

#### City of Pasadena Department of Water and Power

ADDENDUM NO. 7 to

# Specifications LD-13-14 for PROVIDING LABOR AND MATERIALS FOR GLENARM REPOWERING BALANCE OF PLANT DESIGN AND CONSTRUCTION

This addendum is issued to correct and clarify the above Specifications. All addenda will be issued electronically. This addendum shall be considered in the bid proposal and become a part of any contract made pursuant thereto:

- 1. Add the Q & A Table Rev 5 as part of the Specifications. The Q&A Table Rev 4 in Enclosure 1 of Addendum 6 is deemed deleted. See Enclosure 1.
- 2. Delete the entire paragraph in the first bullet of Section 2.3 (Pasadena Living Wage Ordinance) of the Specifications and replace it with the paragraph below:
  - "Pay no less than \$10.83 per hour plus medical benefits of no less than \$1.91 per hour, \$12.74 per hour without medical benefits to all employees who spend any of their time providing labor or delivering services to the City of Pasadena. Additionally, in January 2015 and each January thereafter the Living Wage rate shall be adjusted by the change in the Consumer Price Index, for the Los Angeles-Riverside-Orange County area, for the most recently available 12 month period. Accordingly, current City contractors will be required to adjust wage rates no later than July 1st, to remain in compliance."
- 3. Replace the Living Wage Compliance Certification Form in Appendix C of the Specifications with the Living Wage Compliance Certification Form marked "Addendum 7" in Enclosure 2. This form must be submitted with the bid.

- 4. The requirement for 10% retention contained in Section 9.1.5 of the Specification is reduced to 5%.
- 5. We have made very minor editorial changes to the Bidder's Checklist. A marked up version is contained in Enclosure 3. A clean version to be submitted with your bid is contained in Enclosure 4.
- 6. A clean version of the marked up Bidder's Form contained in Addendum 6 to be submitted with your bid is contained in Enclosure 5.
- 7. Modify Addendum 4 Items 5 and 10 to require an auxiliary load guarantee of 275 kW instead of 250 kW.
- 8. The BOP Scope of Work Attachment A.2 Document List Revision 6 remains as the current revision. See Enclosure 6.
- 9. The BOP Scope of Work Attachment A.3 Reference Document List Revision 5 remains as the current revision. See Enclosure 7.

Date: 3/36/14

Dan Angeles

Principal Engineer

City of Pasadena Water and Power Department

Enclosures:

#### **RECEIPT OF ADDENDUM NO. 7**

#### **Specifications LD-13-14**

# for PROVIDING LABOR AND MATERIALS FOR GLENARM REPOWERING BALANCE OF PLANT DESIGN AND CONSTRUCTION FOR PASADENA WATER & POWER PASADENA, CALIFORNIA

This Receipt must be signed and returned with your bid. Failure to include signed acknowledgements of all addenda will cause the bid to be deemed incomplete and nonresponsive.

I hereby acknowledge receipt of Addendum No. 7 for Specifications LD-13-14 for Providing Labor and Materials for Glenarm Repowering Balance of Plant Design and Construction.

Date

Company Name

Authorized Signature

#### **Enclosure 1**

Question #	Question	Answer	Status	Responsible Party
1	Drawing E6-10 shows a vault identified under note 4 and located at the east end of the Glenarm building. The scope document indicates that this vault is for the 17.2 kV feed form the dispatch center. Given it's location it would appear that it is intended to be inserted in the existing 17.2kV trench on the east of the building as shown on sketch 6-1. Please clarify the intended use and location of this vault.	Location to be determined by the BOP with the intention of feeding through this vault for 17.2Kv feed to the PDC.	CLOSED	
2	The fire marshal (FM) has dictated that the auxiliary lube oil skids/containers be misted/sprinkled. We heard this at the bid meeting on 1/8/14. What does PW&P expect for containment of the oil & water. Depending on the spray volume, this could be a significant quantity and flow of oil & water.	For indoors, the containment would be expected to hold the contents of the largest single container of material, plus 20 minutes of fire flow. For outdoors, the containment would be expected to contain the same, plus the volume of 24 hours of rainfall from a 25 year storm unless it's protected from rainfall. Drainage from the containment area should be sized for the amount of fire flow and rainfall, as applicable.	CLOSED	
3	The scope requires a soil resistivity test <u>after</u> soil removal & recompaction. Presumably this is for grounding design. Is the engineer required to wait to complete a grounding design until after this is complete?	Resistivity values provided can be used to initiate design. Post-backfilling tests should be performed to confirm values.	CLOSED	
4	The containment area fill for future lay down appears to be at a different elevation than the surrounding roads/asphalt. Please confirm elevations to determine if we need to dedicate space in the area for ramping.	The lay down area is approximately 12" higher than the surrounding asphalt. The BOP Contractor will need to plan how to deal with the change in elevation.	CLOSED	
5	Confirm whether a licensed structural engineer is required for the project. i.e. is a licensed civil engineer is acceptable for design of structures for this project.	It is acceptable for the BOP Contractor to utilize a licensed California civil engineer for the design of the structural design.	CLOSED	
6	Clarify how ADA requirements apply for the site. i.e. what buildings are required to be ADA?	ADA requirements apply to the control building.	CLOSED	
7	Does the new fence/wall along Fair Oaks need to be built first, or can it be built near the end of the project?	The decision lies with the BOP contractor.	CLOSED	
8	Clarify if a firewall or blast wall is required between gas compressors and control building.	It is a protection wall and yes it is required.	CLOSED	
9	Section 262600 (Power Distribution Center) Section 2.9-B- 1 requires a 5' clearance under the PDC and Section 5.5 states 8' clearance; please clarify	Actual clearance is to be 6' to bottom of steel.	CLOSED	
10	Specification LD-13-14, 7.2 states water use cost by contractor and scope of work page 140 states water use cost by City of Pasadena; please clarify.	Point of water connection provided by city; cost of water usage by BOP	CLOSED	

Question #	Question	Answer	Status	Responsible Party
11	Is any epoxy grout required for the GE supplied equipment?	Assume none for bid purposes.  Grout specifications (in accordance with project design specifications) grout shall be non-shrinkable, at all ages, when tested in accordance with American Society for Testing and Materials (ASTM) C-827. Effective bearing area shall not be less than 95% in hardened state when tested in accordance with ASTM C-827. If using an epoxy grout for use around turbine and generator skid and anchor bolt, grout must meet requirements of Corps of Engineers CRD C-621 and ASTM C-1107. Peak exotherm of a cylinder of grout material 2 inches in diameter and 4 inches high shall not exceed 95 °F (35 °C), when tested at material and laboratory temperatures of 75 °F (24 °C). Working life of grout shall be 60 minutes minimum at 75 °F (24 °C).	CLOSED	
12	Can testing water be supplied?	Yes at metered cost to the BOP Contractor	CLOSED	
13	Can 70F testing water be supplied for Section 1 hydros?	Assume a package boiler may be required.	CLOSED	
14	Is the onsite resident engineer requirement of scope of work Section C.4.1.2 for a full time requirement?	It is the responsibility of the BOP Contractor to provide engineers as needed.	CLOSED	
15	Attachment 4 of GE document (schedule major component, RTS and delivery dates) based on GE provided NTP of September 27, 2013. Was NTP provided on September 27, 2013?	NTP was provided on September 27. However since that time the delivery dates have been renegotiated to obtain a better delivery sequence to support expected construction needs as well provide more time for preparation of the site and foundations. These are the current Ready to Ship (RTS) and Guaranteed Delivery (GD) dates as contained in the draft of GE's Change Order #1:  Inlet Chiller - RTS 12/17/14 GD 1/28/15 Gas Turbine - RTS 1/23/15 GD 3/2/15 CEMS - RTS 1/30/15 GD 3/13/15 Fuel Gas Compressor -RTS 2/9/15 GD 3/23/15 OTSG - RTS 2/20/15 GD 3/30/15 GSU Transformer - RTS 2/13/15 GD 4/3/15 Steam Turbine - RTS 2/27/15 GD 4/6/15 Auxiliary Boiler - RTS 2/25/15 GD 4/8/15 Auxiliary Boiler Superheater - RTS 2/27/15 GD 4/10/15 Condensate Polisher - RTS 2/27/15 GD 4/10/15 Circulating Water, Condensate, and Feedwater Pumps - RTS 3/4/15 GD 4/15/15 STG Bypass Valve - RTS 3/4/15 GD 4/15/15 Cooling Tower - RTS 3/6/15 GD 4/17/15 Condenser - RTS 3/9/15 GD 4/20/15 Compressed Air Skid - RTS 3/27/15 GD 5/8/15	CLOSED	
16	Section 485312 (circulating water pumps) section 1.2-A-2 states one speed drive motors and Section 1.7-A-8 states two speed motors; please clarify.	The circulating water pump motors are single speed	CLOSED	
17	Section 480031-2 (noise control performance) section 2.2 refers to attachment 6 - performance guarantees and part 3 refers to contract liquidated damages. Can not located liquidated damages in contract.	The BOP contractor does not need the GE Liquidated Damages as they do not apply to the BOP	CLOSED	

Question #	Question	Answer	Status	Responsible Party
18	When will design information be received for the PIE equipment?	These are the current initial drawing delivery dates for major groups of drawings. A more detailed listing can be made available if needed. Following the initial release by General Electric, there is a 3 week period for the City to review and comment on the drawings. General Electric will then issue final drawings seven to eight weeks thereafter depending on the drawing set. These dates do not include erection manuals, procedures, O&M manuals, etc.; just the design drawings.  Gas Turbine Foundation Drawings - 2/7/14 Gas Turbine Electrical and Balance of Drawings - 3/7/14 OTSG Foundation Drawings - 3/21/14 OTSG Balance of Drawings - 5/9/14 STG Foundation Drawings - 5/9/14 STG Electrical Drawings - 7/25/14 STG Electrical Drawings - 7/25/14 STG Balance of Drawings - 10/17/14 Condenser Drawings - 5/9/14 Cooling Tower Electrical Drawings - 6/27/14 Cooling Tower Electrical Drawings - 7/25/14 Pump EXCEPT Electrical Drawings - 7/25/14 Fuel Gas Compressor Foundation Drawings - 4/4/14 Fuel Gas Compressor Balance of Drawings - 5/16/14 Chiller EXCEPT Electrical Drawings - 4/4/14 Chiller Electrical Drawings - 5/2/14 Condensate Polisher Drawings - 5/2/14 Condensate Polisher Drawings - 7/25/14	CLOSED	
19	Are there permit requirements tied to construction of the wall along Fair Oaks?	There are permit requirements tied to the construction of the wall, the Planning Department for Design Review and Building Department for structural review.	CLOSED	
20	IST is a mandatory subcontractor that is not local. The welding could be self-performed. How will the IST subcontract be considered towards the local content criteria?	The orbital welding on the IST equipment is proprietary in both equipment and procedure and the BOP Contractor must subcontract with IST. As IST is not local to Pasadena, this subcontract does not count towards the 15% goal.	CLOSED	
21	In the RFP documents, there are two references mentioned for seismic design criteria. One is based on 2013 CA Building Code (CBC), the other is based on ASCE 7-05 which is 2010 CBC. Which version of CBC is to be used for project design?	This is an update of our prior response due to further information becoming available. Also see the response to question #21.  The BOP Contractor is required to work to CBC-2013. In addition the Building Department has required that site specific seismic data is required. For bidding purposes the bidder should proceed on the basis of using the information in the Specification.  The PIE Contractor and their suppliers are working to CBC-2010. The City is in discussion with the PIE Contractor to address provision of foundation loads calculated in accordance with CBC-2013 for use by the BOP Contractor.	CLOSED	
22	Have you had conversations with the building trades on how they could support the 25% local hire requirements considering their collective bargaining provisions?	Yes and the building trades feel confident that the 25% requirement can be achieved.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
23	GE BOP equipment lists 'preferred suppliers' as opposed to chosen suppliers. Are these suppliers fixed or subject to change?	General Electric is finalizing its suppliers. The current list is as follows; Fuel Gas Compressor - Kobelco Chiller - Stellar Gas Turbine - General Electric Heat Recovery Steam Generator - OTSG by IST CEMS - CEMTEK Steam Turbine - Shin Nippon GSU Transformer - GE Prolec Additional information will be provided as it become available.	OPEN	Diane Donovan
24	Will a water analysis data sheet be provided for the BOP to design and procure the chemical feed system?	Yes. Refer to condensate polisher spec. A3	CLOSED	
25	Are start up and commissioning chemicals to be provided by BOP as well as initial 'fills'	Yes. See Section 480032.1 Item 1.3.A.8 in Attachment A.1 of the Specifications.	CLOSED	
26	Does the BOP contractor work with GE and/or ATCO (the steam turbine enclosure provider) directly during proposal development for load requirement of piping and cable trays?	The steam turbine enclosure will only be used to support the fire sprinkler piping.	CLOSED	
27	For what equipment will GE supply 3D models? GTG? STG? OTSG?	A 3D model of the LM6000 will not be available.  A 3D model of the LM6000 will not be available.  A 3D model of IST's Once Through Steam Generator will be available.  A 3D model for the STG will be available. The 3D model will be a surface type model showing terminal point connections. A few clarifications: 1) the 3D model is not a contract deliverable and is provided as a matter of convenience for the BOP engineer, 2) the 2D drawings take precedence over the 3D model - the BOP engineer will need to check for dimensional differences between 2D drawings and the 3D model. 3) The 2D drawings (contract deliverables) will accurately reflect changes in equipment that might not be updated in the model. 4) The 3D model will be issued after the 2D drawings are issued and after Shin Nippon receives 3D models from their sub-suppliers. GE does not have contract dates with Shin Nippon for a 3D model and will provide it after these activities are complete.  GE will provide other 3D models of their power island equipment if and as they become available.	CLOSED	
28	The BOP contractor is required to contract with the cooling tower manufacturer for field erection; provide cooling tower vendor information.	GE expects to finalize their cooling tower selection by the end of March.  This response will be updated once the selection is made.	OPEN	Diane Donovan
29	Please confirm material requirement for feed water & condensate piping, or if carbon steel A106 is suitable	Please refer to P&IDs. Given the need for high purity water for the OTSG, all condensate & BFW piping is stainless steel.	CLOSED	
30	Is hazard assessment surrey reports on all asbestos containing areas available?	Yes, and will be provided in Addendum 3	CLOSED	
31	Is a list of hazardous waste sites available?	No, the Bidder will have to propose and include in the haz waste plan submittal	CLOSED	

