

Exhibit No.: 3

Proffered by: Public Counsel

Short title: DEF's Response to OPC's Fifth Set of Interrogatories
(33-42)

Witness(s): Gary P. Dean
Joseph Simpson

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Fuel and Purchased Power Cost
Recovery Clause and Generating
Performance Incentive Factor

Docket No. 20210001-EI

Filed: October 13, 2021

**DUKE ENERGY FLORIDA, LLC'S RESPONSE TO
CITIZENS' FIFTH SET OF INTERROGATORIES (NOS. 33-42)**

Duke Energy Florida, LLC ("DEF") responds to the Citizens of the State of Florida, through the Office of Public Counsel's ("Citizens" or "OPC") Fifth Set of Interrogatories to DEF (Nos. 33-42) as follows:

INTERROGATORIES

Please reference the August 25, 2021 GPIF Actual Unit Performance Data schedules for July 2021 in responding to interrogatories 33-42:

33. On page 1 of 16 (Bartow CC), please state if the EAF % of 67.86 for the month of July 2021 is attributable fully or in part to the Full Forced Outage (FFO) event with hours totaling 2,181.08 for 187 MW, beginning on May 2, 2021, or the Partial Forced Outage (PFO) event with hours totaling 2,181.08 for 13 MW beginning on May 2, 2021, as shown on page 8 of 16.

Response:

Bartow CC's Equivalent Availability Factor (EAF) of 67.86% for the month of July 2021 is partly attributed to the Full Forced Outage (FFO) and Partial Forced Outage (PFO) events beginning on May 2.

34. If the answer to Interrogatory No. 33 is yes, please identify the amount of replacement power cost attributable to the unit unavailability below an EAF of 100%. Please also identify the workpapers calculating such replacement power costs.

Response:

Bartow CC's EAF of 67.86% in July 2021 is also partly attributed to a Planned Outage (PO) on the 4D unit that began on June 18th. DEF does not calculate replacement power costs for planned outages.

The replacement power cost for Bartow CC during the month of July 2021 (excluding the Planned Outage that began on June 18th), is approximately \$1.4 million retail (\$1.5 million system). To calculate the replacement power cost assuming Bartow CC had not experienced other outage events, DEF ran a production costs simulation model beginning July 1, 2021 through July 31, 2021; this process is consistent with DEF's prior replacement fuel costs, which produced the total system cost assuming Bartow CC was fully available, with the exception of the Planned Outage on 4D. DEF then compared the resulting "with Bartow CC" system cost to the system cost calculated based on actual unit loadings (i.e., without Bartow CC). The difference between the "with Bartow CC" cost and the "without Bartow CC" cost represents the system replacement power costs during the Bartow CC outages.

Please see DEF's response to OPC's Fourth Request for Production of Documents, question 17.

35. Please state whether Duke Energy Florida, LLC intends to seek, or has already sought, recovery of the replacement power costs identified in response to Interrogatory No. 34

Response

These replacement costs were not included in the 2021 Projection Filing and therefore are not included in the current fuel cost recovery factors. DEF included the replacement power costs identified in DEF's response to OPC's Interrogatory No. 34 in its 2021 Actual/Estimated true-up calculation (included as SCH E1-B in DEF's 2022 Projection filing) and plans to recover those costs in its 2022 fuel factors.

36. Please identify all documents related to any and all root cause analyses (or the functional equivalent, regardless of title), including drafts and related commentary correspondence, involving the forced outages occurring at Bartow CC in July 2021.

Response

As discussed above, the July outages included a continuation of the May FFO effecting the Unit 4C and the June PO. No root cause analysis exists for either event, as the cause of the 4C FFO is the same as January outage impacting the 4A unit, and no RCA is developed for a PO.

37. On page 2 of 16 (Crystal River 4), please state if the EAF % of 67.12 for the month of July 2021 is attributable fully or in part to the two Full Forced Outage (FFO), one Forced Maintenance Outage (FMO) and two Partial Forced Outage (PFO) events with hours totaling 18.2, 3.5, 89.03, 101 and 18.5 for 712 MW, 712 MW, 712 MW, 302 MW and 498 MW, respectively, beginning on July 15, 16, 8, 17 and 24 respectively, as shown on page 10 of 16.

Response

Crystal River 4's EAF of 67.12% for the month of July 2021 is fully attributed to the two Full Forced Outage (FFO), one Full Maintenance Outage (FMO), and two Partial Forced Outage (PFO) events beginning on July 15, 16, 8, 17, and 24, respectively.

