintenance plan for transmission lines and substations. LSPGC also provided a detailed list of transmission line and substation maintenance tasks along with their frequencies. (CC-3)

LSPGC indicated that the number of FTEs for maintenance activities would be 3.8. (CC-4)

LSPGC indicated that it estimates approximately 0.7 FTEs on an annualized basis to conduct the contracted maintenance activities. (CC-5)

LSPGC indicated that it would be responsible for completing all maintenance activities for the project. LSPGC indicated that internal personnel would perform planned and routine inspection and maintenance activities and third-party contractors would be utilized for unplanned, larger scope, or specialized maintenance activities.

LSPGC indicated that it would hire one field technician to be located in close proximity to the project to perform transmission line inspections and oversee the outside contractors for the project. LSPGC indicated that it would also be able to leverage five additional technicians located in California to support maintenance of other LSPGC projects.

LSPGC indicated that it has identified two outside contractors to conduct preventative and predictive maintenance, support forced outage response, perform emergency repairs, and complete major facility rebuilds.

LSPGC indicated that one of its O&M contractors has over 200 qualified employees in its California offices and that the other contractor has three California offices. (M-1)

LSPGC indicated that it employs highly qualified and experienced field personnel.

LSPGC indicated that it assesses all contractors to ensure their personnel have the appropriate training and expertise for the work before authorizing any work order.

LSPGC described the responsibilities and experience requirements for field and substation technicians. (M-2)

LSPGC indicated that all vegetation management personnel are required to complete and maintain annual training necessary to be certified vegetation management technicians. (M-3)

LSPGC indicated that it would comply with the provisions of TCA Appendix C Sections 5.2.1 and 5.2.2 through its existing maintenance policies and procedures and by leveraging the experience of its affiliate, DesertLink, which currently complies with these provisions.

LSPGC indicated that DesertLink's transmission maintenance and inspection plan was approved by the ISO in 2020.

LSPGC indicated that its maintenance and testing procedures are based upon manufacturers' recommendations, national standards, good utility practice, and NERC guidance documents. (M-4)

LSPGC indicated that the project would be integrated into its transmission vegetation management plan based on experience maintaining hundreds of miles of 230 kV, 345 kV, and 500 kV transmission lines across multiple regions. (M-5)

LSPGC indicated that rights-of-way vegetation management would be conducted by the vegetation management contractors. This would consist of herbicide spraying (where permitted) to remove undesired species and inhibit grown, rights-of-way mowing, rights-of-way side cutting, removal of encroaching trees, and vegetation removal to mitigate wildfire risks.

LSPGC indicated that it would have a wildfire mitigation plan to govern the construction, maintenance, and operations of its facilities to minimize the risk of catastrophic wildfire. LSPGC indicated that it would also formalize an emergency preparedness plan for the project. (M-5)

LSPGC indicated that it currently complies with the ISO standards for inspection, maintenance, repair, and replacement set forth in TCA Appendix C.

LSPGC indicated that a recent maintenance report submitted to the ISO by DesertLink tabulated maintenance and inspection tasks and indicated the number of planned and actual occurrences. The report indicated that in all cases the actual number equaled or exceeded the planned number.

LSPGC provided a five-year maintenance report, which covered a maintenance outage on a transmission line and described the work performed, the findings, and corrective actions taken. (M-6)

LSPGC provided DesertLink's 2022 availability measures report, which indicated a 100% availability.

LSPGC also provided a summary of availability data for all LS Power transmission facilities, where the availability ranged from 99.43% to 100% over the period 2018 to 2022. LSPGC indicated that LS Power represented that the lowest number was caused by a major ice storm that affected the area. (M-7)

LSPGC indicated that it believes the addition of the project to the ISO controlled grid would require an amendment to TCA Appendix A to identify the project as under ISO control. (M-8)

LSPGC indicated that it currently performs planned outage coordination for the transmission lines, substations, and associated facilities it operates.

LSPGC indicated that it would be responsible for responding to all forced outages on the project. LSPGC indicated that the project would be incorporated into LSPGC's emergency operations plan and emergency response plan. (M-9)

LSPGC indicated that one technician would be stationed in the project area to perform routine maintenance and inspections and oversee the outside contractors for the project. LSPGC indicated that it would also have five technicians located near the Fresno and San Francisco Bay areas to support the project as needed.

LSPGC indicated that its technician located in the project area would be able to respond to all parts of the project within two hours. LSPGC indicated that the maintenance contractors would be capable of responding to all parts of the project within five hours. (M-10)

LSPGC indicated that it maintains master service agreements with transmission line contractors, vegetation management contractors, helicopter services, equipment suppliers, and material suppliers to supplement its staff and resources as may be necessary. (O-13)

LSPGC indicated that it would maintain communication and coordination with the ISO throughout the emergency repair process, maintain records of the event, and submit reports to the ISO in accordance with ISO agreements. (O-13)

LSPGC indicated that it would maintain critical spare parts and materials required to repair system facilities, including transmission structures, transmission conductor, and transmission insulators and hardware. In addition, LSPGC indicated that it maintains spare transmission structures, including emergency restoration structures, that can be utilized by LSPGC in the event of a failure. (O-15)

3.10.10 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC provided a list of transmission line and substation maintenance activities, as well as the frequency of those activities. The list included maintenance activities related to transmission towers and line, conductors, optical wires, switchyard, transformers, protection equipment, circuit breakers, battery systems, communication systems, buswork, as well as vegetation management. (CC-3)

VPC indicated that it would operate and maintain the project under the direction of one FTE. VPC indicated that its parent company would also use one FTE for supporting O&M activities. (CC-4)

VPC indicated that its O&M subcontractor would employ a project manager and four to six FTEs for maintenance activities.

VPC indicated that it has signed a proposal service agreement with its O&M contractor that describes the scope of services to be provided by the contractor.

VPC indicated that its O&M contractor would work with its maintenance partner for certain field maintenance of the proposed project. VPC indicated that its O&M contractor employs nearly 4,000 people in over 190 offices and plant sites in the U.S. and abroad. (M-1)

VPC indicated that its O&M contractor would be responsible for hiring qualified maintenance personnel for the project. (M-2)

VPC indicated that its O&M contractor's training manual is based on TPMs that have been successfully used by it for maintenance services across its client base nationally.

VPC indicated that its O&M contractor's training program utilizes classroom, learning management system content, self-study, and on-the-job training methods. (M-3)

VPC indicated that its O&M contractor plans to subcontract to support certain field maintenance activities.

VPC indicated that the maintenance program of its subcontractor is comprehensive and would comply with the ISO's maintenance standards. (M-4)

VPC indicated that the maintenance practices as listed in the TCA Appendix C 5.2.1 would be employed by its O&M contractor. (M-4)

VPC indicated that regardless of the project not being located in a High Fire Threat District, it would implement appropriate plans and procedures to minimize wildfire risk (Response to Qualification Question).

VPC indicated that it has already worked with the BLM to develop a preliminary wildfire plan to prevent, mitigate, and respond to fires during construction, operation, and maintenance of the project.

VPC indicated that IID's local experience would inform VPC's final wildfire mitigation plans and procedures. (M-5)

VPC indicated that its O&M contractor would have the responsibility to create and implement a compliant vegetation management plan that would comply with the applicable rules and decisions of the CPUC, NESC, ANSI, A300 Part 7: American operations integrated vegetation management and electric utility rights-of-way, and the International Society of Arboriculture best management practices. VPC indicated that the project would comply with vegetation management standards required by NERC and WECC. (M-5)

VPC indicated that in order to ensure compliance with its own standards, its O&M contractor performs assessments on its facilities on a three-year basis in which every program and procedure is assessed to ensure compliance.

VPC indicated that its O&M contractor's compliance experience with standards for inspection, maintenance, repair, and replacement of similar facilities include proven programs and scalable processes that enable successful O&M services on high-voltage transmission line.

VPC provided sample reports from its O&M contractor for transmission and distribution lines in California, which indicated that no anomalies were observed and that no vegetation was encroaching on the transmission line and concluded that the power lines appear to be in good condition with no loose or failing hardware. The reports include additional information on vegetation management. (M-6)

VPC indicated that its O&M contractor regularly reports on availability measures for its clients and that its current system is capable of capturing the necessary information to report on availability measures as described in TCA Appendix C Section 4.3. VPC indicated that in accordance with Section 4.3, the O&M contractor would generate and

submit to VPC an annual report, which would be transmitted to the ISO within 90 days of the end of the calendar year. (M-7)

VPC indicated that adding the project to the ISO controlled grid would not require any changes or exceptions to the provisions of the TCA. (M-8)

VPC indicated that its O&M contractor plans to subcontract maintenance for the project with a qualified maintenance provider in the same locale as the project, as well as a project manager who would be located regionally.

VPC indicated that its O&M team would work with the VPC-designated representative on the ISO Transmission Maintenance Coordination Committee to ensure compliance with ISO transmission maintenance procedures and appropriate monitoring, tracking, and reporting of outages and project availability. (O-12)

VPC indicated that its O&M contractor has provided samples of emergency response plans for major fire operating procedure, transmission emergency plan, and system restoration plan.

VPC indicated that within two hours of an event, on-call local response field maintenance personnel would be on-site at assessed location, and within 24 hours, repair crews, equipment, and material would be on-site for live-line or typical corrective repairs. VPC indicated that repairs would be completed within 72 hours for small-scale events and 96 hours for large-scale events. (O-13)

VPC indicated that upon award of the project, VPC would continue its conversations with interconnecting utilities to explore mutual assistance agreements, storm restoration and disaster recovery arrangements, equipment storage agreements, shared inventory and spare parts agreements, and the like. (O-15)

Operating Practices

(Prior Projects and Experience Workbook; P-5, CC-3, CC-4, CC-5, O-1 through O-18)

3.10.11 Information Provided by CalGrid

CalGrid provided a list of its experience and the experience of its contractors with operating transmission lines. The list included a total of 14 transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years and are located in the U.S., with three in California. (Prior Projects and Experience Workbook)

CalGrid indicated that one employee would be assigned to oversee the O&M contractor. (CC-4)

Regarding the number of contractor personnel assigned for operations, CalGrid indicated that there would be 20 personnel – ten engineering support and ten operations management. (CC-5)

CalGrid provided an executed memorandum of understanding with its O&M contractor. CalGrid indicated that a subsidiary of its O&M contractor would fulfil the NERC functional role of Transmission Operator (TOP) for the project. CalGrid indicated that under these services, the operations contractor would be monitoring the operations of the line,

including communicating with the ISO on the line's availability and coordinating with the maintenance team on any emergency or maintenance activities.

CalGrid indicated that its operations contractor is a NERC-registered TOP in WECC with 24 x 7 primary and backup control centers staffed with NERC-certified transmission system operators. (O-1)

CalGrid indicated that its operations contractor monitors the certification requirements for the Transmission Operator personnel, including progress and completion of required continuing education and emergency training requirements.

CalGrid described the qualifications, certifications and experience required for field personnel and the project manager. (O-2)

CalGrid indicated that it does not anticipate any exceptions to the provisions of the TCA regarding operations to integrate the project into the ISO controlled grid. (O-4)

CalGrid indicated that it would become the registered Transmission Owner (TO) and Transmission Planner (TP) for the project. CalGrid indicated that it expects its operations contractor to register as the Transmission Operator (TOP). (O-5)

CalGrid indicated that its operations contractor would develop the appropriate policies and procedures, maintain the proper documentation, and submit reports as required by NERC and/or the regional entity to be compliant with applicable TOP NERC reliability standards. (O-6)

CalGrid indicated that temporary waivers of TCA Section 5.1.6 would not be necessary. (O-7)

CalGrid indicated that its operations contractor has maintained and developed compliant facilities, programs, and procedures to support control center services for over 22 years.

CalGrid provided audit reports for the most recent audits, completed in 2022, by SERC and WECC. CalGrid indicated that both audits found no violations and no areas of concern. (O-8)

CalGrid indicated that its O&M contractor plans to enter a coordinator functional registration with the ISO. (O-9) CalGrid provided a list of relevant agreements, such as interconnection agreements and operating procedures with adjacent TOs. (O-10)

CalGrid indicated that its operations contractor has two remote data centers that are "hot-hot" to ensure no loss of data could occur.

CalGrid indicated that the EOP-008 loss of primary control center functionality was most recently audited in 2022, and there were no findings or areas of concerns by WECC or SERC.

CalGrid indicated that its operations contractor would install its field communications equipment, which generally would consist of router, switch, RTU, UPS and supplemental equipment to support physical access controls. (O-11)

CalGrid indicated that its operations contractor would be the primary point of contact for the ISO and neighboring Transmission Operators for voice communications, including ISO issued operating instructions. (O-12)

CalGrid indicated that the project would not be subject to any encumbrance. (O-14)

CalGrid indicated that neither it nor its O&M contractor or the subsidiary operations contractor, as a registered TO or TOP, have had any violations of NERC reliability standards in the past ten years. (O-16)

CalGrid indicated that neither it nor its O&M contractor or the subsidiary operations contractor have received any operations related tariff violations or FERC rules violations in the past ten years. (O-17)

CalGrid indicated that neither it nor its O&M contractor or the subsidiary operations contractor have incurred any violations of operations-related laws, statutes, rules, or regulations. (O-18)

3.10.12 Information Provided by Horizon West

Horizon West provided a list of its experience and the experience of its contractors with operating transmission lines. The list included a total of 57 transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years, and are located in the U.S., with three in California. (Prior Projects and Experience Workbook)

Horizon West indicated that it has prior operational experience in the ISO and provided examples of two projects in California where its affiliate was responsible for operations. (P-5)

Horizon West provided detailed information on the number of FTEs that would be used for various O&M job categories and their estimated utilization. Based on the information provided by Horizon West, the full-time FTE equivalent for performing all the O&M functions listed was approximately three FTEs. (CC-4)

Horizon West indicated that the project's operations would be undertaken by Horizon West field operations staff based in the vicinity of the project and by Horizon West's existing control center team, staffed by its system operating affiliate, Lone Star, located in Austin, Texas. Horizon West indicated that Lone Star is an existing ISO and WECC-certified Transmission Operator, which currently operates Horizon West's facilities with interconnection to SDG&E. Horizon West indicated that Lone Star has a track record of operating transmission assets under the ISO Tariff and interconnection protocols with incumbent investor-owned utilities.

Horizon West indicated that it and its affiliates' system operators are NERC-certified TOP operators.

Horizon West provided the minimum qualifications and experience, training, and certification requirements for its system operators and field personnel, including those involved in switching operations.

Horizon West indicated that its operations staff and Lone Star operations personnel supporting its projects are required to be familiar with the switching protocols contained in their emergency operation plan and required to take an annual switching refresher class to maintain qualification for conducting switching operations. (O-2)

Horizon West provided information on its training program, which included descriptions of training courses required by Horizon West for its operations personnel who are responsible for substation maintenance, system operations, P&C, and transmission lines and includes training for entry-level operations personnel. (O-3)

Horizon West indicated that it does not anticipate the addition of the project to the ISO controlled grid to require any changes or exceptions to the provisions of the TCA regarding operations. (O-4)

Horizon West indicated that Horizon West would perform the TO and TP function for the project under its registration and Lone Star, under its registration, would undertake the project's TOP role for Horizon West. (O-5)

Horizon West indicated that its compliance and responsibility organization would monitor its and Lone Star's execution of their NERC functional programs to ensure compliance with the reliability standards or requirements associated with the project. (O-6)

Horizon West indicated that it would follow NextEra's documented NERC reliability standards internal compliance program, which consists of compliance processes and procedures, effective independent oversight, effective training and education for roles and responsibilities, monitoring and auditing, internal controls, reporting possible violations or concerns, and corrective actions.

Horizon West indicated that it does not foresee any applicable reliability criteria for which TOs are responsible that would require temporary waivers under TCA Section 5.1.6. (O-7)

Horizon West indicated that Horizon West has had no violations relating to applicable NERC reliability standards. Horizon West provided results of NERC audits for the project operator Lone Star for the past ten years.

Horizon West provided the number of miles of transmission lines for which it and its affiliates are responsible for compliance. (O-8)

Horizon West indicated that in January 2020 Lone Star (the Horizon West NERC TOP) executed a Coordinated Functional Registration (CFR) agreement with the ISO.

Horizon West indicated that its operations team members have been instrumental in establishing several CFR agreements with the ISO.

Horizon West indicated that it and its operating system affiliate, Lone Star, would continue to work with the ISO as the CFR evolves, which includes defining roles and responsibilities related to complying with all applicable NERC TOP reliability standards requirements. (O-9)

Horizon West provided a table listing the applicable agreements that would define the project TOP's responsibilities and authority regarding other NERC functional entities. (O-10)

Horizon West indicated that the project would be integrated into its and Lone Star's existing control center infrastructure. Horizon West indicated that Lone Star would perform the system operations function for the project.

Horizon West described Lone Star's infrastructure for providing real-time operational information. (O-11)

Horizon West indicated that the project would not be subject to any encumbrance. (O-14)

Horizon West indicated that it has had no violations of NERC reliability standards in the past ten years. Horizon West provided a list that that identified and described NextEra's and the project sponsor's team violations in all NERC regions, including WECC. Horizon West indicated that for the project's system operator, Lone Star, and most NextEra entities in California, potential violations have been the subject of self-reports submitted to the applicable regional entity, WECC. (O-16)

Horizon West indicated that that there were no operations-related tariff violations or FERC rules violations the project sponsor or its team has incurred in the past ten years. (O-17)

Horizon West indicated that there were no violations of operations-related laws, statutes, rules, or regulations incurred by the project sponsor or its team in the past ten years. (O-18)

3.10.13 Information Provided by Lotus

Lotus provided a list of its experience and the experience of its contractors with operating transmission lines. The list included a total of two transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years, and are located in the U.S., with none in California. (Prior Projects and Experience Workbook)

Lotus indicated that it has faced operations-related risks and challenges similar to those foreseen for the project. (P-5)

Lotus indicated it is ensuring adequate communications and backup communications are installed early and checked frequently throughout the construction and commissioning phases of the project. (P-5)

Lotus provided an example of a recent transmission line project in California where it has been acting as a PTO. (P-5)

Lotus indicated that it would utilize its existing in-house asset management team to oversee its O&M contractor. Lotus indicated that its asset management team would consist of five FTE asset managers who would have additional accounting, finance, operations, and administrative support from Lotus' remaining 24 FTE's. (CC-4)

Regarding the number of contractor personnel assigned for operations, Lotus indicated that its operations contractor operates five shifts of four system operators per shift, including the shift supervisor. (CC-5)

Lotus indicated that it has signed a memorandum of understanding with its O&M contractor and its subsidiary operations contractor.

Lotus indicated that its operations contractor would be the ISO's single point of contact for project operations.

Lotus described the roles and responsibilities of each of the parties. (O-1)

Lotus indicated that its operations contractor currently has twenty system operator positions (including five shift leads), and it monitors the certification requirements for the Transmission Operator personnel, including progress and completion of required continuing education and emergency training requirements. (O-2)

Lotus indicated that its operations contractor maintains an initial and ongoing training program in accordance with PER-005 to ensure specific tasks and procedures, such as lock-out-tag-out, restoration, emergency response, and outage identification and coordination activities are covered.

Lotus also described the training requirements for field personnel. (O-3)

Lotus indicated that it does not anticipate any exceptions to the provisions of the TCA regarding operations to integrate the project into the ISO controlled grid. (O-4)

Lotus indicated that it would become the registered Transmission Owner for the project and its operations contractor would be registered as the TOP. (O-5)

Lotus indicated that its operations contractor would be responsible for compliance and that the O&M contractor's NERC team would provide technical leadership and program coordination in NERC program compliance and validation. (O-6)

Lotus indicated that it does not have any reliability criteria for which it would require a temporary waiver of TCA Section 5.1.6. (O-7)

Lotus indicated that all of the electric transmission facilities that its O&M contractor has operated have been in compliance with all applicable reliability standards.

Lotus provided an example of the CFR matrix that is under development with the ISO that lists NERC requirements and responsibilities of its operations contractor, customer, and the ISO. (O-9)

Lotus provided a list of relevant agreements, including interconnection agreements and TOP to TOP operating procedures. (O-10)

Lotus indicated that its operations contractor has two remote data centers that are "hot-hot" to ensure no loss of data could occur.

Lotus described the actions that would be taken by its operations contractor to provide the availability data required by TCA Appendix C Section 4.3. (O-11)

Lotus indicated that its operations contractor would be the primary point of contact for the ISO and neighboring transmission operators for voice communications, including ISO issued operating instructions. (O-12)

Lotus indicated that it is not anticipated that the project would be subject to an encumbrance. (O-14)

Lotus indicated that neither its O&M contractor nor its subsidiary operations contractor, as a registered TO or TOP, has had any violations of NERC reliability standards in the past ten years. (O-16)

Lotus indicated that it has no violations of NERC reliability standards in the past ten years. (O-16)

Lotus indicated that neither its O&M contractor nor its subsidiary operations contractor has received any operations related tariff violations or FERC rules violations in the past ten years.

Lotus indicated that it has no tariff related FERC violations or FERC rule violations to report. (O-17)

Lotus indicated that neither its O&M contractor nor its subsidiary operations contractor has incurred any violations of operations-related laws, statutes, rules, or regulations. Lotus indicated that it has not incurred any violations of operations-related laws, statutes, rules, or regulations. (O-18)

3.10.14 Information Provided by LSPGC

LSPGC provided a list of its experience and the experience of its contractors with operating transmission lines. The list included a total of five transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years, and are located in the U.S., with none in California. (Prior Projects and Experience Workbook)

LSPGC indicated that it has faced operations and maintenance-related risks and challenges similar to those foreseen for the project that includes operating and maintaining a line in a desert environment and provided a specific example of a project in Texas where it faced similar challenges. (P-5)

LSPGC provided the estimated number of FTEs for operations, maintenance, and administrative functions, as well as a breakdown of these FTEs by job function.

LSPGC estimated 3.8 FTEs for operations. (CC-4)

LSPGC indicated that it would be responsible for providing operations and compliance services for the project.

LSPGC indicated that it plans to operate the project from its control centers located in Austin, Texas. LSPGC indicated that its control centers would be integrated with the ISO in 2025 to operate the Orchard STATCOM and Fern Road GIS/STATCOM projects. LSPGC indicated that its control center facilities are NERC certified high impact rating control centers (per CIP-002-5) that are fully compliant with all NERC standards, including the physical and cyber security requirements necessary to operate the project.

