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#### REVISED STATEMENT OF WORK

Project Title: Technical Assistance for the Development of an Environmental Assessment for the St. Lucie Unit 2 Nuclear Power Plant Extended Power Uprate Licensing Action, U.S. Nuclear Regulatory Commission, Office of Nuclear Reactor Regulation

JOB CODE:	J-4388
TASK ORDER:	4
B&R NUMBER:	2011-x0200-20-11-4-148
NRC ISSUING OFFICE:	Office of Nuclear Reactor Regulation
NRC PROJECT OFFICER (PO):	Brandon Cherry – (301) 415-3154 <u>Brandon.Cherry@nrc.gov</u>
TECHNICAL PROJECT MANAGER (TPM):	Richard Bulavinetz – (301) 415-3607 <u>Richard.Bulavinetz@nrc.gov</u>
FEE RECOVERABLE:	YES
TAC NUMBER:	TBD
DOCKET NUMBER:	50-335
PERIOD OF PERFORMANCE:	Four months from award
TYPE OF CONTRACT:	Cost Plus Fixed Fee, Task Ordering
PERFORMING ORGANIZATION:	Center for Nuclear Waste Regulatory Analyses (CNWRA hereafter Center)

## 1.0 BACKGROUND

The U.S. Nuclear Regulatory Commission (NRC) staff reviews applications from nuclear power plants for licensing actions. The licensing actions can range from simple administrative changes to their license, requests for exemptions from NRC regulations, to complex technical changes related to all aspects of the operation of the plant (i.e., nuclear safety, security, emergency preparedness, nuclear fuel, fire protection, radiation protection, quality assurance, maintenance, radioactive waste, non-radioactive waste, accident consequences, and power uprates).

The NRC staff performs an environmental assessment (EA) on the licensing actions in accordance with the requirements in 10 CFR Part 51, Subpart A – National Environmental Policy Act (NEPA) – Regulations Implementing Section 102(2).

The NRC staff is seeking assistance with the preparation of a complex EA for a request for an extended power uprate (EPU) from a nuclear power plant.

# 2.0 OBJECTIVE

The objective of Task Order No. 4 (TO 4) is to obtain assistance with the preparation of the complex EA for the St. Lucie Unit 2 (St. Lucie) nuclear power plant EPU licensing action, including a preliminary meeting with the Center and obtaining related necessary information (e.g., requests for additional information to the licensee, and any site-specific information), to ensure that a thorough evaluation is performed. The St. Lucie Unit 2 nuclear power plant is located on Hutchinson Island in St. Lucie County, approximately 4.0 miles southeast of Fort Pierce, Florida.

## 3.0 STAFFING

The staff assigned by the Center for Nuclear Waste Regulatory Analyses (the "Center") to the St. Lucie Unit 2 TO should have a general understanding of the range of issues covered by NRC EAs as outlined in the NRC's Office of Nuclear Reactor Regulation Office Instruction LIC-203, Revision 2. Center staff should have experience in the technical and regulatory aspects necessary for evaluating the environmental impacts for the broad range of licensing actions from nuclear power plants in the following areas: radiological and human health; land use; water use; air resources; ecology; threatened, endangered, and protected species and essential fish habitat; historical and cultural resources; socioeconomics and environmental justice, and costbenefit analysis.

## 4.0 SCOPE OF WORK AND DELIVERABLES

The Center shall prepare a complex EA for the EPU licensing action for the St. Lucie Unit 2 nuclear power plant licensed by the NRC.

The work conducted under Task 2 (below) shall be subject to the project management requirements as described in Section 5.0 of this Statement of Work (SOW).

## 4.1 TASK 1: MEETING TO PLAN TASKS 2 & 3

The Center's Project Manager (CPM) and one Subject Matter Expert (SME) shall first meet with the NRC Project Officer (PO) and Technical Project Manager (TPM) in the Center's office in Rockville, MD, for task planning of the work to be performed under this TO. The SME may participate via a teleconference call.

The level of effort for work under Task 1 for this kickoff meeting is two hours each for the CPM and SME.

### 4.2 TASK 2: COMPLETE COMPLEX ENVIRONMENTAL ASSESSMENT

The steps and procedures for completing Task 2 for a complex EA are broken down into the following Subtasks: Collect and Review Information (Subtask 2A); Plan, Draft, and Complete a Complex EA (Subtask 2B); Preparation of Draft EA (Subtask 2B1); and Revise Draft EA to Incorporate NRC Comments (Subtask 2B2). Details of each subtask are outlined below.

A licensing action for increasing the authorized power level (i.e., extended power uprate) at the St. Lucie Unit 2 nuclear power plant is complex, and typically involves a moderate to lengthy EA discussion (i.e., approximately 20 – 30 pages depending on the magnitude of the proposed power increase). Detailed information is required to evaluate the environmental impacts of an extended power uprate.

The total level of effort for work under Task 2 to complete the St. Lucie Unit 2 EPU EA is as follows: 4 hours by the Center's CPM; 88 hours by the Center's SME; and 12 hours by the Center's Administrative staff.

