ATTACHMENT 1—GENERAL TARGET SCHEDULE FOR PROCESSING AND RESOLVING REQUESTS FOR ACCESS TO SENSITIVE UNCLASSIFIED NON-SAFEGUARDS INFORMATION IN THIS PROCEEDING

Day	Event/activity
0	Publication of **Federal Register** notice of hearing and opportunity to petition for leave to intervene, including order with instructions for access requests.
10	Deadline for submitting requests for access to Sensitive Unclassified Non-Safeguards Information (SUNSI) with information: Supporting the standing of a potential party identified by name and address; describing the need for the information in order for the potential party to participate meaningfully in an adjudicatory proceeding.
60	Deadline for submitting petition for intervention containing: (i) Demonstration of standing; (ii) all contentions whose formulation does not require access to SUNSI (+25 Answers to petition for intervention; +7 petitioner/requestor reply).
20	Nuclear Regulatory Commission (NRC) staff informs the requester of the staff's determination whether the request for access provides a reasonable basis to believe standing can be established and shows need for SUNSI. (NRC staff also informs any party to the proceeding whose interest independent of the proceeding would be harmed by the release of the information.) If NRC staff makes the finding of need for SUNSI and likelihood of standing, NRC staff begins document processing (preparation of redactions or review of redacted documents).
25	If NRC staff finds no ''need'' or no likelihood of standing, the deadline for petitioner/requester to file a motion seeking a ruling to reverse the NRC staff's denial of access; NRC staff files copy of access determination with the presiding officer (or Chief Administrative Judge or other designated officer, as appropriate). If NRC staff finds ''need'' for SUNSI, the deadline for any party to the proceeding whose interest independent of the proceeding would be harmed by the release of the information to file a motion seeking a ruling to reverse the NRC staff's grant of access.
30	Deadline for NRC staff reply to motions to reverse NRC staff determination(s).
40	(Receipt +30) If NRC staff finds standing and need for SUNSI, deadline for NRC staff to complete information processing and file motion for Protective Order and draft Non-Disclosure Affidavit. Deadline for applicant/licensee to file Non-Disclosure Agreement for SUNSI.
A	If access granted: Issuance of presiding officer or other designated officer decision on motion for protective order for access to sensitive information (including schedule for providing access and submission of contentions) or decision reversing a final adverse determination by the NRC staff.
A + 3	Deadline for filing executed Non-Disclosure Affidavits. Access provided to SUNSI consistent with decision issuing the protective order.
A + 28	Deadline for submission of contentions whose development depends upon access to SUNSI. However, if more than 25 days remain between the petitioner's receipt of (or access to) the information and the deadline for filing all other contentions (as established in the notice of hearing or opportunity for hearing), the petitioner may file its SUNSI contentions by that later deadline.
A + 53	(Contention receipt +25) Answers to contentions whose development depends upon access to SUNSI.
A + 60	(Answer receipt +7) Petitioner/Intervenor reply to answers.
>A + 60	Decision on contention admission.

[FR Doc. 2013–00793 Filed 1–15–13; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 50–302; NRC–2013–0005]

Florida Power Corporation, Crystal River Unit 3, Draft Environmental Assessment Related to the Proposed License Amendment To Increase the Maximum Reactor Power Level

AGENCY: Nuclear Regulatory Commission.

ACTION: Draft environmental assessment and finding of no significant impact; opportunity to comment.

DATES: Comments must be filed by February 15, 2013. Any potential party as defined in section 2.4 of Title 10 of the *Code of Federal Regulations* (10 CFR), who believes access to Sensitive Unclassified Non-Safeguards Information and/or Safeguards Information is necessary to respond to this notice must request document access by January 28, 2013.

ADDRESSES: You may access information and comment submissions related to this document, which the NRC possesses and are publically available, by searching on *http://www.regulations.gov* under Docket ID NRC–2013–0005. You may submit comments by any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2013–0005. Address questions about NRC dockets to Carol Gallagher; telephone: 301–492–3668; email: *Carol.Gallagher@nrc.gov.*
- *Mail comments to:* Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: TWB–05–B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.
- *Fax comments to:* RADB at 301–492–3446.

For additional direction on accessing information and submitting comments, see ''Accessing Information and Submitting Comments'' in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Siva P. Lingam, Project Manager, Office of Nuclear Reactor Regulation, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001, telephone: 301–415–1564; email: *Siva.Lingam@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Accessing Information and Submitting Comments

A. Accessing Information

Please refer to Docket ID NRC–2013–0005 when contacting the NRC about the availability of information regarding this document. You may access information related to this document by any of the following methods:

- *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2013–0005.
- *NRC's Agencywide Documents Access and Management System (ADAMS):* You may access publicly-available documents online in the NRC Library at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents''* and then select ''*Begin Web-based ADAMS Search.''* For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The ADAMS accession number for each

document referenced in this notice (if that document is available in ADAMS) is provided the first time that a document is referenced. The application for amendment, dated June 15, 2011 (ADAMS Accession No. ML112070659), contains proprietary information in Attachment 5 of the amendment and accordingly, those portions are being withheld from public disclosure. A redacted version of the application for amendment is available electronically as Attachment 7 of the amendment under ADAMS Accession No. ML11207A444.

- *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

B. Submitting Comments

Please include Docket ID NRC–2013–0005 in the subject line of your comment submission, in order to ensure that the NRC is able to make your comment submission available to the public in this docket.

The NRC cautions you not to include identifying or contact information that that you do not want to be publicly disclosed in your comment submission. The NRC will post all comment submissions at *http://www.regulations.gov* as well as enter the comment submissions into ADAMS. The NRC does not routinely edit comment submissions to remove identifying or contact information.

If you are requesting or aggregating comments from other persons for submission to the NRC, then you should inform those persons not to include identifying or contact information that they do not want to be publicly disclosed in their comment submission. Your request should state that the NRC does not routinely edit comment submissions to remove such information before making the comment submissions available to the public or entering the comment submissions into ADAMS.

II. Introduction

The U.S. Nuclear Regulatory Commission (NRC) is considering issuance of an amendment for Facility Operating License No. DPR–72, issued to Florida Power Corporation., (FPC, the licensee) for operation of the Crystal River Unit 3 Nuclear Power Plant (CR–3), for a license amendment to increase the maximum thermal power level from 2,609 megawatts thermal (MWt) to 3,014 MWt. In accordance with section 51.21 of Title 10 of the *Code of Federal Regulations* (10 CFR), the NRC has prepared this Draft Environmental Assessment (EA) documenting its finding. The NRC concluded that the proposed actions will have no significant environmental impact.

The proposed power increase is 15.52 percent over the current licensed thermal power. In 2002, the licensee received approval from the NRC to increase its power by 0.9 percent, and another approval in 2007, to increase its power by 1.6 percent to the current power level of 2,609 MWt.

The NRC staff did not identify any significant environmental impacts associated with the proposed action based on its evaluation of the information provided in the licensee's application and other available information. For further information with respect to the proposed action, see the licensee's application dated June 15, 2011 (ADAMS Accession No. ML112070659). The draft EA and draft FONSI are being published in the **Federal Register** with a 30-day public comment period ending February 15, 2013.

III. Draft Environmental Assessment

Plant Site and Environs

The CR–3 site is located in Citrus County, Florida on 4,738 acres (ac) (1,917 hectares (ha)), approximately 80 miles (mi) (129 kilometers [km]) north of Tampa, Florida. The plant is part of the larger Crystal River Energy Complex (CREC), which includes the single nuclear unit and four fossil-fueled units, Crystal River 1, 2, 4, and 5 (CR–1, CR–2, CR–4, and CR–5). CR–3 is adjacent to Crystal Bay, a shallow embankment of the Gulf of Mexico, and is midway between the mouths of two rivers: the Withlacoochee River, about 4.5 mi (7.2 km) to the north, and the Crystal River, about 2.5 mi (4 km) to the south. The Tampa-St. Petersburg-Clearwater metropolitan area is approximately 60 mi (96.5 km) south of Citrus County. CR–3 includes a pressurized light-water reactor (PWR) supplied by Babcock & Wilcox with a net electrical power output of 903 megawatts electric (MWe). FPC owns and operates CR–3. In this EA, the applicant is referred to as FPC or the licensee.

