North of SONGS-Serrano 500 kV Line Project
Project Sponsor Selection Report

May 31, 2024

California Independent System Operator Corporation

TABLE OF CONTENTS

LIST OF ATTACHMENTS

1. INTRODUCTION

This report describes the competitive solicitation process conducted by the California Independent System Operator Corporation (ISO) for the North of San Onofre Nuclear Generating Station (SONGS)-Serrano 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 of SONGS-Serrano 500 kV Line project. The five qualified proposals that the ISO reviewed from the four project sponsors for the North of SONGS-Serrano 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 of SONGS-Serrano 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 Lotus Infrastructure Global Operations, LLC, in association with Southern California Edison Company, as the approved project sponsor to finance, construct, own, operate, and maintain North of SONGS-Serrano 500 kV Line project.

2 BACKGROUND

2.1 North of SONGS-Serrano 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 of SONGS-Serrano 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 of SONGS-Serrano 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 of SONGS-Serrano 500 kV Line project. 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 October 27, 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 of SONGS-Serrano 500 kV Line Project* (ISO Functional Specifications), as updated as of August 21, 2023.[1] In the ISO Functional Specifications, the North of SONGS-Serrano 500 kV Line project is described as follows:

- A new 500 kV transmission line between North of SONGS Substation and Serrano Substation with an approximate length of 30-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 Southern California Edison Company (SCE) 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 directly assigned components) will cost approximately $503 million. The ISO also specified that the project must be in service no later than June 1, 2034. Upon completion of the project, the approved project sponsor will own the new North of SONGS-Serrano 500 kV Line project, but it must turn the facilities over to ISO operational control.

After the ISO opened the bid solicitation window for the North of SONGS-Serrano 500 kV Line project, the ISO hosted an informational call for interested parties on June 26, 2023, and provided a presentation describing the project and the competitive solicitation

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

process, including the key selection factors.[2] These are the tariff criteria the ISO determined are the most important for selecting a project sponsor for this policy driven project. On July 7, 2023, the ISO posted the final revised list of key selection factors for the project.[3] 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 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."

The ISO evaluated five proposals from four project sponsors – (1) California Grid Holdings LLC (CalGrid), a wholly owned subsidiary of Viridon Holdings LLC, (2) Horizon West Transmission, LLC (Horizon West), an affiliate of NextEra Energy Transmission, LLC (NEET), (3) Lotus Infrastructure Global Operations, LLC (Lotus), in association with Southern California Edison Company (SCE) (together, Lotus-SCE), and (4) Cal Grid, LLC, an LS Power company (LS Power (CAL GRID)), a wholly-owned subsidiary of LS Power Associates, L.P. The ISO posted a list of validated project sponsor applications on December 19, 2023.[4] The ISO found that all five of the proposals provided sufficient

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

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

[4] Validated Project Sponsor Applications

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 February 9, 2024.[5] The ISO found that all four project sponsors and their five 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:

- Project Sponsor, Name, Organizational Structure, and Proposal Summary
- Project Qualifications
- Prior Projects and Experience

http://www.caiso.com/InitiativeDocuments/ListofValidatedProjectSponsorApplications-NorthofSONGStoSerrano500kVTransmissionLineProject.pdf

[5] Qualified Project Sponsor Applications
http://www.caiso.com/InitiativeDocuments/List-of-Qualified-Project-Sponsor-Applications-North-of-SONGS-to-Serrano-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 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 December 19, 2023, as described in Section 2.1 of this report. As also described in Section 2.1, the ISO validated all five 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 four project sponsors and their five 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 of SONGS-Serrano 500 kV Line project. Therefore, the ISO determined that no cure period was needed for the qualification phase pursuant to ISO Tariff Section 24.5.3.3. 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 February 9, 2024. Section 3 of this report describes the ISO's selection process for this project.

On April 8, 2024, the ISO posted on the ISO website a revised schedule extending the date for the completion of the competitive solicitation process for the North of SONGS-Serrano 500 kV Line 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 of SONGS-Serrano 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 Horizon West with regard to many aspects of the satisfaction of the selection factors. Consequently, references to Horizon West and its proposal in this report apply equally to both the Horizon West single circuit proposal and the Horizon West double circuit 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 of SONGS-Serrano 500 kV Line Project

The ISO evaluated five validated and qualified project sponsor applications for the North of SONGS-Serrano 500 kV Line project submitted by four project sponsors:

- CalGrid
- Horizon West, which submitted two proposals – referred to herein as the Horizon West single circuit proposal and the Horizon West double circuit proposal
- Lotus-SCE
- LS Power (CAL GRID)

All four entities are qualified and submitted strong, competitive applications supporting their proposals. As a result, the ISO had to make detailed distinctions among the four project sponsors and their 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. 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 develop, engineer, construct, operate, and maintain 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 provided a letter of financial support for the project sponsor financial obligations signed by an officer of BETP IV indicating that the financial guarantee would be provided prior to the close of the project's financings and that an equity commitment letter would be provided as required by lenders pursuant to the financings of the project. (F-2.2)

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. (F-2.1)

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 NEET and an indirect subsidiary of NextEra Energy, Inc. (NextEra). Horizon West indicated that Horizon West 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, Horizon West's ultimate parent, and its wholly owned subsidiary NEET are headquartered in Juno Beach, Florida, and NextEra's principal subsidiaries are Florida Power & Light Company (FPL) 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 FPL and its subsidiaries, including NEET and Horizon West. (A-5)

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 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 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-SCE

According to Lotus-SCE's proposal, Lotus is a Delaware corporation and private equity investment firm based in Greenwich, Connecticut that 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, and SCE is a California corporation and wholly owned subsidiary of Edison International, a public company, and SCE is one of the nation's largest investor-owned utilities. (A-1, A-5)

Lotus-SCE indicated that its project would be jointly sponsored by SCE and a special purpose limited liability entity 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-1)

Lotus-SCE indicated that Lotus and SCE are submitting a joint proposal whereby Lotus and SCE intend to execute transaction documents that would include certain agreements for jointly developing, financing, constructing, owning, operating, and maintaining the project. (Joint Bid Agreement)

Lotus-SCE indicated that Lotus would be funding 100% of the project costs through construction and that upon commissioning of the project SCE would purchase 100% of the project assets and own, maintain, and operate the project as a part of its existing transmission network and that Lotus would enter into a lease with SCE for 25% of the transfer capability in the project. (Joint Bid Agreement Annex B-4) Lotus-SCE indicated that Lotus' special purpose entity would contribute its leasehold interest in the project to the ISO and would earn a regulated rate of return through traditional ratemaking for its interest. (A-5)

Lotus-SCE indicated that SCE would provide operations and maintenance (O&M) services for the project once it is placed in service. (Joint Bid Agreement Annex B-2)

Lotus-SCE Access to Affiliate Financial Support

Lotus-SCE indicated Lotus would fund the project with debt and equity for the construction and operating period and would rely on existing funds or affiliated investment vehicles for financial backing of the project. Lotus-SCE indicated that the funds of LIF III and other affiliated investment vehicles would be available to support the construction of the project. (F-1)

Lotus-SCE indicated that SCE intends to finance 75% of the project by leveraging its own financial strength to finance, operate, and maintain the project. Lotus-SCE indicated that upon purchase and over the life of the project, SCE would finance the project consistent with SCE's authorized capital structure and various financing sources. (F-1, F-2, A-5)

Lotus-SCE provided a written parent guarantee, signed by an officer of Lotus 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) Lotus-SCE also indicated that LIF III would provide a guarantee to support the project's development, financing, and construction. (A-5)

LS Power (CAL GRID)

According to its proposal, LS Power (CAL GRID) is a Delaware limited liability company. LS Power (CAL GRID) indicated that through intermediate holding companies (LSP Transmission Holdings II 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. LS Power (CAL GRID) indicated that a similar ownership and organization structure has been used by LS Power for all of its transmission projects. (A-5)

LS Power (CAL GRID) indicated that it would utilize LS Power personnel to perform or manage all aspects of the project. LS Power (CAL GRID) also identified seven affiliates as particularly relevant to its proposal: (i) LS Power Grid California, LLC (LSPGC), a public utility in California that owns the Orchard static synchronous compensator (STATCOM), Fern Road gas-insulated switchgear (GIS)/STATCOM, Manning 500 kV Substation Project, Collinsville 500 kV Substation Project, Metcalf-San Jose B HVDC Project, and Newark-NRS HVDC Project competitively awarded by the ISO between 2020 and 2023, (ii) Cross Texas Transmission, LLC (Cross Texas), a transmission service provider in Texas, (iii) DesertLink, LLC (DesertLink), the owner of the Harry Allen-Eldorado 500 kV transmission line competitively selected by the ISO in 2016, (iv) Great Basin Transmission South, LLC, owner of a 75% interest in the One Nevada Transmission Line facilities in Nevada, (v) Republic Transmission, LLC, the owner of the Duff to Coleman 345 kV transmission line in Indiana competitively awarded by MISO 2016, (vi) Silver Run Electric, LLC (Silver Run), the owner of the Silver Run 230 kV Substation transmission line competitively awarded by PJM in 2014, and (vii) LS Power Grid New York Corporation I, the owner of the Gordon Road and Princetown 345 kV GIS substations and 345 kV transmission line in New York competitively awarded by NYISO in 2019. (A-5)

LS Power (CAL GRID) Access to Affiliate Financial Support

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

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

(L-1, L-4, E-1, E-2, E-3, E-4)

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. CalGrid indicated that its team possesses extensive experience in acquiring the required land rights for siting, constructing, and operating the project. (L-4)

CalGrid indicated its proposed route is approximately 35.1 miles long and between 150 feet and 200 feet wide, beginning from the proposed North of SONGS Substation (assumed to be in Orange County). CalGrid indicated that this route would require easements on both private and public lands, affecting several local government entities. (L-1)

CalGrid indicated it selected a route that utilized existing transmission corridors and paralleled existing transmission infrastructure to the maximum extent practicable. In doing so, CalGrid indicated that new risks to wildland fire ignition and potential hindrances to wildland fire fighting would be minimized by adding to existing rights-of-way that help minimize distance to ignitable sources. (L-1)

CalGrid indicated that the relocation of the assumed North of SONGS Substation site could increase the length of its proposed route and that it would develop alternative plans for adjustment of its proposed route and acquisition of land rights to the relocated substation site. (RFC response)

CalGrid indicated that it would acquire land rights from the City of Mission Viejo, City of Orange, Orange County, Orange County Harbors, Beaches, and Parks District, Santa Ana Mountains County Water District, Santa Margarita Water District, and private landowners. (E-1, E-2, E-3, E-4, L-1)

CalGrid provided a number of detailed mapbooks showing the proposed route, environmental constraints, and evaluated proposed routes. (Attachments L1_1, L1_2, L1_3)

3.4.2 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Horizon West indicated that it does not have any existing rights-of-way in the proposed project area but has taken steps to ensure rights-of-way acquisition and mitigate land related risks for the project. (L-4)

Horizon West indicated its proposed route is approximately 40 miles long, 150 feet to 250 feet wide, and would begin at the proposed North of SONGS Substation (assumed to be in U.S. Marine Corps Camp Pendleton, Department of Defense).

Horizon West indicated that its proposed route would minimize the risks of suburban opposition and undergrounding, avoid most private land, maximize co-location with existing transmission infrastructure, minimize impacts to sensitive biological, cultural, and recreational resources to the extent feasible, and entirely avoid the potentially fatal flaw constraint of the federally designated Trabuco Inventoried Roadless Area and the federally designated San Mateo Canyon Wilderness Area. (Executive summary)

For its single circuit proposal, Horizon West indicated that its proposed route would utilize a portion of the existing SCE easement for the final two miles into Serrano

Substation. In total, Horizon West indicated that its proposed route would require 960 total acres of rights-of-way with approximately 21 miles of the route located on land owned and maintained by Orange County. (L-1)

For its double circuit proposal, Horizon West indicated that its proposed route would utilize a portion of the existing SCE easement for the final two miles into Serrano Substation. In total, Horizon West indicated that its proposed route would require 1,200 total acres of rights-of-way with approximately 21 miles of the route located on land owned and maintained by Orange County. (L-1)

Horizon West indicated that its proposed route would run entirely through California Public Utilities Commission (CPUC)-designated High Fire Threat Districts and that any alternative that avoids CPUC-designated High Fire Threat Districts would cross through existing Orange County suburban development. Horizon West provided a map of the proposed route and the alternative segments overlaid with CPUC-designated Tier 2 and Tier 3 High Fire Threat Districts.

Horizon West indicated that, in the event of the relocation of the assumed North of SONGS Substation site, it would develop alternative plans for adjustment of its proposed route and acquisition of land rights to the relocated substation site. (RFC response)

Horizon West indicated that it would acquire land rights from the Department of Defense, Orange County, and private landowners. (E-1, E-2, E-3, E-4, L-1)

Horizon West provided a number of detailed mapbooks showing the proposed route, environmental constraints, and evaluated proposed routes. (Attachments L-1a, L-1b, L-1c)

3.4.3 Information Provided by Lotus-SCE

Lotus-SCE indicated that approximately 22 miles or more than 75% of the proposed route for the project would utilize SCE's existing electric utility rights-of-way and that 15.6 miles of these SCE controlled rights-of-way are vacant and would require no modifications or widening of the rights-of-way to accommodate the project. Lotus-SCE indicated that 6.45 miles of the SCE-owned rights-of-way would require reconfiguration of existing 66 kV circuits, as underbuild circuits, that would be collocated on the proposed 500 kV transmission line's structures. Lotus-SCE indicated that this collocation and maximization of the use of the existing rights-of-way would minimize the environmental and land use footprint of the project. (A-4)

Lotus-SCE provided documentation to verify the existing land rights. (L-1, L-4)

Lotus-SCE indicated its proposed route is approximately 28.7 miles long and would begin at the proposed North of SONGS Substation (assumed to be in Orange County). Lotus-SCE indicated it would acquire land rights from Orange County and private landowners. (E-1, E-2, E-3, E-4, L-1)

Lotus-SCE indicated that the proposed route would require the acquisition of approximately 6.45 miles of new easement distributed among five individual landowners as well as Orange County. Lotus-SCE asserted that this would be a relatively small number of landowners with which to conduct easement discussions and that this would be an advantage of its proposal. (P-4)

Lotus-SCE indicated that utilization of existing rights-of-way would also allow the re-use of existing access roads and lay down areas to avoid unnecessary additional land disturbance during construction as well as during the operation and maintenance of the facilities. (A-4)

Lotus-SCE indicated that the project intends to utilize a high temperature low sag (HTLS) conductor that would utilize a compact structure design to reduce new easement or existing rights-of-way width requirements. (A-4, T-1b)

Lotus-SCE indicated that the proposed route would traverse high-threat wildfire prone areas in SCE's territory with a high exposure to CPUC-designated Tier 3 High Fire Threat Districts. (Z-1)

Lotus-SCE provided a number of detailed mapbooks showing the proposed route, existing rights-of-way and infrastructure, environmental constraints, and evaluated proposed routes. (Attachments L-1.1, L-1.2)

Lotus-SCE indicated that, in the event of the relocation of the assumed North of SONGS Substation site, it would develop alternative plans for adjustment of its proposed route and acquisition of land rights to the relocated substation site. (RFC response)

3.4.4 Information Provided by LS POWER (CAL GRID)

LS Power (CAL GRID) indicated that it does not have any existing land rights to contribute to the project. (L-4)

LS Power (CAL GRID) indicated its proposed route would traverse 113 parcels and is 34 miles long, generally 200 feet wide, and would begin at the proposed North of SONGS Substation (assumed to be in U.S. Marine Corps Camp Pendleton, Department of Defense).

LS Power (CAL GRID) indicated that more than half of the rights-of-way (roughly 56%) required for its proposed route would be on lands owned by the United States government or Orange County. (A-4)

LS Power indicated that parts of the project are located in high fire threat areas. (C-7)

LS Power (CAL GRID) indicated that the relocation of the assumed North of SONGS Substation site could increase the length of its proposed route and that it would develop alternative plans for adjustment of its proposed route and acquisition of land rights to the relocated substation site. (RFC response)

LS Power (CAL GRID) indicated it would acquire land rights from Department of Defense, U.S. Forest Service, and private landowners. (E-1, E-2, E-3, E-4, L-1)

LS Power (CAL GRID) provided a number of detailed mapbooks showing the proposed route, environmental constraints, and evaluated proposed routes. (Attachments L-1A-H)

3.4.5 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.

The proposals of CalGrid, Horizon West, and LS Power (CAL GRID) indicated that they did not have existing land rights along the route. Lotus-SCE indicated it intends to use approximately 22 miles of existing land rights for this project. The ability for Lotus-SCE to utilize existing easements would reduce the effort and cost to acquire the necessary land rights as well as provide increased assurance that the proposed transmission line would be constructed as proposed.

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 from Lotus-SCE is better than the proposals from CalGrid, Horizon West, and LS Power (CAL GRID), among which there is no material difference, 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, one in California. (Prior Projects and Experience Workbook).

3.5.2 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

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, two in California. (Prior Projects and Experience Workbook).

3.5.3 Information Provided by Lotus-SCE

Lotus-SCE 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 18 transmission line projects, ten in California. (Prior Projects and Experience Workbook).

3.5.4 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) 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).

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

(L-4)

3.5.5 Information Provided by CalGrid

CalGrid indicated it does not have any existing easements to be utilized by this project nor does it anticipate any related additional costs. (L-4)

3.5.6 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Horizon West indicated it does not have any existing easements to be utilized by this project nor does it anticipate any related additional costs. (L-4)

3.5.7 Information Provided by Lotus-SCE

Lotus-SCE indicated approximately 75% of the 28.7-mile proposed route is within existing easements. (A-4)

Lotus-SCE indicated approximately 15.6 miles of the proposed route is within a vacant easement while 6.45 miles is in an easement for an existing 66 kV transmission line that would be reconfigured to an underbuilt position on the proposed 500 kV transmission line. (L-4)

Lotus-SCE indicated that, while there is always a risk that an underlying property owner may argue the overburdening of an easement by the installation of additional cabling, facilities, or appurtenances on a structure within an easement, SCE believes that the risk of a successful overburdening challenge to the addition of lower levels of transmission systems within a long-standing right-of-way is extremely low. (L-4)

3.5.8 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) indicated it does not have any existing easements to be utilized by this project nor does it anticipate any related additional costs. (L-4)

3.5.9 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 the project is located in California and such experience will facilitate the timely, efficient, and effective undertaking of the project.

All four project sponsors and their teams have experience in acquiring land rights. Regarding experience in the acquisition of land rights, the ISO has determined that there is no material difference among the proposal of CalGrid, the two proposals of Horizon West, and the proposal of Lotus-SCE, and that their proposals are slightly better than LS Power (CAL GRID)'s proposal because LS Power (CAL GRID)'s team has less U.S. experience and has not demonstrated any land rights acquisition experience in California.

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.

CalGrid, Horizon West, and LS Power (CAL GRID) indicated that they do not have any existing easements to be utilized by this project and as such do not anticipate any related additional costs.

Lotus-SCE indicated that the risk of a successful overburdening challenge to the addition of lower levels of transmission systems within a long-standing right of way is extremely low. The information provided by Lotus-SCE regarding incremental costs of using SCE's existing rights-of-way indicated that the cost savings associated with using the existing rights-of-way would outweigh any incremental costs.

As a result, the ISO has determined that there is no material difference among the five proposals regarding this component of the factor (potential for incremental costs).

Overall Comparative Analysis

Regarding the two components of this factor, as described above, the ISO has determined that, regarding the first component (experience in the acquisition of land rights), there is no material difference among the proposal of CalGrid, the two proposals of Horizon West, and the proposal of Lotus-SCE, and all of these proposals are slightly better than LS Power (CAL GRID)'s proposal, and regarding the second component (incremental cost) there is no material difference among the five proposals of the four project sponsors.

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 proposal of CalGrid, the two proposals of Horizon West, and the proposal of Lotus-SCE and their proposals are slightly better than LS Power (CAL GRID)'s proposal 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, 2029, which is 65 months earlier than the ISO's latest in-service date of June 1, 2034. CalGrid indicated that there is one month 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 for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Horizon West's proposed project schedule included a planned in-service date of December 15, 2031, which is 29.5 months earlier than the ISO's latest in-service date of June 1, 2034.

Horizon West also provided measures it could take if faced with unanticipated delays, such as accelerating its permitting schedule, expediting equipment orders using NextEra's buying power, and expediting its construction process by increasing staffing. (P-3)

3.6.3 Information Provided by Lotus-SCE

Lotus-SCE's proposed project schedule included a proposed in-service date of January 28, 2032, which is 29 months earlier than the ISO's latest in-service date of June 1, 2034.

Lotus-SCE provided a list of actions that it could take to avoid permitting, land acquisition, and construction delays. These included immediate mobilization of the team to begin work, maintaining early and ongoing communication with agency staff, expediting ordering of long-lead time items, providing incentive to construction contractors for early completion, and implementing a no-linear construction plan, among others. Lotus-SCE indicated that if construction schedule delays were to occur, it would take actions such as pre-assembling specific structures or components, such as lattice tower sections, within existing SCE substations or in the project sponsor's laydown areas ahead of the start of other overhead construction activities. Lotus-SCE also indicated that it would add construction crews to recover schedule delays or add standby crews for foundation installation, tower erection, and wire stringing, depending on the task impacted the most by the schedule delay. (P-3)

3.6.4 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID)'s proposed project schedule included a target in-service date of December 16, 2032, which is 17.5 months earlier than the ISO's latest in-service date of June 1, 2034.