Question #	Question	Answer	Status	Responsible Party
32	What permits and inspections are required for historical structures?	Building Permit for the sealing of tunnel openings of the Glenarm Building.	CLOSED	
33	Should fire protection system for control be water mist or FM200?	The control room will have water mist pre-action system.	CLOSED	
34	Please specifically state that the STG fire protection by the BOP Contractor shall be pre-action fire water and deluge if required for STG bearings and lube/hydraulic oil systems. No clean agent gasses are planned.	The STG fire protection requirements are defined in the Specification. No clean agent is required. STG roof preaction, STG bearings preaction with rate of rise detections, and STG lube oil deluge are all required.	CLOSED	
35	Please confirm aircraft warning lights are supplied if required by local codes for the exhaust stack.	No aircraft warning lights are required	CLOSED	
36	Please confirm all IST pressure/temperature instruments are provided and rack mounted and that the BOP Contractor is responsible only for junction boxes, tubing, and wiring.	Refer to M195 in A.3 owner supplied equipment. Items shown with an asterisk are supplied by IST. TEs will be supplied by IST. All other instruments by BOP.	CLOSED	
37	In the RFP documents seismic design values based on CBC 2010 have been provided. During pre-bid meeting, it has been cleared that 2013 version of CBC will be used. Can you provide us with the new seismic design values based on CBC, 2013 version	Since providing our initial response additional information has become available. Also see the response to question #21.  The seismic design methodology did not change from 2010 to 2013, however the response spectra from the USGS hazard maps has increased. The City Building Department is also requiring a site specific seismic evaluation due to the proximity of the Raymond Hill fault which runs east-west south of the site. The results of that study are expected in ~2 weeks time and will be provided in Addendum #5. However it is up to the Bidder to select the proper values as they will be the responsible engineer for the project. The values provided in the Specification are to be used as general guidance only.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
38	Clarify/confirm/identify what drawings/calculations are required to be submitted to city for review	The project will be reviewed under one building permit. The Building Department will be happy to sit down with the BOP Contractor to discuss plan requirements and submission after award. To operate under one permit, the BOP Contractor will need to submit a Foundation Key Plan for all of the equipment foundation drawings. This will serve as a placeholder for the permit. Once the first equipment foundation is finalized, it will be submitted as a revision to the original permit and the Building Department will then review it. The same process will take place for the succeeding foundation drawings as they are ready for submission. The Building Department will perform the review internally (they do not plan to hire an outside consultant).  At a minimum the following will be reviewed:  * Soil design, rebar, concrete, bolting, seismic design  * Grading and drainage plans  * All foundation designs and calculations will be reviewed  * All systems containing hazardous materials will be reviewed  * The fire protection systems will be reviewed (detection and suppression)  * Access for fire and emergency vehicles  * The Control Room building will be subject to a complete review  * The pre-cast wall along Fair Oaks  * The Glenarm Building tunnel seals  An NPDES SWPPP for construction is required to be complied with by the BOP Contractor.	CLOSED	
39	Hyrdologue Inc. representative stated during the pre-bid meeting that additional soil samples have been taken for soil contamination determination. Hyrdologue also stated that no critical contamination levels are anticipated for the project site. Will it be possible for us to get the new soil contamination results as they are available?	Initial test results show that the Dioxin levels on-site at 6" and 12" below grade are below the off-site background levels. DTSC's initial review was to accept the City's recommendation that no further action was needed.	CLOSED	
40	Please define all GE loads & utilities after an emergency shutdown as well as duration, voltage phase, etc. Relevant to safe & proper shutdown of GT & STG & other BOP equipment within GE/IST scope of supply.	Refer to Addendum #4 for information on the LM6000 that GE has provided. They do not expect to have information for the other equipment within their scope of supply until the end of March.	OPEN	Diane Donovan
41	Please define length and diameter of P91/P11/P21 alloy piping materials for interconnecting piping to silencer and/or any other known equipment interconnects to IST/GE equipment	Based on preliminary sizing information, IST expects the interconnecting piping between the start-up vent to the silencer to be 6 NPS Sch 80 SA335 P22. The silencer will have a flanged connection while the control valve and start-up vent isolation valve have butt weld ends. The length of piping between the start-up vent and silencer will depend on the location of the take-off relative to the silencer position. Line diameter sizing information will be confirmed upon completion of valve sizing around March 14th.  For the steam piping, IST expects this to be a 10 NPS Sch80 SA335 P22 pipe. The IST supplied portion of the pipe spool will be approximately 15 ft in length. This will be confirmed by the next release of the General Arrangement drawing.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
42	Please confirm if SS liner is required by GE/IS for any desuperheater or bypass piping interconnections or if P91/P11/P21 is required.	<ol> <li>SS liner is required immediately downstream of the de-super heater. This is a GE standard.</li> <li>SS liner is not required on bypass piping connections.</li> <li>Based on maximum temperature of the steam (914oF), it is expected that P11 piping will be required for the HP steam and bypass piping. BOP contractor will be responsible for final confirmation and selection of piping materials based on the GE data blocks which are scheduled to be issued no later than April 4, 2014.</li> </ol>	CLOSED	
43	Equipment doors on west side open into firewall behind GSU XFMR. What is concept for truck access for equipment removal?	The platforms provided by BOP will need to allow for equipment removal	CLOSED	
44	Are the GE provided panels that are shown on E1-2 shown correctly? TCP Mark VIE panels for CTG and STG often are 6-10 units. Including GPP for 2 units, exciter/AVR for STG, etc., is the allocated space sufficient?	We believe we there is adequate room in the PDC for the referenced panels.	CLOSED	
45	Is battery room required for QEL-CEL battery stacks? If required, is space shown sufficient for 125v battery <u>and</u> 24v battery?	Battery room is basis of bid and is required.	CLOSED	
46	In regards to local business participation obtaining 15% local procurement and subcontracting; do team members count as self-perform?	People performing work that are employees of the BOP Contractor count for self-performed work. Work performed by the any of the BOP Contractor's sub-contractors does not count as self-performed.	CLOSED	
47	In regards to local business participation obtaining 15% local procurement and subcontracting; how do you satisfy 15% requirement at bid time if 7% is material procurement from local Pasadena business?	In order to give the prime credit for the purchases, prior to them actually making the purchases, the Prime has to list the local supplier as a subcontractor.	CLOSED	
48	Will the prime receive credit towards the 15% local business, for transactions generated by our subcontractor?	Yes, the goal is that 15% of the BOP Contractor's subcontracted work be spent with local Pasadena businesses.	CLOSED	
49	Local participation of 15% is required. It is understood this requirement pertains to subcontractor and procuring content combined. In other words if our price for subcontracted work is \$10,000,000 and our price for procurement is \$10,000,000 the aggregate is \$20,000,000 therefore we would need to spend 15% of \$20,000,000 (\$3,000,000) on local Pasadena subcontractors and/or vendors. Please confirm this is correct	That is correct.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
50	When calculating total subcontractor and procurement dollars are we to include other costs such as sales tax, bonds, markup in the calculation? Example: If procuring dollars are \$10,000,000 exclusive of sales taxes and say sales taxes are 9% total procurement cost would be \$10,900,000. If subcontractor content is \$10,000,000 exclusive of bonds and bond cost are an additional 1% subvalue would then be \$10,100,000. In summary, do we shoot for 15% of \$20,000,000 or do we shoot for 15% of \$10,900,000 plus \$10,100,000 which totals \$21,000,000?	The City considers the value of the contract.	CLOSED	
51	Does procuring for project apply only to permanent plant materials or could it include items such as small tools and consumables as well?	Small tools, equipment, and consumables count towards the 15%.	CLOSED	
52	Clarify the 15% local requirement. I.E. 15% applies to total subcontracted plus total procurement. Confirm if this includes taxes/fees, etc.	See responses to items 49 and 50.	CLOSED	
53	What is the evaluation criteria for the local preference point system? I.E., advertising is worth 5 points. What determines if the bidder receives full points at 5/5 versus partial points?	As you cannot partially advertise or solicit bids, there are no partial points.	CLOSED	
54	GE is supplying the STG enclosure (building). Is GE responsible for building official/building permit requirements? If BOP contractor is responsible, who is responsible if the building official requires changes/additions?	General Electric is responsible for providing the design of the steam turbine enclosure. The BOP Contractor is responsible for working with the City's Building Department. If changes to GE supplied equipment are needed, those will be worked through the City's GT5 Project Team.	CLOSED	
55	On page 12 of scope of work, it is stated that "SWPPP and SUSMP permits will need to be obtained by the BOP contractor". On page 49 of the same document, under section G.11 it is mentioned " development of SWPPP meeting all state and EPA regulators and supporting PWP in updating their SUSMP permit." Please clarify the scope of this SUSMP (standard urban storm water mitigation plan) on the BOP contractor side.	The BOP Contractor shall only prepare SWPPP. A SUSMP is not required.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
56	What are the options of locations for hazardous material disposal?	The BOP Contractor will have to retain and pay for the services of an environmental consultant to prepare, submit, and obtain fire department approval of hazardous waste work plan as well as manage the remediation, waste characterization, waste profiling, transportation, & disposal of hazardous waste in accordance with local, state, and federal environmental regulation. Depending on how it's sub-contracted out, this could be one work plan for everything or several separate ones. The BOP Contractor shall submit work plans for the following:  - Lead/asbestos abatement on structures  - Electrical transformer removal (assuming they are not just being sent as hazardous waste)  - Cleaning and removal of fuel oil piping (assuming they are not just being sent as hazardous waste)  - Soil remediation  The work plans will need to demonstrate that the proposed contractor is suitably qualified and licensed for the work, document the procedures used to remove and manage the hazardous materials from generation through disposal, and propose cleanup levels and sampling criteria based upon current regulatory standards. Pasadena Fire Department review of submittals and reports, as well as required inspections, The current billing rate for reviews is \$202/hr for the time required. Lead and asbestos work are also likely regulated by CalOSHA and/or AQMD and may require additional submittals and/or permits for those agencies.	CLOSED	
57	What are the technical specs for flowable fill; if used?	This is the responsibility of the BOP Contractor since they are performing the construction.  Flowable fill mixtures are usually specified to meet either a compressive strength or unit weight requirement. The compressive strength is typically measured by testing a 4 x 8 inch cylindrical test specimen in compression. The National Ready Mixed Concrete Association defines an "excavatable" flowable fill mixture as one with a compressive strength not exceeding 150 pounds per square inch.  We do not have a formal technical spec for flowable fill. Standard criteria are:  * Unit weight: 20#/CF to 145#/CF  * Compressive Strength: 150psi max (any more than this will not allow for future ease of excavation) A typical mix uses approx. 100# cement, 250-300# fly ash, and the rest clean sand, water and selected admixtureson a per cubic yard basis.	CLOSED	
58	On page 34 of scope of work there is a statement, "organics removed from the site will most likely be reduced this soil, if cleared organic material, can be used for fill on site per the geotech report." For proposal preparation, should we assume 1.3000cy is accurate and price accordingly?	You should base your bid upon the quantities provided.	CLOSED	
59	What are the safety training requirements for workers at the site? (how many hours?)	No specific requirements but it will be discussed on the pre-construction meeting. BOP Contractor is responsible for the haz mat training required under local, state, & federal environmental regulations.	CLOSED	
60	Are drawings of maintenance shop available?	The Maintenance Building has been removed from the scope of the project.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
61	Are extended hours allowed for monolithic pours on the center-line foundation?	You should assume that the monolithic pours must be completed within the standard allowed work hours.	CLOSED	
62	Are there any extended time curing requirements?	Per ACI mass concrete requirements	CLOSED	
63	Will plant operations be allowed on Sunday?	Operations: yes Construction: no	CLOSED	
64	Will any historic building inspections be required?	Building Department on sealing of tunnel openings.	CLOSED	
65	Will we utilize the plant's EPA processes for hazardous material?	Yes	CLOSED	
66	Will there be any CBO involvement?	There will not be a CBO in the sense of a California Energy Commission jurisdictional project.  However the Pasadena Building Department does expect to review the project design as well as field inspections.	CLOSED	
67	Does the 15% requirement apply to the aggregate of subcontracting and procurement?	See responses to items 49 and 50.	CLOSED	
68	If we use a company that the city of Pasadena uses, but is not located within the city of Pasadena, does it count towards the 15%?	No	CLOSED	
69	Is the list of Pasadena firms classified by business type?	No, business type is not the criteria, location within the City of Pasadena is the critical criterion.	CLOSED	
70	Are there extraction points for the gear box?	There is a removable panel on the GTG per the GE presentation. The STG gear box should be accessible through the roof.	CLOSED	
71	Is the generator rotor located out of the back?	The generator rotor for both the STG and the GTG will be to the west. Removable panels will be provided by GE for both.	CLOSED	
72	Does the steam turbine include a removable roof?	Sections of the roof are removable.	CLOSED	
73	Will GE define the requirements for the chemical feed systems?	They are included in the issued specifications	CLOSED	
74	Will GE be treating the boiler feed pumps for acoustics?	Yes, If necessary to meet their noise guarantee.	CLOSED	
75	Will the slides from GE's presentation be included in the addendum?	They are being distributed as part of Addendum #2.	CLOSED	
76	Is GE's equipment data current?	Yes	CLOSED	
77	Are the GE preferred vendors confirmed or yet to be determined?	See response to item 23.	CLOSED	
78	When will the bidders know GE's final equipment selections?	See response to item 23.	CLOSED	
79	It was noted that the steam turbine included shims, but are they also included with the gas turbine?	Shear lugs only for gas turbine	CLOSED	
80	Are the generator protective panels included with all devices?	Yes; the BOP is to have them installed in the PDC furnished by the BOP Contractor.	CLOSED	
81	Are the power requirements after shutdown defined?	See response to Item 40.	CLOSED	
82	Is the steam turbine grout or epoxy?	See response to Item 11.	CLOSED	
83	Are the erection plates designed for seismic activity?	Yes	CLOSED	
84	Will the erection plates be bolted and welded?	Yes	CLOSED	
85	Do the modules come prime or painted?	They will be delivered in a primed condition. It is the BOP contractor's responsibility to do touch ups	CLOSED	
86	Is there a recommended traffic-rated cover to protect pipes onsite?	It is the BOP Contractor's responsibility to provide adequate protection.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
87	Are the soil resistivity levels defined?	See response to Item 3.	CLOSED	
88	Are there any requirements for soil remediation in the lay- down yard following use?	The BOP Contractor must restore the laydown area to its as found condition	CLOSED	
89	Are there any architectural details for the 10' protection wall?	There are no architectural requirements.	CLOSED	
90	Is the PDC considered a habitable structure with ADA requirements?	No, there are no ADA requirements for the PDC.	CLOSED	
91	Can additional site visits be requested?	Yes, if scheduled in advance with at least one week's notice.	CLOSED	
92	Which version of the building code will be used on the project?	See response to Item 21.	CLOSED	
93	Are there any requirements to have external condensate storage during drain down of IST's equipment?	The plant design includes a 5,000 gal. Condensate Storage Tank	CLOSED	
94	Are gas blows allowed on the project?	No, natural gas blows are not allowed.	CLOSED	
95	Will the erection procedures for the LM6000 and OTSG be included in the bid package?	Yes, to the extent shown at the pre-bid meeting.	CLOSED	
96	Will the sign-in sheet be made available?	They are being distributed as part of Addendum #2.	CLOSED	
97	Does the CEMS package include the umbilical?	Yes	CLOSED	
98	Will the project primarily be using Donaldson filter houses?	Yes	CLOSED	
99	Does the existing 6' x 4' storm drain culvert lie within an easement? If so, please provide the recorded easement document with legal description and any encroachment restrictions.	No	CLOSED	
100	Since the boilers and burners in the Glenarm Building are not being removed and there is no "seismic retrofitting" of the Glenarm Building, are "demolition" & "protection" plans and a "Historic American Building Survey (HABS) Level III recordation" required prior to any demolition within the Glenarm Building (see Mitigation Monitoring and Reporting Program (MMRP) Mitigation Measures CULT 1, -2 & -3), or for any other existing structure? And is an "interpretive architectural exhibit" required per MMRP Mitigation Measure CULT-2?	There is no demolition within the confines of the Glenarm Building. Therefore a plan is not required.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
101	Has PWP submitted "comprehensive pre-demolition asbestos" and "lead-based paint" surveys "for all existing buildings located on the project site" and a "soils management plan" for "excavation and grading activities on the project site" to the City of Pasadena Fire Department per MMRP Mitigation Measures HAZ-1, -2 & -5? If so, please provide the surveys and plan. If not, please let us know when they will be submitted and their expected approval.	The GT5 Repower EIR Mitigation Measure indicated that an asbestos/lead survey and soil management plan shall be submitted to Pasadena Fire prior to demo. The Mitigation Measure and reporting Program (MMRP) from the EIR is in the BOP Contractor Specification. As the City will not be occupying the Glenarm Building as part of this project, the asbestos and lead abatement will be limited to the structures that will be removed on the south side of the building (i.e., smoke stack, air compressor building, restroom, and piping in the tunnels outside the building that will be removed). There will be organic & lead contaminated dirt remediation. There are electrical transformers that contain < 2 ppm PCB based on PWP's latest sampling and analysis and there are old fuel oil lines in the tunnels that will be removed.  The BOP Contractor could handle this as one work plan for everything or several separate ones. They'll need work plans for the following:  - Lead/asbestos abatement on structures  - Electrical transformer removal (assuming they are not just being sent as hazardous waste)  - Cleaning and removal of fuel oil piping (assuming they are not just being sent as hazardous waste)  - Soil remediation  The work plans will need to demonstrate that the proposed contractor(s) is suitably qualified and licensed for the work, document the procedures used to remove and manage the hazardous materials from generation through disposal, and propose cleanup levels and sampling criteria based upon current regulatory standards. Pasadena Fire will charge \$202/hour for review of submittals and reports, as well as required inspections. This rate is subject to escalation each fiscal year. Lead and asbestos work may also require additional submittals and/or permits from CalOSHA and/or AQMD.	CLOSED	
102	Can we design flexible & rigid pavement sections per the Soils Engineering Investigation's R-value tests of "60 and 67" (page 22) instead of per the paving thickness designs "outlined in section 9.0 Paving of the Soils Investigation Report" based on "an assumed R value of 35" (section 9.2, page 43)	The BOP Contractor will be responsible for the pavement design and layer thickness for surface and base courses. The BOP Contractor may use either CALTRANS or AASHTO methods of flexible and rigid pavement design and will need to select the input values for either method based on information provided in the geotechnical investigation and the Contractors design experience and expertise. The road layer thickness provided in Section 9.2 are based on an R value of 35 as noted and provides expected layer thickness based on that value. The actual R values from lab results for two boreholes are 60 and 67, respectively as noted. The BOP Contractor may use these or other R values based on experience.	CLOSED	
103	Is the reinforced concrete paving covering the "operating areas" to be designed for "heavy truck drives" (2nd to last paragraph in SOW, page 46)?	The intent is to have all concrete H-20 rated, with thickened areas for crane loading on the west side of the GTG and then also south of the cooling tower.	CLOSED	
104	Please clarify the conflicting statements in the 3rd paragraph of SOW, page 49, regarding spill containment areas:  "The containments shall be provided with sumps to pump out rain water or contaminated water."  and  "All spill containment areas shall be set to gravity drain to grade"	Sump pumps are needed to pump out rain water or contaminated water if the containment is located below grade and will not have the proper slope towards the oily water separator.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
105	Is the existing on-site AC roadway running N. – S. between East State St. and the new plant proper to be removed and replaced, or can it be left in place to connect with the proposed new roadways on its west and north ends?	The existing AC paving can be left in place. However, the BOP Contractor is responsible to bring it back to its pre-construction condition before final acceptance of the City of the project.	CLOSED	
106	What volume of "residual fuel oil" in the "asbestos insulated fuel oil piping" and "asbestos containing materials (ACM)" needs to be removed, remediated, and properly disposed (SOW sections A.7.1.i., page 6, and G.2, page 39)?	BOP Contractor shall include in his bid the price for the removal of oil in the fuel oil piping and assume that pipe is full of fuel oil and shall include in his bid the price for removal of all insulation based on the assumption that the insulation is ACM. BOP Contractor is responsible for determining the quantity of the material to be removed.	CLOSED	
107	Per SOW, paragraph 2, pages 5 & 6, of Addendum No. 1, can Hyrdologue serve as both the "geotechnical firm present for all excavation and backfill activities on site" and the "third party geotechnical firm required to be on site for all inspections, testing and reporting including compaction, soil testing, etc.?	Yes, the City does not have any restrictions insofar as the Bidder using Hydrologue as a 3rd party geotechnical firm. It is solely the Bidder's determination as to what firm to use for this role.	CLOSED	
108	Please confirm that the contractor-provided "unit rates" for the "Quantities of soil to be excavated and recompacted, organic materials and lead contaminated soils to be removed from the site and concrete volumes to be demolished" will be used as both an extra to "account for additional material to be handled/removed" and as a "credit for materials not handled and removed" (SOW, section G.1, 3rd paragraph).	Yes, the unit rates that were requested are to be used to adjust up or down the BOP Contractor's cost based on actual volumes.	CLOSED	
109	Where is the Ground Penetrating Radar report in the RFP bid documents? If missing, please provide.	The GPR report is in the document 3626-03 Geophysical Investigation found in A.3.C/Reference & Preliminary Design Scoping/ Geotech Report and GPR / Geotech	CLOSED	
110	Does the 10 minute start requirement apply to the BOP Contractor?	Yes, the plant must meet a 10 minute start. The plant control system, plant design, and any equipment supplied by the BOP Contractor must work with the GE supplied equipment to achieve the 10 minute start. Addendum 4 will contain additional definition.	CLOSED	
111	Can the payment of the Contract Price be by Milestone Payments according to mutually agreed milestones and percentages of the Contract Price (Appendix D 4.1)	Appendix D 4.1 contains the successful Bidder's Not to Exceed price to perform the project. Section 9.0 of Specification describes how payments will be handled. In order to submit a responsive bid, the Bidder must accept Section 9.0 in its entirety.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
112	Typical contract would permit change orders for change in laws; unknown and unexpected underground conditions (obstructions, hazardous materials, artifacts); delays or costs caused by owner or owners other contractors; suspension by the City; grid connection not available by the schedule date; delays in customs not attributable to Contractor; Failure in the acquisition of licenses, permits and approvals due to governmental authority delays and or Statute rules, regulations issued by any governmental authority (in addition to force majeure and changes in scope). Will the BOP Contract include such? (Appendix D 4.2)	This is addressed in Sections 11 and 13 of the Specification.	CLOSED	
113	Contractor interprets this clause to mean that intellectual property of Contractor and Equipment suppliers shall remain their intellectual property. City will own the documents and have the right to use the documents with respect to the operation, maintenance and repair of the Plant. Please confirm. (Appendix D 6.3)	All work product prepared by the BOP Contractor that is a required deliverable under the contract becomes the property of the City of Pasadena.	CLOSED	
114	Contractor requests clarification that this clause does not prevent Contractor's ability to assign payment receivables to a financial entity. (Appendix D 6.7)	The City agrees this clause does not prevent the BOP Contractor from assigning payment receivables. The City, in the past, has allowed contractors to open an escrow account for special handling of invoices and retention payments.	CLOSED	
115	Can you add clarity that in the case of termination other than due to Contractor's default, City shall pay Contractor any and all payments due owing to Contractor on or prior to the date of termination, any prorated payments amount based on the services performed as per contractual requirements and timely performed prior to the service of the notice of termination, refund Contractor the Surety Bond/s and pay all reasonable, actual and direct costs including without limitation the cost of cancellation of subcontracts. (Appendix D 7.15)	This is addressed in Section 3.7 of the Specification.	CLOSED	
116	Contractor interprets that the period time to cure the material breach are 10 Business Days and request that the City confirm this interpretation (Appendix D 7.16)	Section 7.16 of the Contract speaks for itself. If a party sends a notice of default and termination, "the Contract shall terminate unless such default is cured before the effective date of termination stated in such notice, which date shall be no sooner than ten (10) days after the date of the notice."	CLOSED	

