

Matthew R. Bernier
Associate General Counsel

January 26, 2021

VIA ELECTRONIC FILING

Adam J. Teitzman, Commission Clerk Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850

Re: Petition for a Limited Proceeding to Approve Third Solar Base Rate Adjustment by Duke Energy Florida, LLC; Docket No. 20200245-EI

Dear Mr. Teitzman:

Please find enclosed for electronic filing on behalf of Duke Energy Florida, LLC ("DEF"), DEF's Request for Confidential Classification for certain information provided in response to Staff's First Data Request (Nos. 1-15), specifically, DEF's response to Staff's First Data Request questions 5 and 7 and the responsive documents to questions 9, 10 and 14. The filing includes the following:

- DEF's Request for Confidential Classification,
- Slipsheet for Confidential Exhibit A,
- Redacted Exhibit B (two copies),
- Exhibit C (Justification Matrix); and
- Exhibit D (Affidavits of Matthew G. Stout and Benjamin M. H. Borsch)

DEF's Confidential Exhibit A was submitted with DEF's Notice of Intent to Request Confidential Classification on January 5, 2021, under separate cover (DN 00501-2021). Please return the Exhibit A filed on January 5, 2021 and replace with the Exhibit A filed under separate cover on January 26, 2021.

Thank you for your assistance in this matter. Please feel free to call me at (850) 521-1428 should you have any questions concerning this filing.

Respectfully,

/s/ Matthew Bernier

Matthew R. Bernier

MRB/cmw Enclosure

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for a Limited Proceeding to Approve Third Solar Base Rate Adjustment

by Duke Energy Florida, LLC

Docket No. 20200245-EI

Filed: January 26, 2021

DUKE ENERGY FLORIDA, LLC'S REQUEST FOR CONFIDENTIAL CLASSIFICATION

Duke Energy Florida, LLC ("DEF" or "Company"), pursuant to Section 366.093, Florida Statutes ("F.S."), and Rule 25-22.006, Florida Administrative Code ("F.A.C."), submits this Request for Confidential Classification for the confidential information provided in DEF's Response to Staff's First Data Request (Nos. 1-15), submitted on January 5, 2021 concurrently with DEF's Notice of Intent to Request Confidential Classification (DN 00464-2021). The Request is timely. See Ruel 25-22.006(3)(a)1., F.A.C. In support of this Request, DEF states:

- 1. Information contained in DEF's Response to Staff's First Data Request (Nos. 1-15), specifically questions 5, and 7 and responsive documents to questions 9, 10 and 14, contain information that is "proprietary confidential business information" under Section 366.093(3), Florida Statutes.
 - 2. The following exhibits are included with this request:
- (a) Sealed Composite Exhibit A is a package containing unredacted copies of all the documents for which DEF seeks confidential treatment. Composite Exhibit A was submitted separately in a sealed envelope labeled "CONFIDENTIAL" on January 5, 2021 (DN 00501-2021). Please return the confidential documents submitted on January 5, 2021 and replace with the documents contained in "CONFIDENTIAL" Exhibit A submitted under

separate cover with this request on January 26, 2021. In the unredacted versions, the information asserted to be confidential is highlighted yellow.

- (b) Composite Exhibit B is a package containing two copies of redacted versions of the documents for which the Company requests confidential classification. The specific information for which confidential treatment is requested has been blocked out by opaque marker or other means.
- (c) Exhibit C is a table which identifies by page and line the information for which DEF seeks confidential classification and the specific statutory bases for seeking confidential treatment.
- (d) Exhibit D is two affidavits attesting to the confidential nature of the information identified.
- 3. As indicated in Exhibit C, the information for which DEF requests confidential classification is "proprietary confidential business information" within the meaning of Section 366.093(3), F.S. Specifically, the confidential business information at issue in DEF's response to question 5 contains information relating to budgeted information, DEF's response to question 7 and responsive documents to question 14 contains information relating to contractual terms, costs and information with counterparties, DEF's responsive documents to question 9 contains information relating to contractual costs in capital leases with counterparties and DEF's responsive documents to question 10 contains information relating to unit retirements.
- 4. Certain information provided to Staff in response to question 5 includes specific budgeted information, the disclosure of which would impair the efforts of the Company or its to negotiate contracts on favorable terms. Affidavit of Matthew G. Stout at ¶ 5. Public disclosure of this information would provide other counterparties valuable insight into prices that DEF may

be willing to pay in certain circumstances, thereby materially harming DEF's ability to negotiate competitive contracts in the future. *See* § 366.093(3)(e), F.S.; Affidavit of Matthew G. Stout at ¶ 5.

