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Department of General Services
Energy and Resource Management Office
401 North Street, Room 403 North Office, Harrisburg, PA 17120

Bulletin Number 3

on

Project No. GESA 2022-1 – Request for Quotes for a Guaranteed Energy Savings Project at:

Department of Conservation and Natural Resources, State Parks and Forests, Eastern Region, Pennsylvania

Quote Submission Deadline: Wednesday, August 17, 2022 Time of Opening: 2:00 PM

REQUEST FOR INFORMATION

Ridley Creek State Park

- 1. How many staff occupy the building? **Maintenance Building 7; Mansion 10-12; PA Resources Council 0 (currently vacant); Comfort Stations 0**
- 2. What is the number of restrooms in the building? **Maintenance 1; Mansion 4; PRC 2; Four seasonal restroom facilities 2**
- 3. Is there overnight use of the facility, such as showers? **No.**
- 4. What is the traffic count for the park? **2018 885,470**; **2019 976,188**; **2020 1,413,383**; **2021 961.470**
- 5. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? Mansion, 4 units, all electric/programmable; Maintenance, 1 unit, electric/programmable; 1555 Delchester, 1 unit, electric/programmable; PA Resources Council, 2 units, both electric/programmable
- 6. What are the names of buildings that have window A/C units and how many units are there? **PA Resources Council**, **2 units**; **1555 Delchester**, **5 units**; **Mansion**, **1 unit**
- 7. Are there any uninsulated pipes, if so at which buildings? **Yes, however; the pipes that are supposed to be insulated, are.**
- 8. What is the current make and model of the 30-ton condensing unit and what year was it installed? Make: Trane; Model: RAUCC30EPX13ABDF00020; Install Date: approximately 2002.

Nolde Forest Environmental Education Center

1. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? Mansion/Park Office: natural gas furnace with single electric temp. controller in basement, 8 hot water and electric heat

AC units on 3 condensers with 6 total programable thermostats. This is an essential system but does not work; parts are not available. McConnell Education Classroom: Natural gas furnace, electric AC unit with 1 programable thermostat. Maintenance: Natural gas furnace with 1 programable thermostat. Forester's House/Residence: Oil furnace with 1 programable thermostat.

- 2. What are the names of buildings that have window A/C units, and how many are there? Forester's House/Residence: 2 electric window AC units.
- 3. Are there any uninsulated pipes, if so at which buildings? **No.**
- 4. What is the current HVAC system for the Mansion and what year was it installed? **The** Mansion's primary HVAC systems are a blend of various makes, models, and years of components. There are two Lochinvar Power-fin hot water furnaces that were installed in 2019, but the system has been off and inoperable since June 6th, 2022. This is due to the air handling units (1970s) having blown bearings, bent shafts, and no replaceable parts for them. The Baldor three phase water pumps work when the system is up, though it is nearing end of life. The ATC control panel was installed in the 1990s. Various controls and regulators have been bypassed throughout the years creating an unreliable system. There is an Onan 30 EK generator for backup, however; it was locked out tagged out more than 10 years ago for unknown reasons. The auxiliary system is off and inoperable. This secondary system was installed in the 1990s to provide more efficient and direct temperature control to employee offices. The Commonwealth renovated the Mansion in the 1970s to transition the historic building from a residence to a place of employment. When this occurred, walls and doorways were moved which created situations where hot water radiators are now in hallways, rather than in staff offices. The system did not provide reasonable cooling to the staff offices, and so an auxiliary system was installed. This system consists of 8 wall units, 3 outdoor condensing units, and 6 thermostats. It is in-line with the hot water piping and uses electric to power fans and AC unit. Parts are no longer available for these units and pieces were robbed from one unit to repair another unit so often that none of them are operable or repairable. There is zero cooling on the second floor of the Mansion which leads to uncomfortable conditions for the five staff offices and the employee kitchen on that floor. There is old duct work in the attic, though it was capped at some point in the past and appears irreparable. The vents were closed or sealed many years prior to 2019. Photographs of the primary HVAC system and the auxiliary unit and thermostat are below.
- 5. What model and make are the three existing condensing units outside the mansion? **EMI** America Series, ETL Listed, Model (possibly) 95985.









