

April 5, 2017

Michael Borchers
Engineering Manager
City of Greensboro Water Resources Department
2602 South Elm-Eugene Street
Greensboro, NC 27406

REFERENCE: Lake Townsend Energy Plan

Dear Mr. Borchers:

Thank you for the opportunity to submit this proposal to assist the City of Greensboro with the energy management efforts at Lake Townsend. We are looking forward to beginning this project.

BACKGROUND, APPROACH & BENEFITS

The City of Greensboro Water Resources Department desires to begin energy management and optimization efforts on its facilities to achieve various objectives and goals, to reduce costs, improve operations and plan for future conditions. The initial focus of the effort will be on the Lake Townsend facility.

As a general guide to our work, we will utilize The Commissioning Process for Existing Systems and Assemblies, ASHRAE Guideline 0.2P. *This guideline is a general process for planning, assessment, investigation, implementation and ongoing maintenance of existing systems of all types.* A brief list of the advantages of this guideline pertinent to your project include:

- It establishes a team to assist with the development of project objectives, strategies, goals and organizational buy-in
- The process includes the review of existing documentation and operational staff interviews. As discussed in our meetings, this will create familiarity between us the facility, and your staff.
- It assures thorough documentation. Using this process, the master plan documentation begins immediately, not in a later phase.
- Flexibility – the guideline is designed as an iterative process. As new information is discovered, the plan, objectives and strategies can be adjusted. *The process encourages efficiency in achieving results related to the defined objectives, as opposed to strict conformance to the text of the process.* Good communication, judgement and common sense are encouraged.
- Modular – scopes for future assessments, investigations and implementations are developed as the team deems appropriate to assure that all efforts are well

directed in support of the defined objectives. These documents become the basis of your master plan and they are updated to incorporate changes.

- Robustness – the process provides for all the functionality of an “energy audit”, including measurement & verification, while fully accommodating the additional concerns of risk management and resiliency and reliability that you discussed in our meeting on 2/17/17.
- Integration – the process easily integrates with other business systems such as maintenance, training, capital planning and finance

At this very early stage of your endeavor, we should expect the need to make adjustments as new ideas emerge. I am very comfortable suggesting this guideline and feel that it would be “Best Practice” for your facility.

We envision this project as a very collaborative effort involving maintenance, area technicians and project management staff from the City of Greensboro for planning and status updates.

PROPOSED SCOPE OF SERVICES

Below are general scope categories for the project. As more information becomes available, ENPULSE will adjust the scope of work. Again, ASHRAE and Building Commissioning Association Guidelines will be used throughout the entire process.

Only Planning and assessment activities of the guidelines process are included in the scope of this proposal.

PHASE	Reference	TASK
Planning	5.2	Define Roles and Responsibilities
Planning	5.2	Define Scope of Work & Schedule
Planning	5.3	Define Objectives and Goals
Planning	6.4	Define the CFR (Current Facility Requirements)
Planning	6.7	Review Existing Documentation
Planning	6.7	Interview Key O & M Personnel
Planning	6.7	Perform a Cursory Walk-Through
Planning	6.5	Develop Plan Outline (Draft)
Assessment	6.3	Select the Initial Project Team
Assessment	6.7	Perform Assessments – Initial assessments may include: <ul style="list-style-type: none">• Utility data (monthly analysis)• Utility incentives• Documentation• Staff interviews• Site walkthrough• Initial capital plan
Assessment	6.8	Initial Project Plan Report with Assessment Report
Assessment	6.10	Obtain Owner Acceptance and Decision to Proceed

A strong maintenance interface and energy data availability will be required to complete the scope above.

DELIVERABLES – ASSESMENT PHASE

The commissioning process is an Owner centric process. It is for the benefit of the Owner versus other stakeholders. It is designed to be flexible and it is expected to be iterative and modified once additional information is received.

ENPULSE, as the Commissioning Professional, will serve as the facilitator, and will help gather and assemble information, distribute the documentation so the process is transparent. ENPULSE will provide leadership, administrative support, and technical expertise which will help achieve the program's goals.

The deliverables specific deliverables shall include:

- Development and documentation of goals and objectives
- Development and documentation of Current Facility Requirements
- Development and execution of assessments and reports
- Provide the Issues and Resolution Log. This document is a detailed compilation and status of the findings, recommendations, and implementation. It starts at the beginning when the goals are developed and is updated throughout the project. After the project, this log will be maintained and updated to assist the Owner in keeping their systems at optimal performance and to document system changes.

SCHEDULE

We intend to complete with the planning phase within 6 weeks. Please keep in mind, *“The process probably will be iterative and interactive where tasks and even some phases are done more than once, as needed, for the specific facility and systems.”* (ASHRAE Guideline 0.2P, The Commissioning Process for Existing Systems and Assemblies). Using this process we expect to achieve outstanding results.

Start – 5/1/17

Duration: 60 – 90 days

FEES, INVOICING AND TERMS:

ENPULSE's fee proposal for the above scope is **\$49, 500**. Our fee schedule is listed below.

PHASE	PERCENTAGE
Planning	50%
Assessments	50%

Our standard terms are net 14 days. Please let us know if you anticipate any issues with these terms.

POTENTIAL ADDITIONAL RESOURCES

The following resources will be used on an as needed basis:

- Paul Levy, PE
- Utility Tech

It is anticipated that each of the above resources will be utilized for less than 10% of the required project effort.

YOUR RESPONSIBILITIES:

- Provide access to facility and staff
- Provide utility usage data
- Provide clear guidance, communications, and access to information as needed and requested in a timely manner.

LIMITATIONS & EXCLUSIONS:

- All other items not specifically listed in scope

ADDITIONAL SERVICES:

This proposal provides support for the Planning and Assessment phases only. Additional phases, Investigations, Implementations, etc. are not included.

Additional work items not specifically mentioned are not included in this scope. If required, we will be happy to provide proposals for additional services beyond the scope of services offered herein.

CLOSING

If there are any peculiar constraints that we are not aware of, please let us know and we will adjust our fee accordingly.

We appreciate the opportunity to work on this project with you and look forward to a successful project. Please feel free to contact us if you have any questions or comments.

Sincerely,

A handwritten signature in black ink, appearing to read 'Derrick Giles', with a stylized flourish at the end.

Derrick Giles
President

Cc:

ATTACHMENTS:

None