#### Support for Clean Water Act 404 permitting and Alternatives analysis

## Introduction

Progress Energy Carolinas, Inc. (PEC) is soliciting proposals for technical support in connection with environmental permitting of two additional nuclear power generation units at the existing Shearon Harris Nuclear Plant (HNP) in New Hill, North Carolina. The project, known as the Harris Advanced Reactor (HAR) project, is the subject of a Combined Operating License Application (COLA) submitted to the US Nuclear Regulatory Commission (NRC) in February 2008. Major environmental permits for the project will include Clean Water Act Section 404 permit for dredged or fill material and Clean Water Act Section 401 Water Quality Certification. The 404 permit, to be issued by the US Army Corps of Engineers (ACOE), must be for the Least Environmentally Damaging Practicable Alternative (LEDPA) that meets the needs of the applicant. The permit application to ACOE must include information that will support the ACOE review of alternatives and enable the agency to make the LEDPA determination.

This RFP addresses the evaluation of alternatives to the proposed project and other support for the ACOE permitting process. PEC has studied alternative sites and technologies and information exists to support the development of a LEDPA analysis. An independent review of those studies is needed to evaluate whether the information is sufficient to support the LEDPA determination, and the alternatives information needs to be compiled into a document that can be included in the 404 permit application for ACOE review. Other technical support needed for the 404 permitting process is likely to include participation in development of a mitigation plan for the project and help in preparing other permit application elements.

Please describe your approach to the following tasks and provide your proposed scope of work, any suggested alternative tasks, assumptions, exceptions, staffing, schedule and cost estimate (broken down by task and person or staff level). Please also provide a billing rate schedule.

## **Scope of Services**

PEC is seeking the services of a qualified firm to prepare a LEDPA analysis for the 404 permit application and to provide other technical support during the application preparation and review process. The following services are needed:

### Task 1 – LEDPA Analysis

The LEDPA analysis is a key element of the 404 permit application for the HAR project. This task includes the efforts necessary to evaluate PEC's existing alternatives information; identify gaps in the information, if any, and gather information to fill the gaps; and prepare an alternatives analysis report that will successfully support a LEDPA determination by ACOE. The following subtasks are envisioned:

• Prepare Study plan for the LEDPA analysis – To support NRC development of the Environmental Impact Statement (EIS) for the project, PEC must address how it will present its evaluation of alternatives for the EIS and the 404 permit application. The Study Plan will outline the activities

- to be performed to develop and document the LEDPA analysis. Assume one meeting with PEC for this sub-task.
- Review background information This will involve review of existing site evaluation information (siting study), alternatives described in the Environmental Report and other analyses performed by PEC or its advisors to support the selection of the project concept and location.
- Identify gaps and additional information needed Compare existing information with what is needed, based on ACOE regulations and the firm's experience, to demonstrate LEDPA. Identify information gaps or additional evaluations needed to support a complete LEDPA demonstration. Summarize the gaps and/or information needs in a Technical Memo, and assume attendance at one meeting with PEC to discuss the findings from this effort.
- Gather additional info to address gaps Implement the recommendations from the previous subtask and gather or obtain the information needed for the LEDPA document. The detailed needs list will not be available until the previous task is completed, so for purposes of this proposal assume that additional desktop evaluations of wetlands/streams/habitat will be needed for one alternative (greenfield) site to provide information equivalent to what exists for the selected site. Assume no field work will be needed.
- Prepare LEDPA analysis report Using the information reviewed and supplemented during the
  above subtasks, prepare an alternatives analysis that will addresses the LEDPA criterion.
  Deliverables for this task will include an internal Technical Memo for PEC use regarding the
  LEDPA findings and any associated issues or concerns; a White Paper presenting the alternatives
  analysis, suitable for submittal to ACOE as part of the 404 application package; presentation
  slides summarizing the alternatives analysis; and attendance at one meeting with PEC to discuss
  the Technical Memo and White Paper.

# Task 2 – Technical Support for Permitting activities

The selected firm may also be requested to provide technical support services during preparation of the 404 permit application package, as well as support during the review process. Specific areas of support could include assistance in brainstorming mitigation alternatives and development of the overall mitigation plan for the project; attendance at meetings with ACOE and/or other agency stakeholders to discuss the LEDPA analysis; or other technical support, as requested. The detailed scope of these services is unknown at this time, so for purposes of this proposal assume 200 hours of effort for this task.