LSPGC indicated that it trains and credentials local contractors to perform field operations at LSPGC facilities to supplement its internal resources as may be necessary from time to time (*e.g.*, for specialized maintenance and repair). LSPGC indicated that it does not use contractors for transmission system operator positions. (O-1)

LSPGC indicated that it requires that all transmission system operators hold: (1) Transmission Operator NERC certification and/or (2) Reliability Coordinator NERC certification. LSPGC indicated that the policies and procedures for operations personnel are guided by PER-003-02 and PER-005-02 and defined in LSPGC's operations training process manual.

LSPGC also provided the minimum experience and certification requirements for line and substation technicians and technicians performing switching activities. (O-2)

LSPGC indicated that it utilizes NERC's system operator certification and continuing education database to review and archive transmission system operator continuing education hours. LSPGC indicated that its transmission system operator training includes computer-based training, instructor-led courses, formal on-the-job training, simulations, drills, and exercises.

LSPGC indicated that to facilitate regular operating training, its SCADA/EMS system has an operator training simulator.

LSPGC indicated that field personnel are required to complete an annual training program, which includes topics such as emergency action plans, fall protection, hazard communications, CIP, code of conduct, switching, and environmental training.

LSPGC indicated that it assesses all contractors to ensure that their personnel have the appropriate training and expertise for the work before authorizing any work order. (O-3)

LSPGC indicated that it believes the addition of the project to the ISO controlled grid would require an amendment to TCA Appendix A to identify the project as under ISO control. (O-4)

LSPGC indicated that it would be registered with NERC as a TO, TOP, and TP for the Orchard and Fern Road STATCOM projects prior to operation of the project.

LSPGC indicated that it would add the project facilities to the WECC Bulk Electric System facilities list. (O-5)

LSPGC indicated that it would perform all NERC functions for the project. (O-6)

LSPGC indicated that the project would be integrated in its NERC internal compliance program, which is intended to provide a functional framework that outlines the guiding principles, governance structure, and internal compliance management activities implemented at LSPGC entities to support the secure and reliable operation of the bulk electric system and compliance with the NERC reliability standards.

LSPGC indicated that the chief compliance officer would be the NERC senior manager responsible for all NERC compliance. LSPGC indicated that its compliance management team would own oversight to ensure execution of day-to-day processes and controls while functional area leads would own and execute the day-to-day program and processes.

LSPGC indicated that it does not require any waivers under TCA Section 5.1.6. (O-7) LSPGC indicated that it is committed to maintaining compliance with the applicable reliability standards.

LSPGC indicated that in 2022, Texas RE in coordination with Reliability First Corporation conducted a compliance audit of certain LS Power utilities and that no findings of non-compliance with all the NERC reliability standards were found. (O-8)

LSPGC indicated that it would rely on the CFR that would be in place with the ISO for other LSPGC projects to divide responsibility for NERC reliability standards on this project. (O-9)

LSPGC indicated that the responsibilities and authority regarding the Transmission Owner and adjacent Transmission Operator(s) would be defined in an interconnection agreement with each respective adjacent Transmission Operator. (O-10)

LSPGC indicated that to the extent the project data isn't available via ISO ICCP, LSPGC would coordinate with APS and SDG&E to install data acquisition and communications equipment for the project at the North Gila and Imperial Valley substations to ensure adequate, reliable, and redundant data transmission and acquisition capabilities.

LSPGC indicated that its Austin, Texas control centers are NERC certified high impact control centers (per CIP-002-5) that currently operate extra high voltage substations and meet all of the physical and cyber security requirements necessary to operate the project. (O-11)

LSPGC indicated that it has the capability to comply with TCA Sections 6.1 and 6.3 through its existing operations. LSPGC indicated that its operating personnel and support teams at the control centers manage and coordinate all activities related to outages, including but not limited to operation, switching, scheduled maintenance coordination, forced outage management, and return to service.

LSPGC indicated that the project scope does not contain switchable equipment, so switching activities would be limited to the coordination of switching with APS and SDG&E.

LSPGC indicated that it would provide system monitoring and initial forced outage response on a 24/7 basis and a local California-based technician would be responsible for responding to any forced outages on the project. (O-12)

LSPGC indicated that it would be responsible for emergency response and repair on the project in coordination with the ISO. LSPGC provided its emergency operations plan, emergency response plan, and system restoration plan.

LSPGC indicated that the project would not be subject to any encumbrance on the ISO's operational control. (O-14)

LSPGC indicated that the Texas RE conducted a CIP audit of Cross Texas in 2019, which identified compliance violations of five standards. LSPGC indicated that in addition to mitigating each matter, it has significantly fortified enterprise compliance following the Texas RE audit of Cross Texas in April 2019. (O-16)

LSPGC indicated that neither it nor any of its affiliates has been found in violation of any operations-related tariff or FERC rules in the past ten years. (O-17)

LSPGC indicated that neither it nor any of its affiliates has been found in violation of any operations-related laws, statutes, rules, or regulations by any court or agency in the past ten years. (O-18)

3.10.15 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC provided a list of its experience and the experience of its contractors with operating transmission lines. The list included a total of 10 transmission line projects that operate at voltages above 200 kV and have been completed in the past ten years, and are located in the U.S., with seven in California. (Prior Projects and Experience Workbook)

For the VPC Dunes proposal, VPC provided a list of its experience and the experience of its contractors with operating substations. The list included a total of 15 substation projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, and are located in the U.S., with 11 in California. (Prior Projects and Experience Workbook)

VPC indicated that it has faced operations and maintenance risks similar to those foreseen for the project and provided several examples of projects that were related to noxious weed management, time frame for reclamation, and limited construction access. (P-5)

VPC indicated that its operations contractor, a subsidiary of its O&M contractor, operates five shifts of four system operators per shift, including the shift supervisor. (CC-5)

VPC indicated that it would operate and maintain the project under the direction of one full-time equivalent employee dedicated to managing operations and maintenance for the project, including project operations and compliance oversight, reporting to Grid United's vice president of project execution.

VPC indicated that it would also appoint an electrical regulatory compliance lead who would be responsible for ensuring the organization follows the compliance plan and satisfies all applicable NERC, WECC, and ISO compliance requirements, including the ones related to O&M.

VPC indicated that the compliance lead would also act as the authorized company representative and liaison with NERC, WECC, and the ISO. (O-1)

VPC indicated that its operations contractor staffs its transmission operations twenty-four hours a day, seven days a week with NERC reliability coordinator-certified system operators.

VPC indicated that its operations contractor currently has twenty system operator positions (including five shift leads), and it monitors the certification requirements for its TOP personnel, including progress and completion of required continuing education and emergency training requirements. (O-2)

VPC indicated that its O&M contractor would administer training for O&M personnel (including training and certification requirements for operators, linemen, etc.).

VPC indicated that the O&M contractor's training program encompasses all aspects of training, including management, operations, maintenance, environmental considerations, safety programs, and administration. (O-3)

VPC indicated that it would not require any changes or exceptions to the provisions of the TCA regarding operations. (O-4)

VPC indicated that Imperial Irrigation District's participation as a non-PTO and its associated Transmission Ownership Rights (TOR) would be governed by Section 17 of the ISO Tariff. VPC indicated that TORs are neither an entitlement nor an encumbrance under the ISO Tariff. VPC indicated that IID's rights to use transmission as a non-PTO would be effectuated through the issuance of Transmission Rights and Transmission Curtailment (TRTC) instructions, as defined in Section 17.1 of the ISO Tariff. (O-4)

VPC indicated that after award of the project, VPC would take steps with NERC and WECC to become the NERC-registered Transmission Owner and Transmission Planner and would bilaterally contract with its operations contractor as VPC's designated NERC-certified TOP and counterparty to an ISO CFR agreement. (O-5)

VPC indicated that the TOP Control Center Services Agreement contains terms and conditions obligating its operations contractor to meet compliance obligations and be responsible to NERC for any failures to meet those obligations. (O-6)

VPC indicated that it would also appoint an electrical regulatory compliance lead who would be responsible for ensuring the organization follows the compliance plan and satisfies all applicable NERC, WECC, and ISO compliance requirements, including the ones related to O&M. (O-1)

VPC indicated that it does not expect to require any temporary waivers under TCA Section 5.1.6.

VPC indicated that after the proposed project is awarded, it would commence the development and implementation of its NERC, WECC, and ISO compliance plan ahead of the proposed project's commercial operation date so as to meet the applicable reliability criteria. VPC described the key components of its compliance plan. (O-7)

VPC indicated that all of the electric transmission facilities that its O&M contractor has operated have been in compliance with all applicable reliability standards.

VPC indicated that since 2012 its O&M contractor has been through nearly 200 audits across its registrations with no audit-discovered violations. (O-8)

VPC indicated that it and its operations contractor are familiar with the ISO CFRs and the CFR matrices maintained on the NERC registry.

VPC provided an example of the CFR matrix that is under development with the ISO. (O-9)

VPC indicated that it would enter into the ISO TCA with the intent of becoming a PTO, which would give the ISO authority to perform the transmission service provider function relating to managing transmission resources within its balancing authority area. (O-10)

VPC indicated that its operations contractor would be providing TOP services that meet the reliability standard requirements of a NERC-certified TOP, including the obligations to have adequate and reliable data acquisition facilities for its TOP Areas and other TOP Areas. VPC indicated that the EOP-008 loss of primary control center functionality was most recently audited in 2022, and there were no findings or areas of concerns by WECC or SERC. (O-11)

VPC indicated that its operations contractor would be the primary point of contact for the ISO and neighboring TOPs for voice communications, including ISO-issued operating instructions and provided their TOP responsibilities.

VPC indicated that it does not anticipate the need for identification of encumbrances, as defined in the TCA. (O-14)

VPC provided a confidential report that listed a number of NERC violations by the Imperial Irrigation District, mostly the results of self-reports. (O-16)

VPC referenced a confidential report that included information about a Citizens Energy self-report process with FERC that was remedied and FERC staff took no further action. (O-17)

VPC indicated that no operations-related violations of laws, statutes, rules, or regulations, responsive to this question and occurring within the past ten years, have been identified. (O-18)

3.10.16 ISO Comparative Analysis

Comparative Analysis of Construction Practices

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding the construction practices they propose for this project, including but not limited to their proposed design criteria and constructability review process. All of the project sponsors provided a detailed design criteria and constructability review processes that demonstrate that their respective projects would adhere to standardized construction practices. Based on these considerations, in conjunction with all the other considerations included in the ISO's analysis for this component of the factor, the ISO has determined that there is no material difference among the proposals of CalGrid, Horizon West, Lotus, LSPGC, and VPC regarding this component of the factor.

Comparative Analysis of Maintenance Practices

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding adherence to applicable maintenance practices and the robustness of the maintenance practices they have proposed for this project, including but not limited to their proposed plans for compliance with NERC requirements for transmission owners and operators, the TCA, and the ISO's transmission maintenance standards.

The ISO has determined that all the project sponsors and their proposed teams have the basic capability to adhere to standardized maintenance practices. Some of the project

sponsors and their teams have more well-established organizations and processes related to the maintenance of EHV transmission facilities than others do.

Both Horizon West and its team and LSPGC and its team have maintenance practices complying with the ISO's transmission maintenance standards under the TCA that have been approved by the ISO. The other project sponsors indicated that their maintenance practices include the elements of the ISO's maintenance standards.

The proposed emergency response and restoration times for all of the project sponsors are reasonable. Horizon West's proposal indicates it has more local resources available to respond to emergencies than the proposals of the other projects sponsors.

Regarding plans or provisions to be implemented by the project sponsor to replace major failed equipment, e.g., a group of towers (including dead end structures), Horizon West's proposal indicates greater access to spare parts through its affiliates than the other project sponsors do.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this component of the factor, the ISO has determined that, based on the specific scope of this project, Horizon West's proposal is slightly better than LSPGC's proposal (due to Horizon West's local resources available to respond to emergencies and greater access to spare parts), which is slightly better than the proposals of CalGrid, Lotus, and VPC (due to LSPGC's experience with complying with the ISO transmission maintenance standards), among which there is no material difference, regarding this component of the factor.

Comparative Analysis of Operating Practices

For purposes of the comparative analysis for this component of the factor, the ISO has considered the representations by the project sponsors regarding the operating practices they propose for this project, including but not limited to their proposed emergency plans and other plans for compliance with NERC requirements for transmission owners and operators and the ISO's standards.

The ISO has determined that all the project sponsors and their proposed teams have the basic capability to adhere to standardized operating practices and standards and applicable tariffs. Some of the project sponsors and their teams have more experience and well-established organizations and processes related to operating EHV transmission facilities. The ISO considers it an advantage if the project sponsor has complied with the TCA as a PTO. For this analysis, the ISO considers transmission-related operating experience to be more important than generation-related operating experience.

Horizon West and its team and LSPGC and its team operate transmission facilities under the ISO's operational control that are required to comply with NERC standards, the TCA, and the ISO Tariff. None of the other project sponsors has operational transmission facilities operating under the ISO's operational control that are subject to the TCA and the ISO Tariff.

Regarding the approach the project sponsor would use to assure compliance with Applicable Reliability Standards, LSPGC does not plan to subcontract NERC functions, and Horizon West and VPC identified comprehensive corporate level compliance oversight functions that would include subcontractors. CalGrid and Lotus indicate that

compliance management would be the responsibility of the subcontractor performing the TOP function.

Regarding compliance with the Applicable Reliability Standards for all transmission facilities that it owns, operates, or maintains, all project sponsors provided NERC audit reports indicating generally good compliance.

Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this component of the factor, the ISO has determined that, based on the specific scope of this project, there is no material difference between the proposals of Horizon West and LSPGC, and they are better than the proposals of CalGrid, Lotus, and VPC, among which there is no material difference.

Overall Comparative Analysis

The ISO considers the three components of this factor to be of roughly equal importance in the selection process for this project.

Regarding the first component of the factor (demonstrated capability to adhere to standardized construction practices), the ISO has determined that there is no material difference among the six proposals of the five project sponsors regarding this component of the factor.

Regarding the second component (demonstrated capability to adhere to standardized maintenance practices), the ISO has determined that Horizon West's proposal is slightly better than LSPGC's proposal, which is slightly better than the proposals of CalGrid, Lotus, and VPC, among which there is no material difference.

Regarding the third component of this factor (demonstrated capability to adhere to standardized operating practices), the ISO has determined that there is no material difference between the proposals of Horizon West and LSPGC, which are better than the proposals of CalGrid, Lotus, and VPC, among which there is no material difference.

Based on the combination of the foregoing comparisons for the three components of this factor, the ISO has determined that proposal of Horizon West is slightly better than the proposal of LSPGC, which is better than the proposals of CalGrid, Lotus, and VPC, among which there is no material difference regarding this factor overall.

3.11 Selection Factor 24.5.4(i): Ability to Assume Liability for Major Losses

(F-14, F-15, O-15)

The ninth selection factor is "demonstrated ability to assume liability for major losses resulting from failure of facilities of the Project Sponsor."

3.11.1 Information Provided by CalGrid

CalGrid indicated that prior to commencement of construction it would procure or cause its contractors to procure a builder's "all-risk" insurance policy in an amount that is not less than the full replacement cost of the project that will cover perils of flood, earthquake, windstorm, tornado, hail, lightning, freezing, strike, riot and civil commotion,

vandalism, malicious mischief, and sabotage (non-terrorism events); subject to sub-limits and terms that are consistent with current industry practice. (F-14)

CalGrid indicated that upon completion of testing, commissioning, and achievement of substantial completion, the builder's risk insurance policy would expire and the property would be covered by an operational property policy. CalGrid indicated the operational property policy would provide coverage on a replacement cost basis in a broad form all-risk policy with limits that meet or exceed industry specific maximum foreseeable losses, with no co-insurance clause. CalGrid indicated the operational property policy would include coverage for mechanical and electrical breakdown, plus resulting or ensuing damage arising out of defects, the perils of flood, earthquake, windstorm, hail, tornado, lightning, sabotage (excluding sabotage by the named insured), strike, riot and civil commotion, vandalism, and malicious mischief, subject to terms that are consistent with current industry practice. (F-14)

During construction, CalGrid indicated it would require the construction contractor's corporate insurance program to include, but not be limited to, general liability, automobile liability, excess liability (including wildfire), worker's compensation, professional liability, and pollution liability coverage. CalGrid indicated that with respect to wildfire coverage, limits would be subject to commercial reasonableness, availability, and in line with prudent industry practice. (F-14)

During the operational life of the facilities, CalGrid indicated it would require the O&M contractor's corporate insurance program to include, but not be limited to, general liability (including wildfire), automobile liability, excess liability (including wildfire), and worker's compensation coverage. (F-14)

CalGrid indicated it would purchase general liability insurance (including wildfire) and excess liability insurance (including wildfire) over the operational phase of the facilities. CalGrid indicated the policy's limits would be in excess of the O&M contractor's contractually required limits and, with respect to wildfire coverage, limits would be subject to commercial reasonableness, availability, and in line with prudent industry practice. (F-14)

CalGrid indicated its approach to risk management would follow prudent utility practice. CalGrid indicated that should CalGrid's exposure extend beyond its anticipated insurance coverage, it expects that any additional uninsured exposure would be eligible for recovery at FERC. (Attachment G1-1 Wildfire Plans and Procedures)

CalGrid indicated major capital replacements and rebuilds over the life of the project would be financed through retained earnings, owner cash reserves, revolving lines of credit, insurance proceeds, and additional parent support to the extent required. (F-15)

CalGrid indicated it would maintain cash operating reserves and a line of credit to cover unexpected capital replacements, as well as insurance coverage for catastrophic events. (F-15)

CalGrid indicated that an emergency response and spare equipment program is being evaluated and discussions are underway on how to maximize the ability to respond to such events, including the use of its O&M contractor and other providers to maximize ability to respond, minimize costs, and provide these services in accordance with good utility practice. (O-15)

CalGrid indicated that for hardware and insulators, its construction contractor would procure and hold a small percentage (2-3%) of construction spares for loss and breakage during construction and would transfer any unused spares to CalGrid and the O&M contractor to have at project startup.

CalGrid indicated that during commercial operations, the O&M contractor would carry an inventory stock of 1-3% for hardware and insulators as O&M spares for use when damage or issues are noted during inspections in accordance with prudent utility practice. (O-15)

3.11.2 Information Provided by Horizon West

Horizon West indicated that NextEra and its affiliated, subsidiary, and associated companies and corporations, which includes Horizon West, maintain and will maintain a property all-risk insurance program that would cover the project facilities from all risks of direct physical loss or damage, including, but not limited to, mechanical and electrical breakdown, wildfire, flood, earthquake, windstorm, and terrorism. (F-14)

Horizon West indicated it maintains and would maintain a commercial general liability insurance program with limits commensurate with industry standards that would protect against liability claims for bodily injury and property damage. (F-14)

Horizon West indicated the insured values during construction and over the operational life of the project facilities would not be less than the full replacement cost of the facility and include the entire extent of the failure of project facilities during the operation of the project. (F-14)

Horizon West indicated that during construction and operations it would have in place property insurance, general liability insurance, workers compensation insurance, auto liability insurance, pollution liability insurance, professional liability insurance, excess umbrella liability insurance and wildfire liability insurance. Horizon West indicated that it currently maintains a corporate NextEra general umbrella liability policy, including a California wildfire sublimit in the hundreds of millions of dollars. (F-14)

Horizon West indicated it would rely on its internal financial resources, including operating revenues from its projects as well as its NEECH debt facility, to fund unexpected repairs during the project's expected useful life. (F-15)

Horizon West indicated that it would maintain a spare stock of critical transmission line components, hardware, wire, and structures to ensure expedient recovery in the event of an emergency.

Horizon West indicated that in addition to spares on-site, it would have access to its affiliate-wide spares sharing program, specifically Florida Power & Light Company spares and strategic support of equipment suppliers. Horizon West indicated that the project would be built to NextEra equipment design standards to the extent possible so that the project could be incorporated into the larger NextEra spare parts management program. (O-15)

3.11.3 Information Provided by Lotus

Lotus indicated that it would require its construction contractor to carry its own insurance during the construction phase of the project. (F-14)

Lotus indicated it plans to have an insurance package that would include what is typical of industry standards and required for debt financing. Lotus indicated the operating period insurance package would include but not be limited to two main components pertaining to wildfire: (i) all risk property insurance and (ii) general excess liability insurance. Lotus indicated the risk property component would cover the replacement cost of the project anticipated not to be subject to fire related sublimits and the general excess liability component would be anticipated to provide additional coverage of property damage caused by a wildfire. (P-5)

Lotus indicated it would be able to finance unexpected repairs through a number of different financing sources, including but not limited to a revolving credit facility, equity contributions, long-term service agreements, and project or fund cash balances. (F-15)

Lotus indicated that for hardware and insulators, its construction contractor would procure and its O&M contractor would carry a small percentage of construction spares for loss and breakage during construction. Lotus indicated that during commercial operations, its O&M contractor would plan to carry an inventory stock of one to three percent for hardware and insulators as O&M spares for use when damage or issues are noted during inspections. (O-15)

3.11.4 Information Provided by LSPGC

LSPGC indicated that it would maintain insurance coverages with companies rated “A-” or better throughout the construction period and operational life of the project. LSPGC indicated that insurance coverages applicable to the project would include commercial general liability, auto liability, workers compensation, umbrella and excess liability, aircraft liability, and sudden and accidental pollution liability. (F-14)

LSPGC indicated that during construction it would be protected by builder’s all-risk insurance coverage. LSPGC indicated that once operational the project would be included in LS Power’s property all-risk insurance program with a sub-limit applicable to transmission lines, which is anticipated to cover the loss from a single event. (F-14)

LSPGC indicated that its insurance coverage for damages due to wildfires currently affords approximately $100 million in total liability limits. (Response to qualification questions)

LSPGC indicated it would maintain cash operating reserves and a line of credit to cover unexpected capital replacements as well as insurance coverage for catastrophic events. (F-15)

LSPGC indicated that it would maintain critical spare parts and materials required to repair system facilities, including transmission structures, transmission conductor, and transmission insulators and hardware. In addition, LSPGC indicated that it maintains spare transmission structures, including emergency restoration structures that can be utilized in the event of a failure. (O-15)

3.11.5 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC indicated it would require its contractors and subcontractors to have minimum coverages and limits based on type of work and relative level of risks. (F-14)

VPC indicated that during construction, VPC would maintain project-specific insurances for the project in respect of builder's risks insurance, contingent cargo, if applicable, third-party liability, workers compensation, if applicable, and pollution legal liability.

