

State of Florida



Public Service Commission

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TALLAHASSEE, FLORIDA 32399-0850

-M-E-M-O-R-A-N-D-U-M-

DATE: August 11, 2020

TO: Office of Commission Clerk (Teitzman)

FROM: Division of Economics (McNulty, Galloway, Kunkler, Smith II, Wu) *WBM JGH*
Division of Accounting and Finance (Brown, Cicchetti, Higgins, Richards) *MC ALM*
Office of Auditing and Performance Analysis (Vinson) *DM*
Division of Engineering (Ellis, King, Thompson) *TB*
Office of the General Counsel (Brownless, J. Crawford) *JSC*

RE: Docket No. 20190140-EI – Petition to approve transaction for accelerated decommissioning services at CR3 facility, transfer of title to spent fuel and associated assets, and assumption of operations of CR3 facility pursuant to the NRC license, and request for waiver from future application of Rule 25-6.04365, F.A.C. for nuclear decommissioning study, by Duke Energy Florida, LLC.

AGENDA: 08/18/20 – Special Agenda – Post-hearing decision; participation is limited to Commissioners and staff

COMMISSIONERS ASSIGNED: All Commissioners

PREHEARING OFFICER: Polmann

CRITICAL DATES: None

SPECIAL INSTRUCTIONS: None

Case Background

Duke Energy Florida, LLC (DEF or Company) filed its Petition in this docket on July 10, 2019. Pursuant to Rules 28-106.201 and 25-6.04365, Florida Administrative Code (F.A.C.), DEF requests the Florida Public Service Commission (Commission) approve the following items:

1. A transaction between DEF and Accelerated Decommissioning Partners, LLC (ADP) that would transfer:
 - a. All decommissioning activities of the Crystal River nuclear power plant (CR3) on an accelerated basis to an ADP subsidiary, ADPCR3;
 - b. DEF's obligations as a Nuclear Regulatory Commission-licensed operator of CR3 to ADP via ADPCR3;
 - c. Ownership of DEF's Independent Spent Fuel Storage Installation (IFSFI) assets to another ADP subsidiary, ADPSF1, LLC; and
 - d. DEF's contract with the U.S. Department of Energy (DOE) for disposal of spent nuclear fuel and high level radioactive waste to ADP via ADPSF1;
2. DEF's updated nuclear decommissioning cost study; and
3. A waiver, if necessary, of the requirement contained in Rule 25-6.04365, F.A.C., for DEF to file updated nuclear decommissioning studies with the Commission every five years.

DEF states that the central purpose of the proposed transaction is to facilitate an acceleration of the radiological decommissioning and site restoration of CR3 by approximately 36 years. Specifically, DEF estimates the transaction, if approved, would achieve this result by 2038 under the proposed DECON model of decommissioning, rather than by 2074 as is expected under the current SAFSTOR model. Based on cost considerations, SAFSTOR was the model selected by DEF in 2013 for decommissioning CR3 within a 60 year period. At the time, the cost of the DECON model was greater than the amount in DEF's Nuclear Decommissioning Trust (NDT) fund. Rather than collect additional funds from customers to augment the NDT, DEF selected the SAFSTOR model to allow the existing NDT fund to increase over time via fund earnings.

Under the proposed transaction, DEF maintains that there are sufficient funds in the NDT to pay for the accelerated decommissioning, so no additional funds are requested from DEF's customers. DEF maintains that the proposed transaction under DECON serves to mitigate the risk from long-term CR3 dormancy under the SAFSTOR method while providing financial benefits to DEF's customers. DEF further asserts that the proposed transaction relative to the current SAFSTOR method would result in reduced: (1) environmental risks associated with extended dormancy of the plant, (2) risks of regulatory changes that may result in the loss of availability of radioactive waste disposal sites, (3) financial risk of cost escalation rates exceeding the NDT fund's rate of return, and (4) project execution risk because the transaction is based on a fixed price contract. The financial benefits of transaction approval include a higher likelihood that unused NDT funds would be returned to customers and Duke Energy Corporation

shareholders decades earlier than under the SAFSTOR model and the elimination of long term obligations and liabilities associated with continued maintenance of the property.

ADP is a joint venture between NorthStar Group Services, Inc. (NorthStar) (75 percent owner) and Orano Decommissioning Holding, LLC (25 percent owner), a wholly owned subsidiary of Orano USA, LLC (Orano). ADP was created for the specific purpose of decommissioning nuclear power plants. ADP subsidiaries ACPCR3 and ADPSF1, are counterparties to the agreements under the transaction. ADP intends to contract with Waste Control Specialist, LLC (WCS), an affiliate of NorthStar, for purposes of low level radioactive waste disposal. WCS operates radioactive and hazardous waste disposal facilities in Texas, and it is the only facility in the United States that can directly dispose of Class A, B, and C Waste from nuclear power plants.

The transaction for which DEF is seeking Commission approval includes a host of agreements, including the Decommissioning Services Agreement (DSA), which can be considered the master agreement, and references numerous other agreements as exhibits to the DSA. These other agreements include the Spent Nuclear Fuel Purchase and Sale Agreement, Spent Nuclear Fuel Agreement, Contractor's Provisional Trust Agreement, Parent Support Agreements, IFSFI Decommissioning Trust Agreement, and several additional agreements. Also included in the transaction are Parent Guarantees. The DSA and all related agreements and guarantees appear as an exhibit to DEF witness Hobbs' direct testimony.

The Closing of the proposed transaction requires not only the approval of the Commission, but also two other key approvals. The Nuclear Regulatory Commission (NRC) must approve the facility operating license transfer to ADP as prescribed in 10 C.F.R. Section 50.80. In addition, DEF must receive a private letter ruling from the Internal Revenue Service (IRS) to confirm that the proposed transaction does not disqualify the NDT from remaining a qualified fund for tax purposes and that the contract payments made from the NDT to ADPCR3 are a permissible use of the qualified NDT.

The required approvals of the Commission, the NRC, and the IRS in order for this transaction to close underscores the shared jurisdiction of the decommissioning process. As stated in Rule 25-6.04365(2)(b), F.A.C., nuclear decommissioning is "the process of safely managing, dismantling, removing, or converting for reuse the materials and equipment that remain at a nuclear generating unit following its retirement that results in an amendment to the licensing status of a nuclear power plant from operational to possession-only and possibly unrestricted use."

Nuclear Decommissioning – History

The NRC identifies three methods of decommissioning; DECON, SAFSTOR, and ENTOMB. Under DECON, the equipment, structures, and portions of the facility and site that contain radioactive contaminants are promptly removed or decontaminated to a level that permits termination of the license shortly after cessation of operations. Under SAFSTOR, the plant is shut down and defueled, the facility is placed in a safe, stable condition and maintained in that state, to be later decontaminated and dismantled at the end of the storage period to levels that permit license termination. Under ENTOMB, radioactive structures, systems and components are encased in a structurally long-lived substance, such as concrete, then maintained and surveilled until the radioactivity decays to a level that permits license termination. DEF operated

under the DECON method of decommissioning prior to 2015, but has operated under SAFSTOR since then.¹ DEF's proposal would place it under the DECON method once again if the Commission approves the proposed transaction.

In 1982, the Commission required all utilities that operate nuclear units in Florida to establish a funded reserve for decommissioning, and concluded that an internally funded reserve was the appropriate method to account for decommissioning costs.² Effective June 1988, the NRC released amendments to its decommissioning reporting and recordkeeping rule (10 C.F.R. Section 50.75), which specified three methods acceptable to the NRC for electric utilities to demonstrate reasonable financial assurance that funds would be available for decommissioning. Under the amended rule, financial assurance can be provided by prepayment prior to the start of operation, an external sinking fund, or a surety method, insurance, or other guarantee method. An external sinking fund is defined in the NRC rule as:

A fund established and maintained by setting funds aside periodically in an account segregated from licensee assets and outside the licensee's administrative control in which the total amount of funds would be sufficient to pay decommissioning costs at the time termination of operation is expected. An external sinking fund may be in the form of a trust, escrow account, government fund, certificate of deposit, or deposit of government securities.

In September 1989, the Commission issued Order No. 21928 which recognized the NRC rule change and approved the external sinking fund method.³ The external sinking fund method led to what is known today as DEF's NDT. In Order No. 21928, the Commission stated that the objective of a decommissioning trust fund is to have enough money on hand at the time of decommissioning to meet all required expenses at the lowest cost to utility ratepayers. The Commission found that the appropriate investment strategy for a nuclear decommissioning trust fund should ensure that each dollar contributed to the fund is available at the time of decommissioning and that the fund's assets earned a consistent positive return over a market cycle. In Order No. 21928, the Commission required an investment performance evaluation of utilities with nuclear units, along with all other decommissioning activities, every five years. The Commission required a minimum fund earnings rate equivalent to the level of inflation over each five-year review period.

The Commission's decommissioning rule, Rule 25-6.04365, F.A.C., codifies the Commission's policy of requiring each utility that owns a nuclear generating plant to ensure that there are sufficient funds on hand at the time of decommissioning to meet all required expenses by

¹ Order No. PSC-14-0702-PAA-EI, issued December 22, 2014, In Docket No. 20140057-EI, *In re: Petition for approval of 2014 nuclear decommissioning study, by Duke Energy Florida, Inc.*

² Order No. 10987, issued July 13, 1982, in Docket No. 810100-EU(CI), *In re: Investigation of the appropriate accounting and ratemaking treatment of decommissioning costs in nuclear-powered generators.*

³ Order No. 21928, issued September 29, 1989, in Docket No. 870098-EI, *In re: Petitions for approval of an increase in the accrual of nuclear decommissioning costs by Florida Power Corporation and Florida Power and Light Company.* On June 20, 2001, Florida Power Corporation was acquired by Carolina Power and Light Company and became Progress Energy Florida, Inc. effective January 1, 2003. On April 29, 2013, Progress Energy Florida, Inc. officially changed its name to Duke Energy Florida, Inc. (d/b/a Duke Energy Florida) following its merger with Duke Energy.

establishing decommissioning accruals. Rule 25-6.04365, F.A.C., requires each such utility to file a site-specific decommissioning study at least once every five years from the date of the previous study unless otherwise required by the Commission, and the rule specifies the minimum requirements for such studies. Included in such minimum requirements are decommissioning cost information, the calculation of decommissioning annual accrual using current cost estimates escalated to the expected date of decommissioning, and information pertaining to the NDT fund balance and funds earning rate.

The fund established for DEF's NDT has had various trustees over the years. In 2012, State Street Bank and Trust Company was the trustee of the NDT.⁴ On December 31, 2015, DEF changed trustees and appointed The Bank of New York Mellon, a New York state chartered bank, as Trustee of DEF's NDT.

In December 1994, Florida Power Corporation (FPC, predecessor of DEF), and Florida Power & Light Company (FPL) filed decommissioning cost studies with the Commission, in which the utilities proposed the inclusion of costs associated with dry storage of spent nuclear fuel (SNF) after nuclear unit retirements. At that time, it was understood that the U.S. Department of Energy (DOE) was not expected to meet its January 31, 1998 deadline for acceptance of SNF under the Nuclear Waste Policy Act of 1982, nor have a permanent repository for SNF in operation prior to 2010. Under these conditions, CR3 was expected to require on-site dry storage before its operating license expiration date. Anticipating inadequate storage of SNF in the customary storage containment, spent fuel pools, the utilities planned to develop longer-term storage options known as independent spent fuel storage installations (ISFSI). Litigation on this matter against the DOE was initiated by utilities, including FPC and FPL, and utility commissions, including the Florida Public Service Commission, but the DOE insisted it had no obligation to begin accepting SNF in 1998. The Commission decided to allow FPC and FPL to include on-site dry storage costs in their respective accruals. The Commission found that these costs should continue to be reviewed to determine their inclusion in the annual decommissioning accruals.⁵

In February 2013, DEF made the decision to retire CR3. In November that same year, the Commission issued Order No. PSC-13-0598-EI approving the Revised and Restated Stipulation and Settlement Agreement (2013 Settlement).⁶ This allowed recovery of certain CR3 costs, including the cost of dry cask storage and the CR3 regulatory asset. The recovery period that the signatories agreed to in the 2013 Settlement was the earlier of January 2017 or expiration of the Levy Nuclear Project cost recovery charge.

In January 2015, the Commission issued Order No. PSC-15-0027-PAA-EI, in which it approved DEF's request to construct an Independent Spent Fuel Storage Installation (ISFSI) at CR3, a

⁴ Order No. PSC-12-0225-PAA-EI, issued April 30, 2012, in Docket No. 100461-EI, *In re: Petition for approval of nuclear decommissioning cost study, by Progress Energy Florida, Inc.*

⁵ Order No. PSC-95-1531-FOF-EI, issued December 12, 1995, in Docket No. 941350-EI, *In re: Petition for increase in annual accrual for Turkey Point and St. Lucie Nuclear Unit Decommissioning Costs by Florida Power & Light Company* and Docket No. 941352, *In re: Petition for approval of increase in accrual of nuclear decommissioning costs by Florida Power Corporation.*

⁶ Order No. PSC-13-0598-FOF-EI, issued November 12, 2013, in Docket No. 130208-EI, *In re: Petition for limited proceeding to approve revised and restated stipulation and settlement agreement by Duke Energy Florida, Inc. d/b/a Duke Energy.*

plant then producing no additional spent nuclear fuel. In addition, the Commission decided to defer recovery of the IFSFI portion of the CR3 regulatory asset until litigation with the DOE concluded and all recoveries from the federal government were received, and to adjust base rates at that time.

However, in November 2017, the Commission issued Order No. PSC-2017-0451-AS-EU approving the 2017 Second Revised and Restated Settlement Agreement (2017 Settlement) in which the signatories agreed, among other things, that DEF was entitled to petition the Commission for ISFSI capital costs to be recovered through the Capacity Cost Recovery Clause. The 2017 Settlement also stated that “DEF shall credit the CCR clause with the retail portion of all applicable Department of Energy (“DOE”) awards when they are received, and shall amortize [in the CCR clause] the adjusted final DCS facility capital costs balance over the recovery period set forth in Subparagraph 5.c. and 5.d., unless another recovery period is agreed to by all the Original Parties.” The settlement also included provisions for DEF to petition the Commission to collect up to \$8 million to additionally fund the CR3 NDT in support of decommissioning CR3 through December 2021, with the limitation of \$8 million expiring after that date.⁷

On September 10, 2018, DEF filed with the Commission, for informational purposes, a study titled “Updated Site Specific Decommissioning Cost Estimate for Crystal River Unit 3 Nuclear Generating Plant” prepared by TLG Services in May 2018. In this study, TLG Services noted that the construction of the ISFSI and the transfer of spent fuel to it was completed in January 2018. The ISFSI decommissioning cost estimate identified in the study includes the ISFSI operations and maintenance expense, canister transfer expense, and the cost of decommissioning the ISFSI site and facilities. The estimate excluded the costs to construct the IFSFI and transfer the spent fuel from the storage pool to the IFSFI.