38. If the answer to Interrogatory No. 37 is yes, please identify the amount of replacement power cost attributable to the unit unavailability below an EAF of 100%. Please also identify the workpapers calculating such replacement power costs.

Response

The replacement power cost for this outage, during the month of July 2021, is approximately \$1.8 million retail (\$1.9 million system). To calculate the replacement power cost assuming Crystal River 4 had not experienced the outage, DEF ran a production cost simulation model beginning July 1, 2021 through July 31, 2021; this process is consistent with DEF's prior replacement power calculations. DEF ran this simulation model applying the actual load conditions and replacement fuel costs, which produced the total system cost assuming Crystal River 4 was fully available. DEF then compared the resulting "with Crystal River 4" system cost to the system cost calculated based on actual unit loadings (i.e., without Crystal River 4). The difference between the "with Crystal River 4" cost and the "without Crystal River 4" cost represents the system replacement power costs during the Crystal River 4 Outage.

Please see DEF's response to OPC's Fourth Request to Produce Documents, number 19.

39. Please state whether Duke Energy Florida, LLC intends to seek, or has already sought, recovery of the replacement power costs identified in response to Interrogatory No. 38.

Response

These replacement costs were not included in the 2021 Projection Filing and therefore are not included in the current fuel cost recovery factors. DEF included the replacement power costs identified in DEF's response to OPC's Interrogatory No. 38 in its 2021 Actual/Estimated true-up calculation (included as SCH E1-B in DEF's 2022 Projection filing) and plans to recover those costs in its 2022 fuel factors.

40. Please identify all documents related to any and all root cause analyses (or the functional equivalent, regardless of title), including drafts and related commentary correspondence, involving the forced outages occurring at Crystal River 4 in July 2021.

Response

July 2021 outages were associated with Main Boiler Feed Pump Turbine (MBFPT) Trips as well as a Boiler Tube Leak. MBFPT trips occurred July 7th, July 15th, and July 16th. Boiler Tube Leak Outage was from July 7th – July 11th.

Please see DEF'S response to OPC's Fourth Request to Produce Documents, number 20.

41. Please explain how you reflect an EAF of 93.15% on page 3 of 16 (Crystal River 5) for July 2021 when there were 19 Partial Forced Outage events in the month of July as reflected on page 12 of 16.

Response

The EAF calculation is not exclusively dependent on the number of outage events occurring in a month. Instead, the event type, duration, which subunits are affected for combined cycle units, and MW affected relative to the unit's capacity are the dominant parameters affecting a unit's EAF result. Additionally, within the event type classification, Partial events (e.g., Partial Forced Outage, Partial Maintenance Outage, etc.) are weighted less than Full events (e.g., Full Forced Outage, Full Maintenance Outage, etc.). As such, the 19 Partial Forced Outage events for Crystal River 5 in the month of July with relatively short durations and small MW affected did not have a significant impact on the unit's calculated EAF.

42. Please explain how you reflect an EAF of 93.61% on page 4 of 16 (Hines Power Block 1) for July 2021 when there were six Partial Forced Outage, one Full Forced Outage, six Partial Planned Outage and two Forced Maintenance Outage events in the month of July as reflected on page 13 of 16.

Response

The EAF calculation is not exclusively dependent on the number of outage events occurring in a month. Instead, the event type, duration, which subunits are affected for combined cycle units, and MW affected relative to the unit's capacity are the dominant parameters affecting a unit's EAF result. Additionally, within the event type classification, Partial events (e.g., Partial Forced Outage, Partial Maintenance Outage, etc.) are weighted less than Full events (e.g., Full Forced Outage, Full Maintenance Outage, etc.). As such, the six Partial Forced Outages, six

Partial Planned Outages, two Full Maintenance Outages, and one Full Forced Outage events for Hines Power Block 1 in the month of July with relatively short durations and small MW affected did not have a significant impact on the unit's calculated EAF.

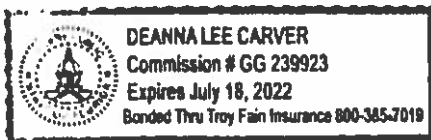
AFFIDAVIT

STATE OF FLORIDA


COUNTY OF PINELLAS

I hereby certify that on this 27th day of Sept., 2021, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared REGINALD D. ANDERSON, who is personally known to me, and has acknowledged before me that he provided the answers to interrogatory numbers 36 and 40 of CITIZENS' FIFTH SET OF INTERROGATORIES TO DUKE ENERGY FLORIDA, LLC (NOS. 33-42) in Docket No. 20210001-EI, and that the responses are true and correct based on his personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 27 day of September, 2021.