Crystal Bay, located in the Gulf of Mexico, is the source for cooling water for the main condensers at CR–3 and the other units at the CREC. CR–3 has a once-through heat dissipation system that circulates water through CR–3 in one of two modes of operation: open cycle (once-through cooling with no cooling towers in operation) and helper cycle (once-through cooling with mechanical draft cooling towers in operation). The CR–3 cooling water system consists of the intake canal, intake structures and pumps, circulating water intake piping, condensers, circulating water discharge piping, outfall structure, discharge canal, and cooling towers. CR–1 and CR–2 share the intake canal, discharge canal, and cooling towers with CR–3. CR–4 and CR–5 also share the discharge canal, which is lined with four permanent helper cooling towers. These helper cooling towers are operated during warmer months to allow CR–1, CR–2, and CR–3 to meet their combined National Pollutant Discharge Elimination System (NPDES) discharge limit of 96.5 degrees Fahrenheit (°F) (35.8 degrees Celsius (°C)) (Permit No. FL0000159). The licensee also regulates discharge temperatures by reducing power at CR–1 and CR–2, if necessary. To avoid having to rely on this rate-reduction method, in 2006, the licensee installed 67 State-approved additional temporary modular cooling towers for use as needed.

The intake canal, which extends into the Gulf of Mexico, is 14 mi (22.5 km) long. Current velocities at the mouth of the intake canal range from 0.6 to 2.6 feet per second (ft/s) (0.2 to 0.8 meters per second [m/s]). CR–3 withdraws cooling water from the Gulf of Mexico through its cooling water intake structure, located near the eastern end of the intake canal. Water from the Gulf is drawn into the intake canal and to the four intake pumps that circulate the non-contact cooling water through the plant. Water passes through eight external trash racks made of 3.6-in (9.2-cm) spaced vertical bars and seven 0.38-in (1-cm) mesh size traveling screens where it is pumped to a circulating-water system and an auxiliary cooling water system. The CR–3 system has a design intake volume of 680,000 gpm [gallons per minute] (42,840 L/s), with a combined condenser flow limit for all three units (CR–1, CR–2 and CR–3) of 1,897.9 million gallons per day (gpd) (4.9 million liters per minute [L/min]) from May 1 to October 31, and 1,120,000 gpd (2,912 L/min) from November 1 to April 30.

The heated water from the cooling water systems flows to a discharge canal shared with CR–1 and CR–2, and then back to Crystal Bay. The discharge canal extends west about 1.6 mi (2.6 km) to the point of discharge in Crystal Bay, and extends an additional 1.2 mi (1.9 km) beyond the discharge point. This discharge canal is the source of cooling system makeup water for CR–4 and CR–5. When CR–1, CR–2, and CR–3 are operating at maximum pumping capacity, the velocity in the discharge canal is about 2.4 ft/s (0.7 m/s) at low tide.

Background Information on the Proposed Action

By application dated June 15, 2011 (ADAMS Accession No. ML112070659), the licensee requested an amendment for an extended power uprate (EPU) for CR–3 to increase the licensed thermal power level from 2,609 MWt to 3,014 MWt for CR–3, which represents an increase of 15.52 percent above the current licensed thermal power. This change requires NRC approval prior to the licensee operating at that higher power level. The proposed action is considered an EPU by the NRC because it exceeds the typical 7-percent power increase that can be accommodated with only minor plant changes. An EPU typically involves extensive modifications to the nuclear steam supply system contained within the plant buildings.

The planned physical modifications to the plant needed in order to implement the proposed EPU would take place inside of existing buildings and previously-disturbed areas on the CR–3 site. The modifications were scheduled to be implemented over the course of two refueling outages, the first of which was completed in 2009, with the second phase scheduled for 2013. The 2009 outage produced a small increase in electrical output with no change in rated thermal power. The 2013 outage would increase the reactor thermal power and increase the electrical output to 168 MWe, however, the concrete containment at CR–3 delaminated in October 2009 during activities to create an opening in the containment for steam generator replacement. After replacing steam generators during 2009 outage, the licensee encountered additional containment delaminations during containment repair activities. The licensee is still in the process of determining further actions, and the plant is still in an outage. As a result, NRC suspended the review of the license renewal application temporarily (ADAMS Accession No. ML11112A122) until the licensee provides a concrete plan to repair the containment to original condition or better.

Approximately 760 people are currently employed at CR–3 on a full-time basis. For the recently completed 2009 outage, this workforce was augmented by an additional 1,000 EPU and steam generator replacement workers on average, with a peak of 1,800 workers. For the scheduled 2013 EPU-upgrade outage, the licensee estimates an average of 1,350 EPU-related construction workers on site. The increase of workers would be comparable to the number of workers required for a routine outage (typically 1,300 workers) and the peak construction workforce would be smaller than the FPC-reported peak workforce for the 2009 outage, which involved the replacement of major components, including the steam generators.

The Need for the Proposed Action

As stated in the licensee's application, the proposed action is to provide the licensee with the flexibility to increase the potential electrical output of CR–3. The proposed EPU will increase the output for CR–3 by about 405 MWt, from about 2,609 MWt to about 3,014 MWt.

Environmental Impacts of the Proposed Action

As part of the original licensing process for CR–3, the U.S. Atomic Energy Commission published a Final Environmental Statement (FES) in 1973 (ADAMS Accession No. ML091520178). The FES contains an evaluation of the potential environmental impacts associated with the operation of CR–3 over its licensed lifetime. In May 2011, the NRC published a draft supplemental environmental Impact Statement (SEIS) for CR–3 (ADAMS Accession No. ML11139A153). The 2011 draft SEIS evaluated the environmental impacts of operating CR–3 for an additional 20 years beyond its then-current operating license, extending the operation life until 2036. The NRC determined that the overall environmental impacts of license renewal were small. This NRC evaluation is presented in NUREG–1437, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Supplement 44, Regarding Crystal River Unit 3 Nuclear Generating Plant (Draft Report for Comment)'' (draft SEIS–44). The NRC used information from FPC's license amendment request for the EPU, consultation with National Marine Fisheries Service (NMFS), the FES, and SEIS–44 to prepare the EA for the proposed EPU.

The licensee's application states that it would implement the proposed EPU without extensive changes to buildings or to other plant areas outside of buildings. Plant modifications required to implement the EPU would occur in two phases. Phase One was completed during a steam generator replacement refueling outage in the fall of 2009. Plant modifications made during this first phase were intended to make the secondary side of the plant more efficient. Phase Two, which is scheduled for the spring of 2013, would include the necessary hardware changes to accommodate the higher operating temperatures of the EPU. Plant modifications to accommodate a power increase include CR–3 switching to a more highly enriched uranium fuel, an operational change in reactor thermal-hydraulic parameters, and upgrade of the Balance of Plant capacity by component replacement or modifications. With the exception of the high-pressure turbine rotor replacement, the required plant modifications would be generally small in scope. Other plant modifications include replacing selected feedwater heaters; providing additional cooling for some plant systems; upgrading various electrical equipment/components to accommodate higher currents; accommodating greater steam and condensate flow rates; and upgrading instrumentation to include minor items such as replacing parts, changing set points, and modifying software.

Increasing the plant's rated thermal power to 168 MWe would also increase the amount of steam generated and the temperature of the circulating water. In order for the licensee to comply with the plant's NPDES thermal limits, two mitigation options are currently being considered: a newly constructed helper cooling tower, or seasonal load reduction. If the first option were selected, a new mechanical-draft cooling tower would be installed on a previously disturbed site, currently occupied by the CREC percolation clarifier pond and south of the existing helper cooling towers. The cooling tower would operate as a once-through cooling tower and, if selected, the licensee would need to apply to the Florida Department of Environmental Protection (FDEP) for a modification of their current NPDES permit. FDEP would determine the actual operating procedures, discharge locations, and timeframes of the new cooling tower option during this permit modification process. Under the second option of seasonal load reduction management, the licensee would manage the discharge canal water through the operation of the existing cooling towers. This strategy has been used at CREC (particularly for CR–1 and CR–2, the fossil fuel units) in the past when the existing cooling towers have been insufficient in meeting NPDES discharge limits due to climatic factors. Under EPU conditions, the licensee anticipates that using this option would require the existing helper cooling towers to operate more frequently and over a longer seasonal period. The potential environmental impacts of both

of these cooling options are evaluated and discussed in this assessment.

The sections below describe the potential nonradiological and radiological impacts to the environment that could result from the proposed EPU.

Nonradiological Impacts

Land Use and Aesthetic Impacts

Potential land use and aesthetic impacts from the proposed EPU include impacts from proposed plant modifications at CR–3. While the licensee proposes some plant modifications, all plant changes related to the proposed EPU would occur within existing structures, or within previously disturbed areas on the CREC site. In the 1960s, the developed area of the CREC site underwent clearing, filling, and grading during this original construction, including being covered with a three to five foot layer of fill. Consequently, there are no undisturbed land areas within the developed CREC site. During the 2009 steam generator replacement outage, a 1 ac (0.4 ha), previously disturbed area was converted into a permanent operational material and equipment lay-down area. An additional 3.5 ac (1.4 ha) was converted to overflow parking, and will likely be used as overflow parking again for the 2013 outage.