LS Power (CAL GRID) indicated that its project schedule includes over 12 months of float. (P-3)

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

Ability to Meet Schedule

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

3.6.5 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 12 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 would 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 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 all team members the means to populate a risk log covering their 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 the commercial operation date. (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 the 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. CalGrid indicated that its management structure is designed to ensure accountability and responsibility across all major functional areas. (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)

CalGrid indicated that it has formed a project advisory team that would be 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, the 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 it has faced environmental permitting risks and challenges similar to those foreseeable with the project's proposed route, including transmission line development through urbanized areas, development of habitat conservation plans under the endangered species act, development of magnetic field management plans, and managing mitigation monitoring, reporting, and compliance programs for large-scale utility infrastructure that traverses multiple permitting jurisdictions. (P-5)

CalGrid indicated that it would acquire land rights from the City of Mission Viejo, City of Orange, Orange County, Orange County Harbors, Beaches, and Parks District, Santa Ana Mountains County Water District, Santa Margarita Water District, and private landowners. (E-1, E-2, E-3, E-4, L-1)

CalGrid indicated that the relocation of the assumed North of SONGS Substation site could increase the length of its proposed route and that it would develop alternative plans for adjustment of its proposed route and acquisition of land rights to the relocated substation site. (RFC response)

CalGrid indicated that it would be sponsoring proposals for two other ISO competitive solicitation projects: the North Gila-Imperial Valley #2 500 kV transmission line project and the Imperial Valley-North of SONGS 500 kV transmission line and substation

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 the additional project awards 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 isn't 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 (ROE) by 2.5 basis points for every full calendar month that the project's energization is delayed beyond June 1, 2034, up to a total of 30 basis points. (P-4)

3.6.6 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Past Performance
Horizon West provided schedule performance for 54 200 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 48 of the 54 transmission line projects were completed on or before schedule and that six 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 in permitting, public service commission approval, and power purchase agreement 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 begin working on the tasks and milestone deliverables identified within the project execution plan using several 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 its 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, O&M, tribal relations, FERC, and legal matters. (P-2)

Horizon West indicated that the 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 23 high-level sets 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 changes to transmission routing, delay in the process of acquiring a certificate of public convenience and necessity (CPCN) from the CPUC, and construction cost risk and in each case identified mitigation measures. (P-4)

Horizon West indicated that it has faced environmental permitting risks similar to those foreseen for the project and provided example of projects that required extensive stakeholder engagement to mitigate siting and permitting risks associated with a project crossing Tribal land, environmental challenges due to traversing protected waterways, and a requirement for schedule compression due to delays in permitting. (P-5)

Horizon West indicated that its proposed route would minimize the risks of suburban opposition and undergrounding, avoid most private land, maximize co-location with existing transmission infrastructure, minimize impacts to sensitive biological, cultural, and recreational resources to the extent feasible, and entirely avoid the potentially fatal flaw constraint of the federally designated Trabuco Inventoried Roadless Area and the federally designated San Mateo Canyon Wilderness Area. (Executive summary)

For its double circuit proposal, Horizon West indicated that its proposed route would utilize a portion of the existing SCE easement for the final two miles into Serrano Substation. In total, Horizon West indicated that its proposed route would require 1,200 total acres of rights-of-way with approximately 21 miles of the route located on land owned and maintained by Orange County. (L-1)

Horizon West indicated that, in the event of the relocation of the assumed North of SONGS Substation site, it would develop alternative plans for adjustment of its proposed route and acquisition of land rights to the relocated substation site. (RFC response)

Horizon West indicated that it would acquire land rights from the Department of Defense, Orange County, and private landowners. (E-1, E-2, E-3, E-4, L-1)

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 no exclusions for delays and would be responsible for the full cost of inflation caused by any delays under its cost containment. (P-3)

3.6.7 Information Provided by Lotus-SCE

Past Performance
Lotus-SCE provided schedule performance for eight 200 kV or above transmission line projects that were completed or in final development in the past ten years in the U.S. and internationally, along with their planned and actual in-service dates. The information provided by Lotus-SCE indicated that four of the eight transmission line projects were completed on or before schedule. The information provided by Lotus-SCE indicated that three projects were delayed by two months due to delays in the vendor selection process, environmental permits, and asbestos abatement and one project that is the late stages of development is delayed by four years due to multiple reasons that Lotus-SCE indicated were explained to the ISO in quarterly reports. (Prior Projects and Experience Workbook).

Project Management and Team
Lotus-SCE indicated that at the inception of the project, it would establish a comprehensive project plan that would outline the scope, objectives, deliverables, and milestones for the project. Lotus-SCE also indicated that the plan would include a detailed schedule, breaking down the project into manageable tasks with clear dependencies and deadlines. (P-1)

Lotus-SCE indicated that through its contractors, it would develop plans that include preconstruction, coordination with SCE, FERC filings, public outreach plan, and SCE interconnection applications. (P-1)

Lotus-SCE 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-SCE indicated that its project development team, led by Lotus-SCE and comprised of specific members from both Lotus-SCE and SCE, would be responsible for developing, siting, permitting, licensing, financing, constructing, and commissioning. (P-2)

Lotus-SCE indicated that the project management team comprised of representatives from both SCE and Lotus would be responsible for day-to-day and long-term planning

and strategy, as well as overseeing the activities performed by the various contractors. (P-2)

Lotus-SCE also indicated the project executive team, comprised of equal members from both SCE and Lotus, would provide governance, oversight, and support to the project management team. (P-2)

Lotus-SCE provided the names of the key members of the project executive and project development teams. Lotus-SCE 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-SCE provided the resume of the individual who would be the project manager for this project. (A-5)

Risk Management

Lotus-SCE provided a list of major risks and obstacles that included not knowing the location and schedule for development of North of SONGS Substation, line siting and land acquisition, environmental permitting, cost containment strategy, and its ability to develop multiple projects simultaneously. Lotus-SCE also provided mitigation measures for these risks and obstacles. (P-4)

Lotus-SCE indicated that it has faced environmental permitting risks and challenges similar to what it expects for this project and provided an example project where it had to submit multiple notices to mitigate delays in obtaining permits and another project where it had to implement mitigation measures for cultural and paleontological resources uncovered during pre-construction surveys. (P-5)

Lotus-SCE indicated that the proposed location of the North of SONGS Substation (if Lotus-SCE were not selected as the approved project sponsor for the Imperial Valley-North of SONGS project), as well as the completion date for the substation, would have an impact on this project. (P-4)

Lotus-SCE indicated that the proposed route would require the acquisition of approximately 6.45 miles of new easements distributed among five individual landowners as well as Orange County. Lotus-SCE asserted that this would be a relatively small number of landowners with which to conduct easement discussions and that this would be an advantage of its proposal. (P-4)

Lotus-SCE also indicated that its team has had significant success with commercial negotiation of land requirements for a similar project in California. (P-4)

Lotus-SCE indicated that the proposed project route would minimize the total of new rights-of-way easements required by siting more than 75% of the length of the project within existing SCE-controlled rights-of-way and that the use of existing rights-of-way would allow for more certainty in the land acquisition stage of project development due to less time being necessary for land acquisition efforts. (P-4)

Lotus-SCE 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)

3.6.8 Information Provided by LS Power (CAL GRID)

Past Performance
LS Power (CAL GRID) 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 LS Power (CAL GRID) indicated that seven of the eight projects were completed on or before the planned in-service date. The information provided by LS Power (CAL GRID) 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 transmission owner's facilities. LS Power (CAL GRID) 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
LS Power (CAL GRID) 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, LS Power (CAL GRID) indicated that its risk management process is an iterative cycle of identification, assessment, mitigation, and monitoring. (P-1)

Regarding schedule management, LS Power (CAL GRID) 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, LS Power (CAL GRID) 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, LS Power (CAL GRID) indicated that it would cover all aspects of the project and ensure the project meets all requirements of the solicitation and industry codes and comply with all applicable laws, regulations, standards, guidelines, criteria, permits, and approvals management. (P-1)

Regarding issues management, LS Power (CAL GRID) indicated that it would follow a seven-step process for the management of issues. (P-1)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) 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)

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

LS Power (CAL GRID) 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)

LS Power (CAL GRID) provided the resume of the individual who would be the project director for this project. (A-5)

Risk Management

LS Power (CAL GRID) 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 LS Power (CAL GRID). Each risk item also included a mitigation measure. (P-4)

LS Power (CAL GRID) particularly identified major risks to the project, such as interest rate increases, equipment and materials cost increases, undergrounding requirements, wildfire risk, North of SONGS Substation location, and land acquisition costs and provided the mitigation measures that it has adopted. (P-4)

LS Power (CAL GRID) indicated that its affiliates have extensive experience with federal review and permitting processes, including National Environmental Policy Act (NEPA) reviews, Bureau of Land Management rights-of-way grants, endangered species act compliance, U.S. Fish and Wildlife Service biological opinions, and various other federal and state agency approvals. LS Power (CAL GRID) also provided examples of its affiliate's work experience with the CPUC on two recent substation projects. (P-5)

LS Power (CAL GRID) indicated that more than half of the rights-of-way (roughly 56%) required for its proposed route would be on lands owned by the United States government or Orange County. (A-4)

LS Power (CAL GRID) indicated it would acquire land rights from Department of Defense, U.S. Forest Service, and private landowners. (E-1, E-2, E-3, E-4, L-1)

LS Power (CAL GRID) indicated that the relocation of the assumed North of SONGS Substation site could increase the length of its proposed route and that it would develop alternative plans for adjustment of its proposed route and acquisition of land rights to the relocated substation site. (RFC response)

LS Power (CAL GRID) 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
LS Power (CAL GRID) indicated that its proposal includes a schedule completion incentive penalty with a reduction in ROE of 2.5 basis points for every full calendar month that the project is delayed beyond December 31, 2033, up to a total of 30 basis points. (P-4)

3.6.9 ISO Comparative Analysis

Comparative Analysis of Proposed Schedule

All five proposals include schedules that meet the latest in-service date of June 1, 2034, specified in the ISO Functional Specifications.

All five proposals indicate that the project sponsor could complete the project by the latest in-service date of June 1, 2034, specified in the ISO Functional Specifications if the start date were to be delayed by six months.

The ISO has determined that all five 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 have 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. Consequently, the ISO has chosen to evaluate the proposals based on the project sponsor's ability or likelihood of achieving the latest in-service date specified in the ISO Functional Specifications.

The ISO has determined that the schedules in all five proposals of the four 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.

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 sponsor understand the risks it would need to mitigate in order to complete the project by the latest in-service date of June 1, 2034, specified in the ISO Functional Specifications.

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 five proposals of the four 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 that were at voltage levels 200 kV or above and completed in the past ten years. CalGrid provided information on 12 transmission line projects, Horizon West for 53 projects, and Lotus-SCE and LS Power (CAL GRID) for eight projects each.

Regarding completing projects on schedule, the ISO considers that CalGrid, Horizon West, and LS Power (CAL GRID) have demonstrated a reasonable degree of success in meeting previous project schedules, although some project sponsors demonstrated more success than others did. 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 LS Power (CAL GRID)'s projects were completed on or ahead of schedule. Lotus-SCE's schedule performance information showed that 50% of its prior projects were completed on or ahead of schedule.

The schedule performance information provided by CalGrid, Horizon West, and LS Power (CAL GRID) showed an average delay of zero, one, and three months respectively, for prior projects that were not completed on schedule. The schedule performance information provided by Lotus-SCE for three prior projects showed an average delay of two months, in addition to one project that was delayed by almost four years due to multiple reasons that Lotus-SCE indicated were explained to the ISO in quarterly reports.

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 LS Power (CAL GRID) in completing previous projects on schedule and considers their experience to be better than the experience described by Lotus-SCE.

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

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-SCE, and LS Power (CAL GRID).

Project Risk and Management
All four project sponsors included a thorough approach to identifying risks to the project schedule and possible mitigations for those risks. All project sponsors confirmed their

ability to work on multiple projects simultaneously, if awarded more than one. All project sponsors indicate that they have taken steps to reduce schedule risk.

Lotus-SCE indicated that it already possesses approximately 75% of the required rights-of-way and will only need to obtain new land rights from a relatively few number of landowners. This reduced scope narrows the likelihood of land acquisition and significant permitting delays, thereby reducing project schedule risk.

The proposals from CalGrid, Horizon West, and LS Power (CAL GRID) indicated that they do not have any existing land rights and will need to acquire all of the required land rights for the project. The areas identified in each of these proposals included environmentally sensitive areas in proximity to suburban developments.

Horizon West indicated that it would require the use of two miles of existing SCE rights-of-way. In addition, the proposed routes identified in associated transmission line mapbooks included in the proposals of CalGrid and LS Power (CAL GRID) showed the proposed 500 kV line in the vicinity of Serrano Substation routed within the existing SCE rights-of-way. This poses a siting risk because the ISO could not identify a process for a third party transmission developer to force an incumbent utility to share or provide access to its transmission rights-of-way.

All project sponsors indicated that they had identified and evaluated additional substation sites in the event their assumed site for the proposed North of SONGS Substation were to be relocated. The ISO determined that these sites could be used if the assumed sites were not available. The risks of each of these proposals are different in nature, but the ISO does not consider any of these risks to be so much greater or smaller in magnitude that it finds a material difference among the project sponsors' proposals regarding these various substation site relocation risks.

Based on the foregoing analysis, the ISO has determined that, regarding project risk and management, the proposal from Lotus-SCE is better than the proposals from CalGrid, Horizon West, and LS Power (CAL GRID), among which there is no material difference.

Financial Incentive

Regarding a financial incentive to complete the project by the latest in-service date in the ISO Functional Specifications, LS Power (CAL GRID)'s proposal includes an incentive that provides for a reduction in ROE of 2.5 basis points (up to a total of 30 basis points) for every full calendar month that the project is delayed beyond December 31, 2033, whereas CalGrid's proposal includes an incentive that provides for a reduction in ROE of 2.5 basis points (up to a total of 30 basis points) for every full calendar month that the project is delayed beyond June 1, 2034.

Regarding an on-time completion financial incentive (project completion on or before the latest ISO in-service date), the ISO has determined that the proposal of LS Power (CAL GRID) is better than the proposal of CalGrid because LS Power (CAL GRID)'s proposal includes an incentive that would go into effect on an earlier date than the incentive in CalGrid's proposal. The ISO has also determined that the proposals of LS Power (CAL GRID) and CalGrid are better than both of the proposals of Horizon West and the proposal of Lotus-SCE because Horizon West and Lotus-SCE did not include any form of financial schedule incentive.

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

The ISO has determined that the proposal from Lotus-SCE is better than the proposals from CalGrid, Horizon West, and LS Power (CAL GRID), among which there is not material difference, regarding project risk and management approaches.

The ISO has determined that there is no material difference among the proposals of CalGrid, Horizon West, and LS Power (CAL GRID) and they are better than Lotus-SCE's proposal regarding the timely completion of projects over the past ten years.

The ISO has determined that regarding offering an on-time completion financial incentive, LS Power (CAL GRID)'s proposal is better than CalGrid's proposal and both of these proposals are better than the proposals of Horizon West and Lotus-SCE, and that there is no material difference among the proposals of Horizon West and Lotus-SCE.

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, LS Power (CAL GRID)'s proposal is better than CalGrid's proposal, which is better than Horizon West's two proposals and Lotus-SCE's proposal, among which there is no material difference, 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-SCE, and LS Power (CAL GRID) 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, LS Power (CAL GRID)'s proposal is better than CalGrid's proposal, which is better than Horizon West's two proposals and Lotus-SCE's proposal, among which there is no material difference, 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, LS Power (CAL GRID)'s proposal is better than CalGrid's proposal, which is better than Horizon West's two proposals and Lotus-SCE's proposal, among which there is no material difference, 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 Collinsville 500/230 kV Substation project will cost hundreds of millions of dollars and require significant financial resources. It is among the costliest projects the ISO has opened for competitive solicitation.

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, which 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 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.

[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.

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.

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 primarily higher 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-11, F-12)

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. CalGrid indicated that the equity commitment would be irrevocable, thereby providing assurances that capital would 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-2.1)

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 the financial guarantee would be provided prior to the close of the project's financings and that an equity commitment letter would be provided as required by lenders pursuant to the financings of the project. (F-2.2)

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+

CalGrid provided financial strength comparison graphs showing CalGrid's financial strength versus select peers and debt issuers. (F-6)

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 for Horizon West Single Circuit and Horizon West Double Circuit Proposals

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 higher 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-2e, F-2f)

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-2f)

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 audited 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-SCE

Project Financing Experience

Lotus-SCE provided a list of transmission and substation projects that Lotus has financed in the past ten years. (Prior Projects and Experience Workbook) Lotus-SCE provided information regarding financing by Lotus for representative projects that were similar in type to this project. Lotus-SCE provided information showing financing for three projects that were primarily higher in cost than the expected cost of this project. Lotus-SCE indicated that the representative projects were financed using project-specific non-recourse construction and permanent debt sourced from institutions. (F-11) Lotus-SCE indicated that Lotus has raised billions of dollars of equity capital related to the development and construction of renewable assets, such as wind farms, solar farms, renewable natural gas projects, energy storage, and biomass power plants. (A-5)

Lotus-SCE also provided information showing financing of SCE projects that were primarily higher in cost than the expected cost of this project. Lotus-SCE indicated that the representative projects were financed through the capital markets based on the needs of SCE's overall capital investment program. (F-11, Prior Projects and Experience Workbook)

Project Financing Proposal

Lotus-SCE indicated that Lotus and SCE are submitting a joint proposal whereby Lotus and SCE intend to execute transaction documents that would include certain agreements for jointly developing, financing, constructing, owning, operating, and maintaining, the project.(Joint Bid Agreement)

Lotus-SCE indicated and that a special purpose entity would be created as an affiliate of Lotus for the project. Lotus-SCE indicated that if selected as the approved project sponsor, the special purpose entity would be established to develop, permit, finance, construct, and commission the project, which would be managed by Lotus through LIF III and affiliated investment vehicles. (F-1, F-2, A-5)

Lotus-SCE indicated that during the development and construction stage of the project Lotus would fund 100% of the development and construction costs. (Joint Bid Agreement Annex B-1)

Lotus-SCE indicated it would negotiate a transaction document that would include a term that if at any time during development or construction of the project Lotus determines that the project is unlikely to proceed due to a material adverse event then SCE, in response to a notice sent by Lotus, would provide its pro rata share of the percentage interest of capital funding. (Joint Bid Agreement Annex B-1)

Lotus-SCE indicated that, upon commissioning of the project, SCE would purchase 100% of the project assets and concurrently Lotus would enter into a lease with SCE for 25% of the transfer capability in the project. (Joint Bid Agreement Annex B-4)

Lotus-SCE 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-SCE indicated that Lotus-SCE would service the debt associated with the design, procurement, construction, and operations of the project. (A-5, F-5)

Lotus-SCE 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 of the construction and operating phases of the project. (F-1, F-12)

Lotus-SCE indicated that it has received a letter of interest and support confirming WAPA's intent to collaborate with the project proponent 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) Lotus also provided a parent guarantee letter for financial backing of the project. (F-2)

Financial Resources

Lotus-SCE indicated Lotus would fund the project with debt and equity for the construction and subsequent operating period and would rely on existing funds or affiliated investment vehicles for financial backing of the project. Lotus-SCE indicated that the funds of LIF III and other affiliated investment vehicles would be available to support the construction of the project.

Lotus-SCE indicated that SCE intends to finance 75% of the project by leveraging its own financial strength to finance, operate, and maintain the project. Lotus-SCE indicated that upon purchase and over the life of the project, SCE would finance the project consistent with SCE's authorized capital structure and various financing sources. (F-1, F-2, A-5)

Lotus-SCE provided a written parent guarantee, signed by an officer of Lotus, 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) Lotus-SCE also indicated that LIF III would provide a guarantee to support the project's development, financing, and construction needs. (A-5)

Lotus-SCE indicated that financial recourse during the construction of the project would be limited to LIF III, but that Lotus-SCE would have sufficient capital through LIF III and investment affiliates to support the construction of the project and any potential liabilities. (F-2)

Lotus-SCE 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)

Total assets
Total liabilities
Net worth

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

Total assets
Total liabilities
Net worth

Credit Ratings

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

Lotus-SCE indicated that SCE has been rated investment grade by all three credit rating agencies. Lotus-SCE provided the following credit ratings and associated credit rating reports for SCE: (F-6)

Moody's A2
S&P A-
Fitch A-

Financial Ratio Analysis

Lotus-SCE did not provide audited financial statements or financial ratios for LIF III. Lotus-SCE provided a letter in lieu of financial statements for LIF III, which Lotus-SCE asserted demonstrates that LIF III could meet the financial requirements of the project. (F-3)

The ISO calculated the following financial ratio based on the letter in lieu of financial statements for LIF III provided by Lotus-SCE:

Total assets/total projected capital costs

Lotus-SCE provided the following financial ratios based on SCE's audited financial statements: (F-9, F-10)

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

3.7.4 Information Provided by LS Power (CAL GRID)

Project Financing Experience

LS Power (CAL GRID) 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) LS Power (CAL GRID) provided information regarding LS Power's financing of representative projects that were similar in type to, but primarily less in cost than, the expected cost of this project. LS Power (CAL GRID) 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) LS Power (CAL GRID) 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

LS Power (CAL GRID) indicated it is relying on its parent LS Power to satisfy the financial criterion for this project. LS Power (CAL GRID) indicated that LS Power intends to access the debt markets to lead placement of limited-recourse financing at LS Power (CAL GRID) to support the construction and long-term operation of the project. LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated that under the terms of the limited-recourse financing, LS Power (CAL GRID)'s lenders would not have recourse to LS Power (CAL GRID)'s parent company, LS Power, but lenders would have access to LS Power (CAL GRID) specific assets, and under an irrevocable equity commitment, they would have recourse to LS Power (CAL GRID)'s committed equity. LS Power (CAL GRID) 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. LS Power (CAL GRID) 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) LS Power (CAL GRID) indicated that it would convert debt used during development and construction or issue new long-term financing to support operations. (F-5)

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

LS Power (CAL GRID) 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

LS Power (CAL GRID) 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-2)

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

Total assets
Total liabilities
Net worth

Credit Ratings

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

Financial Ratio Analysis

LS Power (CAL GRID) 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 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 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 has 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 has 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

CalGrid provided information showing financing of multiple projects of similar type but primarily higher in cost than the expected cost of this project. Horizon West provided information showing financing of transmission projects of similar type but higher in cost than the expected cost of this project. Lotus-SCE provided information for Lotus showing the financing of transmission projects that were of similar type but primarily higher in cost than the expected cost of this project, and Lotus-SCE provided information for SCE showing the financing of transmission projects that were similar in type but primarily higher in cost than the expected cost of this project. LS Power (CAL GRID) provided information showing financing of multiple projects of similar type but primarily less in cost that the expected cost of this project. 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, Lotus-SCE, and LS Power (CAL GRID). Although CalGrid and LS Power (CAL GRID) identified less transmission project financing experience than Horizon West, their financing experience exceeded the experience identified by Lotus-SCE for Lotus, which is responsible for financing of the construction of its project, during the past ten years.

