**BEFORE THE PUBLIC SERVICE COMMISSION**

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| In re: Undocketed Matters | UNDOCKETED 130000-OT |
| | FILED: October 10, 2013 |

**DUKE ENERGY FLORIDA, INC.'S**
**NOTICE OF FILING**

Duke Energy Florida, Inc. ("DEF"), hereby gives notice of filing Attachment C to Duke Energy Florida, Inc.'s Request for Proposals for Long-Term Power Supply Resources with an In-Service Year of 2018 inadvertently omitted from the filing of October 8th, 2013, Document No. 05995-13.

Respectfully submitted,

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**ATTACHMENT C**
**Response Package (Instructions)**

10-8-13

# DEF2018RFP

# Attachment C - Response Package
# TABLE OF CONTENTS



## RESPONSE PACKAGE SCHEDULES

# I. General Instructions

This Response Package contains the information required of Bidders and reviews the required organizational structure and contents of the proposals submitted in response to DEF's RFP for Power Supply Resources. Prior to developing their proposals, Bidders are requested to carefully read Duke Energy Florida's RFP and the instructions in this Response Package.

DEF will be utilizing PowerAdvocate (www.PowerAdvocate.com for further basic information on PowerAdvocate) RFP web tool to download, communicate and upload RFP information. There are no associated charges or specific registration restrictions associated with the registration process. In order to download the DEF 2018 RFP, an interested party must register with PowerAdvocate as a user to access their site which will require basic registration information. To access the DEF 2018 RFP registration process the following link should be used:

www.duke-energy.com/floridarfp

In most cases, the confirmation and acceptance of the registration process should occur within 1 to 4 hours, or within an 8 hr business day window, and an associate email with a link to access the DEF 2018 RFP information will be sent to the user.

Proposals in response to this RFP must be submitted in electronic version via the PowerAdvocate RFP web tool. Additionally, a copied version of the submitted proposal in electronic format and provided on a flash-drive should be delivered to the IM/E at the Sedway Consulting address listed for the Official Contacts in I.E. no later than one day after the DEF December 9, 2013 deadline, or by December 10, 2013. Text portions of the responses must be in Microsoft Word or Adobe Acrobat and schedules are in Microsoft Excel. Preprinted materials such as maps, annual reports, etc. should be submitted in electronic format through the website as well. Bidders must ensure that the proposals are delivered on time.

The PowerAdvocate web site is designed for bidders to upload their complete response package associated with each bid utilizing the three basic tab categories designated by PowerAdvocate as Commercial, Technical and Pricing. Please note the tab names are generic PowerAdvocate tab names and each tab may include various aspects of information relating to technical or pricing information without restrictions to the tab name.

Specific individual bid responses should be uploaded to these three tabs (Commercial, Technical and Pricing) as follows:

(1) **Commercial (or the Commercial tab)[Word Type Files]:** All word related text documents should be uploaded to the commercial tab. Basically, this will consist of the Bidders text responses to Chapters (Executive Summary and Chapters 1 through 12) as one Word document (not individual chapter documents).
(2) **Technical (or the Technical tab)[Non-Word or Non-Excel Files]:** All non-Word or non-Excel files such as .pdf or .jpg should be uploaded to the Technical tab. Basically, this will

consist of the Bidders' referenced information from the Word or Excel files which are cumbersome to include within those Word or Excel files.

(3) **Pricing (or Pricing tab)[excel Type Files]:** All Excel file documents should be uploaded to the Pricing tab. Basically, this will consist of one Excel File with the nine associated RFP schedules as tabs within the Excel file.

Submissions on flash-drives also should be structured in three folders in accordance with the above.

**Bidders are required to use the schedules provided. The schedules (as well as the format of the entire Response Package) have been designed to facilitate the evaluation of the proposals in an expedient manner. Failure to use the schedules will be grounds for disqualification.**

# II. Organization and Contents of Bidders' Proposals

## *A. Overview*

Bidders' proposals **must** be organized according to the structure specified below. If a particular chapter or section is not relevant to a Bidder's proposal, then the Bidder should include the chapter or section and indicate why it is not relevant. Where DEF has included a schedule that is to be completed by the Bidder, the schedules must be completed or the Bidder must indicate why the schedule is not relevant. This requirement is in place to assist the Bidder and DEF in assuring that no question has been overlooked and to provide all relevant information needed to evaluate the proposals.

## *B. Proposal Outline*

The outline that Bidders **must** use to organize their proposals is presented below. Also specified in each section of this Response Package are the chapter number and section number that should be used for all proposals. The specific information that is to be included in each chapter is described below. However, because the information requested may not be relevant to all types of proposals, DEF has indicated in bold the type of proposal to which each question applies. **Where no specific type of proposal is indicated, the Bidder should assume that the information is required for all types of proposals. The Executive Summary and Chapters 1 – 12 word documents should be uploaded to the Power Advocate Commercial tab (and included in the Commercial folder on flash-drive submissions) as one word document when completed.**

- Proposal Executive Summary
- Chapter 1: Project Summary
- Chapter 2: Proposal Pricing
- Chapter 3: Operating Performance
- Chapter 4: Permitting Plans
- Chapter 5: Engineering and Design Plans
- Chapter 6: Site Control
- Chapter 7: Transmission Plan
- Chapter 8: Fuel Supply and Transportation Plan
- Chapter 9: Project Financing Plan
- Chapter 10: Commercial Operation Date Certainty

- Chapter 11: Bidder Experience
- Chapter 12: Acceptance of key Terms & Conditions

This Response Package is organized around a series of schedules. The matrix presented below indicates which schedules apply to different types of proposals. These schedules are provided in an Excel workbook included as part of this Response Package. If a schedule applies to the type of proposal that the Bidder is submitting, the Bidder is **required** to complete the schedule. **Inconsistencies between the electronic and hard copies will be grounds for disqualification. The Excel File with the associated Schedule A tab and 1 – 9 schedules should be uploaded to the Power Advocate Commercial tab as one Excel document when completed.**