VPC indicated that during the operational phase it would maintain project-specific insurances in such amounts and covering such risks as are usually carried by companies engaged in the same or similar business and which is commercially available and reasonable including all risks of physical loss or damage, business interruption (if applicable and reasonable), third party liability, workers compensation, and any insurance required by law.

VPC indicated it did not include specific coverage for wildfire damage in its assumed insurance costs. VPC indicated that this is prudent because the project is not located in a High Fire Threat District and VPC does not wish to burden ISO ratepayers with unnecessary costs. (Response to qualification question)

VPC indicated future financing for any unexpected repairs would be expected to be financed in a similar manner to the project, based on an expectation of the ability to recover prudently incurred costs for such repairs.

VPC indicated financing for unexpected repairs would be expected to include equity from VPC, funded by an equity commitment from Grid United, and debt financing similar to that proposed for the project, dependent on the then-current debt market conditions. (F-15)

VPC indicated that upon award of the project, VPC would continue its conversations with interconnecting utilities to explore mutual assistance agreements, storm restoration and disaster recovery arrangements, equipment storage agreements, shared inventory and spare parts agreements, and the like. (O-15)

3.11.6 ISO Comparative Analysis

For purposes of the comparative analysis for this factor, the ISO has considered the representations by the project sponsors regarding their resources and plans for assuming responsibility for losses resulting from failure of project facilities, including but not limited to their financial resources, proposed insurance, and other plans for mitigation of equipment failures.

Failures of project facilities would likely represent only a portion of the investment in the project, e.g., a number of towers, a limited number of spans of wire, damaged insulators, etc. However in the event where a project facility is found as the cause of a wildfire, the potential for losses, in part due to third party impacts from such a wildfire, could be extensive, even multiple times more than the replacement cost of the transmission facility.

The ISO will consider the ability of a project sponsor to withstand major losses such as those due to wildfires as part of the comparative analysis. The ISO understands that this

project is not located in a High Fire Threat District; however, the threat of a wildfire cannot be ruled out, and therefore the ISO considers whether project sponsors are financially prepared for such an event to be an advantage.

Financial Resources

As discussed above and in Section 3.7 of this report, the financial resources of the project sponsors vary and the ISO has concluded that the proposals of CalGrid and Horizon West are the strongest in this regard, followed by LSPGC's proposal and then the proposals from Lotus and VPC, for its two proposals.

Insurance

CalGrid, Horizon West, Lotus, and LSPGC indicated that during construction and the life of the project there would be an all risk insurance policy in place for the replacement cost of the project, including excess liability insurance that covers wildfires. Horizon West indicated that it would have in place hundreds of millions of dollars in additional wildfire liability insurance for California fire-related liability coverage, which is more than any of the other project sponsors. LSPGC indicated that its insurance coverage for damages due to wildfires currently affords approximately $100 million in total liability limits, which is more than CalGrid, Lotus, or VPC. VPC indicated that during construction it would be protected by its contractor's insurance coverage and once operational it would maintain an all-risk insurance policy; however, VPC did not provide coverage amounts. VPC indicated that it did not include specific coverage for wildfire damage in its assumed insurance costs.

Based on the foregoing, the ISO has determined the proposal of Horizon West is better than the proposal of LSPGC, which is better than the proposals of Lotus and CalGrid, between which there is no material difference, which are better than the two proposals of VPC, regarding insurance coverage for potential major losses.

Mitigation of Equipment Failures

The ISO has determined that Horizon West's proposal is slightly better than the proposals of CalGrid, Lotus, LSPGC, and VPC regarding the ability to mitigate major equipment failures because it would have greater access to spare parts through its affiliates. The ISO has determined that there is no material difference among the proposals of CalGrid, Lotus, LSPGC, and VPC regarding this matter.

Overall Analysis

The ISO considers the three components of this factor to be of roughly equal importance in the selection process for this project. Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this factor, the ISO has determined that, based on the specific scope of this project, the proposal of Horizon West is better than the proposals of CalGrid and LSPGC, between which there are offsetting strengths and weaknesses resulting in a conclusion that there is no material difference, which are better than the proposal of Lotus, which is slightly better than two proposals of VPC, regarding this factor overall.

3.12 Selection Factor 24.5.4(j): Cost Containment Capability, Binding Cost Cap and Siting Authority Cost Cap Authority

The tenth selection factor is "demonstrated cost containment capability of the Project Sponsor and its team, specifically, binding cost control measures the Project Sponsor agrees to accept, including any binding agreement by the Project Sponsor and its team to accept a cost cap that would preclude costs for the transmission solution above the cap from being recovered through the ISO's Transmission Access Charge, and, if none of the competing Project Sponsors proposes a binding cost cap, the authority of the selected siting authority to impose binding cost caps or cost containment measures on the Project Sponsor, and its history of imposing such measures." As discussed in Section 2.1 of this report, the ISO identified this selection factor as a key selection factor for this project because under ISO Tariff Section 24.5.1, binding cost containment commitments are a key selection factor in every ISO competitive solicitation.

For the purpose of performing the comparative analysis for this factor, the ISO initially considered the two components of the factor separately and then combined them into an overall comparative analysis for this factor. The two components are: (1) demonstrated cost containment capability of the project sponsor and its team, including any binding agreement by the project sponsor and its team to accept a cost cap that would preclude project costs above the cap from being recovered through the ISO's transmission access charge, and (2) if none of the competing project sponsors propose a binding cost cap, the authority of the selected siting authority to impose binding cost caps or cost containment measures on the project sponsor and its history of imposing such measures.

All five project sponsors provided binding capital cost containment proposals for their six proposals. The proposals had various provisions regarding cost escalation. The ISO retained a well-respected expert consulting firm to assist, *inter alia,* in evaluating the project sponsors' cost containment proposals and conducting cost of service and revenue requirement studies. The studies and analyses conducted by the consulting firm were extensive, including numerous sensitivity analyses. In addition to evaluating the proposals regarding their proposed binding cost containment measures, the ISO evaluated each project sponsor's proposal considering the following additional factors relating to cost containment:

- Cost containment performance for past projects
- Project management capabilities
- Project risks and mitigation of risks

Cost Containment Capability Including Binding Cost Cap

(Prior Projects and Experience Workbook, Cost and Cost Containment Workbook; P-1, P-2, P-4, CC-1 through CC-15, S-1)

3.12.1 Information Provided by CalGrid

Cost Containment

CalGrid proposed the following cost containment measures:

- a cap on its return on equity (ROE);
- an annual revenue requirement cap for a limited period of time;
- a financial incentive penalty for failure to energize the project by an in-service date of June 1, 2032

(CC-1, Cost and Cost Containment Workbook)

CalGrid proposed specified limited exclusions to its cost containment measures and rate treatment for any incurred costs associated with such exclusions. (CC-1, CC-7)

Cost Containment Performance for Past Projects

CalGrid provided a list of project experience for its transmission line projects that included actual cost versus budget performance. CalGrid provided budget and actual cost information on a project-by-project basis, and, if applicable, identified major issues or challenges faced on a particular project.

Regarding transmission line projects operating at voltages above 200 kV that are ongoing or have been completed in the past ten years and are located in the U.S., the list included 12 projects, 11 of which were completed and one of which is ongoing. CalGrid indicated that all of the 11 projects that were completed were completed at or below budget. CalGrid indicated that ten projects with original budgets less than $150 million were completed 5% below budget on average. CalGrid indicated that two projects with original budgets greater than $700 million, but less than $800 million, were completed 6% below budget on average. (Prior Projects and Experience Workbook)

Project Management Capabilities

CalGrid indicated that its proposed project management steps include project kickoff and scoping, schedule development, risk identification and mitigation plans, and cost estimates, and CalGrid provided detailed information for these steps. (P-1)

Regarding cost estimates, CalGrid indicated that it has performed internal analyses and benchmarking to ensure the project cost estimates were accurate, complete, and competitive against relevant benchmarks. (P-1)

CalGrid described its approach to project management execution, which includes project controls, project communication, quality management, risk management, procurement coordination, and safety management. (P-1)

CalGrid also provided information on its project management leadership team that would bring decades of experience in management of projects. (P-2)

Project Risks and Mitigation of Risks

CalGrid provided a risk log that included 67 risk items grouped into several risk categories (permitting, procurement, construction, rights-of-way, operations etc.), the risk

consequence (cost, schedule) and the likelihood of the risk (low, medium, high). The risk log also includes the owner of each risk (CalGrid, ISO), as well as the mitigation measure for each risk item. (P-4)

CalGrid indicated that while initial conversations with the Fort Yuma Quechan Tribe were encouraging and CalGrid is optimistic about a route that uses tribal land, the route is not without risk. CalGrid indicated that the risk of crossing the reservation includes securing rights-of-way from the Fort Yuma Quechan Tribe and the BIA in a form that is satisfactory to all parties. CalGrid indicated that a resolution from the Fort Yuma Quechan Tribe approving the portion of the project that traverses reservation land would be needed for the BIA to issue a grant of easement for rights-of-way. (E-2)

3.12.2 Information Provided by Horizon West

Cost Containment
Horizon West proposed an annual revenue requirement cap for the first full 15 years of operation (Horizon West ARR Cap Proposal). Under this proposal, Horizon West indicated that the annual revenue requirement cap in year 1 would be $43,769,000, and in year 15 would be $34,835,000. (CC-1, Cost and Cost Containment Workbook)

Horizon West also proposed a soft capital cost cap that would limit its ROE to 5% on project costs in excess of $256 million over the life of the project. Horizon West noted that this soft capital cost cap does not limit its ability to recover other components of its annual revenue requirement (ARR), nor does it limit the rate used to calculate a return on construction work in progress (CWIP) or allowance for funds used during construction (AFUDC) during the construction period. (CC-1)

Horizon West proposed exclusions to its cost containment provisions for both the ARR and soft capital cost cap limited to the incremental costs incurred because of:

1. A change in the ISO project requirements or the ISO Functional Specifications;
2. A change in law, tax rates, or property tax assessment methodology after submission of its proposal;
3. Uncontrollable Force, as defined in the ISO Tariff;
4. Changes by a transmission owner other than Horizon West, including, but not limited to, changes in project scope of work or location, delays to interconnection, costs associated with mitigation for sub-synchronous resonance, impact study, path rating study, facilities study, or other studies requested by any interconnecting PTO, entity providing transmission interconnection, affected system operator, the ISO, or any other entity;
5. Costs associated with capitalized expenditures incurred after the project commercial operating date;
6. The undergrounding of any portion of the transmission line;
7. Losses or liabilities in excess of insurance policy coverages; and
8. CWIP or AFUDC.

(CC-7)

Horizon West indicated that additional costs associated with mitigation measures beyond those assumed in its proposal were excluded. (CC-7, Attachment 5 CC-7a)

Horizon West indicated that it would not seek relief from its proposed cost caps and cost containment measures for any siting or permitting authority directive to relocate the

project. (CC-9) Furthermore, Horizon West affirmed that costs associated with directives to change structures, equipment, or transmission lines, directives to relocate, or delays in receipt of siting or permit authorizations are covered under Horizon West's cost containment. (Request for Clarification #2)

Horizon West indicated that due to its extensive due diligence, it would assume all the risk of re-routes of the project, protecting the ISO's ratepayers from the risk that the proposed route gets longer. (L-1)

Horizon West indicated that it would not seek relief from its proposed cost caps and cost containment measures for any siting or permitting authority directive to change the proposed structures, equipment, or transmission lines associated with the project. (CC-10)

Horizon West indicated that its proposed cost caps and cost containment measures exclude costs incurred as a result of a siting or permitting authority directive to require incremental mitigation for the project beyond that assumed in its proposal, including alternative best management practices and increased compensatory mitigation. (CC-11)

Horizon West indicated that its proposed cost caps and cost containment measures exclude costs related to a directive by any entity that would require it to underground the line. (CC-12)

Horizon West indicated that if there were to be a delay in the receipt of any of Horizon West's siting or permit authorizations, Horizon West would not seek relief from its proposed cost cap and other cost containment measures. (CC-13)

Horizon West indicated that costs caused by other transmission owners are excluded from Horizon West's cost containment proposal. (CC-14)

Horizon West's proposal included a financial incentive penalty for failure to deliver the project by an in-service date of December 31, 2031, with a reduction in its ARR cap of 0.2% for every full calendar month that the project's energization is delayed beyond December 31, 2031, up to a maximum of 1.2%. (CC-1)

Cost Containment Performance for Past Projects

Horizon West provided a list of project experience for its transmission line projects that included actual cost versus budget performance. Horizon West provided budget and actual cost information on a project-by-project basis, and, if applicable, identified major issues or challenges faced on a particular project.

Regarding transmission line projects operating at voltages above 200 kV that are ongoing or have been completed in the past ten years and are located in the U.S., the list included 54 projects. Of these 54 transmission line projects, 34 were completed at or below budget and 20 were completed above budget.

The projects that were completed below budget were completed below budget by an average of 4% and the average budget of these projects was $400 million. Similarly, the projects that were completed above budget were completed above budget by an average of 4% and the average budget of these projects was $320 million. (Prior Projects and Experience Workbook)

Project Management Capabilities
Horizon West provided information regarding its five phases of project management, which includes project launch and initiation, project planning, project execution, project monitoring and controlling, and project closeout. (P-1)

Regarding project execution, Horizon West indicated that the project management team, led on a day-to-day basis by the project manager, would then begin working on the tasks and milestone deliverables identified within the project execution plan using technology platforms such as Microsoft SharePoint and Primavera Unifier to facilitate the exchange of project information, engineering plans, and drawings. (P-1)

Regarding monitoring and control, Horizon West indicated that the project schedule, budget, and risk logs for the project would be updated based on current information. (P-1)

Project Risks and Mitigation of Risks
Horizon West provided a risk and issue log that identified 24 high-level set of risks, category of risk, whether it affects cost or schedule, the probability of occurrence, the impact of the occurrence, whether it is a risk during development or construction, and both completed and potential mitigation. (P-4)

Horizon West indicated that the major risks to the project include routing risk, delay in the CPCN process, and construction cost risk and in each case identified mitigation measures. (P-4)

3.12.3 Information Provided by Lotus

Cost Containment
Lotus proposed the following cost containment measures:

- a nominal capital cost cap;
- a return on equity cap; and
- an additional cost containment incentive in the event of an increase in project cost, in which Lotus would absorb a set amount of additional cost increase before the exclusion would be triggered.

(CC-1, Cost and Cost Containment Workbook)

Lotus indicated that the nominal cost cap provided in its proposal was for information only and did not include an inflation cap and that when Lotus files its transmission revenue requirement rate case with FERC prior to the in-service date of the project, the filling submitted would include actual incurred inflation, and the project would seek to demonstrate the prudence of the amount. (Cost and Cost Containment Workbook and validation response)

Lotus proposed specified exclusions to its cost containment provisions and agreed to certain cost containment measures if certain exceptions are triggered. (CC-8-CC-14)

Cost Containment Performance for Past Projects
Lotus provided a list of project experience for its transmission line projects that included actual cost versus budget performance. Lotus provided budget and actual cost information on a project-by-project basis, and, if applicable, identified major issues or challenges faced on a particular project. (Prior Projects and Experience Workbook)

Regarding transmission projects operating at voltages above 200 kV that are ongoing or have been completed in the past ten years and are located in the U.S., the list included one project. This project is ongoing and information regarding planned or actual (current) budget was not provided because this information was deemed by Lotus to be confidential. (Prior Projects and Experience Workbook)

Project Management Capabilities
Lotus indicated that through respective contractors, it would develop plans that include preconstruction, coordination with APS and SDG&E, FERC filings, public outreach plan, and APS and SDG&E interconnection applications. (P-1)

Lotus also indicated that during the preconstruction phase, it would develop plans for procurement, health and safety, project execution, environmental management, electrical studies, interconnection studies, etc. (P-1)

Project Risks and Mitigation of Risks
Lotus provided a list of major risks and obstacles that included lack of detailed system data for design, siting and land acquisition, environmental permitting, cost containment, and its ability to develop multiple projects simultaneously. Lotus also provided mitigation measures for these risks and obstacles. (P-4)

Regarding siting and land acquisition, Lotus identified failing to garner the willingness of landowners to participate in negotiations as the highest risk and indicated its experience in anticipating and addressing landowner questions and concerns. Lotus also indicated that its affiliates have the tools and resources to investigate land ownership changes and locate contact information to establish contact with the new landowner. (P-4)

Lotus indicated that it has thoroughly evaluated the risk of securing land rights on the Fort Yuma Quechan Tribe reservation and that if an agreement for an easement over reservation land could not be reached, Lotus would notify siting and permitting agencies of such, declare the route over the reservation land as infeasible, and proceed with its alternative route. Lotus indicated that the alternative route is approximately eight miles longer than its preferred route. (L-1)

Regarding environmental permitting and mitigation, Lotus indicated that its experience with this process for a similar transmission project mitigates the risk associated with this process, which could take several years. (P-4)

3.12.4 Information Provided by LSPGC

Cost Containment

LSPGC proposed the following cost containment measures:

- an annual revenue requirement cap for a limited period of time; and
- a financial incentive penalty for failure to complete the project by an in-service date of June 1, 2032.

(CC-1; Cost and Cost Containment Workbook)

LSPGC also proposed specified exclusions to its proposed cost caps and committed to certain cost containment measures if certain exclusions are triggered. (CC-1, CC-9-CC-15)

Cost Containment Performance for Past Projects
LSPGC provided a list of project experience for transmission line projects from LS Power that included actual cost versus budget performance. LSPGC provided budget and actual cost information on a project-by-project basis, and, if applicable, identified major issues or challenges faced on a particular project.

Regarding transmission line projects operating at voltages above 200 kV that are ongoing or have been completed in the past ten years and are located in the U.S., the list included eight projects. All of the eight transmission line projects were completed at or below budget. Three projects with original budgets less than $60 million were completed 6% below budget on average. Four projects with original budgets greater than $100 million, but less than $400 million were completed either on budget or 6% below budget on average. One project above $400 million but below $500 million was completed on budget. (Prior Projects and Experience Workbook)

Project Management Capabilities
LSPGC provided information for its project management approach, which included risk management, schedule management, cost management, project communication, quality management, issues management, and safety management. (P-1)

Regarding cost management, LSPGC indicated its approach is active management of the budget and that early identification of variance trends would enable the project team to resolve budget issues before they become substantial. (P-1)

Project Risks and Mitigation of Risks
LSPGC provided a project risk register that included 73 risk items in six risk categories – cost containment, project management and schedule, environmental permitting and public process, land acquisition, engineering and design, and construction. Each risk item included a rating for risk likelihood, risk consequence, risk level to ISO ratepayers and risk level to LSPGC. Each risk item also included a mitigation measure. (P-4)

LSPGC also identified major risks to the project, such as interest rate increases, equipment and materials cost increases, and regulatory mandated deviations, and provided the mitigation measures that it has adopted. (P-4)

3.12.5 Information Provided by VPC for VPC and VPC Dunes Proposals

Cost Containment
VPC, for both of its proposals, proposed the following cost containment measures:

- a declining or levelized annual revenue requirement cap for a limited time, with a different cap for the VPC proposal and VPC Dunes proposal;

(CC-1, Cost and Cost Containment Workbook)

VPC proposed specified exclusions to its cost containment measures for both proposals. (CC-1, CC-9-CC-15)

Cost Containment Performance for Past Projects
For both proposals, VPC provided a list of project experience for its transmission line projects that included actual cost versus budget performance. VPC provided budget and actual cost information on a project-by-project basis, and, if applicable, identified major issues or challenges faced on a particular project.

Regarding transmission line projects operating at voltages above 200 kV that are ongoing or have been completed in the past ten years and are located in the U.S., the list included four applicable projects. Of these four transmission line projects, three were completed below budget, one was completed above budget. The three projects that were completed below budget were small projects (less than $3 million) that were completed below budget due to scope reduction. One project with a budget of approximately $30 million was above budget by 2.5% due to an increase in project scope. (Prior Projects and Experience Workbook)

Project Management Capabilities
For both proposals, VPC indicated that its project management approach covers around twenty areas, including resource management, risk management, project administration and document control, safety monitoring and reporting, materials management, construction planning, construction management, permitting, environmental compliance, community outreach, and project close out. (P-1)

Project Risks and Mitigation of Risks
For both proposals, VPC indicated that the major risks to the project include permitting delays, cost of private rights-of-way, material and equipment pricing, subsurface conditions, and labor availability. For both proposals, VPC also included the mitigation measures for these risks. In addition, VPC included as risk matrix that identified several financial risks to VPC and the ISO, their probability, impact, and mitigation measures. For both proposals, VPC indicated that this matrix would continue to be updated as the project continues development. (P-4)

Authority to Impose Binding Cost Caps
(CC-16)

3.12.6 Information Provided by CalGrid

CalGrid indicated that this is inapplicable because CalGrid is proposing binding cost control measures. (CC-16)

3.12.7 Information Provided by Horizon West

Horizon West indicated that its transmission rates are regulated by FERC, and therefore the binding cost containment measures that Horizon West proposes for the project will primarily be enforced by FERC, through the Approved Project Sponsor Agreement and Horizon West's FERC-approved transmission rates. (CC-16)

3.12.8 Information Provided by Lotus

Lotus indicated that FERC has the authority to impose cost control measures in the context of rate setting and that while the CPUC has a statutory mandate to establish maximum reasonable cost, the CPUC's authority over costs in this context is preempted by federal law. (CC-16)

3.12.9 Information Provided by LSPGC

LSPGC indicated that this is inapplicable because LSPGC is proposing binding cost control measures. (CC-16)

3.12.10 Information Provided by VPC for VPC and VPC Dunes Proposals

VPC indicated that this is inapplicable because VPC is proposing binding cost containment measures. (CC-16)

3.12.11 ISO Comparative Analysis

Comparative Analysis of Cost Containment Capability Including Cost Cap Agreement

For purposes of the comparative analysis for this component of the factor, the ISO's analysis considered the expected effectiveness of the project sponsor's overall cost containment capabilities, including, but not limited to, cost containment performance on prior projects; project management and scheduling organizations and capabilities; experience of key individuals; the project risk and mitigation that each project sponsor identified; factors affecting cost; and proposed cost containment plans and proposed binding cost caps.