Although Horizon West demonstrated more transmission project financing experience than CalGrid, Lotus-SCE, and LS Power (CAL GRID) in the past ten years, and CalGrid and LS Power (CAL GRID) demonstrated more transmission project financing experience than Lotus-SCE identified for Lotus in the past ten years, the ISO has concluded that CalGrid, Lotus-SCE, and LS Power (CAL GRID) sufficiently demonstrated their ability to secure project financing for this project. Consequently, the ISO considers the project financing experience of all four project sponsors for their five 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 intend to 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. Debt will be provided directly through the existing capital 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.

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

As an alternative to sourcing financing from the capital markets, CalGrid, Horizon West, Lotus-SCE, and LS Power (CAL GRID) 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-SCE received a letter of interest and support confirming WAPA's interest in leading a financing to support a bid by the project proponent 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 four 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. All 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 that are providing the financial support for the project also provided either a letter of guarantee or financial assurance to support the financial obligations of the project. Strength in this factor can help minimize the financial risk that a project may not be completed.

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 LS Power (CAL GRID)'s parent company, LS Power, which is stronger than Lotus-SCE's identified affiliate company, LIF III. Lotus-SCE indicated that if at any time during development or construction of the project Lotus determines that the project is unlikely to proceed due to a material adverse event, then Lotus would request that SCE provide a true-up capital funding for the project. However, based on the limited information provided, the ISO does not consider Lotus' request for SCE's true-up capital funding for the project by SCE to be a binding commitment by SCE to fund the project. Consequently, the ISO focused its analysis of the financial strength of Lotus-SCE on the strength of LIF III as the source of the financial resources for the construction phase of the project.

The ISO also calculated a tangible net worth for the parent companies of three of the project sponsors and has concluded that the parent companies of CalGrid and Horizon West showed a higher tangible net worth than the parent company of LS Power (CAL GRID) has shown over the past five years. Lotus-SCE did not provide sufficient information for the ISO to calculate a tangible net worth for Lotus; thus, the ISO was unable to compare Lotus-SCE to the other project sponsors regarding this measure of financial strength for the development and construction phase of the project. The ISO determined that for the operations phase the tangible net worth of SCE is comparable to that of the other project sponsors, although the ISO considers that of lesser importance than the financial resources of Lotus for the development and construction of the project.

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. Based on the foregoing analysis of the financial resources of the project sponsors, including their tangible net worth and the assets of their parents or affiliates, the ISO has concluded that the proposals of CalGrid and Horizon West are the strongest in this regard, followed by LS Power (CAL GRID)'s proposal and then Lotus-SCE's proposal. The ISO considers Lotus-SCE and LS Power (CAL GRID) 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-SCE for the development and construction phase of the project, the ISO considers LS Power (CAL GRID) and its proposal to be stronger regarding this particular measure of financial strength than Lotus-SCE and its proposal.

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.

Three of the project sponsors, CalGrid, Horizon West, and SCE of Lotus-SCE have parent or affiliate companies that are public and all 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.

Although CalGrid's and Horizon West's individual credit 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. LS Power (CAL GRID)'s parent LS Power and the affiliate companies of Lotus identified by Lotus-SCE 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. SCE is rated an investment grade company, to the extent Lotus-SCE needs credit to obtain funding for the operations phase of the project.

In addition to available credit ratings, the ISO also used Moody's Analytics Estimated Default Frequency (EDF) reports 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

and equivalent ratings were available for three of the four parent or affiliate companies of the project sponsors and also for SCE of Lotus-SCE for each of the past five years.

The EDF scores of the parent companies of CalGrid and Horizon West were lower than LS Power (CAL GRID)'s parent company's EDF scores for the past five years.

Lotus-SCE did not provide sufficient information to generate the EDF report or equivalent ratings for Lotus' affiliate companies; thus, the ISO was unable to compare Lotus to the other project sponsors regarding these two measures of financial strength for the development and construction phase of the project. The information provided by Lotus-SCE regarding SCE's EDF scores and equivalent ratings indicated that SCE has sufficient credit to ensure the ability of Lotus-SCE to meet its obligations during the operations phase of the project.

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 LS Power (CAL GRID). 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 slight differences in the EDF scores of LS Power (CAL GRID) compared to CalGrid and Horizon West, as discussed above, which the ISO does not consider material to this comparison of the creditworthiness of these project sponsors. As noted, the ISO was unable to compare Lotus-SCE to the other project sponsors regarding this consideration for the development and construction phase of the project.

Financial Ratio Analysis

CalGrid, Horizon West, and LS Power (CAL GRID) provided audited financial statements for the past five years for their parent companies. Based on this information, CalGrid, Horizon West, and LS Power (CAL GRID) provided interest and debt coverage, debt to capital, and total assets to total projected capital costs 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, or individually backed project sponsor 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 proposals of CalGrid, Horizon West, and LS Power (CAL GRID) and their parent companies, they 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 LS Power (CAL GRID)'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, debt to capital ratios, and total assets to total projected capital costs ratios of CalGrid and Horizon West better than LS Power (CAL GRID)'s financial ratios for those measures. Lotus-SCE did not provide information for Lotus 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. The ISO was unable to calculate financial ratios other than total assets to total projected capital costs for Lotus-SCE for the development and construction phase of the project, and thus the ISO was unable to compare Lotus-SCE and to the other project sponsors regarding this measure of financial strength for the development and construction phase of the project. Lotus-SCE did provide information for interest and debt coverage, debt to capital, and total assets to total projected capital costs ratios for SCE in its proposal that showed that Lotus-SCE would have no risk of extensive financial leverage during the operations phase of the project because SCE's debt obligations do not exceed its capital balance. However, the ISO considers the financial ratios of SCE for the operations phase of the project of lesser importance than the lack of financial ratios for Lotus for the construction phase of the project.

As discussed above, the ISO considers CalGrid and Horizon West to have better financial ratios than LS Power (CAL GRID), and the ISO was unable to calculate financial ratios for Lotus-SCE for the development and construction phase of the project. As a result, the ISO considers the proposals of CalGrid and Horizon West to be stronger than the proposal of LS Power (CAL GRID), and the ISO is unable to compare these proposals to Lotus-SCE's proposal 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 LS Power (CAL GRID) and Lotus-SCE in the area of financial resources and considers LS Power (CAL GRID) to have an advantage over Lotus-SCE in this area. The ISO considers CalGrid and Horizon West to have an advantage over LS Power (CAL GRID) in the area of credit ratings and EDF and in the area of financial

ratio analysis. The ISO is unable to compare Lotus-SCE to the other project sponsors regarding credit ratings and EDF and regarding financial ratio analysis for the development and construction phase of the project.

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 among CalGrid and its proposal and Horizon West and its two proposals, and they are better than LS Power (CAL GRID) and its proposal, which is slightly better than Lotus-SCE and its proposal, 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 it would submit permit applications to the following agencies:

Expected Federal permits:

- U.S. Army Corps of Engineers - Clean Water Act Section 404.
- U.S. Fish and Wildlife Service - Endangered Species Act Section 7.
- Federal Aviation Administration (FAA) - Consultation for flight paths near civilian airports and helicopter use.
- Bureau of Alcohol, Tobacco, and Firearms - Explosive user permit. Environmental Protection Agency - Comprehensive environmental response, compensation, and liability act phase 1 review.

Expected California permits:

- CPUC CPCN/CEQA review.
- Regional Water Quality Control Board - Water discharge permit.
- California Department of Fish and Wildlife - Section 2081 incidental take permit and 2081.1 consistency with federal species, mitigation plan for rare plants, lake and streambed alteration permit.

- California State Historic Preservation Office - Section 106 consultation.
- Caltrans - Encroachment permits.
- California Department of Toxic Substance Control - Hazardous material plan.

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

3.8.2 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Horizon West indicated it would submit permit applications to the following agencies:

Expected Federal permits:

- Department of Defense, U.S. Marine Base Camp Pendleton - 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 or Section 10 habitat conservation plan.
- Advisory Council on Historic Preservation - Section 106 consultation.
- FAA - Determination of no hazard to air navigation.

Expected California permits:

- CPUC CPCN/CEQA review.
- 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.
- South Coast Air Quality Management District - Dust control plan.

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

3.8.3 Information Provided by Lotus-SCE

Lotus-SCE indicated it would submit permit application to the following agencies:

Expected Federal permits:

- U.S. Army Corps of Engineers - Clean Water Act Section 404, NWP 57.
- U.S. Fish and Wildlife Service - Endangered Species Act Section 7.
- FAA - Determination of no hazard to air navigation.
- Advisory Council on Historic Preservation - Section 106 consultation.

Expected California permits:

- CPUC CPCN/CEQA review (possibly a permit to construct instead of CPCN at the discretion of the CPUC per SB 529 and AB 1373).
- State Water Quality Control Board - Section 401 water quality certification.
- Regional Water Quality Control Board - Storm water pollution protection plan.
- California Department of Fish and Wildlife - Section 1602 lake and streambed alteration permit.
- California Department of Fish and Wildlife - Section 2081 incidental take permit.

Lotus-SCE indicated that SCE would act as the primary lead for licensing and public affairs for the project. (JBA section 2c)

Lotus-SCE provided a list of its experience and the experience of its contractors with obtaining permits for transmission line projects. This list included 17 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 13 in California. (E-1, E-2, E-3, E-4, Prior Projects and Experience Workbook).

3.8.4 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) indicated it would submit permit applications to the following agencies:

Expected Federal permits:

- U.S. Forest Service - Cleveland National Forest - special use permit.
- U.S. Forest Service - Section 106 programmatic agreement (historic preservation).
- Department of Defense USMC Camp Pendleton - rights-of-way and use authorization.
- U.S. Army Corps of Engineers - Clean Water Act Section 404.
- U.S. Fish and Wildlife Service - Endangered Species Act, Section 7 biological opinion, incidental take permit.

Expected California permits:

- CPUC CPCN/CEQA review.
- California Coastal Commission - Federal coastal consistency determination.
- State 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.

LS Power (CAL GRID) 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. (E-1, E-2, E-3, E-4, 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)

3.8.5 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's contemplated design and meets the voltage, ampere ratings, impedance, and other specifications for the project listed in the ISO Functional Specifications and that its electrical characteristics are consistent with the upgrades that were modeled and studied in detail by the ISO. CalGrid indicated that the optical ground wire would contain 144 fiber pairs. (QP-1)

CalGrid indicated that its proposed design for the transmission line satisfies applicable reliability criteria and ISO planning standards. (QP-2).

CalGrid indicated that common design and construction risks and challenges its general construction contractor has encountered when designing transmission line projects include 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 for an approximate 35-mile 500 kV transmission line 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 indicated that it would implement two diverse communications paths between the North of SONGS Substation and Serrano Substation, identified structure types, a two-conductor bundle ACSS (aluminum conductor steel supported), span lengths from 500 to 1,750 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)

3.8.6 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

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 its proposed contractors. (Prior Projects and Experience Workbook)

Horizon West indicated that its proposal satisfies the ISO Functional Specifications for the project and is offering the ISO the option to increase the capacity of the conductor to 4615 Amps at no additional cost. (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 NERC, WECC, and the ISO. (QP-2)

Horizon West indicated that potential engineering risks include unexpected subsurface conditions, route changes, FAA hazard determination, and requirement to change conductor, structures, or foundations. (P-4)

Horizon West indicated that it and its affiliates have extensive experience completing transmission line projects and that previous projects have demonstrated that design risks can usually be attributed to field conditions that are inconsistent with initial design basis assumptions and are mitigated by including an upfront assessment of the project-specific requirements and that Horizon West has unequaled experience with interconnection requirements with adjoining utilities. (P-5)

Horizon West provided detailed design criteria for a 39.6-mile 500 kV transmission line that included codes, standards, and CPUC GO 95 and NESC requirements and detailed engineering routing criteria. Horizon West indicated it would implement two diverse communications paths between the North of SONGS Substation and Serrano Substation, identified self-supporting single circuit structure types for the single circuit proposal and self-supporting double circuit structures for the double circuit proposal, a three conductor bundle ACSS (aluminum conductor steel supported), span lengths of 1,500 feet except for two miles outside of Serrano Substation that would be spaced more tightly to reduce blowout, transmission line crossings, termination at existing substations, and rights-of-way width, and provided the ampacity for an ambient temperature of 50°C and total impedance. (T-1 to T-8)

3.8.7 Information Provided by Lotus-SCE

Lotus-SCE provided information on prior projects and experience that showed its experience and the experience of its contractors with designing transmission line projects. The information included 49 transmission line design projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, with 17 in California. Lotus-SCE also indicated that it has prior experience with its proposed contractor. (Prior Projects and Experience Workbook)

Lotus-SCE indicated that the project has been designed to meet or exceed all the requirements of the ISO Functional Specifications, including those regarding the line voltage, ampacity, line impedance, shield wire, basic insulation level rating, and design temperature. (QP-1)

Lotus-SCE indicated that the ISO Tariff and planning standards were considered in designing the project and that it would be designed with three diverse forms of telecommunication to support WECC guidelines. Lotus-SCE indicated that the routing of the line would avoid shared towers with existing ISO-controlled facilities for reliability purposes. (QP-2)

Lotus-SCE indicated the risks and challenges for the engineering of this project are similar to the ones experienced by SCE on multiple projects. Lotus-SCE further indicated that the engineering challenges associated with the project are very comparable to, although much less complex than, what Lotus' affiliate Delaney Colorado River Transmission Project, LLC, a joint venture led by Lotus and the developer of the Ten West Link project, (DCRT) addressed in developing the Ten West Link project. Lotus-SCE highlighted a few examples of risks previously faced on similar projects, such as the engineering of access roads in challenging terrain, transmission crossings, foundation and 500 kV structure design in seismically active areas and mountainous terrain, and complex foundation systems, such as micropiles. (P-5)

Lotus-SCE provided detailed design criteria for a 28.7-mile 500 kV transmission line that included codes and standards, GO 95 and NESC requirements, detailed routing criteria, including environmental concerns, and California and local requirements. Lotus-SCE indicated that it would implement three diverse communications paths between North of SONGS Substation and Serrano Substation, identified structure types, a two conductor bundle HTLS ACSS/TW ultra-high strength conductor, span lengths of 1200 feet with spans exceeding 2,930 feet for certain spans, transmission line crossings, termination at existing substations, rights-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 LS Power (CAL GRID)

LS Power (CAL GRID) provided information on prior projects and experience that showed its experience and the experience of its contractors with designing transmission line projects. The information included three transmission line design projects that operate at voltages above 200 kV and are ongoing or have been completed in the past ten years, with none in California. LS Power (CAL GRID) also indicated that it has prior experience with its proposed contractor. (Prior Projects and Experience Workbook).

LS Power (CAL GRID) 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)

LS Power (CAL GRID) 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. LS Power (CAL GRID) also indicated that the transmission line design for the project would meet or exceed applicable Institute of Electrical and Electronics Engineers (IEEE), ASCE, CPUC GO 95, and NESC requirements associated with electrical clearances, load factors, and strength factors. (QP-2)

LS Power (CAL GRID) indicated that the project design risks include overcrossing of multiple transmission lines between 230 kV and 500 kV that require effective coordination with incumbent transmission owners as well as the crossing of a highway. (P-4)

LS Power (CAL GRID) indicated its affiliates have demonstrated experience successfully designing and engineering projects with facilities similar to those included in the project

design and that the transmission line design is single-circuit 500 kV with self-supporting lattice structures. (P-5)

LS Power (CAL GRID) provided detailed design criteria for a 34-mile 500 kV transmission line that included codes and standards, CPUC GO 95 and NESC requirements, and detailed engineering routing criteria. LS Power (CAL GRID) indicated that it would implement two diverse communications paths between North of SONGS Substation and Serrano Substation, identified structure types, a three conductor bundle ACSR (aluminum conductor steel reinforced), span lengths of 1,000-1,400 feet with an average span length of 1,250 feet, transmission line crossings, and rights-of-way width, and provided the ampacity for an ambient temperature of 50°C and total impedance. (T-1 to T-8)

3.8.9 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 with voltage greater than 200 kV, 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 California to be an advantage over experience in environmental permitting in other jurisdictions because the project would 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 four project sponsors' teams have experience permitting projects in the U.S. and in California, including experience with the environmental permitting process for transmission lines and substations 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 to be qualified and fully capable of handling the environmental permitting work associated with this project.

The ISO has determined that, regarding environmental permitting experience in the U.S. and California, there is no material difference among CalGrid's proposal, Horizon West's two proposals, and Lotus-SCE's proposal and those four proposals are better than LS Power (CAL GRID)'s proposal because they have more overall U.S. experience and substantially more 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 there is no material difference among CalGrid's proposal, Horizon West's two proposals, and Lotus-SCE's proposal and that those four proposals are better than LS Power (CAL GRID)'s proposal regarding this component of the factor.

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 projects with voltage greater than 200 kV, including but not limited to (1) the engineering experience of the project sponsor and its team for projects it has developed, (2) the engineering experience for similar projects of the project sponsor's team member or members that have been designated as having responsibility for project engineering, and (3) 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 the project would 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 sponsors and their teams. The ISO considers the engineering teams identified by CalGrid, Horizon West, Lotus-SCE, and LS Power (CAL GRID) to be highly qualified and have substantial experience.

The ISO has determined that, regarding engineering and design qualifications and experience of the project teams, there is no material difference between the proposals of CalGrid and Lotus-SCE and their proposals are better than Horizon West's two proposals because both CalGrid and Lotus-SCE have more engineering and design experience in the U.S., as well as California. The ISO has also determined that Horizon West's two proposals are better than LS Power (CAL GRID)'s proposal because LS Power (CAL GRID) did not demonstrate any engineering and design experience of transmission line projects with voltages over 200 kV in the past ten years in California.

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 between the proposals of CalGrid and Lotus-SCE and that their proposals are better than Horizon West's two proposals, between which there is no material difference, and that Horizon West's two proposals are better than LS Power (CAL GRID)'s proposal 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 regarding the first component of this factor (environmental permitting experience) there is no material difference among the proposals of CalGrid, Horizon West, and Lotus-SCE and that their four proposals are better than LS Power (CAL GRID)'s proposal.