**Schedules To Be Completed By Bidder**

| Schedule No. and Name | New Unit | Existing Unit | System Power |
|---|---|---|---|
| Schedule A: Project Summary | X | X | X |
| Schedule 1: Pricing Schedule for New and Existing Unit Proposals | X | X | |
| Schedule 2: Pricing Schedule for System Power Proposals | | | X |
| Schedule 3: Capacity States and Heat Rates for New and Existing Unit Proposals | X | X | |
| Schedule 4: Operating Performance Schedule | X | X | X |
| Schedule 5: Environmental and Regulatory Permit Status Schedule | X | | |
| Schedule 6: Air Emissions Schedule | X | X | |
| Schedule 7: Transmission Information Schedule | X | X | X |
| Schedule 8: Project Pro Forma Schedule | X | | |
| Schedule 9: Project Milestone Schedule | X | | |

**All other non Word or Excel files should be referenced to their associated Word or Excel file, uploaded to the Power Advocate Technical tab, and included in the Technical Folder in the flash-drive submissions.**

## *C. Proposal Executive Summary*

The Bidder is required to provide a brief summary of its proposal (no more than two pages). The summary should include at a minimum a brief overview of the technology and equipment proposed, amount of capacity offered, project location and point of delivery, proposed project pricing, power delivery period, proposed fuel supply arrangements, experience with key project elements, financing plan/arrangements, permitting schedule, and conformance with the key Terms & Conditions (reference Attachment A to the RFP).

## *D. Chapter 1: Project Summary*

Chapter 1 of the Bidder's proposal must consist of a completed Project Summary (Schedule A). Bidders should complete Schedule A after they have completed all other schedules; data must be

consistent with the detailed schedules. The information in this form will be treated as non-confidential and non-proprietary and may be released to the public.

## *E. Chapter 2: Proposal Pricing*

### Introduction

Bidders are required to complete all the applicable pricing schedules referenced in this chapter of the Response Package and to provide a complete description of the components of the charges. Duke Energy Florida has included price schedules for New and Existing Unit Proposals (Schedule 1) and System Power Proposals (Schedule 2) in the Response Package forms as part of this package. Bidders should only complete those schedules that are pertinent to the type of bid submitted (reference "Schedules to be Completed by Bidder" table on Page C2). Bidders should note that contract year one is a partial year. Therefore, a "15-year" contract will cover one partial year and fourteen full years, for example, May 1, 2018 through December 31, 2032.

### Price Schedule for New and Existing Unit Proposals

Bidders offering New or Existing Unit Proposals must complete all relevant sections of Schedule 1 as described in this section of the Response Package. Bidders should ensure that the pricing components of their proposals conform to the requirements described in Figure III-3 (New and Existing Unit Proposal Pricing Parameters) of the DEF 2018 RFP Document. **All costs to be paid by DEF must be reflected in the proposed pricing. DEF will not accept any charges other than those identified in Schedule 1.** Bidders must specify the pricing for their proposals in terms of the following components and units, to the degree that each component is relevant to the particular bid:

Fixed Payment
- Generation Capital Charge ($/kW-Yr)
- Fixed Operation and Maintenance (O&M) Charge ($/kW-Yr)
- Transmission Charge ($/kW-Yr)
- Pipeline Reservation Charge ($/mmBtu-day)

Variable Payment
- Fuel Commodity ($/mmBtu)
- Variable Transportation ($/mmBtu)
- Variable O&M Price ($/MWh, $/hour, or both)

Start Payment
- Start Price Per Facility ($/start/facility).

In addition to completing the schedule, Bidders should include back-up sheets that clearly describe their pricing proposals in terms of the pricing components, any indices proposed to adjust the prices, and the frequency of change in the indices for payment purposes.

The first entries in Schedule 1 are the Contract Start Month, the Contract Start Year, and the Contract End Year, which represent the term for which capacity and energy will be provided to DEF by the Bidder. Bidders must then specify the proposed Contract Capacity for both the Winter and Summer Seasons for each year of the proposed term.

## CAPACITY SPECIFICATION CRITERIA

- Summer: 90ºF, 60% R.H.
- Winter: 40ºF, 60% R.H.

## SEASONAL DEFINITIONS

| Summer | Winter |
|---|---|
| May through October | November through April |

Bidders then enter the annual fixed payment items in Schedule 1 for every year of the term of the proposal. The annual fixed payments must be based on the Seasonal Contract Capacities. Therefore, Bidders must take into account the difference in Summer and Winter Contract Capacities and enter **annualized** $/kW values for every year, including the start year when the proposal does not include all 12 months of the calendar year. Since the Summer and Winter Periods each contain six (6) months, this can easily be achieved by using the average Summer and Winter Contract Capacities when developing $/kW values. Bidders will be paid monthly based on the product of the Bidder-specified seasonal capacity and one-twelfth (1/12) of the Bidder-specified annual charges, and will be subject to adjustments based on actual operating performance (the adjustments for operating performance are described in the key Terms & Conditions included as Attachment A to the DEF 2018 RFP Document).

Generation capital charges are to be consistent with the generation equipment costs specified in Section 9.0 of the Bidder's proposal. Fixed O&M charges should reflect the fixed costs associated with operating and maintaining the project.

A transmission charge must be specified by the Bidder in Schedule 1 for each year of the proposal. These charges should represent the Bidder's Interconnection Facilities and wheeling (if applicable) costs to DEF's Delivery Point and must be based on the Seasonal Contract Capacities. The transmission charges specified are to be consistent with the transmission equipment costs specified in Section 9.0 of the Bidder's proposal. If the proposed project is not located in the DEF system, any costs related to an upgrade of other transmission systems required for delivery of Firm Power from the Facility to the delivery point in the DEF system must be included in the price proposal by the Bidder. Costs for any necessary upgrades to integrate the project into the DEF transmission system will be estimated by DEF during the Initial Detailed and Final Detailed Evaluations of proposals and the costs for the upgrades on the DEF system and other affected utility systems will be included in the evaluation of the proposal.

