



Florida Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

Rick Scott
Governor

Carlos Lopez-Cantera
Lt. Governor

Noah Valenstein
Secretary

July 25, 2017

NOTICE TO APPLICANTS ADDENDUM NO. FOUR (4)

C.H. Corn Hydroelectric Generating Station DEP Bid NO. BDC65-16/17

TO BIDDERS AND PLAN HOLDERS ON THE ABOVE REFERENCED PROJECT: PLEASE NOTE CONTENTS HEREIN AND INCLUDE WITH YOUR BID SUBMISSION.

NOTICE

It will be required that this addendum be signed in acknowledgment of receipt and that it be included with your Bid when same is submitted to Mae Roth, Government Operations Consultant II, Bureau of Design and Construction, 3800 Commonwealth Blvd. MS520, Tallahassee, Florida 32399-3000. Failure to do so may be grounds for rejection of the Bid.

Signature of Contractor and Date

The Following statements supersede & supplement the corresponding items in the specifications & drawings:

Pre-Bid Conference Questions

Unanswered questions are labeled with yellow highlight. Answers extracted from audio recording and notetaking are labeled in blue. Please verify and expound on blue answers and add remarks for yellow highlights.

Maintenance

Q: How frequent is trash/debris removal?

A: About every 3 months using clam shell crane

Q: What debris?

A: Mostly grass

Q: Gate operation protocol in place?

A: None needed beyond gate controls.

Q: How often are grounds inspected?

A: Daily

Q: Additional access to 2nd gate?

A: Yes, via 267 and Stoney Edwards Rd.

Q: How often and how long does it take to mow the grass?

A: Spring and Summer, every 10 days, two days of mowing. Fall and Winter, every 30 days, two days of mowing.

Q: Any weed control?

A: Twice a year, weed control by contractor on upstream/downstream rip-rap.

Q: What fire protection for structure?

A: Fire station plug available; inside turbine room there is alarm and extinguisher

Q: Measuring outflow?

A: Measurement on Culvert every 2 weeks with manual bucket per WMD

Q: Change of flow?

A: None noticed other than after heavy rains

Q: Equipment for mowing owned and maintained by plant? Are mowers, etc. on equipment list?

A: Can be negotiated.

Legal/Stakeholders/Contract

Q: How will the State of Florida ensure that that the winning bidder has the guaranteed right to continue operation of the hydro station until the next FERC license is secured?

A: The 1980's lease between the Board of Trustees and the City of Tallahassee was approved in a formal meeting of the Board of Trustees of the Internal Improvement Trust Fund. Under current law, a commercial lease cannot be transferred, and must be formally approved in form and operation by the Board of Trustees. The City plans only to disconnect the generators from the breakers and mechanically block the hydraulic actuators for the wicket gates from operating. The water flow will occur only through the flood gates until the generator connections are restored and the wicket gates are made operational again.

Q: Will we have the additional opportunity to submit more questions as the schedule for the tender has changed?

A: Bidders may submit questions until 9 a.m. on July 18, 2017.

Q: Is there the opportunity to have another site visit to inspect the internal part of the amberson dam? A: According to the timeframe of the bidding process and formal BOT approval meeting, there will not be time for all bidders to visit the dam.

Q: Is there a contract with the hunt camp?

A: Hunt camps do not lie in lease boundary, but may be present in Lake Talquin State Forest, which is managed by the Department of Agriculture and Consumer Services, Florida Forest Service.

Q: Why city guaranteeing PPA?

A: The PPA is included in USB and FTP files. The PPA is an opportunity rather than an obligation.

Q: Facility in management plan; how to omit from MP?

A: Waterflow management was once the responsibility of the Division of Recreation and Parks, but Plan may be updated through a Negative response memo to the Acquisition and Restoration Council.

Q: Is plant obligated to Black Start Restoration?

A: No

Q: Wheeling charges?

A: The City's Financial statements, included on FTP site and USBs, details wheeling information. However, the new operator could possibly have the opportunity to negotiate wheeling charges.

Q: Endangered animals in area? Requirements for species protection?

A: Bald Eagles and Gopher Tortoise infrequently present. Supporting resources available on FTP Site/USB Drives. No special operating procedures.

Q: What sort of transmission facilities responsible for?

A: None

Q: FERC allow increase/decrease PMF?

A: PMF is determined based on hydrograph. See 2006 IDF study for further details.

Q: FERC-required recreational amenities?

A: None recalled. Recreational opportunities are required by the state.

Q: Draw-downs for dock maintenance (Lake Talquin)?

A: The state limits the amount of draw downs

Q: Duke easement – how big, what rights?

A: See "1970-12-14 FPC Deed.pdf" on FTP Site.

Q: Contractual recreation obligations?

A: None

Operations Details

Q: Hours of operation?

A: 7 days a week, 5 a.m. – 5 p.m.

Q: Life risks associated with operation?

A: Gate controls added as conservative measure

Q: Who manages lake shoreline?

A: Private and public landowners own land to shoreline throughout lake proper.

Q: What is notification system for operation change?

A: Horn, loudspeaker

Q: Are boats able to tie off at boat barrier?