- 5. Additionally, certain information provided to Staff in response to question 7 and responsive documents to questions 9 and 14 includes specific contractual terms and costs with counterparties. If DEF cannot assure contracting parties that it can maintain the confidentiality of contractual terms and costs, those parties and other similarly situated parties may forego entering contracts with DEF, which would adversely impact DEF's competitive business interests. *See* § 366.093(3)(d) & (e), F.S.; Affidavit of Matthew G. Stout and Benjamin M. H. Borsch at ¶¶ 5 and 4.
- 6. Finally, certain information provided to Staff in responsive documents to question 10 includes confidential proprietary business information relating to unit retirements, the disclosure of which would harm DEF's competitive business interests, to the detriment of DEF's customers, if it were disclosed to the public. *See* § 366.093(3)(e), F.S.; Affidavit of Benjamin M. H. Borsch at ¶ 5.
- 7. The information identified as Exhibit "A" is intended to be and is treated as confidential by the Company. *See* Affidavit of Matthew G. Stout and Benjamin M. H. Borsch at $\P\P$ 6 7. The information has not been disclosed to the public, and the Company has treated and continues to treat the information at issue as confidential. *See* Affidavit of Matthew G. Stout and Benjamin M. H. Borsch at $\P\P$ 6 7. Accordingly, such information constitutes "proprietary confidential business information" which is exempt from disclosure under the Public Records Act pursuant to Section 366.093(1), F.S.

8. DEF requests that the information identified in Exhibit A be classified as "proprietary confidential business information" within the meaning of section 366.093(3), F.S., that the information remain confidential for a period of at least 18 months as provided in section 366.093(4) F.S., and that the information be returned as soon as it is no longer necessary for the Commission to conduct its business.

WHEREFORE, for the foregoing reasons, DEF respectfully requests that this Request for Confidential Classification be granted.

Respectfully submitted this 26th day of January, 2021.

/s/ Matthew R. Bernier

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CERTIFICATE OF SERVICE Docket No. 20200245-EI

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished via electronic mail to the following this 26th day of January, 2021.

	<u>/s/ Matthew R. Bernier</u> Attorney
Shaw Stiller / Walter Trierweiler Office of General Counsel FL Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, FL 32399-0850 sstiller@psc.state.fl.us wtrierwe@psc.state.fl.us	

Exhibit A

"CONFIDENTIAL"

 $(Submitted\ under\ separate\ cover.)$

Exhibit B REDACTED

which has not yet been negotiated, but DEF has included a budget of	for this
land purchase. The project could add battery storage at a later time within the exist	ting land
since the batteries and associated equipment can be added within the solar ins	stallation
design and do not require much space.	

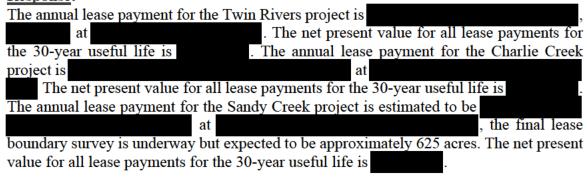
6. Please refer to DEF witness Stout's direct testimony, page 9, lines 18 to 20. Please specify if the land for the Sandy Creek project has been or will be purchased by DEF.

Response:

The Sandy Creek project is leasing the land for the project. The land has been secured via a Solar Option and Lease Agreement and will exercise the option prior to construction. Additionally, DEF plans to purchase the land required for the transmission switching station, which is permitted under the Solar Option and Lease Agreement.