Question #	Question	Answer	Status	Responsible Party
117	Typically there would be a clause excluding incidental and consequential damages. Please confirm whether such will be included. (Appendix D)	Bidder's shall submit proposal as they deem competitive. If the bidder has clarifications or exceptions to the commercial terms only, they may submit them with their bids. The City is not inclined to exclude categories of damages for this project, but may be able to capitate certain types of losses to \$20 million (i.e. for business loss coupled with debt service, the contractor may have a limited exposure City's capitated damages of \$20 million per occurrence only)	CLOSED	
118	Typically there would be a clause limiting the Contractors liability. (Appendix D)	See response to item 117.	CLOSED	
119	What is the length of time for the material and workmanship warranty? (Appendix D)	The BOP Contractor will warrant materials and workmanship for a period of 12 months or the vendors warranty, whichever is longer, following the Acceptance of Work by the City per Part II (City Standard Spec), Section 10 (Completion of Work and Acceptance) of the Specifications.	CLOSED	
120	We note that City Council approval is required if change orders cause Contractors total compensation to exceed a certain amount. Approximately how much above the contract price is this expected to be? (Appendix D)	Section 4.2 of Appendix D will contain an amount that is greater than the Bidder's price as bid to perform the work which is contained in Section 4.1 of Appendix D. The standard change order for City contract is 10% of the contract amount. The City Manager has the authority to approve change orders up to this 10% amount. Change orders that are more than 10% of contract amount will need City Council approval.	CLOSED	
121	Please provide confirmation/clarification that "specialty" contractors (e.g.: insulation, painting, etc) do not need to be identified in the bid	In accordance with Section 3.4 of the Specification, subcontractors that represent more than one-half of one percent (0.5%) of the Bidders bid price must be identified on Attachment 1 to the Specification.	CLOSED	
122	PLA agreement: Attachment E is blank. It is the document that is designed to list the unions signatory to this agreement. Please provide this list. (Appendix D)	The Project Labor Agreement is located in Appendix I (the letter "I") of the Specification.	CLOSED	
123	We are requesting a 3 week bid extension to April 8, 2014.	The bid due date is extended to April 8. The last day to submit questions is extended by the same amount to March 21.	CLOSED	
124	Please advise on the project tax exempt status for materials and equipment incorporated into the project.	There is no special tax exempt status for materials for this project.	CLOSED	
125	With the Maintenance Building removed from the scope of the project, per Pre-Bid Meeting Question 60, Rev. 0, is the Welding Shop also removed?	Yes	CLOSED	
126	Can the area around the Maintenance Building still be used for "parking and proposed laydown/staging area"?	Yes	CLOSED	
127	Is it acceptable to distribute material in the bid specification to third parties for the purposes of obtaining bids from suppliers and vendors.	Yes, however GE proprietary material may not be distributed beyond the Bidder.	CLOSED	
128	Attachment A.1 Scope of Work states in item 6 at the top of page 6 "subject to the 50% self-performance requirement." Is there still a 50% self-performance requirement?	No, there is not a 50% self-performance requirement.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
129	Please clarify the meaning of items 53010 and 53020 in the Division of Responsibility.	53010 - The PIE Contractor is responsible for delivering their equipment to the site. Any equipment that the PIE Contractor ships to the site via rail, will be delivered to the site by the PIE Contractor. The BOP Contractor assumes care, custody, and control of the PIE Contractor equipment when they off-load it from the PIE Contractor's truck/transporter. The BOP Contractor is responsible for the PIE from the time they off-load it from the truck/transporter until placement onto the foundation.  53020 - The BOP Contractor is responsible for movement from the rail siding to the site for equipment that the BOP Contractor procures and ships by rail.	CLOSED	
130	Part ID of the "Bidder's Proposal" in Specifications LD-13-14 appears to have some typos. Shouldn't the referenced attachments refer to section "G" vs. "F" of the Scope of Work, Attachment A.1? In addition, please confirm that Part ID only covers the bid items described in the "Demolition Requirements" portion of Attachment A.1.G. (i.e. – demolition of existing improvements), while Part IE covers the bid items described in the "Civil Requirements" portion of Attachment A.1.G. (i.e. – construction of new improvements)?	Yes, in Specification LD-13-14, Section D of the Bidder's Proposal Form should have referred to Attachment A.1.G instead of A.1.F.  Yes, Part ID of the Bidder's Proposal Form only covers the bid items described in the "Demolition Requirements" portion of Attachment A.1.G. (i.e. – demolition of existing improvements), while Part IE of the Bidder's Proposal Form covers the new GT5 construction items described in the "Civil Requirements" portion of Attachment A.1.G.	CLOSED	
131	In Part ID of the "Bidder's Proposal" in Specifications LD-13- 14, what is "Attachment A.1X"?	Attachment A.1.X is a placeholder for the Glenarm Building Mothballing Requirements which are being issued via Addendum.  The Glenarm Building requirements are included within Addendum 3.	CLOSED	
132	In Part ID of the "Bidder's Proposal" in Specifications LD-13-14, shouldn't the unit process for Item Nos. D.2 – D.6 be in "CY" vs. "Ton" to maintain consistent units?	Yes, we will change these to cubic yards to maintain consistency.	CLOSED	
133	In Part ID of the "Bidder's Proposal" in Specifications LD-13-14, shouldn't there also be separate items with unit prices for the provided allowances for "Remove old house concrete foundations, bricks & asphalt near new tanks (100 CY)", and "Removal and recompaction of 2' – 3' of fill soil below AC roadways (3,380 CY)"?	This was provided in Addendum #3 Item #5 Enclosure #4.	CLOSED	
134	Can the cooling tower be moved to the south by 5-10 feet?	There is no latitude to move the cooling tower.	CLOSED	
135	What are the STG auxiliary heat loads?	The steam turbine auxiliary equipment cooling loads from GE/Shin Nippon are as follows:  Lube oil cooler = 300 kW  Generator cooler = 450 kW	CLOSED	

Question #	Question	Answer	Status	Responsible Party
136	Section 2.3.A.18 of the Shop Fabricated Tanks specification (Section 485173) indicates "All longitudinal and girth welds shall be 100% x-rayed." Can applicable requirements of API 650 and/or ASME be used instead?	The BOP Contractor should use the applicable code requirement for girth weld inspection.	CLOSED	
137	Will the design engineer be responsible for determining the Design Pressure and Design Temperature for the systems or are we to use what is listed in the Service Index?	Yes, the BOP contractor's engineer is responsible for determining design temperature and pressure.	CLOSED	
138	Are different pipe materials allowed to be substituted if deemed acceptable by the design engineer and if they will provide equivalent or superior long-term performance?	Use the pipe materials listed for the BOP Contractor's bid. Alternative materials may be considered after award of contract.	CLOSED	
139	Are Electrical Load lists for the following PIE supplied equipment available? We need these to adequately size and price the 480 V MCCs located in the PDC.  Chiller Electrical Load List  Shin Nippon STG Electrical Load List  IST OTSG Electrical Load List	We can provide estimates of the electrical loads, but the final power requirements are not available from the Power Island Equipment Contractor as yet. Here are estimates based on POWER Engineer's preliminary design and compared against GE's proposal:  GT fuel compressor 1,095 kW GT electric chiller 370 kW GT chiller/heater water pump 330 kW HRSG feed pump 145 kW Cooling water pump 170 kW Cooling tower fans 180 kW Lights 10 kW Aux. from PEACE running motor/load list 485 kW Miscellaneous gas turbine auxiliaries 105 kW Miscellaneous steam cycle auxiliaries 35 kW Miscellaneous plant auxiliaries 40 kW Transformer losses 355 kW	CLOSED	
140	Is there an MCC located in the PIE supplied Chiller Package or are the Chiller 480 V loads being fed from the PIE MCC? A chiller MCC is not called out in the PDC layout plan.	The Chiller package is to be fed from the PIE MCC with two (2) 4160V feeds and two (2) 480 Feeds.	CLOSED	
141	Bid Form - Can the City of Pasadena provide the bid form in native Excel format?	No. The Bidder shall submit the Bidder's Proposal Form (Addendum #3 Item #5 Enclosure #4) completed in handwriting with their bids.	CLOSED	
142	Addendum #2 - Page #37 of Part 1 shows an elevation of the condenser. Can you please provide more complete information - plans, loads etc.	This is the best information we have from General Electric at this time. General Electric expects to finalize the condenser vendor selection at the end of March.	OPEN	Diane Donovan
143	Addendum #2 - Page #38 shows information for the foundation of the STG. Please provide the drawing that is referenced on this sheet: 5065A0-C23. There is also a conflict in the top of concrete elevation shown on this sheet with the top of concrete shown on Page 1700 of Attachment #3. Please clarify what the top of concrete elevation is for the STG.	This is the best information we have from General Electric at this time. The elevation of the steam turbine has not been set as yet.	OPEN	Diane Donovan

Question #	Question	Answer	Status	Responsible Party
144	Attachment #2 - BOI 037-5056 - Architectural Scope of Work Page 13 - Part 7: This calls for required activities in the Existing Glenarm Building and makes reference to details on drawing XXXXXX.  Please provide this drawing so that we can comply with the required scope of work.	This information was provided in Addendum #3 Item 16 and Enclosure #7.	CLOSED	
145	Bid Form - Item #27 - Air Compressor & Receiver - What is the size of the enclosure for this equipment?	It is up to GE as to whether they will be supplying an enclosure or a shelter in order to meet their noise requirements. If GE does not provide an enclosure, then they will be providing a shelter (roof with open sides).	CLOSED	
146	Appendix G - In the "Local Subcontractor Solicitation Process for Contractors bidding on the Project:" section, it states in the second paragraph that "Forms shall be provided to the contractors to assist them in documenting the following steps." Please provide these forms.	The forms are provided in Appendix H.	CLOSED	
147	During the 1/8/14 project site visit, we overheard a PWP rep. state that the two existing on-site power poles, located on the west and south sides of the site, and their overhead utility lines would be removed by the City. Please confirm.	The overhead power line to the southwest of the Glenarm Building will be modified as follows:  1) the end pole to the southwest of the Glenarm Building will be removed  2) the next pole to the south, closer to the Pacific Electric building will remain. At that pole PWP will provide a 480V service drop. From there it is the BOP Contractor's responsibility receive and distribute the temporary construction power on-site.	CLOSED	
148	Due to the unknown hydraulic characteristics of the $6' \times 4'$ storm drain box culvert, are backflow prevention valves required on any storm drain line connection to the $6' \times 4'$ storm drain box culvert to prevent potential flooding of the site should the culvert become surcharged?	We are not aware of any surcharge conditions associated with the 6' x 4' storm drain box culvert. Recommend not including backflow preventers at this time. Contractor will go through a permitting process with the City for relocation of the storm drain and also for the grading permit and if new information is obtained at that time that the culvert can indeed see pressure conditions, the Contractor will need to address it.	CLOSED	
149	We assume that PWP wants the BOP Contractor to preserve and adjust as needed the existing catch basin at the west end of the 6' x 4' storm drain box culvert, while the two existing manholes (identified as "4' & 5' Dia. Lid Unknown" on Topo Survey), which lie in the middle of the plant proper, are to be removed. Please confirm.	Correct.	CLOSED	
150	We assume that the existing south plant entrance gate off State St. is to be removed and the bare ground around the PWP-removed backflow preventer is to be paved to match the existing roadway pavement elevations. Please confirm.	The gate at the south entrance shall be removed and replaced by the BOP Contractor with a wider gate with a similar mesh design as the one removed. The BOP Contractor shall install the necessary post and other appurtenances necessary to make the new gate operate properly. The area where the backflow preventer is removed will need to be paved. The paving should extend to the south and end at the existing gate, matching the existing sidewalk.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
151	Please provide missing GE Packaged Power, Inc.'s Work Order No. 20001, "Area 1 Civil Plan Paving/Grading & U.G. Sewer", Dwg. No. 20001-C-002-02 ("Issued for Construction 1/24/03"), on the Pasadena Powerplant Upgrade Project. The four associated Dwg. Nos. 20001-C-002-01 & -03 thru -05 were provided as part of A.3, but Dwg. No. 20001-C-002-02 is missing.	The referenced drawing will be issued in Addendum #4.	CLOSED	
152	What is the extent of the existing gate and fence removal/replacement at the SE corner of the Glenarm Building where "New Asphalt Pavement" is shown on Dwg. No. C3-1?	This fencing will remain in place.	CLOSED	
153	The ammonia system shows 3x100% capacity pumps whereas the specification discusses 2x100% pumps. Which is correct?	The project requirement is for 3x100% pumps as shown on the P&ID.	CLOSED	
154	Can the City provide the GE guarantee sheet? If this is not available, can the City provide the amount of hours GE allows before PM10 compliance is void?	GE prefers to release the guarantees only to the successful BOP Contractor.  With regards to PM10 testing, GE requires that the combustion turbine must run for a minimum of 300 total-fired hours prior to any PM testing, and must operate at base load for a minimum of 3 to 4 hours prior to any PM test run to achieve steady-state wheelspace temperatures (gas turbine nozzle final stage temperature). GE does not have a maximum number of fired hours before which the PM-10 test must occur to be valid, nor is there a degradation-type factor applied to PM-10 based on hours.	CLOSED	
155	After our review of the General Contract for the above subject project, we have identified a few typical reference clauses missing in an EPC contract. Appendix D of the request for bid does not reference any of the following clauses; namely, Price and Payment Terms, Warranty, Confidential Information, Consequential Damages, Contractor Liability, Environmental , Changes, Force Majeure, Owners Insurance/ Builders Risk Insurance. Please advise how the City plans to address these contract clauses.	Price and Payment Terms - Refer to Section 3.2 and the Bidder's Proposal Form of the Specification for pricing. Refer to Section 9.0 of the Specification for payment terms .  Warranty - Refer to question #119 for the response.  Confidential Information - The Bidder will be required to execute a Non-Disclosure Agreement with General Electric.  Consequential Damages - Refer to question #117 for the response.  Contractor Liability - Refer to question #11718 for the response.  Environmental - Refer to question #117 for the response  Changes - Refer to question #112 for the response.  Force Majeure - Refer to Sections 11.1 and 22.7.  Owners Insurance/ Builders Risk Insurance - Refer to question #160.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
156	Attachment A-1, paragraph J.21.6.j has this statement: The underground duct bank systems shall have at least 20% spare conduits.  We anticipate that the underground power cable bus from the CTG and STG to the 13.8kV switchgear will require a large number of parallel power cables, and as a result will have a very large duct bank. The same situation will apply to the low side connections for the auxiliary transformers T1 and T3. Please clarify if the 20% spare capacity requirement applies to these duct banks.	20% spare conduits are required for the duct banks as described in the Specification.  The CTG to GSU Xfmr circuits are overhead and thus this requirement does not apply.  For the following circuits the City will accept as an alternative sufficient spare conduit to accommodate the cables associated with one of the three phases:  1) STG to GSU Xfmr  2) Aux Xfmr T1 to PDC  3) Aux Xfmr T3 to PDC	CLOSED	
157	Please clarify if the "goal of at least 25% local hiring" in the Project Labor Agreement is a firm requirement or a true goal which we are to attempt/make best efforts to meet during the course of the project.	The 25% local hiring is the goal set under the PLA for the project. Contractor shall perform all outreach effort prescribed in the PFBL and described in Section 6 ( Union Recognition, Referral & Employment of Pasadena Residents) of the PLA to meet this goal.	CLOSED	
158	Referring to Section 7.11.2 of the Sample Contract in Appendix D of the Specification, does the City intend to modify the Indemnity provision in the contract to comply with California law? The word "sole" should be replaced with the word "active" pursuant to California Civil Code Section 2782 (b) which provides as follows: Except as provided in Sections 2782.1, 2782.2, and 2782.5, provisions, clauses, covenants, or agreements contained in, collateral to, or affecting any construction contract with a public agency that purport to impose on the contractor, or relieve the public agency from, liability for the active negligence of the public agency are void and unenforceable.	The City is not attempting to be relieved from "active" negligence and nor does the existing contract language purport to do so. The contract is not in contravention of the California Civil Code as written.	CLOSED	
159	Referring to Section E in Appendix E of the Specification, if the Contractor reduces or eliminates the self-insured retentions, it will result in additional cost. Does the City intend to issue guidance about the amount of self-insured retention that will be acceptable to the City prior to the proposal date?	Bidders should submit proposal as they deem appropriate, to be competitive. Since each company has differing rates for each of its insurance coverage's, each company has differing risk tolerance, and risk appetite for self-insured retentions or deductibles. Each proposer will have to determine on its own its financial capabilities.	CLOSED	
160	Does the City intend to provide Builder's Risk insurance for the full replacement value of the Work. If so does the City intend to disclose the terms of such coverage? If the City intends to provide Builder's Risk insurance, will the	The BOP Contractor must provide Builder's Risk coverage as an option within their bid. Please refer to Addendum #4 for further details.	CLOSED	
161	17.2 kV is not a typical substation voltage. Is the new T3 Aux Transformer connected directly to a generator?	17.2 kV is the correct value. The T3 Aux Transformer is not connected to a generator.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
162	Enclosure 10 of addendum 3 provides us with dates for owner furnished equipment deliveries. It provides both RTS (ready to ship) dates and guaranteed delivery dates. My question pertains to the guaranteed delivery date. Does the guaranteed delivery date provided pertain to the beginning of deliveries to the site or is it the date that we will receive the final delivery for that particular item?	The Guaranteed Delivery Date is the last day that GE may deliver the equipment to the site and not be liable for liquidated damages for late delivery. GE must provide not less than 5 day's notice prior to delivery to the site. Deliveries must occur on a business day before 2:00 PM local time, or as otherwise agreed with the City in writing.  GE may issue a RTS notice up to 30 days prior to the RTS dates in the contract. Additionally they are required to use reasonable efforts to provide 10 days advance notice of issuing a RTS notice.  GE may deliver the equipment up to 30 days prior to the Guaranteed Delivery Date.	CLOSED	
163	In many of the mechanical specifications, e.g. Section 485172 Field Fabricated Tanks - Steel, refer to Section 481200, Combined Cycle Balance of Plant. Where is Section 481200 located?	Section 481200 was originally going to be what is now Attachment A.1, the BOP Scope of Work.  The references to Section 481200 should be back to Attachment A.1 and were inadvertently missed.	CLOSED	
164	Please clarify the incomplete sentence in the answer to Question #56, as underlined below:  "Pasadena Fire Department review of submittals and reports, as well as required inspections, The current billing rate for reviews is \$202/hr for the time required."	The sentence should have read as follows:  Pasadena Fire Department review of submittals and reports, as well as required inspections, is required. The current billing rate for reviews is \$202/hr for the time required.	CLOSED	
165	We have another question in response to your answer to Question #105: If the "existing AC paving can be left in place" (i.e. running N– S between east State St. and the new plant proper), shouldn't the quantity of "Bidder's Proposal" Bid Item D.8 "Remove and recompaction of 2' – 3' of fill soil below AC roadways" be reduced accordingly?	It may be possible to execute the project in the way described, in which case the unit rates will be used to reduce the Bidder's price.	CLOSED	
166	Enclosure 6 of Addendum #2 lists drawing E6-10 as revision C, 7-Jan-14, released in Addendum #2. However, Enclosure 4 in Addendum #2 for Civil Scope/Storm Drain Reroute has E6-10 listed as revision B. Is there in fact a revision C to drawing E6-10?	Revision C is the correct revision and is included in Addendum #4.	CLOSED	
167	Are there OTSG and STG P&IDs for the Glenarm Repowering Project available at this time?	Not at this time, as soon as they are available we will issue them in a future Addendum.	OPEN	Diane Donovan

