Kaw OE Questions

- 1. Scope of work document: Section 4. OMPA to clarify that field services including construction will be performed by the construction contractor and that OE will be responsible for engineering, generating technical specifications, oversight, developing procurement technical specifications, assisting in procurement process and construction oversight.
 - Field Services and construction will be performed by the contractor. The Owner's Engineer will be responsible for engineering, generating technical specifications, oversight, developing procurement technical specifications, assisting in procurement process and construction oversight.
- 2. Scope of Work Document Section 4.g DCS: Please clarify the scope and expectations from OE for this item. Also, will Emerson provide turnkey services? What will be construction contractor's role for DCS? Will the OE prepare minimum requirements for the new system network block diagram interface, operating description, I/O List? Will the OE prepare demo drawings for removal of the old system and termination or other drawings for the new hardware?
 - The OE is to provide Emerson with equipment drawings that will interface with the DCS, aid Emerson with interfacing with the DCS, and aid with testing.
- 3. Scope of Work Document Task 2: Identify Federal Funds: OMPA to clarify how much of the supporting documentation will be needed from the OE. If unknown, we suggest to OMPA specify an anticipated allowance in hours.
 - OMPA anticipates that much of the original Condition Assessment will be used for the Grant submissions. It is unclear to us how much additional support will be needed from the OE as part of the process. OMPA has a separate grant writing firm, so the OE will not be responsible for that component. For pricing purposes, please assume 12 hours of support work.
- 4. Scope of Work Document Task 4: Design Support: Could OMPA clarify what other projects of rehabilitation will be needed and included in the proposal?
 - The design support will encompass all projects in section 4 of the SOW, which some will be in 1 single contract for the GWC. The projects that will be contained in GWC contract will be discussed after the award of the OE contract.
- 5. Scope of Work Document Task 6: Please confirm if home office support for construction contractor's submittal reviews and response to RFIs be included in Task 6.

 Yes
- 6. Scope of Work Document Task 6: OMPA to specify number of visits, number of days per visit, and duties to be performed by specialist as part of an optional limited time representative.

 In the early stage of construction, we require 2 days a week, and as the construction/installation of equipment

increases and startup and commissioning of the unit is being performed 4 days a week will be required.

- 7. Scope of Work Document Task 6: Does OMPA expect OE to develop start-up and commissioning plans or does OMPA have standard plans for contractor's use?
 - The GWC will develop start-up and commissioning plans and the OE will review.
- 8. Scope of Work Document Item 2 Schedule administration. A) Will a specific software for the development of the schedule be required? B) Does OMPA want the schedule to reflect work items of 1 day, with shorter work tasks combined? C) Will weekly, bi-weekly, or monthly updates on the schedule be required by OMPA?

 A) No, we expect the OE to use their standard schedule software.

 B) Yes C) bi-weekly

- 9. Scope of Work Document Item 4.b.3 Calibrate the wicket gates. A) Please clarify if this is re-setting of the existing wicket gate (and if it is more than 1 gate, how many in total followed by light testing to verify good nose to tail sealing between adjacent wicket gates. B) Also if this work is to be performed as part of the GWC or prior to GWC.
 - A) The wicket gates do not need to be re-set but all gates are to be calibrated. (Reset is the same as calibration)
 - B) Prior to the GWC
- 10. Scope of Work Document Item 4.f.3 Bypass pipe for dissolved oxygen: Will the nozzles also be relocated and oriented towards the downstream to discharge into the tailrace?

 The nozzles will not be relocated.
- 11. Scope of Work Document Item 4(e)1. Indicates: "Install redundant relays for generator and GSU protection and provide setting recommendations." Does this require protective relay calculations and loadable setting files or only relay calculations?

This will require protective relay calculations and loadable setting files.

- 12. Clarify how many references or customers OMPA wishes the OE to submit with its proposal.

 There is not set number that we are requiring, but we are requiring that the OE bidder provides a list of similar hydropower rehabilitation projects that have been completed in the last 5 years with reference contact information.
- 13. Confirm which task weekly progress reports are to be scoped and budgeted. We believe the intent is to include this work in Task 6 of the SOW, although there is already a requirement in Task 6 for daily reports.