Events Subsequent to DEF’s Petition

The Order Establishing Procedure, issued August 2, 2019, set dates for an evidentiary hearing to be held January 7-9, 2020.⁸ The Office of Public Counsel (OPC) filed an Unopposed Motion to Hold the Hearing Schedule in Abeyance (Motion) pending the issuance of the NRC Order regarding the transfer of DEF’s license to ADP. The NRC had indicated that its decision on DEF’s license transfer application would not likely take place until the first or second quarter of 2020. On the basis of administrative efficiency, the Prehearing Officer granted the Motion, and he recognized that a new hearing schedule would be determined after issuance of an order by the NRC regarding the license transfer.⁹ Upon the NRC’s issuance of its transfer order dated April 1,

⁷ Order No. PSC-2017-0451-AS-EU, issued November 20, 2017, in Docket No. 20170183-EI, *In re: Application for limited proceeding to approve 2017 second revised and restated settlement agreement, including certain rate adjustments, by Duke Energy Florida, LLC*, Docket No. 20100437-EI *In re: Examination of the outage and replacement fuel/power costs associated with the CR3 steam generator replacement project, by Progress Energy Florida, Inc.*, Docket No. 20150171-EI *In re: Petition for issuance of nuclear asset-recovery financing order, by Duke Energy Florida, d/b/a Duke Energy*, Docket No. 20170001-EI: *In re: Fuel and purchased power cost recovery clause with generating performance incentive factor*, Docket No. 20170002-EI *In re: Energy conservation cost recovery clause*, and Docket No. 20170009-EI *In re: Nuclear cost recovery clause, respectively*.

⁸ Order No. PSC-2019-0320-PCO-EI, issued August 2, 2019, in the instant docket.

⁹ Order No. PSC-2019-0384-PCO-EI, issued September 20, 2019, in the instant docket.

2020, the Second Order Modifying Procedure was issued on April 15, 2020, setting forth the new schedule of key dates in this docket.¹⁰ The hearing dates were set for July 7-8, 2020.

As referenced above, the NRC issued its *Order Approving Transfer of Licensed Authority and Draft Conforming Administrative License Amendment* on April 1, 2020. The NRC order consented to the transfer Facility Operating License No. DPR-72 for CR3 from DEF to ADPCR3 and consented to the transfer of the general license for the CR3 independent spent fuel storage installation from DEF to ADPSF1. In that order, the NRC stated, “there is reasonable assurance that the activities authorized by the amendment can be conducted without endangering the health and safety of the public and that such activities will be conducted in compliance with the Commission’s regulations.”

On January 15, 2020, the IRS issued a Private Letter Ruling confirming the DSA will not cause a disqualification, in whole or in part, of the qualified trust fund maintained within the NDT fund. Further, payments made from the qualified trust fund maintained within the NDF pursuant to the DSA are a permissible use of the NDT fund

The prehearing conference in this docket was held on June 30, 2020. The technical hearing was conducted on July 7-9, 2020. Post-hearing briefs were filed on July 23, 2020. OPC, the Florida Industrial Power Users Group (FIPUG), and White Springs Agricultural Chemicals d/b/a/ PCS Phosphate - White Springs (PCS Phosphate) are intervenors in this case. The Intervenor filed a joint brief titled “Consumer Parties’ Joint Post Hearing Brief,” in which the Intervenor collectively adopted identical positions and arguments on all issues. Throughout this staff recommendation, such intervenor parties, in their positions and arguments, will be referenced as the “Intervenor.”

The Commission is vested with jurisdiction over these matters through several provisions of Chapter 366, Florida Statutes, including Sections 366.04, 366.05, and 366.06.

¹⁰ Order No. PSC-2020-0105-PCO-EI, issued April 15, 2020, in the instant docket.

ACRONYMS LIST

ADP	Accelerated Decommissioning Partners, LLC
ADPCR3	ADPCR3, LLC, an ADP subsidiary
ADPSF1	ADPSF1, LLC, an ADP subsidiary
ANI	American Nuclear Insurers
CCR	Capacity Cost Recovery Clause
CISF	Consolidated interim storage facility
CPT	Contractor's Provisional Trust
CR3	Crystal River Unit 3 Nuclear Power Plant
CREC	Crystal River Energy Complex
D&D	Decontamination and Dismantlement
DEF	Duke Energy Florida, LLC
DCS	Dry Cask Storage
DOE	United States Department of Energy
DSA	Decommissioning Services Agreement
ISFSI	Independent Spent Fuel Storage Installation
LLRW	low-level radioactive waste
NDT	Nuclear Decommissioning Trust
NorthStar	NorthStar Group Services, Inc.
NRC	Nuclear Regulatory Commission
PSA	Parental Support Agreement
RFI	Request for Information
RFP	Request for Proposals
RRSSA	2 nd Revised and Restated Stipulation and Settlement Agreement (or 2017 Settlement)
SNF PSA	Spent Nuclear Fuel Purchase and Sale Agreement
WCS	Waste Control Specialists, LLC, an affiliate of NorthStar

Discussion of Issues

Issue 1: Should the Florida Public Service Commission approve the transactions as contemplated by the Agreement (Decommissioning Services Agreement), the SNF PSA (Spent Nuclear Fuel Purchase and Sale Agreement), and the Ancillary Agreements (as defined in Article I, Section 1.1.1 of the Agreement)?

Recommendation: The Commission should approve the transactions contemplated by the Decommissioning Services Agreement, the SNF PSA, and the Ancillary Agreements between DEF and Accelerated Decommissioning Partners, LLC (ADP) that would result in the transfer of:

- a. All decommissioning activities of the Crystal River nuclear power plant (CR3) on an accelerated basis to an ADP subsidiary, ADPCR3;
- b. DEF's obligations as a Nuclear Regulatory Commission-licensed operator of CR3 to ADP via ADPCR3;
- c. Ownership of DEF's Independent Spent Fuel Storage Installation (IFSFI) assets to another ADP subsidiary, ADPSF1, LLC; and
- d. DEF's contract with the U.S. Department of Energy (DOE) for disposal of spent nuclear fuel and high level radioactive waste to ADP via ADPSF1.

(Brownless, Cicchetti, Higgins, Kunkler, McNulty, Richards, Smith II, Thompson, Vinson, Wu)

Position of the Parties

DEF: Yes, the Commission should approve the proposed transaction. The transaction is in DEF's customers' best interest. All but one risk is transferred to ADPCR3. The DSA provides sufficient protections for the remaining risk to DEF. Notably, DEF will only pay for completed work. The intervenor's changes are unnecessary and may prevent the deal from closing. DEF should not be required to return any money to its customers until DEF's remaining risk is terminated.

Intervenors: Yes, but only if approval is accompanied by an express prohibition on funds recovered from DOE being deposited into the NDT and adoption of the three risk mitigation enhancements recommended in the Direct Testimony of Richard A. Polich to support the protections included in the transaction. These are set out at TR 642-643.

Staff Analysis:

Parties' Arguments

DEF

DEF avers that benefits of the accelerated decommissioning strategy for DEF and DEF's customers include: (1) mitigation of environmental risks of the plant sitting dormant in

SAFSTOR for an extended time; (2) elimination of long-term obligations and liabilities associated with the continued maintenance of the CR3 Facility; (3) reduction of the risks associated with potential regulatory changes, including loss of availability of radioactive waste disposal sites; (4) mitigation of financial risks, including the cost escalation rate that may exceed the NDT rate of return and significant reduction in the value of the NDT due to market conditions; (5) reduced project execution risks based on a fixed price contract; (6) reduced likelihood that DEF will need additional funding from customers; and (7) increased likelihood that unused NDT funds will be returned to DEF customers and Duke Energy Corporation shareholders decades earlier than under SAFSTOR. (DEF BR 4-5)

During the request for proposals (RFP) process, DEF argues that it thoroughly reviewed the vendor proposals submitted to it. DEF further argues that each proposal was evaluated on vendor safety record, accelerated decontamination and dismantlement (D&D) experience, technical approach to accelerated D&D described in the proposal, radiological/health physics/waste handling programs and experience, project schedule, required program management approach, and regulatory management experience. DEF affirms that only two proposals passed the technical evaluation. DEF asserts that its technical evaluation team ultimately concluded that ADP was a qualified team that could execute the project in compliance with the NRC requirements. DEF contends that ADP had the strongest acceptance of project related risks, and provided the most financial benefits to DEF's customers based on its fixed cost bid. (DEF BR 16)

Regarding the Intervenors' criticisms of NorthStar's financial condition, DEF argued that OPC witness Polich based his recommendations on his faulty assessment of NorthStar's financial capability to complete the decommissioning. (TR 6) DEF stated OPC witness Polich's resume does not include any financial training aside from his MBA and that his testimony included several factually inaccurate accounting statements. (DEF BR 10) DEF concluded, "The notable mischaracterizations of basic accounting principles, repeated inaccurate financial information, and use of outdated accounting standards seriously undermine the credibility of the financial review performed by OPC witness Polich." (DEF BR 10-11; TR 667) In its brief, DEF argues that it appears witness Polich bases his recommendations (i.e. enhancements) on his faulty assessment of NorthStar's financial capability to complete the decommissioning. (DEF BR 10)

In a similar vein, DEF anticipates OPC's intent to argue that NorthStar's decommissioning of five NRC-regulated research nuclear reactor projects were so small that they do not demonstrate NorthStar's ability to complete CR3 decommissioning work. DEF argues that these projects were relevant to NRC's review of its license transfer application, and the NRC inspected all five sites several times and signed off on their unrestricted use. DEF further describes NorthStar's experience in Florida dismantling several power plants and, within the past five years, conducting \$50 million worth of work for the State of Florida. (DEF BR 18)

DEF addressed in its brief each of the proposed enhancements put forth by OPC witness Polich, including whether the Commission should require the Parental Support Agreements (PSAs) contained in the DSA be amended to include the State of Florida as a beneficiary. (DEF BR 12) The Company is in disagreement with OPC's recommendation that the State of Florida be added to the currently-proposed PSAs. DEF witness Hobbs in his rebuttal testimony countered that "it

is not reasonable to expect that DEF could re-open negotiations without causing a change to the terms, conditions, pricing and risk transfer to ADP CR3 that could be detrimental to the DEF customers. Additionally, adding the Commission to the Parent Support Agreements would require NRC approval, which could reopen the NRC approval process, potentially jeopardizing the NRC's approval and extending the project timeline.” (TR 693-694) Further, DEF witness Hobbs stated that amending the PSAs in the manner recommended by OPC witness Polich “adds no additional protections for customers.” (DEF BR 12; TR 693)

A second proposed enhancement put forth by OPC witness Polich to which DEF is opposed is whether the Commission should establish an independent monitor to oversee the CR3 decommissioning activities and the financial status of ADP CR3. DEF witness Hobbs countered that Georgia Power's Plant Vogtle Units 3 & 4 projects are not a valid comparison to the CR3 decommissioning project. The CR3 decommissioning project does not currently affect the rates of DEF customers because the existing NDT will fund the project, and further, the CR3 decommissioning work is not complex compared to the Vogtle projects. (TR 711-712) Additionally, witness Hobbs testified that the NRC, U.S. Department of Transportation, the Florida Department of Health - Florida Bureau of Radiation Control, and the Florida Department of Environmental Protection all have CR3-related jurisdiction with reviews and inspection requirements throughout the life of the project. (DEF BR 12; TR 694)

The Company proposes to provide an annual report to the Commission updating NDT funds paid to ADP, funds remaining, schedule performance for the year and to date, and schedule and payment projections. (DEF BR 23) The information provided will represent a subset of the quarterly reports and other information received from ADP. Additionally, DEF avers that ADPCR3 will provide monthly written notices estimating the amount of funds ADPCR3 may request for withdrawal during the following month. (DEF BR 13)

DEF additionally proposes to “share information obtained from the reports obtained from ADP in a method and schedule that can be worked out with PSC staff. (DEF BR 13)

DEF argues that the proposed transaction provides multiple safeguards to ensure timely and within-budget accelerated CR3 decommissioning. (DEF BR 5) DEF witness Doss testified that neither ADP, ADPCR3, nor ADPSF1 will have the rights to use funds in the NDT beyond the contracted amount. (TR 358) Witness Doss further testified that the transaction has been structured to provide significant protections, safeguards, and financial assurances that ADP can meet their contractual obligations without requiring additional funds to be distributed from the NDT. (TR 358-359) DEF lists these aforementioned protections, safeguards, and financial assurances as follows: (1) a fixed price with no change order possibilities; (2) transfer of project execution risks from DEF and DEF customers to ADP; (3) the ability to place the CR3 Facility into SAFSTOR if necessary; (4) retention of control and ownership of the NDT by DEF; (5) payment to ADP only for work actually performed; (6) parent company guaranties provided by NorthStar and Orano—for all obligations of ADPCR3 and ADPSF1 under the DSA; (7) a provisional trust fund established and funded by ADPCR3, which will not be released to the contractor until the completion of certain contractual milestones; (8) ANI insurance that provides coverage for any onsite or offsite radiological event, including any such events that may occur during transportation of radiological material; (9) environmental insurance that provides \$30

million in coverage for previously unknown or new non-radiological contaminations; (10) performance bonds provided by ADPCR3 contractors and subcontractors for applicable scopes of work; (11) reserved NDT funds to complete the project in the event of extreme unforeseen circumstances; and (12) transfer of the NRC license to ADPCR3 and assumption by ADPCR3 of responsibilities for compliance with all regulatory obligations and all on-site activities. (DEF BR 6)