Question #	Question	Answer	Status	Responsible Party
168	The proposed storm drainage system, as detailed on the 'Preliminary Grading & Drainage Plan' (dwg C3-1), does not appear to be sufficient for proper drainage of the site. Should additional catch basins and piping be considered for bidding purposes	We have taken a second look at the proposed storm drainage system as shown on Drawing C 3-1 and find it to be adequate. The BOP Contractor should consider that this arrangement is based on the preliminary information available at this time and they are responsible for the final drainage system design once all equipment sizes and locations are determined and integrated into the final general arrangement. If the bidder thinks that additional catch basin and piping are necessary, then they should consider it in their design and include it in the bid price. City Public works will review and approve the final design before start of construction.	CLOSED	
169	While reviewing the Bidder's Checklist we saw that one of the requirements under Bid Security, Item (a) Bid Bond, was that the Attorney-in-Fact be on file with the L.A. County Clerk or the Pasadena City Clerk. Our Attorney-in-Fact tried to file with Pasadena and was told that they will not file unless it is for 'Real Property.' We wanted to confirm if our Attorney-in-Fact must actually be on file for this project?	The bid security shall be signed & sealed (emboss seal) by the Attorney-in-fact. A Power of attorney for the Attorney-in-fact shall be attached with the bid security. With the Power of attorney attached to the bid document, this addresses the requirement that the Attorney-in-fact is on file with the City Clerk.	CLOSED	
170	The hazard reports provided in Addendum #3 do not provide the lengths/volume of asbestos to be removed in the tunnels outside the boundary of the Glenarm Building	Assume 10 cubic yards. Also provide a unit rate to be used to adjust the bid price based on the actual volume of asbestos. An updated bid form is provided in Addendum #4.	CLOSED	
171	Regarding Specification 485172 (Field Fabricated Tanks – Steel), the data sheet for the Demineralized Water Storage Tank requires a corrosion allowance of 1.5mm (1/16 in). Industry standard for tanks constructed with stainless steel plates requires a corrosion allowance of 0 in. The data sheet lists minimum thickness requirements and industry standard is provide design in accordance with API 650 Appendix S. Please review and advise.	No corrosion allowance is necessary for the stainless steel tank walls. Use the more conservative between the specification and API 650.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
172	see page 134) requires the BOP Contractor to secure necessary construction permits from the City Planning Department and the Pasadena Fire Department, as well as any other construction related permits. The General Fee Schedule Spreadsheets in City of Pasadena's website list all permits that might be associated with this project some of which are listed below.  • Page 7 – Hazardous Materials Permits / Inspections  • Page 8 – Inspections & Permits (Excluding Hazardous Material) – Fire Department  • Page 8 – Construction Permits (New, Alterations, Replacement, other than Haz.Mat.)  • Page 12 – Permits related with Building Services  • Page 14 – Construction Inspections, Permits, Reviews (including Building, Electrical, Mechanical & Plumbing)  • Page 18 – Plan Check Fees Building  • Page 27 – Tree Removal & Protection Plan Review  • Page 28 – Design Reviews  • Page 44 – Water and Power Department – Utility  • Page 49 – Public Works Department – Construction & Demolition Fees  We realize that Building Permit, Temporary Trailer Permits, Excavation Permit, SWPPP Permit, Transportation - Moving Permits, Conducting an Activity in Public Right of Way Permit, Placing a Storage Container in Public Right of Way Permits, are the requirements specifically identified in the	The BOP Contractor is responsible for reviewing the list of fees and making its own determination as far which fees it may need to pay as part of putting its bid together. The following is provided as general guidance only and is not meant to imply what is or is not required.  Hazardous Materials Permits / Inspections - Likely required for the site demolition work and removal of hazardous materials as well as the ammonia system work Inspections & Permits (Excluding Hazardous Material) – Fire Department - Likely required as the Fire Department will inspect the fire protection systems Construction Permits (New, Alterations, Replacement, other than Haz.Mat.) - Likely required for the new construction such as the control building, fire pump, Permits related with Building Services - Likely required for grading permit, control building, electrical, transformers Construction Inspections, Permits, Reviews (including Building, Electrical, Mechanical & Plumbing) - Likely required for new construction Plan Check Fees Building - Likely required for new construction Tree Removal & Protection Plan Review - Likely required for the trees near the Pacific Electric building Design Reviews - While permitting has been handled by the City, the 10' wall along Fair Oaks will likely require a review. Water and Power Department — Utility - Likely required for new electrical service connection Public Works Department — Construction & Demolition Fees - Likely required for street work/closures including the new State Street gate and a Traffic Control Plan	CLOSED	
173	Addendum 4, item 25 requires EPC contractor to provide cost of Builders Risk insurance. To provide that quotation, the value of the Owner furnished PIE equipment needs to be provided to us before we can go out for a quote for that.	See the response to question 177.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
174	Page 1, Section 1.2.D Specifies that all workstations/servers are to be rack mount. Please confirm since there are conflicting requirements throughout the spec. (I.E. Page 13, Section 1.8.A.4.b specifies the OWS to be desk mount server.)  Page 4, Section 1.3.B.2 & 2.4 – Specifies four (4) monitor per OWS, but the architectural layout only shows one OWS with (4) monitors and the other OWS with (2) monitors. Please confirm the exact number of monitors per OWS.  Page 4, Section 1.3.B.3 – specifies two (2) EWS's, however, page 13, section 1.8.A. 2 & 1.8.A.4.b specifies one (1) EWS & page 23, section 2.5 specifies two (2) EWS. Please advise.  Page 4, Section 1.3.B.4 & Page 24, section 2.6 – Please provide more information on the remote workstationsare they stand alone, what are they connected to, what are they monitoring?	Work stations are at desks and to have a standing tower box. Servers are to be rack mounted.  Use the configuration as shown on the Control System Architecture Diagram.  One (1) EWS is required.  Delete the Remote Work Stations referred to in Section 1.3.B.4 (Page 4) and Section 2.6 (Page 24) of the PCS/Control System Specification 4780.	CLOSED	
175	Please provide load list for low voltage (480v) PIE, GTG and STG Motor Control Centers.	Refer to the responses to questions #135 and #139.	CLOSED	
176	Section I.1.7 of Attachment A.1 states that specifications for the steam sample panel are included in Attachment A-2. No specifications for a sample panel could be located in A-2 other than a reference to one located in Section 485952.06 for chemical feed - Section 485951.80, "Steam Sample Panel". Please provide Section 485951.80.	The Steam Sample Panel specification is included in Addendum #5.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
177	To provide builders risk pursuant to the addendum 4 requirements below, we will need to know the value of the facility that we could potentially damage in order to accurately price the builders risk policy. Please provide.	The Course of Construction, Builder's All Risk policy shall have limits commensurate with the total value to replace the entire project in the event of catastrophic loss. The Builder's Risk policy needs to include the value of the equipment - Bidder shall use a value of \$70 million - as well as other costs to replace the project. Further, item 25 of Addendum #4 is modified as follows:  BOP Contractor shall provide at its own expense Builder's All Risk Insurance through the end of the Warranty Period. The insurance shall insure the BOP Contractor, PIE Contractor, and the City against all risks of damage to new buildings, structures, equipment, and materials that are part of the Work, as well as damage to the Broadway and Glenarm power plant attributed to performance of the Work. The Builder's All Risk policy shall insure against all risks, including without limitation risks of:  a) any direct physical loss or damage to the Work, the Broadway and Glenarm power plant, or any portion thereof from any cause, including without limitation flood, earthquake or tidal wave;  b) any mechanical or electrical breakdown that occurs during any performance testing or other testing or operation of any component associated with the Work;	CLOSED	
178	Please provide the unit cost of the water indicated below that will be provided "at cost": i. construction ii. potable iii. raw iv. treated water sources	<ul> <li>A non-refundable initial connect fee of \$150.00</li> <li>A refundable deposit of \$981.01</li> <li>The monthly charge of \$385.08 to be prorated for the opening and closing bill</li> <li>The charge for one billing unit (100 cu. ft.) is \$1.19885 from to October to March; and \$1.12537 from April to October</li> <li>The meter needs to be picked up at Meter Reading Services.</li> <li>Contractor needs to send Billing the reads by the end of each month. Meter Reading will provide cards for the reads.</li> <li>Demin water from the plant will be provided at no cost, however it is only to be used for purposes requiring demin water.</li> </ul>	CLOSED	
179	RFP Attachment A-1 Scope of work indicates the following; One Innovative Steam Technologies single pressure unfired once through steam generator (OTSG) with stack, stack damper, platforms, SCR equipment, and tempering air fans i. Orbital welding of the OTSG tubes to the headers using IST's proprietary process is not within General Electric's scope of supply. ii. The BOP Contractor will contract separately with IST to perform the welding. iii. IST's price to perform this work is ~\$80,000. Will IST also perform handling and fit-up of the jumper tubes or only tacking/welding?	Based on the IST proposal P12079-00 Jumper Tubes, IST is responsible for fit-up of the jumper tubes and completion of orbital welds using welding equipment provided by IST. The list of equipment, consumables, and manpower supply by the Erector is listed in the proposal. IST's proposal is included in Addendum #5.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
180	We have a vendor who batches and sells concrete out of many locations, including the city of Pasadena. However they invoice out of a central office not in Pasadena. Does the concrete coming out of the Pasadena batch plant count as a Pasadena purchase even though the invoice has a non-Pasadena address on it?	If the company is truly in Pasadena (within the City boundary), the answer is yes. However, our suggestion is that the invoice include the Pasadena address where which the company is located.	CLOSED	
181	Will we be allowed/able to coordinate OTSG deliveries in a manner that allows deliveries of heavy sections (upper and lower modules) to be sequenced such that we can off-load directly on to foundation or prior piece in sequence of erection? Same question applies to all GE furnished heavy equipment (generators, turbines, etc.)	PWP will work with the PIE Contractor and the BOP Contractor to facilitate having the loads arrive in sequence, however we cannot guarantee the PIE Contractor's performance beyond the delivery dates and information provided in the responses to questions #'5, #129, and #162.  GE's obligation is to deliver the equipment to the site. As explained during the site walk, the equipment will be delivered to the laydown space off Glenarm. From there the BOP Contractor will need to transport the equipment to the foundation.	CLOSED	
182	Per excerpt below we get 90 days from first fire to COD.  Of those 90 days GE utilizes 76 unimpeded days. Please confirm we will be allowed to perform necessary work during this 90 day period as long as it is coordinated with and does not impede GE.  8.5.3 90-Day SCAQMD Permit Window  (i) As described in Attachment A.1.B, "Project Description", the new generating unit must achieve COD within ninety calendar days of First Fire.  (ii) The Power Island BOP Contractor shall have seventy-six (76) unimpeded calendar days, not necessarily continuous, following First Fire, in order to perform the various tests required under its contract. The BOP Contractor shall not interfere or cause the Power Island BOP Contractor's work to be impeded during this period.  (iii) BOP Contractor shall have fourteen (14) calendar days, not necessarily continuous, in which it is required to perform the post-First-Fire work activities under these specifications, including but not limited to OTSG burnout and catalyst installation, steam blows, flushing and final cleaning, and replacement of temporary piping with final	Yes, PWP will work to promote close coordination between the Power Island Equipment Contractor, BOP Contractor, and PWP Operations.  Please note that 8.5.3 (ii) should have read "The Power Island BOP Contractor shall have seventy-six (76)"	CLOSED	

Question #	Question	Answer	Status	Responsible Party
183	The existing site has minimal amount of parking-laydown-staging area. More laydown will be necessary (estimated approximately 3 acres). We have not been able to locate any area/laydown available off-site but within the City of Pasadena to lease for this need and wanted to know if the City of Pasadena has any property inside the City limits that may be available for lease?	The City does not have any available space for lease.	CLOSED	
184	The PCS Plant Control System Specification section 1.3.A.3. states: "Ethernet based communications to the following subsystems (data only):  a. GTG Units 1,2,3,4. Approximately 400 points. (240 digital, 160 analog)"  Is there only one interface for all GTG Units 1,2,3,4 or is there to be one separate interface to each unit for 4 total?	They can be interfaced in pairs with two separate interfaces 1&2 and 3&4.	CLOSED	
185	The RFP requires we submit a baseline schedule within 30 days of NTP. We think that is very aggressive and request that be changed to 90 days.	The City agrees to change this to sixty (60) days.	CLOSED	
186	This question is asked on the basis that we will have our PDC entirely pre-fabricated (including GE supplied components) at the place of manufacture. As it pertains to the GE ship loose items that need to be installed in the PDC we procure, can we assume for our pricing that GE will ship those items to our PDC manufacturer and that they will do so in a manner that does not delay our PDC manufacturer?	associated with. The panels will be shipped to the PDC vendor the BOP Contractor is using.	CLOSED	
187	Specifically but not limited to the requirements of addendum 4, item 6: Please define what the BOP contractor is to supply which will facilitate the PIE contractor's 10 minute start requirement as most of the equipment required for the 10 minute start is outside of the BOP contractor's scope of supply. Please provide a Terminal Point list with process requirements.	The primary contribution of the BOP Contractor is the control system. The control system must coordinate all elements of the plant, both those supplied by the BOP Contractor (breakers for example) and the PIE Contractor (gas compressor, gas turbine, etc.).	CLOSED	

Question #	Question	Answer	Status	Responsible Party
188	We received a partial answer to our questions below with your item 170 of addendum 4 concerning asbestos quantity. Would you be able to tell us where the costs for the environmental consultant engineer and the geotechnical consultant engineer are to be included on the cost sheets?	Costs associated with the base scope of work should be included in your engineering, demolition, and/or construction costs as you feel most appropriate. Costs associated with the scopes of work where we have provided quantities and unit rates should be included in the responses to those items.	CLOSED	
189	Item D.3 in the addendum 4 bid form starts out asking for prices for import and then goes on to ask for a price for transportation and disposal. Please clarify.	The pricing should address both the cost of importing the fill as well as transportation and disposal of any material. The bid form has been revised and is included in Addendum #5.	CLOSED	
190	We have a question for you concerning Addendum 4 item 10. The BOP contractor is not supplying the 5th bullet notedOne running Auxiliary Cooling Water Pump. As we discussed by phone, this pump is provided by the PIE Contractor and should not be a part of the 250 kW LD BOP electrical load calculation. Please confirm this understanding and remove this pump from the aux load attributable to the BOP Load as listed under item 10 of addendum 4.	You are correct, the Auxiliary Water Cooling Water pump is not part of BOP Contractor Auxiliary Load guarantee.	CLOSED	
191	New bid form from addendum 4, item D.9 indicates asbestos will be paid for on a cubic yard basis. I assume this is for insulation type asbestos. Please confirm. How is the handling of transite (asbestos) pipe going to be addressed? Are you considering this to be part of the asbestos line item in the bid form? If so, how will that be piping quantified?	We do not have an exact footage of transite pipe. For bidding purposes assume that one cubic yard is equiavelnt to 100' of transite pipe (6 pieces of 3' long pipe in a row, six rows of pipe).	CLOSED	
192	During the course of construction, who is responsible to pay for identification of, testing of, and confirmation of hazardous materials?	The BOP Contractor is responsible and shall bear the cost for the remediation and management of hazardous waste as discussed in Question 101 response above and Section G of the BOP Scope of Work Attachment A.1 of the Specifications. The Work shall include, as a minimum:  1. Preparation and execution of work identified in the Work Plan as required in Question #101 response above. Submission and obtaining approval of fire department.  2. Identification, sampling, testing, confirmation, & classification of hazardous waste per applicable Local, State, & Federal regulations. Testing shall include all field testing and certified laboratory testing.  3. Preparation of waste profile prior to shipment.  4. Preparation Hazardous Waste Manifest. BOP Contractor shall provide all information required in the manifest in legible form and shall obtain signature of PWP representative in the "Generator" signature block prior to shipment.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
	Drawing E6-10, note 4 indicates and new "tunnel vault" to be installed. Is this the same vault discussed in the following A-1 Scope of Work, J.2.3 section?			
193	Starting from the 17.2kV Transformer HV terminals a new duct bank will be run east to the south east corner of the Glenarm building. At this point a new concrete vault shall be installed to connect the new ductbank to an existing ductbank running from that point to the basement of the	Yes, this is the same vault discussed in the referenced section of A-1 Scope of Work, Section J.2.3.	CLOSED	
194	Please provide the plants EPA processes referenced in bidders Q&A item 65	Plant EPA process refers to any applicable and latest EPA regulation for remediation, management, and handling of hazardous materials.	CLOSED	
195	Will the City of Pasadena pay for the Pasadena Fire review of submittals discussed in item 101 of the Q&A? If not, how is bidder to quantify how much review time that may take, inspection time that may be necessary, etc?	Pasadena Water & Power will pay for the Fire Department review of the submittal required under Question 101 Response above.	CLOSED	
196	Do you require that our builders risk policy cover the owner furnished equipment from point of shipment? If so, we will need the individual value of each piece of equipment in order for our insurer to price this for us. Additionally, we will need to know from what location each item ships from as rates are structured differently based on method of shipping (eg barge, truck, etc.)	The PIE Contractor is responsible for delivery to the site and any losses that might occur enroute.	CLOSED	
197	The PLA is located in Appendix I. It states that the contractor will be required to pay contributions to the employee benefit funds in the amounts designated in Attachment E. However, Attachment E is left blank. Please provide Attachment E so these contribution amounts can be considered in the bid.	Attachment E refers to Master Agreement of the applicable union (not benefit fund document per se). The Master Agreement is the agreement between the BOP Contractor and the Union which will be attached as Appendix E to the PLA contract when it becomes available. The Bidder must estimate their costs based on their experience.	CLOSED	
198	The Contract does not indicate when the validity of the Performance Bond in the amount of 100% of the Contract Price that must be furnished by the BOP Contractor to the City before the NTP will expire or be released. Please clarify.	The bond must continue in effect for one year after the date of completion of the Contract.	CLOSED	
199	The Contract does not indicate when the validity of the Payment Bond in the amount of 50% of the Contract Price that must be furnished by the BOP Contractor to the City before the NTP will expire of be released. Please clarify.	The Payment Bond must remain in effect until the BOP Contractor has furnished "written certification that all payrolls, bills for materials and equipment, bills from subcontractors and other claims and indebtedness connected with the Work for which the City might become responsible have been paid or otherwise satisfied" as discussed in the last paragraph of Section 9.1.5.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
200	BOP Contractor requests the City to add clarity about the wording that seems to be missing in regards to the Performance Bond on page 8. The last sentence begins "This bond must" but there is nothing further.	Paragraph A of Section 3.6 reads in its entirety "A "Performance Bond" in the amount of 100 percent of the Contract Price to guarantee faithful performance of the Contract. This bond must continue in effect for one year after the date of completion of the Contract."	CLOSED	
201	In the bid specs it indicates the attorney-in fact's power of attorney must be pre-filed with the City of Pasadena or the County of Los Angeles. What is the process for pre-filing the powers?	Please see the response to question #169.	OPEN	Larry Hammond
202	California Public Contract Code Section 10263 (d) indicates the ability of the Contractor to provide standby letters of credit in lieu of retainage albeit the Specification 9.1.5 does not indicate specifically this possibility as other eligible way of security. Please confirm the right of the Contractor to provide the City a standby letter of credit in lieu of a deduction of 10% of the total estimated value of the work performed until the final completion and acceptance of all the work covered by the Contract.	The City will not accept a standby letter of credit in lieu of the 10% retention.	CLOSED	
203	In accordance with specification 133419 section 2.1 –A-9 we are requesting approval for additional manufacture as noted below:  1: American Buildings Company a NUCOR company. 2: Metallic Building Company a NCI company.	These manufacturer's are acceptable, however, the requirements of Specification 133419 remain unchanged.	CLOSED	
204	Is detailed delivery schedule available from GE (more detailed than what previously provided)?	No, the dates provided in the responses to questions #15 and #18 are the best available information that we have.	CLOSED	
205	Can Q&A item 28 now be answered? If not, do you anticipate answering it before the bid date?	Refer to Addendum #6. At this time GE has narrowed their choices to SPX and Cooling Tower Depot but has not yet made a final selection.	OPEN	Diane Donovan
206	Section 15 – Bid Your Full Equal or Better stipulates that "the materials furnished shall be of the latest model.". Please clarify the latest model is being the latest available at the time of bid.	Yes, the latest model available at time of bid is acceptable.	CLOSED	
207	Section 19 – Completion of Work and Acceptance stipulates that "BOP Contractor shall be risk of loss or damage to the Work until the date of the written notice of acceptance from the General Manager". Please provide how long it takes for General Manager to provide the written notice once the BOP Contractor declares Final Completion.	Two weeks after Work is accepted and after completion of all punch list items to the satisfaction of the General Manager	CLOSED	