In addition, for purposes of this comparative analysis, the ISO considers the potential benefits from an in-service date for this project in advance of the latest in-service date specified in the ISO Functional Specifications to be uncertain based on the information currently available to the ISO. In particular, the ISO anticipates that the need that the project is intended to address will not exist prior to June 1, 2032. With this in mind, the ISO has chosen to evaluate the project based on the latest in-service date specified in the ISO Functional Specifications. If the project can be placed into service earlier and the interconnection facilities necessary to accommodate the project are completed sooner than expected, the ISO would anticipate seeking to negotiate an earlier in-service date with the approved project sponsor when the ISO has better information regarding the potential benefits (and risks) of achieving an earlier in-service date.

Cost Estimates

The project sponsors provided a range of cost estimates for capital costs and operations and maintenance costs. The differences in cost estimates are reflected in the proposed annual revenue requirements and binding cost caps proposed by each project sponsor. The ISO discusses below potential site and route-related risks associated with particular projects. The ISO has not identified any significant physical site-related risks, physical project features, or special construction techniques that would inherently or materially increase the costs of a particular project sponsor's project or pose a distinct cost or cost escalation risk not accounted for by a project sponsor.

Binding Cost Containment Measures and Cost Containment Exclusions

All five project sponsors committed to some form of binding cost containment measures subject to certain specified exclusions and conditions for adjustment. However, the robustness of the cost containment measures varies greatly. Consistent with the practice the ISO implemented in connection with the competitive solicitation for past projects and to respect confidentiality concerns, the ISO only specifies in this section the specific, detailed estimated cost and cost containment measures and conditions of the approved project sponsor. The estimated cost and cost containment measures and

conditions proposed by the other project sponsors are described only in very general terms.

Horizon West proposed a limited or soft capital cost cap and a 15-year annual revenue requirement cap. The soft capital cost cap provides for a reduction in Horizon West's ROE from 9.8% to 5.0% for any incremental capital expenditures greater than the project capital cost estimate of $256 million over the life of the project. In addition, Horizon West provided an annual revenue requirement cap for the first 15 years of the project. Incremental costs are subject to the soft capital cost cap up to the value of the annual revenue requirement cap for any given year in the first 15 years. Costs above Horizon West's annual revenue requirement cap would not be recovered.

Horizon West's annual revenue requirement caps provided for the first 15 years of operations range from $43.8 million in year 1 to $34.8 million in year 15. These caps are set higher than the projected actual annual revenue requirements, which limits the effectiveness of the proposed on-time incentive. However, the proposed caps are similar in value to CalGrid's, LSPGC's, and VPC's proposed caps for this period.

CalGrid, LSPGC, and VPC (for both of its proposals) provided robust cost containment provisions through their proposed annual revenue requirement caps. These caps are proposed for a much longer period than the annual revenue requirement caps proposed by Horizon West. However, the CalGrid, LSPGC, and VPC proposals have significantly higher evaluated estimated present value annual revenue requirements, primarily due to those proposals having higher proposed capital costs and associated revenue requirement caps. Lotus provided a capital cost cap and noted that the cap was informative only. Lotus also provided a financial commitment to absorb costs up to a certain amount before seeking recovery regardless of the cause of the increase.

There is a difference between the VPC proposals based on the estimated capital costs used as a basis for the annual revenue requirement cap for each respective proposal. The ISO believes that without IID participation, there is no identified need for the Dunes substation, and without the Dunes substation the benefits to IID participating in the transmission line only project are unclear. For this reason, the ISO chose to focus on VPC's Dunes proposal inclusive of IID and the VPC transmission line only proposal excluding IID participation. Because the VPC Dunes proposal includes a cost sharing agreement with IID, the VPC Dunes proposal inclusive of IID participation provides a lower present value of the estimated revenue requirements in the analysis than the present value of the estimated revenue requirements of the VPC transmission line only proposal, excluding IID participation.

Both CalGrid and Lotus also provided ROE caps for the life of their respective projects, and CalGrid provided specific transmission structure modification caps.

All proposals included numerous siting-related costs that would be excluded from their binding cost caps. Many of these siting-related cost cap exclusion items are common across all of the project sponsors' proposals. The proposal of Horizon West included the fewest cost cap exclusions, specifically noting that route and structure changes and a limited number of changes to its environmental mitigation assumptions would be covered by its cap provisions and not treated as excluded costs.

The longer-term annual revenue requirement caps offered by CalGrid, LSPGC, and VPC are more robust than the soft capital cost cap and the 15-year annual revenue requirement cap offered by Horizon West. However, despite Horizon West's more

limited cost containment as compared to CalGrid, LSPGC, and VPC, Horizon West, based on its reduced return on equity associated with its soft capital cost cap and 15 year annual revenue requirement cap, provides lower present value estimated revenue requirements in the base case analysis as well as in all but the most extreme cases of the sensitivity analyses performed. This is due to Horizon West's lower projected capital costs, O&M costs, and cost of debt. Accordingly, the ISO has determined that Horizon West's proposal is strongest from an estimated revenue requirement and cost containment perspective.

Regarding the proposed costs and cost containment measures of the other four project sponsors for their five proposals, CalGrid's proposal has a robust annual revenue requirement cap, the lowest ROE cap, and the lowest evaluated annual revenue requirements caps across all sensitivities, even after accounting for excluded costs, followed by Lotus' proposal, which provided lower capital costs, an ROE cap for the life of the project, and a capital cost cap that had limited effectiveness due to its many exclusions. Lotus' proposal was followed by the proposals from LSPGC and VPC, which, despite having strong annual revenue requirement caps, included substantially higher estimated costs.

Excluding consideration of any siting-related cap exclusions from the various cost containment measures or any project risk considerations, and accounting for the anticipated lower capital costs of Horizon West's proposal in coordination with its soft capital cost cap and the shorter terms of Horizon West's annual revenue requirement caps, the ISO has determined that Horizon West's proposed cost and cost containment measures are strongest, followed by CalGrid's proposal, Lotus' proposal, LSPGC's proposal, VPC's Dunes proposal inclusive of IID participation only, and then VPC's transmission line only proposal excluding IID participation.

The ISO has determined that the project sponsors' proposed cost cap exclusions cannot be fully compared and evaluated in isolation. They must also be considered in the context of the specific risks each project presents, the likelihood that specific cost cap exclusions might be triggered, and the potential magnitude of impact of any triggered cost cap exclusion. The ISO discusses each project's risk profile in the project risks and mitigation subsection below and then provides a more holistic comparative analysis of the binding cost containment measures, cost cap exclusions, risk profiles, and likelihood of triggering cost cap exclusions in the overall assessment subsection below.

Cost Containment Performance for Past Projects

Regarding completing past projects within the project budget, Horizon West indicated that it had a significantly greater number of projects that were completed at or below budget than the other project sponsors. Those projects had similar capital requirements to this project, and those projects that were completed over budget were an average of 4% greater than the estimates. CalGrid and LSPGC demonstrated a reasonable degree of success in completing projects at or under budget, recognizing that the number of completed projects varied among them but were both significantly less than Horizon West's. Lotus did not provide actual cost information for any of its transmission line projects, and VPC provided cost information only for four projects, out of which three were small projects less than $3 million.

Consequently, the ISO has determined that the proposal of Horizon West is better than the proposals from CalGrid and LSPGC, between which there is no material difference in completing projects on or under budget, and it considers the experience of CalGrid and

LSPGC as represented in their proposals to be better than the experience described by Lotus and VPC, between which the ISO was unable to determine any material difference. In any event, given that all project sponsors proposed specific cost containment measures, those measures would have the most direct bearing on cost containment for this project.

Project Management Capabilities

The ISO determined that all five project sponsors provided a reasonable approach to professional project management for their proposals and, as a result, determined them to be comparable regarding project management capabilities.

Project Risks and Mitigation of Risks

All five project sponsors provided a description of a thorough and professional approach to identifying risks to the completion of the project within the project budget and possible mitigations for those risks for their proposals. All project sponsors submitting applications for more than one project confirmed their ability to work on multiple projects simultaneously, if awarded more than one. VPC indicated that it is submitting proposals for only this project. All five project sponsors have taken steps to reduce risk.

All five project sponsors' proposals identified a variety of similar cost exclusions that were excluded from their respective binding cost containment provisions. Horizon West's proposal was the only proposal that did not exclude additional costs due to route changes that may be required, and it specified more limited types of increases to environmental mitigation costs that would be excluded from its binding cost containment provisions than the proposals of the other project sponsors.

The proposal from Lotus included a number of additional cost exclusions beyond those specified in the proposals of the other project sponsors and indicated that the nominal cost cap provided was for information only and did not include an inflation cap. The proposals from Lotus also indicated that when Lotus files its transmission revenue requirement rate case with FERC prior to the in-service date of the project, the filling submitted would include actual incurred inflation and would seek to demonstrate the prudence of the amount. The ISO considers these representations from Lotus to create an additional risk of cost escalation above Lotus' estimated costs in its proposal beyond the typical exclusions set forth in the proposals of the other project sponsors.

The proposals from CalGrid and Lotus both include routes that cross the Fort Yuma Quechan Tribe Reservation. Rights-of-way acquisition across tribal lands requires additional review and approvals and increases the risk of route changes. Route changes required by a governmental entity were identified by both CalGrid and Lotus as being excluded from their cost cap and cost containment provisions and represent a particular risk of cost escalation for these proposals.

Based on the foregoing analysis, the ISO has determined that regarding project risk and mitigation the proposal from Horizon West is slightly better than proposals of LSPGC and VPC due to the lower number of binding cost cap exclusions identified by Horizon West. The ISO considers LSPGC's proposal and both of VPC's proposals to be better than the proposal from CalGrid, primarily due to the route risk in CalGrid's proposal associated with the Fort Yuma Quechan Tribe rights-of-way acquisition. The ISO considers the proposal from Lotus to present even greater risk of cost escalation than

the proposals of the other project sponsors because of its significantly longer route across the Fort Yuma Quechan Reservation, its low cost of debt assumptions, and its many exclusions, including its lack of a cap on inflation.

Overall Assessment

For purposes of the comparative analysis for this component of the factor, the ISO's analysis considered the expected effectiveness of the project sponsor's overall cost containment capabilities, including but not limited to estimated capital costs; cost containment performance on prior projects; project management and scheduling organizations and capabilities; experience of key individuals; the project risk and mitigation that each project sponsor identified; factors affecting cost; and proposed cost containment plans and proposed binding cost caps.

As discussed above and in Section 2.1, the ISO has identified this selection factor as a key selection factor because under ISO Tariff Section 24.5.1 binding cost containment commitments are a key selection factor in every ISO competitive solicitation, and the ISO considers commitment to robust, binding cost containment measures to be the most effective way in which the ISO can ensure that a project is developed in an efficient and cost-effective manner. Consequently, the ISO considers the proposed cost and binding cost containment measures, inclusive of identified exclusions, proposed by project sponsors to be the most significant inputs into the comparative analysis for this component of the factor.

As discussed above, the ISO has determined that the proposals of the five project sponsors are comparable regarding project management capabilities, and that the proposal of Horizon West is better than other proposals regarding cost containment performance on prior projects. The ISO addresses the comparison of project risks and mitigation in conjunction with the analysis of cost containment below.

Horizon West's soft capital cost cap provisions in combination with its lower estimated costs, 15 year annual revenue requirement cap and its low risk profile and limited proposed cost cap exclusions, makes it stronger than all other proposals. The net present value of the projected revenue requirements of Horizon West's proposal is lower than the net present value of the projected revenue requirements of all of the other proposals in all but a few extreme financial sensitivities. Also, Horizon West proposes the least cost cap exclusions of all proposals, and the ISO considers Horizon West's proposal to present less risk of modification or relocation than the proposals from CalGrid and Lotus, which may result in significant cost escalation.

The proposal from Lotus has the least robust cost containment provisions but provides a net present value of revenue requirements that is slightly lower than the net present value of the revenue requirements for the CalGrid proposal. However, the robust cost containment provisions of CalGrid's annual revenue requirement in conjunction with its estimated capital costs, even with the identified route risk concerns, make its proposal stronger than the Lotus proposal primarily due to Lotus' many cost containment exclusions, route and associated cost escalation risk associated with its preferred route, and cost of debt assumptions.

The proposals from LSPGC and VPC provide stronger binding cost cap provisions than the proposal from Lotus. However, Lotus' proposal is stronger than the proposal of LSPGC and both VPC proposals, due to its lower capital cost estimate and cost of debt

assumptions that result in lower evaluated net present value of revenue requirement costs for the base case and large majority of financial sensitivity analyses performed.

Comparing LSPGC's proposal with the proposals from VPC, based solely on the proposed cost caps, and accounting for excluded costs, LSPGC's proposal has a slightly lower projected net present value of revenue requirements than both proposals from VPC.

As a result, after applying all of the foregoing considerations included in the ISO's analysis for this component of the factor, the ISO has determined that Horizon West's proposal is better than the five proposals of the other four project sponsors regarding this component, followed in order by CalGrid's proposal, Lotus' proposal, LSPGC's proposal, VPC's Dunes proposal, inclusive of IID participation, and then the VPC transmission line proposal, exclusive of IID participation. Horizon West proposed the lowest estimated capital costs, significant cost containment measures, and the fewest proposed cost cap exclusions, which produced the lowest anticipated projected total revenue requirements.

Comparative Analysis of the Authority to Impose Binding Cost Caps

Because all five project sponsors have proposed binding cost cap provisions for their proposals, in accordance with the provisions of this component of the factor, the ISO has not considered this component of the factor in the comparative analysis.

Overall Comparative Analysis

The ISO considers the first component of this factor (cost containment and cost caps) more important than the second component (siting authority imposing a cost cap). Given that all five project sponsors offered a binding cost cap for each of their proposals, the first component is the only basis for the comparative analysis of this factor.

Based on the ISO's analysis for the first component of this factor discussed above, the ISO has determined that Horizon West's proposal is better than the five proposals of the other four project sponsors regarding this factor, followed in order by CalGrid's proposal, Lotus' proposal, LSPGC's proposal, VPC's Dunes proposal, inclusive of IID participation, and then the VPC transmission line proposal, exclusive of IID participation.

3.13 Selection Factor 24.5.4(k): Additional Strengths or Advantages

(Introduction, A-4, A-5, QP-1, QP-2, Z-1)

The eleventh selection factor is "any other strengths and advantages the Project Sponsor and its team may have to build and own the specific transmission solution, as well as any specific efficiencies or benefits demonstrated in their proposal."

3.13.1 Information Provided by CalGrid

Project Design
CalGrid indicated that the planned construction of its proposed project would utilize steel lattice towers and 1,272 kcmil ACSS (aluminum conductor steel supported) "Bittern" conductor. (A-4)

CalGrid indicated that the transmission line conductor that it is proposing has an ampacity rating of 4,620 A, which is significantly higher than the 2,857 A ampacity rating required by the ISO's Functional Specifications. CalGrid indicated the overall transmission line design would support the conductor's full 4,620 A ampacity. CalGrid indicated that this would include the conductors, structures, hardware, connectors, and other equipment. (Response to Qualification Items)

Other Advantages
Regarding the potential for expansion of the project to accommodate an interconnection with IID, CalGrid indicated it is committed to work with the ISO and IID to evaluate options on any future expansion of its project including a 230 kV connection with the Highline Substation if it is determined to be needed or economic by both parties. CalGrid also indicated that it is committed to the cost containment measures associated with that expansion as outlined in its responses. (Z-1)

3.13.2 Information Provided by Horizon West

Project Design
Horizon West indicated that its proposed project consists of the construction of an 82-mile single-circuit double-bundle 2156 kcmil aluminum conductor steel reinforced (ACSR) conductor (referred to as Bluebird) supported by a combination of lattice guyed-V and tubular steel monopole structures. (A-4)

Horizon West indicated it performed a generation deliverability analysis with both its proposed solution and a reference model provided by the ISO for the current competitive solicitation process. Horizon West indicated that it evaluated the performance of both projects separately to ensure that Horizon West's proposed design not only meets the transmission needs identified by the ISO but also performs comparably to the reference solution developed by the ISO.

Horizon West indicated it performed a reliability assessment utilizing ISO 2022-2023 reliability base cases to ensure that the addition of the project would comply with all applicable standards and would not generate any new system violations. (QP-2)

Horizon West indicated that the transmission line conductor that it is proposing has an ampacity rating of 3,194 A which is higher than the 2,857 A ampacity rating required by the ISO Functional Specifications. (QP-1)

Horizon West indicated the overall transmission line design would support the conductor's full 3,194 A ampacity. Horizon West indicated that this would include the conductors, structures, hardware, connectors, and other equipment. (Response to Qualification Items)

In addition, Horizon West identified a triple-bundle 715 kcmil ACSS (aluminum conductor steel supported) 1 30/19 "Redwing" conductor as a no additional cost option. Horizon

West indicated the Redwing option, which has an ampacity rating of 4,615 A, meets all ampacity, audible noise, corona, and electromagnetic field requirements. (QP-1)

Horizon West indicated the overall transmission line design would support the Redwing conductor's full 4,615 A ampacity. Horizon West indicated that this would include the conductors, structures, hardware, connectors, and other equipment. (Response to Qualification Items)

Other Advantages
Horizon West indicated it is also qualified as a PTO in the ISO. Horizon West indicated its indirect parent, NextEra, is the world's largest electric utility by market capitalization and one of America's largest infrastructure capital investors in any industry and that NextEra companies own and operate more than 12,800 miles of HV transmission lines and nearly 1,200 substations across North America. (A-5)

Horizon West indicated that its affiliate NextEra has an umbrella general liability policy that includes hundreds of millions of dollars of California wildfire specific coverage. Horizon West indicated it has reviewed its coverage with subject matter experts and executives at its affiliate and it provides sufficient coverage in the unlikely event that damages should occur. (Z-1 response to qualification items).

3.13.3 Information Provided by Lotus

Project Design
Lotus indicated that its proposed project consists of the construction of a single circuit 500 kV overhead transmission line traversing approximately 72.5 miles from APS's North Gila Substation to SDG&E's Imperial Valley Substation and would be connected to the existing 500 kV buses between these two substations. Lotus indicated that its proposed transmission line would be supported on a combination of steel monopole, tubular guyed-V, and self-supported lattice towers. (A-4)

Lotus indicated that its project would utilize a TS conductor that it believes would provide an optimal solution for the project because it reduces the number and size of structures due to its light weight. (Z-1)

Lotus indicated that the transmission line conductor that it is proposing has an ampacity rating of 4,346 A, which is significantly higher than the 2,857 A ampacity rating required by the ISO Functional Specifications. Lotus indicated the overall transmission line design would support the conductor's full 4,346 A ampacity. Lotus indicated that this would include the conductors, structures, hardware, connectors, and other equipment. (Response to Qualification Items)

Lotus indicated that its proposed conductor has a high efficiency that reduces traditional line losses and allows a design that reduces the impact to the environment based upon reducing ground disturbance required to support it. (Z-1 Response to Qualification Items)

Other Advantages
Lotus indicated it specializes in deploying equity capital in energy infrastructure investment in North America, with a focus on the transmission, renewable power generation, energy storage, biofuels, and natural gas sectors. (A-5)

Lotus indicated that a subsidiary of Lotus, and the approved project sponsor of the ISO competitively awarded Delaney-Colorado River 500 kV Transmission Line project, also known as Ten West Link, has recent experience developing a 500 kV transmission line in the same region, the experience of which reduces the risk for this project through the application of lessons learned. Lotus indicated that the Ten West Link project is only 53 miles north of the proposed project. Lotus indicated the Ten West Link project is located in similar terrain, interfaced with some of the same utilities with which relationships have been built to collaborate, and provided first-hand recent experience with approvals from some of the same agencies, which contribute to Lotus' experience base and lessons learned. (A-5)

3.13.4 Information Provided by LSPGC

Project Design
LSPGC indicated that its proposed project consists of the construction of an 87-mile overhead transmission line rated at 525 kV with structures that would include lattice guyed-v suspension structures, tubular steel H-frame tangent and small running angle structures, tubular steel monopole tangent, running angle, and dead-end structures. (T-7)

LSPGC indicated that the transmission line conductor that it is proposing has an ampacity rating of 3,489 A, which is higher than the 2,857 A ampacity rating required by the ISO Functional Specifications. (T-8)

LSPGC indicated that all aspects of the proposed project support the proposed higher 3,489 A rating. (Response to Qualification Items).

Other Advantages
LSPGC indicated the project would be implemented by a qualified and experienced team, led by LSPGC, with demonstrated success on similar projects. LSPGC indicated this team completed significant diligence and design work to provide the ISO with best overall value and the most certainty. LSPGC indicated it has ample financial resources to complete the project with a financial assurance from LSPGC to provide sufficient financing for the project. LSPGC indicated it has sufficient cash on hand and available credit facilities to fully fund project implementation with a demonstrated ability to raise debt and equity for construction and long-term financing. (A-4)

LSPGC indicated that its parent, LS Power is a transmission and power generation company that owns and manages one of the most diverse independent transmission and power generation portfolios in the United States, including over 16,000 MW of power generation and 600 miles of high-voltage transmission infrastructure. (A-5)

3.13.5 Information Provided by VPC for the VPC Proposal

Project Design
VPC indicated that its proposed project consists of the construction of a transmission line approximately 83 miles in length, using horizontal double-bundle 2-2156 aluminum conductor steel reinforced (ACSR) 84/19 "Bluebird" conductor and using lattice and tangent monopole support structures. (T-1)

VPC indicated that it has been working for the past ten years studying transmission line routes, and that the proposed route is a result of this study.

VPC indicated that the transmission line conductor that it is proposing has an ampacity rating of 3,246 A, which is higher than the 2,857 A ampacity rating required by the ISO Functional Specifications. (T-7)

VPC indicated the overall transmission line design would support the conductor's full 3,246 A ampacity. VPC indicated that this would include the conductors, structures, hardware, connectors, and other equipment. (Response to Qualification Items)

Other Advantages
VPC indicated the project team has completed extensive stakeholder engagement over the past ten plus years with permitting agencies, tribes, private landowners, local organizations, and other interested parties. (A-4)

VPC included letters of support for the project from several stakeholders. (A-4)

VPC indicated that Grid United is dedicated to developing a portfolio of large-scale interregional transmission projects with the objective of revolutionizing North America's electric grid. (A-5)

VPC indicated the project has been under development for over ten years and has completed the WECC three phase rating process with the added requirement for peer review of all aspects of the local, regional, and NERC and WECC reliability criteria and planning standards. VPC indicated that the project currently has a WECC accepted rating of 1,250 MW, which would increase the transfer capability of Path 46 to a total of 12,450 MW. (QP-2)

VPC indicated Citizens Energy's participation in the project would create benefits for disadvantaged communities in the project area. (Z-1)

VPC indicated that IID has more land acquisition and permitting experience in the project area than any other entity. (Z-1)

VPC indicated it has conducted a thorough routing study for the past ten years of all possible routes and that this gives VPC a high degree of confidence in its selected route. (Z-1 response to Qualification Items).