Intervenors

The Intervenors argue that the Commission should condition approval of the proposed transaction on the adoption of the three risk mitigation enhancements recommended by OPC witness Polich. These include directing the NRC staff to add the State of Florida as a beneficiary in the PSAs between ADP (ADPCR3 and ADPSF1) and NorthStar / Orano, establishing an independent monitor, and adopting the reporting requirements set forth by OPC witness Polich. (Intervenors BR 15-16, 22)

The Intervenors question the financing structure of NorthStar, and they state ADP, NorthStar, and WCS have a recent history of financial difficulty. (Intervenor BR 9) The Intervenors conclude, “The recent financial stress and turmoil evident in the public record and case law demonstrates that the financial observations and reservations contained in OPC witness Polich’s testimony (which the Intervenors have deemed confidential) are warranted but can be easily addressed.” (Intervenor BR 12) In addition, the Intervenors argue that NorthStar’s claimed experience in nuclear decommissioning is sparse, and the lack of large project experience is consistent with the Vermont PUC’s findings. (Intervenors BR 8) The Intervenors further argue that these circumstances applicable to NorthStar cannot be ignored but should instead be addressed by reasonable measures – the three enhancements identified above. (Intervenors BR 15)

Accordingly, the Intervenors request the Commission require that the State of Florida, preferably the Florida Public Service Commission, be added to the two PSAs contained in the overall DSA. (Intervenors BR 22) As currently-proposed, the PSAs include parental support commitments from NorthStar Group Services, Inc. and Orano USA, LLC, to the ADP CR3, LLC and ADP SF1, LLC groups, not to exceed the amounts of \$105 million, and \$35 million, respectively. The NRC is also contemplated as a potential beneficiary of the currently-proposed PSAs. (EXH 2)

In supporting the request, OPC witness Polich argued that because the Commission is essentially a representative of the State of Florida and responsible for establishing funding of the NDT, the State of Florida should have equal treatment in the PSAs similar to that of the NRC. (TR 643) Further, witness Polich argued that the State of Florida has a vested interest in the CR3 decommissioning project being properly performed because of the potential for negative environmental impacts, as well as the need for maintaining general public health and well-being. Witness Polich testified that adding the State of Florida to the PSAs would allow it to require ADP’s parent companies to provide decommissioning funding of up to \$140 million through the two PSAs. (TR 644-645)

Additionally, the Intervenors have recommended that the Commission establish an independent monitor to oversee the CR3 decommissioning project as well as maintain an understanding of the financial status of the lead decommissioning contractor, ADPCR3. (Intervenors BR 19-21; TR

643) The independent monitor's duties as envisioned by the Intervenor could include: providing early warnings of technical or regulatory problems, tracking project expenditures and schedules, estimating actual project expenditures relative to project revenue to provide an early warning of financial difficulty, reporting cost overruns, reporting schedule delays, tracking, assessment, and reporting on the financial status of ADP, NorthStar, and Orano, and tracking matters related to the on-site spent nuclear fuel. (Intervenors BR 19-21) Further, OPC witness Polich pointed to the Georgia Public Service Commission's appointment of an independent monitor to continuously assess the progress of Georgia Power's Plant Vogtle Units 3 & 4 project as precedent for his recommendation.¹¹ (TR 650-651)

Also, the Intervenor recommend DEF should be required to provide the Commission with periodic ADP reports identified in OPC witness Polich's direct testimony listed in Attachment 9 to the DSA. The Intervenor note that DEF witness and ADP CEO Scott State, when asked whether he objected to providing the Public Service Commission with monthly reports that are provided to DEF, replied, "I have no issue with providing nonproprietary information to Duke that they, in turn, could provide to the Commission." (TR 253)

Further, the Intervenor propose that the quarterly reporting information be prepared on a monthly basis. According to the Intervenor, "monthly reporting would have significant benefits in the form of timely information or early warning to DEF, the Commission, and the customers" of problems associated with the project. (Intervenors BR 16-17)

Analysis

Vendor Selection for CR3 Accelerated Decommissioning

DEF witness Palasek testified that DEF issued a request for information (RFI) to 14 nuclear decommissioning vendors with experience in the United States decommissioning industry in November 2017. (TR 342) DEF opted against issuing a broad RFI to ensure that only bids from vendors with proven track records in decommissioning were received. To select the vendors, DEF reviewed industry activity, benchmarked plants that are being decommissioned, and received input from external subject matter experts. (EXH 21) Witness Palasek stated that eight of the 14 nuclear decommissioning vendors responded to the RFI. (TR 343)

Witness Palasek asserted that information received from the RFI was used to better understand industry trends, capabilities of potential bidders, due diligence expectations, and the overall project timeline. He further asserted that this information was used to develop the RFP and to select companies to participate in the RFP process. (TR 343) As a result of the RFI process, witness Palasek stated that six of the eight vendors were selected to participate in the RFP process. (TR 344) DEF excluded two of the eight vendors that responded to the RFI from the RFP process because the pricing models identified in their RFI responses did not provide cost certainty, and were not considered cost-effective or competitive, specifically with respect to risk transfer and accountability for project execution. (EXH 21)

Witness Palasek testified that the RFP process was initiated in May 2018 and four of the six vendors responded. He further testified that DEF prepared a comprehensive bid evaluation

¹¹ Vogtle Units 3 & 4 are new-build, first-of-their-kind nuclear reactors currently under construction in the State of Georgia.

process in support of the RFP process. Witness Palasek stated that this evaluation process included a technical evaluation, a commercial evaluation, and a legal evaluation. He asserted that these evaluations involved an assessment of the cost proposals for each bid, a determination of whether the proposed cost was within DEF's budget, and what, if any, financial margin would be maintained. In addition to the direct cost quoted in the bid, witness Palasek further asserted that the evaluation included an assessment of cost certainty based on the proposed transaction structure, risks accepted by the bidder versus those retained by DEF, and financial assurances offered by the bidder. (TR 345) Witness Palasek attested that these evaluations allowed DEF to compare vendor proposals to the available funds in the NDT. (TR 346)

Witness Palasek stated that in September 2018, DEF short listed the two vendors whose bids met DEF's minimum technical, commercial, and legal requirements. He further stated that the two selected vendors then conducted an on-site due diligence process in October 2018. Witness Palasek attested that the vendors conducted the on-site due diligence process at the same time, and that the process was more than four weeks long. (TR 346) Witness Palasek asserted that from this on-site due diligence process, the two vendors submitted refreshed bid proposals in December 2018. After assessing the refreshed bids, witness Palasek affirmed that the evaluation team determined that the bid from ADP offered the most cost certainty to DEF, including responses to proposed terms and conditions. Witness Palasek attested that this determination was based upon the direct cost quoted in ADP's bid, as well as ADP's willingness to accept project execution risks throughout the process, consistent with DEF's expectations, and ADP's willingness to provide financial assurances that supported ADP's contractual commitments. (TR 347) ADP was also the least cost bidder of the four vendors that responded to the RFP. (EXH 21)

The Intervenor did not provide arguments directly related to DEF's RFI and RFP processes.

Summary

Based on DEF's comprehensive RFI and RFP processes, and the ultimate selection of the least cost bidder, staff believes that DEF's RFI and RFP processes were reasonable. In addition, the NRC has approved DEF's selection of ADP to conduct the decommissioning of DEF's CR3, thereby lending further support for the reasonableness of DEF's vendor selection process. (EXH 28; EXH 29) No intervenor expressed direct opposition to DEF's RFI and RFP processes.

Accelerated Decommissioning Costs

ADP Costs

Staff considered the reasonableness of DEF's proposed fixed contract price of \$540 million for decommissioning services provided by ADP. The fixed price appears in the contract between DEF and ADPCR3 / ADPSF1 identified as the Decommissioning Services Agreement, or DSA. (EXH 2, BSP 89). In the DSA, DEF contracts with ADP through its subsidiary, ADPCR3, to complete CR3 decommissioning activities on an accelerated basis, and with another subsidiary, ADPSF1, to acquire ownership of the ISFSI assets from DEF.

First, staff noted that the U.S. Nuclear Regulatory Commission (NRC) has issued its Order to consent to transfer to ADPCR3 DEF's licensed authority under Facility Operating License (No. DPR-72) for the Crystal River Unit 3 Nuclear Generating Plant (CR3) and the general license for the CR3 independent spent fuel storage installation (ISFSI) to possess, maintain, and decommission CR3 and its ISFSI. (EXH 29, BSP 130) The NRC reviewed the information

provided in DEF's license transfer application and found that DEF and ADPCR3 have satisfied the NRC's financial qualifications, decommissioning funding assurance, indemnity, and technical qualifications requirements. (EXH 29, BSP 149)

A second consideration regarding DEF's price for decommissioning is the fact that ADP was selected in part because it offered the most competitive bid in its vendor selection process, as detailed in the prior section of this staff analysis.

With the \$540 million fixed price contract, if the proposed transaction is approved, all the execution risks associated with the accelerated CR3 decommissioning project, such as cost overruns or emergent conditions, would be transferred from DEF to ADP. (TR 347, 434) This transference of risk under the DSA provides a high level of cost certainty to DEF and its customers. It also transfers a significant portion of DEF's CR3 and ISFSI-related staff requirements and management costs to ADP. (EXH 3, P 4)

With the \$540 million fixed price contract, DEF expects the period of time required to affect CR3 decommissioning and site restoration will be reduced significantly. DEF witness State indicated that under the proposed transaction, ADP and its affiliates expect to commence decommissioning activities by 2020 and continue through 2027, ultimately releasing the entire CR3 Facility, other than the Independent Spent Fuel Storage Installation (ISFSI), for unrestricted use by that time. ADP also estimated that once the spent nuclear fuel (SNF) is transferred to a storage facility or permanent disposal site, the ISFSI will be demolished and the NRC operating license will be terminated, thus, completing both the CR3 decommissioning and site restoration by approximately 2038. (TR 57) This is roughly 36 years earlier than DEF previously expected (2038 versus 2074) under SAFSTOR. DEF witness Hobbs asserted that earlier completion of CR3 decommissioning and site restoration would mitigate or eliminate environmental, financial, and regulatory risks that may emerge if the CR3 Facility stayed in a dormant state for decades per DEF's current decommissioning schedule in the absence of the \$540 million contract. (TR 434) Witness Hobbs also argued that there will be several nuclear plants retired in the next ten years in the U.S., and this influx of major retirement projects could constrain available labor and other resources. He further contended that disposing of radioactive material is another major concern, because there are a limited number of licensed nuclear waste disposal sites, each with only a limited capacity. (TR 435) According to witness Hobbs, the proposed transactions will enable the acceleration of the CR3 decommissioning timeline which will greatly reduce, or eliminate, risks associated with the labor and resource availability and long-term cost escalation. (TR 435)

Separate from the \$540 million contract, ADP, via its subsidiary ADPSF1, has agreed to purchase the SNF and the ISFSI from DEF for a nominal amount. Witness Hobbs indicated that ADP will be responsible for all SNF management and the associated costs after the NRC's approval of transferring DEF's licensed authorities to ADP (which occurred April 2020). DEF confirmed that ADP will also be responsible for the termination of the ISFSI license (part 50 license under the NRC's purview) and decommission the ISFSI. (TR 226, 272; EXH 3, Pp 2, 5) As indicated by witness State, ADP will demonstrate on an annual basis to the NRC that it would have sufficient funding available to decommission the ISFSI. (TR 287-288) Witness State further assured that ADP will hold the ISFSI-specific license until the spent fuel is removed and the

associated land is fully remediated, then upon completion of a final-status survey, ADP will take the responsibility of obtaining the NRC approval to terminate the license. (TR 314) After the CR3 Facility-related license and the ISFSI-related license are both terminated, DEF would eventually achieve full NRC license termination.

The Commission approved DEF's 2014 decommissioning study which is based on SAFSTOR for managing nuclear waste during decommissioning.¹² DEF's 2018 cost estimate of decommissioning CR3 under SAFSTOR is approximately \$895.9 million, assuming the decommissioning would take place from 2018 through 2074. (EXH 21, BSP 15) DEF's current cost estimate, for the CR3 Facility Accelerated D&D expected to occur from 2020 through 2038 as presented by witness Hobbs, is \$617 million (\$540 million contract price plus \$77 DEF owner's costs). (TR 441). Witness Hobbs indicated that this latest study result for decommissioning costs is \$278.9 million lower than the cost under the 2018 SAFSTOR estimate, although it is not a direct comparison as the time used for each decommissioning methodology is different. (EXH 3, P 4) Because of the change in method, the contracting model selected, and the timing and duration of decommissioning, DEF did not prepare a comparison report of the current Accelerated D&D study and the 2018 SAFSTOR study. (EXH 3, P 4; EXH 22, BSP 24) Nevertheless, DEF's current decommissioning study indicates that pursuing the \$540 million fixed priced contract will enable CR3 decommissioning to be decommissioned using the Accelerated D&D method, which in turn is expected to result in millions of dollars in savings. (EXH 3, P 4)

DEF claimed that the provisions of the \$540 million contract are structured to provide significant financial assurance and NDT protection. The payment of the contract is broken into a number of discreet work segment termed "Pay Items," and each payment release will be based on DEF's verification of ADP's disbursement certificate. Each disbursement certificate will be accompanied by reasonable supporting documentation attesting whether the agreed upon amount of work has been safely performed. (EXH 3, P 7) As witness State testified, ADP has included a potential profit margin in the amount it estimates for each task of the accelerated D&D project; if a task ends up costing more than the estimate, this amount will be available to fund completion of the task. If the task ends up costing more than the estimated amount including the contingency, ADP will still have to complete the task to comply with its obligations to the NRC and DEF, respectively. (TR 57-58)

DEF further assured that ADP's parent companies, NorthStar and Orano, will provide payment and performance guarantees of all obligations of ADP's subsidiaries, ADPCR3 and ADPSF1, and ADP itself will also create a \$50 million trust fund to support their obligations. (DEF BR at 5; EXH 3, P 6; TR 309-310, 437) The initial amount in the ADP trust fund is \$20 million in cash. Subsequently, six percent of each monthly project milestone payment from the NDT will be retained in the fund until the trust fund value reaches \$50 million. A partial release of \$30 million will be made once all physical decommissioning work is completed and partial license termination has been submitted to the NRC. The remaining \$20 million will be released once the accelerated decommissioning of the nuclear power plant is complete with the CR3 Facility becoming an ISFSI-only site. Further, the earnings on the trust fund will be held by DEF in a

¹² Order No. PSC-14-0702-PAA-EI, issued December 22, 2014, in Docket No. 140057-EI, *In re: Petition for approval of 2014 nuclear decommissioning study, by Duke Energy Florida, Inc.*

designated NDT subaccount until the partial license termination is approved by the NRC. (TR 437; EXH 3, P 6) In addition, DEF gave assurance that the potential environmental and radiologic risks associated with the contract execution have been addressed. First, DEF will maintain its ANI insurance policy which provides coverage for any onsite or offsite radiological event, including during transportation of radiological material. Second, ADPCR3 will acquire a \$30 million environmental insurance policy as a contingency for previously unknown or new non-radiological contamination. Besides, ADPCR3 contractors and subcontractors will each be required to acquire a performance bond for applicable scopes of work it will perform. (TR 437) Furthermore, ADP will be responsible for all on-site environmental liabilities, both radiological and non-radiological pursuant to the contract agreement. (EXH 3, P 7)

DEF further averred that it will have contractual remedies if ADP is unable to complete decommissioning per the term of the contract agreement. (EXH 3, P 7) To address an extreme event, DEF would have the option of returning the CR3 Facility to SAFSTOR (subject to mutual agreement of DEF and ADPCR3), which would provide additional time for the NDT funds to grow so as to provide sufficient funding to complete the decommissioning project. (TR 359) DEF confirmed that there are no limits or physical “point of no return” during the decommissioning process where returning CR3 to a state of SAFSTOR is no longer an option. (EXH 21, BSP 26)

DEF Costs

DEF estimated that it will incur \$77 million in owner’s costs for the period 2019 through 2038. Staff reviewed the components DEF used in estimating its owner’s costs. One of the major components of the costs is salaries and benefits based on DEF’s staffing plans which vary during the estimation period.