Question #	Question	Answer	Status	Responsible Party
208	With regards to City's response to Item 18 above, when will GE supposed to provide erection manuals, procedures, and O&M manuals per their contract?	Depending on the piece of equipment, manuals should be delivered two to eight weeks in advance of delivery.	CLOSED	
209	With regards to City's response to Item 38 above, what is the minimum time period that the Building Department requires for review and approval of submittals?	Approximately six weeks and depending on how quick the BOP contractor can turnaround and submit revised documents per City's comments.	CLOSED	
210	With regards to City's response to Item 128 above, is the self-performance requirement now zero%?	Yes, while the Bidder self-performing some of the work is preferred, there is no requirement for self-performance.	CLOSED	
211	Is the following furniture/consoles shown on drawing A1-2-1 to be included in the \$75,000 furniture allowance, or are they a part of the control room console package?  1) All items against the south wall of the control room 2) 2'-6" x 12'-0" item that does not have monitors shown on it	The items identified in the attached drawing are included in the \$75,000 allowance	CLOSED	
212	P&ID M3-19-1 shows two off-skid air receivers on the P&ID. Are the "two new 100 gallon air receiver tanks" referenced in Section I.1.18 Service Air System the same as or in addition to what is shown on the P&ID? Assuming they are, where will be the locations of these receivers be as we will have to quantify piping to them?	These are the same two receivers described in the text and shown on the P&IDs.	CLOSED	
213	Will the successful contractor be given the electronic files for all RFP drawings? As provided in Addendum 2, the Microstation (DGN) and the AutoCAD (DWG) electronic formats were provided for the GA, Site Plan and Grading Plan drawings. We assume after award the same will be provided for all RFP drawings. Please confirm.	Yes the drawings will be made available on an as-is basis with no warranty or guarantee. The BOP Contractor may use the files at their own risk. Use of the files does not relieve the BOP Contractor in any way from having full and complete responsibility for all aspects of the design and construction of the work shown on the drawing.	CLOSED	
214	Our pump vendors are telling us it is not possible to supply pumps that meet all of the pump requirements (1750 rpm, horizontally/vertically split, 80% efficiency, critical speed design, minimum rise to shutoff, 70 dBA, etc.). Because these are relatively small pumps, can typical pumps for the intended purpose be included in our bid and details of the most important required features be determined after Award? If not, what pump features are most important?	We believe pumps meeting these requirements are commercially available and are unwilling to relax these requirements at this time.	CLOSED	

Question #	Question	Answer	Status	Responsible Party
215	Are 3 – 100% ammonia pumps required as per P&ID M3-17-1 or are 2 pumps required as per addendum 5 item 8, specification 485325.11 Rev A which is the same Rev A specification as the original RFP provided? If 2-100% pumps are required, are you going to revise the P&ID drawing to reflect 2 pumps?	Specification 485325.11 Rev A issued in Addendum 5 incorrectly stated only two pumps are required. P&ID M3-17.1 is correct in showing three ammonia pumps.	CLOSED	
216	What BOP supplied equipment requires CA PE stamped drawings/calculations assuring seismic adequacy.	Per the equipment specifications the tanks and PDC require such qualification.  The Control Building must be designed in accordance with CBC 2013.  Other BOP supplied equipment does not require CA PE stamped drawings/calculations. However sesismic loads will be included in the design of all foundations.	CLOSED	
217	Please clarify the scope of Cyber security: "The PCS shall meet the requirements for Cyber Security as published by the North American Electric Council (NERC) and the Federal Electric Reliability Council (FERC)". The system we are providing is capable of supporting the city in establishing NERC / FERC cyber security compliance, but additional software hardware product may be required depending on the City of Pasadena specific requirements.	The City does not have any additional requirements beyond the NERC/FERC requirements.	CLOSED	
218	Drawing E1-2 shows the PDC is to be 78'-1" long. Basing on vendors' information, we estimated the required PDC length is likely to be about 20 feet greater than what drawing E1-2 indicates. If the actual PDC length is approximately 20 feet greater, we would need to rearrange either the GSU transformer, the STG building with associated tanks to the East, and/or even the aux transformers to obtain the needed additional 20-30 feet from the current location. Please confirm rearrangement of this equipment will be allowed to locate the larger than	We believe the PDC can be provided with the dimensions shown on the General Arrangement. If the bidder can't achieve this PDC footprint, PWP will work with the BOP Contractor to modify the plant layout to accommodate this change. No additional layout information has been developed.	CLOSED	
219	Per A1 SOW, Section J – Electrical Requirements, Section J.21.6.J states the following: "The underground duct bank systems shall have at least 20% spare conduits. As a minimum one (1) 4" PVC power and one (1) 2" hot dipped rigid galvanized steel control conduit shall be provided in each duct run". Does this means that we are still required to add (1) - Power 4"PVC and (1) 2" RGS from each manhole to each individual equipment/skid for future use. This seems redundant and unnecessary. We do have spare conduits from Manhole to Manhole and between major	The requirement contained in the referenced Electrical Requirements Specification applies to the installation of duct banks only. It does not apply to buried conduits (not in duct banks) routed to individual equipment skids	CLOSED	

# City of Pasadena - Glenarm GT5 Pre-Bid Meeting Questions Revision 5

Question #	Question	Answer	Status	Responsible Party
220	The requirement of meeting the 250kW BOP auxiliary power load for the 6 items noted in Addendum 5 is not achievable with the individual loads assigned based on vendor equipment. What did Power Engineers assume for each of these loads? We feel that 274kW is a more reasonable estimate for the total of these 6 loads. Please confirm the new limit is reasonable and provide the source of the 250 kW requirements.		CLOSED	
221	Per the Noise Specification 480033, we find it is difficult to comply with near and far field noise limits of Submittal form A and Submittal form B. We cannot accurately predict the aggregate far field noise even if we meet the near field noise limits based on other factors including nearby walls and structures. Additional there is a discrepancy on the near field noise requirements. As an example the Pump specifications 485311.10 states 85 dBa at 3 feet while the Noise specification states 70 dBa at 3 feet.	The pump specification should have said 70 dBA at 3 feet.  The rest of the noise requirements remain unchanged.	CLOSED	

# **Enclosure 2**

#### **Living Wage Compliance Certification**

This contract is subject to the City of Pasadena's Living Wage Ordinance, Pasadena Municipal Code Chapter 4.11. The Ordinance requires that contractors providing labor or services to the City under contracts in excess of \$25,000:

- Pay no less than \$10.83 per hour plus medical benefits of no less than \$1.91 per hour, or \$12.74 per hour without medical benefits to all employees who spend any of their time providing labor or delivering services to the City of Pasadena. Additionally, in January 2015 and each January thereafter the Living Wage rate shall be adjusted by the change in the Consumer Price Index, for the Los Angeles-Riverside-Orange County area, for the most recently available 12 month period. Accordingly, current City contractors will be required to adjust wage rates no later than July 1st, to remain in compliance.
- ♦ Notify employees who spend any of their time providing labor or delivering services to the City of Pasadena who make less than twelve dollars (\$12) per hour of their possible right to the federal Earned Income Tax Credit (EITC) under § 32 of the Internal Revenue Code of 1954, 26 U.S.C. § 32, and making available to such employees forms required to secure advance EITC payments.

The selected contractor will be required to evidence compliance with the Living Wage Ordinance by submitting payroll records as requested by the City. Each record shall include the full name of each employee performing labor or providing services under the contract; job classification; rate of pay and benefit rate.

On August 4, 2008, the Pasadena City Council amended the Living Wage Ordinance such that the provisions of the Living Wage Ordinance may be waived in a bona fide collective bargaining agreement, but only if the waiver is explicitly set forth in clear and unambiguous terms. If this provision applies, you must provide a copy of the collective bargaining agreement to the City.

I do hereby certify and declare under penalty of pethis bid/proposal is made	erjury that if awarded the contract for whichwill comply with the
(Name of Compa	any)
requirements of the Pasadena Living Wage Ordin 4.11 and the rules and regulations promulgated ther with the provisions of the Pasadena Living Wage contract as well as other penalties as stated in Pasa	eunder. I understand that failure to comply Ordinance may result in termination of the
(Name)	(Title)
(Signature)	(Date)

Please return this form with your bid/proposal. Questions concerning the Living Wage Ordinance should be directed to the Department of Finance – Purchasing Division 626.744.6755.

# **Enclosure 3**

#### **BIDDER'S CHECKLIST**

The following checklist is provided for the convenience of both you and the City and to help eliminate errors and omissions that may render your bid unacceptable. Please check all appropriate boxes and submit this checklist with your Proposal.

Please organize and tab your proposal using the structure outlined below.

1.		5 % of the bid price payable to the City of Pasadena) enclosed in an
	amount of \$ (a)	Surety (Bid) Bond
	(α)	Signed by Bidder
		Signed & sealed (embossed) by Attorney-in-Fact of Surety
		Power of Attorney for Attorney-in-Fact
		Attorney-in-Fact on file with L. A. County Clerk or Pasadena City Clerk
	or (b)	Annual Surety (Bid) Bond on file with Pasadena City Clerk
	or (c)	Check Certified by Bank Cashier's Check
	or (a)	Cashiel's Check
2.	BIDDER'S PROF	
	a)	Bidder's Proposal Form with Acknowledgement of all Addendums
	p)	Commercial Clarifications and Exceptions by Bidder
	C)	Labor and equipment T&M rates
3.	BIDDER FORMS	
		Identity Confirmation
	<del>b)</del>	Subcontractor's Form
	c)	Forms AA-1 Through AA-3 Questionnaire Declaration Of Non-Collusion By Contractor
	u)	Living Wage Compliance Certificate marked Addendum 7
	c)	Living wage compliance defineate marked Addendam /
4.		PATION STRATEGY
	En	closed
5.	KEY STAFF	
	a)	Project Manager resume
	b)	Site Manager resume (if not the Project Manager)
	c)	Engineering Manager resume
	d)	Resident Engineer resume (if planned)
	e) f)	Construction Manager/Construction Superintendent resume Commissioning Manager resume
	f)	Archeologist resume
	9/ h)	Paleontologist resume
	i)	Identify the geotechnical firm/engineer that will be used for the pre-
	excavation	n meeting and will be on site for the over-excavation, demolition and
	remediation	on scope.
6	MANAGEMENT	PI ANS
٠.	_	se Line Schedule

7.	'. ENGINEERING PLANS	
	used and how will it be use b) Attachment A.2 c) Attachment A.2	.B Specification 480033 Submittal Form A .B Specification 480033 Submittal Form B eded additional geotechnical work beyond re-performing
8.	B. PROCUREMENT PLANS	
	a) Bidder's Subco b) Bidder's Major	ntractor Forms Equipment Vendors Forms
9.	b) Describe craft p c) Describe traffic d) Describe equip e) Describe how g	management/mitigation plan ment/material laydown plan las blows will be performed team blows will be performed
10		e turnover package used on a previous project that be done for this project
	Bids are to be signed and submitted in ND TWO COPIES.	n TRIPLICATE. Bidder must submit bids in an ORIGINAL
	All bids shall be enclosed in sealed er and the bidder's name and address a	nvelopes, distinctly marked "Bid" with the title of the bid ppearing on the outside.
Bio	•	City Clerk 100 N. Garfield Ave., Room S228 Pasadena, California 91109

# **Enclosure 4**

#### **BIDDER'S CHECKLIST**

The following checklist is provided for the convenience of both you and the City and to help eliminate errors and omissions that may render your bid unacceptable. Please check all appropriate boxes and submit this checklist with your Proposal.

Please organize and tab your proposal using the structure outlined below.

1.	<b>BID SECURITY</b> (5 % of the bid price payable to the City of Pasadena) enclosed in an amount of \$
	(a) Surety (Bid) Bond
	Signed by Bidder
	Signed & sealed (embossed) by Attorney-in-Fact of Surety
	Power of Attorney for Attorney-in-Fact
	Attorney-in-Fact on file with L. A. County Clerk or Pasadena City Clerk or (b) Annual Surety (Bid) Bond on file with Pasadena City Clerk
	or (c) Check Certified by Bank
	or (d) Cashier's Check
2.	BIDDER'S PROPOSAL
	a) Bidder's Proposal Form with Acknowledgement of all Addendums
	b) Commercial Clarifications and Exceptions by Bidder
	c) Labor and equipment T&M rates
3.	BIDDER FORMS
	a) Identity Confirmation
	b) Forms AA-1 Through AA-3 Questionnaire c) Declaration Of Non-Collusion By Contractor
	d) Living Wage Compliance Certificate marked Addendum 7
4.	LOCAL PARTICIPATION STRATEGY Enclosed
5.	KEY STAFF
•	a) Project Manager resume
	b) Site Manager resume (if not the Project Manager)
	c) Engineering Manager resume
	d) Resident Engineer resume (if planned) e) Construction Manager/Construction Superintendent resume
	e) Construction Manager/Construction Superintendent resume f) Commissioning Manager resume
	g) Archeologist resume
	h) Paleontologist resume
	i) Identify the geotechnical firm/engineer that will be used for the pre-
	excavation meeting and will be on site for the over-excavation, demolition and
	remediation scope.
6.	MANAGEMENT PLANS
	Base Line Schedule

7. ENGINEERING PLANS

	a)			engineering software and 3D modeling package that will be
	<b>b</b> .\			used as a tool in the field.
	b)			A.2.B Specification 480033 Submittal Form A
	d)		Identify any r	A.2.B Specification 480033 Submittal Form B needed additional geotechnical work beyond re-performing
	u)			needed additional geotechnical work beyond re-performing nents after backfill of the site.
8.	PROC	UREMENT	PLANS	
Ο.				contractor Forms
	b)			or Equipment Vendors Forms
9.	CONS	TRUCTION	N PLANS	
	a)		Describe site	staffing plan and expected craft manpower curve
	b)		Describe craf	ft parking and trailer plan
	c)			fic management/mitigation plan
				iipment/material laydown plan
				v gas blows will be performed
	٠,			v steam blows will be performed
	g)		Describe the	commissioning plan
10	. TURN	OVER PLA	NS	
				ple turnover package used on a previous project that vill be done for this project
			and submitted	d in TRIPLICATE. Bidder must submit bids in an ORIGINAL
A٨	ID TWC	COPIES.		
				envelopes, distinctly marked "Bid" with the title of the bid appearing on the outside.
Bic	ds shou	ld be addre	essed to:	City Clerk 100 N. Garfield Ave., Room S228 Pasadena, California 91109

# **Enclosure 5**

SPECIFICATIONS LD-13-14

#### **BIDDER'S PROPOSAL**

# FOR PROVIDING LABOR AND MATERIALS

**FOR** 

#### GLENARM REPOWERING BALANCE OF PLANT DESIGN AND CONSTRUCTION

To the Honorable City Council of the City of Pasadena, California

#### Gentlemen:

In response to the Notice Inviting Bids for the Glenarm Repowering Balance of Plant Design and Construction for the City of Pasadena, Water and Power Department, the undersigned hereby proposes and agrees to provide all necessary and incidental labor, supervision, transportation, materials, construction equipment, tools, engineering, testing, sampling, and analysis, to satisfactorily complete the Work in strict conformity with the Specifications all approved Addenda for the firm prices hereinafter indicated.

PA	PART I - ITEMIZED COST PROPOSAL						
	Bid Item	Quantity	Description	Unit Price	Total Amount		
Α	GENE	RAL COND	DITIONS				
	A.1	LS	Insurances, Bonds, Mobilization, Offices, Overheads per Specifications and any approved Addenda	Lump Sum	\$		
	A.2	LS	Building Permits per Specifications and any approved Addenda	Lump Sum	\$		
	A.3	LS	Sales and Use Tax (if any)	Lump Sum	\$		
	A.4		Part IA SUBTOTAL		\$		

В	ENGIN	ENGINEERING					
	B.1	LS	Detailed Engineering, Studies and Submittals per Specifications and any approved Addenda	Lump Sum	\$		
	B.2	LS	Sales and Use Tax (if any)	Lump Sum	\$		
	B.3		Part IB SUBTOTAL		\$		
С	EQUIF	PMENT SUI	PPLY				
	C.1	LS	Furnish Plant Control System software, programming, cabinets and all necessary hardware per Attachment A.2 PCS/Control System Specification (037-4780) and any approved Addenda	Lump Sum	\$		
	C.2	LS	Furnish, Power Distribution Center, including switchgear, breakers and all other associated equipment per Attachment A.2 Section 262600 Power Distribution (PDC) and any approved Addenda	Lump Sum	\$		
	C.3	LS	Furnish auxiliary transformers per Attachment A.2 Section 261200-2 (Medium Voltage Auxiliary Transformers) and any approved Addenda	Lump Sum	\$		
	C.4	LS	Balance of Engineered Equipment per attachment A.1 of the Specifications and any approved Addenda	Lump Sum	\$		
	C.5	LS	Sales and Use Tax (if any)	Lump Sum	\$		
	C.6		Part IC SUBTOTAL		\$		

D	DEMOLITION, REMEDIATION, EARTHWORK, PAVING					
	D.1	LS	Exclusive of D.2 through D.8 which are provided separately below:  Demolition of Existing Above Grade Site Infrastructure; Storm Drain Relocation, including demolition and haul-off of existing storm drain culvert; Stockpiling, Backfilling, Dirt Importation, Topo & Site Survey; Site fences and gates;  Site Preparation, Grading & Drainage, Roads & Paving, Sidewalks & Landscaping; State Street Improvements; Erosion & Sediment Controls; Sanitary Sewer Connections; & Making of all Facility Interfaces per BOP Scope of Work in Attachment A.1 Section G of the Specifications as well as all applicable and approved Addenda.	Lump Sum	\$	
	D.2	700 CY (Cubic Yards)	Concrete demolition for tunnels, stack foundations, train tracks, gantry crane per the BOP Scope of Work in Attachment A.1 Section G.2 and any approved Addenda. Provide lump sum price for the transportation and disposal of 700 CY, and a \$/CY for adjustments up and down from 700 CY.	\$/CY	\$	