A: The allowance of boats to tie off to barrier will be a management decision. The winning bidder may choose to allow or prohibit tie offs to maximize safety and recreational opportunities.

Q: Security: cameras?

A: Cameras are currently monitored by the City's Purdom Generating Station

Q: Internet?

A: DSL connection

Q: Bid process: if questions not answered by deadline, do we start over?

A: Questions and answers will be posted to addendum to Vendor Bid System by 9 a.m. on July 25, 2017.

Q: Are boundary lines described in lease absolute?

A: Yes – legal description as is and will be available

Q: What is minimum bid amount based on?

A: Appraisal

Q: Lease stakeholders?

A: Lease stakeholders include the winning bidder, the Board of Trustees of the Internal Improvement Trust Fund. Special lease conditions require lessee to maintain agreement with USGS for inflow and outflow gauges. Other stakeholders could include U.S. Fish and Wildlife, the Florida Fish and Wildlife Conservation Commission, Northwest Florida Water Management District, counties and residents within the area.

Q: Why rock the toe?

A: FERC requested to replace the previously placed riprap that had weathered.

Q: Seepage monitoring along earthen dam?

A: Monitored at culvert outlets.

Q: Embankment leaks? Seepage from dam, run-off pooling from poor drainage?

A: No comments or concerns raised by FERC

Q: USFS touch FERC boundaries? What are stakeholder requirements?

A: We are not aware of any.

Q: How deep is concrete wall built?

A: Concrete walls vary in depth by type.

Q: Is remote dike made to fail?

A: No

Q: Hourly rate and charge rate for operators, including benefits?

A: Hourly Rate - \$34.45 - \$33.64, Benefits multiplier- 1.4

Q: Cost of security guard service?

A: Cost of security guard service is negotiable

Q: Is night security required by any organization or stake holder?

A: No.

Q: Can you please provide a breakdown on the daily operator schedule. What they are checking on daily basis, how much time spent mowing or cleaning?

A: Operator schedule is 6AM-6PM, seven days a week. Daily operator tasks include safety of the earthen dam, security of the property, including the powerhouse, dam and spillways, hourly operational logs of the turbine/generators, lake and river inflow, outflows and levels every three hours.

Q: What is night security cost? Based on hours or monthly fee?

A: See above

Q: Is the security a requirement by City?

A: Not a requirement.

Q: What does daily operator checklist and worklist look like? How much time on routine checks?

A: Daily routine checks are provided above. Time required for the daily routine checks is estimated at six hours

Q: Who oversees the Operators?

A: Management at the City's Purdom Generating Station.

Q: What is that cost? A: Not tracked.

Q: Managed by the City? A: Yes. Q: Employees are City Employees? A: Yes.

Q: Is there a clear delineation between the hydro and the gas operations?

A: Yes

Q: Do we need to separate? A: No need to separate. Q: Work required to separate?

A: No need to separate.

Q: Does Hydro have it's own meter?

A: Yes

Q: Lost Production – is it tracked when unit trips? how long does it take for operator to get to plant to restart unit? Do they go or wait till next day?

A: It trips rarely. Normal operating conditions, wait till the next day. High, or potentially high, water conditions – 24 hr coverage.

Q: Who performs maintenance and is maintenance scheduled only when there is an issue?

A: Routine maintenance by the operators. Scheduled maintenance/PM support Purdom Plant personnel. Major overhauls or major issues handled by contractors.

Structure History

Q: Dirt underneath grass of spillway?

A: Fill from digging used in slope and remote dike; not hydraulic fill

Q: Any seismic issues?

A: Never, no

Q: When was sand (embankment) added?

A: 2 – 3 years ago

Q: Lime stone issues? Does dam lay on karst topography?

A: None known and no requirements in respect to licenses

Q: How old slots?

A: About 12 years

Q: Have the head gates been rehabbed?

A: New 6-7 years ago

Q: Gate repairs?

A: A couple years ago on #6, continuous PM.

Q: Concrete repair around gates?

A: None recalled

Q: Last time painted?

A: Late last year, and before that ~ 6 – 7 years ago

Q: Erosion issues with slope of retaining wall?

A: No

Q: Open spillway studies? Risk mitigation because of Orville event?

A: Plan submitted to FERC per their request. Awaiting approval.

Q: Any issues following 1994 hurricane?

A: None recalled

Q: When were interconnection underground cables changed?

A: No.

Q: What analysis done of spillway during design? Who designed it?

A: Subsurface soil samples and lithologic logs. Mead & Hunt, Inc.

Q: Friction tested on trunnion pins?

A: Not to our knowledge.

Q: GSU age and condition?

A: One in 1985 and the other one replaced in 2007. In good operating condition. Oil tested annually by Doble.

Q: In “2015 Underwater Structural Inspection” report, page 62, divers report a “generator impellor at base of retention wall”. Please provide explanation and report.

A: The impeller noted was portions of the turbine impeller that was removed by the previous owner/operator, Florida Power Corp., prior to relinquishing the facility to the State of Florida.

Q: Please provide name of original turbine manufacturer.