The Center shall submit the draft St. Lucie Unit 2 EPU EA to the NRC TPM no later than 25 business days after receipt of the licensing action information from the NRC TPM, as specified in Subtask 2B1. The Center shall submit the revised St. Lucie Unit 2 EPU EA to the NRC TPM no later than 15 business days after receipt of the NRC TPM's comments as specified in Subtask 2B2.

Subtask 2A: Collect and Review Information

The NRC Technical Project Manager (TPM) shall provide the Center with the license action request (LAR) submitted by the licensee, Florida Power and Light (FPL), for the St. Lucie Unit 2 nuclear power plant and associated relevant documents.

The Center shall review the LAR documents to determine if the licensee provided adequate information needed for the EA. The Center shall identify and list areas that require additional information and provide that list to the NRC TPM.

The Center shall keep the NRC TPM informed (either via e-mail, phone call, or personal meeting) on a bi-weekly basis and describe the information reviewed under this task, including deficiencies found in the LAR, and describe the actions to be taken to complete the St. Lucie Unit 2 EPU EA in a timely manner. Within 10 business days after receipt of the LAR, the Center shall provide the NRC TPM with a list of the deficiencies, if any, of information provided in the LAR. The NRC shall review this list and communicate the deficiencies to the licensee. If a formal Request for Additional Information (RAI) is submitted to the licensee, the NRC will adjust the work schedule accordingly. The Center shall consider any coordination necessary to cover laws and regulations other than NEPA.

The level of effort for work under Subtask 2A to collect and review information for the St. Lucie Unit 2 EPU licensing action is approximately 24 hours performed by the Center's SME.

Subtask 2B: Plan, Draft and Complete a Complex Environmental Assessment

The scope of work under Subtask 2B shall involve planning, drafting, and completion of the St. Lucie Unit 2 EPU EA to evaluate the impacts of the proposed licensing action. The effort shall consist of Subtasks as described below.

Subtask 2B work shall be initiated concurrently with Subtask 2A. The level of effort for work under Subtask 2B to plan, draft and complete the St. Lucie Unit 2 EPU EA is as follows: a total of 4 hours by the Center's CPM; 64 hours by the Center's SME; and 12 hours by the Center's Administrative staff.

Unless directed otherwise by the NRC TPM, the Center shall concurrently (with Subtask 2A) begin work on Subtask 2B1.

Subtask 2B1: Preparation of Draft Environmental Assessment

Using the information provided by the NRC TPM (i.e., license action, related supplemental information, and the licensee's response to any RAIs), the Center shall follow LIC – 203, Revision 2, "Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues," in preparation of the draft St. Lucie Unit 2 EPU EA. Deviations from the outline shall be approved by the NRC TPM. The NRC TPM shall provide several complex EAs which show examples of the types of licensing actions submitted by nuclear power plants for the Center to follow, including EPU EAs. The Center shall focus the discussion on the human health and environmental issues that will be potentially impacted by the licensing action.

The Center shall submit the draft St. Lucie Unit 2 EPU EA to the NRC TPM no later than 25 business days after receipt of the licensing action information from the NRC TPM, as specified in Task 2.

The level of effort for work under Subtask 2B1 to prepare the draft St. Lucie Unit 2 EPU EA is as follows: a total of 2 hours by the Center's CPM; 50 hours by the Center's SME; and 8 hours by the Center's Administrative staff.

Subtask 2B2: Revise Draft Environmental Assessment to Incorporate NRC Comments

The Center shall revise the draft EA based on the comments received from the NRC. The Center shall submit the revised EA to the NRC TPM no later than 15 business days after receipt of the NRC TPM's comments.

The level of effort for work under Subtask 2B2 to revise and complete the St. Lucie Unit 2 EPU EA is as follows: a total of 2 hours by the Center's CPM; 14 hours by the Center's SME; and 4 hours by the Center's Administrative staff.

# 4.3 TASK 3: FINAL PRODUCTS

The Center shall provide the NRC with at least one paper copy of the Environmental Assessment for the completed St. Lucie Unit 2 EPU licensing action and 10 copies in CD format. Details are provided in Section 12 below. The level of effort for work under Task 3 to produce one paper copy and 10 copies in CD format for the St. Lucie Unit 2 EPU EA is 4 hours by the Center's Administrative staff.

#### 5.0 PROJECT MANAGEMENT

#### Maintain Effective Communication with NRC Staff

The Center shall maintain effective communication with NRC staff to help coordinate and integrate EA preparation with NRC's technical and decision-making activities. For the duration of Task 2, the Center shall participate in a bi-weekly telephone call with the NRC's TPM to discuss the status of the EA.

If requested by the NRC's TPM, the Center's Team Leader and the NRC TPM shall participate in additional face-to-face meetings held in either the NRC's Rockville, Maryland, office or at the Center's Rockville office. The meetings will be of a short duration (typically 1-2 hours) and, when occasionally held, will substitute for the bi-weekly conference calls between the Center and the NRC. The Center's SME may participate via a teleconference call.

