UNITED STATES ENVIRONMENTAL PROTECTION AGENCY
Region 6
1445 Ross Avenue, Suite 1200
Dallas, TX 75202-2733

February 20, 2013

Cindy Bladey
U.S. Nuclear Regulatory Commission
Mail Stop: TWB-05-B01M
Washington, DC 20555-0001

Ms. Bladey,

In accordance with our responsibilities under Section 309 of the Clean Air Act (CAA), the National Environmental Policy Act (NEPA), and the Council on Environmental Quality (CEQ) regulations for implementing NEPA, the U.S. Environmental Protection Agency (EPA) Region 6 office in Dallas, Texas, has completed its review of Draft Supplement 48 to the Generic Environmental Impact Statement (DSEIS) prepared by the United States Nuclear Regulatory Commission (NRC) for the License Renewal of South Texas Units 1 and 2. The purpose of the proposed action is to provide an option that allows for power generation capability beyond the term of the current nuclear power plant operating license to meet future system generating needs.

EPA rates the DSEIS as "**EC-2**" i.e., EPA has "environmental concerns and requests additional information" in the Final EIS (FEIS). The EPA's Rating System Criteria can be found at http:/www.epa.gov/compliance/nepa/comments/ratings.html. The "EC" rating is based on the potential for adverse impacts to groundwater resources and offsite radiological impacts from the uranium fuel cycle. The "2" indicates the DSEIS does not contain sufficient information to fully assess threatened and endangered species, groundwater resources, and the long-term storage of on-site nuclear waste. Detailed comments are enclosed with this letter which clearly identifies our concerns, and the informational needs requested for incorporation into the FEIS. Responses to comments should be placed in a dedicated section of the FEIS and should include the specific location where the revision, if any, was made. If no revision was made, a clear explanation should be included.

EPA appreciates the opportunity to review the DSEIS. Please send our office two copies of the FEIS, and an internet link, when it is filed with the Office of Federal Activities, EPA (Mail Code 2252A), Ariel Rios Federal Building, 1200 Pennsylvania Ave, N.W., Washington, D.C. 20004. This letter will be published on the EPA website, www.epa.gov, according to our responsibility under Section 309 of the CAA to inform the public of our views on the proposed

Federal action. If you have any questions or concerns, I can be reached at 214-665-8126, or contact Keith Hayden of my staff at hayden.keith@epa.gov or 214-665-2133.

Sincerely,

Debra A. Griffin
Associate Director,
Compliance Assurance
and Enforcement Division

Enclosure

DETAILED COMMENTS ON THE
U. S. NUCLEAR REGULATORY COMMISSION
DRAFT SUPPLEMENTAL ENVIRONMENTAL IMPACT STATEMENT
FOR THE
SOUTH TEXAS UNITS 1 AND 2 NUCLEAR LICENSE RENEWAL
MATAGORDA COUNTY, TEXAS

BACKGROUND: The South Texas Project (STP), Units 1 and 2, are pressurized water reactors located approximately 90 miles Southwest of Houston near Bay City, Texas. The original operating licenses for STP 1 and 2 were issued on March 22, 1998 and March 28, 1989, respectively. Each unit of the STP is designed for a net electrical power output of 1,250 megawatts (MWe). STP Nuclear Operating Company (STPNOC) initiated the proposed Federal action by submitting an application for license renewal of the STP, Units 1 and 2, for which the existing licenses expire on August 20, 2027, and December 15, 2028, respectively. If the license is renewed by the Nuclear Regulatory Commission (NRC), the STP can continue to operate for an additional 20 years past the current license expiration date. The NRC makes the decision to grant or deny license renewal based on whether the applicant has demonstrated that the environmental and safety requirements in the agency's regulations can be met during the period of extended operation. State regulatory agencies and STPNOC will ultimately decide whether the plant will continue to operate based on factors such as the need for power or other matters within the State's jurisdiction or the purview of the owners.

1.0 PURPOSE AND NEED FOR ACTION

1.2 Purpose and Need for the Proposed Federal Action

The DSEIS states that "If the renewed license is issued, the appropriate energy-planning decision makers, along with STPNOC, will ultimately decide if the reactor units will continue to operate on factors such as the need for power." While informative, this statement does not explain to the public and Federal agencies the need for the power in regard to the region or nation.

- Include detailed language in the purpose and need statement about why the energy created by the facility is needed.

2.0 AFFECTED ENVIRONMENT

2.2.4.2 Surface Water Quality and Effluents

The dates listed for the Texas Pollution Discharge Elimination System (TPDES) in this section and Table C-1 contradict each other. Section 2.2.4.2 states the TPDES permit was administratively continued by the Texas Commission on Environmental Quality (TCEQ) on July 13, 2009, but Table C-1 states a new TPDES permit was approved April 5, 2012.

- Clarify the correct date of issuance for the TPDES permit issued to the STP.

2.2.9.4 Visual Aesthetics and Noise

Page 2-62 states noise from STP operations sometimes exceeds 55 A-weighted decibels (dBA), and can be detected off site. This noise level has been identified as causing annoyance with outdoor activities; while a level of 45 dBA can have undesirable effects to indoor activities.

- It is unclear if this information is based on a study of STP noise and how it affects the surrounding area, or if the noise levels cited are those typical of industrial operations similar to STP. Please clarify whether the noise level was derived from a site specific study of the STP, or was the noise level given as an example of those that would typify industrial operations similar to STP. Also, clarify if 55 dBA is the level of noise detected at the STP, the property line, or nearby sensitive noise receptors.