From 2019 up to the contract closing date, which DEF assumed would be June of 2020, the staffing plan includes support for the efforts to place into, and manage, CR3 in the SAFSTOR dormancy state. For the post-closing period, the staffing plan includes support for DEF’s observations of the contractor’s decommissioning performance and Pay Items validation until CR3 reaches ISFSI-only state. (TR 441; EXH 24, BSP 77)

The other components that DEF included in calculating its owner’s costs are applicable for the entire estimation period. These components include: (1) property taxes based on historical assessment; (2) insurance premium estimates based on historical incurred costs; and (3) other costs estimated for elements of contingent contractor services, miscellaneous materials, office supplies, employee travel expense, and some shared service costs related to the Crystal River Energy Complex (CREC). (EXH 24, BSP 77-78)

From a functional point of view, DEF’s owner’s costs can also be segregated into two parts: one associated with the spent fuel management and the other related to the license termination. The spent fuel management expenses, in the amount of approximately \$14 million, will occur prior to the ISFSI ownership transfer from DEF to ADP. The license termination costs, in the amount of approximately \$63 million, are for the entire estimated period 2019 through 2038. (EXH 3, P 9) DEF witness Hobbs provided a detailed breakdown of the owner’s costs, by year, for each cost function from 2019 through 2038. (EXH 3, PP 3, 9)

The spent fuel management expenses are comprised of two main elements: nuclear security and the operation and maintenance (O&M) costs associated with the ISFSI. The nuclear security expenditures cover salaries and benefits, uniforms, supplies, employee training, equipment and software, etc. The O&M expenditures are for the maintenance of the security equipment, preventive maintenance activities, and surveillance by operations, maintenance and radiation protection personnel, etc. (EXH 24, BSP 78)

With respect to the license termination expenditures, for the period prior to the contract closing date, the estimated amounts cover salaries and benefits, materials and office supplies, employee travel, license costs and fees, as well as one-time costs associated with the contract closing. For the post-closing period, the estimated amounts include salaries and benefits of personnel to perform observations during the contractor's decommissioning performance and Pay Items validation, taxes based on historical assessed county property taxes, insurance premiums estimated based on historically incurred costs, contingent contractor services, miscellaneous materials, office supplies, employee travel, and some shared service related to the CREC. (EXH 24, BSP 79)

Summary

Staff believes that DEF's proposed fixed contract price of \$540 million for the services set forth in the contract by ADP is reasonable because of the many considerations noted above. These considerations include NRC approval of ADP to complete the decommissioning project, the selection of ADP, based on a competitive bid process, the shifting of execution risk from DEF to ADP in the DSA, and the elimination or mitigation of environmental, financial, and regulatory risks in the DSA. Likewise, based on the record in the docket, staff believes that the estimate of \$77 million owner's costs is reasonable. Staff notes that the reasonableness of these estimates has not been challenged by the Intervenors.

Nuclear Decommissioning Trust Impacts

NDT Customer Protections

NDT Payments

Staff considered whether the structure of DEF's payments from the NDT to ADPCR3 for decommissioning work protects DEF customers' interest in the NDT. DEF witness Doss testified that DEF will maintain control of the NDT, which will be separated into two subaccounts. One subaccount, the IOI Decommissioning Subaccount (IOI Subaccount), will be equal to the fixed cost of \$540 million due to APDCR3, and another subaccount, the "DEF Reserve Account," will be established to hold the remaining funds separate from the ADPCR3 fixed cost funds. The DEF Reserve Account funds will be used to pay the owner's costs. Payments from the NDT to ADP will be disbursed only upon the completion of qualified work and will be limited to fixed amounts agreed upon in the contract. (TR 353) ADP will make monthly requests for payment from the NDT by filing an invoice which will include a certification indicating that the work associated with the payment request has been completed. (TR 358)

DEF witness Hobbs testified that ADP is assuming all project execution risk such as cost overruns or emergent conditions (other than changes in end state conditions)¹³ which provides a high level of cost certainty to DEF customers. (EXH 2, BSP 14, 15, 522-526; TR 434) ADP was selected to perform the decommissioning based on its fixed-cost bid and the greatest acceptance of project related risks. DEF projects there are currently sufficient funds in the NDT to meet all required expenses. (TR 440)

The fixed cost of decommissioning CR3 and the process by which ADP is to be paid, i.e. only after specific work is completed, is detailed in section 3.11.2 of the DSA. (EXH 2, BSP 41) Staff believes the structure of DEF's payments from the NDT to ADPCR3 for decommissioning work provides adequate protection of the NDT fund to the benefit of DEF customers.

NDT Fund Management

Staff considered whether important structural aspects of NDT management and key financial assurances for decommissioning work were included in the proposed transaction, thereby serving to protect DEF customers' interest in the NDT. DEF witness Doss testified that in the event there are any excess funds in the NDT upon completion of all decommissioning activity at the CR3 Facility, including the removal of the spent fuel, the decommissioning of the ISFSI, and full termination of the NRC license, those funds will be returned to DEF's customers and shareholders. Conversely, in the unlikely event any additional money is required, DEF's shareholders would be obligated to contribute towards the additional costs along with DEF's customers. DEF must file a petition with the Commission if any additional decommissioning funding is sought from its customers. (TR 353-354) As of March 31, 2019, the NDT had an estimated value of \$654 million (net of estimated taxes), and the cost of the decommissioning project is expected to total \$617 million (\$540 million fixed cost of the contract plus \$77 million in owner's costs). (TR 355) DEF will maintain ownership and oversight of the NDT. However, for the funds segregated in the IOI Subaccount, DEF will agree with ADP on the desired investment strategy and designated investment manager. (TR 353-355)

To help ensure ADP can meet its contractual obligations, it has secured or will maintain financial assurances such as performance bonds, provisional trust funding, and parent company guaranties. All of the aforementioned measures will serve to protect the NDT from liability in excess of the fixed cost of \$540 million. In the event of significant unforeseen circumstances which could not be contractually resolved, and subject to mutual agreement of DEF and ADP, DEF has the option to return to SAFSTOR which would provide additional time for the NDT funds to grow and provide sufficient funding to complete the project. (TR 358-359)

The Intervenor's position on this issue is that the Commission's approval of the proposed transaction should be contingent, in part, upon the Commission's express prohibition of funds recovered from DOE for spent fuel management expended prior to the closing being deposited in the NDT fund. The Intervenor's argue such fund recoveries are required per the 2017 Settlement Agreement to be credited to consumers via the Capacity Cost Recovery Clause (CCR). This matter is the subject of Issue 2, wherein staff recommends that recovery of decommissioning

¹³ End state conditions are defined in the DSA and include both federal and state conditions as regards radiological conditions of the CR3 site at the point of license termination, including radiological dosage limits, excavation requirements, subsurface plant structure removal, and acceptability of demolition debris prior to its reuse.

funds associated with any ISFSI capital costs expended for spent fuel management be credited to the CCR in order to comply with the 2017 Settlement Agreement. Staff notes that the decommissioning cost study, addressed in Issue 3, shows balances of NDT reserve subaccount funds in excess of \$100 million each year of the accelerated decommissioning time horizon (through 2038) exclusive of the anticipated DOE recoveries in 2022 (\$90 million). (EXH 2, P 9)

NDT Risks
End State Conditions

Witness Hobbs testified regarding the risks that remain with DEF during the decommissioning process. In his testimony, he describes areas of risk that relate to the end state conditions of the CR3 facility, that could be caused by either the State of Florida or the Nuclear Regulatory Commission:

The first end state condition is related to the radiological criteria for unrestricted use of the property as defined in 10 C.F.R. 20.1402. This regulation requires that the residual radioactivity be reduced to an acceptable level during the decommissioning activities. The second risk is associated with the removal of subterranean improvements after the first end state condition described above is met. The plan is to remove the walls of the structures to a nominal three feet below grade, fill the remaining decontaminated basements with fill material including clean concrete generated during the decommissioning activities, add a nominal three feet of fill dirt and add vegetation for erosion control purposes. DEF retains responsibility for deviations in cost and to the schedule if either of these end state conditions change for any reason, including changes to regulations.

(TR 435-436)

The third end state condition included in witness Hobb's testimony appearing above is the reuse of clean concrete debris. DEF plans to segregate clean concrete debris produced during the demolition of site structures and to recycle clean concrete debris to backfill the subsurface structures that will remain in place. (EXH 2, P 525)

When asked about the source of funds that DEF would use to address any emergent issues related to end state conditions at CR3, witness Hobbs stated the NDT Reserve account was available primarily for such an event. (TR 462)

No projected costs or analysis of possible costs related to changes in state or federal regulation (with regard to end state conditions at CR3) were entered into the record. However, witness Hobbs did testify that if there were a change to the end state conditions, DEF and ADPCR3 could negotiate for additional funds to be paid to ADPCR3 for additional work performed related to these conditions. (TR 436) Also, nothing regarding possible or pending changes to the regulations governing these end state conditions is in the record.

Under the DSA, ADP will assume responsibility for all decommissioning activities at CR3. (TR 433) However, DEF is responsible for the end state conditions at CR3 once decommissioning activities are completed. (TR 435) If either the State of Florida or the NRC changes the

regulations governing these conditions, the responsibility will fall to DEF to comply with those changes. As witness Hobbs testified, the reserve portion of the NDT will be available to DEF to fund any additional work it would take to reach these conditions. (TR 462) However, no analysis or estimates of these costs exist in the record.

The Updated Site-Specific Decommissioning Cost Estimate discusses the radiological criteria for license termination. (EXH 33, BSP 205-206) If any of the criteria for license termination change, the responsibility for remedying that situation would fall to DEF. (TR 435) DEF contacted the Florida Department of Environmental Protection (FDEP) to see if it concurs with the federal regulations regarding the end state conditions. (EXH 2, p. 524 of 597) FDEP concurred with the federal regulations regarding radiological levels, subsurface removal depth, and the use of clean concrete to backfill the site. (EXH 2, P 524 of 597) Witness Hobb's testified that there is no known proposed state or federal rulemaking at this time, but also indicated that there is no guarantee these regulations will not change. (TR 698)

NDT Depletion

DEF witness Hobbs describes the process that would take place in the event that the NDT is depleted prior to completion of decommissioning and DEF's contractual remedies against ADP have been exhausted. (EXH 23, BSP 00044)

If DEF determines that the current NDT balance is insufficient to cover the expected cost of decommissioning, and the other contractual remedies against ADP have been exhausted, such that additional funds are needed from customers, DEF would file a petition requesting that the Commission authorize an accrual to be collected from customers for the retail portion. The shareholder portion would be funded by the Company and would not be recovered from customers. If the event occurs during the term of the current 2017 Settlement, then DEF would comply with the provisions of paragraph 7 (i.e. petition for additional funds through a surcharge in base rates up to an annual contribution of \$8 million). There is no monetary threshold as to when this process would be initiated; rather, it would occur if DEF determines that the expected cost of decommissioning has increased such that the NDT is not sufficiently funded. All parties that demonstrate appropriate standing would have full rights to participate in that future proceeding. (EXH 23, BSP 00044)

When asked if DEF considered any alternatives to secure NDT funding if the contractual protections, safeguards, and financial assurances proved insufficient, witness Doss testified that DEF would have the option of returning to SAFSTOR, which would provide additional time for the NDT funds to grow and provide sufficient funding to complete the project, subject to a mutual agreement of DEF and ADPCR3. However, based on current information, DEF does not believe it will need to seek additional funding. (TR 359) When asked why DEF does not foresee the need to collect additional funding from customers,¹⁴ witness Doss stated that the NDT balance as of March 31, 2019 is more than the total estimated future costs to be incurred during Accelerated D&D. (EXH 23, BSP 44; EXH 26, BSP 99; EXH 28, BSP 110; TR 357)

¹⁴ In the event additional funding is required, such funding would be collected via an allocation to customers and to shareholders (DEF) based on DEF'S shareholder-funded buyout of minority owners' interest in CR3. DEF shareholders' allocated share of ownership is 9.55 percent. Likewise, any excess funds at the time of license termination would be refunded to shareholders in that same percentage.