Bidders must specify a fixed pipeline demand/reservation charge (if appropriate to the technology being proposed). Bidders must specify a charge for each year of the proposal in $/mmBtu-day and must specify the amount of transportation proposed to be reserved (in Chapter 8 of the proposal). Bidders may specify a fixed pipeline demand/reservation tariff as the price. DEF reserves the right to negotiate fuel transportation provisions with the Bidder if benefits can be derived for DEF and its customers.

Bidders must provide fuel price proposals for the primary and secondary fuels. The primary fuel is the fuel that the Bidder expects to use for the majority of the generation in the year, and the secondary fuel

is the fuel that the Bidder expects to use for the remaining generation. If desired, the Bidder may propose to use only one fuel throughout the year and not specify a secondary fuel (the primary and secondary fuels are specified on Schedule A). Bidders have three options for proposing fuel prices:

1. the Bidder may specify a series of firm prices or a price that escalates at a Bidder-specified rate. These prices will be used for evaluation and payment purposes. The escalation rate used must be outlined in the Bidder's proposal.
2. the Bidder may propose to use a price index or combination of indices or propose a formula based on an index or combination of indices. Reference price forecasts are provided in Schedule 1 for the Bidder to use as an index to formulate prices. The Bidder should enter the formula in the appropriate cells (in Rows 29-30 and 32-33 of Schedule 1) and also describe the formula in Chapter 2 of its proposal. The Bidder shall enter the name of the proposed index (e.g., "Gas Daily Henry Hub", "Gas Daily Florida Citygate", etc.) in the space provided on Rows 48 and 49 of Schedule 1.
3. the Bidder may propose to use a fuel tolling arrangement whereby DEF will supply fuel tolling services to the project. If the Bidder selects this option, DEF will determine the appropriate price to use for the evaluation.

If the Bidder selects option 2 above, the DEF fuel price forecast will be used as an index to evaluate proposals; however, the Bidder will be paid based on the actual values of the index(es) at the time of payment. The DEF fuel price forecast assumptions are based on recent forecasts for the fuels; however, DEF reserves the right to update these forecasts during the evaluation period if they no longer reflect DEF's current expectations.

The index selected for each pricing component should be consistent with market-based indices that are appropriate for that component. For example, if a Bidder proposes to use natural gas as its primary fuel, a gas commodity index is appropriate to choose. If a Bidder proposes to use a secondary fuel, the Bidder should select an appropriate index for that fuel. The Bidder must identify the pricing point for the index selected, if appropriate.

Bidders must enter annual prices for variable O&M. Although Bidders may specify two fuels (Primary and Secondary) to be used during a year, Bidders should enter only one annual price for each of the O&M components. These prices should reflect the weighted average annual O&M, based on the proposed fuels. Bidders may propose variable O&M prices in terms of $/MWh or $/hour of operation, or both.

Bidders are also required to enter annual start prices. The start price component is designed to compensate the Bidder for the cost of starting the Facility. Payment will only be made for starts required and initiated by DEF. DEF will not reimburse the Bidder for test starts or starts arising from a forced outage or from an unplanned maintenance outage. DEF will estimate the number of starts for evaluation purposes but pay the Bidder based on the actual number of successful starts.

Schedule 1 provides an area for other costs to be specified by the Bidder. Any other costs the Bidder expects DEF to pay must be identified in this area. **DEF will not accept any charges other than those identified in Schedule 1.**

**Bidders should include back-up sheets which clearly describe their pricing proposals in terms of the pricing components and the index(es) proposed to adjust the prices.**

## Price Schedule For System Power Proposals

Bidders who are proposing System Power Proposals are required to complete Schedule 2. **All costs to be paid by DEF must be reflected in the proposed pricing. DEF will not accept any charges other than those identified in Schedule 2.**

The first entries in Schedule 2 are the Contract Start Month, the Contract Start Year, and the Contract End Year, which represent the term for which capacity and energy will be provided to DEF by the Bidder. Bidders must then specify the proposed Contract Capacity for both the winter and Summer Seasons for each year of the proposed term.

Bidders next enter capacity and transmission charges, fuel and non-fuel energy prices, and start prices in Schedule 2 for every year of the term of the proposal. The capacity charge should represent fixed costs associated with the generation system from which power is being provided. For the transmission charge, the Bidder should enter the total price of transmission, including wheeling and system upgrade costs as appropriate, to deliver the system power to the delivery point at the DEF system. Costs for any necessary upgrades to integrate the proposed power flow into the DEF transmission system will be estimated by DEF during the Initial and Detailed Evaluations of proposals, and the costs for the upgrades on the DEF system and other affected utility systems will be included in the evaluation of the proposal.

The capacity and transmission charges must be based on the Seasonal Contract Capacities and must be entered as **annualized** values for every year, including the start year when the proposal does not include all twelve months of the calendar year. Bidders will be paid monthly based on the product of the Seasonal Contract Capacity and one-twelfth (1/12) of the Bidder-specified annual capacity and transmission charges, and will be subject to adjustments based on the actual availability of capacity under the agreement.

Bidders of System Power Proposals must guarantee 100% availability for the capacity and energy offered to DEF. In the event that DEF signs a power purchase agreement (PPA) with a Bidder to supply System Power, and that supplier fails to deliver the capacity and energy committed to in the PPA, then DEF will only pay for the capacity and energy actually received and will also charge the supplier for DEF's cost of replacement capacity and energy. DEF prefers proposals that, when curtailments are necessary, the Bidder curtails delivery only on a pro-rata basis simultaneously and proportionately along with the Bidder's other firm sales, including primary public service obligations.

The system fuel energy price should reflect the fuel costs associated with providing energy from the Bidder's generation system. Bidders have three options for proposing fuel-related system energy prices:

1. the Bidder may specify a series of firm prices or a price that escalates at a Bidder-specified rate. These prices will be used for evaluation and payment purposes. The escalation rate used by the Bidder must be outlined in the Bidder's proposal.
2. the Bidder may propose to use a price index or combination of indices or propose a formula based on an index or combination of indices. Reference price forecasts are provided in

Schedule 2 for the Bidder to use as an index to formulate prices. The Bidder should enter the formula in the appropriate cells (in Row 27 of Schedule 2) and also describe the formula in Chapter 2 of its proposal. The Bidder shall enter the proposed index(es) (e.g., "Gas Daily Henry Hub", "Gas Daily Florida Citygate", etc.) in the space provided on Row 40 of Schedule 2.