If the licensee decides to construct a helper-cooling tower, the new mechanical draft-cooling tower would be located on a small previously disturbed parcel of land near the CREC percolation clarifier pond. The construction and operation of the proposed 73.5 ft (22.4 m), 289 ft (88.1 m) diameter cooling tower would affect approximately 5 ac (2 ha), some of which would be temporarily used as a construction lay-down area.

If the load reduction management option were chosen, no land use changes would occur.

Other than the activities described above, no new construction would occur outside of the developed area of the CREC site, and no expansion of existing buildings, roads, parking lots, or storage areas are required to support the proposed EPU. Existing parking lots, road access, equipment lay-down areas, offices, workshops, warehouses, and restrooms would be used during plant modifications. In addition, there are no planned modifications to transmission lines. Because land use conditions would not change, and because any land disturbance has and would occur within previously disturbed areas, there would be no significant land use or aesthetic impacts from EPU-related plant modifications at CR–3.

Air Quality Impacts

CR–3 is located within the West Florida Intrastate Air Quality Control Region (AQCR). All of Florida, including the West Florida Interstate AQCR, are designated as being in attainment or unclassifiable for all criteria pollutants in the U.S. Environmental Protection Agency's (EPA) regulations at 40 CFR 81.310. Orange County, Duval County, the Tampa Bay area including Hillsborough and Pinellas Counties, and Southeast Florida including Dade, Broward, and Palm Beach Counties continue to be classified by the FDEP as attainment/maintenance areas for ozone and Tampa is a maintenance area for lead. The closest non-attainment area to CR–3 is 275 mi (442.5 km) north in Bibb County, Georgia. The entire State remains unclassifiable for particulate matter, 10 microns or less in diameter (PM_{10}), based on the EPA not yet considering this pollutant for attainment determinations. Unclassifiable areas are usually treated as attainment areas. The nearest designated mandatory Class 1 Federal area, the Chassahowitzka National Wildlife Refuge, is 13 mi (20.9 km) south of CR–3.

The CREC qualifies as a major source under the FDEP Title V permit program by virtue of the operation of the coal-fired units on contiguous parcels all under the control of FPC and, therefore, is required to obtain a Title V permit (Permit No. 0170004–004–AV). Although none of the permit stipulations pertain directly to the operation of CR–3, the existence of that permit nevertheless has an indirect impact on the operation, monitoring, and recordkeeping requirements for stationary sources of criteria pollutants affiliated with CR–3. Specifically, drift from an auxiliary cooling tower shared between CR–3 and two coal-fired units is addressed in the permit, and three diesel-fueled emergency power generators affiliated exclusively with the nuclear reactor are identified as unregulated stationary sources. NRC expects no changes to the emissions from these sources as a result of the EPU.

During EPU implementation, some minor and short duration air quality impacts would occur from other non-regulated sources. Vehicles of the additional outage workers needed for EPU implementation would generate the majority of air emissions during the proposed EPU-related modifications. However, this source will be short term and temporary. If the new helper cooling tower option were selected, the effects of additional workers and associated vehicles during the 18-month construction period would be similarly short term and temporary. In addition, the majority of the EPU activities would be performed inside existing buildings and would not cause additional atmospheric emissions.

If the new helper cooling tower option were selected, a new cooling tower onsite would result in added particulate matter (PM) emissions. FDEP regulations limit PM emissions to 25 tons per year, and PM_{10} emissions to 15 tons per year. Potential PM and PM_{10} emissions from the new cooling tower were evaluated by the licensee in 2007 and the cooling tower design was subsequently modified to meet PM emission thresholds by reducing the flow rate through the tower. The predicted emissions from the modified design are 91.2 tons PM per year and 5.5 tons PM_{10} per year. PM emissions from the cooling tower would be confined to the CREC property, with minimal visibility impacts.

Therefore, the NRC staff expects no significant impacts to regional air quality from the proposed EPU beyond those air impacts evaluated for draft SEIS–44, including potential minor and temporary impacts from worker activity and impacts from a possible new cooling tower.

Water Use Impacts

Groundwater

Groundwater at the CREC is drawn from the Floridian aquifer system, which is a thick, vertically continuous sequence of Tertiary-age carbonate rocks (limestone and dolomite) with high relative permeability and regional extent. Although the CREC currently maintains 14 onsite production wells completed in the Upper Floridian aquifer, CR–3 draws its water only from the south treatment plant, which is supplied by three wells. Groundwater is used at CR–3 for boilers and steam generators, ash processes, fire protection, and drinking water. CR–3 currently uses approximately 0.73 million gallons per day (gpd) (2.8 million liters (L) per day) of freshwater per day, which is well below the 2 million gpd (7.6 liters per day) authorized by the Southwest Florida Water Management District water use permit (Permit No. 20004695.004). This amount represents approximately three percent of the total groundwater consumed in Citrus County. The facility's individual wastewater facility permit administrated by the FDEP regulates the percolation ponds onsite

and specifies the site's groundwater monitoring requirements.

Under the EPU, the licensee does not expect to significantly change the amount of freshwater use or supply source. With an expected increase of 1,350 workers supporting 2013 EPU construction activities, NRC expects potable water use to increase during the outage and return back to the regular operating levels after EPU implementation. It is unlikely this potential increase in temporary groundwater use during the EPU construction activities would have any effect on other local and regional groundwater users. This was demonstrated during the 2009 outage, which had a larger increase of onsite workers (a peak of 1,800) and caused no public water supply shortages. Based on the 2009 outage, the NRC staff expects no significant impact on groundwater resources during proposed EPU construction activities or following EPU implementation.

Surface Water

FDEP regulates the Florida Surface Water Quality Standards through a National Pollutant Discharge Elimination System (NPDES) permit, which also establishes the maximum area subject to temperature increase (mixing zone), maximum discharge temperatures, and chemical monitoring requirements. CR–1, CR–2, and CR–3 are currently operating under NPDES Permit No. FL0000159. CR–4 and CR–5 operate under a separate NPDES permit. The intake structure for the CR–3 main condenser uses four circulating water pumps, which provide a total flow capacity of 680,000 gpm (42,840 L/s). Two of the pumps are rated at 167,000 gpm (10,521 L/s) and two are rated at 179,000 gpm (11,277 L/s). Service pumps withdraw an additional 10,000 to 20,000 gpm (630 to 1,260 L/s), depending on system demand. The NPDES permit limits the combined flow for CR–1, CR–2, and CR–3 to 1,898 million gpd (4.9 million liters per minute [L/min]) from May 1 to October 31, and 1,613 million gpd (4.2 million L/min) from November 1 to April 30.

Cooling water for all CREC units is discharged back to the Gulf through a common discharge canal, located north of CR–1, CR–2, and CR–3. The site discharge canal extends about 1.6 mi (2.6 km) west into the Gulf to the point of discharge in Crystal Bay, and then another 1.2 mi (1.9 km) beyond the discharge point. The helper cooling towers withdraw water from the discharge canal when needed to comply with the NDPES thermal discharge limit of 96.5 °F (35.8 °C).

The NPDES permit stipulates that prior to the use of any biocide or chemical additive used in the cooling system or any other portion of the treatment system, a permit revision from the FDEP is required. As regulated by the current CR–3 NPDES permit, the plant periodically adds chlorine in regulated quantities to control biofouling organisms. Because FDEP regulates discharges and requires chemical monitoring, NRC expects that the authorized discharges will not exceed the NPDES permit maximum total residual oxidant (chlorine) concentration at the unit outfall of 0.01 milligrams per unit (mg/L) after EPU implementation.

To accommodate the increase in thermal output as a result of the EPU, the licensee has defined two cooling options: A new helper cooling tower, or load reduction management. The helper cooling tower option would utilize a mechanical draft cooling tower designed to operate in a once-through mode, discharging either to the intake or discharge canal, as is necessary. If this option is selected by the licensee, some of the current modular cooling towers could be discontinued. The new cooling tower would not require the use of any chemicals or biocides to control biofouling organisms and would not significantly increase total dissolved solids concentrations in the cooling water discharge. The actual operational procedures of the new cooling tower would be defined during the NPDES permit modification process, which would be required and administered by FDEP. If the load reduction management option were selected, the temporary modular towers, as well as CREC's permanent cooling towers, would continue to operate. Discharge canal temperatures would be moderated by reducing power at either CR–1 or CR–2 in order to comply with the site's NPDES permit. This second option would also likely extend the length of time per season that the current cooling towers are used.

As part of the proposed EPU, the licensee consulted with the Florida Department of Community Affairs for a review of coastal zone consistency. Currently, FDEP has the authority to review all Federal licenses for coastal zone consistency with Section 307 of the Coastal Zone Management Act. For CR–3, CR–4, and CR–5, the coastal zone consistency certification is documented by the FDEP in Section XXV, ''Coastal Zone Consistency,'' of the licensee's Conditions of Certification, updated most recently on August 1, 2012.