D	DEMO	DEMOLITION, REMEDIATION, EARTHWORK, PAVING				
	D.3	2,500 CY	Import fill to fill tunnel voids per the BOP Scope of Work in Attachment A.1 Section G.2 and any approve Addenda. Provide lump sum price for the transportation and disposal of 2,500 CY and a \$/CY for adjustments up and down from 2,500 CY.	\$/CY	\$	
	D.4	1,300 CY	Organics removed from site per the BOP Scope of Work in Attachment A.1 Section G.2 and any approved Addenda. Provide lump sum price for the labor, material, equipment, transportation and disposal of 1,300 CY and a \$/CY for adjustments up and down from 1,300 CY.	\$/CY	\$	
	D.5	13,000 CY	Over-excavate and re-compact soils, but not removed from site per the BOP Scope of Work in Attachment A.1 Section G.2 and any approved Addenda. Provide lump sum price for the labor, material, equipment to over-excavate and re-compact 13,000 CY and a \$/CY for adjustments up and down from 13,000 CY.	\$/CY	\$	
	D.6	25 CY	Lead contaminated soil, removed from site and disposed per the BOP Scope of Work in Attachment A.1 Section G.2 and any approved Addenda. Provide lump sum price for the labor, material, equipment, transportation, & disposal of 25 CY and a \$/CY for adjustments up and down from 25 CY.	\$/CY	\$	

D	DEMOLITION, REMEDIATION, EARTHWORK, PAVING					
	D.7	100 CY	Remove old house concrete foundations, bricks, and asphalt near new tanks from the project site and dispose of them per the BOP Scope of Work in Attachment A.1 Section G.2 and any approved Addenda. Provide lump sum price for the labor, material, equipment, transportation, & disposal of 100 CY and a \$/CY for adjustments up and down from 100 CY.	\$/CY	\$	
	D.8	3,000 CY	Remove and recompaction of 2' - 3' of fill soil below AC roadways per the BOP Scope of Work in Attachment A.1 Section G.2 and any approved Addenda. Provide lump sum price for the labor, material, and equipment for removal and recompaction of 3,000 CY and a \$/CY for adjustments up and down from 3,000 CY.	\$/CY	\$	
	D.9	10 CY	Remove asbestos from within the circulating water tunnels underlying the site and outside of the Glenarm Building. Provide lump sum price for the labor, material, transportation, and disposal of 10 CY and a \$/CY for adjustment up and down from 10 CY.	\$/CY	\$	
	D.10	LS	Sales and Use Tax (if any)	Lump Sum	\$	
	D.11		Part ID SUBTOTAL		\$	

E	GT5 C	ONSTRUC	TION EXCLUSIVE OF DEMOLITION	ON CONTAIN	ED IN PART D
	E.1	LS	Civil Construction as described in Attachments A.1, A.2, and A.3 of the Specifications and any approved Addenda.	Lump Sum	\$
	E.2	LS	Structural Construction as described in Attachments A.1, A.2, and A.3 of the Specifications and any approved addenda	Lump Sum	\$
	E.3	LS	Mechanical Construction as described in Attachments A.1, A.2, and A.3 of the Specifications and any approved Addenda. This price should include the IST scope and the BOP Contractor additional work associated with orbital welding per Section A.4.3 of the BOP Scope of Work Attachment 1 and the Jumper Tube Installation Proposal on Enclosure 8 of Addendum 5.	Lump Sum	\$
	E.4	LS	Electrical Construction as described in Attachments A.1, A.2, and A.3 of the Specifications and any approved Addenda.	Lump Sum	\$
	E.5	LS	I&C Construction as described in Attachments A.1, A.2, and A.3 of the Specifications and any approved Addenda.	Lump Sum	\$
	E.6	LS	Furnish all materials and labor for the erection of the new Water Lab per the BOP Scope of Work in Attachment A.1 Section F, Attachment A.2 Architectural Scope of Work, and any approved Addenda	Lump Sum	\$

E	GT5 CONSTRUCTION EXCLUSIVE OF DEMOLITION CONTAINED IN PART D					
	E.7	LS	34.5kV work between GSU and on-site 34.5kV vault per the BOP Scope of Work in Attachment A.1 Section J and any approved Addenda.	Lump Sum	\$	
	E.8	LS	17kV work between Aux Transformer Bank and on-site 17kV vault per the BOP Scope of Work in Attachment A.1 Section J and any approved Addenda.	Lump Sum	\$	
	E.9	LS	Sales and Use Tax (if any)	Lump Sum	\$	
	E.10		Part IE SUBTOTAL		\$	

F	STARTUP, COMMISSIONING AND TRAINING					
	F.1	LS	Startup and Commissioning as well as Testing and Checkouts per the BOP Scope of Work Attachment A.1 Sections C and P and any approved Addenda.	Lump Sum	\$	
	F.2	LS	Allowance for craft support for power island contractor based on two pipe fitters and two electricians for a period of 3 months working a 6-10 schedule. Time will be billed on a T&M basis.		\$	
	F.3	LS	Training per the BOP Scope of Work in Attachment A.1 Section Q and any approved Addenda.	Lump Sum	\$	
	F.4	LS	O & M Manuals per Sections L and R in BOP Scope of Work in Attachment A.1 and any approved addenda.	Lump Sum	\$	

F	STARTUP, COMMISSIONING AND TRAINING						
	F.5	LS	Sales and Use Tax (if any)	\$			
	F.6		Part IF SUB TOTAL		\$		

G	CONT	CONTROL ROOM						
	G.1	LS		Furnish all materials and labor for the erection of the new Operations and Control Building per the BOP Scope of Work in Attachment A.1 Section F and Attachment A.2, Architectural Scope of Work and any approved Addenda		for the erection of the new Operations and Control Building per the BOP Scope of Work in Attachment A.1 Section F and Attachment A.2, Architectural Scope of Work and any		\$
	G.2	LS		Sales and Use Tax (if any)	Lump Sum	\$		
	G.3			Part IG SUB TOTAL		\$		
Н	OTHE	R CC	ONSTR	UCTION REQUIREMENTS				
	H.1	LS	Spare require the consecution Section Section Work	de all materials and labor for e Parts, tools, & Storage rements of Section M, as well as construction requirements in on N, as well as Construction over Package Requirement in ons L and O, of the BOP Scope of in Attachment A.1 and any oved Addenda.	Lump Sum	\$		
	H2	LS	Work & Saf third p geote boltin erecti of Wo	C, Shop Inspection, Included, Coordination Meeting, & Health ety per section C as well as the party inspections (paleo/archeo, ech, concrete, high-strength g, etc.), & cooling tower supplier on in Section A of the BOP Scope ork Attachment A.1 of the ifications and any approved anda	Lump Sum	\$		

	H.3	LS	Sales and Use Tax (if any)	\$		
	H.4 Part IG SUB TOTAL		\$			
I	BUILDER'S ALL RISK INSURANCE					
	I.1 LS Provide Builder's All Risk Insurance per Addenda #4 and any approved Addenda		Lump Sum	\$		

PART II - GRAND TOTAL PRICING		
Grand Total = A.4 + B.3 + C.6 + D.11 + E.10 + F.6 + G.3 + H.4+I1	Lump Sum	\$

Each bidder <u>must</u> bid on all of the above items. If any bidder makes any alteration, interlineation or deviation in any of the printed matter of the proposal or if the signature of the bidder is incomplete, the bid will be considered informal and may be rejected.

Refer to section 3.2 in case of a discrepancy between the Item Prices and the Total Price.

The prices quoted herein include all applicable federal, state, local, and other taxes.

The undersigned bidder agrees to commence work on the start date indicated in the Notice to Proceed and proposes and agrees to have the Work completed by the date specified in Section 8.1.

The undersigned bidder acknowledges receipt of the following addenda issued for the above project. If no addenda have been received, write "none". FAILURE TO ACKNOWLEDGE RECEIPT OF ANY ADDENDA ISSUED WILL RENDER THE CONTRACTOR'S BID NON-RESPONSIVE.

List of Addenda Received:

ida i todoivoa.	
Addendum No.	Bidder's Initials
1	
2	
3	
4.	
5.	
6.	
7.	
· · · <u></u>	

The bidder declares that neither he nor any member of his firm or corporation is an officer or an employee of the City of Pasadena.

Calii	fornia State Contracto	or's License Number	
	<u> </u>	s that he is an official legally authorized to bind their uld the City accept this proposal.	firm and to
	proposal by		
		(Name of Firm)	
Lega	al status of bidder:	(Please check the appropriate box)	
A.	Corporation	State of Incorporation	
B.	Partnership	List Names	
C.	DBA	State Full Name	
D.	Other	Explain	
Sign	nature of Bidder(A	Title uthorized Signature)	
Prin	t Name		
Add	ress	City Z	<u></u>
Tele	phone No		
Sign	ned this	day of2014	

# **Enclosure 6**



# Project Deliverables List

Report Date March 14, 2014					
Document No.	Engineering Discipline	Document Title	Current Rev. Date	Current Rev. No.	Released
001112	A D CHUME CATHD A I	HOLLOW METAL DOODS AND FRAMES	10.0 - 12		
081113	ARCHITECTURAL	HOLLOW METAL DOORS AND FRAMES	10-Oct-13	A	SPEC
083323	ARCHITECTURAL	OVERHEAD COILING DOORS	10-0ct-13	A	SPEC
087100	ARCHITECTURAL	DOOR HARDWARE	10-Oct-13	A	SPEC
092900	ARCHITECTURAL	GYPSUM BOARD	10-Oct-13	A	SPEC
093100	ARCHITECTURAL	CERAMIC TILE	10-Oct-13	A	SPEC
095113	ARCHITECTURAL	ACOUSTICAL PANEL CEILINGS	10-Oct-13	A	SPEC
096513	ARCHITECTURAL	RESILIENT BASE AND ACCESSORIES	10-Oct-13	A	SPEC
096519	ARCHITECTURAL	RESILIENT TILE FLOORING	10-Oct-13	A	SPEC
096723	ARCHITECTURAL	RESINOUS FLOOR COATING	10-Oct-13	A	SPEC
096900	ARCHITECTURAL	ACCESS FLOORING	10-Oct-13	A	SPEC
099123	ARCHITECTURAL	INTERIOR PAINTING	10-Oct-13	A	SPEC
102113	ARCHITECTURAL	TOILET COMPARTMENTS	10-Oct-13	A	SPEC
102800	ARCHITECTURAL	TOILET ACCESSORIES	10-Oct-13	A	SPEC
105113	ARCHITECTURAL	METAL LOCKERS	10-Oct-13	A	SPEC
123200	ARCHITECTURAL	MANUFACTURED WOOD CASEWORK	10-Oct-13	A	SPEC
123553	ARCHITECTURAL	LABORATORY CASEWORK	10-Oct-13	A	SPEC
133419	ARCHITECTURAL	METAL BLDG SYS SINGLE METAL PANELS WALLS AND ROOF	10-Oct-13	A	SPEC
260000	ELECTRICAL	ELECTRICAL-MECHANICAL EQUIPMENT	10-Sep-13	D	SPEC
260533	ELECTRICAL	NON-SEG BUS SPECIFICATION	9-Sep-13	A	SPEC
261200.2	ELECTRICAL	MEDIUM VOLTAGE AUXILIARY TRANSFORMERS SPECIFICATION	9-Sep-13	В	SPEC
262050	ELECTRICAL	LOW VOLTAGE MOTORS	10-Sep-13	С	SPEC
262600	ELECTRICAL	POWER DISTRIBUTION CENTER (PDC) SPECIFICATION	9-Sep-13	В	SPEC
262600	ELECTRICAL	PDC SPECIFICATION	9-Sep-13	В	SPEC
263323.1	ELECTRICAL	125VDC BATTERY SYSTEM SPECIFICATION	9-Sep-13	В	SPEC
262323.2	ELECTRICAL	24VDC BATTERY SYSTEM SPECIFICATION	6-Sep-13	A	SPEC
480020	ALL	PASADENA SITE CONDITIONS	20-Feb-14	K	SPEC
480033	ALL	NOISE CONTROL PERFORMANCE	10-Dec-13	В	SPEC
480032.1	-	BALANCE OF PLANT CONTRACTOR PERFORMANCE TESTING	21-Oct-13	A	SPEC
485072	MECHANICAL	COATING OF PIPING AND TANKS	9-Sep-13	A	SPEC
485080	MECHANICAL	PIPING AND EQUIP INSULATION	18-Sep-13	A	SPEC
485090	MECHANICAL	CATHODIC PROTECTION	9-Sep-13	A	SPEC
485100.01	MECHANICAL	PIPE MATERIAL SPECIFICATIONS	18-Oct-13	Various	SPEC
485100.03	MECHANICAL	VALVE MATERIAL SPECIFICATIONS	27-Sep-13	Various	SPEC
485121	MECHANICAL	GENERAL SERVICE CONTROL VALVES	15-Jul-13	A	
485172	MECHANICAL	FIELD FABRICATED TANKS - STEEL SPECIFICATION	15-Jul-13	A	SPEC
485173	MECHANICAL	SHOP FABRICATED TANKS SPECIFICATION	10-Dec-13	С	SPEC
485311.10	MECHANICAL	HORIZONTAL CENTRIFUGAL PUMPS – GENERAL SERVICE SPECIFICATION	10-Dec-13	С	SPEC
485325.11	MECHANICAL	AMMONIA FORWARDING PUMP SKID SPECIFICATION			SPEC
			26-Jul-13 9-Dec-13	A	SPEC
485422	MECHANICAL MECHANICAL	SHELL AND TUBE HEAT EXCHANGER  STEAM AND WATER SAMDLE DANIEL		В	SPEC
485951.80		STEAM AND WATER SAMPLE PANEL  DOTABLE WATER SYSTEM DIMP SYID	12-Mar-14	A	ADD 5
485951.96	MECHANICAL	POTABLE WATER SYSTEM PUMP SKID	9-Dec-13	В	SPEC
485952.05	MECHANICAL	CHEMICAL FEED SYSTEM - COOLING TOWER	14-0ct-13	В	SPEC
485952.06	MECHANICAL	CHEMICAL FEED SYSTEMS - STEAM GENERATOR	14-0ct-13	В	SPEC
485956	MECHANICAL	FIRE PREVENTION AND PROTECTION SYSTEM	30-Jan-14	C	ADD 3
489596	MECHANICAL	FIRE ALARM AND SIGNALING SYSTEMS	29-Aug-13	A	SPEC
485956.30	MECHANICAL	FIRE WATER SPRINKLER SYSTEM	9-Aug-13	A	SPEC
037-1758	ALL	SOIL EXCAVATION VOLUMES	18-Aug-11	A	SPEC
037-5033	ALL	PASADENA GT-5 DESIGN CRITERIA	17-Dec-13	D	SPEC
037-4780	CONTROLS	PCS/CONTROL SYSTEM SPECIFICATION	10-Dec-13	В	SPEC
037-5056	ARCHITECTURAL	ARCHITECTURAL SCOPE OF WORK	23-0ct-13	В	SPEC
261300-1	ELECTRICAL	15KV SWITCHGEAR SPECIFICATION	10-Oct-13	В	SPEC
261300-2	ELECTRICAL	5KV SWITCHGEAR SPECIFICATION	10-Oct-13	В	SPEC
263323-2	ELECTRICAL	24VDC BATTERY SYSTEM SPECIFICATION	9-Sep-13	A	SPEC
A1-2-1	ARCHITECTURAL	CONTROL BUILDING MAIN FLOOR PLAN	10-0ct-13	D	SPEC

1 of 3



# **Project Deliverables List**

	Report Date	March 14, 2014			
Document No.	Engineering Discipline	Document Title	Current Rev. Date	Current Rev. No.	Released
A1-3-1	ARCHITECTURAL	CONTROL BUILDING EXTERIOR ELEVATIONS	10-0ct-13	D	SPEC
A1-9-1	ARCHITECTURAL	CONTROL BUILDING & WATER LAB ROOM FINISH, DOOR AND WINDOW SCHEDULES	10-Oct-13	D	SPEC
A1-9-2	ARCHITECTURAL	CONTROL BUILDING & WATER LAB DOOR AND WINDOW DETAILS	10-Oct-13	D	SPEC
A2-1-1	ARCHITECTURAL	ROOF DEMOLITION PLAN	24-Sep-13	С	SPEC
A2-1A	ARCHITECTURAL	WELDING SHOP FLOOR PLAN	16-Jul-13	A	SPEC
A2-2-1	ARCHITECTURAL	MAINTENANCE SHOP MAIN FLOOR PLAN	10-0ct-13	D	SPEC
A2-2-2	ARCHITECTURAL	MAINTENANCE SHOP MEZZANINE	24-Sep-13	С	SPEC
A2-3-1	ARCHITECTURAL	MAINTENANCE SHOP EXTERIOR ELEVATIONS	24-Sep-13	С	SPEC
A2-4-1	ARCHITECTURAL	MAINTENANCE SHOP SECTIONS	10-Oct-13	D	SPEC
A2-5-1	ARCHITECTURAL	MAINTENANCE SHOP DETAILED PLANS	10-Oct-13	D	SPEC
A2-9-1	ARCHITECTURAL	ROOM DOOR FINISH SCHEDULES	10-Oct-13	D	SPEC
A3-1	ARCHITECTURAL	CONTROL BUILDING EXTERIOR ELEVATIONS	27-Mar-13	В	SPEC
A3-2-1	ARCHITECTURAL	WELDING SHOP FLOOR PLAN	24-Sep-13	С	SPEC
A3-3-1	ARCHITECTURAL	WELDING SHOP EXTERIOR ELEVATIONS	24-Sep-13	С	SPEC
A4-1	ARCHITECTURAL	CONTROL BUILDING & WATER LAB BUILDING SECTIONS	10-Oct-13	D	SPEC
A4-2-1	ARCHITECTURAL	WATER LABORATORY FLOOR PLAN	10-Oct-13	D	SPEC
A4-3-1	ARCHITECTURAL	WATER LABORATORY EXTERIOR ELEVATIONS	24-Sep-13	С	SPEC
C1-3	CIVIL	PRELIMINARY SITE PLAN LM6000 CONFIGURATION	17-Jan-14	L	SPEC
C3-1	CIVIL	PRELIMINARY GRADING & DRAINAGE PLAN GAS TURBINE/AXIAL EXHAUST	17-Jan-14	G	SPEC
C3-3	CIVIL	PRELIMINARY SITE SURFACING PLAN GAS TURBINE/AXIAL EXHAUST	17-Jan-14	В	SPEC
C3-4	CIVIL	CONSTRUCTION PARKING, LAYDOWN, STAGING AND ACCESS PLAN	2-0ct-13	В	SPEC
C3-5	CIVIL	PRELIMINARY SITE DETAILS GAS TURBINE/AXIAL EXHAUST	7-0ct-13	A	SPEC
CSK-1	CIVIL	BOREHOLE LOCATION PLAN	29-Apr-11	В	SPEC
E1-1A	ELECTRICAL	ELECTRICAL OVERALL CONCEPTUAL ONE-LINE DIAGRAM (LM 6000)	7-Jan-14	G	ADD 2
E1-2	ELECTRICAL	ELECTRICAL OVERALL CONCEPTUAL PDC BUILDING LAYOUT	10-Dec-13	Е	ADD 2
E6-1	ELECTRICAL	ELECTRICAL UNDERGROUND NOTES AND LEGEND	4-0ct-13	A	SPEC
E6-10	ELECTRICAL	PROPOSED ELECTRICAL UNDERGROUND ROUTING	7-Jan-14	С	ADD 4
I1-1	CONTROLS	PLANT CONTROL SYSTEM ARCHITECTURE	30-Aug-13	A	SPEC
I1-2	CONTROLS	CONTROL ROOM WORKSTATIONS	30-Aug-13	A	SPEC
M1-1-1	MECHANICAL	GENERAL ARRANGEMENT GAS TURBINE/AXIAL EXHAUST	3-Jan-14	L	ADD 2
M1-1-6	MECHANICAL	TIE POINT DRAWING GAS TURBINE/AXIAL EXHAUST	3-Jan-14	Е	ADD 2
M2-2-1	MECHANICAL	PROCESS FLOW DIAGRAM WATER BALANCE (W/ INLET CHILLING)	28-Feb-12	D	SPEC
M2-2-4	MECHANICAL	GLENARM INDUSTRIAL WASTEWATER	9-May-12	В	SPEC
M3-1-0	MECHANICAL	P&ID-COVER SHEET	15-Oct-13	Е	SPEC
M3-10-1	MECHANICAL	P&ID-GLAND STEAM SYSTEM	6-Dec-13	Е	SPEC
M3-1-1	MECHANICAL	P&ID - SYMBOLS AND LEGEND	15-Oct-13	С	SPEC
M3-11-1	MECHANICAL	P&ID-CONDENSATE SYSTEM	30-Jan-14	Н	SPEC
M3-11-2	MECHANICAL	P&ID-CONDENSATE SYSTEM	30-Jan-14	Н	SPEC
M3-11-3	MECHANICAL	P&ID-CONDENSATE SYSTEM	6-Dec-13	G	SPEC
M3-1-2	MECHANICAL	P&ID - SYMBOLS AND LEGEND	8-Oct-12	A	SPEC
M3-12-1	MECHANICAL	P&ID-CONDENSER AIR EXTRACTION	29-Nov-13	F	SPEC
M3-1-3	MECHANICAL	P&ID - SYMBOLS AND LEGEND	15-0ct-13	В	SPEC
M3-13-1	MECHANICAL	P&ID-CIRCULATING WATER SYSTEM	30-Jan-14	Н	
M3-13-1 M3-14-1	MECHANICAL MECHANICAL				SPEC
		P&ID-AUXILIARY COOLING WATER SYSTEM	6-Dec-13	F	SPEC
M3-15-1	MECHANICAL	P&ID-COMPONENT COOLING WATER SYSTEM	15-0ct-13	D	SPEC
M3-15-2	MECHANICAL	P&ID-COMPONENT COOLING WATER SYSTEM	15-0ct-13	D	SPEC
M3-15-3	MECHANICAL	P&ID-COMPONENT COOLING WATER SYSTEM	15-0ct-13	E	SPEC
M3-16-1	MECHANICAL	P&ID-COOLING TOWER CHEMICAL FEED SYSTEM 13-Sep-13 D			SPEC
M3-17-1	MECHANICAL	P&ID-AQUEOUS AMMONIA SYSTEM 6-Dec-13 G		-	SPEC
M3-18-1	MECHANICAL	P&ID-FUEL GAS SYSTEM	6-Dec-13	G	SPEC
M3-18-2	MECHANICAL	P&ID-FUEL GAS SYSTEM	6-Dec-13	G	SPEC
M3-18-3	MECHANICAL	P&ID-FUEL GAS SYSTEM	15-0ct-13	В	SPEC
M3-19-1	MECHANICAL	P&ID-SERVICE AIR SYSTEM	15-0ct-13	Е	SPEC
M3-20-1	MECHANICAL	P&ID-INSTRUMENT AIR SYSTEM	13-Sep-13	D	SPEC
M3-2-1	MECHANICAL	P&ID-GAS TURBINE INTERCONNECTIONS	15-0ct-13	Е	SPEC
M3-21-1	MECHANICAL	P&ID-FIREWATER SYSTEM	15-0ct-13	D	SPEC