3. the Bidder may propose a "true-up" arrangement whereby the fuel price will be trued-up to the Bidder's regulatory jurisdiction's system average fuel price. If the Bidder selects this option, the bidder must provide a series of prices to be used for evaluation purposes, as well as evidence that the series of prices are reasonable.

If the Bidder selects option 2 above, the DEF fuel price forecast will be used as an index to evaluate the proposal; however, the Bidder will be paid based on the actual values of the index(es) at the time of payment. The DEF fuel price forecast assumptions are based on recent forecasts for the fuels; however, DEF reserves the right to update these forecasts during the evaluation period if they no longer reflect DEF's current expectations.

The index selected for each pricing component should be consistent with market-based indices that are appropriate for that component. For example, if a Bidder proposes to use natural gas as its primary fuel, a gas commodity index is appropriate to choose. If a Bidder proposes to use a secondary fuel, the Bidder should select an appropriate index for that fuel. The Bidder must identify the pricing point for the index selected, if appropriate.

The non-fuel energy costs should represent the non-fuel variable costs associated with providing energy from the Bidder's system. The non-fuel energy costs can be represented in terms of $/MWh or $/hour scheduled, or both.

The Bidder may also provide annual start prices. The start price component is designed to compensate the Bidder for the cost of starting various facilities when DEF schedules power for delivery. DEF will estimate the number of starts for evaluation purposes but pay the Bidder based on the actual number of times DEF schedules power for delivery.

Schedule 2 provides an area for other costs to be specified by the Bidder. Any other costs the Bidder expects DEF to pay must be identified in this area. **DEF will not accept any charges other than those identified in Schedule 2.**

**Bidders should include back-up sheets which clearly describe their pricing proposals in terms of the pricing components and the index(es) proposed to adjust the prices.**

## Contract Flexibility Provisions

Also pursuant to Section II.E of the DEF 2018 RFP Document, DEF is encouraging Bidders to offer contract flexibility provisions. For example, Bidders may propose an initial contract term and provide DEF options to extend the term at predefined prices. If Bidders would like to provide such options, the pricing schedules should be used to convey the prices. The initial term should be entered as the Contract Term, and the extension provisions should be explained by the Bidder. Other flexibility provisions could also be proposed. Bidders should clearly and completely explain their proposals, including appropriate pricing information.

## *F. Chapter 3: Operating Performance*

In this chapter of its proposal, each Bidder must demonstrate how its proposal complies with all of the operating performance requirements specified in Section III of the DEF 2018 RFP Document and the degree to which it is consistent with DEF's preferences for the operational Technical Criteria outlined in Section III.B.3.b.ii of the RFP. In Attachment A of the DEF 2018 RFP Document, DEF has provided key Terms & Conditions that provide several of the key operating performance requirements which will be used to ensure that the Bidder's generating resource provides DEF with its required level of operating performance. Bidders are required to answer the questions presented in Schedules 3 and 4 and to provide all necessary data to support the answers provided.

Bidders must specify in Schedule 3 the proposed project's heat rate information for the proposed primary fuel and secondary fuel. The heat rate data must be provided by specifying seasonal capacity states and heat rates for each fuel based on the Capacity Specification Criteria and Seasonal Capacity Specification Criteria provided in Attachment A (key Terms & Conditions). Capacity states must be specified at net generation levels at the delivery point of the DEF system. In addition, the Bidder should specify the elevation at which the unit is (would be) be sited. The heat rate data provided will be used for both evaluation and contract purposes.

Heat rates must be expressed in terms of the higher heating value of the fuel and must be the average (not incremental) heat rate for the capacity state. Heat rates must incorporate any margin for degradation during the term of the contract. Degradation may be incorporated over the term or annually. Bidders are required to provide heat rate data for the minimum load and full load operating points (the full load capacity values must be equal to the Seasonal Contract Capacity values and are carried over from Schedule 1). Bidders may provide heat rates for up to three additional capacity states to better represent the operational characteristics of the proposed project.

In Schedule 4, the Bidder must provide responses to all items that apply to the type of proposal being offered. Answer yes or no for each Operating Performance threshold by entering an "X" in the appropriate box for each item in the first part of Schedule 4. In the second part of Schedule 4, Bidders must provide operating performance evaluation criteria responses and outage information.

## *G. Chapter 4: Permitting Plans*

In this chapter of its proposal, each Bidder should demonstrate how its proposal complies with all of the permitting requirements specified in Section III of the RFP Solicitation Document, and the degree to which it is consistent with DEF's preferences for a high level of certainty that the proposed project will receive its required permits within the time indicated on the project's critical path schedule. Each Bidder is required to answer the questions presented below and provide all necessary data to support these answers. For sections that require responses to several bullet items, the Bidder must always precede its response with the bullet item, verbatim, as shown below.

**Section**

**4.0** In Schedule 5, the Environmental and Regulatory Permit Status Schedule, identify which items would be required for the project to be constructed and operated by placing an "X" in the "Not Required" or "Required" column by each item. If a permit has been applied for, indicate the date that the permit was applied for in the column marked "Applied For" and the date that the permit is likely to be issued in the column labeled "Expected Receipt." Some of the required

items are pre-printed in Schedule 5. However, if additional permits would be required, add them to the schedule in the blank cells provided.

The Bidder should indicate why the project is likely to receive each required permit, license, or approval. **[New Unit Proposals]**

**4.1** Provide specific information for the project site as identified below. **[New Unit Proposals]**

- List any new rights-of-way required for the project for fuel pipelines, water pipelines, rail spurs, roadways, or electric transmission lines.

- Identify the total acreage of wetlands on the proposed site or rights-of-way before and after construction and the acreage disturbed, lost, or converted during construction.

- Provide a copy of a map showing any portions of the proposed site or rights-of-way that are in a local or state designated Coastal Zone Management Area (CZMA).

- Provide evidence that the existing zoning for the site is compatible with the proposed use and, if not, provide a plan for changing the zoning.