Aquatic Resource Impacts

The potential impacts to aquatic resources from the proposed action could include impingement of aquatic life on barrier nets, trash racks, and traveling screens; entrainment of aquatic life through the cooling water intake structures and into the cooling water systems; and effects from the discharge of chemicals and heated water.

Because the proposed EPU will not result in an increase in the amount or velocity of water being withdrawn from or discharged to the Gulf of Mexico, NRC expects no increase in aquatic impacts from impingement and entrainment beyond the current impact levels. Currently, all organisms impinged on the trash racks and traveling screens would be killed, as would most, if not all, entrained organisms. If the licensee selects the cooling tower option, a portion of the discharge would be routed to the site intake canal in late fall and winter, which would reduce the amount of withdrawal from the Gulf of Mexico. Reducing the amount of water withdrawal could reduce entrainment effects during cooler months. Under either cooling option, the licensee would continue its mitigation and monitoring program, developed in conjunction with NMFS, for the capture release and protection of sea turtles that enter the intake canal.

Regardless of which cooling option (helper cooling tower or load reduction management) is chosen, FPC will comply with its NPDES discharge limit of 96.5 °F (35.8 °C). If the cooling tower option is selected, the mechanical draft cooling tower would be constructed to accommodate the increase in thermal loads, as well as allowing the licensee to retire a portion of its 67 temporary modular towers. If the load reduction management option were selected, the temporary towers as well as CREC's permanent cooling towers would continue to operate. Discharge canal temperatures would be moderated by reducing power at either CR–1 or CR–2 in order to comply with the site's NPDES permit. This second option would extend the length of time per season that the current cooling towers are used, as necessary. Because NRC expects the surface water, temperature not to exceed 96.5 °F (35.8 °C), as a result of the proposed EPU, the NRC staff concludes that there are no significant impacts to aquatic biota from the proposed EPU.

Essential Fish Habitat Consultation

The Magnuson-Stevens Fishery Conservation and Management Act

(MSA) identifies the importance of habitat protection to healthy fisheries. Essential Fish Habitat (EFH) is defined as those waters and substrata necessary for spawning, breeding, feeding, or growth to maturity (Magnuson-Stevens Act, 16 USC 1801 *et seq.*). Designating EFH is an essential component in the development of Fishery Management Plans to minimize habitat loss or degradation of fishery stocks and to take actions to mitigate such damage. The consultation requirements of Section 305(b) of the MSA provide that Federal agencies consult with the Secretary of Commerce on all actions or proposed actions authorized, funded, or undertaken by the agency that may adversely affect EFH. On June 1, 2011, an EFH assessment for the proposed operating license renewal was sent to the NMFS under separate cover to initiate an EFH consultation (ADAMS Accession No. ML11140A100). The EFH assessment for license renewal also discussed the proposed EPU and the potential new cooling tower option. The submitted EFH assessment found that continued operation of CR–3 would have no adverse effects to EFH for two of the species of concern (*Seriola dumerili* and *Epinephelus adscensionis*) and minimal adverse effects for the remaining 17 species. The EFH assessment for license renewal discussed the proposed EPU conditions, stating that the effects of impingement, entrainment, and the thermal plume would not be increased by the EPU due to the fact that flow rates will not be increased from current operating levels, and any increase in thermal output will be mitigated, potentially by an additional cooling tower. Therefore, the EFH issued for license renewal is also valid for NRC's requirements under Section 7 of the Endangered Species Act (ESA) for the proposed EPU.

NMFS responded to NRC's EFH assessment on July 25, 2011 (ADAMS Accession No. ML11216A130). In their letter, NMFS stated that the agency currently had insufficient staffing resources to review the draft SEIS, and that it should be noted that NMFS position is neither supportive of, nor in opposition to, the proposed relicensing activities. This letter fulfilled the NRC's requirements under Section 7 of the ESA with notification to NMFS.

The following table identifies the species that the NRC considered in its EFH assessment.

TABLE 1—SPECIES OF FISH ANALYZED IN EFH ASSESSMENT

Fishery management plan	Scientific name	Common name
Red Drum	*Sciaenops ocellatus*	red drum.
Reef Fish	*Mycteroperca bonaci*	black grouper.
	Lutjanus jocu	dog snapper.
	Diplectrum bivittatum	dwarf sand perch.
	Mycteroperca microlepis	gag grouper.
	Lutjanus griseus	gray snapper.
	Seriola dumerili	greater amberjack.
	Lachnolaimus maximus	hogfish.
	Lutjanus synagris	lane snapper.
	Epinephelus striatus	Nassau grouper.
	Epinephelus morio	red grouper.
	Epinephelus adscensionis	rock hind.
	Lutjanus apodus	schoolmaster.
	Rhomboplites aurorubens	vermilion snapper.
	Ocyurus chrysurus	yellowtail snapper.
Coastal Migratory Pelagics	*Scomberomorus maculatus*	Spanish mackerel.
Shrimp	*Farfantepenaeus duorarum*	pink shrimp.
	Litopenaeus setiferus	white shrimp.
Stone Crabs	*Menippe mercenaria*	Florida stone crab.

Terrestrial Resources Impacts

CR–3 uses approximately 27 ac (11 ha) of previously disturbed land within the 1,062 ac (430 ha) developed portion of the 4,738 ac (1,917 ha) CREC. The remainder of the CREC site has been left undeveloped, providing a buffer zone containing 3,676 ac (1,488 ha) of primarily hardwood hammock forest and pineland, salt marshes, small tidal creeks, and freshwater swamps, protected against encroachment from any other coastal development. As previously discussed, there remain no undisturbed areas and no native solids or vegetation communities within the developed CREC site. Within the disturbed facility areas, small strips of vegetation occur on roadsides, and open lawn areas are dominated by grasses. After September 11, 2001, a 0.9 ac (0.4 ha), which was previously mixed-hardwood wetland, was altered for security reasons. All trees in this area were cut to accommodate construction of new security facilities. This area was later converted into a permanent lay-down area during the 2009 steam generator replacement outage. An additional 3.5 ac (1.4 ha) grass area was converted to overflow parking, and will likely be used as overflow parking again for the 2013 outage.

If the helper cooling tower option is chosen, the new mechanical draft cooling tower would be constructed on a small parcel of land which was formally salt marsh, but was filled in 1970 by the site's previous owners. This area, approximately 3,600 ft (1,097 m) west of CR–3 was also the site of the former CR–3 meteorological towers (which is now relocated) and is currently occupied by the CREC percolation clarifier pond. The proposed 73.5 ft (22.4 m) cooling tower would have a diameter of 289 ft (88.1 m) and would require approximately 18 months to build. The previously disturbed areas affected by construction of the new tower would total approximately 5 ac (2 ha), some of which would be converted to an additional construction lay-down area.

Because the new cooling tower option would only impact previously disturbed areas onsite, impacts that could potentially affect terrestrial resources would include disturbance or loss of habitat, construction and EPU-related noise and lighting, and sediment transport or erosion during the 2013 outage and the 18-month construction period for the new cooling tower. Noise and lighting would not adversely affect terrestrial species beyond effects experienced during previous outages because EPU-related construction modification activities would take place

during outage periods, which are typically periods of heightened activity. Noise and lighting impacts from the possible construction of a new cooling tower would only affect terrestrial species temporarily during the construction period. If the load reduction management option is selected, there would be no construction-related impacts to terrestrial species beyond those related to the 2013 outage. Also, during the 2009 outage, prior to the grading or grubbing conducted for the lay-down areas, the licensee performed a survey of the areas in accordance with the licensee's conditions of site certification under FDEP and followed best management practices to ensure that any ecological resources were protected. No changes to transmission lines or right of way (ROW) maintenance practices are required for the EPU. Thus, NRC expects no significant impacts on terrestrial resources associated with the proposed EPU.

Threatened and Endangered Species Impacts

Under Section 7 of the Endangered Species Act of 1973, as amended (ESA), Federal agencies, in consultation with the U.S. Fish and Wildlife Service (FWS) or the National Marine Fisheries Service (as appropriate), must ensure that actions the agency authorizes, funds, or carries out are not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of critical habitat.