Jacobsburg Environmental Education Center

- 1. How many staff occupy the building? Manager's Residence: 1 (Manager and his family).
- 2. What is the number of restrooms in the building? **2.5 at residence, 2 at comfort station**
- 3. Is there overnight use of the facility, such as showers? **2 Showers at residence, 0 in public restroom**
- 4. What is the traffic count for the park? There is an annual attendance of anywhere from 275K to 300K in the park.
- 5. What are the names of buildings that use oil and wood? **Manager's residence.**
- 6. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? Residence has 2: 1 dial and 1 digital nonprogrammable; Maintenance has 5 dials; Public Restroom has 2, both restrooms are controlled by 1 dial; Visitor Center/Park Office has 12, which are controlled by the BAS system and dial on wall.
- 7. What are the names of buildings that have window A/C units, and how many are there? **Managers Residence has 5 and Maintenance Building has 1.**
- 8. Are there any uninsulated pipes, if so at which buildings? **No.**

French Creek State Park

- What are the names of buildings that use oil, propane, and wood for heating? POM
 residence, APM residence, maintenance use propane; Hopewell restroom, loop A, B, C,
 D restrooms use wood; carpenter shop maintenance, both residences are aux. wood
 heat.
- 2. What are the names of buildings that have window A/C units? **APM residence**, maintenance, rarely used in carpenter's shop and EE building.
- 3. What is the current heating system for the residences and what year was it installed? **Oil POM residence, 2018; APM residence, unknown but older.**
- 4. What is the HVAC system for the main office? **Geothermal.**

- 5. What needs to be repaired/upgraded in the geothermal system? There are air handler issues, as they are nearly 30 years old. System does not run the way it was designed.
- 6. What needs to be upgraded in the solar panel system, how large is it? It's a low wattage system that could be upgraded or expanded to produce more solar; installed in 2008.

Lackawanna State Park

- 1. What are the names of buildings that use propane and oil? Maintenance uses propane for heat and domestic hot water. Ranger station uses propane for a on demand hot water heater. The Managers residence uses propane for cooking stove and heating oil for heat. The future lake side lodge uses heating oil for heat. The main office has a diesel-powered backup generator.
- 2. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? The Maintenance building has two slide/dial thermostats, one for each ceiling hung unit. The future lake side lodge has one dial thermostat to control the steam boiler. The residence has one programable thermostat to control the steam boiler and the Mitsubishi unit has an internal thermostat. The office has programable thermostats for air handlers, electric thermostats for most geo slab units and one dial for original geo slab. All other heaters in parks have internal regulated thermostats.
- 3. What are the names of buildings that have window A/C units and how many are there? The contact station has 1 window AC unit, and the ranger station has 2 window AC units.
- 4. Are there any uninsulated pipes, if so at which buildings? The future lake side lodge does not have any pipe insulation. The residence has about 90% of the domestic hot water pipes insulated but does not have any on the boiler pipes. Most other buildings have insulation where needed depending on if the building is seasonal or not.
- 5. What are the occupied times for the energy recovery unit and what building is it housed in? The timer for the ERU is set from 06:00 to 18:00. It is located at the main office above the Environmental learning room.
- 6. What is the maintenance garage's current heating system and what year was it installed? The Maintenance building is heated by three propane units. There are two "Hot Dawg" ceiling mounted units. One is model # HD100AS0121, the other is model # HD60AS0121. There is also a wall mounted Hearthrite model HB30TL-1 with an internal thermostat.
- 7. What is the make and model of the residence steam boiler and what year was it installed? The future lake side lodge has a Peerless stem boiler, model # ECT-04-175/spt. Year of origin is unknown. The residence has a Weil McLain steam boiler. Model is unreadable and year of origin is unknown.

Neshaminy State Park

1. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? They're all dial in the office. One at maintenance is programmable, the one in maintenance lunchroom is electric, and the one in the main bathroom is electric.

- 2. What are the names of buildings that have window A/C units, and how many are there? **The office has 4 and the maintenance building has 2 window units.**
- 3. Are there any uninsulated pipes, if so at which buildings? **They're all uninsulated except in residence basement.**
- 4. What is the make and model of the boiler for the manager's residence and what year was it installed? Not sure how old the boiler is but service dates to 1996. Photos of the labels are below.



