# NextEra Energy Transmission West and Pacific Gas and Electric Company Estrella Substation and Paso Robles Reinforcement Project Proponent's Environmental Assessment (A.17-01-023)

# **CONFIDENTIAL PUBLIC** Response to Deficiency List No. 2

The California Public Utilities Commission (CPUC) identified deficiencies in NextEra Energy Transmission West, LLC's (NEET West) and Pacific Gas and Electric Company's (PG&E) Proponent's Environmental Assessment (PEA) for the Estrella Substation and Paso Robles Reinforcement Project. Below are confidential responses to Deficiency List No. 2 issued by the CPUC on June 29, 2017. Each Deficiency is numbered according to the list, followed by NEET West's and PG&E's response. This document includes the following attachments, which are described in more detail in the text below under the applicable response.

- Attachment 4-3a. NEET West Confidential and Highly Commercially Sensitive Cost Information
- Attachment 4-3b. PG&E Confidential and Highly Commercially Sensitive Cost Information

# Chapter 4. Alternatives

## **Deficiency 4-3:**

## Cost Estimates

- A. 1. Proposed Project: Provide an itemized (unbundled) cost estimate for all project components identified in the PEA (i.e., both transmission and immediate and future distribution identified).
  - 2. Estimate and itemize the costs of constructing the proposed transmission facilities.

3. Estimate and itemize the costs for all distribution facilities (below 50 kV) required to meet the 10-year distribution demand forecast presented in PEA Appendix G.

Define the length (aggregate, in miles) of distribution lines that would be required. Define the number and type of all associated distribution facilities (e.g., 70/21-kV and 70/12-kV transformers; breakers and switches; 12-kV and 21-kV pole-top transformers).

4. Estimate and itemize the cost of each parcel acquisition or partial parcel acquisition that would be required and estimate the amount of land to be acquired (aggregate, in square feet). Identify the number of unique parcels that would be impacted by the land acquisitions.

*B. 1. Potential Templeton Expansion Alternative: Provide an itemized (unbundled) cost estimate with a level of detail comparable to the estimate provided for the proposed project* 

in response to Item "A." Assume this alternative to constructing the proposed project is potentially feasible.

2. Estimate and itemize the costs of constructing, replacing, or reconductoring the above 50-kV facilities necessary to meet the minimum, mandatory NERC/WECC/FERC standards planning requirements and CAISO requirements.

Describe, in detail and with maps, any new 70-kV lines or 70-kV reconductoring work that would be required.

*Provide GIS data for all the 70-kV transmission line work described.* 

3. See Item A.3.

*4. See item A.4.* 

5. Document the level of design and engineering used as a basis for the cost estimate as compared to the estimate provided for the proposed project.

6. Explain to what extent this alternative would meet each of the three basic objectives of the proposed project listed in the PEA.

7. *If there are potential feasibility constraints, please describe, and compare these potential constraints to those of the proposed project.* 

C. 1. Potential Paso Robles Substation Expansion Alternative: Provide an itemized (unbundled) cost estimate with a level of detail comparable to the estimate provided for the proposed project in response to Item "A." Assume this alternative to constructing the proposed project is potentially feasible.

2. Estimate and itemize the costs of constructing, replacing, or reconductoring any above 50-kV facilities necessary to meet the minimum, mandatory NERC/WECC/FERC standards planning requirements and CAISO requirements.

Describe, in detail and with maps, any new 70-kV lines or 70-kV reconductoring work that would be required.

Provide GIS data for all the 70-kV transmission line work described.

- *3. See Item A.3.*
- 4. See item A.4.
- 5. See item B.5.
- 6. See item B.6.
- 7. See Item B.7.

8. Provide aerial imagery, substation schematic diagrams, and a parcel map with an explanation for why Paso Robles cannot be expanded as described in the response to item "C."

# Response:

The applicants object to question 4-3 to the extent it seeks detailed cost information because Section IX.B.1.f of General Order ("GO") 131-D specifies that a detailed estimate of cost is not required for a PTC Application. In addition, the Assigned Administrative Law Judge's Scoping Ruling issued in this proceeding on July 14, 2017 ("Scoping Ruling") at page 11 held that project cost is not an issue to be addressed in this proceeding. Nevertheless, without waiving the objection, the Applicants provide preliminary cost estimates for A and B as requested. Preliminary estimated costs for a potential Paso Robles Expansion Alternative as requested in C are not provided because, as explained in greater detail below, the burden of obtaining them would outweigh any value such costs could provide given that the alternative is so clearly infeasible. To demonstrate this conclusion, a diagram is provided demonstrating that it would be necessary to take out adjacent businesses to expand at this substation.