A: The City refurbished the powerhouse with turbines manufactured by Dominion Engineering Works.

Q: Can you please provide a list of any repairs to the dam? I’ve seen a folder with a repair due a damage done in 1957. Apart from the new spillway construction has any other improvement/repairs been done? A: Yes, toe drains improvements were completed in mid- to late 1990s, and a filter bed was installed in 2016 to address potential uplift at the north end of the earthen dam.

Q: Can you please provide the reports for electrical testing ?

A: Testing completed as part of overhauls completed in 1986, 1996 and 2007.

Q: Why did Unit 2 not operate for the years of 2007, 2008 and 2013

A: Lack of water in 2007, 2008. Lack of water, exciter repairs in 2013

Q: Why did Unit 1 not operate for the year of 2011

A: Lack of water in 2011

Structure Detail

Q: Are you able to raise lake level?

A: No, we don’t want to do that; recreational opportunities must be maintained.

Q: Significance of rocks at the toe (bottom of embankment)?

A: Per FERC, original riprap bed exhibiting significant weathering. Riprap replenished in the past year

Q: Any slope erosion (embankment)?

A: None

Q: What do pink flags signify?

A: Quarter-sized boil, filter bed installation scheduled for summer 2017.

Q: What is minimum flow?

A: Run of river, match gauge upstream

Q: High flow frequency?

A: Weather dependent.

Q: Water quality monitoring present down stream?

A: Temperature restrictions? No requirements.

Q: How much accessible with ballast?

A: Accessible; Hollow beneath catwalk, ballast is 5 – 6 feet below the deck.

Q: Any vents in concrete?

A: About 8, 3in diameter holes

Q: Has FERC asked to study spillway (instability; lift off with high flow)?

A: None, other than the recent Oroville Spillway related study.

Q: How many piezometer wells present?

A: 42

Q: Back up generator?

A: 500 gal diesel tank, double walled; operates gates and lights

Q: Can they be run with battery? A: No

Q: What is purpose of arches?

A: Structural

Q: What is Amberson filled with?

A: Concrete sand ballast

Q: Construction of remote dike?

A: Soil; materials excavated during aux spillway construction.

Q: Artesian well (office water, cooling)?

A: No, 5-horse submersible

Q: How deep is intake?

A: 31.85 ft

Q: Turbine generator set info?

A: See nameplate photos

Q: What's your aluminum slot? How old are slots?

A: Concrete wall built in 1985 and aluminum flashboard constructed and delivered in 2012.

Q: Is there any recent evaluation of the stability of the dam including also factor of safety?

A: Not of the earthen dam

Q: Spillway drawings and calculations were found but only for review. Would IFC or even as built be available?

A: Question unclear.

Q: Please provide more information regarding the design and construction of the sand filter as installed on the downstream dam toe. Can you also provide any flow measurement and observation records of the outflow.

A: See FERC approval of QCIP for the sand filter

Q: How often does plant trip for utility, external reasons?

A: Rare, infrequent

Q: How often does unit trip for unit issue reasons?

A: Rare, infrequent

Q: Are all three generating units fully operational at this time?

A: Unit 2 is awaiting a rebuilt hydraulic cylinder. Other than the hydraulic cylinder, all three units are fully operational.

Q: Are there any known issues (major damage, operational limits, etc.) with generating units at this time?

A: None.

Q: Are there any known issues (major damage, operational limits, etc.) with generator step-up transformers at this time?

A: None.

Requested Documents

Interconnection Agreement with Duke Energy

Minimum and maximum flow (cfs) through each turbine – See ‘Hydraulic Turbine Consultants Performance Data.pdf’ on FTP Site.

Turbine and generator operation and maintenance manuals – see manuals on FTP Site.

Turbine governor (Rexa) operator’s manual – See REXA manual on FTP Site.

Drawings for installed but uncompleted control system...For this and the following sub-questions pertaining to controls – These units are operated manually with some minor remote monitoring and alarming capabilities. Currently, there are no additional plans to enhance the system.

Additional documents will be available through the FTP site by 9 a.m. on July 27.

- **Detailed project networking architecture diagram showing all IEDs, protections, PLCs, controllers, SCADA servers, switches, patch panels, etc. and communications media that are part of the communications design**
- **Diagram showing the flow of information data.**
- **Diagram that explains the control hierarchy thought (level 0, level 1, etc.).**
- **Clarify how relays and electronic devices will communicate with SCADA and under what protocols.**
- **Information about ICT cabinets.**
- **Information on any HMI developed**
- **Information on historical server**
- **State of completion of system**

Arc Flash study report and mitigation activities

A financial statement showing operating expenses, prepared by COT for the DEP

Copy of daily logsheets

Maintenance logs 5 years

Maintenance reports 5 years

Outage reports 5 years

Generator, GSU transformer and OCB testing reports 5 years

All historical generation records from 1985 to 2007

Last gantry crane inspection report
Updated drawing showing the instrumentation on the dam and concrete structures
Additional documents will be available through the FTP site by 9 a.m. on July 27.

In all other respects, the contract documents of which this is an Addendum, and attachments relative thereto, shall remain in full force and effect.