7. Please refer to DEF witness Stout's direct testimony, page 15, line 12 through 14. For the Twin Rivers, Charlie Creek and Sandy Creek projects, please specify the amount of lease payments for the useful life of the facility. As part of this response, please also provide a net present value for all lease payments.

Response:



- 8. Please refer to DEF witness Stout's direct testimony, page 15, lines 12 through 14. Please specify the length of the lease and the expected useful life of the Twin Rivers, Charlie Creek and Sandy Creek projects.
 - a. Please compare the estimated lifespan of the solar facility to the duration of the lease.

- 09 Please refer to DEF witness Borch's [sic] direct testimony, Exhibit BMHB-4. For the combined SoBRA projects, please provide the annual and cumulative values over the period 2020-2052 (in nominal and net present value) for each of the following categories: capital, incremental fixed O&M, and other cost(s) for the SoBRA projects, and avoided capital, fixed O&M, capacity purchases, fuel cost, emissions cost (excluding carbon), carbon emissions cost, variable O&M, and other cost(s) for the system as a whole. Please provide the response in electronic (Excel) format
- a. Please explain in detail the assumptions used to determine the value of each of the components evaluated in this analysis.
- b. Explain whether DEF's emissions savings include CO2 emissions. If so, provide a sensitivity analysis without those costs and provide the revised annual and cumulative values for each category in electronic format. DEF's emission savings include CO2 emissions savings.

 c. Please provide sensitivity analysis for each of the alternative fuel forecasts (high and low) included in the exhibit, with revised annual and cumulative values for each category in electronic (Excel) format.

Mid Fuel with Carbon Case	

Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	and Installation	and Installation	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
													-	-	-	-	-	-	-	-	-	-
																						22.2
																						47.5 47.7
																						38.4
																						34.5
																		-				23.4
													(23.8)	(0.0)	0.0	(5.4)		(0.3)	(2.5)	(10.7)	-	12.9
													(34.0)			(7.1)	(0.0)	(0.2)	(3.0)		-	2.7
																						2.5
																					-	(16.9
																						(20.4
																						(21.5
																						(42.4
																						(57.3
													(40.4)	(0.0)	(0.0)	(21.2)	(0.0)	(1.2)	(2.5)			(61.3
													(45.1)	(0.0)	(0.0)	(25.1)	(0.0)	(1.2)	(6.7)	(39.0)	-	(74.9
													(46.4)	(0.0)	(0.0)	(29.4)	(0.0)	(1.2)	(4.2)	(38.5)		(77.4
														(0.0)							-	(79.1
														-							-	(84.5
																						(85.0
																						(98.5
																						(105.0
																						(112.8
																					-	(116.2
													(54.9)	-	(0.0)	(54.1)			(2.5)			(116.1
													(62.0)	(0.0)	(0.0)	(62.3)	(0.0)	(1.6)	(5.4)	(34.1)	-	(135.1
													(55.6)			(58.3)			(3.9)	(33.7)	-	(124.0
																					-	(129.5
Familian and and							In consensual and						(30.7)	(0.0)	(0.0)	(35.9)	(0.0)	(1.7)	5.9	(33.1)	-	(73.8
Installation Hamilton, Columbia, Trenton, Lake Placid, and	and Installation	and Installation	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	FOM Hamilton, Columbia, Trenton, Lake Placid, and	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and Installation Hamilton, Columbia, Trenton, Lake	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and Trenton, Lake Placid, and Santa Fe	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and Installation In	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and Installation Installation Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and Shata Fe Twin Rivers Placid, and Shata Fe Twin Rivers Placid, and Shata Fe Twin Rivers Duette Equipment and Installation Duette Placid, and Shata Fe Twin Rivers Placid, and Shata Fe Twin Riv	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and Installation Hamilton, Columbia, Santa Fe Santa	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and DeBary Equipment and Installation Instal	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and DeBary Equipment and Installation Instal	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and DeBary Equipment and Installation Instal	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and Installation Hamilton, Columbia, Santa Fe Twin Rivers	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and DeBary Equipment and Installation Instal	Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary Equipment and DeBary Equipment and Installation Instal	Installation Hamilton, Columbia, Trenton, Lake placid, and DeBary Equipment and DeBary Equipment and Installation Installation Twin Rivers Duette Equipment and DeBary Equipment and Installation Twin Rivers Equipment and DeBary Equipment and Installation Twin Rivers Equipment and DeBary Equipment and Installation Twin Rivers Twin Rivers	Installation Hamilton, Columbia, Installation Santa Fe Installation Installation Santa Fe Installation Installation	Namilton, Columbia, Trenton, Lake Piacid, and DeBary Sample Capigment and Language Cap	Installation Hamilton, Columbia, Terton, Lake Pickid, and Defiary Equipment and installation In	Installation Hamilton, Columbis, Tenton, Lake Pickd, and Debtary River of Columbis, Tenton, Lake Pacid, and Columbis,	Installation Regulament R	Separation Registration Regist	Separation Sep	Installation Columbia Columbia Installation Columbia Installation I	Installation Supplement S	Incremental Parameter Para