## A.

- NEET West and PG&E are providing confidential cost information for the project separately in Confidential and Highly Commercially Sensitive Attachments 4-3a and 4-3b. This information is confidential and is not publicly available. It is also proprietary and highly commercially sensitive, and therefore NEET West's and PG&E's cost information should not be distributed to the public or the parties to this proceeding, <u>or</u> <u>shared with the other Applicant</u> (i.e., NEET West's cost information should not be shared with PG&E, and PG&E's cost information should not be shared with NEET West). NEET West and PG&E are providing this information subject to the Declarations of Confidentiality provided concurrently with this response.
- 2. Please see NEET West's and PG&E's confidential responses provided in Confidential and Highly Commercially Sensitive Attachments 4-3a and 4-3b.
- 3. Please see PG&E's confidential response provided in Confidential and Highly Commercially Sensitive Attachment 4-3b.
- 4. Please see NEET West's and PG&E's confidential responses provided in Confidential and Highly Commercially Sensitive Attachments 4-3a and 4-3b.

## B.

All information related to the Potential Templeton Expansion Alternative is confidential, since it has not been publicly disclosed, has not been obtained with appropriate site or route reviews that would have included public and local agency outreach, and constitutes commercial information relating to potential business plans and strategies that could place either or both applicants at a commercial disadvantage with respect to landowners that could have an interest in the siting and routing of this alternative. NEET West and PG&E further note that GO 131-D and the Scoping Ruling dictate that project cost is not an issue to be addressed in this proceeding. The Applicants

also note that their analysis of siting, routing and potential environmental impacts related to the Potential Templeton Alternative is preliminary. The Applicants have not undertaken detailed engineering or environmental analysis of this potential alternative. Accordingly, the response provided herein is preliminary and subject to change. Nevertheless, NEET West and PG&E are providing cost information for the Proposed Templeton Expansion Alternative in the confidential responses provided in Confidential and Highly Commercially Sensitive Attachments 4-3a and 4-3b.

1. The applicants jointly developed the Potential Templeton Expansion Alternative using the project as a model to provide an "apples to apples" comparison. Specifically, the applicants developed a scope for this alternative that assumed the NEET West would construct a 230 kV substation near the existing Templeton Substation that contains essentially the same equipment as the proposed Estrella 230 kV yard and contain room for future expansion, which would interconnect with the Morro Bay Cal Flats #2 230 kV line and would connect with the Templeton Substation via a 70 kV line. See Exhibit 4-3A below. The scope for this alternative assumed that PG&E would modify and expand Templeton Substation to operate in the same manner as the proposed Estrella 70 kV yard, including the foreseeable distribution need and room for future expansion. With respect to construction of a new 70 kV line to connect the modified Templeton Substation to the Paso Robles Substation, PG&E developed two route alternatives, one that is referred to as the Creston Road Alternative (see Exhibit 4-3B below) and another referred to as the River Road Alternative (see Exhibit 4-3C below). Both alternatives assume a double circuit 70kV transmission line would be constructed such that it would "electrically" insert an expanded Templeton Substation between Paso Robles and San Miguel Substations.

NEET West anticipates that the scope of the 230 kV substation portion of the Potential Templeton Expansion Alternative is essentially identical to the scope of the 230 kV substation portion of the project. Therefore, NEET West expects the cost estimates for the two 230 kV substations to be identical. Please see NEET West's confidential response provided in Confidential and Highly Commercially Sensitive Attachment 4-3a for this information.

PG&E prepared cost information comparing the cost of the project to its portion of the Potential Templeton Expansion Alternative, which provides cost information for the potential Creston Road alternative and the potential River Road alternative. Please see PG&E's confidential response provided in Confidential and Highly Commercially Sensitive Attachment 4-3b for this information.

2. Please see PG&E's confidential response provided in Confidential and Highly Commercially Sensitive Attachments 4-3b for cost information regarding constructing, replacing, or reconductoring above 50-kV facilities. Please see Exhibit 4-3B below for a map of the potential Creston Road Alternative and Exhibit 4-3C below for a map of the potential River Road Alternative. PG&E is not providing GIS information because it has not prepared any for these two potential alternatives. These figures represent preliminary designs that were not developed with detailed engineering, siting, routing, or environmental analysis.

