



Session 1

1. Would PG&E allow an earlier COD than 11/1/2021?
  - The COD of 11/1/2021 is based on a project timeline that syncs up with the projected overload of the Llagas substation transformer. PG&E will not entertain earlier CODs.
2. When will the interconnection facilities be constructed?
  - PG&E has initiated the WDT interconnection application but the interconnection facilities have not yet been designed. It is anticipated that the interconnection facilities will be completed in the 2020 to early 2021 timeframe.
3. Who is responsible for what permits?
  - PG&E will lead any discretionary permitting and certain other permits that are described in the PSA.
  - Seller is responsible for permits that PG&E does not obtain (only building permit anticipated at this time).
4. Who is responsible for the environmental review?
  - PG&E will complete an internal Environmental Release to Construction process prior to earth disturbance. This is not part of the Seller's scope.
5. Will the wet spoils dump be removed?
  - Yes, the wet spoils will be removed by PG&E prior to construction at no cost to the Seller.
6. What type of fence is required for the energy storage facility?
  - PG&E's Substation Standard for fencing (Standards documents to be shared after NDA execution) must be utilized in the base proposal. Alternate proposals may propose other fence options.
7. Who is responsible for the CEQA process?
  - PG&E will lead the CEQA process, as applicable.
8. Who is responsible for the underground utilities survey?
  - The Seller will need to complete Underground Service Alerts, as applicable, as part of the construction process. PG&E has already generated a complete geotechnical survey and report, complete with underground utilities identified to assist Participants in proposal preparation. Participants will receive the report after executing an NDA.
9. What grounding design is required? Is there any particular software required for the ground grid analysis?
  - PG&E's Substation grounding standard documents will be provided to Participants after executing an NDA. These requirements must be followed in base proposal designs.
  - For purposes of ensuring all bids cover the same scope of work, Participants should include the cost for two copper ground grid connections running from the energy storage facility ground grid to the substation ground grid.



- i. See the PSA Technical Specifications document for a description of ground grid design requirements (copper cable thickness, connectors, trench depth etc.).
  - ii. The distance from the energy storage ground grid to the substation ground grid is estimated to be 120'. The surface material for trenching is crushed rock.
    - See the PSA Technical Specifications for grounding analysis software requirements.
10. Is Llagas considered a brownfield or greenfield substation project?
  - PG&E is considering the Llagas ES project a brownfield substation project.
11. Is Llagas the only PG&E-owned and operated site in the 2016 ESRFO?
  - No, PG&E's 2016 ESRFO includes other PG&E-owned and operated sites. Participants are encouraged to review the RFO protocol document for a description of the PV co-located and stand-alone PSA projects.
12. Are QA, QC and Safety requirements included in the PSA?
  - Yes, QA and QC requirements are specified in the Technical Specifications (Exhibit E to the PSA) and in Appendix 1. Safety requirements are specified in the PSA.
13. Will PG&E remove the existing light poles on the site?
  - Yes, PG&E will remove the existing light poles prior to construction.
14. Who is responsible for construction power?
  - The Seller is responsible for construction power provision and costs.
  - PG&E would consider leaving one existing light pole on site for the provision of construction power (Seller to be construction power Customer of Record and will be responsible for construction power charges).
15. Is a secondary distribution backup for station power required as in PG&E Substation designs?
  - No secondary distribution backup is required in the energy storage facility design.
16. Is PG&E aware of any noise ordinance/requirements from the local county?
  - PG&E is not aware of any noise ordinances or requirements relevant to this project from Santa Clara County.
17. What clearances are required from the substation fence?
  - Clearance requirements are detailed in the Technical Specifications (Exhibit E).
18. Where should the switchgear be placed?
  - PG&E's preferred location for the switchgear is in the southwest corner of the project site.
19. What water retention requirements will govern the design?
  - See Technical Specifications (Exhibit E) for drainage requirements.
20. Is a separate entrance required for the energy storage facility?
  - Yes, PG&E requires a separate gated entrance for the energy storage facility.
21. Will PG&E assign Owner's Engineers for the project?
  - Yes—electrical and civil Owner's Engineers will be assigned to the project.
22. Where will the Nexus meter be located? What CTs and PTs will serve as inputs?