- Provide evidence that a Phase I Environmental Assessment has been completed and that the proposed site or rights-of-way are not contaminated. If the proposed site or rights-of-way are contaminated, indicate the clean-up measures planned, their estimated costs, schedules for completion, and status of reviews by appropriate federal or state agencies.

- Identify any environmentally sensitive areas (*i.e.*, wetlands, water use caution areas, state lands (including submerged), CZMA, wildlife refuge, public parks, critical habitats for endangered species) within a one-mile radius of the proposed plant location and any mitigation measures for these areas.

- Identify any sites of historical or archaeological significance within a one-mile radius of the proposed plant location and any mitigation measures for these areas.

**4.2** Describe the current and recent past land use and development of the site and adjacent lands, discussing the compatibility of the project with adjacent and nearby land uses. **[New Unit Proposals]**

**4.3** Provide a waste disposal plan for the proposed project which identifies the solid or hazardous wastes that would be generated by the project and identifies how they would be disposed. **[New Unit Proposals]**

**4.4** Indicate the quantity and source of cooling, injection, steam make-up, and general use water that would be needed for the project. This information should include the characteristics of the water to be used, necessary treatment processes, and a discussion of competing uses for the water. Provide a water supply plan for securing water supply and delivery to the project. Include the source of the water, a description of the water delivery system, the terms and

conditions of any existing water supply transportation arrangements, and the status of such arrangement. **[New Unit Proposals, Existing Unit Proposals]**

**4.5** Provide the following information concerning the wastewater generated by the project **[New Unit Proposals]**:

- The sources, composition, and expected quantity of wastewater to be generated by the project, the disposal method to be employed, including any waste treatment methods, and the water composition after treatment.

- The classification of any surface waters or groundwaters to which wastewater effluent is discharged and the name of the surface water.

**4.6** Describe any hydrologic alterations, (*e.g.*, dredging, filling, diking, outfall structure, or impoundment) of any surface waters that would be required by the project, identifying the affected resource, the significance of the alteration, and the mitigation measures proposed. **[New Unit Proposals]**

**4.7** Provide the following information regarding the impact of the project on the air quality of the surrounding area **[New Unit Proposals, Existing Unit Proposals]**:

- Identify the air quality management area where the project is (would be) located and indicate the attainment status of this area for each of the criteria pollutants.

- Identify whether there are any Class 1 areas within 100 kilometers of the proposed project site. If so, indicate whether any visibility modeling has been performed and the visibility impacts on the Class 1 areas projected by the model.

- Indicate the removal efficiency of any pollution control equipment that is (would be) employed for $NO_x$, $SO_2$, PM, CO, Hg, or hazardous air pollutants (HAPs).

- Complete Schedule 6, the Air Emissions Schedule, for both the primary and secondary fuel.

- If BACT or LAER would apply to the project, indicate how the Bidder proposes to comply with these requirements.

- Describe plans for obtaining any required offsets and allowances for the project, including $SO_2$ and $NO_x$ allowances.

- Address levels of $NH_3$ (ammonia) emissions and requirements for handling/storage, if used.

- Describe the strategy for compliance with the Clean Air Interstate Rule (CAIR), Clean Air Mercury Rule (CAMR), and the Clean Air Visibility Rule (CAVR).

**4.8** Indicate the expected incremental ambient noise level during the daytime and nighttime hours that would result from the operation of the project at the nearest property boundary and any planned mitigation measures. Also, indicate the distance of the nearest residence from the

project and define the expected daytime and nighttime ambient noise levels at the nearest residence. **[New Unit Proposals]**

## *H. Chapter 5: Engineering and Design Plans*

In this chapter of the proposal, the Bidder should demonstrate how its proposal complies with all of the engineering and design requirements specified in Section III of the RFP Solicitation Document. The Bidder is required to provide the information requested below and all data necessary to support the answers provided. **[New Unit Proposals, Existing Unit Proposals]**

**Section**

**5.0** This section is used to describe, at the highest level, the project's facilities. The discussion should clearly describe the assumptions as to what degree, if any, the new facilities will interface and rely on or enhance existing facilities.

- Layout and Location—Describe the location of the new facilities on site using a conceptual layout drawing. If existing facilities are present, show them in relation to the new units. The drawing(s) should show the location and size of the units and auxiliaries, stacks, fuel and water delivery systems, fuel and water storage tanks, waste water handling and disposal systems, water treatment systems, sanitary waste treatment systems, site storm water management systems, effluent storage system and tanks, etc. The site layout shall also identify wetland boundaries, buffers, etc. The drawing(s) should show the plant access for operations and construction, construction lay down and parking as well as security and buffer arrangements. The drawing(s) shall also show, in phantom, the location for future build-out reserve areas.

- Offices, Control Room, Shops and Warehousing—Describe what facilities are going to be built or added, either to existing or as standalone facilities. With regard to office and shop space, describe the number of individuals to be housed in offices, and the assumption on the level of maintenance work to be done in the shop.

- Transmission and Substation—Describe in general terms how the unit(s) are, or are proposed to be, interconnected to the Duke Energy Florida transmission system. Describe conceptually the substation arrangement (e.g. breaker and a half scheme) and at what voltage level the units are to be tied in to the substation. Describe the step up transformer including the MVA rating. Supply a single line diagram.

- 15 kV and Higher Equipment up to the Step up Transformer—Describe the 15kV equipment from the generator leads to the step up transformer. This description shall include the iso-phase bus work, generator breaker and connected auxiliary transformers and equipment. This equipment should be described on a single line diagram.

- Less than 15kV Electrical System—Describe the lesser voltage electrical systems to be installed. Indicate any interface or tie in to existing systems. Redundant systems should be defined. The uninterruptible power source for the plant shall also be described. Include appropriate single line diagrams.

- Plant Control Room Philosophy—Describe in general terms the overall control room philosophy as to the balance of plant DCS and the interface with the unit specific control system. Describe any tie-ins or interface with existing plant systems. Describe the interface of the DCS unit controls to the RTU connection to the DEF Energy Control Center.