As discussed above, the ISO determined that there is no material difference between the proposals of CalGrid and Lotus-SCE and their proposals are better than the two Horizon West proposals, between which there is no material difference, and that those two proposals are better than LS Power (CAL GRID)'s proposal, regarding the second component of this factor (engineering 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 between the proposals of CalGrid and Lotus-SCE and their proposals are better than the two Horizon West proposals, between which there is no material difference, and those two proposals are better than LS Power (CAL GRID)'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-7, C-8)

3.9.1 Information Provided by CalGrid

CalGrid provided information on prior projects and experience that showed its experience and the experience of its contractor with construction of transmission lines 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, 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 species habitats. (P-5)

CalGrid indicated that its construction contractor has experience complying with a California utility's wildfire standard for preventing and mitigating fires while performing work in California. (C-7)

CalGrid indicated that neither CalGrid nor its contractor has had any safety, litigation, or environmental legal violations, fines, or other notices 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 for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Horizon West provided information on prior projects and experience that showed 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 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 construction challenges similar to those foreseen for this project and provided some examples. Horizon West indicated that it would leverage lessons learned from recent projects to 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-SCE

Lotus-SCE indicated that it has not yet chosen a construction contractor and submitted a list of seven possible construction contractors along with experience of each of the contractors. (A-5)

Lotus-SCE provided information on prior projects and experience that showed its experience and the experience of its contractors 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 with three in California, and also indicated that it has prior experience with its proposed contractor. (Prior Projects and Experience Workbook)

Lotus-SCE indicated that the risks and challenges for the construction of this project are similar to those it has faced on other projects, including having to deal with Orange County communities, challenging rough, mountainous, and inaccessible terrain,

transmission crossings, complex triple bundle conductor installation, seasonal construction restrictions, and native species. (P-5)

Lotus-SCE indicated that Lotus and its construction contractor(s) have not received any construction-related fines and are not under investigation for any violations of any construction-related laws, and they are not defendants in any legal proceeding regarding construction. (C-8)

3.9.4 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) provided information on prior projects and experience that showed 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, with one in California. LS Power (CAL GRID) also indicated that it has prior experience with its proposed contractors. (Prior Projects and Experience Workbook)

LS Power (CAL GRID) indicated its affiliates have demonstrated experience successfully constructing projects with risks and challenges similar to those presented by the project that involve constructing high-voltage transmission lines on rugged and difficult to access lands, overcrossing of multiple transmission lines between 230 kV and 500 kV, crossings of highways, and coordination with interconnecting transmission owners. (P-5)

LS Power (CAL GRID) indicated that it has not been subject to any notice of violations or fines in the past ten years related to construction, but its affiliate, LS Power Grid New York Corporation (LSPGNY), received notices of violation from the New York Department of Public Service and that the conditions giving rise to the notices of violation were addressed and remediated by LSPGNY either prior to the issuance of the notices of violation or within a short time frame. (C-8)

LS Power (CAL GRID) indicated that it has not been found in violation of any construction-related law in the past ten years and is not currently under investigation or a defendant in any legal proceeding for any construction-related law. (C-8)

Maintenance Record

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

3.9.5 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 that are generation ties. (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, and tying in more than 10,000 MW of energy resources. 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, 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 (1) the condition of towers, foundations, and ground straps; (2) the condition of conductors and hardware, including spacers, insulators, and splices; and (3) 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. (M-6)

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 Appendix C Section 4.3 of the Transmission Control Agreement (TCA). (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)

3.9.6 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

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 transmission line and substation maintenance practices that are consistent with the ISO transmission maintenance standards, and each has been approved by the ISO. (M-4)

Horizon West indicated that with the combined experience of three ISO PTOs (Horizon West, GridLiance, and Trans Bay Cable) and its affiliate, FPL, Horizon West has the capability to update its substation and line maintenance practices as they pertain to the proposed project's equipment. (M-4)

Horizon West indicated 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 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 manages 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. (M-6)

Horizon West indicated 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. (O-13)

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 would need to comply with environmental regulations in the area while conducting ongoing maintenance and effective vegetation management. Horizon West indicated it would build on its experience with similar projects. (P-5)

3.9.7 Information Provided by Lotus-SCE

Lotus-SCE provided a list of its experience and the experience of its contractors with the maintenance of transmission lines. The list included six 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 all six in California. (Prior Projects and Experience Workbook)

Lotus-SCE indicated that since 1998, all SCE facilities under the operational control of the ISO have been subject to all aspects of the TCA Appendix C. Lotus-SCE indicated that SCE is compliant with the elements listed in the TCA Appendix C, Sections 5.2.1 (Transmission Line Circuit Maintenance) and 5.2.2 (Station Maintenance). Lotus-SCE indicated that SCE's maintenance practices have been filed with and approved by the ISO. (M-4)

Lotus-SCE indicated that SCE's transmission vegetation management plan describes how vegetation management is performed within SCE's service territory. (M-5)

Lotus-SCE indicated that SCE has extensive experience in mitigating wildfire risk in Southern California and since 2018 SCE has deployed substantial wildfire mitigation efforts, including hardening the grid with over 5,000 miles of covered conductor, trimming more than a million trees, performing more than one million inspections in high fire risk areas, and deploying advanced detection technologies. (F-14)

Lotus-SCE indicated that SCE has a comprehensive wildfire detection and mitigation program and a CPUC approved wildfire mitigation plan that is intended to reduce the wildfire risk through annual inspection of overhead transmission lines, trimming and removal of trees to prevent vegetation from coming into contact with electrical equipment, and monitoring of high fire threat areas through a network of weather stations and wildfire cameras to make real-time informed operation decisions. (Z-1)

Lotus-SCE indicated SCE's maintenance practices filed with the ISO encompass requirements for inspection, assessment, maintenance, repair, and replacement activities performed with respect to transmission and substation facilities. Lotus-SCE indicated that the most recent ISO annual review, conducted April 2023, noted one minor deviation from adherence to SCE's filed maintenance practices for substations and one minor deviation from SCE's filed maintenance practices for transmission lines. (M-6)

Lotus-SCE indicated that SCE is periodically audited by the CPUC for compliance of its inspection and maintenance activities on transmission facilities, both those controlled by the ISO and those under CPUC jurisdiction. (M-6)

Lotus-SCE indicated that SCE has extensive experience with providing its availability measures in accordance with TCA Appendix C Section 4.3.

Lotus-SCE indicated that Startrans, a subsidiary of Lotus, became a PTO with the ISO by executing a TCA in 2007. Lotus-SCE indicated that, since then, Startrans has been satisfying all of the related ISO requirements. Lotus-SCE indicated that DCRT has been performing the responsibilities associated with a PTO in connection with its development of the Ten West Link project and has been performing interconnection studies and executing interconnection agreements with generation facilities proposing to connect to the bulk transmission network via the Ten West Link project. (M-7)

Lotus-SCE indicated that it has faced maintenance-related risks and challenges similar to those foreseen for the project, such as having available staff in the project vicinity to mitigate risk associated with emergent work and facilitate rapid deployment due to unexpected outages. (P-5)

3.9.8 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated that its affiliate, DesertLink, which has been in operation since August of 2020, currently complies with the provisions of TCA Appendix C Sections 5.2.1 and 5.2.2. LS Power (CAL GRID) indicated that DesertLink's transmission maintenance and inspection plan was approved by the ISO in 2020. (M-4)

LS Power (CAL GRID) indicated that its affiliate's transmission maintenance and inspection plan includes items such as inspection frequency and type, components to be inspected, qualifications of inspectors, and recordkeeping. LS Power (CAL GRID) indicated that the maintenance and testing procedures are based upon manufacturers' recommendations, national standards, good utility practice, and NERC guidance documents. (M-4)

LS Power (CAL GRID) indicated that its affiliate LSPGC filed its 2023-2025 wildfire mitigation plan with the office of Energy Infrastructure Safety for the Orchard and Fern Road STATCOM projects and that the wildfire mitigation plan defines the processes to

identify potential hazards, and risk scenarios, analyzes the potential hazards and risk scenarios, evaluates the analysis, and establishes mitigations (M-4)

LS Power (CAL GRID) indicated its transmission vegetation management plan would be based on the experience of its affiliates maintaining hundreds of miles of 230 kV, 345 kV, and 500 kV transmission lines across multiple regions. LS Power (CAL GRID) indicated the transmission vegetation management plan would be a preventative and corrective program that would utilize regularly scheduled inspections, chemical treatments, mowing, and trimming with corrective measures as identified by the inspections and that additional ground patrol and drone inspections would be performed in response to specific circumstances as they arise (e.g., weather event, landowner feedback). (M-5)

LS Power (CAL GRID) provided a sample vegetation management inspection report that covered the inspection of six transmission lines in Texas and identified no vegetation related outages. (M-6)

LS Power (CAL GRID) indicated that its affiliates currently comply with the ISO standards for inspection, maintenance, repair, and replacement as set forth in the TCA Appendix C. (M-6)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated that its affiliates currently comply with the requirements of TCA Appendix C Section 4.3 and provided DesertLink's 2022 availability measures report, which indicated 100% availability.

LS Power (CAL GRID) provided a summary of availability data for all LS Power grid transmission facilities, which indicated that availability ranged from 99.43% to 100% over the period 2018 to 2022 and that the lowest percentage was caused by a major ice storm. (M-7)

LS Power (CAL GRID) indicated that its affiliates have faced operations and maintenance-related risks and challenges similar to those foreseen for the project, which includes operating and maintaining a line in a desert environment, and provided a specific example of a project in Texas where its affiliate faced similar challenges. (P-5)

3.9.9 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 the project would 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, National Environmental Policy Act, Storm Water Pollution Prevention Plan, and U.S. Forest Service 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 teams identified by CalGrid, Horizon West, Lotus-SCE, and LS Power (CAL GRID) to be qualified, experienced, and capable of handling the construction work associated with this project. All four project sponsors' teams have relevant experience in the construction of transmission line projects in the U.S. and California and have faced construction risks similar to those foreseen for the project. Each of the project sponsors conveyed that its proposed construction team has not had any relevant safety, litigation, or environmental legal violations, fines, or other notices of violations in the past ten years.

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 determined that there is no material difference among the proposals of CalGrid, Horizon West, Lotus-SCE, and LS Power (CAL GRID) 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.

Regarding its analysis of this component of the factor, the ISO considers the teams identified by CalGrid, Horizon West, Lotus-SCE, and LS Power (CAL GRID) to be qualified, experienced, and capable of handling the maintenance of the project. Each of the four project sponsors provided examples of relevant U.S. experience with the maintenance of transmission lines, including vegetation management, and have faced maintenance risks similar to those foreseen for the project.

Horizon West, Lotus-SCE, and LS Power (CAL GRID) have experience maintaining extra high voltage (EHV) transmission facilities as ISO PTOs in accordance with the TCA, which the ISO considers an advantage, while CalGrid does not. Horizon West, Lotus-SCE, and LS Power (CAL GRID) each demonstrated compliance with the ISO maintenance standards. CalGrid indicated that, as a recently formed entity, it does not currently have historical audit reports for maintenance of facilities; however, it provided

inspection reports from its O&M contractor performed for third parties that covered maintenance activities.

All project sponsors have experience with developing wildfire mitigation plans. However, Horizon West and Lotus-SCE have existing CPUC approved wildfire mitigation plans and each maintains transmission facilities in CPUC-designated High Fire Threat Districts, which the ISO considers an advantage, while CalGrid and LS Power (CAL GRID) do not.

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 Horizon West and Lotus-SCE, and their proposals are better than LS Power (CAL GRID)'s proposal, which is better than CalGrid's proposal, 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.

Regarding the first component of this 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-SCE, and LS Power (CAL GRID).

Regarding the second component of the factor (previous record regarding maintenance), the ISO has determined that there is no material difference among Horizon West's proposals and Lotus-SCE's proposal, which are better than LS Power (CAL GRID)'s proposal, which is better than CalGrid's proposal.

Based on the combination of the ISO's analyses of the two components of this factor, the ISO has determined that there is no material difference among Horizon West's proposals and Lotus-SCE's proposal, which are slightly better than LS Power (CAL GRID)'s proposal, which is better than CalGrid's proposal, 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 contractor encounters when constructing lines, which include access work complications, landowner relations, geotechnical and environmental issues, and crossings of bodies of water, critical (threatened or endangered) species habitats, or railroads. (P-5)

CalGrid indicated that its construction contractor would use a detailed process for receiving and inspecting materials and equipment delivered to the project and would develop tailored construction inspection and test plans. CalGrid indicated it plans to establish three 660'x660' primary laydown areas and 140 150'x150' structure pads along the approximately 35-mile route. (C-2)

CalGrid provided a table that identifies line crossings and indicated that it anticipates clearances would be required to both cross and build near existing infrastructure and that clearances of existing circuits would be coordinated directly with the applicable utilities. (C-3)

CalGrid indicated that a multi-disciplinary team would complete constructability reviews and 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 would use Primavera P6 software to develop a project schedule using the critical path method. (C-6)

CalGrid indicated that hydraulic drilling machines would be used for deep foundations, that erection of towers would be done using hydraulic cranes, and that laydowns would be built along the line to receive inventory and distribute material. CalGrid indicated that helicopters would be utilized to build structures in areas of challenging access and to string and clip the conductor, shield wire, and optical ground wire, and that multiple helicopters would be used to complete the project. (C-7)

CalGrid indicated that construction would involve wildfire prevention and mitigation and that CalGrid and its construction contractor would reduce the risk and severity of wildfire during construction, including ensuring 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 for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Horizon West indicated that the project would avoid complex construction challenges in urban environments, including traffic control and closures, business loss compensation, specialized equipment (e.g., horizontal directional drills, cable pullers), jack and bore, utility relocation, noise mitigation, and agency coordination. Horizon West indicated it would leverage lessons learned from recent projects to deliver the project. (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)

For the Horizon West single circuit proposal, Horizon West indicated that three material laydown yards would be established and that 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)

For the Horizon West double circuit proposal, Horizon West indicated that four material laydown yards would be established and that these yards are anticipated to be approximately 25 acres in size to accommodate for the larger steel structures 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, and provide crossing procedures to be used for energized and non-energized crossings. (C-3)

Horizon West indicated it would coordinate design and constructability reviews and that design reviews would encompass all aspects of the design and indicated that project or design changes would be discussed with the engineering, environmental, land, or other project disciplines prior to implementation. (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 it expects standard construction techniques would be used for the project, including ground access and rubber-tired equipment. Horizon West indicated it anticipates that some access road construction and expansion would be required, which may involve the use of tracked equipment. (C-7)

Horizon West indicated that helicopters may be used for conductor stringing and tower inspection, and would be used more extensively if access road construction in certain areas is infeasible, such as remote sections of Camp Pendleton or sensitive areas of the Ronald W. Caspers Wilderness Park. (C-7)

3.10.3 Information Provided by Lotus-SCE

Lotus-SCE provided a specific example project that required the construction of extensive access roads in challenging terrain, transmission crossings, 500 kV structure assembly and installation, complex triple-bundle conductor installation over difficult terrain, and complex foundation systems such as micropiles. Lotus-SCE also identified risks pertaining to season constructional restrictions and construction outage restrictions and provided several examples where it faced similar risks. (P-5)

Lotus-SCE indicated that the construction contractor would implement a project quality control plan, which would be designed to ensure all scope elements achieve uniform,

high-quality workmanship throughout the phases of the procurement, fabrication, and construction of the project. Lotus-SCE indicated that the quality control manager would conduct daily field inspections of the construction operations, including those by subcontractors, and would perform quality control tests on materials for self-performed work. (C-1)

Lotus-SCE indicated that construction laydown yards were identified and sized for material receiving and storage, temporary contractor and project sponsor offices, and employee parking, and that optimal locations for material storage and temporary staging were selected as a part of the proposal development effort. Lotus-SCE identified a process for purchasing, receiving, and stockpiling materials, and providing material to the contractors. (C-2)

Lotus-SCE indicated that the construction contractor would be responsible for coordination of the duration and timing of any clearances of existing circuits necessary during construction and it would require the construction contractor to adhere to all ISO and SCE grid control processes and procedures related to clearances. (C-3)

Lotus-SCE indicated that its engineering staff and construction managers or inspection personnel, in collaboration with the construction contractor, would review the engineering drawings, construction specifications, and material orders for accuracy and completeness. Lotus-SCE indicated that constructability reviews of engineering drawings would occur at three different design completion milestones: (1) once the project reaches a 60% design completion to review preferred routing, including environmental points and buffers, access routes, structure locations, pulling and tensioning sites, and other alignment items; (2) once the project reaches 90% design completion to cover all outstanding design items, permit requirements, land and property challenges, and material status; and (3) once the job has been issued for construction. (C-4)

Lotus-SCE indicated that the proposed route aims to utilize approximately twenty-two linear miles of SCE's existing rights-of-way to the extent feasible, while strategically placing new infrastructure near adjacent transmission lines where possible. Lotus-SCE indicated that approximately 75% of the overall transmission line length benefits from utilizing existing SCE transmission line easement corridors, with only approximately 6.45 miles of the proposed project requiring new easement acquisition. Lotus-SCE indicated that it has not executed any new easements, permits, or agreements to secure additional land rights that it doesn't currently possess. (C-5)

Lotus-SCE indicated that the project's master schedule would include the timing of key activities and resources required, would show the sequence of work, environmental restrictions, and clearance requirements, and would be managed using industry standard software. (C-6)

Lotus-SCE indicated that project sequencing would rely on build-up of project activities so that they 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-SCE indicated that it and its construction contractor would keep as much of the scope of construction as conventional as possible. Lotus-SCE indicated that its proposal would require less than 1.5 miles of new access roads in order to safely construct, operate, and maintain the electric infrastructure and that remaining access roads already

exist and are being utilized to maintain SCE and San Diego Gas & Electric Company (SDG&E) electrical facilities in the area. Lotus-SCE indicated that it would not be required to build miles of roads to properly construct, inspect, and maintain facilities located in CPUC-designated High Fire Threat Districts. Lotus-SCE indicated that helicopter work is expected to support wire stringing operations to support the project schedule and that the conductor would be pulled in by conventional methods using a puller and tensioner. (C-7)

3.10.4 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) indicated that this project presents construction risks and challenges similar to other projects successfully developed by LS Power, including rugged and difficult to access lands, transmission line and highway crossings, and coordination with interconnecting transmission owners. (P-5)

LS Power (CAL GRID) indicated that it has assembled a skilled and experienced team to complete and oversee construction activities for the project. LS Power (CAL GRID) indicated that it would contract with third-party firms to oversee the construction activities. LS Power (CAL GRID) indicated that it would require the construction contractor to prepare a project specific quality assurance and quality control plan that would detail the inspection program and provided a detailed list of the items to be inspected. (C-1)

LS Power (CAL GRID) indicated that it would directly purchase the major material for the transmission line, including structures, conductor, optical ground wire, and insulators and hardware. LS Power (CAL GRID) indicated that its construction contractor would establish up to three material yards to support construction of the project and would use several methods to ensure timely delivery of materials to the project site for installation. (C-2)

LS Power (CAL GRID) indicated that it would coordinate with the impacted transmission owners to negotiate interconnection and crossing agreements. (C-3)

LS Power (CAL GRID) indicated that it has advanced design of the project and has confirmed that it can be constructed on schedule and budget and that all designs and specifications would go through a rigorous series of quality assurance and quality control checks before being implemented on the project. (C-4)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated it would maintain a comprehensive master project schedule that would incorporate all project tasks, including public relations, regulatory, land acquisition, engineering, environmental permitting and compliance, procurement, outages, construction, and commissioning, and that its contractor would prepare and maintain a detailed Primavera (P6) schedule. (C-6)

LS Power (CAL GRID) indicated that the project would be located near a dense suburban population and mountains requiring several special construction techniques and that helicopters would be utilized throughout construction to access difficult terrain or environmentally restricted areas. LS Power (CAL GRID) indicated that it plans to utilize

a helicopter to fly workers, tools, and material to and from tower locations as well as to pull a sockline for conductor installation at inaccessible locations and that a heavy lift helicopter would be used to set lattice structures. (C-7).

LS Power (CAL GRID) indicated that parts of the project would be located in high fire threat areas and it would have a wildfire mitigation plan to govern the construction, maintenance, and operations of its facilities to minimize the risk of catastrophic wildfire. (C-7)

LS Power (CAL GRID) indicated that fire prevention measures would be established by the construction contractor in a construction fire prevention plan as part of the site-specific safety plan and reviewed at each daily and weekly safety meeting. (C-7)

LS Power (CAL GRID) indicated that its field manager and the construction contractor's site supervisor would be present during construction activities and would have the responsibility of monitoring the fire prevention activities. (C-7)

LS Power (CAL GRID) indicated that the project would be located in an area known to be inhabited by multiple protected species and interruptions in construction activities due to species restrictions are anticipated and the project schedule includes over 18 months float to accommodate construction interruptions due to species. (C-7)

Maintenance Practices

CC-3, CC-4, CC-5, M-1 through M-10, P-5, O-3, O-13, O-15)

3.10.5 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 equivalent employees (FTEs). (CC-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 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 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 Section 5.2.1 (Transmission Line Circuit Maintenance). (M-4)

CalGrid indicated that its 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 captures 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 with a qualified maintenance provider in the same locale as the project, which would allow for a quick response to any issues that might arise. (M-10)

CalGrid indicated that for mitigation and operations under extreme or red flag conditions for facilities in CPUC-designated High Fire Threat Districts, CalGrid would have an enhanced set of strategies that would include inspections, maintenance, vegetation, and access road management, and plans and protocols for maintenance and operations in these areas. (Attachment G1_1 Wildfire Plans and Procedures)

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 the 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 repairs for 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. (O-13)

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. (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, 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)

3.10.6 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Horizon West indicated that it has experience in complying with ISO maintenance procedures. (M-4)

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 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, protection and control, and transmission lines and includes training for entry-level operations personnel. (O-3)

Horizon West indicated that the project's maintenance operations would be undertaken by its field operations team and that the maintenance team would be based at the existing Horizon West Suncrest SVC facility in Alpine, California. Horizon West indicated that if Horizon West were to be selected as the approved project sponsor for

the Imperial Valley-North of SONGS 500 kV Line and 500/230 kV Substation Project, two technicians would be stationed at North of SONGS Substation. (M-1)

Horizon West indicated that its affiliates 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 indicated that, out of an abundance of caution, it has designed a custom vegetation management plan, including bi-annual patrols, one led by a forester, to identify and manage hazards throughout the operational life of the project transmission line. (Z-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 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 last hundred years. (M-5)

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 team has already identified priority work zones for trimming along the rights-of-way for this project by using LiDAR data and manual inspection. (M-5)

Horizon West provided the annual maintenance audit reports of its maintenance practices by the ISO for the years 2012 through 2022. Audit results showed generally good compliance with Horizon West and Trans Bay Cable standards. (M-6)

Horizon West indicated 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. (O-13)

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

Horizon West indicated that it has experience providing the ISO with availability measures in accordance with TCA Appendix C Section 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 more than two dozen of this team are located within a two-hour 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 would maintain a spare stock of critical transmission line components, hardware, wire, and structures to ensure expedient recovery in the event of an emergency. (O-15)

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 of delivery within hours. (O-15)

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

3.10.7 Information Provided by Lotus-SCE

Lotus-SCE indicated SCE's maintenance practices address all the requirements of TCA Appendix C Sections 5.2.1 (Transmission Line Circuit Maintenance) and 5.2.2 (Station Maintenance). (M-4)

Lotus-SCE provided a list of transmission line maintenance activities, which included maintenance related to patrols and inspections, conductor and shield wire, disconnections and pole-top switches, structures and foundations, guys and anchors, insulators, and vegetation management, among others. (M-4)

Lotus-SCE indicated that for typical transmission line operations and maintenance activities and other administrative and general needs, SCE would utilize existing internal structures with a small incremental need of 1-1.5 FTEs for maintenance. (CC-4)

Lotus-SCE indicated that it would not be contracting with any third-party provider for O&M services but would instead utilize SCE's in-house personnel to conduct maintenance for the project. (CC-5)

Lotus-SCE indicated that SCE has training programs in place to ensure all persons (i.e., operators, linemen, and substation electricians) in scope by trade are qualified, trained, and skilled in line with all applicable internal SCE policies and state and federal policies. (O-3)

Lotus-SCE indicated that it would leverage the SCE transmission and distribution (T&D) training department based out of Chino, CA for all training and support resources required for the transmission O&M, and the content for each job function would be consistent with the training SCE's personnel receive today in operating and maintaining SCE's extensive 500 kV network. (O-3)