Mid Fuel	vith Carbon Case																						
	Equipment and Installation				F			Incremental FOM															
	Hamilton,	Equipment and	Equipment	Equipment	Equipment and	Equipment	Land Lease	Hamilton,	Incremental	Incremental	Incremental	Incremental	Incremental	Fuel	Emissions	Emissions	Emissions	Other		Avoided	Avoided	Avoided	Total
PV \$M	Columbia,	Installation	and Installation	and Installation	Installation	and Installation	Rental	Columbia,	Incremental FOM Santa Fe	FOM Twin	FOM Duette	FOM Charlie	FOM Sandy	Costs	SO2	Nox	CO2	Environmental	Avoided FOM	Variable	Replacement	Capacity	Savings
	Trenton, Lake Placid, and	Santa Fe	Twin Rivers	Duette	Charlie Creek	Sandy Creek	Payments	Trenton, Lake Placid,		Rivers		Creek	Creek	Savings	Savings	Savings	Savings	Savings		O&M	Costs	Purchases	
	DeBary							and DeBary															
2020														(8.9)	(0.0)	(0.0)	-	(0.1)	-	(1.8)	-	-	20.8
2022														(17.9)	(0.0)	(0.0)	-	(0.2)		(2.6)	-	-	41.8
2023														(17.3)	(0.0)	(0.0)		(0.1)		(2.6)		-	39.2
2024														(20.7)	(0.0)	(0.0)	(1.7)	(0.1)		(2.5)		-	29.6 24.9
2026														(19.1)	(0.0)	(0.0)	(2.9)	(0.1)		(1.6)		-	15.9
2027														(15.1)	(0.0)	0.0	(3.4)	(0.1)		(1.6)	(6.8)	-	8.2
2028														(20.2)	(0.0)	(0.0)	(4.2)	(0.0)		(1.8)	(4.2)	-	1.6 1.4
2030														(18.8)	(0.0)	(0.0)	(5.6)	(0.0)		(1.9)	(9.3)		(8.8)
2031														(18.2)	0.0	(0.0)	(5.8)	0.0		(1.8)	(8.4)	-	(10.0)
2032														(17.6)	0.0	(0.0)	(5.4)	0.0		(1.5)	(7.7)	-	(11.0)
2034														(16.2)	0.0	0.0	(5.9)	0.1	(0.3)	(1.2)	(12.2)		(17.1)
2035														(15.3)	(0.0)	(0.0)	(6.8)	(0.0)		(0.9)	(15.1)	-	(21.7) (21.7)
2036														(14.3)	(0.0)	(0.0)	(7.5)	(0.0)		(0.9)	(14.0)	-	(24.9)
2038														(14.4)	(0.0)	(0.0)	(9.1)	(0.0)	(0.4)	(1.3)	(12.0)	-	(24.1)
2039														(13.6)	(0.0)	(0.0)	(9.6)	(0.0)		(0.6)	(11.1)	-	(23.1) (23.1)
2040														(11.7)	-	(0.0)	(9.0)	(0.0)		(1.0)	(9.5)	-	(21.8)
2042														(12.5)	-	(0.0)	(10.2)	(0.0)		(0.9)	(8.7)		(23.7)
2043														(10.7)	(0.0)	(0.0)	(9.6)	(0.0)		(0.4)	(8.1)	-	(20.9)
2044														(11.1)	(0.0)	(0.0)	(10.0)	(0.0)		(0.7)	(6.9)		(22.3)
2046														(10.4)	(0.0)	(0.0)	(9.7)	(0.0)		(0.8)	(6.4)	-	(21.5)
2047														(9.5)	(0.0)	(0.0)	(9.4)	(0.0)		(0.4)	(6.0)	-	(20.2)
2049														(8.5)	(0.0)	(0.0)	(8.9)	(0.0)		(0.6)	(5.1)	-	(18.9)
2050														(8.4)	(0.0)	(0.0)	(9.1)	(0.0)		(0.4)	(4.8)	-	(18.5)
2051	Equipment and							Incremental						(4.1)	(0.0)	(0.0)	(4.8)	(0.0)	(0.2)	0.8	(4.4)	-	(9.9)
	Installation	Equipment	Equipment	Equipment	Equipment	Equipment		FOM															
DV čes	Hamilton,	and	and	and	and	and	Land Lease	Hamilton,	Incremental	Incremental FOM Twin	Incremental	Incremental	Incremental	Fuel	Emissions	Emissions	Emissions	Other	Avaided CO.	Avoided	Avoided	Avoided	Total
PV \$M	Columbia, Trenton, Lake	Installation	Installation	Installation	Installation Charlie	Installation	Rental Payments	Columbia, Trenton,	FOM Santa Fe	Rivers	FOM Duette	FOM Charlie Creek	FOM Sandy Creek	Costs Savings	SO2 Savings	Nox Savings	CO2 Savings	Environmental Savings	Avoided FOM	Variable O&M	Replacement	Capacity Purchases	Savings
	Placid, and	Santa Fe	Twin Rivers	Duette	Creek	Sandy Creek		Lake Placid,						3-									
	DeBary							and DeBary															