3.13.6 Information Provided by VPC for the VPC Dunes Proposal

Project Design
VPC indicated that its proposed project consists of the construction of a transmission line approximately 85-miles long, which would be designed using double bundled Bluebird (2156 aluminum conductor steel reinforced (ACSR)) conductors and that the planned tower types are lattice towers on federal land and monopoles through private agricultural land. VPC indicated that the project would also include the construction of a new Dunes 500 kV Switching Station. VPC indicated that the Dunes 500 kV Switching Station is being designed as a ring bus expandable to a breaker and half configuration for future expansion. (QP-1)

VPC indicated that this proposal, including the Dunes 500 kV Switching Station, would best maximize value to the ISO's customers, result in the most system benefits, and best

meet the ISO's policy objectives as well as California's broader policy objectives by opening the Imperial Valley's vast renewable resource potential. (A-4)

VPC indicated that its proposal would allow access to in state renewable resources by adding a new Dunes 500 kV Switching Station to its proposed transmission solution that is adjacent to a planned 500/230 kV Dunes Substation that IID intends to construct, own, and operate with a new IID 230 kV transmission line to IID's planned Nelson 230 kV Substation.

VPC indicated that its Dunes 500 kV Switching Station would be strategically located within a BLM solar energy resource zone, near a known geothermal resource area, and close to private lands in eastern Imperial Valley that are suitable for renewable energy development. (A-4)

VPC indicated that the transmission line conductor that it is proposing has an ampacity rating of 3,246 A, which is higher than the 2,857 A ampacity rating required by the ISO Functional Specifications. (T-7)

VPC indicated the overall transmission line design would support the conductor's full 3,246 A ampacity. VPC indicated that this would include the conductors, structures, hardware, connectors, and other equipment. (Response to Qualification Items)

VPC indicated, however, that the limiting factor for its project would be equipment in the new Dunes Switching Station that is rated at 3000 A. (Response to Qualification Items.)

VPC indicated that the inclusion of the Dunes 500 kV Switching Station would serve as an on-ramp for renewables to utilize the additional potential capacity of the transmission line. (A-4)

Other Advantages

VPC indicated that its proposal includes the participation of IID and Citizens Energy and that the project team has completed extensive stakeholder engagement over the past ten plus years with permitting agencies, tribes, private landowners, local organizations, and other interested parties. (A-4)

VPC included letters of support for the project from several stakeholders. (A-4)

VPC indicated that Grid United is dedicated to developing a portfolio of large-scale interregional transmission projects with the objective of revolutionizing North America's electric grid. (A-5)

VPC indicated that the project has been under development for over ten years and has completed the WECC three phase rating process with the added requirement for peer review of all aspects of the local, regional, and NERC and WECC reliability criteria and planning standards. VPC indicated that the project currently has a WECC accepted rating of 1,250 MW, which would increase the transfer capability of Path 46 to a total of 12,450 MW. (QP-2)

VPC indicated Citizens Energy's participation in the project would create benefits for disadvantaged communities in the project area. VPC indicated IID has more land acquisition and permitting experience in the project area than any other entity. (Z-1)

VPC indicated it has conducted a thorough routing study for the past ten years of all possible routes, which gives VPC a high degree of confidence in its selected route. (Z-1 response to Qualification Items).

3.13.7 ISO Comparative Analysis

For the purposes of the comparative analysis for this factor, the ISO has reviewed the six proposals from the five project sponsors to determine if there are advantages the project sponsor or its team have for building and owning the project that were not addressed in other parts of the selection process. This comparative analysis considers proposed project design and other potential advantages.

Project Design

Project design will be considered in two parts, (1) transmission line ampacity and (2) project scope.

Ampacity
The ISO Functional Specifications require projects to provide at a least 2857 A rating. All proposed projects included the use of conductors that had ampacity ratings that exceeded the rating in the ISO Functional Specifications. There were some differences in transmission line ampacity among the submitted proposals ranging from 3194 A to 4620 A and one proposal (by Horizon West) offered an optional conductor at no additional costs that had an even higher ampacity rating. All project sponsors confirmed that their proposed transmission line design would support the higher ampacity ratings proposed. However, the VPC Dunes proposal indicated that its project's overall ampacity rating was lower than the proposed conductor rating due to the ampacity limit imposed by a 3,000 A limitation of its proposed Dunes Switching Station.

The ISO considered the fact that all project sponsors proposed projects with designs that resulted in ampacity ratings that exceeded the ISO's Functional Specifications and determined that there is no material difference among the six proposals regarding the additional ampacity provided because the value of additional ampacity is uncertain at this time, based on the information available to the ISO.

Project Scope

With the exception of the VPC Dunes proposal, all proposals proposed a single transmission line using various types of support structures. In addition to the transmission line, the VPC Dunes proposal also included the construction of a Dunes 500 kV Switching Station. The inclusion of a switching station exceeds the ISO Functional Specifications because the ISO Functional Specifications did not contemplate the addition of a substation to the North Gila to Imperial Valley #2 500 kV line. Based on the information available to the ISO, the value to ISO ratepayers of the addition of the Dunes substation and inclusion of IID and associated allocation of 20% of the transmission line capacity is uncertain at this time. However, this does not preclude the ISO from considering the Dunes substation in another context at a later time.

Other Advantages

VPC's proposals propose the inclusion of Citizens Energy as a potential participant in the project and assert that Citizens Energy's participation in the project would create

benefits for disadvantaged communities in the project area. However, ISO notes that the inclusion of Citizens Energy is optional and not guaranteed. Consequently, the ISO is unable to attribute any particular advantage to this aspect of VPC's proposal.

The ISO has determined that none of the project sponsors' proposals identifies any other particular advantage to the ISO and transmission ratepayers that the ISO has not already considered and addressed in the foregoing analysis or its analysis of the more specific selection factors.

Overall Comparative Analysis

As discussed above, the ISO is unable to identify any particular benefit or advantage regarding the additional ampacity of the transmission lines in the six proposals of the five project sponsors. Regarding the VPC Dunes proposal to include a switching station, the ISO considers the potential benefits from this interconnection to IID and associated reduction in ISO capacity on the North Gila to Imperial Valley #2 line due to IID's ownership stake to be uncertain based on the information currently available to the ISO. The ISO is also unable to identify a particular benefit or advantage to the ISO and its ratepayers of VPC's proposed inclusion of Citizens Energy.

The ISO has determined that none of the project sponsors' proposals identifies any other particular advantage to the ISO and transmission ratepayers that the ISO has not already considered and addressed in the foregoing analysis or its analysis of the more specific selection factors. Based on the foregoing considerations, in conjunction with all the other considerations included in the ISO's analysis for this factor, the ISO has determined that, based on the specific scope of this project, there is no material difference among the six proposals of the five project sponsors regarding this factor.

3.14 Selection Factor 24.5.4(a): Capability to Finance, License, Construct, Operate, and Maintain the Facility

In this section, the ISO provides the comparative analysis of this selection factor, as discussed in Section 3.3 of this report. This selection factor is a comparative analysis of "the current and expected capabilities of the Project Sponsor and its team to finance, license, and construct the facility and operate and maintain it for the life of the solution." As noted in Section 3.3, this factor encompasses several more specific selection factors, which are discussed in Sections 3.7, 3.8, 3.9, and 3.10 of this report.

What follows is an overall comparative analysis for this factor based upon the discussion of the other factors or factor components encompassed by this factor. As stated in Section 3.3, the ISO will not repeat all of the information provided by the project sponsors for these more specific selection factors and the comparative analysis for each.

In addition to the general project information provided in the project sponsors' proposals, the other selection factors (or components of a factor) considered in the comparative analysis for this factor are as follows:

24.5.4(e): the financial resources of the project sponsor and its team;

24.5.4(f): the technical [environmental permitting] qualifications and experience of the project sponsor and its team (component of 24.5.4(f));

24.5.4(g): the previous record regarding construction and maintenance of transmission facilities, including facilities outside the ISO controlled grid, of the project sponsor and its team; and

24.5.4(h): demonstrated capability to adhere to standardized construction, maintenance, and operating practices of the project sponsor and its team.

3.14.1 ISO Comparative Analysis

The ISO's comparative analysis has considered the results of the analysis of the four selection factors or factor components listed above. As an initial matter, the ISO notes that all of the project sponsors and their teams are capable of satisfying these selection factors regarding this project.

The ISO has determined that Horizon West's proposal is better than the five proposals of the other four project sponsors regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, it is better than CalGrid's proposal regarding the third selection factor (construction and maintenance record) and better regarding the fourth selection factor (demonstrated capability to adhere to standardized construction, maintenance, and operating practices), it is better or slightly better than LSPGC's proposal regarding the first selection factor (financial resources), the second selection factor component (technical [environmental permitting] qualifications and experience of the project sponsor and its team), the third selection factor, and the fourth selection factor, it is better or slightly better than Lotus' proposal and both of VPC's proposals regarding the first selection factor, the third selection factor, and the fourth selection factor, and there is no material difference among Horizon West's proposal and the five proposals of the other four project sponsors regarding the other relevant selection factors or factor components.

The ISO has determined that CalGrid's proposal is slightly better than the proposals of VPC, Lotus, and LSPGC regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, it is better than VPC's two proposals regarding the first selection factor, it is better than Lotus' proposal regarding the first selection factor, and slightly better regarding the third selection factor, and it is better than LSPGC's proposal regarding the first selection factor and slightly better regarding the second selection factor component and the third selection factor, and LSPGC's proposal is better than CalGrid's proposal regarding the fourth selection factor, which the ISO considers to result in a slight advantage for CalGrid's proposal, and there is no material difference among CalGrid's proposal and the proposals of VPC, Lotus, and LSPGC regarding the other relevant selection factors or factor components.

The ISO has determined that LSPGC's proposal is slightly better than Lotus' proposal and VPC's two proposals because, as discussed regarding each of the relevant individual selection factors or factor components, it is slightly better than Lotus' proposal regarding the first selection factor, and it is better than Lotus' proposal regarding the fourth selection factor, and Lotus' proposal is slightly better than LSPGC's proposal regarding the second selection factor component, and there is no material difference

between LSPGC's proposal and Lotus' proposal regarding the third selection factor, which the ISO considers to result in a slight advantage for LSPGC's proposal, and LSPGC's proposal is slightly better than VPC's proposals regarding the first selection factor and better regarding the fourth selection factor, and VPC's proposals are slightly better than LSPGC's proposal regarding the second selection factor component and the third selection factor, which the ISO considers to result in a slight advantage for LSPGC's proposal.

The ISO has determined that there is no material difference between the two proposals of VPC regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, there is no material difference between them regarding any of the relevant factors or factor components. The ISO has determined that VPC's two proposals are slightly better than Lotus' proposal because, as discussed regarding each of the relevant individual selection factors or factor components, VPC's proposals are slightly better than Lotus' proposal regarding the third selection factor, and there is no material difference among VPC's proposals and Lotus' proposal regarding the first selection factor, the second selection factor component, and the fourth selection factor.

In summary, based on a detailed review of the proposals of the project sponsors regarding these individual selection factors and factor components, the ISO has determined that Horizon West's proposal is better than CalGrid's proposal, which is slightly better than LSPGC's proposal, which is slightly better than VPC's two proposals, which are slightly better than Lotus' proposal, regarding this factor overall.

3.15 Qualification Criterion 24.5.3.1(a): Manpower, Equipment, and Knowledge to Design, Construct, Operate, and Maintain the Project

The first qualification criterion is "whether the Project Sponsor has demonstrated that it has assembled, or has a plan to assemble, a sufficiently-sized team with the manpower, equipment, knowledge and skill required to undertake the design, construction, operation and maintenance of the transmission solution."

The first qualification criterion is a broad criterion that encompasses three specific selection factors that are discussed in Sections 3.8, 3.9, and 3.10 of this report. The ISO will not repeat here the information provided by the project sponsors for these more specific selection factors or the comparative analysis for each. What follows is an overall comparative analysis for this criterion based upon the comparative analyses for the selection factors encompassed by this criterion.

3.15.1 ISO Comparative Analysis

The ISO previously determined and posted notice on its website that all six proposal submitted by the five project sponsors meet the minimum requirements to qualify for evaluation in the selection process. Pursuant to ISO Tariff Section 24.5.4, the ISO has further reviewed the proposals regarding the project sponsor qualification criteria in its comparative analysis for purposes of selecting the approved project sponsor.

This qualification criterion considers several factors addressed by the selection factors previously discussed. For this reason, the ISO bases its comparative analysis for this

criterion on the results of the comparative analysis for the selection factors addressed above. The selection factors or factor components considered in the comparative analysis for this criterion are as follows:

> 24.5.4(f): the engineering qualifications and experience of the project sponsor and its team (a component of 24.5.4(f));
>
> 24.5.4(g): the previous record regarding construction and maintenance of transmission facilities, including facilities outside the ISO controlled grid, of the project sponsor and its team; and
>
> 24.5.4(h): demonstrated capability to adhere to standardized construction, maintenance, and operating practices, of the project sponsor and its team.

The ISO's comparative analysis has considered the results of the analysis of the three selection factors or factor components listed above. As an initial matter, the ISO notes that all of the project sponsors and their teams are capable of satisfying these factors regarding this project. The ISO has determined that Horizon West's proposal is slightly better than the five proposals of the other four project sponsors regarding this criterion because, as discussed regarding each of the relevant individual selection factors or factor components, it is slightly better than the proposals of CalGrid, Lotus, and VPC regarding the second selection factor (construction and maintenance record) and better regarding the third selection factor (demonstrated capability to adhere to standardized construction, maintenance, and operating practices), and the proposals of CalGrid, Lotus, and VPC are better than Horizon West's proposal regarding the first selection factor component (engineering qualifications and experience of the project sponsor and its team), which in comparison to the advantages of Horizon West regarding the second selection factor and the third selection factor still results in a slight advantage for Horizon West's proposal over the proposals of CalGrid, Lotus, and VPC, and it is better or slightly better than LSPGC's proposal regarding the first selection factor component, the second selection factor, and the third selection factor.

The ISO has determined that there is no material difference among CalGrid's proposal and the two proposals of VPC regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, there is no material difference among them regarding any of the relevant factors or factor components.

The ISO has determined that CalGrid's proposal and the two proposals of VPC are slightly better than the proposals of Lotus and LSPGC regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, they are slightly better than Lotus' proposal regarding the second selection factor, and there is no material difference among the proposals of CalGrid, Lotus, and VPC regarding the first selection factor component and the third selection factor, and the proposals of CalGrid and VPC are better than LSPGC's proposal regarding the first selection factor component and slightly better regarding the second selection factor, and LSPGC's proposal is better than the proposals of CalGrid and VPC regarding the third selection factor, which the ISO considers to result in a slight advantage for the proposals of CalGrid and VPC's proposal.

The ISO has determined that there is no material difference between Lotus' proposal and LSPGC's proposal because, as discussed regarding each of the relevant individual selection factors or factor components, Lotus' proposal is better than LSPGC's proposal

regarding the first selection factor component, LSPGC's proposal is better than Lotus' proposal regarding the third selection factor, and there is no material difference between LSPGC's proposal and Lotus' proposal regarding the second selection factor which the ISO considers to result in offsetting advantages for Lotus' and LSPGC's proposals.

In summary, based on a detailed review of the proposals of the project sponsors regarding these individual selection factors and factor components, the ISO has determined that Horizon West's proposal is slightly better than CalGrid's proposal and the two proposals of VPC, among which there is no material difference, which are slightly better than the proposals of Lotus and LSPGC, between which there is no material difference, regarding this criterion overall.

3.16 Qualification Criterion 24.5.3.1(b): Financial Resources

The second qualification criterion is "whether the Project Sponsor and its team have demonstrated that they have sufficient financial resources, by providing information including, but not limited to, satisfactory credit ratings, audited financial statements, or other financial indicators."

3.16.1 ISO Comparative Analysis

The ISO previously determined and posted notice on its website that all six proposals submitted by the five project sponsors meet the minimum requirements to qualify for evaluation in the selection process. Pursuant to ISO Tariff Section 24.5.4, the ISO has further reviewed the proposals regarding the project sponsor qualification criteria in its comparative analysis for purposes of selecting the approved project sponsor.

This qualification criterion essentially duplicates the factors addressed by selection factor 24.5.4(e) (the financial resources of the project sponsor and its team) discussed in Section 3.7 above. For this reason, the ISO bases its comparative analysis for this criterion on the results of the comparative analysis for the selection factor above. As discussed above regarding selection factor 24.5.4(e), the ISO has determined that there is no material difference between CalGrid and its proposal and Horizon West and its proposal, and they are better than LSPGC and its proposal, which is slightly better than Lotus and its proposal and VPC and its two proposals, among which there is no material difference regarding this criterion.

3.17 Qualification Criterion 24.5.3.1(c): Ability to Assume Liability for Losses

The third qualification criterion is "whether the Project Sponsor and its team have demonstrated the ability to assume liability for major losses resulting from failure of any part of the facilities associated with the transmission solution by providing information such as letters of credit, letters of interest from financial institutions regarding financial commitment to support the Project Sponsor, insurance policies or the ability to obtain insurance to cover such losses, the use of account set asides or accumulated funds, the revenues earned from the transmission solution, sufficient credit ratings, contingency financing, or other evidence showing sufficient financial ability to cover these losses in the normal course of business."

3.17.1 ISO Comparative Analysis

The ISO previously determined and posted notice on its website that all six proposals submitted by the five project sponsors meet the minimum requirements to qualify for evaluation in the selection process. Pursuant to ISO Tariff Section 24.5.4, the ISO has further reviewed the proposals regarding the project sponsor qualification criteria in its comparative analysis for purposes of selecting the approved project sponsor.

This qualification criterion essentially duplicates the factors addressed by selection factor 24.5.4(i) (demonstrated ability to assume liability for major losses resulting from failure of facilities of the project sponsor) discussed in Section 3.11 above. For this reason, the ISO bases its comparative analysis for this criterion on the results of the comparative analysis for the selection factor above. As discussed above regarding selection factor 24.5.4(i), the ISO has determined that the proposal of Horizon West is better than the proposals of CalGrid and LSPGC, between which there are offsetting strengths and weaknesses resulting in a conclusion that there is no material difference, which are better than the proposal of Lotus, which is slightly better than the two proposals of VPC, regarding this criterion.

3.18 Qualification Criterion 24.5.3.1(d): Proposed Schedule and Ability to Meet Schedule

The fourth qualification criterion is "whether the Project Sponsor has (1) proposed a schedule for development and completion of the transmission solution consistent with need date identified by the ISO; and (2) has the ability to meet that schedule."

3.18.1 ISO Comparative Analysis

The ISO previously determined and posted notice on its website that all six proposal submitted by the five project sponsors meet the minimum requirements to qualify for evaluation in the selection process. Pursuant to ISO Tariff Section 24.5.4, the ISO has further reviewed the proposals regarding the project sponsor qualification criteria in its comparative analysis for purposes of selecting the approved project sponsor.

This qualification criterion essentially duplicates the factors addressed by selection factor 24.5.4(d) (the proposed schedule for development and completion of the transmission solution and demonstrated ability to meet that schedule of the project sponsor and its team) discussed in Section 3.6 above. For this reason, the ISO bases its comparative analysis for this criterion on the results of the comparative analysis for the selection factor above. As discussed above regarding selection factor 24.5.4(d), the ISO has determined that, based on the specific scope of this project, that there is no material difference among the proposals of CalGrid, Horizon West, and LSPGC, which are slightly better than the two proposals of VPC, between which there is no material difference, and which are slightly better than the proposal of Lotus, regarding this criterion.

3.19 Qualification Criterion 24.5.3.1(e): Technical and Engineering Qualifications and Experience

The fifth qualification criterion is "whether the Project Sponsor and its team have the necessary technical and engineering qualifications and experience to undertake the design, construction, operation and maintenance of the transmission solution."

3.19.1 ISO Comparative Analysis

The ISO previously determined and posted notice on its website that all six proposals submitted by the five project sponsors meet the minimum requirements to qualify for evaluation in the selection process. Pursuant to ISO Tariff Section 24.5.4, the ISO has further reviewed the proposals regarding the project sponsor qualification criteria in its comparative analysis for purposes of selecting the approved project sponsor.

This qualification criterion considers several factors addressed by the selection factors previously discussed in Sections 3.8, 3.9, and 3.10 above. For this reason, the ISO bases its comparative analysis for this criterion on the results of the comparative analysis for the selection factors addressed above. The selection factors considered in the comparative analysis for this criterion are as follows:

> 24.5.4(f): the technical [environmental permitting] and engineering qualifications and experience of the project sponsor and its team;
>
> 24.5.4(g): the previous record regarding construction and maintenance of transmission facilities, including facilities outside the ISO controlled grid, of the project sponsor and its team; and
>
> 24.5.4(h): demonstrated capability to adhere to standardized construction, maintenance, and operating practices of the project sponsor and its team.

The ISO's comparative analysis has considered the results of the analysis of the three selection factors listed above. As an initial matter, the ISO notes that all of the project sponsors and their teams are capable of satisfying these selection factors regarding this project. The ISO has determined that Horizon West's proposal is slightly better than the five proposals of the other four project sponsors regarding this criterion because, as discussed regarding each of the relevant individual selection factors or factor components, it is slightly better than the proposals of CalGrid, Lotus, and VPC regarding the second selection factor (construction and maintenance record) and better regarding the third selection factor (demonstrated capability to adhere to standardized construction, maintenance, and operating practices), and the proposals of CalGrid, Lotus, and VPC are better than Horizon West's proposal regarding the first selection factor (technical [environmental permitting] and engineering qualifications and experience of the project sponsor and its team), which the ISO considers to result in a slight advantage for Horizon West's proposal over the proposals of CalGrid, Lotus, and VPC, and it is slightly better than LSPGC's proposal regarding the first selection factor, the second selection factor, and the third selection factor.

The ISO has determined that there is no material difference among CalGrid's proposal and the two proposals of VPC regarding this factor because, as discussed regarding each of the relevant individual selection factors, there is no material difference among them regarding any of the relevant factors.