- Raw, Service and Potable Water Facilities—Describe any new and/or existing facilities and any interconnection between the facilities, if applicable. The description shall include the capability of the systems and the storage requirements.

- Demineralized Water Facilities—Describe demineralized water facilities. Include the throughput and the amount of waste water to be rejected. Describe the storage facilities and the amount of capacity available in hours of operation. Describe the nature of the demineralizer arrangement as to whether it is leased and if it includes pre-filtration and reverse osmosis. If buildings are required describe them as well.

**5.1** Provide an operations and maintenance plan (O&M Plan) which demonstrates that the project will be operated and maintained in a manner to allow the project to satisfy its contractual commitments. This O&M Plan should indicate proposed project staffing levels, the schedule for major maintenance activities, plans for inspecting and testing of major equipment, entities responsible for operating and maintaining the project, and status and schedule for securing a maintenance agreement.

**5.2** Provide an engineering design plan that identifies the following:

- generation technology, including the make/model/supplier's name
- emission control equipment, including the make/model/supplier's name
- major equipment to be employed, including the make/model/supplier's name
- major equipment vendors
- whether new or refurbished equipment will be used
- commercial in-service date **[Existing Unit Proposals only]**

**5.3** Provide historic operating performance data (heat rate, EFOR, summer and winter MDC, number of starts) for the proposed projects that demonstrate that they will be able to achieve the operating targets specified. **[Existing Unit Proposals only]**

Provide historic operating performance data (heat rate, EFOR, summer and winter MDC, number of starts) for projects of similar technology that demonstrate that the proposed technology will be able to achieve the operating targets specified. **[New Unit Proposal only]**

**5.4** Provide a heat and material balance diagram.

**5.5** Specify any limitations the proposed project will have regarding the start-up fuel system. If the project has or will have a secondary fuel, please specify whether the project will be able to start on either fuel independent of other fuel systems being completely out of service. Please specify whether the project will be able to switch fuel sources "on the fly."

**5.6** Provide the following projected unit performance information:

- Equivalent Forced Outage Rate (EFOR)

  EFOR = [(FOH + EFDH)/(FOH + SH)]

  Where:

  FOH = Forced Outage Hours: The sum of all hours experienced during forced outages.

  EFDH = Equivalent Forced Derated Hours: The summation of the products of the Forced Derated Hours (FDH) and size (MW) of reduction for each event, divided by the Seasonal Contract Capacity (SCC).

  FDH = Forced Derated Hours: The number of hours experienced during a forced derated event.

  SH = Service Hours: The total number of hours a unit was electrically connected to the transmission system.

- Equivalent Availability Factor (EAF)

  EAF = [(AH - (EUDH + EPDH)) / PH]

  Where:

  AH = Available Hours: Period Hours (PH) less Planned Outage Hours (POH), Forced Outage Hours (FOH) and Maintenance Outage Hours (MOH).

  PH = Period Hours: Number of hours in the period (month).

  POH = Planned Outage Hours: The sum of all hours experienced during planned outages and planned outage extensions.

  FOH = Forced Outage Hours: The sum of all hours experienced during forced outages.

  MOH = Maintenance Outage Hours: The sum of all hours experienced during maintenance outages and maintenance outage extensions.

  EUDH = Equivalent Unplanned Derated Hours: The summation of the products of Unplanned Derated Hours (UDH) and size (MW) of reduction for each event, divided by Seasonal Contract Capacity (SCC).

  UDH = Unplanned Derated Hours: The number of hours experienced during a forced derated event, a maintenance derated event, or scheduled derated extension of a maintenance derated event.

  EPDH = Equivalent Planned Derated Hours: The summation of the products of the Planned Derated Hours (PDH) and size (MW) of reduction for each event, divided by the Seasonal Contract Capacity (SCC).

  PDH = Planned Derated Hours: The number of hours experienced during planned derated event or scheduled derated extension of a planned derated event.

## *I. Chapter 6: Site Control*

In this chapter of the proposal, the Bidder should demonstrate how its proposal complies with all of the site control requirements specified in Section III of the RFP Solicitation Document. Bidders are required to provide the information requested below and all necessary data to support the answers provided. **[New Unit Proposals, Existing Unit Proposals]**

**Section**

**6.0** Provide a USGS map (7.5 minute scale) that indicates the project site location and the surrounding area of at least two (2) miles from the site center, identifies all generation, substation, and other equipment, and all new rights-of-way that would be required for the project, including critical dimensions. Show proximity to and identify the nearest DEF substation and/or transmission line. Provide a recent aerial photograph showing the site location and surrounding area for at least one (1) mile from each site boundary.

**6.1** Demonstrate site control either in the form of an agreement demonstrating ownership of the site, lease of the site for the term of the proposal, or at a minimum, an executed letter of intent to negotiate a lease for the site for the full contract term or term necessary for financing (whichever is greater) or to purchase the site. Provide a copy of a letter of intent or contract that demonstrates that the Bidder's proposal satisfies DEF's site control threshold. If the property is fee owned, a copy of the Title and Legal Description of the property is required.

**6.2** If off-site rights-of-way are required for gas, electrical, water, or rail service, demonstrate site control either in the form of an executed letter of intent to negotiate a lease for the rights-of-way for the full contract term or term necessary for financing (whichever is greater) or to purchase the rights-of-way.

## *J. Chapter 7: Transmission Plan*

In this chapter of the proposal, the Bidder should demonstrate how its proposal complies with all of the transmission requirements specified in Section III of the RFP Solicitation Document. Bidders are required to provide the information requested below and all necessary data to support the answers provided .

**Section**

**7.0** Bidders are required to provide a completed Transmission Information Schedule (Schedule 7). **[All Proposals]**

**7.1** If the proposed project or power source is located outside of DEF's system, provide a transmission plan that identifies the project's proposed transmission path, including delivery point. Also provide evidence that the host system utility and all wheeling utilities are willing to grant DEF the right to dispatch the output of New and Existing Unit Proposals or the right to schedule the power from System Power Proposals. Identify the DEF interface utility that would be used to deliver the power to DEF. **[Existing Unit Proposals, New Unit Proposals]**

For New Unit Proposals located outside of the DEF system, bidders are required to provide one of the following from the host system utility:

- A Transmission System Impact study agreement from the host system's Transmission Provider that indicates that the output of the New Unit can be delivered to the DEF interface.