Exhibit 4-3A. Templeton Substation Alternative







Prepared by SWCA Environmental Consultants (8/28/2017, 8:37:57 AM) - NAD 1983 UTM Zone 10N File: Exhibit\_04\_03\_B\_Templeton\_Paso\_Creston\_Route - Basemap source: ESRI World Topographic Map





Prepared by SWCA Environmental Consultants (8/28/2017, 8:38:43 AM) - NAD 1983 UTM Zone 10N File: Exhibit\_04\_03\_C\_Templeton\_Paso\_South\_River\_Route - Basemap source: ESRI World Topographic Map

- 3. Please see PG&E's confidential response provided in Confidential and Highly Commercially Sensitive Attachments 4-3b for this information.
- 4. NEET West does not have cost information for the cost of necessary parcel acquisitions related to the Potential Templeton Expansion Alternative. However, from reviewing county assessor values for San Luis Obispo County, the price per acre of land in the vicinity of the Templeton Substation is approximately double to triple the value of land in the vicinity of the current project location. Therefore, NEET West would expect the cost of parcel acquisition adjacent to the Templeton Substation to be substantially higher than the cost of the current site of the project. NEET West also notes that the current configuration of the potential site may require NEET West to obtain land for its portion of the facilities from two different landowners, which could further increase the land acquisition costs. Finally, NEET West notes that any additional land costs required to procure an alternative parcel would be added to the costs that have already been incurred to acquire land for the project.

PG&E estimates that it would need to acquire approximately one acre of land to expand Templeton Substation to construct this alternative. PG&E has provided land-related costs, including acquisition, in Confidential and Highly Commercially Sensitive Attachments 4-3b.

5. As described in response to Question 4-3(B)(1), above, given that the scope of the 230 kV substation portion of the Proposed Templeton Expansion Alternative is essentially identical to the scope of the 230 kV substation portion of the project, the cost estimates for the two 230 kV substations are identical. Accordingly, the level of design and engineering used for the cost estimate for the two 230 kV substations is identical.

NEET West's and PG&E's confidential cost estimates for the Proposed Templeton Expansion Alternatives provided in Confidential and Highly Commercially Sensitive Attachments 4-3a and 4-3b are an AACE Class 5 estimate (i.e., it assumes installed cost estimates could range from 50% less to 100% more than the amount shown). By comparison, NEET West's and PG&E's confidential cost estimates for the project provided in Confidential and Highly Commercially Sensitive Attachments 4-3a and 4-3b are an AACE Class 3 estimate (i.e., it assumes installed cost estimates could range from 20% less to 30% more than the amount shown). Additional contingency is included in the overall total cost that represents other project risks for the Estrella and Templeton project sites.

6. The Applicants note that their analysis of siting, routing and potential environmental impacts related to the Potential Templeton Substation Alternative is preliminary. The Applicants have not undertaken detailed engineering or environmental analysis of this potential alternative. Accordingly, the response provided herein is preliminary and subject to change.

The three stated project objectives in the Revised PEA, dated May 2017, are to: (1) reinforce electrical reliability by implementing the CAISO-approved electrical plan of service; (2) meet expected future electrical distribution demand; and (3) balance safety, cost, and environmental impacts.

The Potential Templeton Expansion Alternative would fail to meet the first project objective. The CAISO-approved electric plan of service would not be implemented and the addition of significantly longer distribution facilities to connect the project to the local distribution system would not reinforce electrical reliability as well as the project. This potential alternative would require three new 21 kV distribution feeders from Templeton and 31 miles of additional circuit work than the initially project planned for Estrella Substation. The additional circuit length would result in increased distribution network losses and more exposure to unplanned distribution circuit faults due to the longer connections. Therefore, new distribution circuits supplied from Templeton would be less reliable than new distribution circuits supplied from the project.

The Potential Templeton Expansion Alternative would fail to meet the second project objective of meeting expected future electrical distribution demand because, as noted above, its distance from the expected load growth and the excessive line length to integrate three new 21 kV lines from Templeton into the existing distribution network would result in increased distribution network losses.

The Potential Templeton Expansion Alternative would fail to meet the third project objective of balancing safety, cost and environmental impacts because it would cost significantly more than the project and would likely result in significant adverse environmental impacts. As noted in PG&E's confidential response provided in Confidential and Highly Commercially Sensitive Attachments 4-3b, the "expected case" for the Proposed Templeton Expansion would cost over 50 percent more to construct than the project. In addition, as compared to the project, construction of much longer, new 70 kV power lines from Templeton Substation would very likely face heavy property owner opposition, require removing or trimming more heritage oaks, and disturb areas known to have a high incidence of buried cultural resources.