- Please see the Single Line Diagram shared with Participants as part of the RFO for details on the metering locations.
23. What construction hours are anticipated?
- Participants should assume 4x10's in their base proposals.
  - Participants can propose other arrangements in alternate proposals.
24. What is the name of the pre-approval service for subcontractors? When would Participants need to be qualified themselves?
- ISNetWorld is the pre-approval service used by PG&E. ISNetworld can be accessed at <https://www.isnetworld.com/>.
  - Participants (Seller) would have to be approved in ISNetworld prior to engaging in any Medium or High Risk activities as defined in PG&E's Contractor Safety Standard.
25. How does PG&E evaluate the Llagas ES project compared to 3<sup>rd</sup> party proposals?
- PG&E's evaluation protocol is described in the RFO protocol document.
26. Can PG&E share information on the cost of the substation transformer upgrade project?
- On a unit cost estimating basis, the transformer upgrade is expected to be approximately \$5M.
  - PG&E plans to use the same evaluation methodology for the transformer upgrade as was used in the 2014 ESRFO. Details on this methodology can be found in PG&E's CPUC testimony.
27. Can PG&E share the attendee list from this site visit?
- Yes. PG&E has shared the attendee list and the list is available on the RFO website.
28. Can PG&E share a list of currently approved design, construction firms etc.
- If Participants are considering certain subcontractors and do not know their pre-qualification status, PG&E is happy to verify firms on an individual basis. Please send a list of firm names to [energystorage@pge.com](mailto:energystorage@pge.com).
29. Would PG&E consider using an MSA instead of a PSA?
- All Participants must base their base proposal on the PSA as included in the 2016 ESRFO documentation.
  - Should a shortlisted Participant have an MSA with PG&E for similar type work, PG&E will consider working off the MSA template instead of the pro-forma PSA after shortlisting (expected spring 2017). However, terms and conditions as well as risk profile will be modified to conform with those in the PSA.
30. Is PG&E aware of any height limitations imposed by Santa Clara County?
- PG&E is not aware of any height restrictions imposed by Santa Clara County.

## Session 2

31. Are there any NERC/CIP requirements?



- NERC/CIP requirements for the project will be assessed by PG&E through an internal evaluation process during the project design stage. Since PG&E IT will complete the telecommunications work, compliance with NERC/CIP requirements will broadly fall on PG&E.
32. Can vendors bid terms longer than 10 years?
- Yes, Participants can bid contract terms beyond 10 years in alternate proposals.
  - The RFO Offer Form contains a spot to include additional costs associated with extending the term (see “PSA Offers Only” tab).
33. Where is PG&E’s property line for the project site?
- Surveying files will be provided to Participants after NDA execution. These surveying files show the PG&E property line along with dimensions.
34. Are vehicle access lanes required around the energy storage facility?
- PG&E’s General Arrangement Substation design standard requires a perimeter access road around the facility. Base proposal designs should include this design requirement.
    - i. Alternate proposals can suggest alternate arrangements that still allow equipment access.
35. What are the project sizing requirements?
- All base bids MUST be 10MW/40MWh per the Technical Specifications and per the commercial terms laid out in the pro-forma PSA.
  - Alternate bids must be no more than 20MW.
36. Is there any water currently available to the project site?
- No water is currently available directly on site.
37. Does the local fire department require water at the site? Who would be responsible for the cost if the fire department required water on site?
- PG&E has not inquired with the local fire department whether on-site water would be required for an energy storage installation. The requirement would be driven by the storage technology selection.
  - To the extent that new water distribution was required by the local fire department, the Seller would be responsible for the costs associated with installation of such a system per the Technical Specifications.
38. Will the finished grade within the fence be crushed rock or blacktop?
- PG&E’s Substation standard is crushed rock.
  - Participants can suggest alternatives for cost savings in alternate proposals.
39. Is the area to the south of the project site free for construction laydown use?
- Yes, the area just south of the existing northernmost Substation fence is available for construction laydown use (trailers, materials, etc.).
40. Will the interconnection line be underground or overhead?



- PG&E has not yet initiated the design of the interconnection facilities so it is unknown whether the facilities will be overhead or underground at this time.
41. Is the fence tied into ground grid?
- No—PG&E standards require separate ground rods for the fence that are not tied into the main ground grid.
42. How will PG&E ensure it is comparing apples-to-apples with respect to auxiliary loads needed for various energy storage technologies?
- PG&E’s offer form has an input for annual MWh auxiliary loads that is factored into the evaluation.
43. Where should the various meters in the switchgear be placed?
- Participants should reference the preliminary SLD and SLMR provided with the RFO materials (after NDA execution) for guidance on meter placement.
44. What are the duty cycle requirements for the project?
- The duty cycle requirements for the project are detailed in Exhibit F.
45. When is CPUC approval expected?
- CPUC approval is expected in fall 2018.
46. What is the current zoning of the project site?
- The project site is currently classified for utility use by Santa Clara County.
47. Can Participants propose projects that extend into the current perimeter of the Llagas Substation?
- No—PG&E will not consider proposals that include encroachment into the current perimeter of the Llagas Substation.
48. Is union labor required for the project?
- Please see Attachment 1 of the PSA for details on labor requirements.
49. What arc flash study requirements are relevant for this project?
- Participants should reference Exhibit E to the PSA (“Technical Specifications”) for details on arc flash study expectations from PG&E.
50. Is the site over one acre? Are any SWPPP requirements relevant? If so, who is responsible
- To the extent a SWPPP was required, PG&E would be responsible for the SWPPP.
51. What are the energy storage master controller requirements?
- The Seller provided controller must be able to accept DNP3 real/reactive power set points from PG&E’s SCADA server on site. Participants should review Exhibit E for more details and requirements.
52. Should SCADA equipment be in the switchgear?
- Yes, SCADA equipment will be installed inside the walk-in switchgear in 19 inch racks.