A number of species in Citrus County are listed as threatened or endangered under the ESA, and other species are designated as meriting special protection or consideration. These include birds, fish, aquatic and terrestrial mammals, flowering plants, insects, and reptiles that could occur on or near CR–3 facility areas and possibly along the electrical transmission line ROWs. The most common occurrences of threatened or endangered species observed within the CREC boundary are five species of sea turtles: loggerhead turtles (*Caretta caretta*), Atlantic green turtles (*Chelonia mydas*), Kemp's ridley turtles (*Lepidochelys kempii*), hawksbill turtles (*Eretmochelys imbricata*), and leatherback turtle (*Dermochelys coriacea*). FPC has a mitigation and monitoring program, developed in conjunction with NMFS, in place for the capture-release and protection of sea turtles that enter the intake canal. The Florida manatee (*Trichechus manatus latirostris*), a subspecies of the West Indian manatee (*Trichechus manatus*), also has been documented at CREC. Designated critical habitat for the Florida manatee is located in the Crystal River and its headwaters, adjacent to the southern boundary of the CREC. The NRC assessed potential impacts on the Florida manatee from operation of CR–3 in the draft SEIS–44. Three additional federally protected animals have been observed within the CREC site boundary, including American alligators (*Alligator mississippiensis*), wood storks (*Mycteria americana*), and bald eagles (*Haliaeetus leucocephalus*). No other critical habitat areas for endangered, threatened, or candidate species are located at the CREC site or along the transmission line ROWs.

The following table identifies the species found on or near the CREC site or the transmission line ROWs that the NRC assessed in draft SEIS–44.

TABLE 2—FEDERALLY LISTED SPECIES ASSESSED IN DRAFT SEIS–44

Scientific name	Common name	ESA status [a]
Birds:		
Aphelocoma coerulescens	Florida scrub-jay	T
Charadrius melodus	piping plover	T
Grus americana	whooping crane	E/XN
Haliaeetus leucocephalus	bald eagle	T
Mycteria americana	wood stork	E
Fish:		
Acipenser oxyrinchus desotoi	gulf sturgeon	T
Pristis pectinata	smalltooth sawfish	E
Marine Mammals:		
Trichechus manatus latirostris	Florida manatee	E/CH
Reptiles:		
Drymarchon corais couperi	eastern indigo snake	T
Sea Turtles:		
Caretta caretta	loggerhead turtle	T
Chelonia mydas	green turtle	E
Dermochelys coriacea	leatherback turtle	E
Eretmochelys imbricata	hawksbill turtle	E
Lepidochelys kempii	Kemp's ridley turtle	E
Crocodilians:		
Alligator mississippiensis	American alligator	T/SA
Plants:		
Bonamia grandiflora	Florida bonamia	T
Campanula robinsiae	Brooksville bellflower	E
Chrysopsis floridana	Florida golden aster	E
Dicerandra cornutissima	longspurred mint	E
Eriogonum longifolium var. *gnaphalifo-lium*	scrub buckwheat	T
Justicia cooleyi	Cooley's water willow	E
Nolina brittoniana	Britton's beargrass	E

[a] E = endangered; T = threatened; T/SA = threatened due to similarity of appearance; EXPN, XN = experimental, nonessential; CH = critical habitat.

Source: U.S. Fish and Wildlife Service.

NRC has consulted with NMFS since 1982 regarding sea turtle kills, captures, or incidental takes. A 2002 NMFS biological opinion concluded that operation of the CREC is not likely to jeopardize the continued existence of the five sea turtle species (ADAMS Accession No. ML022460361). The 2002 NMFS biological opinion provides for limited incidental takes of threatened or endangered sea turtles. Correspondence between the licensee, FWS, and NMFS in connection with the 2011 license renewal environmental review indicated that effects to endangered, threatened, or candidate species, including a variety of sea turtles and manatees, would not significantly change, as a result of issuing a license renewal for CR–3.

Because any increase in thermal output, as a result of the proposed EPU will be mitigated either by a new cooling tower option or load reduction management, the EPU will not increase thermal exposure to aquatic biota at the site. NRC expects the licensee capture-release and monitoring program for sea turtles and NRC interactions with NMFS regarding incidental takes to continue under the terms and conditions of the 2002 biological opinion. Therefore, NRC expects the proposed EPU would not change the effects of plant operation on threatened and endangered aquatic species.

Planned construction-related activities associated with the proposed EPU primarily involve changes to existing structures, systems, and components internal to existing buildings and would not involve earth disturbance, with the exception of the construction of the new helper cooling tower, if selected. Traffic and worker activity in the developed parts of the plant site during the 2013-outage modifications would be somewhat greater than a normal refueling outage. During the 18-month construction period of the new helper-cooling tower, impacts that could potentially affect terrestrial resources would include disturbance or loss of habitat, construction and EPU-related noise and lighting, and sediment transport or erosion. As described in the ''Terrestrial Resource Impacts'' section, any potential impacts from cooling tower construction would only affect terrestrial species temporarily during the construction period. Any ground disturbing activities would require the licensee to conduct a survey and follow best management practices to ensure that any ecological resources were protected. No changes to transmission lines or ROW maintenance practices are required for the EPU.

The NRC concluded in draft SEIS–44 that the continued operation of CR–3 was not likely to adversely affect terrestrial wildlife. In general, the effects of changes to the terrestrial wildlife habitat on the CR–3 site from the proposed EPU should not exceed those potential effects on terrestrial wildlife evaluated in draft SEIS–44, including potential minor and temporary impacts from EPU-related worker activity and any impacts from the construction of a new mechanical draft-cooling tower. Implementing the EPU would not change water withdrawal or discharge rates or effluent temperatures outside of those in the present NPDES permit. Due to the lack of such changes, the NRC staff concludes that the incremental effect of the EPU would have no additional effect on endangered aquatic species beyond those already addressed in the 1998 biological assessment and NMFS 2002 biological opinion (ADAMS Accession Nos. ML12009A034 and ML022460361, respectively).

Historic and Archaeological Resources Impacts

A 1973 archaeological survey (conducted on the recommendation of the Florida Division of Historical Resources) identified 20 archaeological sites within the CREC property boundaries, consisting of 18 prehistoric sites, one prehistoric site with historic components, and one of unspecified affiliation. Records at the Florida Master Site File in the Florida Division of Historical Resources confirm that these are the only recorded archaeological sites within CREC. These sites have not been evaluated for listing on the National Register for Historic Places (NRHP) and they remain potentially eligible until a formal evaluation is conducted. In addition, there are 63 recorded archaeological sites along the transmission line ROWs. Most of these archaeological sites have been determined ineligible for listing on NRHP, but nine have not been formally evaluated.

As previously discussed, all plant modifications related to the proposed EPU would occur within existing structures, or within previously disturbed areas on the CREC site. The developed area of the CREC site underwent clearing, filling, and grading during power plant construction, including being covered with a three to five foot layer of fill. Consequently, no areas remain undisturbed within the developed portions of the CREC site. Any potential ground disturbances would occur within this area. The licensee also has corporate procedures for the protection of archaeological resources, including consultation with the Florida State Historic Preservation Office, in place that apply to any ground disturbing activities within the CREC and along transmission lines. The 2009 EPU and steam generator replacement-outage did not adversely impact any archaeological sites on historic properties in the vicinity of CR–3, because all of the outage activity took place away from known archaeological sites within the previously disturbed developed portions of the plant site. Because no ground disturbance or EPU-related construction activities would occur outside of previously disturbed areas, there would be no significant impact from the proposed EPU-related modifications on historic and archaeological resources at the CREC site.

Socioeconomic Impacts

Potential socioeconomic impacts from the proposed EPU include increased demand for short-term housing, public services, and increased traffic in the region due to the temporary increase in the size of the workforce at CR–3 required to implement the EPU. The proposed EPU also could generate increased tax revenues for the State and surrounding counties due to increased power generation.

Approximately 760 full-time employees work at CR–3. For the recently completed 2009 outage, this workforce was augmented by an additional peak of 1,800 workers. For the upcoming 2013 outage, the licensee estimates a peak of 1,350 EPU-related workers, which is only slightly higher than a typical outage peak of 1,300 workers. Once EPU-related plant modifications have been completed, the size of the refueling outage workforce at CR–3 would return to normal levels and would remain similar to pre-EPU levels, with no significant increases during future refueling outages. The size of the regular plant operations workforce would be unaffected by the proposed EPU.

Based on the 2009 outage, NRC expects most of the EPU plant modification workers to relocate temporarily to the Tampa-St. Petersburg-Clearwater metropolitan area during the upcoming 2013 outage, resulting in short-term increased demands for public services and housing. Because plant modification work would be temporary, most workers would stay in available rental homes, apartments, mobile homes, and camper-trailers.

There were no housing or public services shortages during the 2009 outage, which employed a significantly

larger number of workers than is expected during the upcoming 2013 outage. Therefore, the increase in plant employment during the 2013 outage would have little or no noticeable effect on the availability of housing in the region.