7. Unlike the project, the Potential Templeton Expansion Alternative is not feasible from a legal perspective, since it does not meet the CAISO's functional specifications for the Estrella Project (in particular, the requirement by the CAISO that the project be located within a 2.2-mile radius from the intersection of Highway 46 and the Morro Bay-Gates and Templeton-Gates 230 kV transmission corridor), and therefore is not consistent with the Approved Project Sponsor Agreement entered into by NEET West and the CAISO.

In addition, NEET West and PG&E do not have site control over the additional land that would be needed to construct the Potential Templeton Expansion Alternative. PG&E would have to acquire land from an adjacent landowner to expand the Templeton Substation to accommodate the necessary 70 kV and distribution and related equipment. NEET West would have to acquire land from up to two adjacent landowners to construct the 230 kV substation and secure easements that would enable PG&E to construct the 230 kV interconnection. Neither party has communicated with the landowners, so the landowners' receptivity to conveying land rights is unknown and, even if they were receptive, it is not possible to estimate how long it would take to complete the negotiations and close the transactions or the cost that would be required to procure the land rights.

In addition, as noted above, this alternative may not be feasible from an economic standpoint because it is estimated to be considerably more costly than the project. Further, this alternative may not be feasible from an environmental perspective because, as noted above, it appears likely to result in significant adverse environmental impacts. Moreover, the Applicants have not undertaken detailed engineering or environmental analysis of this potential alternative, so it is possible that additional feasibility constraints may exist.

# C.

All information related to the Potential Paso Robles Expansion Alternative is confidential, since it has not been publicly disclosed, has not been obtained with appropriate site or route reviews that would have included public and local agency outreach, and constitutes commercial information relating to potential business plans and strategies that could place either or both applicants at a commercial disadvantage with respect to landowners that could have an interest in the siting and routing of this alternative. NEET West and PG&E further note that GO 131-D and the Scoping Ruling dictate that project cost is not an issue to be addressed in this proceeding. The Applicants also note that their analysis of siting, routing and potential environmental impacts related to the Potential Paso Robles Substation Alternative is preliminary. The Applicants have not undertaken detailed engineering or environmental analysis of this potential alternative. Accordingly, the response provided herein is preliminary and subject to change.

- 1–6. For the reasons discussed below in the response to C.7, the Potential Paso Robles Substation Expansion Alternative is not feasible. NEET West and PG&E therefore have not prepared a cost estimate for this potential alternative.
- 7. An assumption was made that the additional 230/70 kV transformer was being installed at Templeton Substation (and not at Paso Robles Substation) and that the analysis of the Potential Paso Robles Substation Expansion Alternative was based on developing a breaker and a half system at Paso Robles Substation to accommodate a new single circuit 70 kV power line from Templeton Substation and adding a fourth 70/12 kV distribution bank to Paso Robles Substation.

The existing Paso Robles substation site is not large enough to accommodate the new equipment and modifications necessary to design and construct a facility that is roughly comparable to the project. As shown in Exhibit 4-3D below, there are two locations adjacent to the substation that could be considered for expanding the substation. Although there is land immediately to the east of the substation (referred to in Exhibit 4-3D as Option A), it is too small to accommodate the necessary equipment and modifications to expand Paso Robles Substation. In addition, PG&E does not have site control over this land.

There is also a 1.37 acre parcel immediately to the north of the substation (referred to in Exhibit 4-3D as Option B) that appears to be large enough to accommodate the necessary equipment and modifications to expand the substation (see Exhibit 4-3E below). However, existing businesses currently operate on this parcel; PG&E does not have site control. Even if PG&E were to acquire the parcel via contract or eminent domain and

force those businesses to close or move, the area surrounding the Paso Robles Substation is dense with residential and commercial development making it extremely difficult to extend distribution feeders out of an expanded Paso Robles Substation to the projected load growth areas near the Paso Robles Airport area (See Figure 6, Appendix G).

8. See Exhibits 4-3D and 4-3E below.





repared by SWCA Environmental Consultants (8/28/2017, 6:39:54 AM) - NAD 1983 UTM Zone 10N le: Exhibit\_04\_03\_D\_Paso\_Robles\_Substation\_Expansion\_Alternative - Basemap source: ESRI World Imagery

#### Exhibit 4-3E. Paso Robles 70 kV Substation Expansion Alternative – Breaker-and-a-Half



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