#### Other Communication

The Center shall coordinate all necessary NRC communication (other than communications for the Project Officer) for Tasks 2 through the NRC's TPM.

#### NRC Comments

The Center shall resolve all NRC comments through the NRC TPM when making revisions to any deliverable under this TO.

### Quality Assurance for the Project

The Center shall implement and maintain quality assurance requirements for the project in accordance with Section 14.0 of this SOW.

#### 6.0 ACCEPTANCE CRITERIA

The Center shall document the preparation of the St. Lucie Unit 2 EPU EA and maintain appropriate records. The draft EA and final EA shall provide sufficient detail to enable members of the public to generally understand the basis of the conclusions.

## 7.0 LEVEL OF EFFORT

The total level of effort under Task Order No. 1 to complete one complex EA is as follows:

- Task 102 hours management oversight02 hours technical
- Task 204 hours management88 hours technical12 hours administrative

Task 3 04 hours administrative

### 8.0 MEETINGS AND TRAVEL

As requested by the NRC TPM and discussed under Task 1, the CPM shall meet with the NRC Project Officer (PO) and TPM at the NRC office in Rockville, Maryland, for a task planning meeting. The NRC TPM may choose to periodically meet with the Center at its office in Rockville to review the status of work and provide input into the project, as discussed in Section 5. No funds are required for travel, since the NRC's Headquarters office and the Center's Rockville office are located less than one mile apart from each other.

### 9.0 NRC FURNISHED MATERIAL

The NRC TPM will provide the following materials to the Center at the beginning of Task 1:

- Licensee's license action request
- Copies of documents related to the license action request
- Copy of LIC 203, Revision 2, "Procedural Guidance for Preparing Environmental Assessments and Considering Environmental Issues"
- Copies of completed EAs to be used as examples for format and content

The NRC TPM will provide the Center with new information and related documents to support the preparation of the EA on an as-needed basis.

## 10.0 CENTER-ACQUIRED MATERIAL

No materials are expected to be acquired by the Center under this task order.

## 11.0 PERIOD OF PERFORMANCE

The period of performance for this effort shall be for a four month period to commence on the effective date of the TO award.

### 12.0 REPORTS

Submittals for Task 2 by the Center shall be submitted via electronic mail with attachments consistent with the word processor in use at the NRC (Microsoft Word 2007), along with copies in portable document format (i.e., \*.pdf). At a minimum, the Center shall provide one paper copy and 10 CD copies of the Task 2 final EA to the NRC's PO and TPM. The EA provided by the Center shall be in a report similar to the sample EAs provided to the Center by the NRC TPM.

### **13.0 TECHNICAL DIRECTION**

Richard Bulavinetz is the designated NRC TPM for this task order. Brandon Cherry is the designated NRC PO. Technical instructions may be provided to the Center during the duration of Task 2 of this TO. Technical instructions shall not constitute new assignments of work or changes of such a nature as to justify an adjustment in cost or period of performance. Directions, if any, for changes in scope of work, cost, or period of performance will be issued by the NRC Contracting Officer.

## 14.0 STANDARD WORK PRACTICES

For all draft and final reports under this task order, the Center shall assure that an independent review of numerical computations and mathematical equations and derivations is performed by qualified personnel other than the original author(s) of the reports and other than the person who performed the original calculation. If the Center proposes to check less than 100 percent of all computations and mathematical equations and derivations in the report(s) (such as may be the case when there is a large number of routine, repetitive calculations), the Center must first obtain written approval from the NRC's TPM.

In addition, the final EA report under this TO, including those which do not contain numerical analyses must be reviewed by the Center's management and approved with two signatures.

One signature must be from the Center's Task Leader, and one signature must be from a manager at a higher managerial level than the Task Leader.

When revisions for the reports are issued by the Center, a section must be included in the revised report to document dates of, reasons for, and scope of all changes made since the issuance of the first Center's approved report.

NRC has the option of appointing a Peer Group to review, comment upon, and recommend changes to the draft and final reports. The Center may recommend candidates for the Peer Group for approval by the NRC's TPM or PO.

In the occasion of dissent in the content of the final report, the dissenting party shall have the option of stating their viewpoints and findings in a section of the report. This section does not require the development of a formal quality assurance program nor does it require formal quality assurance program documentation or review.

# APPENDIX A SCHEDULE AND DELIVERABLES

	TASK	DELIV	/ERAE	BLE
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- 1 Task Planning Meeting
- 2B1 Preparation of Draft Complex St. Lucie Unit 2 EPU Environmental Assessment
- 2B2 Revise Draft Environmental Assessment to Incorporate NRC Comments
- 3 Provide Final Products

## SCHEDULE

Upon Agreement by NRC and the Center

25 business days after receipt of Information from NRC

15 business days after receipt of NRC TPM's comments

Provided upon completion of 2B2