Lotus-SCE indicated that SCE would follow well-established maintenance practices and processes, similar to those practices used today to maintain its existing system. Lotus-SCE indicated that SCE intends to own, operate, and maintain all infrastructure required to operate the project. Lotus-SCE indicated that SCE would integrate the new lines and equipment into its existing operations and maintain them in accordance with SCE's most current standards. (M-1)

Lotus-SCE indicated that SCE has more than 2,900 appropriately skilled, highly qualified, and experienced electrical workers responsible for maintenance. Lotus-SCE indicated that SCE's approach to training electrical workers aligns with NERC and DOE guidelines. (M-2)

Lotus-SCE indicated that SCE utilizes agile and informal training to assist employee development learning in addition to facilitating formal training programs. (M-3)

Lotus-SCE indicated that SCE's T&D training department has a staff of full-time instructors and that adjunct instructors from SCE's field organizations supplement this staff. (M-3)

Lotus-SCE indicated that since 1998, all SCE facilities under the operational control of the ISO have been subject to all aspects of TCA Appendix C. Lotus-SCE indicated that SCE is compliant with the elements listed in TCA Appendix C, Sections 5.2.1. (Transmission Line Circuit Maintenance) and 5.2.2 (Station Maintenance). (M-4)

Lotus-SCE indicated that SCE's maintenance practices have been filed with and approved by the ISO. (M-4)

Lotus-SCE described how vegetation management is performed within SCE's service territory. Lotus-SCE indicated that SCE's vegetation management operations department prunes vegetation in high and non-high fire risk areas to meet the clearances documented in SCE's transmission vegetation management plan. Lotus-SCE indicated that these clearances also require the incorporation of conductor sag and sway for lines subject to NERC Reliability Standard FAC-003-4. (M-5)

Lotus-SCE indicated that. due to SCE's robust organizational structure, SCE is able to manage its system by planning and executing large scale vegetation management initiatives. Lotus-SCE described vegetation activities scoped for 2025-2028 within high fire risk areas for T&D, which include a hazard tree mitigation program scoped to remove over 59,000 trees, pole brushing of over 450,000 structures, removal of dead and dying trees from 66,000 structures, and expanded line clearing on over 660,000 structures. (M-5)

Lotus-SCE provided a copy of SCE's 2023-2025 wildfire mitigation plan. (M-4)

Lotus-SCE indicated that the ISO has approved SCE's filed maintenance practices. Lotus-SCE indicated that the most recent ISO annual review, conducted April 25-28, 2023, noted one minor deviation from adherence to SCE's filed maintenance practices for substations and one minor deviation from SCE's filed maintenance practices for transmission lines. (M-6)

Lotus-SCE indicated that it and SCE have extensive experience with providing its availability measures in accordance with TCA Appendix C Section 4.3. (M-7)

Lotus-SCE indicated that Startrans, a subsidiary of Lotus, became a PTO with the ISO by executing a TCA in 2007. (M-7)

Lotus-SCE indicated that the project sponsor does not anticipate that adding the project to the ISO-controlled grid would require any changes or exceptions to the provisions of the TCA as they relate to maintenance. (M-8)

Lotus-SCE indicated that all SCE facilities (new and existing) under the operational control of the ISO are maintained in accordance with activities and requirements listed in TCA Sections 6.1, 6.3, and 7. (M-9)

Lotus-SCE indicated that SCE's transmission organization has eight grid locations spread throughout 50,000 square miles, along with a crew that specializes in helicopter-assisted work system-wide. Lotus-SCE indicated that the new lines being proposed in this project would likely be maintained by SCE's Orange grid (located in Santa Ana, CA). (M-10)

Lotus-SCE indicated that SCE has mutual assistance agreements with its neighboring utilities and belongs to the Western Utilities Team for responding to emergent concerns when either needing or providing assistance. (O-13)

Lotus-SCE indicated that in accordance with Standard 1 of General Order Number 166 of the CPUC, SCE has developed a corporate emergency response and recovery plan. (O-13)

Lotus-SCE indicated that the time for a crew to respond to an emergency affecting project facilities would vary based upon circumstance but could be under an hour, as this project is within SCE territory. Lotus-SCE indicated that SCE would be able to use its helicopter fleet or would be able to direct crews across its territory to the project as necessary. Lotus-SCE indicated that, in remote areas, a crew could be present in a matter of a couple of hours, or less, depending upon the severity of the event at-hand. (O-13)

Lotus-SCE indicated that SCE has 16-crews, wire stringing equipment, cranes, digger derricks, and bucket trucks to support emergency transmission work. Lotus-SCE described the structures stocked by SCE to facilitate emergency repairs. (O-15)

3.10.8 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) provided a maintenance plan for transmission lines and substations that details transmission line and substation maintenance tasks along with their frequencies. (CC-3)

LS Power (CAL GRID) indicated that the number of internal FTEs for maintenance activities would be 3.2. (CC-4)

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

LS Power (CAL GRID) indicated that field personnel would be required to complete an annual training program, which would include topics such as emergency action plans, fall protection, hazard communications, critical infrastructure protection, code of conduct, switching, and environmental training. (O-3)

LS Power (CAL GRID) indicated that it would be responsible for completing all maintenance activities for the project. LS Power (CAL GRID) 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. (M-1)

LS Power (CAL GRID) 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. LS Power (CAL GRID) indicated that it would also be able to leverage five additional technicians located in California to support maintenance of other LS Power projects. (M-1)

LS Power (CAL GRID) indicated that it has qualified three outside contractors to conduct preventative and predictive maintenance, support forced outage response, perform emergency repairs, and complete major facility rebuilds. (M-1)

LS Power (CAL GRID) indicated that it would employ highly qualified and experienced field personnel. (M-2)

LS Power (CAL GRID) indicated that it would assess all contractors to ensure their personnel have the appropriate training and expertise for the work before authorizing any work order. (M-2)

LS Power (CAL GRID) described the responsibilities and experience requirements for field and substation technicians. (M-2)

LS Power (CAL GRID) indicated that it would utilize internal and external training courses to ensure it has qualified, skilled, and experienced field personnel. (M-3)

LS Power (CAL GRID) indicated that all vegetation management personnel would be required to complete and maintain annual training necessary to be certified vegetation management technicians. (M-3)

LS Power (CAL GRID) 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 affiliates, DesertLink and LSPGC. LS Power (CAL GRID) indicated that DesertLink currently complies with these provisions and that DesertLink's transmission maintenance and inspection plan was approved by the ISO in 2020. (M-4)

LS Power (CAL GRID) indicated that its maintenance and testing procedures would be based upon manufacturers' recommendations, national standards, good utility practice, and NERC guidance documents. (M-4)

LS Power (CAL GRID) indicated that it would establish a wildfire mitigation plan and an emergency preparedness plan. LS Power (CAL GRID) indicated that its affiliate LSPGC filed its 2023-2025 wildfire mitigation plan with the Office of Energy Infrastructure Safety for the Orchard and Fern Road STATCOM projects. LS Power (CAL GRID) indicated that its wildfire mitigation plan would detail how the project facilities would be constructed, operated, and maintained in a manner that would keep customers and communities safe by minimizing the risk of catastrophic wildfire and that this plan would be leveraged to support this project. (M-4)

LS Power (CAL GRID) indicated that the project would be integrated into LS Power's transmission vegetation management plan based on experience maintaining hundreds of miles of 230 kV, 345 kV, and 500 kV transmission lines across multiple regions. LS Power (CAL GRID) indicated that LS Power's transmission vegetation management plan is a preventative and corrective program that utilizes regularly scheduled inspections, chemical treatments, mowing, and trimming with corrective measures as identified by the inspections. (M-5)

LS Power (CAL GRID) indicated that it currently complies with the ISO standards for inspection, maintenance, repair, and replacement set forth in TCA Appendix C and provided examples of recent DesertLink and other LS Power facilities' maintenance and availability measures reports showing good results. (M-6, M-7)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated that LS Power currently performs planned outage coordination for the transmission lines, substations, and associated facilities it operates.

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

LS Power (CAL GRID) 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. LS Power (CAL GRID) indicated that it would also have five technicians and maintenance contractor resources located in California to support the project as needed. (M-10)

LS Power (CAL GRID) indicated that LS Power's technician located in the project area would be able to respond to all parts of the project within two hours. LS Power (CAL GRID) indicated that the maintenance contractors would be capable of responding to all parts of the project within two hours. (M-10)

LS Power (CAL GRID) indicated that it would maintain 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)

LS Power (CAL GRID) 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, LS Power (CAL GRID) indicated that LS Power maintains spare transmission structures, including Lindsey emergency restoration structures, that could be utilized by LS Power (CAL GRID) in the event of a failure. (O-15)

Operating Practices

(Prior Projects and Experience Workbook; CC-3, CC-4, CC-5, O-1 through O-12, O-13, O-14, O-16 to O-18)

3.10.9 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 that are generation ties. (Prior Projects and Experience Workbook)

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 during operations 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 CPUC-designated High Fire Threat Districts. (Attachment G1_1 Wildfire Plans and Procedures)

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 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. (O-1)

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 would monitor the certification requirements for the Transmission Operator personnel, including progress and completion of required continuing education and emergency training requirements. (O-2)

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

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 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 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 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 Coordinated Functional Registration (CFR) agreement 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. (O-11)

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. (O-11)

CalGrid indicated that its operations contractor would install its field communications equipment, which generally would consist of router, switch, remote terminal unit, universal power supply, 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 the project would not be subject to any encumbrance related to ISO operational control. (O-14)

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

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

3.10.10 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

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. (O-1)

Horizon West indicated that the project's dedicated field operations and maintenance team would be located either at the Suncrest or North of SONGS substations. (O-1)

Horizon West indicated that it and its affiliates' system operators are NERC-certified TOP operators. (O-2)

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. (O-2)

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, protection and control, 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 for the proposed project, 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. (O-7)

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 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 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. (O-11)

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

Horizon West indicated that it is fully capable of managing emergencies and fulfilling its obligations for system emergency reports under TCA Sections 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 Sections 9.2 and 9.3 requirements. Horizon West indicated that it has identified resources, including two dedicated local personnel committed to the project, approximately 50 technical staff within a two-hour drive, and more than 40 certified switching personnel throughout California. (O-13)

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

Horizon West indicated that it has a CPUC-approved wildfire mitigation plan and maintains active fire-prevention programs. Horizon West indicated that it would extend its wildfire mitigation plan to include the new project location and would employ similar fire-preventions strategies to the project, which would include, among other things, real-time monitoring capability (visual and electronic), seismic and fire hardening infrastructure, and comprehensive vegetation management. (O-13)

Horizon West indicated that the project would not be subject to any encumbrance related to ISO operational control. (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 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 of NextEra's 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 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)

3.10.11 Information Provided by Lotus-SCE

Lotus-SCE provided a list of its experience and the experience of its contractors with operating transmission lines. The list included a total of six 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 all six in California. (Prior Projects and Experience Workbook)

Lotus-SCE indicated that it has faced operations-related risks and challenges similar to those foreseen for the project, such as operational challenges where there are overlapping points of operational jurisdiction, and provided an example where SCE developed operating procedures for a substation that had interconnections with several operators. (P-5)

Lotus-SCE indicated that for typical transmission line operations and maintenance activities and other administrative and general needs for operations, SCE would utilize existing internal structures with a small incremental need of 0.5-1 FTEs for operations. (CC-4)

Lotus-SCE indicated that it would not be contracting with any third-party provider for O&M services but would instead utilize SCE's in-house personnel to conduct operations for the project. (CC-5)

Lotus-SCE indicated that SCE would own and operate the project and would provide, among other things, operational services for the project following the in-service date. Lotus-SCE indicated that SCE operates a total of two control centers and 13 switching centers and coordinates operations across 30 interconnections with the ISO within Southern California. (O-1)

Lotus-SCE indicated the entire capacity of the project would be under the operational control of the ISO. (M-8)

Lotus-SCE indicated that SCE would follow well-established operational practices and processes, similar to those practices used today to operate its existing T&D system. Lotus-SCE indicated that its grid control center (GCC) is the single point of contact for communications with the ISO and the GCC has overall authority of the entire SCE electric system via two control centers (Alhambra and Irvine). Lotus-SCE indicated that the GCC would assign operational jurisdiction to the Orange County switching center, which would have operational control of the transmission line. (O-1)

Lotus-SCE indicated that SCE has policies, processes, and procedures in place to ensure all persons in scope by trade are qualified, skilled, and experienced in their respective trades or occupations in line with all applicable SCE internal policy requirements and state and federal requirements. (O-2)

Lotus-SCE indicated that for real time operations related training, the compliance and training department within SCE's GCC located in Alhambra, CA would be responsible. (O-3)

Lotus-SCE indicated that SCE's transmission operators in the GCC are both certified internally and externally by obtaining NERC certifications that meet if not exceed the necessary requirements. (O-3)

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

Lotus-SCE indicated that SCE would have responsibilities related to NERC compliance. Lotus-SCE indicated that SCE is registered as a TP, TO, and TOP. (O-5)

Lotus-SCE indicated that SCE, as the project TO and TOP, would perform all required NERC functions and reporting requirements internally. (O-6)

Lotus-SCE indicated that SCE has established an energy regulation compliance program, which provides the framework and governance over how SCE maintains compliance with program uses an integrated compliance management framework comprised of elements that make up the core compliance responsibilities (prevention, detection, monitoring, and response). (O-7)

Lotus-SCE indicated that temporary waivers under TCA Section 5.1.6 are not applicable. (O-7)

Lotus-SCE indicated that it has completed all compliance reporting on-time, including, but not limited to, self-certifications, periodic data response submittals, relay mis-operations, and vegetation outages. (O-8)

Lotus-SCE provided the number substations and miles of transmission lines for which SCE is responsible for compliance. Lotus-SCE provided WECC compliance reports for WECC's triennial review of SCE for compliance with applicable NERC reliability standards. (O-8)

Lotus-SCE indicated that it would develop a reliability standards agreement with the ISO. Lotus-SCE indicated that this agreement would contain the delegation of responsibilities between the project sponsor and other entities in accordance with NERC standards and would be similar to the one in place between the ISO and SCE. (O-9)

Lotus-SCE indicated that SCE is actively registered with NERC to perform the following functions as defined in the NERC standards: Distribution Provider, Generator Owner, Generator Operator, Resource Planner, Transmission Owner, Transmission Operator, and Transmission Planner and intends to maintain its registration with NERC for the life of the project. (O-10)

Lotus-SCE indicated that it intends to use SCE for control center operations subject to any necessary approvals from the CPUC. Lotus-SCE indicated that it plans to negotiate an O&M agreement with SCE for this service. Lotus-SCE indicated that SCE operates a large transmission system subject to ISO control and has experience in acquiring adequate and reliable data acquisition facilities for its TOP area. Lotus-SCE indicated that if SCE is providing these services, adequate and reliable supervisory control and data acquisition (SCADA) system data for the transmission operator area would be available at SCE's primary and backup control centers for use by operations. Lotus-SCE indicated that with this SCADA system being available at both the primary and backup control centers, it would have the required information to maintain reliable system operation. (O-11)

Lotus-SCE indicated that SCE, as a PTO, currently operates all of its high voltage electric facilities subject to TCA Sections 6.1 and 6.3 and this project would be operated in the same manner. (O-12)

Lotus-SCE indicated that since 1998, all SCE facilities under the operational control of the ISO have been subject to and have been fully compliant in all aspects with the requirements of TCA Sections 9.2 and 9.3 (Management of Emergencies). (O-13)

Lotus-SCE indicated that, in accordance with requirements of the CPUC, SCE has developed a corporate emergency response and recovery plan. (O-13)

Lotus-SCE indicated that SCE has a comprehensive wildfire detection and mitigation program and a CPUC approved wildfire mitigation plan that is intended to reduce the wildfire risk through annual inspection of overhead transmission lines, trimming and removal of trees to prevent vegetation from coming into contact with electrical equipment, and monitoring of high fire threat areas through a network of weather stations and wildfire cameras to make real-time informed operation decisions. (Z-1)

Lotus-SCE indicated that the project would not be subject to any encumbrances related to ISO operational control. (O-14)

Lotus-SCE provided a summary of six NERC notices of violation SCE has incurred from 2013-2023 related to transmission operations and maintenance and indicated that all six have been mitigated to WECC's satisfaction. (O-16)

Lotus-SCE indicated that neither the project sponsor, Lotus, SCE, nor any member of the proposed project team has incurred any operations-related tariff violations or FERC rules violations in the past ten years. (O-17)

Lotus-SCE indicated that neither it, Lotus, SCE, nor any member of the proposed project team has had any violations of operations-related laws, statutes, rules, or regulations related to each of their respective transmission operations and maintenance in the past ten years. (O-18)

3.10.12 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated that it has faced operations and maintenance-related risks and challenges similar to those foreseen for the project, including operating and maintaining a line across rugged, difficult to access lands. (P-5)

LS Power (CAL GRID) provided the estimated number of FTEs for operations, maintenance, and administrative functions, as well as a breakdown of these FTEs by job function. LS Power (CAL GRID) estimated 5.6 FTEs for operations. (CC-4)

LS Power (CAL GRID) indicated that it would be responsible for providing operations and compliance services for the project using LS Power and affiliate staff that operate extra high voltage transmission facilities in Texas, New Jersey, Delaware, New York, and California (commencing in 2025). (O-1)

LS Power (CAL GRID) indicated that it plans to operate the project from LS Power's control centers located in Austin, Texas. LS Power (CAL GRID) indicated that the control centers would be integrated with the ISO in 2025 to operate the LSPGC Orchard STATCOM and Fern Road GIS/STATCOM projects. LS Power (CAL GRID) indicated that the control center facilities are NERC certified high impact rating control centers (per

NERC standard CIP-002-5) that are fully compliant with all NERC standards, including the physical and cyber security requirements necessary to operate the project. (O-1)

LS Power (CAL GRID) indicated that it would train and credential local contractors to perform field operations at its facilities to supplement its internal resources as may be necessary from time to time (e.g., for specialized maintenance and repair). LS Power (CAL GRID) indicated that it would not use contractors for transmission system operator positions. (O-1)

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

LS Power (CAL GRID) also provided the experience and certification requirements for line and substation technicians and technicians performing switching activities. (O-2)

LS Power (CAL GRID) indicated that it would utilize NERC's system operator certification and continuing education database to review and archive transmission system operator continuing education hours. LS Power (CAL GRID) indicated that its transmission system operator training would include computer-based training, instructor-led courses, formal on-the-job training, simulations, drills, and exercises. LS Power (CAL GRID) indicated that to facilitate regular operating training, its SCADA/energy management system would have an operator training simulator. (O-3)

LS Power (CAL GRID) indicated that it would assess all contractors to ensure that their personnel have the appropriate training and expertise for the work before authorizing any work order. (O-3)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated that it would register with NERC as a TO and TP prior to operation of the project. LS Power (CAL GRID) indicated that because the project is a transmission line only, NERC Transmission Operator (TOP) registration would not be required. LS Power (CAL GRID) indicated that its experience with other transmission line-only facilities suggests the owner of the North of SONGS Substation or Serrano Substation would register as the TOP for the project. LS Power (CAL GRID) indicated that, to the extent both substation owners are unwilling to register as the TOP for the project, it would register as the TOP. (O-5)

LS Power (CAL GRID) indicated that it would add the project facilities to the WECC bulk electric system facilities list. (O-5)

LS Power (CAL GRID) indicated that it would perform all NERC functions for the project. (O-6)

LS Power (CAL GRID) indicated that the project would be integrated in LS Power's 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 LS Power entities to support the secure and

reliable operation of the bulk electric system and compliance with the NERC reliability standards. (O-7)

LS Power (CAL GRID) indicated that the chief compliance officer would be the NERC senior manager responsible for all NERC compliance. LS Power (CAL GRID) 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. (O-7)

LS Power (CAL GRID) indicated that it would not require any waivers under TCA Section 5.1.6. (O-7)

LS Power (CAL GRID) indicated it has compliance responsibility for all transmission facilities it owns and is committed to maintaining compliance with the applicable reliability standards. (O-8)

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

LS Power (CAL GRID) indicated that it would leverage the CFR that would be in place with the ISO for LSPGC to divide responsibility for NERC reliability standards on this project. (O-9)

LS Power (CAL GRID) indicated the project is a transmission line-only facility and would not include the responsibilities of a Transmission Operator as defined in NERC reliability standards. LS Power (CAL GRID) indicated that the responsibilities and authority regarding the adjacent Transmission Operators would be defined in an interconnection agreement with each respective adjacent Transmission Operator. (O-10)

LS Power (CAL GRID) indicated that it anticipates receiving data for the project via the ISO's inter-control center communications protocol (ICCP). LS Power (CAL GRID) indicated that, to the extent the project data isn't available via ISO ICCP, it would coordinate with SCE and the North of SONGS Substation owner to install data acquisition and communications equipment for the project at Serrano Substation and North of SONGS Substation to ensure adequate, reliable, and redundant data transmission and acquisition capabilities. (O-11)

LS Power (CAL GRID) indicated that LS Power's Austin, Texas control centers are NERC certified high impact control centers (per NERC standard 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)

LS Power (CAL GRID) indicated that it would have the capability to comply with TCA Sections 6.1 and 6.3 through its existing operations. LS Power (CAL GRID) indicated that its operating personnel and support teams at the control centers would 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. (O-12)

LS Power (CAL GRID) indicated that the project scope does not contain switchable equipment, so switching activities would be limited to the coordination of switching with SCE and the North of SONGS Substation owner. (O-12)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated LS Power's operations and maintenance group has experience managing emergency responses for wildfires, snow and ice storms, thunderstorms, hurricanes, and tornados and that it would be responsible for emergency response and repair on the project in coordination with the ISO. LS Power (CAL GRID) provided its emergency operations plan, emergency response plan, and system restoration plan. (O-13)

LS Power (CAL GRID) indicated that it would establish a wildfire mitigation plan that defines the processes to identify potential hazards and risk scenarios, analyzes the potential hazards and risk scenarios, evaluates the analysis, and establishes mitigations. LS Power (CAL GRID) indicated that robust vegetation management practices, monitoring, and emergency preparedness would be key mitigation measures in the wildfire mitigation plan. LS Power (CAL GRID) indicated that LS Power's 2023-2025 Wildfire Mitigation Plan would be leveraged to support the project.