The ISO has determined that CalGrid's proposal and the two proposals of VPC are slightly better than the proposals of Lotus and LSPGC regarding this factor because, as discussed regarding each of the relevant individual selection factors, they are slightly better than Lotus' proposal regarding the second selection factor, and there is no material difference among the proposals of CalGrid, Lotus, and VPC regarding the first selection factor and the third selection factor, and the proposals of CalGrid and VPC are better than LSPGC's proposal regarding the first selection factor and slightly better regarding the second selection factor, and LSPGC's proposal is better than the proposals of CalGrid and VPC regarding the third selection factor, which the ISO considers to result in a slight advantage for the proposals of CalGrid and VPC's proposal.

The ISO has determined that there is no material difference between Lotus' proposal LSPGC's proposal because, as discussed regarding each of the relevant individual selection factors, Lotus' proposal is better than LSPGC's proposal regarding the first selection factor, LSPGC's proposal is better than Lotus' proposal regarding the third selection factor, and there is no material difference between LSPGC's proposal and Lotus' proposal regarding the second selection factor, which the ISO considers to result in offsetting advantages for Lotus' and LSPGC's proposals.

In summary, based on a detailed review of the proposals of the project sponsors regarding these individual selection factors, the ISO has determined that Horizon West's proposal is slightly better than CalGrid's proposal and the two proposals of VPC, among which there is no material difference, which are slightly better than the proposals of Lotus and LSPGC, between which there is no material difference, regarding this criterion overall.

3.20 Qualification Criterion 24.5.3.1(f): Commitment to Enter Into TCA and Adhere to Applicable Reliability Criteria

(A-6)

The sixth qualification criterion is "whether the Project Sponsor makes a commitment to become a Participating TO for the purpose of turning the Regional Transmission Facility that the Project Sponsor is selected to construct and own as a result of the competitive solicitation process over to the ISO's Operational Control, to enter into the Transmission Control Agreement with respect to the transmission solution, to adhere to all Applicable Reliability Criteria and to comply with NERC registration requirements and NERC and WECC standards, where applicable."

3.20.1 Information Provided by CalGrid

CalGrid indicated that it commits to become a participating transmission owner for the purpose of turning the transmission elements included in the project over to the ISO's operational control. CalGrid further indicated that it commits to enter into the TCA for the project transmission elements and to adhere to all applicable reliability criteria and to comply with NERC registration requirements and WECC standards, where applicable. (A-6)

3.20.2 Information Provided by Horizon West

Horizon West indicated that if selected by the ISO as the approved project sponsor for the project, Horizon West, which is already a PTO, commits to turn over the transmission element to the ISO's operational control, to enter into the TCA regarding the transmission element, to adhere to all applicable reliability criteria, and to comply with NERC registration requirements and NERC and WECC standards, where applicable. (A-6)

3.20.3 Information Provided by Lotus

Lotus indicated that it commits as follows:

(1) That the project special purpose entity that would be incorporated for this project would become a PTO with the ISO for the purpose of turning its project over to the ISO's operational control;
(2) That the special purpose entity would negotiate, execute, and abide by the Approved Project Sponsor Agreement with the ISO and would support its filing of this document with FERC, to the extent FERC approval is necessary;
(3) That the special purpose entity would negotiate, execute, and abide by the TCA applicable to its project as well as any provisions of the ISO's tariffs that pertain to a PTO; and
(4) That the special purpose entity would adhere to all applicable reliability criteria (including applicable CIP standards) and would comply with NERC registration requirements and NERC and WECC standards, where applicable.

Lotus indicated that it is not aware of any encumbrances or entitlements that would be identified in its application to become a PTO with the ISO, and all the new transmission capacity associated with its project should be available for use by the ISO customers as of the in-service date. To the extent any encumbrances, entitlements and specific local and all applicable reliability standards apply and arise as the special purpose entity moves the project through development and construction, Lotus indicated that the special purpose entity would work with the ISO to establish an operation plan that ensures seamless treatment. (A-6)

3.20.4 Information Provided by LSPGC

LSPGC indicated that it would become a PTO in 2025 related to the Orchard STATCOM and Fern Road GIS/STATCOM projects. If selected as the approved project sponsor of the project, in accordance with the Approved Project Sponsor Agreement, LSPGC would turn the project over to the ISO's operational control and work with ISO to amend the existing TCA. LSPGC indicated that it would adhere to all applicable reliability criteria and comply with applicable NERC registration requirements and NERC and WECC standards. (A-6)

3.20.5 Information Provided by VPC

VPC indicated that it would execute the TCA and would be a PTO under the ISO Tariff, procedures, and manuals.

VPC indicated that upon initiation of precommercial testing, operational control over its project's transmission facilities would be transferred to the ISO, with such facilities residing within the ISO balancing authority area.

VPC indicated that this transfer of operational control would be conditioned upon ISO's recognition of IID's Transmission Ownership Rights to 20% of the transmission line capacity of the eastern segment of the project – specifically, an approximately 53.5 mile segment between and including structure 195 and the dead-end tower located at the eastern endpoint of the transmission line just outside the existing North Gila 500 kV Substation as well as the corresponding treatment of IID as a non-PTO in accordance with applicable provisions of the ISO Tariff, including Article 17 and related ISO Business Practice Manuals and applicable ISO procedures.

VPC indicated that IID would be a non-PTO and, accordingly, would coordinate with the ISO pursuant to Article 17 of the ISO Tariff and applicable ISO procedures, including but not limited to the issuance of TRTC instructions.

VPC indicated that its project would be owned, operated, and maintained in a manner consistent with Good Utility Practice, as such term is defined in the ISO Tariff, and subject to compliance with all applicable reliability standards. VPC indicated that it would register with NERC and WECC as the Transmission Owner and Transmission Planner. VPC indicated that it has a proposal services agreement in place for its operations contractor to provide designated TOP registration and footprint expansion certification services for the project's transmission facilities. VPC indicated that negotiation and execution of a bilateral contract for the project sponsor's TOP registration and related services would occur after the ISO's award. (A-6)

3.20.6 Information provided by VPC for VPC Dunes

VPC indicated that it would execute the TCA and would be a PTO under the ISO Tariff, procedures, and manuals.

VPC indicated that upon initiation of precommercial testing, operational control over the project's transmission facilities would be transferred to the ISO, with such facilities residing within the ISO balancing authority area.

VPC indicated that this transfer of operational control would be conditioned upon ISO's recognition of IID's Transmission Ownership Rights to 20% of the Dunes to North Gila 500 kV transmission line capacity and 40% of the Dunes 500 kV Switching Station capacity as well as the corresponding treatment of IID as a non-PTO in accordance with applicable provisions of the ISO Tariff, including Article 17 and related ISO Business Practice Manuals and applicable ISO procedures.

VPC indicated that IID would be a non-PTO and, accordingly, would coordinate with the ISO pursuant to Article 17 of the ISO Tariff and applicable ISO procedures, including but not limited to the issuance of TRTC instructions.

VPC indicated that its project would be owned, operated, and maintained in a manner consistent with Good Utility Practice, as such term is defined in the ISO Tariff, and subject to compliance with all applicable reliability standards. VPC indicated that it would register with NERC and WECC as the Transmission Owner and Transmission Planner. VPC indicated that it has a proposal services agreement in place for its operations contractor to provide designated TOP and footprint expansion certification services for the project's transmission facilities. VPC indicated that negotiation and

execution of a bilateral contract for the project sponsor's TOP registration and related services would occur after the ISO's award. (A-6)

3.20.7 ISO Comparative Analysis

The ISO previously determined and posted notice on its website that all six proposals submitted by the five project sponsors meet the minimum requirements to qualify for evaluation in the selection process. Pursuant to ISO Tariff Section 24.5.4, the ISO has further reviewed the proposals with regard to the project sponsor qualification criteria in its comparative analysis for purposes of selection of the approved project sponsor.

All five project sponsors, with certain identified limitations in the case of VPC, have committed to becoming a PTO, turning over operational control of the project to the ISO, abiding by the terms of the TCA, and adhering to all applicable reliability criteria for their proposals. Consequently, the ISO has determined there is no material difference among the proposals of the five project sponsors regarding this criterion.

The ISO notes that the VPC and VPC Dunes proposed their transfer of operational control would be conditioned upon ISO's recognition of IID's certain Transmission Ownership Rights as well as the corresponding treatment of IID as a non-PTO in accordance with applicable provisions of the ISO Tariff. The ISO considers this proposal acceptable pursuant to the ISO's competitive solicitation process.

3.21 ISO Overall Comparative Analysis for Approved Project Sponsor Selection

Under ISO Tariff Section 24.5.4, the ISO conducts a comparative analysis to select an approved project sponsor. In accordance with Section 24.5.4, the purpose of the comparative analysis is to take into account all transmission solutions being proposed by competing project sponsors and to select a qualified project sponsor that is best able to design, finance, license, construct, maintain, and operate the particular transmission facility in a cost-effective, efficient, prudent, reliable, and capable manner over the lifetime of the facility, while maximizing the overall benefits and minimizing the risk of untimely project completion, project abandonment, and future reliability, operational, and other relevant problems, consistent with good utility practice, applicable reliability criteria, and ISO documents. In conducting the comparative analysis, the ISO applies the qualification criteria described in ISO Tariff Section 24.5.3.1 and the selection factors specified in Section 24.5.4.

As discussed above, the ISO has conducted this competitive solicitation because, in its 2022-2023 transmission planning process, the ISO identified a policy-driven need for the North Gila-Imperial Valley #2 500 kV Line project. As required by the ISO Tariff, the ISO undertook a comparative analysis to determine the degree to which each project sponsor and its proposal(s) met the applicable tariff selection factors and qualification criteria to determine the approved project sponsor to finance, construct, own, operate, and maintain this project.

The ISO's analysis determined that there are either no material differences or only slight differences among the project sponsors and their proposals regarding many of the selection factors and qualification criteria.

One of the key selection factors for which the ISO identified material differences among the project sponsors' proposals is the estimated cost and cost containment factor, including the project sponsors' commitment to binding cost containment measures. As discussed above, this factor is one of the six key selection factors identified by the ISO at the outset of this competitive solicitation process. Horizon West proposed the lowest estimated capital costs, significant cost containment measures, and the fewest proposed cost cap exclusions, which produced the lowest anticipated projected total revenue requirements at the lowest evaluated risk to ISO ratepayers.

A second key selection factor is the project sponsor's existing rights-of-way and substations that would contribute to the transmission solution in question. As discussed above, the ISO found there were no material differences among the proposals of the project sponsors regarding satisfaction of this factor. No project sponsor has existing land rights along the proposed route, and all project sponsors had sufficient plans for acquiring the necessary land rights.

A third key selection factor is the experience of the project sponsor and its team in acquiring rights-of-way, if necessary, that would facilitate approval and construction, and in the case of a project sponsor with existing rights-of-way, whether the project sponsor would incur costs in connection with placing new or additional facilities associated with the transmission solution on such existing rights-of-way. Again, no project sponsor has existing land rights along the proposed route, and for this selection factor, the ISO determined that Horizon West and CalGrid had the strongest proposals, based on the greater land rights acquisition experience of their teams, including experience acquiring land rights in California.

A fourth key selection factor is the proposed schedule for development and completion of the transmission solution and demonstrated ability to meet the schedule of the project sponsor and its team. The ISO determined that Horizon West, CalGrid, and LSPGC had similarly strong proposals that were stronger than VPC's and Lotus' proposals regarding this factor. Horizon West's proposed schedule provided a substantial amount of cushion in meeting the June 1, 2032 latest in-service date in the ISO Functional Specifications. Horizon West's proposal also included an incentive penalty for failure to meet the latest ISO in-service date. Horizon West's proposal showed that it has a solid track record in timely completing projects and can complete this project and any other project for which it might be selected as the approved project sponsor in a timely manner. These features of Horizon West's proposal combined to make it comparable to, or better than, the other project sponsors' proposals regarding this key selection factor.

The fifth key selection factor is the financial resources of the project sponsor and its team. The ISO's analysis showed that CalGrid and Horizon West have comparable financial metrics and that they are better than Lotus, LSPGC, or VPC in this regard. Horizon West's proposal demonstrated it has substantial financing experience, financial resources, and financial backing sufficient to finance this project along with any other project for which it might be selected as the approved project sponsor.

The sixth key selection factor is the technical and engineering qualifications and experience of the project sponsor and its team. The ISO's analysis showed that Horizon West's environmental permitting team has as much or more relevant experience as any other project sponsor and its team but that the teams of CalGrid, Lotus, and VPC have more experience than Horizon West's team with the design and engineering of EHV transmission projects in California. However, Horizon West's proposal demonstrated it and its team have sufficient experience with the design and engineering of EHV

transmission projects to ensure that they are fully capable of performing the design and engineering of this project. The advantage of CalGrid, Lotus, and VPC regarding this selection factor does not offset the significant advantage of Horizon West's cost and cost containment proposal and the overall advantage of Horizon West regarding the other key selection factors.

Regarding the non-key selection factors, Horizon West's proposal was either as strong as or better than the proposals of the other project sponsors for every selection factor. And regarding the six qualification criteria, Horizon West's proposal was as strong as or better than the proposals of the other project sponsors for all six of these criteria.

For the foregoing reasons, the ISO determined that Horizon West and its team are qualified, experienced, and have the financial resources to capably, cost-effectively, and reliably license, finance, construct, operate, and maintain this particular project at the lowest cost and by the specified in-service date. Based on the ISO's review of the proposals and a comparative analysis regarding all of the selection factors and qualification criteria, the ISO determined that Horizon West's proposal is better than the proposals of CalGrid, Lotus, LSPGC, and VPC regarding this project. The result of this competitive solicitation is that the ISO selected Horizon West as the approved project sponsor to finance, construct, own, operate, and maintain the North Gila-Imperial Valley #2 Line project.[9]

[9] Selection of Horizon West as the approved project sponsor does not preclude the ISO from taking positions on specific rate proposals contained in Horizon West's rate filing at FERC regarding its proposal.

Attachment 1

Competitive Solicitation Transmission Project Sponsor Application

Transmission Project Sponsor Proposal –Competitive Solicitation Application

Contents

INTRODUCTION AND GENERAL INSTRUCTIONS

In accordance with ISO Tariff Section 24.5 (Transmission Planning Process Phase 3), the ISO will initiate a period of at least ten (10) weeks that will provide an opportunity for project sponsors to submit specific transmission project proposals to finance, construct, own, operate, and maintain certain transmission elements identified in the ISO's comprehensive transmission plan, or those approved by ISO management in advance of the issuance of the transmission plan if the capital cost of the project is less than or equal to $50 million. Such project proposals must include plan of service details and supporting information as set forth in the Business Practice Manual for the Transmission Planning Process (BPM-TPP) sufficient to enable the ISO to determine whether the proposal meets the criteria specified in ISO Tariff Sections 24.5.3 and 24.5.4. This competitive solicitation application form describes the details that must be provided regarding project sponsor proposals.

Projects included in this process will become part of the ISO controlled grid, and approved project sponsors will become participating transmission owners (PTOs) and will sign the Transmission Control Agreement (TCA) and enter into a Coordinated Functional Registration (CFR) agreement with the ISO. The ISO also anticipates that the project sponsor or its contracted representative(s) will be registered with the North American Electric Reliability Corporation (NERC) in the NERC categories of Transmission Owner and other functions as applicable.

This section sets forth requirements for the formatting and general contents of the project sponsor's application. The application submitted to the ISO shall not include any substantive information in response to this section. In particular, in Section 1 of the application, the project sponsor shall provide a summary of the most significant aspects of the project as proposed by the project sponsor. The ISO will refer to the information provided in Section 1, rather than any information provided in a transmittal letter for an introduction to and overview of the project. The information to be included in the application will be used by the ISO to determine whether the proposal meets the qualification criteria set forth in ISO Tariff section 24.5.3 and, if so, to compare each project sponsor and its proposal with other qualified project sponsors and proposals for the same approved transmission element pursuant to ISO Tariff section 24.5.4. To facilitate this assessment and comparison, project sponsors must provide information that reflects a thorough understanding of the requirements, processes, and activities needed to accomplish project completion and continuing operation and maintenance.

The project sponsor must submit three documents in connection with its proposal:

1. this Competitive Solicitation Application form;
2. the Cost and Cost Containment Workbook;
3. the Prior Projects and Experience Workbook.

The first document, Competitive Solicitation Application, is a completed form of this Microsoft Word document. The second document, Cost and Cost Containment Workbook, is in the form of an Excel spreadsheet. The spreadsheet documents the project sponsor's proposed capital

and operations and maintenance (O&M) expenses, and also any proposed cost containment measures. The third document, Prior Projects and Experience Workbook, is in the form of a separate Excel spreadsheet. The spreadsheet documents the project sponsor's listing of prior projects and experience relevant to its capability to develop the current project. Please note that only applicant and contractor experience identified in the Prior Projects and Experience Workbook will used to evaluate past project performance and experience. Experience identified within other areas of sponsor proposals must be included within the Prior Projects and Experience Workbook to be evaluated.

This application form is separated into specific sections. Each section specifies information to be provided and is assigned a unique identifier for each item of information required, for example, QP–1 for Project Qualification, E-1 for Environmental Permitting and Public Processes items, S-1 for items related to Substation Design and Engineering, and so on. Project sponsors must provide responses to each of the items in the space provided after the specification of the information required and clearly note in the response the unique item identifier in each part of the response.

If the project sponsor believes that any item of the application is not applicable to its project proposal, it may indicate "N/A" but must provide a brief reason why it believes it is not applicable.

If supporting documentation is provided to supplement specific responses to application items, the project sponsor must include a specific reference to the item number and to the page numbers and paragraphs of the supporting documentation that are responsive to the application item, along with a brief explanation of how the referenced material is responsive. Information that responds directly to the information requests in the application shall be incorporated directly into the application and not be submitted as separate attachments merely referenced in the application response.

If a project sponsor provides attachments as part of the response, the project sponsor shall specify the file name of the attachment in the space provided for the response. In addition, the project sponsor shall name the attached files using the following naming convention – the file name shall include the unique identifier for the application item to which the information responds (e.g., A-5) and a description of the contents (e.g., A-5 Resumes of Key Individuals). All responses must be in readable electronic format and include the name of the project sponsor and description of the project. When submitting attachments, do **NOT** create any subdirectories. The ISO's filing system cannot process subdirectories and their use may cause important information to be lost. Also, do not use any of the following (special) characters when naming attachment files: [(~ # % & * { } \ / : < > ?)]. Use of any of these special characters is not compatible with the ISO's filing system and will cause important information to be lost. In addition, the project sponsor shall include in its cover letter a table or index in Microsoft Word format that contains a list of documents and attachments provided. The table or index must include the file name, contents, and a description of the application section(s) and items to which it corresponds. The project sponsor must provide a copy of the application

in Microsoft Word format. The project sponsor must provide all responses and attached material in English or the ISO will disregard the information submitted.

The following instructions in italics pertain to the submission of geographic information:

When submitting geographic information, e.g., the proposed route for a transmission line or the location of a proposed new substation, or reactive support or series compensation station, the project sponsor shall provide the information both in a PDF file or files, and also in shapefiles. In order to provide for the greatest support and exchangeability, shapefiles are chosen as the GIS format for submittal. There shall be one shapefile for each proposed transmission project, and no shapefile submitted shall contain more than one proposed transmission project. The proposed transmission projects are to be defined as ***line*** *shapes. The attribute table of the shapefile shall include a* ***"NAME" text field*** *that contains the name of the transmission project. This submittal shall include, at a minimum, the following four files:* ***name.shp***, ***name.shx***, ***name.dbf*** *and* ***name.prj***. *The file name shall be the name of the transmission project with any spaces and special characters replaced by underscores or other regular characters. Abbreviating and shortening of the names are acceptable and encouraged. All of the files that make up the shapefile shall be zipped together in a single "zip" file with the same name as the shapefile.*

If the project sponsor proposes to contract with others to perform duties related to the proposed project, the project sponsor's responses to the items in the application must reflect the roles, responsibilities, processes, and procedures to be used by the organization that will perform those duties, and the management controls that will be used by the project sponsor to assure that the work is done in accordance with applicable agreements, contracts, and regulatory and reliability requirements. In addition, the project sponsor shall complete the Excel spreadsheet entitled Prior Projects and Experience Workbook by which the project sponsor is to provide information regarding relevant prior projects and experience of the project sponsor and its contractors.
For each item in the application, if the project sponsor is proposing to finance, construct, own, operate, and maintain multiple transmission elements, the project sponsor shall also indicate how its response would change depending on how many of its proposals are approved by the ISO. For example, in P-4 of Section 4 (Project Management and Schedule) the project sponsor shall describe how the projected in-service date of a project would be affected if two or more of the project sponsor's proposals are approved.

Please note that the ISO will consider only ONE proposal per application submitted. The project sponsor may identify alternate proposals that it has considered, but shall clearly identify the single proposal that it wishes the ISO to evaluate.

This application form includes an officer certification form (Section 15) that must be signed by an officer of the authorized representative of the applicant project sponsor. The ISO will not consider any application that does not include a completed officer certification form.

To the extent a project sponsor considers any of the information submitted with its application to be confidential or proprietary, the project sponsor must clearly identify the confidential or proprietary information and must include an explanation as to why the information should be treated by the ISO as confidential. The ISO will not treat the identity of a project sponsor and basic information about the project sponsor's proposed project as confidential information. A project sponsor must separately request confidential treatment for each response to an individual application information request and explain the need for confidential treatment. Project sponsors shall not make general designations of large sections of the application as confidential or proprietary.

Project sponsors should note that the maximum size of an e-mail submitted to the ISO must not exceed 20 MB or the ISO's e-mail system may not be able to process it. An application that includes files or attachments larger than 20 MB must be compressed to files of a size less than 20 MB. Project sponsors shall submit their information via CD or DVD medium. Please provide 3 complete sets of CDs or DVDs and clearly label each with project name and sponsor name. The ISO prefers that project sponsors submit the initial application (consisting of the Microsoft Word document and associated attachments, and the Excel spreadsheets) on CDs or DVDs. If a project sponsor wishes to apply for more than one project eligible for the ISO's transmission procurement process, the project sponsor must submit a separate application for each project. Again, the ISO will consider only one proposal per application.
Please note that there are several tables in this application form for use in providing responses. Project sponsors may add rows to the tables if the number of entries exceeds the number of rows initially provided in the tables.