 The weekly progress reports will be scoped and budgeted under Task 6. It is OMPA's intent to have weekly progress reports starting in Task 3 and leading up to the engineering oversight, and then daily progress reports will be provided.
- 14. Confirm which task digitizing documents are to be scoped and budgeted. We believe the intent is to include this work in Task 4 of the SOW.
 Digitizing documents will be scoped and budgeted under Task 4.
- 15. Confirm which task as-built drawings are to be scoped and budgeted. We believe the intent is to include this work in Task 6 of the SOW.
 - As-built drawings will be scoped and budgeted under Task 6, and expected to be digitized.
- 16. Add "and epoxy injection of voids" to Section 4, item a.5. The GWC will want to fill any voids while scaffolding and access are available.
 - Epoxy injection of voids will be completed once the test for bond between concrete and steel is completed and before the scaffolding is removed.
- 17. Would it be possible for OMPA to provide drawings of the 1) wicket gate friction device and 2) gate lever from the original equipment manufacturer, IMPSA?
 - These drawings will be provided and will be posted on the OMPA website.
- 18. The scope of work indicates the need to calibrate the wicket gates. Para. 2.2.5 of the summary report indicates that the wicket gates do not seal well, and one or more gates may have shifted out of position. OMPA also states that the wicket gates do not need to be re-set. We believe the intent is to re-position one or two wicket gates that have shifted back to their original orientation or angular position. Could OMPA confirm this interpretation of calibrating the wicket gates?
 - To clarify, re-setting the gates and calibrating the gates are one in the same and question 9 has been revised to show the correction. OMPA wishes for all gates to be calibrated.

- 19. Clarify the scope of thrust bearing refurbishment. Is thrust bearing refurbishment limited to replacing mercury pressure switches?
 - OMPA will replace the mercury pressure switches. The OE will scope and budget for the thrust bearing seal to be replaced.
- 20. Replacement of sump pumps is not discussed in the Summary Report. Confirm that pump and guide rail replacement is desired. Confirm that piping to be replaced is limited to the cracked ductile iron pipe shown in Fig. 2-40 of the summary report.
 - All pumps, piping, and supports in the sump will need to be replaced. The cracked ductile iron pipe will be replaced by OMPA.
- 21. Confirm that the only valve to be replaced is the one blowoff valve discussed in Para 2.11.1 and shown located on top of the fire pump in Fig. 2-45 of the summary report.

 Correct, this is the only valve in the fore protection system that needs to be replaced.
- 22. Confirm in-kind replacement of the strainers is desired and there is no need for evaluating backflushing and mesh size.
 - The strainers will need to be evaluated for automatic backflushing and a finer mesh size will need to be evaluated as well.
- 23. Is the OE responsible for providing procurement documentation, specifications, and/or drawings needed for OMPA to procure any DCS equipment that is outside of Emerson's scope of supply?

 Yes
- 24. Confirm if Task 3 is intended to include scope and budget for the OE to assist OMPA with preparing responses to bidder's request for information (RFIs)?

 Yes
- 25. Confirm if Task 4 is intended to include scope and budget for the OE to review submittals from the procurement suppliers. Information provided by the procurement suppliers will also need to be used to update Task 4 design documents, please confirm this was considered part of the scope.

 The review of submittals from procurement suppliers shall fall under Task 3, and the information provided by suppliers will be used to update design documents in Task 4.
- 26. Confirm if Task 5 is intended to include scope and budget for the OE to respond RFIs from the GWC bidders? Yes, but OMPA will post the answers on our website and not directly to the GWC.
- 27. Regarding the scope for Task 5, will there be a mandatory pre-bid meeting for the bidders and would OMPA like the OE to attend the pre-bid meeting?

 Yes, there will be mandatory pre-bid meetings for the bidders, and the OE is expected to attend.
- 28. Will the unit control panel be replaced or modernized as part of the DCS upgrade? Para. 2.10.1.2.1 of the Summary Report mentions that now would be a good time to evaluate making changes to monitoring and control features in the existing unit control switchboard.
 - Yes, and the OE is to provide Emerson with equipment drawings that will interface with the DCS, aid Emerson with interfacing with the DCS, and aid with testing.