LS Power (CAL GRID) 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)

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

LS Power (CAL GRID) indicated that the TRE conducted a critical infrastructure protection audit of Cross Texas in 2019 that identified compliance violations of five standards. LS Power (CAL GRID) indicated that, in addition to mitigating each matter, it has significantly fortified enterprise compliance following the TRE audit of Cross Texas in April 2019. (O-16)

LS Power (CAL GRID) indicated that neither it nor any of LS Power's affiliates has been found in violation of any operations-related tariff or FERC rules in the past ten years. (O-17)

LS Power (CAL GRID) indicated that neither it nor any LS Power affiliate 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)

3.10.13 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 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-SCE, and LS Power (CAL GRID) 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 capability to adhere to standardized maintenance practices. Some of the project sponsors and their teams have more local experience and resources near the project than others. The ISO considers it an advantage if the project sponsor has complied with the TCA as a PTO. For this analysis, the ISO considers compliance with transmission-related tariff provisions to be more important than compliance with generation-related tariff provisions.

Horizon West, Lotus-SCE, and LS Power (CAL GRID) and their teams have existing maintenance practices complying with the ISO's transmission maintenance standards under the TCA that have been approved by the ISO. CalGrid indicated that its maintenance practices include the elements of the ISO's maintenance standards.

All four project sponsors have proposed enhanced vegetation management for the areas of this project that are in high fire threat districts and would create or update their CPUC wildfire mitigation plans accordingly.

The proposed emergency response and restorations times for all of the project sponsors are reasonable. Lotus-SCE would have more local resources (crews, vehicles, cranes, helicopters, wire stringing equipment, etc.) and access to mutual assistance programs to respond to emergencies than CalGrid, Horizon West, or LS Power (CAL GRID) would. Horizon West would have more resources through its affiliates to respond to emergencies than CalGrid or LS Power (CAL GRID) would. LS Power (CAL GRID) indicated it would have access to Lindsey emergency restoration structures.

Regarding plans or provisions to be implemented by the project sponsor to replace major failed equipment, the proposals of Horizon West and Lotus-SCE indicate greater access to spare transmission line equipment and parts than the proposals of CalGrid or LS Power (CAL GRID).

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 Lotus-SCE is slightly better than the two proposals of Horizon West, between which there is no material difference and which are slightly better than the proposal of LS Power (CAL GRID),

which is slightly better than the proposal of CalGrid, 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 capability to adhere to standardized operating practices and standards and applicable tariffs. All of the project sponsors indicated they have faced challenges and risks similar to what they would face with this project, including wildfire risk. Some of the project sponsors and their teams have more local experience and situational awareness near the project than others. The ISO considers it an advantage if the project sponsor has complied with the TCA as a PTO. For this analysis, the ISO considers compliance with transmission operations-related tariff provisions to be more important than compliance with generation-related tariff provisions.

Horizon West, Lotus-SCE and LS Power (CAL GRID) and their teams operate transmission facilities under the ISO's operational control and are required to comply with NERC standards, the TCA, and the ISO Tariff. CalGrid does not have 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, Horizon West, Lotus-SCE, and LS Power (CAL GRID) identified existing comprehensive corporate level compliance oversight functions that would include subcontractors. CalGrid indicated that its approach to compliance would be built upon the team's past experiences operating and maintaining significant transmission infrastructure.

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. The Horizon West, Lotus-SCE, and LS Power (CAL GRID) teams and their affiliates have more transmission facilities subject to NERC compliance than CalGrid. CalGrid provided compliance reports for its O&M contractor, which has more experience with generation facilities and less with transmission facilities than the other project sponsors.

Horizon West and Lotus-SCE each maintain active fire prevention programs and have CPUC approved wildfire mitigation plans that they would update to include this project. Horizon West and Lotus-SCE indicated they have visual and electronic monitoring tools that continuously monitor weather conditions that could lead to wildfires and assist in making real time operation decisions; however, Lotus-SCE has a more extensive network of weather stations and cameras in the Southern California region than Horizon West. CalGrid indicated that during operations it would adhere to industry leading programs, processes, and operations procedures that would be documented in a CPUC-ratified wildfire mitigation plan. LS Power (CAL GRID) indicated it would establish a wildfire mitigation plan that defines the processes to identify potential hazards and risk

scenarios, analyzes the potential hazards and risk scenarios, evaluates the analysis, and establishes mitigations, and that robust vegetation management practices, monitoring, and emergency preparedness would be key to this plan.

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 Lotus-SCE is slightly better that the two proposals of Horizon West, between which there is no material difference and which are slightly better than the proposal of LS Power (CAL GRID), which is slightly better than the proposal of CalGrid, regarding this component of the factor.

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 this factor (demonstrated capability to adhere to standardized construction practices), the ISO has determined that there is no material difference among the five proposals of the four project sponsors.

Regarding the second component of this factor (demonstrated capability to adhere to standardized maintenance practices), the ISO has determined that the proposal of Lotus-SCE is slightly better that the two proposals of Horizon West, between which there is no material difference and which are slightly better than the proposal of LS Power (CAL GRID), which is slightly better than the proposal of CalGrid, regarding this component of the factor.

Regarding the third component of this factor (demonstrated capability to adhere to standardized operating practices), the ISO has determined the proposal of Lotus-SCE is slightly better that the two proposals of Horizon West, between which there is no material difference and which are slightly better than the proposal of LS Power (CAL GRID), which is slightly better than the proposal of CalGrid, regarding this component of the factor.

Based on the combination of the foregoing comparisons for the three components of this factor, the ISO has determined that the proposal of Lotus-SCE is better than the two proposals of Horizon West, between which there is no material difference and which are better than the proposal of LS Power (CAL GRID), which is better than the proposal of CalGrid, 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 would 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 (including wildfire), automobile liability, excess liability (including wildfire), worker's compensation, professional liability, and pollution liability coverage. (F-14)

CalGrid indicated it would also procure an owner's interest policy during the course of construction to cover third party bodily injury and property damage. CalGrid indicated the owner's interest limits would be excess and above the construction contractor's contractually required limits and cover the owner for third-party bodily injury and property damage losses resulting from contractors and subcontractors, which are not otherwise insured under the contractors' insurance. With respect to wildfire coverage, CalGrid indicated the limits would be subject to commercial reasonableness and availability and would be 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 (including wildfire) and excess liability (including wildfire) insurance 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 would cover the owner for third-party bodily injury and property damage losses resulting from contractors and subcontractors, which are not otherwise insured under the O&M contractor's insurance. With respect to wildfire coverage, CalGrid indicated limits would be subject to commercial reasonableness and availability and would be 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 necessary 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.

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 its O&M contractor to have at project startup.

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)

3.11.2 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Horizon West indicated that NextEra and its affiliated, subsidiary, and associated companies and corporations, which includes Horizon West, maintain and would maintain a property all-risk insurance program that would cover the facility 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. (F-14)

Horizon West indicated its affiliate NextEra has an umbrella general liability policy that includes hundreds of millions of dollars of California wildfire-specific coverage. (Z-1)

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 useful life.

Horizon West indicated it would have access to additional equity funding, additional credit facilities, and a robust insurance program to finance unexpected repairs, both

during construction and over the life of the project. Horizon West indicated its access to additional parent equity and debt funding is backed by NextEra, which has access to and regularly secures financing in the public debt and equity markets. (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 provided a transmission line restoration plan to be implemented in response to an outage or other emergency conditions that would be encountered over the life of the project resulting in damages requiring structure, wire, or hardware replacement. (O-15)

Horizon West indicated that in addition to spares on-site, it would have access to its affiliate-wide spares sharing program, specifically FPL 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 can be incorporated into the larger NextEra spare parts management program. (O-15)

3.11.3 Information Provided by Lotus-SCE

Lotus-SCE indicated it plans to maintain insurance for the project that is typical of industry standards and required for debt financing. Lotus-SCE indicated this would include coverage based on replacement value, as well as business interruption and general liability. (F-14)

Lotus-SCE indicated that it would require the construction contractor to carry its own insurance with appropriate limits and policy terms and provisions that are commensurate with a project of this type, size, and complexity, during the construction phase of the project as required and approved by the ISO, project lenders, and the project sponsor. (F-14)

Lotus-SCE indicated that SCE expects to maintain property insurance limits of hundreds of millions of dollars throughout the construction and the operational life of the project facilities and that this insurance would cover structures, such as substations, but coverage for transmission lines would only be available within 1000 meters of a structure such as a substation or generating station. Lotus-SCE indicated this provision is standard in property insurance policies covering power lines and the policy would not exclude coverage for negligence. (F-14)

Lotus-SCE indicated that other insurance coverage carried by SCE would include general liability insurance and wildfire liability insurance. Lotus-SCE indicated that SCE maintains hundreds of millions of dollars of general liability insurance covering bodily injury and property damage to third parties caused by SCE's negligence and that SCE also maintains $1 billion of customer-funded self-insurance coverage for potential wildfire liability involving SCE's facilities. Lotus-SCE indicated that additional wildfire liability coverage would be available through the separate California Wildfire Fund. (F-14)

Lotus-SCE indicated that some types of losses include, but are not limited to: (1) injury of an SCE worker (covered by workers compensation insurance); (2) injury of a contractor (covered by contractors' workers' compensation insurance); (3) injury to member of the public (covered by general liability insurance); (4) equipment failure or maintenance (not covered by insurance, part of O&M and capital maintenance); and (5)

major failure of multiple towers or spans due to wind storm, earthquake, etc. (not covered by insurance, replaced under emergency programs and CPUC and FERC ratemaking). Lotus-SCE indicated the extent of failure coverage would include up to the replacement value of the facility. (F-14)

Lotus-SCE indicated that it would utilize SCE's existing wildfire self-insurance and that this would reduce the ongoing operations and maintenance costs, as well as the administrative and general expenses that are allocated to the project. Lotus-SCE indicated this would protect the ISO's ratepayers from both (1) increases in insurance rates due to uncertainty in wildfire insurance markets and (2) unnecessary additional insurance policies from new ISO PTOs, saving substantial amounts of money per year in project expenses. (CC-1)

Lotus-SCE indicated that SCE would be providing financing during the time period that the project is in-service. Lotus-SCE indicated that SCE possesses a credit facility in the billions of dollars to provide access to short-term liquidity in order to finance unexpected repairs or replacements. (F-15)

Lotus-SCE indicated that SCE has 16 transmission line crews, wire stringing equipment, cranes, digger derricks, and bucket trucks to support emergency transmission work. Lotus-SCE indicated that SCE stocks Lindsey emergency restoration structures, emergency steel poles, and lattice structures that can facilitate various terrains, voltages, and other constraints as well as various types of conductors. (O-15)

Lotus-SCE indicated that SCE has mutual assistance agreements with its neighboring utilities and belongs to the Western Utilities Team for responding to emergent concerns when either needing or providing assistance. (O-13)

3.11.4 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) indicated that it would maintain insurance coverages with companies rated "A-" or better throughout the construction period and operational life of the project. LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated that during construction it would be protected by builder's all-risk insurance coverage. Once operational, LS Power (CAL GRID) indicated 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).

LS Power (CAL GRID) indicated that LS Power's insurance coverage for damages due to wildfires currently affords approximately $100 million in total liability limits. (Response to qualification questions)

LS Power (CAL GRID) 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.

In addition, LS Power (CAL GRID) indicated it plans to require contractors and subcontractors to have an appropriate level of insurance for the scope of work to be performed. (F-14)

LS Power (CAL GRID) 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)

LS Power (CAL GRID) indicated major capital replacements and rebuilds necessary over the life of the project would be financed through retained earnings, owner cash reserves, revolving lines of credit, and insurance proceeds. (F-15)

LS Power (CAL GRID) 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, LS Power (CAL GRID) indicated that LS Power maintains spare transmission structures, including Lindsey emergency restoration structures, that could be utilized by LS Power (CAL GRID) in the event of a failure. (O-15)

3.11.5 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.

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. This project will run through CPUC-designated High Fire Threat Districts; therefore, the ISO considers the extent to which the project sponsors are financially prepared for such an event to be an advantage.

Financial Resources
As discussed above in Section 3.7 of this report, the financial resources of the project sponsors vary. The comparative analysis in Section 3.7 primarily focuses on the ability of a project sponsor to finance the development and construction of the project. However, when comparing the ability of a project sponsor to assume liability for major losses for this project, the ISO considers the financial resources available to cover major losses both during development and construction as well as during the operational life of the project. For this factor, the ISO considers the financial resources available during the operational life of the project when the facilities are energized to be more important than during development and construction of the project in the comparative analysis of financial resources.

In the discussion of financial resources of the project sponsors in Section 3.7 of this report, the ISO has concluded that the proposals of CalGrid and Horizon West are the strongest, followed by LS Power (CAL GRID)'s proposal and then Lotus-SCE's proposal. This conclusion is primarily based on the financial resources Lotus-SCE represented in its proposal that would be available during the development and construction phase of the project. However, more relevant to this factor, Lotus-SCE represented in its proposal that SCE would be providing financing during the time period that the project is in-service and that SCE possesses a credit facility in the billions of dollars to provide access to short-term liquidity in order to finance unexpected repairs or replacements.

Based on the forgoing considerations, the ISO has determined that for this aspect of this factor there is no material difference among the proposals of CalGrid, Horizon West, and Lotus-SCE, which are better than LS Power (CAL GRID)'s proposal in this regard.

Insurance Considerations
Regarding the proposed insurance coverage by the project sponsors, the ISO considers the insurance coverage available to cover major losses both during development and construction as well as during the operational life of the project. The ISO considers the insurance coverage available during the operational life of the project when the facilities are energized to be more important than during development and construction of the project.

During construction of the project, CalGrid, Horizon West, and LS Power (CAL GRID) indicated that there would be an all risk insurance policy in place for not less than the replacement cost of the project, including general or excess liability insurance that covers wildfires. Lotus-SCE indicated that SCE expects to maintain property insurance in the hundreds of millions of dollars and general liability insurance in the hundreds of millions of dollars during the construction of the project. 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 during the construction phase. LS Power (CAL GRID) indicated that its insurance coverage for damages due to wildfires currently affords approximately $100 million in total liability limits available during the construction phase.

During the operational life of the project, CalGrid, Horizon West, and LS Power (CAL GRID) indicated there would be an all risk insurance policy in place for not less than the replacement cost of the project, including general or excess liability insurance that covers wildfires. Lotus-SCE indicated that SCE expects to maintain property insurance in the hundreds of millions of dollars and general liability insurance in the hundreds of millions of dollars during the operational life of the project. Lotus-SCE indicated that it also maintain $1 billion of customer-funded self-insurance coverage for potential wildfire liability involving its facilities, with additional wildfire liability coverage through the separate California Wildfire Fund, which is expected to reach $21 billion of wildfire insurance. 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 during the operations phase. LS Power (CAL GRID) indicated that its insurance coverage for damages due to wildfires currently affords approximately $100 million in total liability limits available during the operations phase.

Based on the foregoing considerations, and because the ISO considers project insurance coverage during operations more important than during construction, the ISO has determined that, regarding this consideration, the proposal of Lotus-SCE is better than the proposals of CalGrid, Horizon West, and LS Power (CAL GRID) due to its

access to SCE's $1 billion in self-insurance wildfire liability insurance and access to the California Wildfire Fund during operations. The ISO has determined that the two proposals of Horizon West, between which there is no material difference, are better than the proposals of CalGrid and LS Power (CAL GRID) due to Horizon West's hundreds of millions of dollars in additional wildfire liability insurance available during construction and operations. The ISO has also determined that the proposal of LS Power (CAL GRID) is better than the proposal of CalGrid due to LS Power (CAL GRID)'s approximately $100 million in wildfire liability insurance.

Mitigation of Equipment Failures
The ISO has determined that the proposals of Horizon West and Lotus-SCE, among which there is no material difference, are better than the proposals of CalGrid and LS Power (CAL GRID), because they have greater access to spare parts through either affiliates or mutual assistance agreements. The ISO has also determined that LS Power (CAL GRID)'s proposal is better than CalGrid's proposal in this regard because of LS Power (CAL GRID)'s access to LS Power's spare parts program.

Overall Comparative Analysis
For the specific scope of this project, in the comparative analysis of this factor, the ISO considers that insurance coverage is more important than financial resources and mitigation of equipment failures, especially because this project runs through CPUC-designated High Fire Threat Districts. 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 the proposal of Lotus-SCE is better than the two proposals of Horizon West, between which there is no material difference and which are better than the proposal of LS Power (CAL GRID), which is slightly better than the proposal of CalGrid, regarding this factor.

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 four project sponsors provided binding capital cost containment proposals for their five 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 binding cost containment measures, the ISO evaluated each project sponsor's proposal regarding the following 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 ROE;
- an annual revenue requirement cap for a limited period of time; and
- a financial incentive penalty for failure to energize the project by an in-service date of June 1, 2034.

(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 the 11 projects that were completed were completed at 5.4% below budget on average and the average budget of these projects was $120 million. (Prior Projects and Experience Workbook)

Project Management Capabilities

CalGrid indicated that its proposed project management steps would 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 included the owner of each risk (CalGrid, ISO), as well as the mitigation measure for each risk item. (P-4)

CalGrid indicated that it has faced environmental permitting risks and challenges similar to those foreseeable with the project's proposed route, including transmission line development through urbanized areas, development of habitat conservation plans under the endangered species act, development of magnetic field management plans, and managing mitigation monitoring, reporting, and compliance programs for large-scale utility infrastructure that traverses multiple permitting jurisdictions. (P-5)

CalGrid indicated that it would acquire land rights from the City of Mission Viejo, City of Orange, Orange County, Orange County Harbors, Beaches, and Parks District, Santa Ana Mountains County Water District, Santa Margarita Water District, and private landowners. (E-1, E-2, E-3, E-4, L-1)

CalGrid indicated that, in the event of relocation of the assumed North of SONGS Substation site that would increase the length of the purposed route, the capital cost increase would be limited to the lesser of actual costs or a specified per mile amount. (RFC response)

CalGrid indicated that it would be sponsoring proposals for two other ISO competitive solicitation projects: the North Gila-Imperial Valley #2 500 kV transmission line project and the Imperial Valley-North of SONGS 500 kV transmission line and substation 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 the additional project awards 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 isn't compromised for any additional awarded projects. (P-4)

3.12.2 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

Cost Containment
Horizon West for both of its proposals proposed the following cost containment measures:

- a limit on its ROE for costs above a capped value;
- a limited operations and maintenance cap for a limited period of time; and
- a limited cost of debt cap for a limited period of time.

(CC-1, Cost and Cost Containment Workbook)

Horizon West 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
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, 33 of which were completed at or below budget and 20 of which were completed above budget and one project that did not have budget information.

