

Request For Information as of 12/09/2016:

(1) What are the requirements for site meeting ? Notification,safety equipment ?

- Notifications: Email notification of planned attendance is adequate notification. David.alba@LADWP.com
- Safety Equipment: Standard safety equipment for a power station, including but not limited to Steel toe work boots, Hard Hat and Eye Protection.
- Other requirements: All potential bidders will need to watch a site orientation safety video 45 minutes long. This will be done from 8:15 am to 9:00 am. Any late arrival will be required to watch the video while the preliminary job walk is happening, so on time arrival is recommended.

(2) New-There are no transformer loss evaluation factors in spec? Will Apex be providing ?

More time is needed to consider, Apex will respond by 12/16/2016.

(3) What is the evaluation Criteria ?

More time is needed to consider, Apex will respond by 12/16/2016.

(4) We need to have information with regards to the in-service units. When moving the VA-Tech units to the spare pad how much dis-assembly is required / mandated by the original manufacturer before moving the unit? Perhaps if you have VA-Tech documentation on this it would be very helpful, as we need this info to determine the time line and effort required in the movement (swap out) of the VA-Tech units in order to price the service.

No documentation for dis-assembly of the existing units is available. The 14 December job walk will provide an opportunity for prospective respondents to assess the transformers which are expected to be energized.

Prospective respondents should price the service based on industry standard practices, for example the price of moving and installing the newly manufactured GSU.

(5) Currently we are looking at delivery to site on Q1 2019 vs March 1, 2018 per SCPPA RFP. Is this an issue with APEX spare GSU project planning?

Respondents are to advise the nearest delivery to site date if March 1, 2018 is not possible. Currently Apex GS has two outages planned for 2018. 4/16/2018 thru 5/12/2018 & 10/12/2018 thru 10/20/2018.

Request For Information as of 12/17/2016:

(1) Is there a railway in?

No. Train tracks are near the interstate 15.

(2) Where was the transformer delivered and how?

Believe it was delivered by truck. No records on site.

(3) Where should we pull power from for the new pads?

Connection can be made in either electrical distribution room. One of which is immediately west of the existing GSU. The second is immediately west of the Air Cooled Condenser. These are circled on drawing **13308-DE-601-6**.

(4) Request 14 days approval of drawings submittals.

Denied. Approval of drawings will be reduced to 21 days as a compromise.

(5) Offered an extension to bid responses due with understanding that no other extensions will be allowed.

New date is Feb 02, 2017 before 2pm.

(6) Is prevailing wage required?

Will respond by 12/27/2016

(7) What 480V power is available on site?

3 welding receptacles total: one 100A, and two 60A circuits. If additional power is needed the station will rent and provide.

(8) Are there any known structural items below the ACC, or between the breaker neat the STG PEC. Asked because these are two potential route to bring power to the spare GSU pads.

See drawings added to the webpage. Contractor to verify prior to beginning construction. Both Electrical and Structural have been provided.

(9) Single line electrical drawings for 480V power for GSU pads?

There are spare Motor Control Center positions in the electrical rooms, capable of supporting 100A. Contractor to size, procure and install the appropriately sized breaker. 65,000 amp interrupt rating required.

- (10)** Provide a copy of the STG crane plan drawing.

Added to the web page.

- (11)** Page 19 - The percent impedance voltage at 60-hertz, 525-kV, 162-MVA, with the tap changer in neutral position, shall be 9.05 percent.

The impedance of the VA Tech units, when converted to the same MVA base, are not equal. The 270 MVA unit has an impedance of 9.05 % at 162 MVA but the impedances of the 215 MVA units are 8.52 % and 8.54 % at 129 MVA, which is approximately 10.7 % at 162 MVA. Is ABB to match only the impedance of the 270 MVA, i.e. 9.05 % at 162 MVA? Or should an average impedance be proposed, i.e. 9.88 % at 162 MVA?

9.05%

- (12)** Page 20 - All leads or taps leaving the coils shall be furnished with thermally upgraded paper insulation. The insulation shall be done so as to prevent undue bending or breaking of the lead insulation.

ABB insulates all winding exits with Nomex paper, which has a higher temperature rating than standard thermally upgraded paper.

Approved

- (13)** Page 20 - The average audible noise level, when measured in accordance with IEEE C57.12.90, shall not exceed 85 decibels at 270-MVA.

Please confirm that this corresponds to core noise plus fans only.

Yes, core noise plus fans

- (14)** Page 24 - All welds shall be thoroughly cleaned to remove weld flux or spatter, slag, and heat oxides to obtain a rust-free, grease-free surface, suitable for painting. Paint shall then be applied to provide a moisture barrier. This moisture barrier shall consist of mica flakes in a suitable vehicle, a melamine resin-base paint, a vinyl resin-base paint, an acrylic base paint, or equivalent paint for the intended purpose.

ABB uses a 2-part epoxy based paint.

Approved

- (15)** Page 28 - **(9) Cabinets:** All cabinets, including the main control cabinet, shall be Hoffman, steel, weather-tight, and dust proof; they shall have a NEMA Type 4 rating. An IP rating alone is not acceptable. They shall be equipped with a drip shield and shall be accessible from grade.

We offer our custom-made cabinet from our local supplier. Our control cabinets are custom designed to fit the specific requirements of each project and their dimensions vary greatly from one design to the next. For this reason ABB purchases their steel enclosures from local sheet metal manufacturer Meta Fab and Agora rather than purchase a standard off-the-shelf box. See attached sample drawing of a typical project. The cabinet meets the NEMA 4 requirements.

Approved

- (16)** Page 37 – Each transformer shall be furnished with internal connection points, to which tertiary bushings may be connected during testing and commissioning, or at a later date by SCPPA, or left unused for buried tertiary operation.

Not applicable to this design. No tertiary winding is provided.

Approved

- (17)** Page 43 - **(22) Insulation Surface-Moisture Content:** The transformer shall be designed such that the insulation surface-moisture content shall not exceed 0.4 percent.

The guaranteed moisture content is 0.3 percent after vapor phase drying and 0.5 percent at time of shipment.

Approved

Carried over from 12/09/2016 RFI's:

- (1)** New-There are no transformer loss evaluation factors in spec? Will Apex be providing ?

See response in the Addendum.

- (2)** What is the evaluation Criteria ?

See response in the Addendum.