- Confirmed Transmission Service to the DEF interface

In addition, for New Unit Proposals located outside of the DEF system, bidders are required to provide the information in Schedule 7 of Attachment D.

- Bidders are required to provide the contact information of a transmission planner from the host system utility.

For Existing Unit Proposals located outside the DEF system, bidders are required to provide the information in Schedule 7 of Attachment D.

**7.2** For projects located inside of the DEF system, bidders are required to the information in Schedule 7 of Attachment D.

## *K. Chapter 8: Fuel Supply and Transportation Plan*

In this chapter of the proposal, the Bidder should demonstrate how its proposal complies with all of the fuel supply and transportation plan requirements specified in Section III of the RFP Solicitation Document and the degree to which it is consistent with DEF's requirements for a reliable fuel supply for the proposed project. Bidders are required to provide a preliminary fuel supply plan and all necessary data to support the answers provided regarding this plan. **[New Unit Proposals, Existing Unit Proposals]** Bidders interested in having DEF provide fuel tolling services should complete Section 8.1 rather than Section 8.0.

**Section**

**8.0** The preliminary fuel supply plan for both primary and secondary fuels must specify or provide the information listed below.

- Provide a map of the fuel supply and transportation infrastructure for the proposed project and a description of supply and transportation alternatives available to the project. If natural gas is proposed as a fuel (primary or secondary), identify the proposed main pipeline source, the length of any lateral from the main pipeline to the site, and the size and pressure of the lateral. If oil is proposed as a fuel (primary or secondary), provide the fuel quality requirements, proposed on-site storage capacity (total usable volume and number of tanks), the proposed transport means to the site, and the distance from the expected supply source.

- Provide copies of all fuel supply and transportation agreements in place for the proposed project. If fuel supply and transportation contracts are not in place, provide a description of the types and quality of service for fuel supply and transportation sought, the pricing and operational requirements, the contract terms and conditions required, and the status of such arrangements including the date that such arrangements will be in place. If the Bidder has received proposals from fuel and transportation providers, the Bidder should include the preferred proposal as well as a description of the experience of the Bidder in developing similar supply arrangements.

- Specify the criteria that would be used to select the ultimate fuel supplier and transportation service providers.

- If a secondary fuel is to be used, provide supporting information for the periods over which the primary and secondary fuel supply are expected to be used. The Bidder must specify any months in which the usage of the primary fuel is expected to be curtailed and the conditions under which the primary fuel is expected to be curtailed.

- Indicate whether transportation would be provided from existing capacity or whether new construction would be required. If new construction is required, provide an assessment of the availability of rights-of-way.

- If natural gas is being proposed, indicate the required gas pressure for the proposed project and confirm the capability of the pipeline to deliver natural gas to the project at or above that pressure.

- If natural gas is being proposed, indicate the amount of fixed pipeline demand/reservation (in mmBtu per day) on which the pricing is based.

- Describe the liquid fuel unloading facilities. This should include the number of truck or rail unloading stations and the unloading rate for the unloading facility. Describe the amount of existing storage and any new oil storage required. Describe if the storage is single or double walled and the amount of fuel oil storage dedicated to any new units. Describe whether a storage tank fire protection system is, or will be installed.

**8.1** DEF is willing to consider tolling proposals. If the Bidder is interested in DEF providing fuel tolling services, the following information must be included in its proposal:

- Provide a map of the fuel supply and transportation infrastructure for the proposed project and a description of supply and transportation alternatives available to the project. If natural gas is proposed as a fuel (primary or secondary), identify the proposed main pipeline source, the length of any lateral from the main pipeline to the site, and the size and pressure of the lateral. If oil is proposed as a fuel (primary or secondary), provide the fuel quality requirements, proposed on-site storage capacity (total usable volume and number of tanks), the proposed transport means to the site, and the distance from the expected supply source.

- If a secondary fuel can be used, provide information for the periods over which the primary and secondary fuel supply is expected to be used.

**[Existing Unit Proposals]**

- The name of gas pipeline(s) with which the project is interconnected
- Location of the interconnection/meter
- Flow capability of each meter at the plant and the pressure requirement
- The name of the Operator Account
- Specify whether there are other units at the site that serve other customers such that a balancing agreement would need to be developed with a third party.

**[New Unit Proposals]**

- The name of gas pipeline(s) with which the project will be interconnected
- Location of the proposed interconnection/meter
- Specify whether the facility will serve only DEF such that the meter could be added to DEF's Operator Account.

## *L. Chapter 9: Project Financing Plan and Bidder Financial Information*

The Bidder is required to provide evidence that the project is financially viable, that the project will likely be able to attract funds from investors, and that the Bidder has the financial ability to fulfill their obligations to DEF over the term of the contract. In this section of the proposal, the Bidder should demonstrate how its proposal complies with all of the project financial viability requirements specified in Section III of the RFP Solicitation Document and the degree to which it is consistent with DEF's preferences for proposals for which the Bidder is able to demonstrate that there is a high likelihood of the project securing funding. Bidders are required to provide the information requested below and all necessary data to support the answers provided.

**Section**

**9.0** The financing plan must specify or provide the following: **[New Unit Proposals]**

- The projected cost of the project, broken down into the following major cost elements:

  Equipment
  - Generation facilities
  - Transmission Interconnection facilities
  - Fuel facilities (e.g. pipeline interconnection, oil storage tanks, rail spurs)

  EPC Contractor
  Contingency
  Licensing, permits and site certificates
  Interest During Construction
  Other Costs.

- How the proposed project would be financed, including likely lenders and investors, the terms under which funds would be provided, and the respective percentage of funding represented by debt and equity.

- The timing for securing financing.

- A description of the project from a legal and financial standpoint indicating the actual ownership structure, the entities that will have ownership interests and their percentage interests in the project, their responsibilities for the development of the project, and their responsibilities for funding of project development expenses.