Intervenor Proposed Enhancements

The Intervenors recommend certain enhancements to the proposed transaction due to NorthStar's financial difficulties and its alleged sparse level of experience in decommissioning nuclear power plants. Regarding NorthStar's financing structure and the recent history of financial difficulty on the part of ADP, NorthStar, and WCS referred to in the brief of the Intervenors, staff believes it is important to note that the parent company of NorthStar, NorthStar Group Holdings, LLC, was merged into JFL-NGS Parties, LLC, on June 12, 2017. (TR 632) As stated in witness Polich's direct testimony, the result of the merger was stated as: "...recapitalized, including both the investment of new capital and the conversion of certain debt to equity, in a transaction that improved the company's liquidity and financial condition." (TR 633) Staff agrees with DEF's conclusion that "the Commission should consider the fact that OPC's only witness was comfortable enough with the financial situation of NorthStar that he withdrew two financially-related conditions. This demonstrates the OPC's witness ultimately decided NorthStar was financially capable and responsible to perform the Accelerated D&D." (DEF BR 10)

As regards the adequacy of NorthStar's nuclear decommissioning experience, staff is persuaded that NorthStar is qualified to complete the task of decommissioning CR3 based on the NRC's safety evaluation conducted by its Office of Nuclear Materials in support of the license transfer. In its technical qualification evaluation of ADPCR3, the NRC concluded, "Based on its review, the NRC staff determined that the Applicants have described a project organization that will provide the requisite experience and expertise for the decommissioning of the CR-3 facility, the maintenance of the CR-3 ISFSI, and compliance with the requirements of the licenses and the Commission's regulations." (EXH 29, BSP 148-150) Based on these considerations, the NRC concluded ADP is qualified to be the holder of the licenses. Staff believes this NRC evaluation, in addition to NorthStar's experience in both nuclear decommissioning, large scale dismantlements in Florida, and here-to-date success in decommissioning Vermont Yankee, provide evidence that NorthStar maintains the requisite experience to safely decommission CR3. (TR 328, 677; EXH 39, P 22)

Staff reviews each of the Intervenors' proposed enhancements in turn below.

Parent Support Agreements

In his direct testimony, OPC witness Polich cites the Vermont Yankee Nuclear Power Plant (Vermont Yankee) decommissioning arrangement entered into by representatives of the State of Vermont and NorthStar as precedent for its recommendation.¹⁵ (TR 645) While staff agrees with witness Polich as to the State of Florida's vested interest in the CR3 decommissioning project, the Vermont Yankee arrangement is dissimilar to the instant proceeding. As explained by DEF witness Hobbs, the regulated utility and then-current owner of the plant, Entergy Nuclear Vermont Yankee, LLC (Entergy), as per the terms of the agreement, sold all plant, property, and equipment to subsidiaries of NorthStar. (TR 695-696) The Vermont Yankee NDT also transferred to NorthStar as part of the transaction. The sale removed the State of Vermont's regulatory authority with respect to Entergy and the decommissioning of Vermont Yankee. (TR 695)

¹⁵ Vermont Yankee Nuclear Power Plant was an electricity-generating nuclear power plant located in the State of Vermont. The Vermont Yankee plant operated from 1972 through 2014.

The instant transaction has no effect (i.e. severance or discontinuity) on the established regulatory arrangement between the Commission and DEF. As it stands today and the foreseeable future, DEF remains in the State of Florida as a regulated public utility, and with the exception of the SNF and SNF assets, owner of the CR3 plant. Further, DEF will draw NDT funds to satisfy costs associated with overseeing CR3's decommissioning. Thus, the Commission will conduct future reviews of matters related to CR3's decommissioning and the success level of DEF's oversight efforts. The Commission's authority is well-established in this context. This was not the case in Vermont where the regulatory attachments with Entergy with respect to the Vermont Yankee Plant were essentially severed by approving the plant's sale.

Additionally, DEF witness Hobbs avers that the Intervenor's requested conditions could potentially trigger a renegotiation of the DSA, and possibly a new NRC review thereof, such that including the State of Florida as a beneficiary to the PSAs could be detrimental to the underlying purpose of the DSA. (TR 693-694) Staff agrees. Staff is of the opinion that the risks involved with potentially delaying the closing of the transaction, and further delaying the physical removal of the plant and restoring the site, likely outweigh any potential or perceived benefits of adding the State of Florida to the PSAs.

Independent Monitor

The Intervenor's argue that the Commission should require an independent monitor to oversee the CR3 decommissioning activities. However, staff is concerned that there appears to be inadequate record evidence concerning the details associated with imposing such a requirement. The following items are of particular note: undefined cost specifically related to an independent monitor; undefined process to identify an independent monitor; undefined process to identify an independent monitor's scope of duties; the independent monitor's ability to, if any, review certain confidential or yet-to-be released data belonging to DEF, ADP and its ownership, or any of ADP's subcontractors.

Staff is persuaded by DEF witness Hobbs' argument that a "new-build" nuclear project in Vogtle Units 3 & 4 is not directly comparable to the CR3 decommissioning project, in either scope or potential cost understanding (estimating).¹⁶ The entire CR3 decommissioning project, as currently defined in the DSA, is fully-funded and projected to not require any additional customer funding. A new-build nuclear project in Vogtle Units 3 & 4 presents a much different cost dynamic. The nature of estimating and determining the final in-service cost (and recovery) of Vogtle Units 3 & 4 would certainly increase front-end desires of stakeholder parties to install an independent monitor. Further, in this case not only is the entire project projected to be fully-funded, but much of the decommissioning funding/activities as contemplated by the DSA would carry bond and monetary performance assurances, as well as certain activities would be covered by various insurance policies. (TR 690-692) Staff believes the aforementioned items as contemplated are reasonably sufficient cost- and performance-support structures for the decommissioning project.

¹⁶ A "new-build" project, as used in this instance, can be described as an entirely new, first-of-its-kind construction endeavor. Any new-build construction project generally carries a greater degree of potential logistical and cost uncertainty. This uncertainty is primarily due to (potential) unforeseen or emergent issues that must be addressed in order to progress the project to completion.

Assuming approval of the proposed reporting requirements in Issue 7, staff believes the new types of information gathered will serve to continuously inform the Commission and the broader public of developments at the CR3 site. The CR3 decommissioning project has been ongoing for over a half-decade. The Commission has reviewed numerous CR3-related retirement and decommissioning developments over that timeframe. Thus, given the numerous federal and state agencies, including the Commission and OPC, staff believes there are currently adequate resources in place to monitor CR3's decommissioning developments.

Reporting Requirements

Staff's analysis of the reporting requirements associated with decommissioning under the proposed transaction is the subject of Issue 7 of this recommendation. As detailed in Issue 7, staff recommends that DEF timely provide the information provided to DEF by ADP. Staff also recommends DEF provide additional periodic information, as may be prepared by DEF, regarding NDT payments and balances, schedule performance, and management reports.

Summary

Staff believes the terms and conditions contained in the DSA regarding NDT payments and NDT fund management reasonably protect DEF customers. For the reasons detailed above, staff recommends approving the two PSAs contained in the DSA without modification. Staff does not believe establishing an independent monitor to evaluate the CR3 decommissioning project is warranted at this time.

SNF Agreements

An important aspect of the proposed transaction is the change in ownership, operations and maintenance, and liability associated with SNF and the ISFSI at CR3 that would result from the approval of the transaction. The SNF, the ISFSI, and the associated liability have, to date, been under the ownership and control of DEF. Under the terms of the DSA, the ownership, operation, financing responsibility (including ISFSI decommissioning), and associated liability would transfer to ADPSF1. Various agreements contained within the DSA implement this transfer.

The SNF and the ISFSI ownership transfer is implemented in Exhibit A of the DSA, which is the Spent Nuclear Fuel Purchase and Sale Agreement (SNF PSA) between DEF, as Seller, and ADPSF1, as Buyer. The SNF PSA, if approved, would transfer the ownership of the SNF and equipment that comprises the ISFSI from DEF to ADPSF1 on the date of the closing, which DEF and ADP expect to be October 1, 2020. (EXH 2, BSP 99) Under this agreement, ADPSF1 would pay \$1,000 to DEF and ADPSF1 would assume all liabilities that relate to the asset. (EXH 34, P 102)

The transfer of operation and maintenance responsibility of the SNF and the ISFSI is implemented in Exhibit C of the DSA, which is the SNF Services Agreement between ADPCR3 and its affiliate, ADPSF1. In this agreement ADPSF1, as the owner of the ISFSI, agrees to operate and maintain the ISFSI, and store, maintain, and manage the Spent Nuclear Fuel and high level waste (HLW) located on the ISFSI after the closing date. ADPSF1 also agrees to package the Greater Than Class C Waste (GTCC) generated during the decommissioning of CR3. ADPSF1 also agrees to remove all SNF and high level waste from the Crystal River Site and transfer such material to a storage or disposal site designated by ADPCR3. Once all SNF, high level waste, and GTCC has been removed from the site, ADPSF1 completes

decommissioning of the ISFSI in accordance with the DSA. (EXH 3, P 136) ADPSF1 compensation, as expressed in the SNF Services Agreement as appears in the DSA, is confidential. (EXH 35, P 137) Orano will support the management of the SNF and facilitate the transfer of SNF to DOE. (TR 57)

The transfer of financing responsibilities of the SNF and ISFSI is implemented in Exhibit M of the DSA, which is the ISFSI Decommissioning Trust Agreement between ADPSF1 and the Trustee. The purpose of ISFSI Decommissioning Trust is to receive funds for the purpose of providing financial assurance for ISFSI decommissioning costs and to administer and invest funds for the benefit of ADPSF1. (EXH 2, BSP 277) According to DEF Witness State, the amount to be deposited by ADPSF1 at the closing is approximately \$3.5 million. (TR 281) ADP expects that this fund would be the recipient of refunds or litigation awards which may be received for compensation from DOE for spent fuel management costs that ADPSF1 incurs after the closing date. (TR 332)

Witness Hobbs testified that, under the transaction, the responsibility for the SNF cannot revert back to DEF, and DEF would not pay for any spent fuel management costs after the closing. (TR 530) The Intervenor did not challenge witness Hobb's argument.

Based upon staff's analysis of the transaction agreements pertaining to the sale, operations management, and financing of the SNF and ISFSI, staff believes DEF's customers are well protected from adverse consequences related to the disposition of these assets in the future. In addition, DEF is positioned under the transaction to seek restitution on behalf of its customers and shareholders, in the form of DOE financial awards, for all costs incurred related to spent fuel management, both for SNF and ISFSI, through the date of the closing.

Conclusion

Staff concludes that the record in this case shows DEF's bidding practices with regard to the vendor selection for accelerated decommissioning were reasonable and prudent, and in the best interest of DEF's customers. DEF's RFI and RFP processes were comprehensive, resulting in the ultimate selection of the least cost bidder. In addition, the NRC has approved DEF's selection of ADP to conduct the decommissioning of DEF's Crystal River 3 facility. (EXH 28; EXH 29) Staff notes that no intervenor expressed direct opposition to DEF's RFI and RFP processes.

Staff concludes that DEF's proposed fixed contract price of \$540 million for the services set forth in the contract provided by ADP is reasonable. Staff notes that, while the Intervenor have challenged the financial capabilities of ADP, they have not provided any challenge to the transaction costs of the contract. Based on the record in the docket, staff believes that the estimate of \$77 million owner's costs is reasonable. Staff notes that the reasonableness of this estimate has not been challenged by the Intervenor.

Despite the many customer protections that have been built into the transaction, DEF admits that the risk of depletion of the NDT remains. (TR 461-462) The primary risk appears to be the risk of additional costs associated with end state conditions. (TR 436) However, all radiological remediation requirements of the NRC and the State of Florida have been incorporated into the DSA and there is no proposed rulemaking at the federal or state level at this time which would impact radiological remediation requirements. Other risks remain, such as insolvency of ADP or

its parents, but are significantly mitigated by the series of protections built into the proposed transaction. (TR 384, 702-703)

Based upon the proposed transaction agreements pertaining to the sale, operations management, and financing of the SNF and ISFSI, staff believes DEF's customers are well protected from any adverse consequences related to the disposition of these assets in the future in the event the Commission approves the proposed transaction.

Staff recommends the Commission approve the transactions contemplated by the Decommissioning Services Agreement, the SNF PSA, and the Ancillary Agreements between DEF and ADP that would result in the transfer of:

- a. All decommissioning activities of the CR3 on an accelerated basis to an ADP subsidiary, ADPCR3;
- b. DEF's obligations as a NRC -licensed operator of CR3 to ADP via ADPCR3;
- c. Ownership of DEF's ISFSI assets to another ADP subsidiary, ADPSF1, LLC; and
- d. DEF's contract with the DOE for disposal of spent nuclear fuel and high level radioactive waste to ADP via ADPSF1.

Issue 2: Is DEF's proposed transaction with ADP and its subsidiaries for decommissioning CR3 consistent with DEF's 2017 2nd Revised and Restated Stipulation and Settlement Agreement (2017 Settlement)?

Recommendation: Staff recommends that the Commission find that the proposed transaction with ADP and its subsidiaries for decommissioning CR3 is consistent with the 2017 Settlement with one exception: the deposit into the Nuclear Decommissioning Trust Fund (NDT) of funds recovered from Department of Energy (DOE) associated with spent fuel management capital costs. Pursuant to the terms of the 2017 Settlement, capital costs associated with spent fuel management recovered from DOE should be returned to ratepayers through the CCR. (Brownless, McNulty)

Position of the Parties

DEF: Yes. DEF's proposed transaction with ADP and its subsidiaries for decommission [sic] CR3 is consistent with the 2017 Settlement. The 2017 Settlement does not reference any accelerated decommissioning contracts. It only includes a provision regarding the process for obtaining an accrual if needed during the term of the settlement. Since DEF is not requesting an accrual in this docket, that provision is inapplicable.

Intervenors: No. As demonstrated in the discussion on Issue 3, diversion of the DOE award funds from the CCR Clause through approval of the 2019 Cost Study to the NDT is contrary to the provisions of the Commission-approved RRSSA at paragraph 5.a.(1).