Horizon West indicated that the projects that were completed below budget were completed below budget by an average of 3.7% and the average budget of these projects was $400 million. Horizon West indicated that the projects that were completed above budget were completed above budget by an average of 3.2% 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 include 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 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 23 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 changes to transmission routing, delay in the CPCN process, and construction cost risk and in each case identified mitigation measures. (P-4)

Horizon West indicated that it has faced environmental permitting risks similar to those foreseen for the project and provided example of projects that required extensive stakeholder engagement to mitigate siting and permitting risks associated with a project crossing Tribal land, environmental challenges due to traversing protected waterways, and a requirement for schedule compression due to delays in permitting. (P-5)

Horizon West indicated that its proposed route would mitigate land acquisition risk, undergrounding risk, and environmental impacts as much as possible while providing a viable route. (L-1)

Horizon West indicated that its proposed route would minimize the risks of suburban opposition and undergrounding, avoid most private land, maximize co-location with existing transmission infrastructure, minimize impacts to sensitive biological, cultural, and recreational resources to the extent feasible, and entirely avoid the potentially fatal flaw constraint of the federally designated Trabuco Inventoried Roadless Area and the federally designated San Mateo Canyon Wilderness Area. (Executive summary)

For its single circuit proposal, Horizon West indicated that its proposed route would utilize a portion of the existing SCE easement for the final two miles into Serrano Substation. In total, Horizon West indicated that its proposed route would require 960 total acres of rights-of-way with approximately 21 miles of the route located on land owned and maintained by Orange County. (L-1)

For its double circuit proposal, Horizon West indicated that its proposed route would utilize a portion of the existing SCE easement for the final two miles into Serrano Substation. In total, Horizon West indicated that its proposed route would require 1,200 total acres of rights-of-way with approximately 21 miles of the route located on land owned and maintained by Orange County. (L-1)

Horizon West indicated that it would acquire land rights from the Department of Defense, Orange County, and private landowners. (E-1, E-2, E-3, E-4, L-1)

Horizon West indicated that, if the North of SONGS Substation site were to be relocated from its assumed location, one of its evaluated alternative routes may be evaluated as a more cost-effective alternative from that location. (Response to RFC #1)

Horizon West indicated that it is sponsoring more than one project in the ISO's 2022-2023 competitive solicitation process and that, if awarded more than one project, it would be able to draw on NextEra's scale, as well as access to financial guarantees in excess of the financing required for the project, to complete multiple projects. (P-4)

3.12.3 Information Provided by Lotus-SCE

Cost Containment
Lotus-SCE proposed a capital cost cap of $291,794,964 in October 2023 dollars, which would include both capital expenditures and allowance for funds used during construction (AFUDC). (CC-1)

Lotus-SCE indicated that it would not seek any adjustment to the cost cap for the first $3 million increase in the project cost irrespective of the cause. However, Lotus-SCE indicated that this $3 million dead band would not apply to any increase in the project cost resulting from the ISO changing the project scope, any interconnection requirements from the interconnecting TOs, or any affected system costs that would result in a change in the project requirements or specifications. (CC-1)

Lotus-SCE indicated that it would seek an increase in the cost cap if realized cost increases were to exceed 2.1%. (CC-1)

Lotus-SCE proposed an ROE cap of 10.3% including FERC adders for Lotus' portion of the project for the life of the project. (CC-1)

Lotus-SCE proposed a 50/50 debt to equity structure for Lotus' portion of the project. (CC-1)

Lotus-SCE indicated that SCE's expansive operations and maintenance capabilities provide strong economies of scale for transmission lines and substations close to its existing service territory. Lotus-SCE indicated that approximately 22 miles of transmission line would be within existing SCE easements and only 6.45 miles would need to be purchased for the project and would be within existing SCE service territory. For this reason, Lotus-SCE indicated that only a small amount of incremental labor cost is forecasted associated with the placement of these new lines and that all incremental labor associated with SCE's standard operations and maintenance would be conducted by SCE's existing operations and maintenance staff, including extensive experience in NERC activities such as Transmission Owner, Transmission Operator, and Transmission Planner functions. Lotus-SCE indicated that the small amount of incremental labor cost was included in its estimate of the cost of O&M for overhead lines, which was calculated as a per-mile allocation of total transmission operations and maintenance costs mostly attributable to the new purchased property for the project. Lotus-SCE indicated that this would provide strong operational capabilities while leveraging the in-place local systems and operations and maintenance crew support to ensure the most efficient ongoing O&M costs. (Response to RFC 4)

Lotus-SCE indicated that towers and lines within 1000 meters of an electrical facility would be covered by SCE within an existing insurance policy at no cost to the project. Lotus-SCE also indicated that SCE would handle property losses for non-covered portions of line segments of transmission lines through its self-insurance coverage and that SCE would not allocate any costs associated with that program to the project. (Response to RFC 4)

Lotus-SCE indicated that it would utilize SCE's existing wildfire self-insurance, which would reduce the ongoing operations and maintenance costs, as well as the administrative and general expenses that would be allocated to the project, protecting the ISO's customers from both increases in insurance rates due to uncertainty in wildfire insurance markets and unnecessary additional insurance policies from new ISO PTOs. (CC-1)

Lotus-SCE identified the following exclusions to its proposed cost containment provisions:

- Costs resulting from any change in interconnection requirements and any associated costs from what is described in the ISO Functional Specifications.

- Costs resulting from changes in the proposed project route, including the cost of any time delay associated therewith.
- Costs resulting from any change in the proposed North of SONGS Substation location.
- Costs due to the North of SONGS Substation not being available for interconnection, such as AFUDC and direct and indirect management costs, that may be incurred after mechanical completion of the line.
- Costs resulting from any additional evaluations or field studies beyond the 60 miles of transmission line assumed for CEQA environmental review by the CPUC.
- Costs resulting from any change as a result of any governmental action, change in law, or environmental mitigation that is not normal industry practice.

Lotus-SCE indicated that its cost cap reflects a constant 2.1% rate of inflation and that it would seek an increase in the cost cap if realized cost increases were to exceed 2.1%. (CC-7)

Lotus-SCE indicated that it would seek an increase in the cost cap if its cost of debt should exceed what was anticipated in its proposal. (CC-7)

Lotus-SCE proposed a definition of Force Majeure Events that included modifications to the ISO Tariff definition. (CC-8)

Lotus-SCE indicated that costs associated with changes to the proposed project route required by a permitting or siting authority, including the cost of any associated time delay, would be excluded from the Lotus-SCE cost cap. (CC-9)

Lotus-SCE indicated that costs associated with changes to the proposed structures, equipment, or transmission line required by a permitting or siting authority, including the cost of any associated time delay, would be excluded from the Lotus-SCE cost cap. (CC-10)

Lotus-SCE indicated that costs associated with an increase in the amount of environmental mitigation beyond what was assumed in the proposal, including the cost of any associated time delay, would be excluded from the Lotus-SCE cost cap. (CC-11)

Lotus-SCE indicated that, if a permitting or siting authority were to require undergrounding of the proposed transmission facilities or a portion of the transmission facilities, the associated costs, including the cost of any associated time delay, would be excluded from the Lotus-SCE cost cap. (CC-12)

Lotus-SCE indicated that costs associated with a delay in the receipt of any siting or permitting authorizations beyond the six month float included in the proposed schedule would be excluded from the Lotus-SCE cost cap. (CC-13)

Lotus-SCE indicated that costs resulting from a delay in the construction of a PTO's interconnection facility for the project or costs incurred by Lotus-SCE as a result of changes in the scope of work or location of the project required or caused by the PTO would be excluded from the Lotus-SCE cost cap. (CC-14)

Lotus-SCE indicated that any changes due to the replacement of any of its approved contractors would not have any impact on its proposed cost cap or any other cost containment measure. (CC-15)

Cost Containment Performance for Past Projects
Lotus-SCE provided a list of project experience for its substation and transmission line projects that included actual cost versus budget performance. Lotus-SCE 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, seven of which were developed by SCE and one by Lotus. Of the seven transmission line projects developed by SCE, Lotus-SCE indicated that six were completed at or below budget and one was above budget. Lotus-SCE indicated that the six projects that were completed below budget were completed below budget by an average of 11.9%, and the average budget of these projects was $560 million. Lotus-SCE indicated that one project was completed above budget by 26.7%, and the original budget of this project was approximately $1.5 billion. Lotus-SCE indicated the project developed by Lotus (which Lotus-SCE proposes to be responsible for the development and construction of this project) is still in development. (Prior Projects and Experience Workbook)

Project Management Capabilities
Lotus-SCE indicated that, at the inception of the project, it would establish a comprehensive project plan that would outline the scope, objectives, deliverables, and milestones for the project. Lotus-SCE also indicated that the plan would include a detailed schedule, breaking down the project into manageable tasks with clear dependencies and deadlines. (P-1)

Lotus-SCE indicated that, through respective contractors, it would develop plans that include preconstruction, coordination with SCE, FERC filings, a public outreach plan, and SCE interconnection applications. (P-1)

Lotus-SCE 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-SCE provided a list of major risks and obstacles that included not knowing the location and schedule for North of SONGS Substation, line siting and land acquisition, environmental permitting, cost containment strategy, and its ability to develop multiple projects simultaneously. Lotus-SCE also provided mitigation measures for these risks and obstacles. (P-4)

Lotus-SCE indicated that it is willing to absorb first $3 million of costs above the cost cap before approaching the ISO for a potential change in the cost cap even if such increase in cost is due to force majeure events or other cost cap exclusions specified in its proposal, except that it would not apply to any increase in the project cost resulting from the ISO changing the project scope, any interconnection requirements from the interconnecting TOs, or any affected system costs that would result in a change in the project requirements or specifications. (P-4)

Lotus-SCE indicated that it has faced environmental permitting risks and challenges similar to what it expects for this project and provided an example project where it had to submit multiple notices to mitigate delays in obtaining permits and another project where

it had to implement mitigation measures for cultural and paleontological resources uncovered during pre-construction surveys. (P-5)

Lotus-SCE indicated that approximately 22 miles or more than 75% of the proposed route for the project would utilize SCE's existing electric utility rights-of-way and that 15.6 miles of these SCE controlled rights-of-way are vacant and would require no modifications or widening of the rights-of-way to accommodate the project. Lotus-SCE indicated that 6.45 miles of the SCE-owned rights-of-way would require reconfiguration of existing 66 kV circuits, as underbuild circuits, that would be collocated on the proposed 500 kV transmission line's structures. Lotus-SCE indicated that this collocation and maximization of the use of the existing rights-of-way would minimize the environmental and land use footprint of the project. (A-4)

Lotus-SCE indicated that the proposed project route would minimize the total of new rights-of-way easements required by siting more than 75% of the length of the project within existing SCE-controlled rights-of-way and that the use of existing rights-of-way would allow for more certainty in the land acquisition stage of project development due to less time being necessary for land acquisition efforts. (P-4)

Lotus-SCE indicated that the project intends to utilize an HTLS conductor that would utilize a compact structure design to reduce new easement or existing rights-of-way width requirements. Lotus-SCE indicated that the reduction in sag of the HTLS conductor would provide cost savings in the structural components of the line by allowing for reduced height of the proposed 500 kV structures. (A-4, T-1b)

Lotus-SCE indicated that, if the identified North of SONGS Substation site were to be relocated from its assumed location, Lotus-SCE would work with the ISO to potentially adjust the existing cost containment provisions that would apply to the project under the new situation that would arise from a relocated North of SONGS Substation site to reflect actual costs incurred. Lotus-SCE provided an estimated range of $5-6.1 million per mile for incremental costs associated with route changes associated with the potential relocation of the North of SONGS Substation site. (Response to RFC)

Lotus-SCE 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)

3.12.4 Information Provided by LS Power (CAL GRID)

Cost Containment

LS Power (CAL GRID) 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 December 31, 2033.

(CC-1; Cost and Cost Containment Workbook)

LS Power (CAL GRID) 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
LS Power (CAL GRID) provided a list of project experience for transmission line projects from LS Power that included actual cost versus budget performance. LS Power (CAL GRID) 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 that were all completed at or below budget. LS Power (CAL GRID) indicated that three projects with original budgets less than $60 million were completed 6% below budget on average. LS Power (CAL GRID) indicated that 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 and one project above $400 million but below $500 million was completed on budget. (Prior Projects and Experience Workbook)

Project Management Capabilities
LS Power (CAL GRID) 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, LS Power (CAL GRID) indicated its approach would be 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
LS Power (CAL GRID) 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 LS Power (CAL GRID). Each risk item also included a mitigation measure. (P-4)

LS Power (CAL GRID) also identified major risks to the project such as interest rate increases, equipment and materials cost increases, undergrounding requirements, wildfire risk, North of SONGS Substation location, and land acquisition costs and provided the mitigation measures that it has adopted. (P-4)

LS Power (CAL GRID) indicated that its affiliates have extensive experience with federal review and permitting processes, including NEPA reviews, Bureau of Land Management rights-of-way grants, endangered species act compliance, U.S. Fish and Wildlife Service biological opinions, and various other federal and state agency approvals. LS Power (CAL GRID) also provided examples of its affiliate's work experience with the CPUC on two recent substation projects. (P-5)

LS Power (CAL GRID) indicated that more than half of the rights-of-way (roughly 56%) required for its proposed route would be on lands owned by the United States government or Orange County. (A-4)

LS Power (CAL GRID) indicated it would acquire land rights from Department of Defense, U.S. Forest Service, and private landowners. (E-1, E-2, E-3, E-4, L-1)

LS Power (CAL GRID) indicated that, in the event of relocation of the assumed North of SONGS Substation site that would increase the length of the purposed route, capital costs would increase by a specified amount per mile. (RFC response)

LS Power (CAL GRID) 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)

Authority to Impose Binding Cost Caps

(CC-16)

3.12.5 Information Provided by CalGrid

CalGrid indicated that this is inapplicable because CalGrid is proposing binding cost control measures. (CC-16)

3.12.6 Information Provided by Horizon West for Horizon West Single Circuit and Horizon West Double Circuit Proposals

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 would primarily be enforced by FERC, through the Approved Project Sponsor Agreement and Horizon West's FERC-approved transmission rates. (CC-16)

3.12.7 Information Provided by Lotus-SCE

Lotus indicated that while the CPUC has a statutory mandate to establish maximum reasonable cost, FERC ultimately determines whether transmission costs incurred are just and reasonable. (CC-16)

3.12.8 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) indicated that this is inapplicable because it is proposing binding cost control measures. (CC-16)

3.12.9 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; transmission system interconnections, 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.

The ISO anticipates that the need that the project is intended to address may not exist prior to June 1, 2034. 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 four project sponsors for the five proposals 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.

Lotus-SCE proposed a capital cost cap of $291,794,964 in October 2023 dollars, which includes both capital expenditures and AFUDC. Lotus-SCE indicated that the project sponsor would not seek any adjustment to the cost cap for the first $3 million increase in the project cost irrespective of the cause. However, the $3 million dead band would not apply to any increase in the project cost resulting from the ISO changing the project scope, any interconnection requirements from the interconnecting TOs, or any affected system costs that would result in a change in the project requirements or specifications. Lotus-SCE indicated that it would seek an increase in the cost cap if realized cost increases exceed 2.1%. Lotus-SCE indicated that the cost cap would adjust based on actual realized prices, which significantly reduces the value of the cost cap. Therefore, none of the ISO's sensitivity analysis scenarios included a cost cap for Lotus-SCE's project. However, Lotus-SCE's proposal still performed strongest in all but one of the sensitivity analysis scenarios.

Lotus-SCE proposed an ROE cap of 10.3% including FERC adders for Lotus' portion of the project for the life of the project. Lotus-SCE proposed a 50/50 debt to equity structure for Lotus' portion of the project.

Lotus-SCE indicated that under the joint bid agreement and future transaction document between Lotus and SCE, SCE would perform all operations and maintenance tasks and support for the project. Lotus-SCE indicated that SCE already has expansive operations and maintenance capabilities within its service territory, and Lotus-SCE indicated that it has forecasted only a small amount of incremental labor cost associated with the placement of the new lines for the project, mostly attributable to the limited percentage of new property to be purchased for the project. All incremental labor associated with SCE's standard operations and maintenance would be conducted by SCE's existing staff, significantly limiting O&M costs, administrative and general (A&G) costs, and outside services requirements costs for the life of the project. In addition, the limited

percentage of new land rights needed by Lotus-SCE for the project would limit the amount of additional land costs, property insurance and associated costs for the project.

Horizon West proposed a soft capital cost cap that would limit ROE on project capital costs in excess of Horizon West's estimated capital costs. Horizon West also proposed an O&M cap and limited cost of debt cap. However, Lotus-SCE's proposal, based on its lower estimated O&M, A&G, property insurance, outside service requirements, and land costs, in combination with its limited capital cost cap, $3 million dead band, and partial ROE and debt to equity ratio caps, provides a lower present value of total estimated revenue requirements than Horizon West's proposal in the base case analysis as well as all but the most extreme financial sensitivity analysis case.

CalGrid and LS Power (CAL GRID) provided robust cost containment provisions through proposed annual revenue requirement caps for a significant portion of the identified project useful life. However, both CalGrid's proposal and LS Power (CAL GRID)'s proposal had significantly higher projected present value of annual revenue requirements than Lotus-SCE's proposal primarily due to a combination of Lotus-SCE's low estimated operating costs and lower capital cost estimate.

Accordingly, the ISO has determined that Lotus-SCE's proposal is strongest when considering both cost and cost containment, as seen throughout the financial sensitivities performed.

The annual revenue requirement caps offered by CalGrid and LS Power (CAL GRID) are more robust than the combination of the soft capital cost, operations, and cost of debt caps offered by Horizon West for its two proposals. However, despite Horizon West's more limited cost containment as compared to those of CalGrid and LS Power (CAL GRID), Horizon West's single circuit proposal, based on its lower capital cost estimate and reduced return on equity associated with its soft capital cost cap, operations cap, and cost of debt cap, provides lower present value estimated revenue requirements in the base case analysis as well as in all but a few extreme cases of the sensitivity analyses performed.

Regarding the projected costs and proposed cost containment measures of the other three proposals, LS Power (CAL GRID)'s proposal has a lower estimated present value revenue requirement than CalGrid's proposal in all sensitivity analysis scenarios, due to its lower annual revenue requirement caps. Both CalGrid's proposal and LS Power (CAL GRID)'s proposal have a lower estimated present value revenue requirement than Horizon West's double circuit proposal due to Horizon West's higher estimated capital costs.

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.

Nevertheless, excluding consideration of any siting-related cap exclusions from the various cost containment measures or any project risk considerations, based on the projected capital costs and operations and maintenance costs of Lotus-SCE's proposal and the other considerations discussed above, the ISO has determined that Lotus-SCE's proposed combination of projected costs and cost containment measures is stronger than those of the other project sponsors, followed by Horizon West's single circuit

proposal, LS Power (CAL GRID)'s proposal, CalGrid's proposal, and then Horizon West's double circuit proposal.

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 substantial number of projects that were completed at or below budget as well as a number of projects that were completed above budget. The projects identified by Horizon West had similar capital requirements to this project, and those projects that were completed both over and under budget had costs that were an average of 4% above or below the estimated costs. CalGrid and LS Power (CAL GRID) demonstrated a reasonable degree of success in completing projects at or under budget, recognizing that the number of completed projects was less than Horizon West's. The ISO has determined that there is no material difference among the proposals from CalGrid, Horizon West, and LS Power (CAL GRID) regarding demonstrated ability to complete projects at or under budget. The ISO also determined that their proposals were better than the proposal from Lotus-SCE in this regard because the majority of the experience identified by Lotus-SCE was for SCE projects, and SCE is not responsible for the construction of this project, and because of Lotus' recent public FERC filing for the Ten West Link project transmission tariff, which includes significant costs in excess of the cost cap. 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 four project sponsors provided a reasonable approach to professional project management for their five proposals and, as a result, determined them to be comparable regarding project management capabilities.

Project Risks and Mitigation of Risks
All four 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 five proposals. All project sponsors confirmed their ability to work on multiple projects simultaneously, if awarded more than one. All four project sponsors indicated that they have taken steps to reduce risk.

All four project sponsors' proposals identified a variety of similar cost exclusions that were excluded from their respective binding cost containment provisions. Horizon West's proposal identified the least number of cost cap exclusions, while the proposals from CalGrid and LS Power (CAL GRID) identified numerous cost cap exclusions but fewer than those identified by Lotus-SCE. The proposal from Lotus-SCE included a number of additional cost cap exclusions beyond those specified in the proposals of the other project sponsors and indicated cost cap provisions were subject to numerous escalations, including inflation.

The proposals from CalGrid, Horizon West, and LS Power (CAL GRID) indicated that they do not have any existing land rights and will need to acquire all of the required land rights for the project. The areas identified in each of these proposals included environmentally sensitive areas in proximity to suburban developments.

Horizon West indicated that it would require the use of two miles of existing SCE rights-of-way. In addition, the proposed routes identified in associated transmission line mapbooks included in the proposals of CalGrid and LS Power (CAL GRID) showed the proposed 500 kV line in the vicinity of Serrano Substation routed within the existing SCE rights-of-way. This poses a siting risk because the ISO could not identify a process for a third party transmission developer to force an incumbent utility to share or provide access to its transmission rights-of-way.

Lotus-SCE's proposal indicated that it already possesses 22 miles of the required 28.7 miles of the required transmission line rights-of-way for the project and that the remaining land acquisition activities will be limited to negotiations with five landowners as well as Orange County. This significantly limits Lotus-SCE's risk of cost escalation for, among other considerations, route changes and permitting delays in comparison to the proposals from CalGrid, Horizon West, and LS Power (CAL GRID).

All project sponsors indicated that they had identified and evaluated additional substation sites in the event their assumed site for the proposed North of SONGS Substation were to be relocated. The ISO determined that these sites could be used if the assumed sites were not available. The risks of each of these proposals are different in nature, but the ISO does not consider any of these risks to be so much greater or smaller in magnitude that it finds a material difference among the project sponsors' proposals regarding these various substation site relocation risks.

In addition, all of the proposals include routes of differing lengths based on the initial assumed locations of North of SONGS Substation. The final location of North of SONGS Substation was identified in the ISO Functional Specifications to be within 10 miles north of the existing San Onofre Substation and two miles from the existing SCE 230 kV line rights-of-way. The ISO performed sensitivity analyses using estimates provided by each project sponsor to determine the scope of the cost impacts for locations within the defined areas. These sensitivities led to variations in each proposal's projected cost analysis but did not have a material effect on the results of the comparative analysis of the relative evaluated projected cost and cost containment proposals of the project sponsors.

Based on the foregoing analysis, the ISO has determined that, regarding project risk and mitigation, the proposal from Lotus-SCE is better than the proposals of CalGrid, Horizon West, and LS Power (CAL GRID), primarily due to Lotus-SCE's comparatively low risks for permitting and acquisition of land rights, despite Lotus-SCE's greater extent of cost cap exclusions than for the proposals of the other project sponsors. While Horizon West has similar cost escalation risks to those of CalGrid and LS Power (CAL GRID) for its land rights acquisition proposal, Horizon West's more limited number of cost cap exclusions related to land rights acquisition gives its proposal an advantage over CalGrid's and LS Power (CAL GRID)'s proposals.

Regarding identified project risk mitigation, the ISO determined that there is no material difference among the proposed mitigation measures proposed by CalGrid, Horizon West, LS Power (CAL GRID), and Lotus-SCE.

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, projected interconnection costs, 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 four project sponsors are comparable regarding project management capabilities and that the proposals of CalGrid, Horizon West, and LS Power (CAL GRID) are comparable and better than the proposal of Lotus-SCE 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.

The proposal from Lotus-SCE has significantly less route and land acquisition risk than the proposals of CalGrid, Horizon West, and LS Power (CAL GRID) due to the fact that it already has land rights for 75% of the proposed project route within its existing transmission line rights-of-way. In addition, Lotus-SCE has the lowest present value of the projected revenue requirements of all of the proposals in all but one extreme financial sensitivity case primarily due to its low capital, O&M, A&G and related operating costs as well as low land rights acquisition, property insurance, and other associated costs associated with the utilization of SCE's existing staff and infrastructure in the project area. The ISO considers this combination of lower projected costs and lower risk of cost escalation to outweigh the potential effect of Lotus-SCE's greater extent of cost cap exclusions in providing Lotus-SCE's proposal the advantage over the proposals of the other project sponsors regarding the combined comparison of project risks in conjunction with projected costs and cost containment.