The ISO requires a deposit of $100,000* for each submitted application. The ISO will not consider applications if the project sponsor fails to include the deposit on or before the date the bid window closes. Payment instructions and a project sponsor deposit form can be found in Section 16 of this application form.

While the competitive bid window is open, a project sponsor may submit questions to the ISO for clarification. Questions must be submitted via e-mail to the following address: transmissioncompetitivesolicitation@caiso.com. The ISO will attempt to answer these questions in a timely manner. The answers will be made available in a table that the ISO will post to its website on the "Transmission Planning" page. Note that the ISO will not include the identity of the project sponsor in the table. In general, the ISO will update this table on a weekly basis or as needed.

1 PROJECT SPONSOR NAME, ORGANIZATIONAL STRUCTURE, AND PROPOSAL SUMMARY

A-1 Project Sponsor Name:

Response: (Enter Project Sponsor Company Name)

A-2 Proposal Name:

Response: (Enter Proposal Name)

A-3 Submittal Date:

Response: (Enter Submittal Date)

A-4 Provide a brief summary of the project sponsor's proposal:

*Re*sponse:

A-5 Provide an organizational chart depicting the project team and areas of responsibility, including the responsibilities of all contractors. In addition, provide a corporate organizational chart of the project sponsor and any parent companies and affiliates. Attach resumes of all key management and lead personnel of the project sponsor, affiliates, and contractors who will be used for the project, including a resume for each lead individual of the project sponsor and its contractors in each area of responsibility for the project. Identify any parent organization or affiliate personnel responsible for a specific project listed in the Prior Projects and Experience Workbook who will be part of the project sponsor's team for the instant project. For project sponsor and affiliated personnel and for contractor personnel, relate each resume to a position on the organization chart provided. The project sponsor should be aware that if it is selected as the approved project sponsor, the ISO will require that any change in the personnel and contractors proposed to be used for the project must be approved by the ISO. Describe the legal and financial structure of the project sponsor and its team, including type of corporation if a corporation, or type of entity if it is a special purpose entity (e.g. project financed LLC) created explicitly for the proposed project. Describe the legal and financial relationship of the entity listed as the project sponsor to all other entities that are referred to in the application to include but not limited to all parent or holding company organizational entities, equity investors and any entity that will finance or otherwise financially support or provide guarantees for part or all of the project if different from the project sponsor. This description shall include the entity or entities that will own the assets of the project (whether through a special purpose entity or as

part of a portfolio of assets or other mechanism) during the construction period and during the operating period.

Response:

A-6 State that the project sponsor is making a commitment to become a participating transmission owner for the purpose of turning the transmission element that the project sponsor is selected to construct and own as a result of the competitive solicitation process over to the ISO's operational control, to enter into the Transmission Control Agreement with respect to the transmission element, to adhere to all applicable reliability criteria, and to comply with NERC registration requirements and NERC and Western Electricity Coordinating Council (WECC) standards, where applicable.

Response:

2 PROJECT QUALIFICATION

Project Sponsor and Project Qualifications:

The ISO will review each project sponsor's proposal to assess the qualifications of the project sponsor and its project proposal based on the qualification criteria set forth in ISO Tariff section 24.5.3. The ISO will evaluate the information submitted by each project sponsor in response to the application items pertaining to sections 24.5.3.1(a)-(e) to determine whether the project sponsor has demonstrated that its team is physically, technically, and financially capable of (i) completing the needed transmission solution in a timely and competent manner and (ii) operating and maintaining the transmission solution in a manner that is consistent with good utility practice and applicable reliability criteria for the life of the project.

In addition, the ISO will determine whether the transmission solution proposed by a project sponsor is qualified for consideration, based on the qualification criteria contained in ISO Tariff sections 24.5.3.2(a) and (b). Please demonstrate that the proposed project meets the proposal qualification criteria for the needed transmission element by providing responses to the following two items (QP-1, QP-2) that relate to the qualification of the proposed project. When providing these responses, the project sponsor shall refer to information that has been provided in other sections of its application for additional information and support. The following two responses shall provide a complete demonstration or qualification – through the two responses directly and by including references in the two responses to material provided in responses to other items in the application.

Describe and demonstrate how:

QP-1. The proposed design of the transmission solution is consistent with needs identified in the comprehensive ISO transmission plan.

Response:

QP-2. The proposed design of the transmission solution satisfies applicable reliability criteria and ISO planning standards.

Response:

3 PRIOR PROJECTS AND EXPERIENCE

In the accompanying Excel spreadsheet entitled Prior Projects and Experience Workbook, the project sponsor shall provide a description of all relevant prior projects and experience of the project sponsor on the Project Sponsor experience tab and its proposed contractors on the Contractor experience tab as it relates to this project. The lists of projects should include those with voltages greater than 200 kV completed in the past ten years. If the project sponsor or its proposed contractors do not have experience constructing facilities with voltages greater than 200 kV, but do have experience constructing lower voltage facilities, this experience may be included. Detailed explanations of schedule and budget variances may be supplied in a separate document if necessary as noted in the spreadsheet and shall include a description of major issues confronted and resolved during the project.

The Contractor experience tab of the Prior Projects and Experience Workbook shall be used to list the prior project experience of all contractors that the project sponsor proposes to use for this project, including but not limited to land acquisition, environmental permitting, design and engineering, construction, maintenance, and operations contractors. If the project sponsor proposes to but has not retained a contractor for any of the foregoing functions, the project sponsor shall provide a realistic short list of contractors under consideration. Any change to these contractors will require approval by the ISO. The evaluation will consider the qualifications of each submitted contractor. The experience list shall include any work performed by the contractor for the project sponsor. For environmental permitting contractors, the project sponsor must indicate in the spreadsheet, for each prior project listed for that contractor, the federal and state permits acquired as well as associated environmental processes, including federal NEPA or state environmental review determinations.

4 PROJECT MANAGEMENT AND SCHEDULE

P - 1. Provide a general description of the proposed approach to project management and scheduling for the transmission element.

Response:

P - 2. Provide the proposed management structure, organization, authority levels, and resources committed to project management and scheduling for the full scope of the project, including relevant experience and capability for the proposed project manager and other relevant decision-makers for the project. If the sponsor does not have a team in place, provide your plan to meet these requirements.

Response:

P - 3. Provide a proposed schedule for project development through release for operation that includes, at a minimum, key critical path items such as:
- Develop contracts for project work;
- Regulatory approval; permitting; rights of way and land acquisition;
- Engineering and design;
- Material and equipment procurement;
- Facility construction;
- Agreements (interconnection, operating, scheduling, etc.) with other entities;
- Pre-operations testing;
– Any amount of "float" incorporated into the schedule and how it was determined;
- Project in-service date;
- Other items identified by the project sponsor.

Provide a list of measures that the project sponsor would take to meet its schedule if the project sponsor encounters unanticipated delays in its schedule for land acquisition, permitting, or construction of up to 6 months. If the project sponsor proposes any financial or other incentives to ensure completion of the project on schedule, provide a description of those financial or other incentives.

Response:

P - 4. For the proposed project, identify the major risks and obstacles to successful project completion within cost budget while meeting schedule and identify proposed mitigations to minimize the risks. Describe all actions that the project sponsor will take to keep the project within budget while meeting schedule in light of the major risks identified.

If the project sponsor is sponsoring more than one project, the project sponsor shall also describe how the projected in-service date of this project (as reflected in the proposed schedule) would be affected if two or more of the project sponsor's proposals are selected.

Response:

P - 5. For the transmission line and substation projects included in the Prior Projects and Experience Workbook, provide the following:

(a) Any environmental permitting risks and challenges that the project sponsor and its team have previously faced that are comparable to the risks and challenges it will face in connection with this project.

(b) Any transmission line or substation design or engineering risks and challenges that the project sponsor and its team have previously faced that are comparable to the risks and challenges it will face in connection with this project.

(c) Any transmission line or substation construction risks and challenges that the project sponsor and its team have previously faced that are comparable to the risks and challenges it will face in connection with this project.

(d) Any maintenance risks and challenges that the project sponsor and its team have previously faced that are comparable to the risks and challenges it will face in connection with this project.

(e) Any operations risks and challenges that the project sponsor and its team have previously faced that are comparable to the risks and challenges it will face in connection with this project.

(f) Other specific materials that reflect project management skills for an actual project.

Response:

5 COST ASSUMPTIONS AND CONTAINMENT

Provide all the information regarding cost containment for the proposed project in the Cost and Cost Containment Workbook. In addition, provide the information regarding the cost containment proposal in response to the following requests. Ensure the information provided in this application is consistent with the information provided in the Cost and Cost Containment Workbook.

CC-1 Fully describe in detail all of your proposed cost containment measures.

Response:

CC-2 Explain in detail and provide all bases, assumptions, reasons, support, and documentation as to why your estimated cost of debt constitutes a reasonable representation and expectation of the debt cost you expect to incur in connection with the project.

Response:

CC-3 Describe each proposed maintenance activity and its frequency planned over the life of the project facilities. Explain in detail and provide all bases, assumptions, reasons, and support as to why your estimated O&M costs (and Administrative and General (A&G) costs) constitutes a reasonable representation and expectation of the O&M costs you expect to incur in connection with the project. To the maximum extent practicable, provide this analysis for each individual component of total O&M costs as reflected in the Cost and Cost Containment Workbook.

Response:

CC-4 Identify by job category the number of full-time equivalent employees (FTE) the project sponsor intends to employ from its company to perform operations activities and the number of FTEs the project sponsor intends to employ from its company to perform maintenance activities. Also provide the number of FTEs that will be allocated to Administrative and General activities. Describe the specific role and functions each FTE will serve. Describe in detail the basis for and assumptions underlying these FTE estimates and the cost associated with the FTEs.

Response:

CC-5 Indicate whether the project sponsor intends to contract for O&M services.

a. If so, provide the name of the counterparty and attach any agreements that provide the terms of the relationship.

b. If the project sponsor intends to rely on O&M services from a regulated utility, identify the utility and describe in detail how the utility intends to support the project. Attach any agreements that provide the terms of the relationship.

c. Provide the specific roles and functions the contractors will provide for the project.

d. Provide in detail the justification for cost estimates associated with contracted O&M services.

e. For contracted O&M services, provide: (1) the number of FTEs- (on an annual basis) that would be conducting maintenance activities; (2) the number of FTEs- that would be providing operations services; and (3) the number of FTEs- that would be allocated to Administrative and General activities.

Response:

CC-6 Provide all details, assumptions, reasons, and supporting documentation (including manufacturers' guidelines) underlying the project sponsor's useful life projections for the project.

Response:

CC-7 Describe in detail all exclusions to any cost cap and cost containment measures the project sponsor proposes.

Response:

CC-8 If the project sponsor is proposing an exclusion for *force majeure* events, how exactly does the project sponsor propose to define *force majeure* for purposes of limiting exclusions from or increases to any cost cap and other cost containment measures?

Response:

CC-9 If a siting or permitting authority were to require relocation of the project sponsor's proposed site for the project, how exactly would that affect the project sponsor's proposed cost cap and other cost containment measures?

Response:

CC-10 If a siting or permitting authority were to require changes to the proposed structures, equipment, or transmission lines associated with the project sponsor's project, how would that affect the proposed cost cap and other cost containment measures?

Response:

CC-11 If a siting or permitting authority were to require an increase in the amount of environmental mitigation beyond that assumed in the project sponsor's proposal, how would that affect the proposed cost cap and other cost containment measures?

Response:

CC-12 If a siting or permitting authority were to require undergrounding of the project sponsor's proposed transmission facilities, or require overhead construction if the

project sponsor has proposed undergrounding, how would that affect the proposed cost cap and other cost containment measures?

Response:

CC-13 If there were to be a delay in the receipt of any of the project sponsor's siting or permit authorizations, how exactly would that affect the proposed cost cap and other cost containment measures?

Response:

CC-14 If there were to be a delay in the schedule of the participating transmission owner for constructing its interconnection facility for the project, or if changes in project scope or location were to be required or caused by the interconnecting PTO, how would that affect the proposed cost cap and other cost containment measures?

Response:

CC-15 If one of the project sponsor's approved contractors was not able to meet its requirements, and the project sponsor were to propose and the ISO approve an alternate contractor, what impact would this have on the proposed cost cap and other cost containment measures?

Response:

CC-16 Indicate the authority of any agency with jurisdiction over the project to impose binding cost control measures or cost caps on the project, if the project sponsor is not proposing a cost cap.

Response:

6 FINANCIAL

The project sponsor (or the project sponsor's parent or other affiliated entity in the event the project sponsor must rely on either to meet this financial criteria) must demonstrate it has sufficient financial resources, including, but not limited to, satisfactory credit ratings and other financial indicators as well as the demonstrated ability to assume liability for major losses resulting from failure of any part of the facilities associated with the transmission solution. The ISO will consider the parent's or affiliated entity's financial statements, credit ratings, and other statements in this section if the parent or affiliated entity provides financial assurances acceptable to the ISO as described in F-2 below.

General

F - 1. Provide a list of equity holders, equity contribution by each investor, and the amount of debt over the entire life of the project.

Response:

F - 2. If the project sponsor is relying on a parent or another affiliated entity to satisfy the financial criterion of its application, (1) describe the entity's relationship to the project sponsor in the form of a corporate hierarchy and (2) provide a letter signed by an officer of the parent or affiliated entity indicating that the parent or affiliated entity provides financial assurances for the project. In addition, provide details of the parent's or affiliated entity's plan for providing for credit, investment, or financing arrangements for financial backing of the project. If financial recourse is limited, describe under what conditions recourse is available to the parent or affiliated entity's financial resources. Describe how these arrangements comply with all legal and regulatory requirements related to affiliate transactions.

Response:

Financial Strength and Creditworthiness

For the entity that has the financial resources to meet the financial strength and creditworthiness criteria and is required to provide financial assurances for the project, provide the information requested in F-3 through F-10.

F - 3. Provide annual, audited financial statements or equivalent (e.g., FERC Form 1) that at a minimum, includes an Auditors Statement, Management Statement, Balance Sheet, Income Statement, Statement of Cash Flows and Notes to the Financial Statements, for the most recent year and previous four years (five years total). If audited financial statements are not available, the project sponsor may provide other documentation demonstrating financial capability. In either case, the documentation **must be accompanied by a letter signed and attested to by an officer of the company** providing financial assurances that the documents are a fair representation of the financial condition of the company in accordance with generally accepted accounting practices. If this information is available electronically, it is acceptable for the project sponsor to provide links to the appropriate documents. NOTE: All financial statements must be provided in English.

Response:

F - 4. Provide quarterly, unaudited financial statements or equivalent (e.g. FERC Form 3-Q) published since the last annual, audited financial statement. If not available, the project sponsor may provide other documentation demonstrating financial capability. In either case, such documentation **must be accompanied by a letter signed and attested to by an officer of the company** providing financial assurances that the documents are a fair representation of the financial condition of the company in accordance with generally accepted accounting practices. If this information is available electronically, it is acceptable for the project sponsor to provide links to the appropriate documents. NOTE: All financial statements must be provided in English.

Response:

F - 5. If the creation of a special purpose entity (SPE) is being proposed for this project, describe the funding source(s) for the SPE for the duration of the project's useful life and how it fits into the corporate hierarchy. Explain how the capabilities and resources of the parent organization(s) of the SPE can be attributed to and will serve the SPE.

Response:

F - 6. Provide current credit ratings and rating agency reports from Moody's Investor Services, Standard & Poor's Ratings Services and/or Fitch Ratings, or another rating agency designated by the U.S. Securities and Exchange Commission as a Nationally Recognized Statistical Rating Organization. If credit ratings are unavailable, the project sponsor may provide other supporting information.

Response:

F - 7. Provide a report of any failure to make debt service payments on time during the previous five years. If the project sponsor is an SPE, report any such failures by its parent or other affiliated entities, including any predecessor SPEs.

Response:

F - 8. Provide a summary of any history of bankruptcy, dissolution, merger, or acquisition for the current calendar year and the five prior calendar years. If the project sponsor is an SPE, report any such events by its parent or other affiliated entities, including any predecessor SPEs.

Response:

F - 9. Based upon the most recent audited financial statements, provide a ratio of total assets to the total projected capital costs of the project, and show the calculation including any encumbrances.

Response:

F - 10. For each of the five years for which audited financial statements were provided according to F – 3 above, provide the following financial ratios, and show the calculation for each:

a. Funds from operations to interest coverage
b. Funds from operations to total debt
c. Total debt to total capital

Response:

Project Financing

F - 11. Describe the financing used on up to five projects listed in the Prior Projects and Experience Workbook that are similar in type and size to (or larger than) the transmission element and/or substation proposed in the application. Include the following in your response and use the table provided below:

1) Project description,
2) Financing structure (e.g., LLC vs. corporate),
3) Equity and debt contribution,
4) Debt sources,
5) Bank(s) involved,
6) Other important information.

F-11 (1)Project Description	(2)Financing Structure	(3)Equity and Debt Contribution	(4)Debt Sources	(5)Banks Involved	(6)Other Important Information

F - 12. Describe the proposed financing sources of funds and instruments for construction and working capital for this project by completing the following table:

Entity Providing Debt Financing	Loan Amount	Interest Rate	Repayment Period	Grace Period During Construction	Equity Provided by Project Sponsor

F - 13. For financing sources other than the capital markets, describe the benefits to ratepayers and others of your proposed financing source(s). This shall include the projected cost of the financing sources.

Response:

Project Liability Protection and Project Replacement and Repairs

F - 14. Provide the project sponsor's planned insurance coverage, including types of coverage and insured values during the construction period and over the operational life of the project facilities, including but not limited to covering negligent performance. Also include the types of losses to be covered during the construction and operation of the project, including specifying the extent of failure of project facilities to be covered by the planned insurance during the operation of the project.

Response:

F - 15. Describe your ability to finance unexpected repairs (*e.g.*, replacement of a series of towers) or replacement construction during the estimated useful life, *i.e.*, the operating period for the transmission element(s). For example, capabilities can include, but are not limited to, the following: use of account set-asides or accumulated funds, parent organization guarantees, letters of credit, letters of intent from financial institutions to support the project sponsor, insurance, or other means of ensuring that these increased costs can be covered in a timely manner and thus not delay the return of the project to normal operation.

Describe any actual events where the project sponsor had to cover increased costs due to equipment failures, including the nature of the event, costs incurred, and how these costs were funded by the project sponsor.

Response:

7 ENVIRONMENTAL PERMITTING AND PUBLIC PROCESSES

E - 1. Provide an overview of the various project activities that the project sponsor believes are needed to achieve siting approval, obtain all necessary permits, and any other necessary public processes required to construct the project. Provide a list of steps or flow chart for these project activities and processes. If the project is located within more than one state, provide a response for each state as applicable.

Response:

E - 2. Using your best estimate, indicate whether any federal discretionary permit(s) will be required. For each discretionary permit anticipated, identify the agency and applicable governing rule or statute. Describe these in detail, e.g., Clean Water Act Section 401- 404, U.S. Fish and Wildlife Service biological opinion.

Response:

E - 3. Using your best estimate, indicate whether any state discretionary permit(s) will be required and the type of permit to be filed (e.g., endangered species incidental take permit, water quality Section 401).

Response:

E - 4. Indicate if any federal land (for example, Forest Service, BLM) is proposed to be crossed, and if a NEPA (National Environmental Policy Act) environmental process is required.

Response:

E - 5. For projects within the State of California:

a. Indicate which agency is the expected California Environmental Quality Act (CEQA) lead agency. Explain why that agency was chosen and indicate whether that agency has agreed to be the lead agency for this project.

Response:

b. Provide a list of Best Management Practices[10] and project sponsor standing policies, related to siting and permit processes, that all employees are required to observe, including how are they implemented and how are they reported, that would be applicable for the proposed project.

[10] BMPs, which are environmental industry standard terminology, are the project sponsor's standards that would be common to all projects, i.e., not specific to any particular project. For example, this could consist of company training policies that relate to required safety training, environmental sensitivity training, accident and injury reporting, or community involvement programs involving both the local elected officials and the immediate community that will be impacted by the proposed project.

Response:

c. Provide a list of Applicant Proposed Measures that would be applicable for the proposed project. These are project sponsor mitigation measures that would be applied to reduce the potential environmental impact for a particular construction activity to ensure the impact is reduced below the level of a significant unavoidable impact. These are normally related to the CEQA checklist.

Response:

d. Indicate if you expect to perform any public outreach (e.g., open houses, project hotline number, project update mailings) and describe the planned outreach program.

Response:

E - 6. Provide information related only to transmission line, reactive support, series compensation, and substation siting and permits for projects developed by the project sponsor or its team in the past ten years. If the project sponsor is an SPE, provide information on the parent organization(s) for similar projects. Provide:

a. A description of any project siting or permitting notice of violation (NOV).

Response:

b. Siting or permitting fines levied by the project approval authority or any other agency with discretionary or ministerial authority over the project.

Response:

c. Remediation actions taken to avoid future violations.

Response:

d. A summary of siting or permitting law violations by the project sponsor or its team found by federal or state courts, federal regulatory agencies, state public utility commissions, other regulatory agencies, or in any other legal proceeding.

Response:

e. Any notice of violations that were remediated to the satisfaction of the issuing agency or authority.

Response:

f. A summary of any instances in which the project sponsor or its team is currently under investigation or is a defendant in any legal proceeding for violation of any siting or permitting law.

Response:

8 TRANSMISSION OR SUBSTATION LAND ACQUISITION

L - 1. Provide a general description of the land siting and acquisition needed for the proposed project and a map of the proposed project alignment and/or substation site on a suitable map base and scale - USGS quadrangle 1:24000 at a minimum. The map should show the study area for routing the project as well as any alternate routes, existing transmission lines, California Natural Diversity Data Base (CNDDB) information within the project area, and avoidance areas (such as parks, airports, military installations, and areas of local, state or national interest and any other major exclusion areas). Provide estimated acreages required. Include construction access, permanent access roads, laydown yards, and landing zones, if required. Show alternatives evaluated, those dismissed, and the justification for the preferred site.

Response:

L - 2. Provide a copy of the standard grant of easement anticipated and any temporary construction easement documents necessary for the project construction and a description of your proposed strategy for crop loss and or business loss compensation.

Response:

L - 3. Provide an indication of whether the project sponsor has eminent domain authority. If the project sponsor does not have eminent domain authority and does not plan to obtain eminent domain authority, describe the strategy for acquisition of necessary land rights.