4.0 ENVIRONMENTAL IMPACTS OF OPERATION

4.7 Protected Species and Habitats

After reviewing federal and state threatened and endangered species lists, a "no effect" determination was made on 31 species, and a "is not likely to adversely affect" (NLAA) determination was made on 10 species. A "no effect" determination is appropriate when a proposed action will not affect listed species. No further consultation with the United States Fish and Wildlife Service (USFWS) is required if a federal agency makes a "no effect" determination. A NLAA determination is appropriate when a proposed action will have insignificant or beneficial effects to listed species. Written concurrence must be obtained from the USFWS to satisfy Section 7 consultation requirements of the Endangered Species Act for the 10 species where a NLAA determination was made.

- Obtain written concurrence from USFWS on the 10 species where a NLAA determination was made. Include this concurrence in the Final EIS.

4.8.2 Radiological Impacts of Normal Operations

This section describes the STP Radiological Environmental Monitoring Program (REMP) and states that reports were reviewed and no adverse radiological trends were observed. It also stated the data showed there was no measurable impact to the environment from operations at STP.

- Include, or incorporate by reference, a synopsis of the data, methods, and analysis used to determine that no adverse trends or no measurable impact to the environment would occur from STP operations in the Final EIS.

4.11.3.1 Cumulative Impacts on Surface Water Resources

This section lists many water projects and the respective water use totals for each project. As presented, it is difficult to determine the cumulative effects to surface water.

- In order to provide a more effective understanding of the cumulative impacts to surface water include a tabular summary of project water use totals in the Final EIS.

4.11.3.2 Cumulative Impacts on Groundwater Resources

Tritium sample levels at STP Units 1 and 2 have ranged from 17,000 picocuries per liter (pCi/L) to less than 7,000 pCi/L. The EPA primary drinking water standard for tritium is 20,000 pCi/L. Cumulative impacts to groundwater resources from the increased tritium levels produced by the proposed STP Units 3 and 4 were not discussed.

- Include a detailed description of how the proposed STP Units 3 and 4 will affect tritium levels monitored on or near the STP.

NRC staff concluded that the cumulative impact to groundwater resources as a result of relicensing would be small. The building of STP Units 3 and 4, and the resulting increase in tritium levels, are reasonably foreseeable future actions which should be included in the cumulative impacts to groundwater resources section. The analysis of cumulative tritium levels for Units 3 and 4 may warrant a designation of cumulative impacts as moderate.

- Analyze the expected cumulative tritium levels as a result of Units 3 and 4 being built, and the effect this would have on groundwater resources. After factoring in the impacts from Units 3 and 4; determine if the cumulative impacts are small or moderate.

6.0 ENVIRONMENTAL IMPACTS OF THE URANIUM FUEL CYCLE, WASTE MANAGEMENT, AND GREENHOUSE GAS EMISSIONS

6.1 The Uranium Fuel Cycle

Uranium mining impacts were generally addressed in the GEIS for In-Situ Leach Uranium Milling Facilities (NUREG-1910). However, potential site specific impacts were not addressed in that document. As was discussed during a conference call with NRC on January 9, 2013; these site specific assessments for Tribal consultation and environmental justice (EJ) are initiated for individual mining project licenses. This was not readily apparent from reading the DSEIS.

- We recommend the Final EIS clarify the relationship amongst various NRC programs and their respective documents, and clarify when Tribal consultations and EJ assessments are initiated for actions.

The DSEIS describes the offsite radiological impacts from the uranium fuel cycle and waste management as acceptable. Legacy mining issues in the Grants Mineral Belt, New Mexico areas has resulted in the establishment of Superfund sites containing contaminated soil and water exceeding safe levels established by the U.S. government.

- Describe the difference between acceptable and unacceptable effects from offsite radiological impacts from the uranium fuel cycle. Include any quantitative or qualitative criteria used to make determinations of acceptability.

Long Term Storage of On-site Nuclear Waste

As indicated in the DEIS this issue is currently being addressed in an EIS to support the update of the Waste Confidence Decision and Rule (WCD). In addition, no licenses dependent upon this decision and rule will be issued until the WCD EIS has been completed. If the results of the WCD EIS identify information that requires a supplement to this EIS, NRC will perform the appropriate additional NEPA review for those issues before making a final licensing decision. EPA will review the WCD EIS and any appropriate supplemental NEPA documentation as required.

GENERAL COMMENTS

Tribal Consultation

The United States has a unique legal relationship with federally-recognized tribes based on the Constitution, treaties, statutes, Executive Orders, and court decisions. This relationship includes recognition of the right of tribes as sovereign governments to self-determination, and an acknowledgment of the federal government's trust responsibility to tribes. The precise nature of this relationship will vary depending upon the identity of the tribes, nature of trust resources, and federal agencies involved.

The DSEIS indicates that Tribes were identified and contacted for the limited purpose of discussing the National Historic Preservation Act , but does not provide complete information to determine if Tribal officials have been contacted for government-to-government consultation on the full scope of potential effects of the South Texas Plant under Executive Order (EO) 13175. It appears that the proposed project could affect tribal resources and citizens or government services. EPA recommends NRC take the following actions to satisfy consultation with Tribes under EO 13175:

- Identify all potentially affected tribes and tribal resources.
- Identify potentially applicable treaties, laws, policies, legal responsibilities and duties.
- Contact and, as appropriate, initiate consultation with Tribes concerning the potential effects of its action.