Tyler State Park

- 1. What is the annual use (in gallons) of the building? There is one bill for the entire park, so each building's usage is unknown. However, most of the water usage is at the boathouse.
- 2. How many staff occupy the building? The main office has 4 salaried employees and 5 seasonal employees using it. Maintenance has 3 salaried and 4 seasonal.
- 3. What is the number of restrooms in the building? **Office 3, Maintenance 1**
- 4. Is there overnight use of the facility, such as showers? **No overnight facilities.**
- 5. What is the traffic count for the park? **Prior to the COVID pandemic, the average annual visitation was 800,000 900,000. During 2020, there was an increase to 1,200,00 and in 2021 it was approximately 1,100,000.**
- 6. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? The office has 4 programmable thermostats (Lux and Invensys), and two dial thermostats for heating (both Honeywell). Maintenance has one boiler for the supervisor's office and first 2 bays. It is not programmable. The other bays, as well as the 2 year-round restrooms and the lift station, have electric heating units fixed in the corners. They are not programmable.

- 7. What are the names of buildings that have window A/C units, and how many are there?

 Main office 1, Maintenance 1
- 8. Are there any uninsulated pipes, if so at which buildings? **All pipes in buildings that aren't** winterized are insulated. However, the insulation has been confirmed as asbestos.
- 9. What is the model and make of the 2 existing condensing units for the park office and what year were they installed? York and Payne. Maintenance staff says one of them was installed in 2019; unsure of installation date for the other unit.

Tobyhanna State Park

- 1. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? The park office has individual thermostats for each heating zone; 4 dial type and 1 electric. The carpenter shop has an electric thermostat. The primary maintenance building has an electric thermostat. The residence has an electric thermostat.
- 2. What are the names of buildings that have window A/C units and how many are there? The park office has 3 wall mounted window A/C units. The primary maintenance building has 2 wall mounted window A/C units. The park residence has 3 window A/C units.
- 3. Are there any uninsulated pipes, if so at which buildings? There are some uninsulated pipes in the primary maintenance building. All other heated buildings have insulated pipes.
- 4. What make, model and quantity of heat pumps does the main office have? What year were they installed? The office does not have heat pumps. We have electric base board with propane secondary in the individual offices.
- 5. What is the current hot water system for the beach house and main office? The office has a single 40-gallon electric hot water tank. The beach house has dual 119-gallon electric hot water tanks.
- 6. What is the make and model of the furnace in the carpenter shop? What year was it installed? Hallmark Warm Air Furnace manufactured by Boyertown Furnace Co Model number HB85, Serial No. 514219. We have maintenance records going back to 2007.



Beltzville State Park

- 1. What are the names of buildings that use oil and propane? Manager's Residence & Maintenance Building.
- 2. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? **Managers Residence, 5 Electronic; Maintenance, 1 Electronic and 5 Dial.**
- 3. What are the names of buildings that have window A/C units, and how many are there? Manager's Residence 6; Maintenance Building 1; Environmental Education Center 1; Sewage Treatment Plant 1.
- 4. Are there any uninsulated pipes, if so at which buildings? **No**.
- 5. What is the current make and model of the HVAC system in the park office and what year was it installed? **Lennox HS19-311V-4P Installed in May 2009.**

Promised Land State Park

- 1. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? Maintenance: 2 (1 digital, 1 dial [heat only]); Office: 1 dial; Pickerel Point bath house: 5 digital (4 electric, 1 battery); Deerfield: no thermostat; Main day use bathroom: no thermostat; Satellite day use bathroom: wall heaters with built-in thermostats; Cabin Colony: wood fireplaces, bathrooms have ceiling heaters with built-in thermostats; Sewer Treatment Plant: 1 lever type.
- 2. What are the names of buildings that have window A/C units and how many are there? None of the buildings listed on the RFQ have window AC units. Only residences.
- 3. Are there any uninsulated pipes, if so at which buildings? Yes; Maintenance, Office, Main Day Use Bathroom, Satellite Day Use Bathroom, Cabin Colony.
- 4. What is the make and model of the park office generator and what year was it installed? **Dayton Model 4W117H, Serial 1849032. No date. Original to building.**
- 5. What type of heating system is used in the maintenance building and why does it need to be expanded? **Forced hot air. No AC cooling.**
- 6. What is the make and model of the water heaters for the day use area and what year was it installed? Three (3) Takagi on-demand water heaters Model T-M32ASME. Installed 2017.
- 7. What issues does the current feed system have during the winter? The water tanks need to be drained due to freezing issues. Campsites and cottages are open year-round If there are power outages, there isn't water to these areas since water pressure is lost immediately. In the summer, due to water towers, usually power is restored before water pressure is lost. Power is often lost in the winter due to the remote location of the power lines.