The additional number of refueling outage workers and truck material and equipment deliveries needed to support EPU-related plant modifications could cause short-term level of service impacts (restricted traffic flow and higher incident rates) on secondary roads in the immediate vicinity of CR–3. The licensee expects increased traffic volumes during the upcoming 2013 refueling outage. However, based on a 2007-traffic study commissioned by the licensee, and the results of the 2009 refueling outage (which the study showed had a greater potential for impact to transportation in the region than the 2013 outage), only small traffic delays are anticipated during the 2013 outage. For the 2009 outage, the licensee successfully established a temporary offsite parking area, using shuttle buses to transport workers on and off the site to mitigate congestion at the intersection of US–19/US–98 and West Power Line Road. Because fewer workers will be required for the 2013 outage, offsite parking may not be used, however, the licensee recognizes that a similar approach to the 2009 outage could be utilized, if necessary.

CR–3 currently pays annual real estate property taxes to Citrus County, the Board of County Commissioners, the Citrus County School District, the Southwest Florida Water Management District, the Citrus County Hospital Board, the Homosassa Special Water District, mosquito control, and the county's municipalities to fund their respective operating budgets. The annual amount of future property taxes CR–3 would pay could take into account the increased value of CR–3, as a result of the EPU and increased power generation.

Due to the short duration of EPU-related plant modification activities, there would be little or no noticeable effect on tax revenues generated by additional temporary workers residing in Citrus County. In addition, there would be little or no noticeable increased demand for housing and public services or level-of-service traffic impacts beyond what is experienced during normal refueling outages at CR–3. Therefore, there would be no significant socioeconomic impacts from EPU-related plant modifications and power plant operations under EPU conditions in the vicinity of CR–3.

Environmental Justice Impact Analysis

The environmental justice impact analysis evaluates the potential for disproportionately high and adverse human health and environmental effects on minority and low-income populations that could result from activities associated with the proposed EPU at CR–3. Such effects may include human health, biological, cultural, economic, or social impacts. Minority and low-income populations are subsets of the general public residing in the vicinity of CR–3, and all are exposed to the same health and environmental effects generated from activities at CR–3.

NRC considered the demographic composition of the area within a 50 mi (80.5 km) radius of CR–3 to determine the location of minority and low-income populations using the U.S. Census Bureau data for 2010 and whether they may be affected by the proposed EPU.

According to 2010 census data, an estimated 1,039,919 people live within a 50 mi (80.5 km) radius of CR–3. Minority populations within 50 mi (80.5 km) comprise 20 percent (approximately 207,470 persons). The largest minority group was Hispanic or Latino (of any race) (approximately 92,015 persons or 9 percent), followed by Black or African American (approximately 80,979 persons or 8 percent). The 2010 census block groups containing minority populations were concentrated primarily east of CR–3. Minority populations within Citrus County comprise 10.6 percent of the total population, with the largest minority groups being Hispanic or Latino (of any race) with 4.7 percent, followed by Black or African American with 3 percent.

According to the 2010 American Community Survey 1-Year Estimates data, 17.3 percent of the total population and 12.3 percent of families residing in Citrus County were considered low-income, living below the 2010 federal poverty threshold. The 2010 federal poverty threshold was $11,139 for an individual and of $22,314 for a family of four. According to the 2010 American Community Survey 1-Year census estimates, the median household income for Florida was $53,093, while 12.0 percent of families and 16.5 percent of the state population were determined to be living below the Federal poverty threshold. Citrus County had a lower median household income average ($43,791) and slightly higher percentages of families and individuals living below the poverty threshold, respectively.

Potential impacts to minority and low-income populations would mostly consist of environmental and socioeconomic effects (e.g., noise, dust, traffic, employment, and housing impacts). Radiation doses from plant operations after implementation of the EPU are expected to continue to remain well below regulatory limits.

Noise and dust impacts would be temporary and limited to onsite activities. Minority and low-income populations residing along site access roads could experience increased commuter vehicle traffic during shift changes. Increased demand for inexpensive rental housing during the EPU-related plant modifications could disproportionately affect low-income populations; however, due to the short duration of the EPU-related work and the availability of housing, impacts to minority and low-income populations would be of short duration and limited. According to the 2010 census information, there were approximately 14,722 vacant housing units in Citrus County.

Based on this information and the analysis of human health and environmental impacts presented in this EA, the proposed EPU would not have disproportionately high and adverse human health and environmental effects on minority and low-income populations residing in the vicinity of CR–3.

Nonradiological Cumulative Impacts

The NRC considered potential cumulative impacts on the environment resulting from the incremental impact of the proposed EPU when added to other past, present, and reasonably foreseeable future actions in the vicinity of CR–3. For the purposes of this analysis, past actions are related to the construction and licensing of CR–3, present actions are related to current operations, and future actions are those that are reasonably foreseeable through the end of station operations, including operations after implementation of the EPU.

The NRC concluded that there would be no significant cumulative impacts to air quality, groundwater, threatened and endangered species, or historical and archaeological resources near CR–3 because the contributory effect of ongoing actions within the region are regulated and monitored through a permitting process (e.g., NPDES and 401/404 permits under the Clean Water Act) under State or Federal authority. In these cases, impacts are managed as long as these actions comply with their respective permits and conditions of certification.

Surface water and aquatic resources were examined for potential cumulative impacts. For both resource areas, the geographic boundary for potential cumulative impacts is the area of the post-EPU thermal mixing zone. If the proposed EPU is approved and is implemented, CR–3's mixing zone will not change from pre-uprate conditions during full flow and capacity because any increase in thermal discharge temperature will be mitigated either by a new cooling tower option or by load reduction management. The NRC anticipates that CR–3 will continue to operate post-EPU in full compliance with the requirements of the FDEP NPDES permit. FDEP would evaluate the licensee's compliance with the NPDES permit and take action, as required, to ensure compliance.

Cumulative socioeconomic impacts from the proposed EPU and continued operation of CR–3 would occur during the spring 2013 refueling outage. The increased demand for temporary housing, public services, and increased traffic from the EPU-related outage workforce would have a temporary cumulative additive effect on socioeconomic conditions in local communities. However, these cumulative effects would be similar to those experienced during normal refueling outages at CR–3 caused by current operations.

Nonradiological Impacts Summary

As discussed above, the proposed EPU would not result in any significant nonradiological impacts. Table 3 summarizes the nonradiological environmental impacts of the proposed EPU at CR–3.

TABLE 3—SUMMARY OF NONRADIOLOGICAL ENVIRONMENTAL IMPACTS

Land Use	No significant impacts on land use conditions and aesthetic resources in the vicinity of CR–3.
Air Quality	No significant impacts to air quality from temporary air quality impacts from vehicle emissions related to EPU construction workforce.
Water Use	No significant changes to impacts caused by current operations. No significant impacts on groundwater or surface water resources.
Aquatic Resources	No significant changes to impacts caused by current operation due to impingement, entrainment, and thermal discharges.
Terrestrial Resources	No significant impacts to terrestrial resources.
Threatened and Endangered Species	No significant changes to impacts caused by current operations.
Historic and Archaeological Resources	No significant impacts to historic and archaeological resources onsite or in the vicinity of CR–3.
Socioeconomics	No significant socioeconomic impacts from EPU-related temporary increase in workforce.
Environmental Justice	No disproportionately high or adverse human health and environmental effects on minority and low-income populations in the vicinity of CR–3.
Cumulative Impacts	No significant changes to impacts caused by current operations.

Radiological Impacts

Radioactive Gaseous and Liquid Effluents and Solid Waste

CR–3 uses waste treatment systems to collect, process, recycle, and dispose of gaseous, liquid, and solid wastes that contain radioactive material in a safe and controlled manner within NRC and EPA radiation safety standards. The licensee's evaluation of plant operation under proposed EPU conditions predict that no physical changes would be needed to the radioactive gaseous, liquid, or solid waste systems.

Radioactive Gaseous Effluents

The gaseous waste management systems include the radioactive gaseous system, which manages radioactive gases generated during the nuclear fission process. Radioactive gaseous wastes are principally activation gases and fission product radioactive noble gases resulting from process operations, including continuous cleanup of the reactor coolant system, gases used for tank cover gas, and gases collected during venting. The licensee's evaluation determined that implementation of the proposed EPU would not significantly increase the inventory of carrier gases normally processed in the gaseous waste management system, because plant system functions are not changing, and the volume inputs remain the same. The licensee's analysis also showed that the proposed EPU would result in an increase (a bounding maximum of 15.5 percent for all noble gases, particulates, radioiodines, and tritium) in the equilibrium radioactivity in the reactor coolant, which in turn increases the radioactivity in the waste disposal systems and radioactive gases released from the plant.

The licensee's evaluation concluded that the proposed EPU would not change the radioactive gaseous waste system's design function and reliability to safely control and process the waste. The existing equipment and plant procedures that control radioactive releases to the environment will continue to be used to maintain radioactive gaseous releases within the dose limits of 10 CFR 20.1302 and the as low as is reasonably achievable (ALARA) dose objectives in 10 CFR Part 50, Appendix I.