Reginald D. Anderson


Notary Public
State of Florida, at Large

My Commission Expires: July 18, 2022

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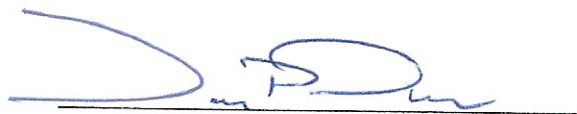
STATE OF FLORIDA

COUNTY OF PINELLAS

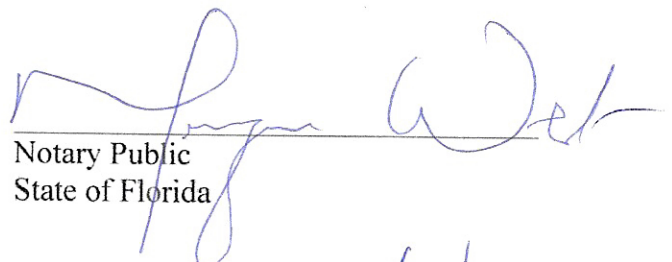
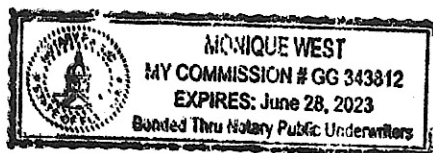
I hereby certify that on this 6th day of October, 2021, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared GARY P. DEAN, who is personally known to me, and has acknowledged before me that he provided the answers to interrogatory numbers 34, 35, 38, and 39 of CITIZENS' FIFTH SET OF INTERROGATORIES TO DUKE ENERGY FLORIDA, LLC (NOS. 33-42) in Docket No. 20210001-EI, and that the responses are true and correct based on his personal knowledge.

THE FOREGOING INSTRUMENT was sworn to and subscribed before me by means of
☐ physical presence or ☒ online (video) notarization by Gary Dean, who is personally known to me.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 6th day of October, 2021.



Gary P. Dean


Notary Public
State of FloridaMy Commission Expires: 6/28/2023

AFFIDAVIT

STATE OF NORTH CAROLINA

COUNTY OF MECKLENBURG

I hereby certify that on this 15th day of Oct, 2021, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared INGLE LEWTER, who is personally known to me, and has acknowledged before me that she provided the answers to interrogatory numbers 33, 37, 41 and 42, of CITIZENS' FIFTH SET OF INTERROGATORIES TO DUKE ENERGY FLORIDA, LLC (NOS. 33-42) in Docket No. 20210001-EI, and that the responses are true and correct based on her personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 15th day of October, 2021.

Ingle Lewter
Ingle Lewter



Mecklenburg County, NC

The foregoing instrument was acknowledged before me on this 15th day of OCTOBER, 2021 byMARY INGLE LEWTER, who acknowledged to me that he or she willingly signed and executed the instrument for the purposes stated in it.Raj Patel
Notary Public

A handwritten signature in blue ink, appearing to read "R. Patel", written over a horizontal line.

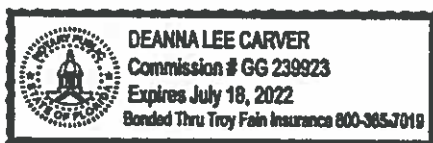
AFFIDAVIT

STATE OF FLORIDA

COUNTY OF CITRUS

I hereby certify that on this 10th day of Oct, 2021, before me, an officer duly authorized in the State and County aforesaid to take acknowledgments, personally appeared JOSEPH SIMPSON, who is personally known to me, and has acknowledged before me that he provided the answers to interrogatory number 40 of CITIZENS' FIFTH SET OF INTERROGATORIES TO DUKE ENERGY FLORIDA, LLC (NOS. 33-42) in Docket No. 20210001-EI, and that the responses are true and correct based on his personal knowledge.

In Witness Whereof, I have hereunto set my hand and seal in the State and County aforesaid as of this 10th day of OCTOBER, 2021.



Joseph Simpson
Joseph Simpson

Deanna Lee Carver
Notary Public
State of Florida

My Commission Expires: July 18, 2022