Staff Analysis:

Parties' Arguments

DEF

DEF does not directly address whether depositing the money that it anticipates it will recover from DOE for damages associated with spent fuel management violates the 2017 Settlement. However, DEF states that doing so will greatly benefit ratepayers because it will act as another protection against cost overruns and potential changes in Florida Department of Environmental Protection End-state Conditions. (EXH 42, P 4; DEF BR 21)

Intervenors

The Intervenors argue that the deposit into the NDT of *any* portion of the money recovered from DOE for spent fuel management is contrary to Section 5.a.(1) of the 2017 Settlement Agreement. The Intervenors argue that administrative finality has attached to the provisions of the 2017 Settlement Agreement which were approved by Order No. PSC-2017-0451-AS-EU, issued November 20, 2017. (Intervenors BR 26) The Intervenors note that DEF has not asked the Commission to recede from, repudiate, or modify any portion of the 2017 Settlement. (Intervenors BR 26, 30) Nor, as the Intervenors point out, has DEF asked that the signatories to the 2017 Settlement agreement allow these funds to be placed into the NDT. (Intervenors BR 26) Further, the Intervenors state that DEF has acted consistently with the Intervenors' position in

the past, crediting \$18,266,200, the retail portion of the \$21,426,525 recovered from DOE for 2011-2013 costs, to the CCR Clause in 2018.¹⁷ (Intervenors BR 28)

Finally, the Intervenors state that prohibiting DEF from placing DOE recoveries into the NDT will not require the transaction to be renegotiated. (Intervenors BR 30) The Intervenors contend that this is true because the DSA details how the NDT will be divided between funds that will be paid to ADP (\$540 million) and funds that will be retained by DEF (\$71 million). (EXH 42, P 3) Further, the Intervenors argue that the DSA grants DEF all DOE recoveries for spent fuel storage transactions that take place up to the date of the closing and grants to ADP all DOE recoveries for spent fuel storage that take place after the closing.(EXH 42, P 4) However, the Intervenors state that the DSA does not address what DEF must do with the money it projects it will recover from DOE in this latest round of spent fuel storage cost litigation. (Intervenors BR 31)¹⁸ Additionally, the Intervenors do not contend that any other terms of the transaction as proposed violate any part of the 2017 Settlement. In sum, the Intervenors take the position that but for the proposed improper treatment of the damages recovered from DOE for spent fuel management, the DSA otherwise comports with the terms of the 2017 Settlement. (Intervenors BR 26)

Analysis

Section 5.a of the 2017 Settlement¹⁹ deals with the regulatory treatment of the costs associated with CR3. CR3 was placed in extended cold shutdown in January 1, 2011, and ultimately retired on February 5, 2013. At that time, as recorded in DEF's 2013 Settlement Agreement,²⁰ DEF implemented deferral accounting through the creation of a regulatory asset to address the capital cost amounts and revenue requirements associated with all CR3-related costs, referred to as the "CR3 Regulatory Asset." The Commission subsequently approved the amount of the CR3 Regulatory Asset to be recovered from ratepayers and authorized the issuance of low-cost nuclear asset recovery bonds through securitization.²¹

The Nuclear Waste Policy Act of 1982²² directed the federal government to develop a high-level nuclear waste repository and established a timeline for DOE to begin accepting such wastes from commercial facilities by roughly 1996. The costs of locating and establishing the federal

¹⁷ Order No. PSC-2018-0490-FOF-EI, issued October 2, 2018, in Docket No. 20180009-EI, *In re: Nuclear cost recovery clause*, at p. 7.

¹⁸ This point is conceded by DEF in its Brief at p. 21.

¹⁹ Order No. PSC-2017-0451-AS-EU, issued November 20, 2017, in Docket No. 20170183-EI, *In re: Application for limited proceeding to approve 2017 second revised and restated settlement agreement, including certain rate adjustments, by Duke Energy Florida, LLC*.

²⁰ Order No. PSC-13-0598-FOF-EI, issued November 12, 2013, in Docket No. 130208-EI, *In re: Petition for limited proceeding to approve revised and restated stipulation and settlement agreement by Duke Energy Florida, Inc. d/b/a Duke Energy*.

²¹ Order No. PSC-15-0465-S-EI, issued October 14, 2015, in Docket Nos. 150148-EI, *In re: Petition for approval to include in base rates the revenue requirement for the CR3 regulatory asset, by Duke Energy Florida, Inc. and 150171-EI, In re: Petition for issuance of nuclear asset-recovery financing order, by Duke Energy Florida, Inc. d/b/a Duke Energy*; Order No. PSC-15-0537-FOF-EI, issued November 19, 2015, in Docket Nos. 150148-EI, *In re: Petition for approval to include in base rates the revenue requirement for the CR3 regulatory asset, by Duke Energy Florida, Inc. and 150171-EI, In re: Petition for issuance of nuclear asset-recovery financing order, by Duke Energy Florida, Inc. d/b/a Duke Energy*.

²² 42 U.S.C. § 10101, PL 97-425, 96 Stat. 2201.

repository was funded by a fee of one mill/kWh levied on all nuclear plant output.²³ This fee was passed through to DEF's ratepayers until discontinued in 2001-2002. (TR 370) At this time no permanent federal nuclear waste site has been established. (TR 227-228) DEF is currently storing the spent nuclear fuel from the now retired CR3 plant on site in an Independent Spent Fuel Storage Installation (ISFSI) using dry cask storage (DCS). DEF has spent approximately \$132 million constructing this facility²⁴ and is currently suing DOE to fully recover its costs for on-site spent fuel storage.

Section 5.a(1) of the 2017 Settlement allows DEF to recover the "projected total (retail jurisdictional) value of the reasonable and prudent projected DCS facility *capital costs*" through the Capacity Cost Recovery Clause (CCR). (Emphasis added) The DCS facility is also referred to in the 2017 Settlement as the ISFSI. Section 5.a(1) further states that:

DEF shall credit the CCR Clause with the retail portion of all applicable Department of Energy ("DOE") awards when they are received, and shall amortize the adjusted final DCS facility capital cost balance over the recovery period set forth in Subparagraph 5.c and 5.d, unless another recovery period is agreed to by all the Original Parties. (Emphasis added)

Based on the plain language of the 2017 Settlement, the portion of any DOE settlement that is associated with DCS facility capital costs must be returned to DEF ratepayers as a credit to the CCR. This plain reading of Section 5.a(1) of the 2017 Settlement is consistent with DEF's actions in 2018 when DEF credited \$18,266,200 in 2011-2013 ISFSI *capital costs* to the CCR.²⁵ As the Intervenor correctly note, DEF has not asked to modify the 2017 Settlement nor sought to negotiate depositing any portion of the DOE award into the NDT with the signatories of the 2017 Settlement. Under these circumstances it is clear that administrative finality has attached to the 2017 Settlement and that the unambiguous terms of Section 5.a(1) of the 2017 Settlement control.

DEF's latest projection of its recovery from DOE for its spent fuel management costs up through the closing date (currently scheduled for October 1) is approximately \$90 million based on the opinion of its outside counsel handling the litigation. (EXH 41, P 5) From February 2013 through May 31, 2020, DEF has disbursed \$191.4 million in spent fuel management costs from the Nuclear Decommissioning Trust Fund (NDT). (EXH 41, P 4) This \$191.4 million includes the \$90 million for which DEF is currently seeking recovery from DOE. (TR 450) Witness Hobbs testified that additional spent fuel management costs were, and would continue to be, incurred by DEF after the current suit was filed and prior to the closing. These costs could either be added to the current litigation or be the subject of a separate suit against DOE at some date in the future. (TR 451)

²³ Order No. 12540, issued September 21, 1983, in Docket No. 830001-EU, *In re: Investigation of fuel adjustment clauses of electric utilities*.

²⁴ Order No. PSC-2018-0490-FOF-EI, issued October 2, 2018, in Docket No. 20180009-EI, *In re: Nuclear cost recovery clause*.

²⁵ Order No. PSC-2018-0490-FOF-EI at p. 7.

DEF witness Hobbs further testified that spent fuel management costs consist of security costs, e.g., armed security officers to protect the spent fuel in the ISFSI. (TR 447-448) It is therefore clear that some portion of the \$90 million that DEF believes it will recover from DOE in this latest round of litigation is related to spent fuel management expenses and as an expense is not required to be refunded to ratepayers through the CCR pursuant to Section 5.a(1).

DEF is requesting that all funds recovered from DOE be deposited into the NDT. (EXH 34, PP 23-24; EXH 42; TR 361-362, 454) DEF intends to do so in 2022 and convert the funds to a rainy-day fund to provide further protection from construction risks.(EXH 42, P 12) The 2017 Settlement does not address the regulatory treatment of non-capital spent fuel management costs. These spent fuel management expenses are free to be deposited into the NDT as proposed by DEF.

Likewise, the 2017 Settlement does not address what type of decommissioning process for CR3 DEF must pursue. Thus, there is no prohibition in the 2017 Settlement against switching from SAFSTOR to the proposed accelerated decontamination and dismantlement method if the Commission finds that to be in the ratepayers' best interests. However, as stated above, while non-capital spent fuel management funds recovered from DOE can be placed into the reserve portion of the NDT as requested by DEF, spent fuel management capital costs must be returned to ratepayers through the CCR, pursuant to the terms of the 2017 Settlement.

Conclusion

The proposed transaction with ADP and its subsidiaries for decommissioning CR3 is consistent with the 2017 Settlement with one exception: the deposit of funds recovered from DOE associated with capital costs associated with spent fuel management. Capital costs associated with spent fuel management recovered from DOE should be returned to ratepayers through the CCR.

Issue 3: Should the Commission approve DEF's 2019 Accelerated Nuclear Decommissioning Study?

Recommendation: Staff recommends that Commission approve DEF's 2019 Accelerated Decommissioning Study. (Smith II, Higgins, Wu)

Position of the Parties

DEF: Yes. The Commission should approve DEF's 2019 Accelerated Nuclear Decommissioning Study. DEF's 2019 Accelerated Nuclear Decommissioning Study reflects the new cost estimate included in the transaction and demonstrates that there are sufficient funds in the NDT to complete decommissioning.

Intervenors: No. The Commission Should Reject DEF's Decommissioning Cost Study and Direct DEF to Flow All Damage Recoveries from DOE to Consumers through the CCR Clause. The Commission cannot and, in any event, should not approve the deposit of DOE award funds into the NDT.

Staff Analysis:

Parties' Arguments

DEF

Both witness Doss and witness Hobbs testified that DEF filed an updated decommissioning study as required by Rule 25-6.04365, F.A.C. (TR 355, 440) They both explained that the 2019 Study has been updated to reflect the new accelerated decommissioning schedule, as well as the updated costs included in the DSA. (TR 355, 440) Both witnesses further explain that the 2019 Study includes the \$540M for the fixed price contract, as well as \$77M in DEF's owner's costs. (TR 355, 440-441) They testify that, given the NDT balance of \$654M, the 2019 Study confirms that DEF can complete the decommissioning work at the CR3 facility with the potential of \$100M left after decommissioning is complete. (TR 355, EXH 3 p. 7 of 12)

DEF argues that the Commission should approve the 2019 Study because it reflects the new costs contemplated in the DSA and it demonstrates that the NDT has sufficient funds to complete the decommissioning. (DEF BR 22)

Intervenors

The Intervenors argue that the 2019 Study "presumes that DEF would place \$90 million in DOE recoveries expected in 2022 in the NDT, where it would remain indefinitely unless a federal high-level waste repository is established and accepts the CR3 spent fuel and other high-level nuclear wastes." (Intervenors BR 25) They state that depositing those funds recovered from DOE into the NDT would breach the 2017 Settlement Agreement. (BR 2, 25) The Intervenors contend that damages recovered due to a DOE contract breach is required to be applied to the Capacity Cost Recovery Clause (CCR) pursuant to the terms of the RRSSA. (Intervenors BR 26)

Analysis

The Commission periodically reviews Decommissioning Cost Studies pursuant to Rule 25-6.04365, F.A.C. The purpose of the rule is to “. . .ensure there are sufficient funds on hand at the time of decommissioning to meet all required expenses by establishing appropriate decommissioning accruals.”²⁶ Utilities are required pursuant to this rule to file a decommissioning study at least every five years, or as required by the Commission.

As part of its Petition, DEF requested approval of its 2019 Accelerated Decommissioning Cost Study (2019 Study) for its CR3 nuclear power plant. However, as a result of the DSA, DEF is changing decommissioning methods from the SAFSTOR method to the DECON method. (EXH 3, P 3) Changes to the decommissioning method have led to major differences between the 2019 Study and the 2014 Decommissioning Study (2014 Study) previously approved by Order No. PSC-14-0702-PAA-EI.²⁷

In addition to changes resulting from decommissioning methodology, the 2019 Study also differs from the 2014 Study due to several activities that have been completed at CR3. Since the costs associated with those activities have already been incurred, they are not included in the 2019 Study. DEF witness Hobbs testified about these changes and their effect on the 2019 Study:

There are several differences between past cost estimates and the Proposed Transaction. First, spent fuel management costs are not included in the fixed price under the DSA. Since ADPSF1 will own the spent fuel assets, they will fund the operation and maintenance of the ISFSI, management of spent nuclear fuel, the removal of all of the spent nuclear fuel and high-level waste from the site and the decommissioning of the ISFSI with funding that is separate and apart from this transaction. Ultimately, this funding is expected to be provided by the U.S. Department of Energy (“DOE”). ADP will have the responsibility for obtaining these funds and will bear any risk of DOE recovery. Since ADPCR3 will operate and maintain the ISFSI for ADPSF1, ADPCR3 will also be responsible to comply with NRC regulations associated with spent fuel management. Second, the fixed price under the DSA does not include the actual costs incurred by DEF to reach the dry dormancy conditions. Past cost studies included the transition costs from an operating plant condition to dry dormancy. The ADP bid does reflect the benefit of these projects including the elimination of significant risks such as the movement of fuel into dry storage.

(TR 441-442)

ADP will be responsible for spent fuel management. (EXH 3, P 2) According to witness Hobbs testimony, ADP has agreed to purchase the ISFSI for a nominal amount, and not only assume responsibility for the management of all spent fuel, but also for the associated costs once approval of the license transfer by the NRC has occurred. (EXH 3; P 2) The NRC approved the license transfer on April 1, 2020. (EXH 28, BSP 109) The DSA provides that DEF will incur spent fuel management costs up to the closing of the DSA.

²⁶ 25-6.04365, F.A.C., Nuclear Decommissioning.