- Provide documentation demonstrating the relevant experience of the Bidder (or partner responsible for securing financing) in obtaining financing for other power generation projects.

**9.1** The Bidder is required to provide sufficient financial information to enable DEF to assess the financial strength and credit of the entity that would execute a contract with DEF. Bidders should provide information on their corporate structure (including identification of any parent companies), a copy of the respondent's most recent quarterly report containing unaudited consolidated financial statements that is signed and verified by an authorized officer of respondent attesting to its accuracy, a copy of respondent's most recent annual report containing audited consolidated financial statements and a summary of respondent's relevant experience. Financial statements should include all associated footnotes. Financial statements, annual reports and other large documents may be referenced via a web site address. If the proposed contracting entity is not the same legal entity for which financial information is furnished, the respondent should state whether a parent guarantee will be provided to cover the obligations of the contracting entity.

**9.2** The Bidder is required to include a discussion of the potential for increases or decreases in DEF's cost of capital and any competitive advantage the Bidder's financing arrangements may give the Bidder. **[All Proposals]**

**9.3** For proposals that will be seeking to obtain project financing, Bidders are required to provide full project financial Pro Formas that supply, at a minimum, the information outlined in Schedule 8, Project Pro Formas Schedule, for the proposed financing term. For purposes of completing this pro forma, Bidders should assume an appropriate project capacity factor for the technology being proposed (10% for peaking duty, 50% for intermediate duty, and 80% for baseload duty). Actual project capacity factors will vary. The assumed capacity factor is used only to review the project's financial viability as indicated by the Bidder's project pro forma. DEF reserves the right to request project pro formas from all short-listed proposals. **[New Unit Proposals]**

## *M. Chapter 10: Commercial Operation Date Certainty*

The Bidder is required to demonstrate that its New Unit Project will be able to achieve the commercial operation date requirements. As part of this demonstration, the Bidder is required to provide a critical path diagram and schedule for the project that conforms to the requirements specified below. DEF will evaluate the reasonableness of the following aspects of the Bidder's proposed schedule: permitting, securing the project site, fuel supply and transportation arrangements, engineering design, equipment procurement, project financing, project construction, and start-up and testing. DEF's evaluation will consider the evidence presented by the Bidder that the proposed schedule for each of these project

elements is reasonable. For the purposes of developing this schedule only, the Bidder should assume that negotiations are finalized by August, 2014. However, specifying this date should not be construed as a commitment by DEF to finalize negotiations by this date.

**Section**

**10.0** Provide a critical path diagram and schedule for the project that specifies the critical path for each of the elements of the project development cycle including but not limited to, the following: permitting, securing the project site, fuel supply and transportation arrangements, engineering design, equipment procurement, construction and permanent financing, project construction, and start-up and testing. **[New Unit Proposals]**

**10.1** Complete Schedule 9, the Project Milestone Schedule, which will be included as part of an executed contract. **[New Unit Proposals]**

**10.2** The Bidder should provide a summary of its current and planned electric power resources including such information as the source of supply, contract terms, and accessibility to the DEF system. For proposals that require new resources be built to maintain a reliable supply on the host system, Bidders are required to state the type of capacity to be built and provide evidence that the required construction can be completed in time to maintain a reliable supply. **[System Power Proposals]**

**10.3** If the proposed project will be providing steam or electricity to a host customer, indicate the name of the entity to whom this service will be provided, the type and amount of energy to be provided, and the status of negotiations regarding the terms and conditions under which such service will be provided, including appropriate documentation of such contracts. **[New Unit Proposal, Existing Unit Proposal]**

## *N. Chapter 11: Bidder Experience*

The Bidder is required to provide evidence regarding its relevant experience in developing projects that are of an equivalent size and technology. DEF will evaluate each Bidder's relevant experience in six areas: permitting, engineering, financing, fuel procurement, project construction, and operations and maintenance, including environmental compliance. For proposals that rely on a project team composed of more than one firm to develop the project, the Bidder should indicate its relevant experience in working with other team members to develop projects.

**Section**

**11.0** Provide for at least five comparable projects a project reference not affiliated with the Bidder. For each reference, specify a contact name, title, company, address, and phone number.

For each project, indicate the utility or company served and provide a description of the project, including project location, the size and type of project, the scheduled and actual in-service date, and the availability factor achieved. **[New Unit Proposals, Existing Unit Proposals]**

**11.1** For each of the project participants, provide an experience statement which lists the relevant experience of the firm, including other projects of a similar type, size, and technology. Describe

the experience in the following six areas: permitting, engineering, financing, fuel procurement, project construction, and operations and maintenance, including environmental compliance. **[New Unit Proposals, Existing Unit Proposals]**

**11.2** Provide documentation regarding the contractual relationship between the Bidder and all additional project participants and vendors. If this contractual relationship has not been finalized, specify the schedule for doing so. **[New Unit Proposals]**

**11.3** Indicate if the Bidder has failed to perform under any contracts or agreements for power supplies. If so, please explain. **[All Proposals]**

**11.4** Provide a summary of current litigation activity, with supporting explanatory information as necessary, related to (1) provision of energy products and services (fuel, power, ancillary services, engineering, on-site services); (2) lease option arrangements for assets; (3) purchases of energy products and services (as above); or (4) industrial construction projects (power plants, industrial plants, cogeneration facilities, etc.). **[All Proposals]**

## *O. Chapter 12: Acceptance of key Terms & Conditions*

**[All Proposals]**

Attachment A to the DEF RFP Solicitation Document contains key Terms & Conditions that DEF will utilize during this RFP and any possible contract negotiations. The key Terms & Conditions were developed assuming the resources are in the DEF System.

Bidders willing to accept DEF's key Terms & Conditions (Attachment A to the DEF RFP Solicitation Document) without exceptions should indicate this in their proposals. Bidders with exceptions to the key Terms & Conditions should indicate all exceptions in red-lined form. Each exception should be clearly described and the requested change clearly identified. Bidders may provide the red-lined form using the Word version that was included in the RFP Package. Red-lined versions of the key Terms & Conditions should be accompanied by a textual discussion which provides the reason for the exception.