Radioactive Liquid Effluents

The liquid waste management system collects, processes, and prepares radioactive liquid waste for disposal. Radioactive liquid wastes include liquids from various equipment drains, floor drains, the chemical and volume control system, steam generator blowdown, chemistry laboratory drains, laundry drains, decontamination area drains, and liquids used to transfer solid radioactive waste. The licensee's evaluation shows that the proposed EPU implementation would not significantly increase the inventory of liquid normally processed by the liquid waste management system. This is because the system functions are not changing and the volume inputs remain the same. The proposed EPU would result in an increase in the equilibrium radioactivity in the reactor coolant (15.5 percent), which in turn would impact the concentrations of radioactive nuclides in the waste disposal systems.

Because the composition of the radioactive material in the waste and the volume of radioactive material processed through the system are not expected to significantly change, the current design and operation of the radioactive liquid waste system will accommodate the effects of the proposed EPU. The existing equipment and plant procedures that control radioactive releases to the environment will continue to be used to maintain

radioactive liquid releases within the dose limits of 10 CFR 20.1302 and ALARA dose objectives in 10 CFR part 50, Appendix I.

Radioactive Solid Wastes

Radioactive solid wastes include solids recovered from the reactor coolant systems, solids that come into contact with the radioactive liquids or gases, and solids used in the reactor coolant system operation. The licensee evaluated the potential effects of the proposed EPU on the solid waste management system. The largest volume of radioactive solid waste is low-level radioactive waste, sources include resins and charcoal, sludges and spent filters from water processing, and dry active waste (DAW) that result from routine plant operation, refueling outages, and routine maintenance. DAW includes paper, plastic, wood, rubber, glass, floor sweepings, cloth, metal, and other types of waste generated during routine maintenance and outages.

The licensee states that the proposed EPU would not have a significant effect on the generation of radioactive solid waste volume from the primary reactor coolant and secondary side systems because system functions are not changing, and the volume inputs remain consistent with historical generation rates. The waste can be handled by the solid waste management system without modification. The equipment is designed and operated to process the waste into a form that minimizes potential harm to the workers and the environment. Waste processing areas are monitored for radiation, and safety features are in place to ensure worker doses are maintained within regulatory limits. The proposed EPU would not generate a new type of waste or create a new waste stream. Therefore, the impact from the proposed EPU on radioactive solid waste would not be significant.

Occupational Radiation Dose at the EPU Power Level

FPC stated that the in-plant radiation sources are expected to increase approximately linearly with the proposed increase in core power level of 15.5 percent. For the radiological impact analyses, the licensee assumed an increase to the licensed thermal power level from 2,609 MWt to 3,014 MWt or 15.5 percent. To protect the workers, the licensee's radiation protection program monitors radiation levels throughout the plant to establish appropriate work controls, training, temporary shielding, and protective equipment requirements so that worker doses will remain within the dose limits of 10 CFR Part 20 and ALARA.

In addition to the work controls implemented by the radiation protection program, permanent and temporary shielding is used throughout CR–3 to protect plant personnel against radiation from the reactor and auxiliary systems. The licensee determined that the current shielding design, which uses conservative analytical techniques to establish the shielding requirements, is adequate to offset the increased radiation levels that are expected to occur from the proposed EPU. The proposed EPU is not expected to significantly affect radiation levels within the plant and, therefore, there would not be a significant radiological impact to the workers.

Offsite Doses at the EPU Power Level

The primary sources of offsite dose to members of the public from CR–3 is radioactive gaseous and liquid effluents. The licensee provided a comparison of historic offsite dose levels at CR–3 with the projected post-EPU dose levels (bounded by a factor of two) and the Appendix I ALARA guidelines, as shown below in Table 4. The doubled post-EPU does levels remain less than one percent of the Appendix I ALARA guidelines.

TABLE 4— HISTORIC AND PROJECTED POST-EPU OFFSITE DOSES COMPARED TO 10 CFR PART 50, APPENDIX I ALARA GUIDELINES.

	Historic CR–3 offsite doses (200 to 2008)	Projected post-EPU offsite doses (x2 scaling)	Appendix I ALARA guidelines	Units
Liquid				
Total Body	$9.39x10^{-5}$	$1.88x10^{-4}$	3	mrem/yr.
Maximum Organ	$3.65x10^{-3}$	$7.30x10^{-3}$	10	mrem/yr.
Gaseous				
Gamma Air Dose	$2.69x10^{-3}$	$5.38x10^{-3}$	10	mrad/yr.
Beta Air Dose	$1.95x10^{-2}$	$3.90x10^{-2}$	20	mrad/yr.
Total Body	$5.61x10^{-3}$	$1.10x10^{-2}$	15	mrem/yr.
Maximum Organ	$1.68x10^{-2}$	$3.36x10^{-2}$	15	mrem/yr.

As previously discussed, operation at the EPU power level will not change the ability of the radioactive gaseous and liquid waste management systems to perform their intended functions. Also, there would be no change to the radiation monitoring system and procedures used to control the release of radioactive effluents in accordance with NRC radiation protection standards in 10 CFR Part 20 and 10 CFR Part 50, Appendix I.

Based on the above, the offsite radiation dose to members of the public would continue to be within NRC and EPA regulatory limits and, therefore, would not be significant.

Spent Nuclear Fuel

Spent fuel from CR–3 is currently stored in the plant's spent fuel pool, however, the licensee has initiated the construction of an independent spent fuel storage installation to provide additional dry storage of spent nuclear fuel at the CR–3 site. CR–3 is licensed to use uranium-dioxide fuel that has a maximum enrichment of 5 percent by weight uranium-235. The average fuel assembly discharge burnup for the proposed EPU is expected to be limited to 50,000 megawatt days per metric ton uranium (MWd/MTU) with no fuel pins exceeding the maximum fuel rod burnup limit of 60,000 MWd/MTU. The licensee's fuel reload design goals will maintain the CR–3 fuel cycles within the limits bounded by the impacts analyzed in 10 CFR Part 51, Table S–3—Uranium Fuel Cycle Environmental Data and Table S–4—Environmental Impact of Transportation of Fuel and Waste to and From One Light-Water-Cooled Nuclear Power Reactor, as supplemented by NUREG–1437, Volume 1, Addendum 1, ''Generic Environmental Impact Statement for License Renewal of Nuclear Plants, Main Report, Section 6.3—Transportation Table 9.1, Summary of findings on NEPA [National Environmental Policy Act] issues for

license renewal of nuclear power plants'' (ADAMS Accession No. ML12111A162). Therefore, there would be no significant impacts resulting from spent nuclear fuel.

Postulated Design-Basis Accident Doses

Postulated design-basis accidents are evaluated by both the licensee and NRC to ensure that CR–3 can withstand normal and abnormal transients and a broad spectrum of postulated accidents without undue hazard to the health and safety of the public.

The licensee performed analyses according to the Alternative Radiological Source Term methodology, updated with input and assumptions consistent with the proposed EPU. For each design-basis accident, radiological consequence analyses were performed using the guidance in NRC Regulatory Guide 1.183, ''Alternative Radiological Source Terms for Evaluating Design Basis Accidents at Nuclear Power Reactors'' (ADAMS Accession No. ML003716792). Accident-specific total effective dose equivalent was determined at the exclusion area boundary, at the low-population zone, and in the control room. The analyses also include the evaluation of the waste gas decay tank rupture event. The licensee concluded that the calculated doses meet the acceptance criteria specified in 10 CFR 50.67 and 10 CFR Part 50, Appendix A, General Design Criterion 19.

NRC is evaluating the licensee's EPU applications to independently determine whether they are acceptable to approve. The results of the NRC evaluation and conclusion will be documented in a Safety Evaluation Report that will be publicly available. If NRC approves the EPU, then the proposed EPU will not have a significant impact with respect to the radiological consequences of design-basis accidents.

Radiological Cumulative Impacts

The radiological dose limits for protection of the public and workers have been developed by the NRC and EPA to address the cumulative impact of acute and long-term exposure to radiation and radioactive material. These dose limits are codified in 10 CFR part 20 and 40 CFR part 190.

The cumulative radiation doses to the public and workers are required to be within the regulations cited above. The public dose limit of 25 millirem (0.25 millisieverts) in 40 CFR Part 190 applies to all reactors that may be on a site, the storage of low level radioactive waste and spent nuclear fuel, and includes any other nearby nuclear power reactor facilities. No other nuclear power reactor or uranium fuel cycle facility is located near CR–3. The offsite dose analysis data demonstrate that the dose to members of the public from radioactive effluents is well within the limits of 10 CFR Part 20 and 40 CFR Part 190. The projected post-EPU doses remain well within regulatory limits. Therefore, the NRC staff concludes that there would not be a significant cumulative radiological impact to members of the public from increased radioactive effluents from CR–3 at the proposed EPU power level.