Nescopeck State Park

- 1. What are the names of buildings that use oil and propane? **Heating oil at POM Residence**; **propane heat at ARM Residence**.
- What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? APM Residence has 7 dial; POM Residence has 2 dial; ARM Residence has 3 dial; Well House has 1 Electric heater ceiling

- mount unit, dial controlled; Office has 3 Electric; Maintenance Garage has 2 Electric heater ceiling mount units, dial controlled.
- 3. What are the names of buildings that have window A/C units and how many are there? **APM** Residence is using 1 window unit (3 available in storage at residence).
- 4. Are there any uninsulated pipes, if so at which buildings? **Yes, in the APM Residence, POM Residence, ARM Residence, Well House and Office.**

Forestry District #18 - Weiser State Forest

- 1. What are the names of buildings that use oil and wood pellets? RMC: Pellets are fuel source for heat ONLY at RMC and RMC garage; Bear Gap: oil burner; Roaring Creek Stone House: oil burner; Haldeman Stone House: geothermal; Fire Cache: oil hot water baseboard; Fire Warehouse: oil heat; Penn Forest: oil heat; Locust Valley: oil heat and hot water.
- 2. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? At RMC: Price 8 electric; Colman 1 dial; Tekmar 22 electric; Daikin 7 electric. At RMC garage: Daikin 1 electric. At Bear Gap: White Rogers 1 programable. At Roaring Creek Stone House: White Rogers 1 programable. At Haldeman Stone House: Honeywell, 1 ProSeries programable. At Fire Cache office: Honeywell, 1 dial non-programable. At Warehouse: Honeywell, 1 dial non-programable. At Penn Forest: Honeywell, 3 dial non-programable. At Locust Valley: Aube, 2 programable.
- 3. What are the names of buildings that have window A/C units and how many are there? **Bear Gap (2) window units; Fire Cache office (1) window unit**
- 4. Are there any uninsulated pipes, if so at which buildings? **Yes; Roaring Creek Stone House; Haldeman Stone House maintenance room; Penn Forest**
- 5. What is the current HVAC system for the district office and the garage buildings? **RMC (2) Daikin units; RMC Shop (1) Daikin Minisplit.**

Forestry District #20 - Loyalsock State Forest

- 1. What are the current controls for each building? What is the number of thermostats and what is their make (dial, electric, programmable)? Forest Maintenance HQs, Office Building: 7 thermostats, dial type for heat mats in the floor. The off peak electric thermal storage units (7) each have setting controls on the units themselves. There is an additional dial/mercury thermostat for the AC unit. Hillsgrove Residence: 1 digital programmable thermostat for the oil-fired heat pump. Hillsgrove Maintenance Shop: 1 dial/mercury thermostat. Resource Management Center: 7 temperature sensors (Alerton). System runs with Alerton BacTalk software. Resource Management Center-Fire Apparatus Building/Garage: 1 temperature sensor. Controlled through same system as RMC.
- 2. What are the names of buildings that have window A/C units and how many are there? **No window units.**
- 3. Are there any uninsulated pipes, if so at which buildings? **All pipes at Forest Maintenance HQs, Office Building, Residence and Shop are uninsulated.**
- 4. What is the failure that is arising from the office building sand mound pump? **The failure** with the sand mound system has been resolved. The float tree was not designed

- properly, and the system was not pumping when it should have been. A new float tree was installed in the tank and new circuitry in the panel. Since the repairs, the system has not failed. It no longer needs to be considered.
- 5. What is the make and model of the office building sand mound pump and what was the year it was installed? Sand mound and system was installed in 2008. Make and model no longer relevant since the system was repaired.
- 6. What is the maintenance building's current air conditioning system? **AC unit at Forest Maintenance HQs, Office Building is a Carrier 38TKB042300.**

Rebecca Tomlinson, RFQ Coordinator Energy & Resource Management Office

Please acknowledge receipt of Bulletin by email response to Becky Tomlinson at: retomlinso@pa.gov