For Horizon West's single circuit proposal, its soft capital cost cap provisions, in combination with its lower estimated costs, limited operations and cost of debt caps, and limited proposed cost cap exclusions, make it stronger than the other three proposals regarding estimated costs and cost containment. The present value of the projected revenue requirements of Horizon West's proposal is lower than the present value of the projected revenue requirements of the proposals from CalGrid, LS Power (CAL GRID), and its own double circuit proposal. Also, Horizon West, for both of its proposals, proposes the fewest cost cap exclusions of all proposals.

The proposals from Cal Grid and LS Power (CAL GRID) both have robust cost containment provisions, but LS Power (CAL GRID)'s proposal identifies fewer cost containment exclusions and provides a present value of revenue requirements that is

lower than the present value of the revenue requirements for CalGrid's proposal. In addition, both of these proposals have significantly lower present value of revenue requirements than Horizon West's double circuit proposal primarily due Horizon West's higher capital cost estimate.

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 Lotus-SCE's proposal is better than the four proposals of the other three project sponsors regarding this component, followed in order by Horizon West's single circuit proposal, LS Power (CAL GRID)'s proposal, CalGrid's proposal, and then Horizon West's double circuit proposal.

Comparative Analysis of the Authority to Impose Binding Cost Caps

Because all four 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 four project sponsors offered some binding cost containment provisions 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 Lotus-SCE's proposal is better than the four proposals of the other three project sponsors regarding this factor, followed in order by Horizon West's single circuit proposal, LS Power (CAL GRID)'s proposal, CalGrid's proposal, and then Horizon West's double circuit proposal.

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

CalGrid indicated that its proposed solution is a 35.1-mile, 525 kV transmission line that would utilize steel lattice towers and 1,590 kcmil ACSS Falcon conductor. (A-4)

CalGrid indicated that its proposed bundled Falcon ACSS 1590 kcmil conductor would carry up to a continuous line load of 5,456 Amps without any adverse effect to the conductor performance and that this rating is above the rating specified in the ISO Functional Specifications. (Z-1)

CalGrid indicated that the transmission line as proposed would support the conductor's full 5,456 Amp rating and design of all aspects of this line is consistent with the higher rating. CalGrid indicated that this includes the conductor, structures, hardware, connectors, and other equipment. CalGrid indicated that it would operate and maintain the project to a rating of 5,456 Amps. (Response to Qualification Items).

3.13.2 Information Provided by Horizon West for Horizon West Single Circuit Proposal

Horizon West, for its single circuit proposal, indicated that its proposed solution would include a 40-mile single-circuit triple-bundle 715 kcmil aluminum conductor steel supported (ACSS) conductor supported by a combination of self-supporting lattice and tubular steel poles. (A-4)

Horizon West indicated that its proposed transmission line would have a higher conductor rating that would provide 1,140 MVA additional capacity under summer normal rating conditions, for 4,431 MVA total, based on a 5117 Amp line at 500 kV. Horizon West indicated that all components in the proposed project support the higher line rating. (Response to Qualification Items)

Horizon West indicated that it had designed the proposal to a 300-year mean return period, minimizing the risk of equipment failure and resulting in larger baseline design clearances. Horizon West indicated it had added an additional 5' design buffer to all calculated NESC and GO 95 clearances for the line. (Z-1)

Horizon West indicated that it would bring special capabilities to manage the wildfire risk on the project, which combine pioneering vegetation management capabilities from its NextEra affiliate, a custom design for the project, and a robust insurance plan in the unlikely event of wildfire damages. (Z-1)

3.13.3 Information Provided by Horizon West for Horizon West Double Circuit Proposal

Horizon West, for its double circuit proposal, indicated that its proposed solution would include a 40-mile single-circuit triple-bundle 715 kcmil aluminum conductor steel supported (ACSS) conductor supported by a combination of double-circuit capable self-supporting lattice and tubular steel poles. (A-4)

Horizon West indicated that its proposed transmission line would have a higher conductor rating that would provide 1,140 MVA additional capacity under summer normal rating conditions, for 4,431 MVA total. Horizon West indicated that all components in the proposed project support the higher line rating. (Response to Qualification Items).

Horizon West indicated that it had designed the proposal to a 300-year mean return period, minimizing the risk of equipment failure and resulting in larger baseline design clearances. Horizon West indicated it had added an additional 5' design buffer to all calculated NESC and GO 95 clearances for the line. (Z-1)

Horizon West indicated that it would bring special capabilities to manage the wildfire risk on the project, which combine pioneering vegetation management capabilities from its

NextEra affiliate, a custom design for the project, and a robust insurance plan in the unlikely event of wildfire damages. (Z-1)

Horizon West indicated that its double-circuit capable solution provides the low-cost option to add an additional 4,431 MVA to North of SONGS-Serrano path if desired by the ISO in the future. (Response to Qualification Items).

3.13.4 Information Provided by Lotus-SCE

Lotus-SCE indicated that its proposed transmission solution is a single circuit 500 kV overhead transmission line that would traverse approximately 28.7 linear miles, of which more than 75% of the project is within SCE's existing transmission line rights-of-way. (A-4)

Lotus-SCE indicated the single circuit 500 kV transmission line would be supported on a combination of self-supported tubular steel monopoles and lattice steel towers, of which structure type would be located based upon the terrain. Lotus-SCE indicated that self-supporting steel monopoles would be utilized to allow the project to fit within the existing SCE-owned rights-of-way and to reduce the structure footprint in open space areas to minimize the need for new rights-of-way. (A-4)

Lotus-SCE indicated that it intends to utilize a high temperature low sag conductor, which it indicated would utilize a compact structure design to reduce new easement or existing rights-of-way width requirements. (A-4)

Lotus-SCE indicated that its project has been designed with an actual continuous rating of 5,314 Amps, approximately 39.8% higher than the minimum required by the ISO, a 4-hour emergency rating of 5,314 Amps, approximately 20.6% higher than the minimum requirements set forth in the ISO Functional Specifications, and a 30-minute emergency rating of 5,520 Amps, which is approximately 7.6% higher than the minimum requirements specified in the ISO Functional Specifications, while adhering to the ISO's impedance requirements and design requirement specifications. (QP-1)

Lotus-SCE indicated that the advantage of the proposed project route is that it would be sharing the rights-of-way with the existing 220 kV lines, which already have existing access roads, active SCE vegetation management and maintenance schedules, local field forces and material yards, an existing diverse telecom network, and an extensive inventory of spare infrastructure for unexpected outages. (Z-1)

Lotus-SCE also indicated that, by sharing the rights-of-way with the 220 kV lines, it would greatly minimize the impact to the environment and surrounding communities and, because of these factors, it has identified significant cost savings over alternatives in both capital and O&M costs, in addition to reduced wildfire risk due to only 25% of the line being greenfield construction. (Z-1)

Lotus-SCE included a letter of support from International Brotherhood of Electrical Workers Local 47 in support of the project sponsor. (Z-1)

Lotus-SCE indicated that it has cost advantages relative to the other project sponsors because the others lack existing O&M infrastructure and telecom networks, have an increased risk on the project from lack of familiarity with the community, regulatory, and environmental factors in Orange County, would have an increased environmental impact,

public impact, and land costs associated with a more significant greenfield route in undisturbed land, have an increased wildfire risk associated with potential new entrants to high fire risk areas, and risk large wildfire insurance impacts associated with new entities without existing coverage or access to the California Wildfire Fund. (Z-1)

3.13.5 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) indicated that it is proposing an approximately 34-mile, overhead 500 kV transmission line that would include a triple bundled 1272 kcmil 54/19 ACSS "Pheasant" conductor with self-supported lattice structures. (A-4)

LS Power (CAL GRID) indicated that it would utilize overhead conductor with proposed summer normal and emergency ratings of 5,396 Amps and winter normal and emergency rating of 5,556 Amps, which exceeds the ratings in the ISO Functional Specifications of 3,800 Amps and 3.800 Amps, respectively. (QP-1)

LS Power (CAL GRID) indicated that all aspects of the proposal support the proposed higher line rating with the exception of underground transmission, to the extent it is necessary. LS Power (CAL GRID) indicated that underground transmission would be designed to meet the required ratings in the ISO Functional Specifications. (Response to Qualification Items)

3.13.6 ISO Comparative Analysis

For the purposes of the comparative analysis for this factor, the ISO has reviewed the five proposals submitted from four 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 two areas, (1) the proposed project design and construction and (2) other possible advantages.

Design and Construction
All project sponsors submitted a design that includes a transmission line whose ampacity exceeds that identified in the ISO's Functional Specifications. 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 five 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.

In its double circuit proposal, Horizon West incorporates a design that would facilitate the installation of a second circuit in the future, by using towers initially designed to support two circuits. The project, however, would initially consist of only one circuit. The ISO's planning studies have not identified a need for an additional circuit at this time, nor has the ISO studied the benefits of an additional circuit. For this reason, the ISO does not consider the capability to add a second circuit to the existing tower line a material advantage at this time.

Consequently, the ISO has determined that regarding project design and construction, there is no material difference among the five proposals of the four project sponsors.

Other Advantages
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 its analysis of the more specific selection factors. The ISO recognizes that Lotus-SCE's proposed use of existing rights-of-way for a substantial portion of the project offers significant benefits; however, the ISO has considered and addressed these benefits in its analysis of the more specific selection factors.

Overall Comparative Analysis
Based on consideration of the above two areas of this factor, the ISO has determined that there is no material difference among the five proposals of the four project sponsors regarding this factor overall.

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 two

proposals, between which there is no material difference, are better than the three proposals of the other three project sponsors regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, they are better than Lotus-SCE's proposal regarding the first selection factor (financial resources), and Lotus-SCE's proposal is only slightly better regarding the fourth selection factor (demonstrated capability to adhere to standardized construction, maintenance, and operating practices), which the ISO considers to result in a slight advantage for Horizon West's proposals, they are better than CalGrid's proposal regarding the third selection factor (construction and maintenance record) and regarding the fourth selection factor, and they are better than LS Power (CAL GRID)'s proposal regarding the first selection factor, 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, and there is no material difference among Horizon West's proposals and the three proposals of the other three project sponsors regarding the other relevant selection factors or factor components.

The ISO has determined that Lotus-SCE's proposal is better than CalGrid's proposal regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, although CalGrid's proposal is better than Lotus-SCE's proposal regarding the first selection factor, and there is no material difference between Lotus-SCE's proposal and CalGrid's proposal regarding the second selection factor component, Lotus-SCE's proposal is better than CalGrid's proposal regarding both the third selection factor and the fourth selection factor, which the ISO considers to result in an advantage for Lotus-SCE's proposal.

The ISO has determined that Lotus-SCE's proposal is better than LS Power (CAL GRID)'s proposal regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, although LS Power (CAL GRID)'s proposal is slightly better than Lotus-SCE's proposal regarding the first selection factor, Lotus-SCE's proposal is better than LS Power (CAL GRID)'s proposal regarding the second selection factor component, the third selection factor, and the fourth selection factor, which the ISO considers to result in an advantage for Lotus-SCE's proposal.

The ISO has determined that there is no material difference between CalGrid's proposal and LS Power (CAL GRID)'s proposal regarding this factor because, as discussed regarding each of the relevant individual selection factors or factor components, CalGrid's proposal is better than LS Power (CAL GRID)'s proposal regarding the first selection factor and the second selection factor component, and LS Power (CAL GRID)'s proposal is better than CalGrid's proposal regarding the third selection factor and the fourth selection factor, which the ISO considers to result in offsetting advantages for CalGrid's proposal and LS Power (CAL GRID)'s proposal.

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 two proposals, between which there is no material difference, are slightly better than Lotus-SCE's proposal, which is better than CalGrid's proposal and LS Power (CAL GRID)'s proposal, between which there is no material difference, 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 five proposals submitted by the four 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 Lotus-SCE's proposal is better than the four proposals of the other three project sponsors regarding this criterion because, as discussed regarding each of the relevant individual selection factors or factor components, there is no material difference among Lotus-SCE's proposal and Horizon West's two proposals regarding the second selection factor (construction and maintenance record) and there is no material difference between Lotus-SCE's proposal and CalGrid's proposal regarding the first selection factor component (engineering qualifications and experience of the project sponsor and its team), and Lotus-SCE's

proposal is better than the four proposals of the other three project sponsors regarding all the other selection factors or factor components.

The ISO has determined that there is no material difference between Horizon West's two proposals and they are better than CalGrid's proposal regarding this criterion because, as discussed regarding each of the relevant individual selection factors or factor components, although CalGrid's proposal is better than Horizon West's two proposals regarding the first selection factor component, Horizon West's two proposals are better than CalGrid's proposal regarding the second selection factor and the third selection factor (demonstrated capability to adhere to standardized construction, maintenance, and operating practices), which the ISO considers to result in an advantage for Horizon West's proposals.

The ISO has determined that Horizon West's two proposals are also better than LS Power (CAL GRID)'s proposal regarding this criterion because, as discussed regarding each of the relevant individual selection factors or factor components, Horizon West's two proposals are better than LS Power (CAL GRID)'s proposal regarding the first selection factor component, the second selection factor, and the third selection factor.

The ISO has determined that LS Power (CAL GRID)'s proposal is slightly better than CalGrid's proposal regarding this criterion because, as discussed regarding each of the relevant individual selection factors or factor components, although Cal Grid's proposal is better than LS Power (CAL GRID)'s proposal regarding the first selection factor component, LS Power (CAL GRID)'s proposal is better or slightly better than CalGrid's proposal regarding the second selection factor and the third selection factor, which the ISO considers to result in a slight advantage for LS Power (CAL GRID)'s proposal.

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 Lotus-SCE's proposal is better than Horizon West's two proposals, between which there is no material difference and which are better than LS Power (CAL GRID)'s proposal, which is slightly better than CalGrid's proposal, 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 five proposals submitted by the four 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 among CalGrid and its proposal and Horizon West and its two proposals, and they are better than LS Power (CAL GRID) and its proposal, which is slightly better than Lotus-SCE and its proposal, 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 five proposals submitted by the four 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 Lotus-SCE is better than the two proposals of Horizon West, between which there is no material difference and which are better than the proposal of LS Power (CAL GRID), which is slightly better than the proposal of CalGrid, 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 five proposals submitted by the four 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 LS Power (CAL GRID)'s proposal is better than CalGrid's proposal, which is better than Horizon West's two proposals and Lotus-SCE's proposal, among which there is no material difference, 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 four project sponsors submitted proposals that 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'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 Lotus-SCE's proposal is better than the four proposals of the other three project sponsors regarding this criterion because, as discussed regarding each of the relevant individual selection factors, there is no material difference among Lotus-SCE's proposal and Horizon West's two proposals regarding the second selection factor (construction and maintenance record) and there is no material difference between Lotus-SCE's proposal and CalGrid's proposal regarding the first selection factor (technical [environmental permitting] and engineering qualifications and experience of the project sponsor and its team), and Lotus-SCE's proposal is better than the four proposals of the other three project sponsors regarding all the other selection factors.

The ISO has determined that there is no material difference between Horizon West's two proposals and they are better than CalGrid's proposal regarding this criterion because, as discussed regarding each of the relevant individual selection factors, although CalGrid's proposal is better than Horizon West's two proposals regarding the first selection factor, Horizon West's two proposals are better than CalGrid's proposal regarding the second selection factor and the third selection factor (demonstrated capability to adhere to standardized construction, maintenance, and operating practices), which the ISO considers to result in an advantage for Horizon West's proposals.

The ISO has determined that Horizon West's two proposals are also better than LS Power (CAL GRID)'s proposal regarding this criterion because, as discussed regarding each of the relevant individual selection factors, Horizon West's two proposals are better than LS Power (CAL GRID)'s proposal regarding the first selection factor, the second selection factor, and the third selection factor.

The ISO has determined that LS Power (CAL GRID)'s proposal is slightly better than CalGrid's proposal regarding this criterion because, as discussed regarding each of the relevant individual selection factors, although Cal Grid's proposal is better than LS Power (CAL GRID)'s proposal regarding the first selection factor, LS Power (CAL GRID)'s proposal is better or slightly better than CalGrid's proposal regarding the second selection factor and the third selection factor, which the ISO considers to result in a slight advantage for LS Power (CAL GRID)'s proposal.

In summary, based on a detailed review of the proposals of the project sponsors regarding these individual selection factors, the ISO has determined that Lotus-SCE's proposal is better than Horizon West's two proposals, between which there is no material difference and which are better than LS Power (CAL GRID)'s proposal, which is slightly better than CalGrid's proposal, 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 PTO 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 for Horizon West Single Circuit and Horizon West Double Circuit Proposals

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 concerning 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-SCE

Lotus-SCE indicated that the special purpose entity to be established by Lotus for purposes of the project would sell the entire project to SCE and SCE would thereafter lease 25% of the transfer capability of the project to that special purpose entity. Lotus-SCE indicated that, as such, SCE would be the owner of the project and would perform all necessary O&M services for the project. Lotus-SCE indicated that SCE is already registered as a TO and TOP at NERC as recognized by WECC and the ISO. Lotus-SCE indicated that SCE would be responsible for operating and maintaining the project in accordance with all applicable NERC, WECC, and ISO reliability standards and criteria in addition to the ISO's operating procedures, the ISO Tariff, and the ISO's Business Practice Manuals. (A-6)

3.20.4 Information Provided by LS Power (CAL GRID)

LS Power (CAL GRID) indicated that LSPGC would become a PTO in 2025 related to the Orchard STATCOM and Fern Road GIS/STATCOM projects. LS Power (CAL GRID) indicated that if selected as the approved project sponsor of the project, in accordance with the Approved Project Sponsor Agreement, LS Power (CAL GRID) would turn the project over to the ISO's operational control and work with ISO to amend the existing TCA. LS Power (CAL GRID) indicated that it would adhere to all applicable reliability

criteria and comply with applicable NERC registration requirements and NERC and WECC standards.

3.20.5 ISO Comparative Analysis

All four project sponsors 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 five proposals of the four project sponsors regarding this criterion.

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 of SONGS-Serrano 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. Lotus-SCE, based on its possession of 75% of the required land rights, proposed low O&M, A&G, property insurance, outside service requirements, and land costs, in combination with its proposed limited capital cost cap, $3 million dead band, and partial ROE and debt to equity ratio caps, provided the lowest present value of total projected revenue requirements at the lowest evaluated risk of cost escalation.

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, Lotus-SCE is proposing to use SCE's existing rights-of-way for approximately 75% of the length of the project, which provides Lotus-SCE a substantial advantage over the other project sponsors regarding this selection factor, as they have no existing rights-of-way for their proposals.

A third key selection factor is the experience of the project sponsor and its team in acquiring rights-of-way. The ISO determined that Lotus-SCE, CalGrid, and Horizon West had the strongest proposals regarding this selection factor because their teams all had substantial land rights acquisition experience in the U.S., including experience 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 regarding project schedule risk and management, due to the significant amount float identified in all of the proposals, none of the risks to the proposed schedules of the project sponsors is significant enough to pose a risk that the project could not be completed by the latest in-service date in the ISO Functional Specifications. The proposals from CalGrid and LS Power (CAL GRID) also included an incentive penalty for failure to meet the latest ISO in-service date, which the ISO considers to provide them an advantage over the proposals of Horizon West and Lotus-SCE regarding this selection factor. In addition, the ISO concluded that the proposals of the other project sponsors had an advantage over Lotus-SCE's proposal regarding experience completing projects on schedule and that Lotus-SCE's advantage regarding the least risk of schedule delay due to land acquisition and permitting risks offset Horizon West's advantage in this regard but did not fully offset the combination of those two advantages for CalGrid and LS Power (CAL GRID). Nevertheless, the ISO considers Lotus-SCE to be fully capable of completing the project by the latest in-service date in the ISO Functional Specifications.

The fifth key selection factor is the financial resources of the project sponsor and its team. 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. 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 LS Power (CAL GRID) and Lotus-SCE in the area of financial resources and considers LS Power (CAL GRID) to have an advantage over Lotus-SCE in this area. However, Lotus-SCE's proposal demonstrated it has sufficient financing experience, financial resources, and financial backing to finance this project. And the advantage of the other project sponsors regarding this selection factor does not offset the advantage of Lotus-SCE's projected cost and cost containment proposal.

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 Lotus-SCE's proposal identified environmental permitting experience and engineering and design qualifications and experience of its project team that was as strong as or better than the experience of the other project sponsors and their teams regarding both components of this selection factor.

Regarding the non-key selection factors, Lotus-SCE's proposal was either as strong as or better than the proposals of the other project sponsors for every selection factor, with the exception of the very general factor 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, regarding which Horizon West's proposal had a very slight advantage only because of Horizon West's greater financial resources for the construction phase of the project. And regarding the six qualification criteria, Lotus-SCE's proposal was as strong as or better than the proposals of the other project sponsors for four of these six criteria, with the exception of the qualification criteria for financial resources and for CalGrid's and LS Power (CAL GRID)'s advantage regarding their financial incentives for meeting the project schedule, which are duplicative of the key selection factors in these areas discussed above.

For the foregoing reasons, the ISO determined that Lotus-SCE 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 Lotus-SCE's proposal is better than the proposals of CalGrid, Horizon West, and LS Power (CAL GRID) regarding this project. The result of this competitive solicitation is that the ISO selected Lotus-SCE as the approved project sponsor to finance, construct, own, operate, and maintain the North of SONGS-Serrano 500 kV Line project.[9]

[9] Selection of Lotus-SCE as the approved project sponsor does not preclude the ISO from taking positions on specific rate proposals contained in the rate filings of Lotus or SCE 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:

Response:

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.

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

[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.

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,
ix. high voltage switch types and ratings,
x. switchgear type and ratings,
xi. battery system arrangements,

[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.

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