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## **Project Deliverables List**

### Report Date March 14, 2014

Report Date March 14, 2014						
Document No.  Engineering Discipline		Document Title	Current Rev. Date	Current Rev. No.	Released	
M3-22-1	MECHANICAL	P&ID-SERVICE WATER SYSTEM	15-0ct-13	Е	SPEC	
M3-23-1	MECHANICAL	P&ID-DEMINERALIZED WATER SYSTEM	15-0ct-13	Е	SPEC	
M3-23-2	MECHANICAL	P&ID-DEMINERALIZED WATER SYSTEM	15-0ct-13	С	SPEC	
M3-24-1	MECHANICAL	P&ID-POTABLE WATER SYSTEM	15-0ct-13	Е	SPEC	
M3-25-1	MECHANICAL	P&ID-CHILLED WATER SYSTEM	20-Feb-14	Н	SPEC	
M3-25-2	MECHANICAL	P&ID-CHILLED WATER SYSTEM	30-Jan-14	G	SPEC	
M3-26-1	MECHANICAL	P&ID-WASTEWATER COLLECTION SYSTEM	15-Oct-13	Е	SPEC	
M3-26-2	MECHANICAL	P&ID-WASTEWATER COLLECTION SYSTEM	15-Oct-13	D	SPEC	
M3-27-1	MECHANICAL	P&ID-AUXILIARY STEAM SYSTEM	15-Oct-13	С	SPEC	
M3-3-1	MECHANICAL	P&ID-OTSG INTERCONNECTIONS (EXHAUST GAS)	6-Dec-13	G	SPEC	
M3-3-2	MECHANICAL	P&ID-OTSG INTERCONNECTIONS (STEAM)	30-Jan-14	Н	SPEC	
M3-4-1	MECHANICAL	P&ID-BOILER FEEDWATER SYSTEM	6-Dec-13	G	SPEC	
M3-5-1	MECHANICAL	P&ID-HIGH PRESSURE STEAM	6-Dec-13	Е	SPEC	
M3-6-1	MECHANICAL	P&ID-STEAM TURBINE INTERCONNECTIONS	6-Dec-13	F	SPEC	
M3-7-1	MECHANICAL	P&ID-STEAM DRAINS ¬タモ DRAIN TANK	10-Dec-13	G	SPEC	
M3-8-1	MECHANICAL	P&ID-STEAM AND WATER SAMPLING	15-Oct-13	D	SPEC	
M3-9-1	MECHANICAL	P&ID-CYCLE CHEMICAL FEED SYSTEM	13-Sep-13	D	SPEC	
M9-1	MECHANICAL	EQUIPMENT LIST	6-Dec-13	С	SPEC	
M9-10	MECHANICAL	TIE-IN LIST	20-Nov-13	D	SPEC	
M9-2	MECHANICAL	SERVICE INDEX	22-Nov-13	С	SPEC	
SKE6-1	ELECTRICAL	EXISTING ELECTRICAL UNDERGROUND ROUTING	4-0ct-13	A	SPEC	
SKE6-2	ELECTRICAL	EXISTING ELECTRICAL UNDERGROUND ROUTING		A	SPEC	
SKM1-7	MECHANICAL	AMMONIA (EXISTING)	4-Dec-13	A	SPEC	
SKM1-8	MECHANICAL	INTERIM/TEMPORARY CONFIGURATION	18-Dec-13	В	ADD 2	
SKM1-9	MECHANICAL	FINAL CONFIGURATION		В	ADD 2	

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# **Enclosure 7**



# **Attachment A3-Reference Information Documents**

March 12, 2014

			· · · · · ·		
Document No./ Filename	Document Title	Current Rev. Date	Current Rev. No.	Released	Location
Air Compressor	Typical Drawing	10/06/08	1	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Air Compressor
260000	Elec-Mech Equip	09/10/13	D	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
261050	MV Motors	09/10/13	С	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
261200	GSU Transformer	09/10/13	G	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
262050	LV Motors	09/10/13	С	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
409413.22	CEMS	09/10/13	Н	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
480020	Site Conditions	02/20/14	K	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
480031	Noise Control Perf	09/10/13	I	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
480032	Power Island Perf	09/10/13	Н	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
481100	Combined Cycle PIE	09/10/13	N	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485122.11	Steam Bypass Valves	09/10/13	Е	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485221	ST and TEWAC Generator	09/10/13	G	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485222	GTG Aeroderivative	09/10/13	Н	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485311.10	Condensate Pumps	09/10/13	F	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485311.20	Boiler Feedwater Pumps	09/10/13	Н	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485312	Circ Water & Aux Cooling Water Pumps	09/10/13	F	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485374.21	Compressed Air System	09/10/13	Н	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485374.22	Fuel Gas Compressor	09/10/13	Е	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485413	OTSG Spec	09/10/13	I	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485432	Surface Condenser	09/10/13	G	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485471	Inlet Air Chiller	09/10/13	Е	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485491	Cooling Tower	09/10/13	F	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Att 24 Specs
485951.8	Steam and Water Sample Panel	03/12/14	А	SPEC	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 5
485952	Condensate Polisher	08/24/12	F	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
ElectricBoiler brochure	ElectricBoiler brochure	-	11/10	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Aux Boiler Specs
ElectricBoiler Specifications	ElectricBoiler Specifications	-	11/10	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Aux Boiler Specs
ElectricBoilers Boiler Book	ElectricBoilers Boiler Book	-	11/10	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Aux Boiler Specs
CEMS	CEMS System Overview (Typical layout with optional equipment)	-	С	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\CEMS

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# **Attachment A3-Reference Information Documents**

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	Waren 12, 2011				
Document No./ Filename	Document Title	Current Rev. Date	Current Rev. No.	Released	Location
PASADENA CHILLER GA	Chiller Module General Arrangement	09/12/12	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Chiller
969031	One Line Diagram	-	F	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Electrical Drawings
Attachment 4	Attachment 4 Scheduled Major Component RTS and Delivery Dates_GE_13Dec4	-	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Equip Delivery Sched
Gas Compressor1	Machinery Arrangement Feed Gas Compressor System	11/20/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Gas Compressor
Att 10.1 MID-TD-0000-1	Fuel Gases for Combustion in Aeroderivative Gas Turbines Sept 2009	9/2009	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GE MID TD Specs
Att 10.2 MID-TD-0000-3	Water and Steam Purity for Injection in Aero Derivative Gas Turbines June 2010	6/2010	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GE MID TD Specs
Att 10.3 MID-TD-0000-4	Compressor Cleaning for GE Aircraft Derivative Gas Turbines June 2010	6/2010	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GE MID TD Specs
Att 10.4 MID-TD-0000-5.	Liquid Detergent for GE Aircraft Aero Derivative Gas Turbines June 2010	6/2010	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GE MID TD Specs
Att 10.5 MID-TD-0000-6	Lubricating Oil Specification for GE Aircraft Aero Derivative Gas Turbines June 2010	6/2010	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GE MID TD Specs
7253049-969014	Plan & Elevation Turbine Control Panel	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969741	Instrument Loop Diagram Hydraulic Start System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969742	Instrument Loop Diagram Ventilation & Combustion Air System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969743	Instrument Loop Diagram Mineral Lube Oil System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969744	Instrument Loop Diagram Turbine Lube Oil System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969746	Instrument Loop Diagram Fire & Gas Protection System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969750	Instrument Loop Diagram Nox Water Injections System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969751	Instrument Loop Diagram Fuel System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969753	Instrument Loop Diagram Water Wash System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969755	Instrument Loop Diagram Auxiliary Systems	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969758	Instrument Loop Diagram Sprint System	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
Pasadena CKOM -GTG Controls	LM6000 GE Aeroderivative Package	11/19/13	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Controls
7253049-969005	Electrical Symbols Abbreviations and Reference Data	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969006	Interconnect Plan Electrical	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969007	Interconnect Wiring Diagram Customer	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969009	Interconnect Cable Schedule	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969013	Nameplate List Engraving Schedule & Switch Development	10/09/13	А	ADD 3	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 3
7253049-969021	Plan & Elevation Generator Lineside Cubicle Cable Entry Top/Bottom	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969023	Plan & Elevation Generator Neutral Cubicle	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical

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# **Attachment A3-Reference Information Documents**

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	Waren 12, 2011				
Document No./ Filename	Document Title	Current Rev. Date	Current Rev. No.	Released	Location
7253049-969031	One Line Diagram	10/09/13	А	ADD 4	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 4
7253049-969032	Three Line Diagram Generator Metering	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969035	Schedule Motor Control Center	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969037	System Schematic Generator Excitation	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969041	Schematic Diagram Circuit Breaker Control	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969044	Schematic Diagram Motor Control Centers	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969690	Area Classification Drawing Main Unit	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969767	Schematic Diagram DC Power Distribution	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969768	Schematic Diagram Critical Shutdown Path	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969769	Schematic Diagram Miscellaneous	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969930	Schematic Diagram Lighting & Distribution	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
7253049-969934	Schematic Diagram Communication	10/09/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
Brush_GTG_Curves	Electrical Data Sheet	10/23/13	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Electrical
969224	Installation Footprint Anchor Bolt and Shear Lug Location	-	Н	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
120E4746	General Arrangement	10/18/12	G	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
7253049-969201	General Arrangement Main Unit - LH	11/12/13	А	ADD 4	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 4
7253049-969204	General Arrangement Air Filter	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
7253049-969219	General Arrangement Auxiliary Skid Left Hand	11/11/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
7253049-969221	General Arrangement Generator / Gearbox Mineral Lube Oil Skid	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
7253049-969224	Installation Footprint Anchor Bolt and Shear Lug Location	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
7253049-969293	Piping Penetrations Option LH	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
CD19671	Air Filter GE-AEP_GSX LM6000 with Chiller Coil	02/10/12	0	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
ElectricBoiler Dimensions and ratings	ElectricBoiler Dimensions and ratings	-	11-10	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
GA 69200	GA 9 Main Unit - RH	-	Н	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
GA 969209	GA Sprint Skid	-	D	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings

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## **Attachment A3-Reference Information Documents**

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Document No./ Filename	Document Title	Current Rev. Date	Current Rev. No.	Released	Location
GA 969218	GA Auxiliary Skid Right Hand	-	Н	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
GA 969221	GA Generator_Gearbox Mineral Lube Oil Skid	-	F	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
GA A0 321638800	GA Generator	07/17/12	С	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
Sample 00	ElectricBoiler sample drawing S-302-700kW @ 480V	06/08/10	00	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
SK-01	GE_STG_Sk1 - PWP Comments	11/15/12	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Arrangement Drawings
7253049-969232	Flow & Instrument Diagram Hydraulic Start System	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969239	Flow & Instrument Diagram Ventilation & Combustion Air System	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969244	Flow & Instrument Diagram Turbine Lube Oil System	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969247	Flow & Instrument Diagram Turbine Hydraulic System	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969248	Flow & Instrument Diagram Mineral Lube Oil System	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969254	Flow & Instrument Diagram Fire & Gas Protection System	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969260	Flow & Instrument Diagram Fuel System	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969262	Flow & Instrument Diagram Water Wash System	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969268	Flow & Instrument Diagram Sprint System Main Unit	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969269	Flow & Instrument Diagram Water Injection Pump	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969270	Flow & Instrument Diagram Sprint System Sprint Skid	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
7253049-969272	Flow & Instrument Diagram Auxiliary Systems	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
Inlet Air Chilling_Heating Conceptual Design_R3 add pre-cooler	Inlet Air Chilling_Heating Conceptual Design_R3 add pre-cooler	10/08/13	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
M005_(RG)_120E4746_SEP 12-2013	General Arrangement	09/12/13	G	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
M101_(RB)_230F5536_AUG 23-2013	Flow Diagram Steam System	08/23/13	В	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams
M105 230F5512	Feedwater System	11/07/12	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&ID and Flow Diagrams

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# **Attachment A3-Reference Information Documents**

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Document No./ Filename	Document Title	Current Rev. Date	Current Rev.	Released	Location
M106 203D7522 sheet 2	Condenser Terminal Points On Waterboxes	08/23/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M106_(RA)_203D7522_AUG 23-2013	Condenser Terminal Points	08/23/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M107_(RB)_120E4791_AUG 23-2013	Flow Diagram Circulating Water	08/23/13	В	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M109 230F5537	Auxiliary Cooling Water System	01/28/13	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M112_(RA)_230F5538_AUG 23-2013	Steam Drains System	08/23/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M119 120E4734 Sheet 2	Flow Diagram Steam Turbine	08/23/13	С	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M119_(RC)_120E4734_AUG 23-2013	Flow Diagram Steam Turbine	08/23/13	С	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M125_(RA)_230F5539_AUG 23-2013	Condenser Air Removal System	08/23/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs
23-2013 M190_(RD)_230F5504_AUG 23-2013	Combined Cycle system Overview Diagram	08/23/13	D	SPEC	and Flow Diagrams  Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M195 230F5496 sheet 2	Ammonia Dilution Heating Flow Diagram	02/07/13	В	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
M195_(RD)_230F5496_AUG 23-2013	Flow Diagram OSTG-1 Pressure	08/23/13	D	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\F&IDs and Flow Diagrams
7253049-969225	Lift Arrangement	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Lift and Shipping Info
7253049-969226	Shipping Data	10/16/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Lift and Shipping Info
PWP_Estimated Heaviest Lifts_Equipment Weights	PWP_Estimated Heaviest Lifts_Equipment Weights	-	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical\Lift and Shipping Info
7253049-000231	Flow & Equipment Symbols Mechanical	10/31/13	А	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Mechanical
Chart Only SNM Start up	Chart Only SNM Start up	04/02/12	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Performance Data
Pasadena CKOM - GT Inlet Air Conditioning	Turbine inlet Air Temperature Conditioning System	-	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\GTG\Performance Data
Attachment 12	Mechanical Completion Certificate	-	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Mechanical Completion
C12079-EI RevP	ONCE THROUGH STEAM GENERATOR ERECTION & INSTALLATION INSTRUCTIONS	09/13/13	0	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\OTSG
IST Start-Up Curve	OTSG Start-Up Curve	-	-	SPEC	Attachment A3-Reference Information \A.3.A City-Supplied Power Island Equipment Info\OTSG
OTSG Erection Training - SCR-CO - Revised	OTSG INSTALLATION AND ERECTION TRAINING PRESENTATION	03/01/13	-	SPEC	Attachment A3-Reference Information \A.3.A City-Supplied Power Island Equipment Info\OTSG
Pasadena CKOM - OTSG (IST)	Glenarm Repowering Project OTSG Design	11/15/13	-	SPEC	Attachment A3-Reference Information \A.3.A City-Supplied Power Island Equipment Info\OTSG
11303-001	General Arrangement LM6000 PG OSTG	11/01/13	P1	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
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## **Attachment A3-Reference Information Documents**