As previously discussed, the licensee has a radiation protection program that maintains worker doses within the dose limits in 10 CFR Part 20 during all phases of CR–3 operations. The NRC expects continued compliance with regulatory dose limits during operation at the proposed EPU power level. Therefore, the NRC staff concludes that operation of CR–3 at the proposed EPU levels would not result in a significant impact to worker cumulative radiological dose.

Radiological Impacts Summary

As discussed above, the proposed EPU would not result in any significant radiological impacts. Table 5 summarizes the radiological environmental impacts of the proposed EPU at CR–3.

TABLE 5—SUMMARY OF RADIOLOGICAL ENVIRONMENTAL IMPACTS

Radioactive Gaseous Effluents	Amount of additional radioactive gaseous effluents generated would be handled by the existing system.
Radioactive Liquid Effluents	Amount of additional radioactive liquid effluents generated would be handled by the existing system.
Radioactive Solid Waste	Amount of additional radioactive solid waste generated would be handled by the existing system.
Occupational Radiation Doses	Occupational doses would continue to be maintained within NRC limits.
Offsite Radiation Doses	Radiation doses to members of the public would remain below NRC and EPA radiation protection standards.
Spent Nuclear Fuel	The spent fuel characteristics will remain within the bounding criteria used in the impact analysis in 10 CFR Part 51, Table S–3 and Table S–4.
Postulated Design-Basis Accident Doses	Calculated doses for postulated design-basis accidents would remain within NRC limits.
Cumulative Radiological	Radiation doses to the public and plant workers would remain below NRC and EPA radiation protection standards.

Alternatives to the Proposed Action

As an alternative to the proposed action, the NRC considered denial of the proposed EPU (i.e., the ''no-action'' alternative). Denial of the application would result in no change in the current environmental impacts. However, if the EPU was not approved for CR–3, other agencies and electric power organizations may be required to pursue other means, such as fossil fuel or alternative fuel power generation, in order to provide electric generation capacity to offset future demand. Construction and operation of such a fossil-fueled or alternative-fueled facility could result in impacts in air quality, land use, and waste management greater than those identified for the proposed EPU at CR–3. Furthermore, the proposed EPU does not involve environmental impacts that are significantly different from those originally indentified in the Crystal River Unit 3 FES and draft SEIS–44.

Alternative Use of Resources

This action does not involve the use of any different resources than those previously considered in the FES or draft SEIS–44.

Agencies and Persons Consulted

In accordance with its stated policy, on November 6, 2012, the NRC consulted with the State of Florida official regarding the environmental impact of the proposed action. The State official had no comments.

IV. Draft Finding of No Significant Impact

Based on the details provided in the EA, the NRC concludes that granting the proposed EPU license amendment is not

expected to cause impacts significantly greater than current operations. Therefore, the proposed action of implementing the EPU for CR–3 will not have a significant effect on the quality of the human environment because no significant permanent changes are involved, and the temporary impacts are within previously disturbed areas at the site and the capacity of the plant systems. Accordingly, the NRC has determined it is not necessary to prepare an environmental impact statement for the proposed action.

Dated at Rockville, Maryland, this 8th day of January, 2013.

For the Nuclear Regulatory Commission.

Jessie F. Quichocho,

Acting Chief, Plant Licensing Branch II–2, Division of Operating Reactor Licensing, Office of Nuclear Reactor Regulation.

[FR Doc. 2013–00781 Filed 1–15–13; 8:45 am]

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NUCLEAR REGULATORY COMMISSION

[Docket No. 52–033; NRC–2008–0566]

DTE Electric Company (Formerly the Detroit Edison Company), Notice of Availability of Final Environmental Impact Statement for a Combined License for Unit 3 at the Enrico Fermi Atomic Power Plant Site

Notice is hereby given that the U.S. Nuclear Regulatory Commission (NRC) and the U.S. Army Corps of Engineers, Detroit District, have published NUREG–2105, ''Final Environmental Impact Statement for the Combined License (COL) for Enrico Fermi Unit 3.'' The site is located in Monroe County, Michigan. The application for the COL was submitted by letter dated September 18, 2008, pursuant to part 52 of Title 10 of the *Code of Federal Regulations* (10 CFR). A notice of receipt and availability of the application, which included the environmental report, was published in the **Federal Register** on October 10, 2008. A notice of acceptance for docketing of the COL application was published in the **Federal Register** on November 25, 2008. A notice of intent to prepare a draft environmental impact statement (EIS) and to conduct the scoping process was published in the **Federal Register** on December 10, 2008 (73 FR 75142).

SUPPLEMENTARY INFORMATION:

Accessing Information

Please refer to Docket ID NRC–2008–0566 when contacting the NRC about the availability of information regarding this document. You may access information related to this document, which the NRC possesses and are publicly-available, using any of the following methods:

• *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2008–0566. Address questions about NRC dockets to Carol Gallagher; telephone: 301–492–3668; email: *Carol.Gallagher@nrc.gov.*

• *NRC's Agencywide Documents Access and Management System (ADAMS):* You may access publicly-available documents online in the NRC Library at *http://www.nrc.gov/reading-rm/adams.html.* To begin the search, select ''*ADAMS Public Documents''* and then select ''*Begin Web-based ADAMS Search.''* For problems with ADAMS, please contact the NRC's Public Document Room (PDR) reference staff at 1–800–397–4209, 301–415–4737, or by email to *pdr.resource@nrc.gov.* The four volumes of the final EIS are available electronically under ADAMS Accession Numbers ML12307A172, ML12307A176, ML12307A177, and ML12347A202.

• *NRC's PDR:* You may examine and purchase copies of public documents at the NRC's PDR, Room O1–F21, One White Flint North, 11555 Rockville Pike, Rockville, Maryland 20852.

In addition, the final EIS can be accessed online at the NRC's Fermi Unit 3—specific Web page at *http://www.nrc.gov/reactors/new-reactors/col/fermi.html.* The Ellis Library and Reference Center, located at 3700 South Custer Road, Monroe, Michigan 48161–9716, has also agreed to make the final EIS available to the public.

FOR FURTHER INFORMATION CONTACT: Mr. Bruce Olson, Project Manager, Environmental Projects Branch 2, Division of New Reactor Licensing, Office of New Reactors, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001. Telephone: 301–415–3731; email: *Bruce.Olson@nrc.gov.*

Dated at Rockville, Maryland, this 10th day of January, 2013.

For the Nuclear Regulatory Commission.

Mark S. Delligatti,

Deputy, Director, Division of New Reactor Licensing, Office of New Reactors.

[FR Doc. 2013–00783 Filed 1–15–13; 8:45 am]

BILLING CODE 7590–01–P

NUCLEAR REGULATORY COMMISSION

[Docket No. 030–09415; NRC–2013–0006]

Aptuit, LLC; License Amendment Request, Opportunity To Provide Comments, Request a Hearing and To Petition for Leave To Intervene

AGENCY: Nuclear Regulatory Commission.

ACTION: Decommissioning plan, license amendment request; opportunity to comment, request a hearing and petition for leave to intervene.

DATES: Comments must be filed by February 15, 2013. A request for a hearing must be filed by March 18, 2013.

ADDRESSES: You may access information and comment submissions related to this document, which the NRC possesses and are publically available, by searching on *http://www.regulations.gov* under Docket ID NRC–2013–0006. You may submit comments by any of the following methods:

• *Federal Rulemaking Web site:* Go to *http://www.regulations.gov* and search for Docket ID NRC–2013–0006. Address questions about NRC dockets to Carol Gallagher; telephone: 301–492–3668; email: *Carol.Gallagher@nrc.gov.*

• *Mail comments to:* Cindy Bladey, Chief, Rules, Announcements, and Directives Branch (RADB), Office of Administration, Mail Stop: TWB–05–B01M, U.S. Nuclear Regulatory Commission, Washington, DC 20555–0001.

• *Fax comments to:* RADB at 301–492–3446.

For additional direction on accessing information and submitting comments, see ''Accessing Information and Submitting Comments'' in the **SUPPLEMENTARY INFORMATION** section of this document.

FOR FURTHER INFORMATION CONTACT: Michael LaFranzo, Senior Health Physicist, Materials Control, ISFSI, and Decommissioning Branch, Division of Nuclear Materials Safety, Region III, U.S. Nuclear Regulatory Commission, 2443 Warrenville Road, Lisle, Illinois 60532; telephone: 630–829–9865; fax number: 630–515–1259; email: *Michael.LaFranzo@nrc.gov.*

SUPPLEMENTARY INFORMATION:

I. Accessing Information and Submitting Comments

A. Accessing Information

Please refer to Docket ID NRC–2013–0006 when contacting the NRC about