Response:

L - 4. Indicate whether the project sponsor has any existing ROW or substations on which all or a portion of the transmission element can be built. For any such ROW describe how it would be used as part of the proposed project. Also, for any such ROW describe any incremental costs and risks associated with using the existing ROW (for example, negotiating additional land rights or the potential of "overburdening" existing easements). Does the project sponsor make a binding commitment to seek to use such existing ROW or substations for the project, and to use such existing ROW or substations unless the applicable siting authority or other regulatory agency determines otherwise, approves a different route, or the project sponsor is prevented from doing so by *force majeure* type events?

Response:

9 SUBSTATION DESIGN AND ENGINEERING

The items listed below should only be completed if the proposed transmission solution contains a substation or facilities similar to a substation (e.g., synchronous condenser, STATCOM).

S - 1. For each substation or reactive control element that is included as part of your proposed project, provide the location, GPS information, interconnection with new or existing transmission facilities, bus and breaker arrangement, typical structure types and materials that will be used, and any other unique aspects of the substation that the project sponsor proposes.

Response:

S –2. For each proposed substation, reactive support, or series compensation installation, provide the substation siting criteria that will be used on the project (e.g., future area plans, constructability, earthquake activity, flood plain and mudslide considerations).

Response:

S – 3. For each proposed substation, reactive support, or series compensation installation, provide the basic parameters for the installation - primary and secondary voltage, BIL[11], initial design power capacity, and final design power capacity (if developed in stages).

Response:

S – 4. For each proposed substation, reactive support, or series compensation installation, provide a preliminary design criteria document that specifies the criteria that will be used in the design of the facility. Also provide a list of standards and requirements that will be used in its design - e.g., IEEE 142. Provide a complete list of state specific requirements for each U.S. state in which the project will be located (e.g., California and other state specific requirements if part of the project or the entire project is located outside California).

Response:

S – 5. For each proposed substation, reactive support, or series compensation installation, provide a single line diagram and general arrangement plan, which includes:

i. bus and breaker arrangement,
ii. transformer arrangement,
iii. automatic tap changer, if any,
iv. power factor correction equipment if any,
v. voltage regulator, if any,
vi. ground fault limiting resistor or reactor, if any,
vii. line terminations for existing or proposed transmission lines,
viii. bus type and rating,

[11] A design voltage level for electrical apparatus that refers to a short duration (1.2 x 50 microsecond) crest voltage and is used to measure the ability of an insulation system to withstand high surge voltage.

ix. high voltage switch types and ratings,
x. switchgear type and ratings,
xi. battery system arrangements,
xii. substation, reactive support, or series compensation facility layout with equipment location, fencing, grounding, control/relay building, etc.

Response:

S – 6. For each proposed substation, reactive support, or series compensation installation, describe the protection system criteria and specific components included in the design for primary and back-up protection. Identify any special protection considerations for the substation.

Response:

S – 7. For each proposed substation, reactive support, or series compensation installation, describe the SCADA incorporated in the design. Include the project sponsor's commitment to meet operational data requirements and a specific description of the communications strategy.

*Res*ponse:

S – 8. For each proposed substation, reactive support, or series compensation installation, describe the physical security criteria and specific security measures that will be incorporated in the final facility design.

Response:

10 TRANSMISSION LINE DESIGN AND ENGINEERING

The items listed below should only be completed if there is a transmission line included in the proposed transmission solution.

T - 1. Provide a general overview and description of the transmission line that the project sponsor proposes, including the following items. Use the table provided below for your responses:

a. The starting and ending points including length of preferred route. If the route is in more than one state, provide the information for each state. This shall include GPS coordinates.
b. proposed conductor size, bundling and type,
c. intervening substations, switching stations, or series compensation facilities,
d. typical span lengths,
e. any other unique aspects of the line that the project sponsor proposes that has not previously been provided for the overhead portions of the line.

If any underground transmission is proposed, include a general description of the following items:

f. the underground conductor size and type and length of segment(s),
g. the proposed termination facilities, and
h. any other unique aspects of the underground portion of the line not previously provided.

T-1 Item	Response
a	
b	
c	
d	
e	
f	
g	
h	

T - 2. Provide the transmission line siting criteria that will be used for any overhead section of the proposed transmission line and any underground sections of the proposed transmission line.

Response:

T - 3. Provide a listing of all existing or permitted transmission lines, including voltage, structure type, and separation, located adjacent to or in the same corridor as the proposed project. Provide the criteria used to establish the separation between the proposed transmission line and existing transmission and distribution facilities.

Response:

T - 4. Provide the preliminary design criteria document for any overhead section of the proposed transmission line and any underground section of the proposed transmission line.

Response:

T - 5. Provide a list of standards and requirements that will be used in the transmission line design for both overhead and underground, e.g., IEEE 951, ASCE Manual No. 72, GO 95, with an emphasis on providing a complete list of state specific requirements and the requirements of other states where the proposed project will be located. Also provide any interconnection standards for interconnection of the project to existing utility system(s).

Response:

T - 6. Provide a single line diagram and a general arrangement plan of the entire proposed transmission line, including transmission line crossings by the new project line. For crossings, provide a list by voltage and type of construction of lines crossed (either over or under) by the proposed project. Include isolation devices to be installed for operations and maintenance purposes.

Response:

T - 7. For any proposed overhead transmission line, provide the following additional information not included in response to T-1 in the table provided below:

a. Basic parameters of the transmission line(s) - Design voltage, BIL (design or adjacent substation criteria), initial design power capacity and final design power capacity (if developed in stages).

Support Structures

For any support structures including wood poles, tubular poles, and lattice steel structures, provide:

b. a description of the proposed support structures and conductor geometry,
c. structure foundations as appropriate and grounding criteria and implementation,
d. insulation level, insulator types,
e. lightning protection,
f. estimated right of way widths for each different segment of the project with drawings for each and the basis of determining each right of way width.

Line Ratings and Impedance

g. Provide the estimated per mile line impedances for each different line section proposed in the project, suitable for use in power flow, system stability, and system protection studies. Also provide an estimate of the completed line overall impedance in per unit on a 100 MVA base.
h. Provide NESC and/or GO 95 Grade of Construction.

i. Provide NESC and/or GO 95 Loading Corridor Separation.

T-7 Item	Response
a	
b	
c	
d	
e	
f	
g	
h	
i	

T - 8. For any proposed overhead section and any underground section of the transmission line, provide the ampacity rating methodology including maximum conductor temperature that will be used to determine the normal and emergency ratings of the overhead line for summer and winter. Provide the actual ampacity for the line under normal conditions and emergency operations (specify time limit for emergency operations) for summer and winter operating conditions.

Response:

T - 9. For any proposed underground transmission sections, provide the following additional information not included in response to T-1 in the table provided below:

a. Type of transmission cable, including splicing and cable grounding,
b. Substructures, conduits and duct banks, and splicing enclosures,
c. Termination facilities and structures,
d. Description of the type of transmission cable, including splicing and cable grounding,
e. Provide the estimated per mile line impedances for each different line section proposed in the project. All line impedances shall be provided on a per unit 100 MVA base. Also provide an estimate of the completed line overall impedance.
f. lightning protection,
g. estimated right of way widths for each different segment of the project with drawings for each and the basis of determining each right of way width.

T-9 Item	Response

a	
b	
c	
d	
e	
f	
g	

T - 10. For each substation that the proposed transmission line would terminate in that will not be the responsibility of the project sponsor to modify in order to interconnect the line, provide the following information in the table below:

a. Name of the substation where the interconnection will take place.
b. A description of the demarcation point that identifies the point in the interconnection where responsibility for implementation (e.g., design, construction, testing) changes from the project sponsor to the substation owner.
c. List of agreements that must be reached with the substation owner or others to interconnect and operate the proposed line to the substation (e.g., interconnection agreement, schedule agreement).
d. A description of the project sponsor's approach to determining if any environmental permitting will be required to terminate the proposed line at the substation
e. A description of the approach the project sponsor's will use to determine the cost to implement changes at the substation or other locations that are associated with the interconnection of the proposed project at the substation and of those costs which will paid for by the project sponsor.

T-10 Item	Response
a	
b	
c	
d	
e	

11 CONSTRUCTION

Provide an overview and description of the construction plan and management practices that the project sponsor proposes to follow in response to the questions below:

C-1 Description of inspection of construction activities, including substations, reactive support, series compensation installations, overhead transmission lines, and underground transmission lines if part of the project.

Response:

C-2 Description of the method of establishing material yards, sequencing and receiving material, providing material to contractors, material quality control methods, and material expediting processes.

Response:

C-3 Description of the method of coordination of the duration and timing of any clearances of existing circuits necessary during construction.

Response:

C-4 Description of the plans for a constructability review including completeness of engineering drawings, construction specifications, material orders, and tracking and providing changes.

Response:

C-5 Description of the status of easements orders of possession, permits, and compliance with pre- construction permit conditions and mitigation measures.

Response:

C-6 Description of the method for detail scheduling showing sequence of work, environmental restrictions, clearances requirements, progress reports, and actions taken to maintain schedule.

Response:

C-7 Description of any unique or special construction techniques proposed for any aspect of the proposed project, including ROW clearing, construction and permanent access road construction, and expected helicopter work.

Response:

C-8 Provide information related only to transmission line, reactive support, series compensation, and substation construction for projects developed by the project sponsor or its team for projects completed during the past ten years. If the project sponsor is an SPE, provide the information for the parent organization(s). Provide

a. A description of any project construction-related notice of violation (NOV).

Response:

b. Construction-related fines levied by the project approval authority or any other agency with discretionary or ministerial authority over the project.

Response:

c. Remediation actions taken to avoid future violations.

Response:

d. A summary of construction-related law violations by the project sponsor or its team found by federal or state courts, federal regulatory agencies, state public utility commissions, other regulatory agencies, or in any other legal proceeding.

Response:

e. Any notice of violations that were remediated to the satisfaction of the issuing agency or authority.

Response:

f. A summary of any instances in which the project sponsor or its team is currently under investigation or is a defendant in any legal proceeding for violation of any construction-related law.

Response:

12 MAINTENANCE

M-1 Describe the roles and responsibilities of the project sponsor's maintenance organizations. Describe any organizational changes to the project sponsor's current organization that are planned to accommodate maintenance of the proposed project. Provide any contract you have with a third party to provide maintenance services for the project. Describe what specific maintenance activities will be handled by project sponsor staff and which activities will be handled by contractors or vendors.

Response:

M-2 Describe the project sponsor's policies, processes, and procedures for assuring that only persons who are appropriately qualified, skilled, and experienced in their respective trades or occupations are employed. Include qualifications, certifications, and experience requirements for maintenance and field personnel.

Response:

M-3 Describe the project sponsor's training program for maintenance personnel. Include initial and continuing education requirements for maintaining qualifications for classifications with maintenance responsibilities (e.g., what are the training and certification requirements for linemen and substation electricians?). Identify training resources used.

Response:

M-4 Describe the project sponsor's capabilities that will enable it to comply with the maintenance standards described in Appendix C of the TCA. Indicate whether or not the project sponsor's standards include the elements listed in TCA Appendix C Sections 5.2.1 (Transmission Line Circuit Maintenance) and 5.2.2 (Station Maintenance). (Note: Each PTO will prepare its own maintenance practices that shall be consistent with the requirements of the ISO Transmission Maintenance Standards. The effectiveness of each PTO's maintenance practices will be gauged through the ISO's availability performance monitoring system. Each PTO's adherence to its maintenance practices will be assessed through an ISO review pursuant to TCA Appendix C Maintenance Procedure 4).

Response:

M-5 Describe the project sponsor's vegetation management plan as it applies to the proposed project. Provide the project sponsor's preexisting procedures and historical practices for managing ROW for transmission facilities.

Response:

M-6 Provide information, notices, or reports regarding the project sponsor's compliance with its standards for inspection, maintenance, repair, and replacement of similar facilities. Include audit reports or regulatory filings.

Response:

M-7 Describe the project sponsor's capabilities that will enable it to provide its Availability Measures in accordance with TCA Appendix C Section 4.3 as applicable. Provide sample availability measures, or similar measures, for other facilities owned by the project sponsor to demonstrate the project sponsor's capability.

Response:

M-8 Would adding the project to the ISO controlled grid require any changes or exceptions to the provisions of the TCA? If "yes", describe.

Response:

M-9 Describe the project sponsor's (its team or planned team) capabilities that will enable it to comply with the activities required by TCA Section 7 (Operations and Maintenance [including Scheduled Maintenance, Exercise of Contractual Rights, and Unscheduled Maintenance]).

Response:

M-10 Specify where the project's maintenance team (including any project sponsor staff and contractors) will be located. Specify the estimated response time of any assigned project sponsor staff, maintenance contractor, or emergency response provider.

Response:

13 OPERATIONS

O-1 Describe the roles and responsibilities of the operations organizations, including operating jurisdictions as they relate to the proposed project. Identify the planned location of those responsible for operation of the project, including the location of the control center that will serve as the single point of contact for the ISO. Describe any organizational changes to the project sponsor's current operations organization that are planned to accommodate the proposed project. Provide any contract you have with a third party to provide operation services for the project. Describe what specific operations activities will be handled by project sponsor staff and what activities will be handled by contractors or vendors.

Response:

O-2 Describe the project sponsor's policies, processes, and procedures for assuring that only persons who are appropriately qualified, skilled, and experienced in their respective trades or occupations are employed. Include qualifications, certifications, and experience requirements for operators and field personnel.

Response:

O-3 Describe the project sponsor's training program for operations personnel. Include initial and continuing education requirements for maintaining qualifications for classifications with operation responsibilities (e.g., what are the training and certification requirements for operators, linemen, and substation electricians?). Identify training resources used.

Response:

O-4 Would adding the project to the ISO controlled grid require any changes or exceptions to the provisions of the TCA regarding operations? If "yes", describe.

Response:

O-5 Identify the NERC functions for which the project sponsor has registered or intends to become registered related to the proposed project.

Response:

O-6 If the project sponsor plans to contract for services to perform the NERC functions, identify the contractor and the NERC functions for which it is registered or intends to become registered. If you plan to use a contractor and have not selected one yet, provide the requested information for the contractors you are considering. Describe how the project sponsor will ensure compliance with the reliability standards or requirements associated with these functions. Provide any contract you have with a third-party to perform NERC functions.

Response:

O-7 Describe the approach the project sponsor will use to assure compliance with Applicable Reliability Standards. Include descriptions of organizational responsibility, processes, and procedures for assuring compliance. Identify any Applicable Reliability Criteria for which transmission owners are responsible that require temporary waivers under TCA Section 5.1.6. Explain any.

Response:

O-8 Provide information demonstrating that the project sponsor, or its intended contractor or contractors as identified in O-1, has been in compliance with the Applicable Reliability Standards for all transmission facilities that it owns, operates, or maintains. This could include information for facilities outside the ISO controlled grid and shall include available NERC compliance audit results. Provide information describing the amount of transmission facilities subject to NERC compliance by listing the number of miles of transmission lines by voltage class and the number of substations by voltage class. If the project sponsor does not have experience with transmission facilities subject to NERC reliability standards, provide information demonstrating compliance with standards that do apply to those facilities and the amount of facilities subject to such compliance.

Response:

O-9 Describe in general how the project sponsor proposes to divide responsibility for NERC reliability standards between the project sponsor and the ISO in the Coordinated Functional Registration agreement. Compare your response with existing agreements between the ISO and other PTOs, and describe expected differences, if any. Existing agreements are available on the ISO website.

Response:

O-10 Describe the applicable agreements that will define the responsibilities of the Transmission Operator as defined in NERC reliability standards and authority with respect to NERC reliability standards categories of Generator Owner(s), Generator Operator(s), Planning Authority(ies), Distribution Provider(s), Transmission Owner(s), Transmission Service Provider(s), Balancing Authority(ies), Transmission Planner(s), and adjacent Transmission Operator(s).

Response:

O-11 Describe how the project sponsor will meet the NERC reliability standards requirement that a Transmission Operator have adequate and reliable data acquisition facilities for its Transmission Operator Area and with others for operating information necessary to maintain reliability. Include back-up control center plans if any. Also include provisions for providing the availability data required by TCA Appendix C Section 4.3.

Response:

O-12 Describe the project sponsor's (its team or planned team) capability that will enable it to comply with the activities required by TCA Section 6.1 (Physical Operation of Facilities [including Operation, ISO Operating Orders, Duty of Care, Outages, Return to Service, and Written Report]) and TCA Section 6.3 (Other Responsibilities).

Response:

O-13 Describe the project sponsor's capability (for its team or its planned team) that will enable it to comply with the activities required by TCA Section 9.2 (Management of Emergencies by Participating TOs) and TCA Section 9.3 (System Emergency Reports: TO Obligations). Identify resources available to respond to major problems on the proposed project. Include resources available through mutual assistance agreements and describe expected response times. Provide samples of emergency operating plans.

Response:

O-14 Will the project be subject to any encumbrance? If so, provide a statement of any Encumbrances to which any of the transmission lines and associated facilities to be placed under ISO Operational Control are subject, together with any documents creating such Encumbrances and any instructions on how to implement Encumbrances and Entitlements in accordance with TCA Section 6.4.2.

Response:

O-15 Identify the plans or provisions to be implemented by the project sponsor to replace major failed equipment, e.g., a substation transformer, circuit breaker, or a group of towers (including dead end structures).

Response:

O-16 Identify and describe any violations of NERC reliability standards or other reliability standards the project sponsor or its team has incurred in the past ten years.

Response:

O-17 Identify and describe any operations-related tariff violations or FERC rules violations the project sponsor or its team has incurred in the past ten years.

Response:

O-18 Identify and describe any violations of operations-related laws, statutes, rules, or regulations the project sponsor or its team has incurred in the past ten years that are not discussed elsewhere in the application.

Response:

14 MISCELLANEOUS:

Z-1: Provide any additional evidence or support that the project sponsor believes supports its selection as an approved project sponsor. This can include, but is not limited to, other benefits the project sponsor's proposal provides, specific advantages that the project sponsor or its team have, or any efficiencies to be gained by selecting the project sponsor's proposal or additional information that was not requested in the other sections that supports the selection of the sponsor's proposal. Do not include information that is already included in other sections of the application.

Response:

15 OFFICER CERTIFICATION

OFFICER CERTIFICATION FORM

Project Sponsor Name:

I, _____, an officer of the entity identified above as the Project Sponsor or affiliate of the Project Sponsor, understanding that the ISO is relying on the information set forth in the foregoing application, including associated worksheets, to select an Approved Project Sponsor for the transmission element that is the subject of the application, hereby certify that I have full authority to represent the Project Sponsor or affiliate of the Project Sponsor, as described below. I further certify that:

1. I am the _____(title) of _____ (Project Sponsor).

2. I have prepared, or have reviewed, all of the information contained in the foregoing application, including associated worksheets, which is being submitted into the ISO's competitive selection process for the:

   _____(name of transmission element).

3. On behalf of the Project Sponsor, I agree that any dispute between the ISO and the Project Sponsor regarding any aspect of the competitive selection process, including the ISO's selection report, will be resolved in accordance with ISO Tariff Section 13 ("Dispute Resolution").

I acknowledge that I understand the relevant provisions of Section 24.5 of the ISO Tariff and the Business Practice Manual for Transmission Planning applicable to the Project Sponsor's application, including, but not limited to, those provisions describing the information that will be used by the ISO to determine the Project Sponsor's qualifications to participate in the competitive selection process and the criteria that the ISO will apply in the comparative evaluation for purposes of Selecting an Approved Project Sponsor. I certify, after due investigation, that the information provided in the application, including associated worksheets, is true and accurate to the best of my belief and knowledge and there are no material omissions. In addition, by signing this certification, I acknowledge the potential consequences of making incomplete or false statements in this certification, which may include exclusion from the current and subsequent competitive selection processes.

_____
(Signature)

Print Name: _____

Title: _____

Date: _____

16 APPLICATION DEPOSIT PAYMENT INSTRUCTIONS

Please complete this entire form.

Project Sponsor Deposit Information

1. **Name of Phase 3 Project:** _____

2. **Name, address, telephone number, and e-mail address of the Customer's contact person (primary person who will be contacted):**

   Name: _____
   Title: _____
   Company Name: _____
   Street Address: _____
   City, State: _____
   Zip Code: _____
   Phone Number: _____
   Fax Number: _____
   Email Address: _____

3. **Alternate contact:**

   Name: _____
   Title: _____
   Company Name: _____
   Street Address: _____
   City, State: _____
   Zip Code: _____
   Phone Number: _____
   Fax Number: _____
   Email Address: _____

4. **Any deposit paid by check shall be submitted to the CAISO representative indicated below: Note – the check may be included with applications submitted on CDs or DVDs. Checks shall be made payable to the CAISO.**

	Overnight Address
California ISO	California ISO
Attn: Julie Balch	Attn: Julie Balch
Grid Assets	Grid Assets
P.O. Box 639014	250 Outcropping Way
Folsom, CA 95763-9014	Folsom, CA 95630

5. Project Sponsor Deposit is submitted by:

Legal name of the Customer: _____
By (signature): _____
Name (type or print): _____
Title: _____
Date: _____

**Required Deposit: $75,000 USD (note: Wires originating from outside the U.S. are subject to currency conversion rates and/or additional bank fees).
**Your application will not be considered received if the deposit is not received prior to the bid window close date.

Wire Information

California ISO - Remit to Addresses
Beneficiary Bank Name
Beneficiary Bank Address
Wells Fargo Bank, NA
420 Montgomery St.
San Francisco, CA 94104

LGIP/SGIP
Wells Fargo Bank, NA
ABA # 121000248
Account # 4122041825
Account name: CAISO LGIP

California ISO

Approval History

Approval Date: June 23, 2023

Effective Date: June 23, 2023

Application Owner: Scott Vaughan

Application Owner's Title: Manager, Transmission Assets

Revision History

Version	Date	Description
8	6/23/2023	Added clarification for including experience, added reference to GPS coordinate idenitification of subs and transmission lines, eliminated original question L1 , added request for more detail on schedule float in P3
7	3/22/2021	Revised Version Released - General update and simplification
6	4/17/2019	General update
5	5/10/2016	General update and revised to address stakeholder comments.
4	4/7/2014	Revised to align with updated tariff.
3	4/4/2013	Revised Version Released – Add Version Control, Approval History, and Revision History Sections
2	4/1/2013	Revised Version Released - General clarification modifications and clean-up for 2012-2013 TPP Phase 3 Bid Window Opening
1	12/19/2012	Initial Version Released