²⁷ Order No. PSC-14-0702-PAA-EI, issued December 22, 2014, in Docket No. 20140057-EI, *In re: Petition for approval of 2014 nuclear decommissioning cost study, by Duke Energy Florida Inc.*

Given the unique situation of the instant docket, there are two major categories of costs that will be drawn from the NDT, and thus, are pertinent to the 2019 Study. The first category of costs includes the DSA itself in the amount of \$540M, and the second category of costs is DEF's owner's costs in the amount of \$77M. (EXH 3, P 2)

As discussed in Issue 1, "DEF has entered into a DSA with ADP which provides that ADP will assume the role of operator licensee, responsible for all activities conducted under the License upon NRC approval of the transfers to ADP." (EXH 3, P 2 of 12) Under the terms of the DSA, ADP has agreed that it will decommission the CR3 Facility as specified in the DSA, and ultimately obtain termination of the License, pursuant to the fixed priced services agreement. (EXH 3, P 2)

Table 3-1 below illustrates the decommissioning activities to be performed by ADP, with associated costs, and timeframes.

**Table 3-1
Decommissioning Activities**

Phase	Years	Cost \$(000s)	% of Total
Planning/Site Preparation	2020-2021	100,695	18.6%
Decommissioning/Partial License Termination	2021-2027	403,241	74.7%
Site Restoration	2026-2027	36,064	6.7%
	Total	540,000	100%

Source: EXH 3

The \$540M cost estimate in this case has been fully examined in Issue 1. That analysis covers the RFP process as well as the contingency allowance built in to the price of the DSA. The contingency allowance is a requirement under Rule 26-6.04365, F.A.C., and is adequately reflected in the competitively bid \$540M contract price.

DEF Owner's Costs

If the DSA is approved by the Commission, there will be costs that remain with DEF. (EXH 3, P 2) These remaining costs are all operating costs for three time periods: 1) pre-closing (2020); 2) closing through 2022; and 3) 2023-2038. (EXH 3, P 3) The costs in the pre-closing timeframe include spent fuel management costs up to the closing date. (EXH 3, P 3) The costs in the "post-closing through 2022" timeframe include post-closing operating costs such as oversight and pay item validation, non-labor recurring costs, taxes, fees, and insurance costs." (EXH 3, P 3) These costs have been fully reviewed in Issue 1. Table 3-2 illustrates DEF's Owner's costs through 2038.

**Table 3-2
 DEF's Owner's Costs**

	Cost \$ (000s)
DEF Operating Costs up to Closing 2020	44,0000
DEF Operating Costs Closing through 2022	4,000
DEF Operating Costs 2023-2038	29,000
Total DEF Cost	77,000

Source: EXH 3

Based on DEF's 2019 Study, the cost to decommission CR3 is \$617M. (EXH 3, p. 2) This amount consists of the fixed price contract of \$540M and DEF owner's costs of \$77M. (EXH 3, P 2) The balance of the NDT on March 26, 2019 was \$654M. Therefore, staff believes the NDT is adequate to fund the transaction barring any changes to the regulations governing the end state conditions. Staff recognizes the potential for changes in these end state conditions and the possibility that DEF may request additional funds in the future if these regulations change. The Company asserts that the NDT provides reserves to address any potential issues with those end state conditions, and claims in the 2019 Study that "no further funding is needed to satisfy any further cost of decommissioning." (EXH 3, P 8) The risks associated with reaching these end state conditions are discussed in Issue 1.

Conclusion

Rule 25-6.04365, F.A.C., describes its purpose, in part, is ". . . to ensure there are sufficient funds on hand at the time of decommissioning to meet all required expenses by establishing appropriate decommissioning accruals." Staff's recommended accrual is addressed in Issue 4; however, staff agrees with DEF's position that the record shows there are more than sufficient funds in the NDT to cover the price of the DSA and the remaining owner's costs as long as the regulations governing the end state conditions do not change.

Rule 25-6.04365(1), F.A.C., further states that, "this rule requires each utility to file a Nuclear Decommissioning Study on a regular basis, the purpose of which is to obtain sufficient information to update cost estimates based on new developments, additional information, technological improvements, and forecasts; to reevaluate alternative methodologies; and to revise the annual accrual needed to recover the costs."

While certain terms and conditions of the fixed-price DSA, as well as other information such as DEF (owner's) costs, were used to produce a decommissioning cost study filing, staff believes the vast majority of the information that forms the basis of this filing are the contractual details of the fixed-price DSA. In terms of how the Commission has historically evaluated decommissioning "costs" and the formation thereof, the instant filing is largely predicated on contractually agreed-upon activities for an agreed-upon price. Staff does not necessarily view this as a "from the ground up" evaluation of costs developed through the use of industry standards and norms for site-specific nuclear demolition cost estimation that the Commission periodically receives for all of Florida's nuclear units for the purposes of ratemaking.²⁸ However, staff believes the purpose of Rule 25-6.04365, F.A.C., is satisfied as stated above,

²⁸ 25-6.04365, F.A.C., Nuclear Decommissioning.

wherein sufficient funds are expected to be available in the NDT to cover the price of the DSA and the remaining owner's costs as long as the regulations governing the end state conditions do not change. (EXH 3, P 9)

Based on the record, staff believes that the 2019 Study satisfies the purpose of Rule 25-6.04365, F.A.C. Therefore, staff recommends the Commission approve DEF's 2019 Accelerated Decommissioning Study.

Issue 4: What is the appropriate annual accrual in equal dollar amounts necessary to recover the proposed decommissioning costs of CR3?

Recommendation: Staff recommends the appropriate accrual to cover the cost of decommissioning the CR3 site remain set at zero dollars per year. (Higgins)

Position of the Parties

DEF: There is no requested annual accrual.

Intervenors: \$0.

Staff Analysis:

Parties' Arguments

DEF

DEF does not provide substantive argument on this issue in its brief; it states in its post-hearing position that there is no requested annual accrual.

Intervenors

The Intervenors do not provide substantive argument on this issue in their brief; they state in their post-hearing position that the appropriate annual accrual is \$0

Analysis

The purpose of this issue is to determine the appropriate annual charge to be included in base rates for the purposes of covering the cost of decommissioning CR3. The information filed in this proceeding indicates the cost to decommission the CR3 site, as presently known and identified, is fully funded. Thus, a continuation of the current accrual for nuclear decommissioning of zero dollars per year as approved and maintained by the immediate four preceding Commission Orders to address this matter, is warranted.²⁹ There is no disagreement among the parties to this docket concerning the annual accrual amount. Additionally, staff recommends that the financial assumptions related to the Nuclear Decommissioning Trust - DEF Reserve Fund, that are included in DEF witness Terry Hobbs' Exhibit TH-2, are reasonable. (EXH 3)

Staff's recommended annual accrual amount is based upon information contained in the DSA and DEF's responses to staff discovery. Generally, once the cost of decommissioning a nuclear unit is determined it is then escalated into future cost. The question becomes how much money needs to be collected from ratepayers in equal monthly payments to equal decommissioning costs in future dollars at a future date. However, the information filed in the instant proceeding

²⁹ Order No. PSC-02-0655-AS-E issued May 14, 2002, in Docket No. 20000824-EI, *In re: Review of Florida Power Corporation's earnings, including effects of proposed acquisition of Florida Power Corporation by Carolina Power & Light*, Order No. PSC-05-0945-S-EI, issued September 28, 2005, in Docket No. 20050078-EI, *In re: Petition for rate increase by Progress Energy Florida, Inc.*, Order No. PSC-12-0225-PAA-EI, issued April 30, 2012, in Docket No. 20100461-EI, *In re: Petition for approval of nuclear decommissioning cost study, by Progress Energy Florida Inc.*, Order No. PSC-14-0702-PAA-EI, issued December 22, 2014, in Docket No. 20140057-EI, *In re: Petition for approval of 2014 nuclear decommissioning study, by Duke Energy Florida, Inc.*

indicates that the task of decommissioning CR3 is fully funded both on a current and a projected basis. Thus, there is no need for additional funding given the facts and assumptions contained in this proceeding's evidentiary record. Further, the need for an annual accrual for decommissioning is most often directly related to management of the NDT. As such, staff highlights a few relevant items concerning the CR3 NDT below.

Near-Recent Historical NDT Performance

The NDT has performed well since 2014, which was the last time the Commission reviewed its performance in a decommissioning proceeding.³⁰ The achieved annualized net financial returns of the NDT over the past five years are 5.9 percent before tax, and 4.5 percent after tax. (EXH 3) The Commission has historically evaluated and benchmarked the performance of the fund relative to the Consumer Price Index, which is reported to be an annualized 1.3 percent over approximately the same 5-year timeframe. (EXH 3)

Current NDT Position and Assumptions

The NDT had an estimated after-tax balance of \$654 million at the end of March 2019. With respect to DEF, the total estimated cost to fully decommission the CR3 site is \$617 million through 2038. This figure consists of \$540 million to fund the contract with ADP, and \$77 million of DEF/owner's costs. These figures demonstrate that there is no current need for additional decommissioning funding from customers.

The current NDT will be segregated into two separate and distinct accounts for the purposes of funding decommission operations and oversight. The majority of existing funds, \$540 million designated to fund the contract with ADP CR3, will be placed into the contractor or "IOI Subaccount," with the remainder of the funds to be held in the "DEF Reserve Subaccount."

After the transaction closes and the ownership of the spent nuclear fuel has been transferred to ADPSF1, DEF estimates that it will on average spend roughly \$1.4 million per year from 2021-2038 to oversee the decommissioning of the site. These expenditures are to be funded through the DEF Reserve Subaccount. Further, with respect to the DEF Reserve Subaccount, these funds are expected to grow substantially over the relevant time period. Crediting factors include financial growth and a 2022 financial award from DOE for reimbursement of costs incurred for spent fuel management bring the estimated total ending balance of the DEF Reserve Subaccount to \$298.5 million in 2038. This is the projected amount assumed available for refund to DEF's customers and shareholders when decommissioning is complete and the NRC fully releases the site. (EXH 3)

Conclusion

Staff recommends the appropriate accrual to cover the cost of decommissioning the CR3 site remain set at zero dollars per year.

³⁰ Order No. PSC-14-0702-PAA-EI.

Issue 5: What is the appropriate accrual effective date for adjusting the accrual amount, if any adjustment is needed?

Recommendation: If the staff recommendation in Issue 4 is approved, there will be no adjustment to the current zero decommissioning accrual. Therefore, no accrual effective date is needed. (Galloway)

Position of the Parties

DEF: Not applicable.

Intervenors: The last opportunity to adjust any accrual appears to be December 31, 2021 pursuant to the 2017 Settlement Agreement.

Staff Analysis:

Parties' Arguments

DEF

In its brief, DEF concurs that with no requested annual accrual, an effective date is not applicable. (DEF BR 22)

Intervenors

The Intervenors agree that the appropriate annual accrual in equal dollar amounts necessary to recover the proposed decommissioning costs of CR3 is \$0. They further state that the last opportunity to adjust any accrual appears to be December 31, 2021 pursuant to the 2017 Settlement Agreement. (Intervenor BR 32)

Analysis

In Issue 4, staff recommends that there be no adjustment to the approved decommissioning accrual amount of zero. The parties are in agreement that there should be no adjustment to the decommissioning accrual amount. If the staff recommendation on Issue 4 is approved there will be no change to the accrual amount of \$0. Therefore, no effective date needs to be approved.

Conclusion

The parties agree that no effective date needs to be approved given no change to the approved accrual amount of \$0. Therefore, if the staff recommendation on Issue 4 is approved and there is no change to the zero decommissioning accrual amount, no accrual effective date is needed.

Issue 6: Should the Commission approve DEF's request to waive, if necessary, the future filing of CR3 decommissioning studies every five years as provided in Rule 25-6.04365, F.A.C.?

Recommendation: If the Commission approves staff's recommendation in Issue 7, future filings of decommissioning studies required in Rule 25-6.04365(3), F.A.C., would be unnecessary and should be waived. (Brownless, McNulty)

Position of the Parties

DEF: Yes, the Commission should waive the future filing of the studies every five years required by Rule 25-6.04365, F.A.C. The studies are meant to ensure that DEF accrues adequate funds in the NDT to cover the projected cost of decommissioning CR3. Once DEF has commenced decommissioning pursuant to the transaction, the studies will no longer be necessary because the cost for the accelerated decommissioning CR3 is contractually fixed at less than the NDT funds.

Intervenors: No, not unless the Commission imposes suitable reporting requirements as detailed in FIPUG's position on Issue 7 and an independent monitor to oversee the project on behalf of the Commission and consumer parties is put in place. The reports described in the testimony of Richard A. Polich at TR 649 - 650 should – at a minimum – be required if the Petition is approved. See discussion on Issue 1.

Staff Analysis:

Parties' Arguments

DEF

DEF does not provide substantive argument in its brief on this issue. In its post-hearing position, DEF states that the Commission should waive the Rule 25-6.04365, F.A.C., requirement that DEF file a site-specific nuclear decommissioning study at least once every five years, because once DEF has commenced decommissioning pursuant to the transaction, the studies will no longer be necessary to ensure DEF accrues adequate funds in the NDT to cover the projected cost of decommissioning. (DEF BR 23)

Intervenors

The Intervenors argue that the Commission should require DEF provide timely and regular reports to ensure that decommissioning and spent fuel activities in the DSA are completed, that NDT funds are prudently spent, and that sufficient funds remain to complete the decommissioning and spent fuel activities. The Commission should not grant any rule waiver or other waiver request to delay or excuse the submission of these or similar reports related to the handling of nuclear waste. (Intervenors BR 33) The Intervenors contend that the reports described in the testimony of OPC witness Polich should, at a minimum, be required if the Petition is approved. (Intervenors BR 33, citing to TR 649 – 650)

Analysis

Rule 25-6.04365(3), F.A.C., *Nuclear Decommissioning Study*, provides that “[e]ach utility shall file a site-specific nuclear decommissioning study at least once every five years from the submission date of the previous study unless otherwise required by the Commission.” Among other things, the rule requires that the study include a description of the unit, the status of its operating license, the methodology used for the decommissioning study, annual accruals, and projected decommissioning cost estimates. The purpose of this study is to recognize developments and changes affecting decommissioning cost projections and estimates, and to consider such factors as additional information, improvements in technology, and regulatory changes that have transpired since the last decommissioning study.³¹

According to DEF, the rule requires decommissioning studies to ensure there are sufficient funds on hand at the time of decommissioning to meet all required expenses by establishing appropriate decommissioning accruals. Accordingly, once DEF has commenced decommissioning (as it proposes to do in this transaction), such studies are no longer necessary. (Petition pp. 17-18). For purposes of the transaction between DEF and ADP, DEF considers the phrase “time of decommissioning” to mean a single point in time. This is because the transaction between DEF and ADP contractually fixes the price for the accelerated decommissioning of CR3 at an amount that is less than the balance of funds already available in the NDT. Due to the fact that there are adequate decommissioning funds in place at the time of decommissioning, DEF contends that filing full additional cost studies beyond the cost study filed on July 10, 2019, would not be helpful to the Commission. (EXH 26, BSP 98)

The Intervenor recommend that the Commission amend the ADP CR3 reporting requirements contained in Attachment 9, Section B from quarterly to monthly, and enhance the information to provide timely insight into conditions that could impair ADP’s ability to complete the contract. This includes establishing monthly and annual reporting requirements to the Commission. (Intervenor BR 16) As detailed in Issue 7, staff is in agreement with the recommendation that DEF should provide quarterly reports to ensure that decommissioning and spent fuel activities in the DSA are completed. In addition, staff recommends in Issue 7 that DEF file management level reports showing that NDT funds are prudently spent, and that sufficient funds remain to complete the decommissioning and spent fuel activities. These reports would provide more useful and timely information to the Commission than would a five-year decommissioning study, and allow staff and interested parties to better monitor the progress of the CR3 decommissioning activities.