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	War off 12, 2011				
Document No./ Filename	Document Title	Current Rev. Date	Current Rev. No.	Released	Location
Typical OTSG Erection Drawings	Typical OTSG Erection Drawings	-	-	SPEC	Attachment A3-Reference Information \A.3.A City-Supplied Power Island Equipment Info\OTSG
Attachment 6	Performance Guarantees	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Performance Data
Attachment 22	LM6000PG Degradation	02/01/13	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Performance Data
GE Guarantee Heat Balances	GE Guarantee Heat Balances	02/12/13	0	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Performance Data
Attachment 1.1	Scope of Supply GTG	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Scope of Supply Documents
Attachment 1.2	Scope of Supply OTSG	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Scope of Supply Documents
Attachment 1.3	Scope of Supply CEMS	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Scope of Supply Documents
Attachment 1.4	Scope of Supply Mechanical and Fluid	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Scope of Supply Documents
Attachment 1.5	Scope of Supply Terminal Points	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Scope of Supply Documents
Attachment 1.7	Scope of Supply Engineering Design	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Scope of Supply Documents
Attachment 1.8	Scope of Supply Commissioning and Startup	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Scope of Supply Documents
Pasadena CKOM - GE BOP Mechanical	Steam Turbine & Generator Overview	11/19/13	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\STG
STG Layout For Information Only	Steam Turbine Layout (For Information Only)	-	0	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\STG
STG_Generator Curves for Information Only	REACTIVE CAPABILITY CURVE, EFFICIENCY CURVES, SATURATION CURVES	-	0	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\STG
Attachment 23	Obligations of Site Representatives	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Technical Advisors
Attachment 5.1	Typical Site Test Measurement Procedures-Test Philosophy	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Testing Documents
Attachment 5.2	Typical Site Test Measurement Procedures-Standard Field Testing Procedure for Emission Compliance Based on US EPA, ISO and EN Methodology	10/2011	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Testing Documents
Attachment 5.3	Typical Site Test Measurement Procedures-SPECIFICATION FOR GAS TURBINE GENERATOR PERFORMANCE TEST MEASUREMENT (SGTGPTM) LM6000 PC / PG SAC, NATURAL GAS FUEL	-	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Testing Documents
Attachment 14.1	GTG Training Descriptions	-	2	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Training
Attachment 14.2	Training Program	2013	-	SPEC	Attachment A3-Reference Information\A.3.A City-Supplied Power Island Equipment Info\Training
mitigation summary	Mitigation Summary	-	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\Air Permit
South Coast Facility Permit to Construct and Operate	South Coast Facility Permit to Construct and Operate	08/15/13	26	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\Air Permit

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Document No./ Filename	Document Title	Current Rev.	Current Rev. No.	Released	Location
Title V Facility Significant Permit Revision	Title V Facility Significant Permit Revision	08/15/13	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\Air Permit
0 TOC	Environmental Impact Report-Table Of Contents	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
0 TOC_Revised	Environmental Impact Report-TOC Revised	3/2013	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
0 Executive Summary	Environmental Impact Report-Executive Summary	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
1.0 Introduction	Environmental Impact Report-Introduction	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
1.0 Introduction_Revised	Environmental Impact Report-Introduction_Revised	3/2013	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
2.0 Project Description	Environmental Impact Report-Project Description	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
2.0 Comments and Responses on DEIR_Revised	Environmental Impact Report-Comments and Responses on DEIR_Revised	3/2013	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
3.0 Environmental Setting	Environmental Impact Report-Environmental Setting	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
3.0 Corrections and Additions_Revised_Revised		3/2013	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.0 Mitigation Monitoring and Reporting Program	Environmental Impact Report-Mitigation Monitoring and Reporting Program	3/2013	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.A Aesthetics	Environmental Impact Report-Aesthetics	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.B Air Quality	Environmental Impact Report-Air Quality	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.C Cultural Resources	Environmental Impact Report-Cultural Resources	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.D Greenhouse Gases	Environmental Impact Report-Greenhouse Gases	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.E Hazards	Environmental Impact Report-Hazards	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.F Land Use and Planning	Environmental Impact Report-Land Use and Planning	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.G Noise	Environmental Impact Report-Noise	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
4.H Water Supply	Environmental Impact Report-Water Supply	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
5.0 Alternatives	Environmental Impact Report-Alternatives	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
6.0 Other Environmental Considerations	Environmental Impact Report-Other Environmental Considerations	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
7.0 Persons and Organizations	Environmental Impact Report-Persons and Organizations	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
8.0 References	Environmental Impact Report-References	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
Appendix_Table_of_Content	s Environmental Impact Report-Appendix Table of Contents	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
Appendix A_Revised	Environmental Impact Report-Appendix Table of Contents_Revised	04/15/10	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
Appendix-A_NOP-IS-Scoping Meeting Materials	Environmental Impact Report-NOP-IS-Scoping Meeting Materials	09/16/11	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA

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		Current Poy	Current Rev.		
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Appendix-B_Air Quality Assessment Files	Environmental Impact Report-Air Quality Assessment Files	11/2012	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
Appendix-C_Greenhouse Gas Impact Assessment	Environmental Impact Report-Greenhouse Gas Impact Assessment	06/15/12	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
Appendix-D.1_Figures 1-13	Environmental Impact Report-Figures 1-13	-	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
Appendix-D_Hazardous Materials	Environmental Impact Report-Hazardous Materials	07/29/11	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
Appendix-E_Noise	Environmental Impact Report-Noise	01	12/2011	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
Appendix-F_Water Supply Documentation	Environmental Impact Report-Water Supply Documentation	05/23/12	2	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\EIR CEQA
GT 3&4 SWPPP (Draft)	GT 3&4 SWPPP (Draft)	01/31/03	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\SUSMP & SWPPP
PWP SUSMP	Stormwater Treatment Certification	02/03/03	-	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\SUSMP & SWPPP
Broadway Wastewater Permit Rev B	Broadway Wastewater Permit Rev B	07/31/12	В	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\Waste Water
Glenarm Wastewater Permit Rev C	Glenarm Wastewater Permit Rev C	07/18/13	С	SPEC	Attachment A3-Reference Information\A.3.B City-Supplied Permitting Information\Waste Water
20001-C-004-06 4-06	GSU foundation plan	12/08/03	2	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural
8-2-2368	Electrical Shop Plot Plan	10/16/69	4	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Architectural and Structural\Pump Building Existing
8-2-2369	Electrical Shop Plan & Elevations	12/08/60	3	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Architectural and Structural\Pump Building Existing
8-2-2370	Electrical Shop Mezzanine Floor Plan & Details	09/21/60	3	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Architectural and Structural\Pump Building Existing
8-2-2371	Electrical Shop Floor Plan Anchor Bolt Setting Plan	06/21/20	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Architectural and Structural\Pump Building Existing
8-2-2372	Electrical Shop Partial Deck Plan & Longitudinal Sect.	03/03/60	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Architectural and Structural\Pump Building Existing
8-2-2373	Electrical Shop Basement Plan Sections & Details	02/17/69	2	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural\Pump Building Existing
8-2-2374	Electrical Shop North & Partial East Elevations & Roof Slab Over Room B1	06/21/60	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural\Pump Building Existing
8-2-2375	Electrical Shop Foundation Plan for New Deck Slab Basement Ramp & Room B1 Floor Slab	02/17/69	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural\Pump Building Existing
8-2-2376	Electrical Shop Reinforcing Details for Beams, Girders, Floor Slab & Ramp	06/21/60	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural\Pump Building Existing
8-2-2381	Electrical Shop Architectural Floor Plan & Room Elevations	02/17/69	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural\Pump Building Existing
8-2-2382	Electrical Shop Architectural Room Elevations	09/16/60	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural\Pump Building Existing
8-2-2383	Electrical Shop Miscellaneous Architectural Details	09/20/60	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural\Pump Building Existing

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Document No./ Filename	Document Title	Current Rev.	Current Rev.	Released	Location
8-2-2384	Electrical Construction Shop Electrical Layout	09/15/60	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Architectural and Structural\Pump Building Existing
8-2-49	Circ Pipe Tunnels Demo 2	08/02/49	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Demolition Scope
8-2-49B	Circ Pipe Tunnels Demo 3	08/02/49	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Demolition Scope
8-2-49C	Circ Pipe Tunnels Demo 4	04/27/49	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Demolition Scope
8-2-1337	Overall Tunnel Demo 1	01/02/58	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Demolition Scope
8-2-1355	Stack Foundation Demo 5	11/01/56	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Demolition Scope
8-2-1670	Plot Plan Crane Rail Demo 6	02/26/62	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Demolition Scope
SKM-1	Existing Tunnels and Proposed Equipment Overlay	06/12/13	В	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Demolition Scope
2-2-1562	Underground Fair Oaks ave.	04/22/03	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
8-2-547	Receiving Stations and Dispatching Center Electrical Plot Plan	01/30/95	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
8-2-575	Powerhouse to Receiving Station Section A Interconnecting Tunnel Ground System	10/14/48	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
8-2-1341	General Arrangement of Existing Structures and Foundations	03/27/58	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
20001E004-01	Overall conduit routing plan & sect	04/10/03	4	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
20001E004-02	Overall conduit routing plan & sect	12/08/03	4	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
20001E004-03	Overall conduit routing plan & sect	12/08/03	4	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
20001E004-05	Conduit ductbank sect & misc sect	12/08/03	4	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
20001E004-13 004-13	Conduit ductbank details-GSU hv lines	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
8-2-6643, 6507, 6606, 6510 6603, 6613 & 6602	Existing Trench and Sanitary Sewer East of Glenarm Building	-	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
Storm Drain and Conduit Trench Drawing	Storm Drain and Conduit Trench Drawing	04/10/03	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
V-228	UG Vault Standards	06/27/07	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Electrical
8-2-300	Fountain Drawing	09/02/38		SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Mechanical
20001-071R0	Waste Water F & ID	11/08/02	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Mechanical

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# **Attachment A3-Reference Information Documents**

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20001-090	Flow & Instrument Diagram Ammonia System	05/19/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Mechanical
20001M001	Overall Site Plan GT 3 & 4	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Mechanical
20001P001-02	Key plan above ground and trenches	12/08/03	2	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Mechanical
20001P026-01	29% NH3 tank area above ground piping	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Mechanical
20001P026-02	29% NH3 tank area above ground piping	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Mechanical
20001-P-011-01	Piping and Plan Details Existing OWS	11/18/02	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Mechanical
Existing Oil-Water Separator	Existing Oil-Water Separator Manufacturer's Information	01/23/03	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Mechanical
Glenarm Parcel Map	Glenarm Parcel Map	08/09/04	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Survey Info
Glenarm Parcel Plan	Glenarm Parcel Plan	09/28/04	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Survey Info
Pasadena Glenarm Facility	Pasadena Glenarm Facility	-	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Survey Info
8-2-1002	General Location Plan	03/29/73	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Arrangement Dwgs Existing or Past
8-2-1477	Piping Arrangement	11/25/60	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Arrangement Dwgs Existing or Past
8-2-1669	Gas Equipment Building Miscellaneous Sections & Details	02/26/62	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Arrangement Dwgs Existing or Past
8-2-1670	Gas Equipment Building Plot Plan Paving & Yard Details	02/26/62	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Arrangement Dwgs Existing or Past
Site Water Utility Information	Site Water Utility Information	-	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Arrangement Dwgs Existing or Past
8-2-1355	Sootblowing Stack & Precipitator Support Foundations	11/05/56	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Civil
20001c002-01	Civil Key Plan Paving / Grading & U.G. Sewer PDF	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Civil
20001c002-01	Civil Key Plan Paving / Grading & U.G. Sewer CAD	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Civil
20001c002-03	Area 2 paving grading sewer	12/23/03	2	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Civil
20001c002-04	Area 3 paving grading sewer	12/23/03	2	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Civil
20001c006-04	Oily Water Separator foundation sections and details	03/06/03	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Civil
20001-c003-05	Civil Sections & Details	01/24/03	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Civil

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Document No./ Filename	Document Title	Current Rev. Date	Current Rev. No.	Released	Location
2-6643, 6507, 6606, 6510, 6608, 6613 & 6602	Existing Trench and Sanitary Sewer East of Glenarm Building	6/1987	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Civil
8-2-49	Circ Pipe Tunnels	02/06/31	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
8-2-49B	Circ Pipe Tunnels	08/14/31	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
8-2-49C	Circ Pipe Tunnels	08/05/31	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
8-2-49D	Circ Pipe Tunnels	05/22/31	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
8-2-598	Circ Pipe Tunnels	10/03/50	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
8-2-949	Broadway to Glenarm Pipe Tunnel	12/22/65	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
8-2-1337	Station Service Plot Plan	01/02/58	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
20001P006-03	West end culvert piping	11/18/02	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
20001P006-04	West end culvert piping	05/19/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
20001P027-01	Pipe trench between culvert & NH3 tanks	12/16/02	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
20001P028-01	Demin Water Pump 158A & Pipe Trench	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
20001P028-02	East end culvert & trench piping details	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
20001P00601	Ammonia truck unloading and culvert piping	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Mechanical Tunnels
33W	Location of power plant water services	08/29/40	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Underground Utilities
3716	Utility Drawings in Public ROW - Fair Oaks Ave - Glenarm to State St	03/27/87	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Underground Utilities
20001-274-M	Oil Water Separator Flo Trend Systems	01/16/03	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Underground Utilities
20001E011-04	Cathodic protection pipe pit area	02/24/03	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Underground Utilities
20001P001-01	Key plan underground piping A	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Underground Utilities
20001P003-01	GT 3&4 equipment drains underground	12/08/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Underground Utilities
20001P004-01	GT3 area underground piping	12/17/03	1	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP Dwgs\Underground\Underground Utilities
20001P005-01	GT4 area underground piping	12/17/03	2	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Underground Utilities

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	- TVIGITOTI 12, 2011				
Document No./ Filename	Document Title	Current Rev. Date	Current Rev.	Released	Location
20001P009-01	NH3 tank area underground piping	12/16/02	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Underground Utilities
20001P011-01	Oily water separator pit piping	11/18/02	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Underground Utilities
20001-P-011-01	Piping Plan & Details Oily Water Separator Pit	11/18/02	0	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Underground Utilities
Glenarm Plant Fire Protection Drawing	Glenarm Plant Fire Protection Drawing	06/30/03	3	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Underground Utilities
GT1 GT2 UG GAS DWG	Piping Area III	04/30/75	4	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Underground Utilities
k350 OWS flow diagram	k350 oil water separator flow diagram	10/11/02	А	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Underground Utilities
Storm Drain and Conduit Trench Drawing	Storm Drain and Conduit Trench Drawing	04/10/03	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Existing PWP  Dwgs\Underground\Underground Utilities
3626-04-02	GT-5 FIRSTPCRCorrectionEnvironmental Investigation	07/29/11	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Geotech Report and GPR
3626-04-02	GT-5 Environmental Investigation - 1 of 4 txt only	07/29/11	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Geotech Report and GPR\Enviro
3626-03	Geophysical Investigation	04/15/10	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Geotech Report and GPR\Geotech
3626-04-01	GT5 Geotechnical Investigation	08/01/11	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Geotech Report and GPR\Geotech
11195Hydrologue_ThermalR esistivity_01	Soil Thermal Resistivity Tests	09/16/11	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Geotech Report and GPR\Soil Resistivity
geovisionthermal Resistivity	Soil Thermal Resistivity Tests	08/10/11	-	SPEC	Attachment A3-Reference Information\A.3.C Existing Site and Reference Drawings\Geotech Report and GPR\Soil Resistivity
Attachment 1.6 Scope of Supply DOR	Attachment 1.6 Scope of Supply DOR	-	-	SPEC	Attachment A3-Reference Information\A.3.D Division of Responsibility
Completion Turnover Start- Up	GLENARM REPOWERING PROJECT SCOPE OF RESPONSIBILITY MATRIX	10/11/13	А	SPEC	Attachment A3-Reference Information\A.3.D Division of Responsibility
14-ST Steam Quality	Steam Quality	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
2014-01-08 GT5 Pre-Bid Meeting Introduction	2014-01-08 GT5 Pre-Bid Meeting Introduction	01/08/14	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
2014-01-08 GT5 Pre-Bid Meeting Local Participation	2014-01-08 GT5 Pre-Bid Meeting Local Participation	01/08/14	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
2014-01-08 GT5 Pre-Bid Meeting Working with Pasadena	2014-01-08 GT5 Pre-Bid Meeting Working with Pasadena	01/08/14	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
505-101 Sheet 01	Topographic Survey Pasadena Glenarm Facility	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
505-101 Sheet 02	Topographic Survey Pasadena Glenarm Facility	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
505-101 Sheet 03	Topographic Survey Pasadena Glenarm Facility	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
5065A0-C23	Generator outline dwg for reference	08/23/13	F	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2

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	Waren 12, 2011				
Document No./ Filename	Document Title	Current Rev. Date	Current Rev. No.	Released	Location
BOP RFP Pre-Bid Presentation 010814- updated	BOP RFP Pre-Bid Presentation 010814-updated	01/08/14	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
C8 foundation dwg	STG Foundatoin Drawing			ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
C8 Layout STG	Layout	04/30/08	2	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
8 Loading data STG Foundati	c Loading Data [kN]	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Construction Staging and Traffic Management Plan	Construction Staging and Traffic Management Plan	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Contracts_Purchase Orders_Permits Insurance Requirements	Contracts Purchase Orders Permits Insurance Requirements	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
ES-1000 Rev 9	Feedwater Quality Requirements for Superheated Steam Applications	07/22/11	9	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Exhibit A - DW_221732D01	Drawing 221732C1	-	0	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Exhibit B - HA_221732D01	Form 3.2.1-D	-	0	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
FY 2014 Adopted General Fee Schedule Part 2	FY 2014 Adopted General Fee Schedule Part 2	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
JV468844D	SPX Cooling Technologies Prelim Dwg - Basin Section & Details	10/22/12	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
JV4688445	SPX Cooling Technologies Prelim Dwg - Schematic View	10/22/12	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Jv468844B	SPX Cooling Technologies Prelim Dwg - Basin Section & Details	10/22/12	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Location and Working Hours	Location and Working Hours	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Moving Permit Application - For Wide Load and Heavy Equipment	Moving Permit Application - For Wide Load and Heavy Equipment	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
P12079-00 Jumper Tubes	Jumper Installation Proposal - IST	11/27/13	0	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Public Right-of-Way Permit	Public Right-of-Way Permit	12/19/12	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Rotor removal instructions _skid pan_	Rotor removal instructions skid pan	-	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
SK-8371-0	Condenser Outline Proposal Level (Proposal No. H-8371.HX)	-	0	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Storage Container - Application	Storage Container - Application	07/01/13	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Truck Route	Truck Route Map Exhibit 1	06/22/11	CAD90070A. MXD	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
11302-0004	Generic Flowsheet Dual Pressure OTSG W/ Burner, SCR & CO	02/20/06	P1	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
COP BOP Pre-Bid GE BOP Equipment_14Jan02	COP BOP Pre-Bid GE BOP Equipment	01/08/14	-	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
IST Presentation 20140108 (NXPowerLite)	IST Presentation 20140108 (NXPowerLite)	01/08/14		ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2

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Document No./ Filename	Document Title	Current Rev. Date	Current Rev.	Released	Location
LM6000_Package_Layout_E volution1.5.14r1	LM6000 Package Layout Evolution	-		ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
Bidder's Questions 2013-01- 15 Rev 0	Bidder's Questions	01/15/14	0	ADD 2	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 2
7253049-969960	Recommended Settings For Model 175 Nox Water Injection Pump Sr Drive	10/09/13	Α	ADD 3	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 3
7253049-969961	Jaquet T401 GT Backup Overspeed Device Settings, SSW1	10/09/13	Α	ADD 3	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 3
7253049-969962	Digital Multifunction Meter Settings Satec Pm174	10/09/13	Α	ADD 3	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum
7253049-969964	Suggested Settings For Beckwith Model M-3425a Generator Protection System	10/09/13	Α	ADD 3	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 3
7253049-969965	Automatic Voltage Regulator Settings, Brush Prismic A30	10/09/13	Α	ADD 3	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 3
7253049-969966	DSM Settings	10/09/13	Α	ADD 3	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 3
7253049-969966	Asbestos Survey and Lead-Based Paint Assessment Report	02/24/99	Α	ADD 3	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 3
11303-0001	General Arrangement LM6000 PG OTSG		Е	ADD4	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 4
C12079-PCP	OTSG Pre-Construction Plan	01/24/13	00	ADD 4	EMAT\Procurement\Packages\BOP Contractor Scope\Addenda\Addendum 4

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