Conclusion

Rule 25-6.04365(3), F.A.C., affords the Commission with the discretion to waive the requirement that DEF file a decommissioning study every five years (“ . . . at least once every five years from the submission date of the previous study *unless otherwise required by the Commission.*”)(emphasis added). Staff believes that the reporting requirements recommended in Issue 7 provide more timely and regulatory appropriate information to better monitor the decommissioning of DEF’s CR3 unit. With approval of the reporting requirements recommended in Issue 7, staff does not anticipate that the Commission will need any future CR3

³¹ Order No. PSC-2014-0702-PAA-EI, issued December 22, 2014, in Docket No. 20140057-EI, *In re: Petition for approval of 2014 nuclear decommissioning study, by Duke Energy Florida, Inc.*

decommissioning studies. Staff notes, however, that the Commission retains the authority pursuant to Section 366.04(2)(f), F.S., to require DEF to resume filing the study, should the need arise.³²

Staff therefore recommends that if the Commission approves staff's recommendation in Issue 7, future filings of decommissioning studies required in Rule 25-6.04365(3), F.A.C., would be unnecessary and should be waived.

³² Section 366.04(2)(f), F.S., provides that the Commission shall have power over electric utilities to prescribe and require the filing of periodic reports and other data as may be reasonably available and as necessary to exercise its jurisdiction hereunder.

Issue 7: What reports should be given to the Commission to ensure that the decommissioning and spent fuel activities outlined in the DSA are completed, NDT funds are reasonably spent, and sufficient funds remain to complete the decommissioning and spent fuel activities?

Recommendation: Staff recommends the Commission require DEF to provide the following information through the final period of partial license termination:

1. the information responsive to items identified in the DSA, Attachment 9, Section A should be provided to the Commission within two business days of DEF's receipt of this information from ADP;
2. the information responsive to items identified in the DSA, Attachment 9, Sections B through E should be provided to the Commission within two weeks of DEF's receipt of this information from ADP;
3. a quarterly DEF decommissioning report containing, at minimum, the NDT fund monthly payments and balances for the previous quarter, ADPCR3 schedule performance for the previous quarter, and an assessment of schedule and pay projections for the current quarter, should all be provided within one month following DEF's quarterly meeting with ADPCR3; and
4. decommissioning management-level reports and presentations prepared by DEF for DEF management review, should be provided to the Commission within two weeks of their presentation to DEF management. (Vinson, Smith II, Cicchetti)

Position of the Parties

DEF: DEF will submit an annual report to the Commission to ensure that the decommissioning activities outlined in the DSA are completed including: NDT funds paid to ADP in the previous year, NDT funds remaining, ADP CR3's schedule performance for the previous year and the project to date, and future schedule and pay projections assessment. DEF will also make available, to Commission Staff, any information provided to it by ADP pursuant to the DSA.

Intervenors: The reports described in the testimony of Richard A. Polich at TR 649 - 650 should – at a minimum – be required if the Petition is approved. See Discussion on Issue 1.

Staff Analysis:

Parties' Arguments

DEF

The Company proposes to provide a single annual report to the Commission updating NDT funds paid to ADP, funds remaining, schedule performance for the year and to date, and schedule and payment projections. (DEF BR23) The information provided will represent a subset of the quarterly reports and other information received from ADP. DEF additionally proposes to “share

information obtained from the reports obtained from ADP in a method and schedule that can be worked out with PSC staff.” (DEF BR 13)

Intervenors

The Intervenors request DEF be required to provide to the Commission the periodic ADP reports listed in Attachment 9 to the DSA, the contents of which are enumerated in the Analysis section of this issue. The Intervenors note that DEF witness and ADP CEO Scott State, when asked whether he objected to providing the Public Service Commission with monthly reports that are provided to DEF, replied, “ I have no issue with providing nonproprietary information to DEF that they, in turn, could provide to the Commission.” (TR 253)

Further, the Intervenors propose that the quarterly reporting information be prepared on a monthly basis. According to the Intervenors, “monthly reporting would have significant benefits in the form of timely information or early warning to DEF, the Commission, and the customers” of problems associated with the project. (Intervenor BR 16-17)

In addition to requesting monthly reporting, the Intervenors proposed the following specific elements to be included in reports to the Commission:

1. Monthly reporting requirements except as noted below,
2. Project status, activities completed and projection of next quarter activities,
3. Identification of any project delays and cause,
4. Payments from the NDF and projections for next monthly payments,
5. Status of the CPT,
6. Financial reports of ADP, ADP companies and ADP Parents (Quarterly Statements), and
7. Identification of critical issues and performance of ADP. (Intervenor BR 18)

The Intervenors also note in their brief that the Vermont Public Utilities Commission, in its oversight of the decommissioning of the Vermont Yankee nuclear plant, received monthly project status reports. The brief cites the Vermont Commission’s view of the importance of post-closing oversight by the relevant Vermont state agencies in mitigating risks related to funding adequacy. The Intervenors point out that NorthStar (one of ADP’s parents) provides monthly summaries of expenditures, annual certifications regarding progress, and notification of material developments affecting the project. (Intervenor BR 21)

Analysis

All parties have recognized the need for the Commission to remain well-informed during the decommissioning of CR3, regardless of the method or timeframe involved in accomplishing this activity. Staff believes that due to the Commission’s ongoing role of overseeing disbursements from the NDT, it must be provided information regarding the status of work, DEF’s assessment of cost and schedule estimates, unforeseen developments, and other details regarding the project.

In direct testimony, OPC witness Polich initially presented five customer protection enhancements “intended to mitigate potential risk and enhance the probability of a successful CR3 decommissioning.” These recommended enhancements were:

1. Amend the Parental Support Agreement to include the State of Florida as a beneficiary and with the same rights as the NRC,
2. Require the parent companies of ADP to maintain a minimum cash or cash equivalent asset in the amount of at least \$105 million to support the Parental Support Agreement,
3. Modify the Contractor’s Provisional Trust contributions from monthly payments to NorthStar to increase it from 6% to 10% of payments,
4. Amend the ADP CR3 reporting requirements contained in Attachment 9, Section B from Quarterly to Monthly and enhance the information to provide timely insight into conditions that could impair ADP’s ability to complete the job. This includes establishing reporting requirements to the Florida Public Service Commission, and
5. Establish an Independent Monitor to oversee the CR3 decommissioning activities and ADPCR3’s financial status. (TR 622-623)

At hearing, the Intervenor withdrew proposed Enhancements 2 and 3, continuing to endorse the remaining three enhancements. Also at hearing, the parties stipulated that if the Commission orders adding any of these three recommended enhancements to the DSA, NorthStar’s position is that parts of the DSA would have to be renegotiated. (TR 604) Further, regarding the positions of DEF and ADP, the stipulation stated that the need to renegotiate the DSA would depend on a future assessment of the proposed condition. (TR 605)

Of these, Issue 7 relates to Enhancement 4, in determining what portions of the information provided by ADP to DEF should be forwarded to Commission staff, and on what timetable this should occur. Regarding Enhancement 4, during the hearing DEF witness Hobbs indicated “I will supply the Commission and its staff whatever information they [ADP] have that Duke Energy - Florida has available.” (TR 577)

Mr. Polich’s proposed Enhancement 4 focuses on Section B of Attachment 9 of the DSA alone. In its entirety, Attachment 9 to the DSA lays out the following summarized set of reporting and notification requirements:

Attachment 9, Section A requires ADP to notify DEF within 24 hours of: 1) Specified actions or notifications by government agencies such as NRC, OSHA, FDEP, and EPA; 2) Specified health, safety, or environmental events or situations requiring notification of government agencies; 3) Proposed organizational changes in equity ownership; and 4) Breach of debt covenants, default, insolvency, etc., of parent companies.

Attachment 9, Section B requires a quarterly face-to-face meeting of ADP and DEF personnel, with the following to be provided two weeks prior to the meeting: 1) Summary of items in A above, 2) summary of certain disputes, 3) issues of contractor non-

compliance, 4) concerns needing management attention, 5) regulatory submittals by ADP, 6) completed and upcoming milestones, and 7) updated project schedule.

Attachment 9, Section C requires Annual summaries of items in A and B above by March 31 each year containing assessment of Project Schedule and other items of project performance and future projections.

Attachment 9, Sections D and E require quarterly specified information related to latter-stage fuel off-site transfer activities.

Under cross examination by staff counsel, witness Hobbs stated he had no objection to providing staff, within an additional 24 hours, the information required in Attachment 9 Section A. (TR 578) Regarding DEF providing staff, within one week, the information required under Attachment 9, Sections B and C, witness Hobbs stated, “I don’t have any objection to giving the Commission and its staff whatever information it needs.” (TR 578) Regarding timing, Mr. Hobbs agreed “that DEF is willing to commit to share this information in a method and on a schedule that can be worked out with the PSC staff.” (TR 579)

Staff believes that this offer to give the Commission whatever information ADP provides to DEF through its reporting channels could satisfy, in part, the Commission’s needs in its oversight role. However, staff notes it is possible that questions by staff could be prompted by this information or that additional documents or explanations may become necessary.

Therefore, staff recommends that the information required by Attachment 9, Section A be provided by DEF to the Commission within two business days of its receipt from ADP, and that the information within Sections B through E be provided to the Commission within two weeks of its receipt by DEF.

In staff’s view, another category of information at issue is the reports prepared by DEF based upon the project information provided under Attachment 9. At hearing, witness Hobbs was asked, “Do you anticipate that DEF will prepare written reports to your management regarding these meetings, evaluating these materials, giving the status of payments, schedules, conflicts, et cetera?” DEF witness Hobbs stated, “I intend to produce a report ... I think there are key leaders within our [company] that have an interest, a very keen interest in this project. (TR 574-575) Therefore, staff recommends that reports and presentation prepared by DEF be provided to the Commission within two weeks of their completion and transmittal to the final intended DEF recipient.

Staff believes that reviewing presentations or reports prepared by DEF for DEF management review is at least of equal value to the information provided by ADP. Review of these documents would provide an even clearer understanding of the project’s status than the ADP information itself. It would also provide staff a clear view of the next steps to be taken by DEF in response to its observations regarding the status of events and progress at CR3.

Finally, as noted in DEF’s position statement on Issue 7, the Company proposes to provide annual reports to the Commission updating NDT funds paid to ADP, funds remaining, schedule performance for the year and to date, and schedule and payment projections. (DEF BR23) In

cross examination by staff counsel, witness Hobbs stated a willingness to commit to prepare and provide the same information to Commission staff on a quarterly basis. (TR 579-580) Staff recommends that the Commission require DEF to provide this information on both a quarterly and annual basis.

Regarding the Commission's need for adequate information in performing its oversight role, staff acknowledges the relevance of the Intervenors' references in their brief to the Vermont PUC's statements emphasizing

the importance of the post-closing oversight activities by the relevant State agencies in mitigating risks to the State related to funding adequacy. In addition to other measures that have the potential to mitigate post-closing risks, NorthStar will be providing monthly summaries of all expenditures at the site, informative and detailed annual certifications regarding the project's progress, and prompt notification of material developments affecting NorthStar or the project. The State agencies will also have significant rights in overseeing the project, including the right to inspect books and records, to access the site, and to object to disbursements from certain funding sources.

(Intervenors BR 21)

Although in the case of Vermont Yankee, state agencies besides the PUC were involved in that transaction's oversight, staff notes the Commission has these same rights and responsibilities that may be useful in ensuring the CR3 project and NDF are being properly managed. Staff also notes that monthly reports were deemed acceptable by the parties and agencies involved. (EXH 38, P 40)

Conclusion

Staff believes the Commission should require DEF to provide the following information through the final period of partial license termination:

1. the information responsive to items identified in the DSA, Attachment 9, Section A, should be provided to the Commission within two business days of DEF's receipt of this information from ADP;
2. the information responsive to items identified within the DSA, Attachment 9, Sections B through E, should be provided to the Commission within two weeks of DEF's receipt of this information from ADP;
3. a quarterly DEF decommissioning report containing, at minimum, the NDT fund monthly payments and balances for the previous quarter, ADPCR3 schedule performance for the previous quarter, and an assessment of schedule and pay projections for the current quarter, should all be provided within one month following DEF's quarterly meeting with ADPCR3; and

4. decommissioning management-level reports and presentations prepared by DEF for DEF management review, should be provided to the Commission within two weeks of their presentation to DEF management.

Issue 8: Should this docket be closed?

Recommendation: Staff recommends that this docket should be closed if no timely appeal is filed. If a timely appeal is filed, this docket shall remain open pending resolution of the appeal. (Brownless)

Position of the Parties

DEF: Yes.

Intervenors: No. The docket should remain open until any action approved, if at all, by the Commission is completed satisfactorily.

Staff Analysis: The order issued in this docket after the Commission vote is a final administrative order that is subject to appeal to the Florida Supreme Court within 30 days of its rendition pursuant to Rule 9.110(c), Florida Rule of Appellate Procedure. If no timely appeal is filed, staff recommends that this docket be closed. If an appeal is timely filed, staff recommends that this docket should remain open pending resolution of the appeal.