2020 2021 2022 2023 2024 2025 2026	h Carbon Case Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	FOM Hamilton, Columbia,	Incremental	Incremental													
2021 2022 2023 2024 2025	,							Trenton, Lake Placid, and DeBary	FOM Santa Fe	FOM Twin	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2022 2023 2024 2025																			-		-		-
2023 2024 2025														(8.9)	(0.0)	(0.0)		(0.1)		(1.8)			20.8
2024 2025														(26.8)	(0.0)	(0.0)		(0.3)	-	(4.4)		-	62.6
2025														(44.1)	(0.0)	(0.1)		(0.4)	-	(7.0)	-	-	101.8
														(64.8)	(0.0)	(0.1)	-	(0.6)	-	(9.5)	-	-	131.4
2026														(83.7)	(0.0)	(0.1)	(1.7)	(0.7)	-	(11.6)	-	-	156.4
														(102.7)	(0.0)	(0.2)	(4.6)	(0.8)	-	(13.2)	-	-	172.2
2027														(117.8)	(0.0)	(0.2)	(8.0)	(0.9)	(0.2)	(14.8)	(6.8)		180.4
2028														(138.1)	(0.0)	(0.2)	(12.2)	(0.9)	(0.3)	(16.6)	(11.0)	-	182.0
2029														(154.1)	(0.0)	(0.2)	(16.6)	(0.9)	(0.4)	(18.5)	(16.7)		183.4 174.6
2030														(172.8)	(0.0)	(0.2)	(22.2)	(0.9)	(0.7)	(20.3)	(26.0)	-	164.6
2031														(208.7)	(0.0)	(0.2)	(33.4)	(0.9)	(1.1)	(22.2)	(42.0)		154.8
2032														(224.9)	(0.0)	(0.2)	(38.9)	(0.8)	(1.1)	(26.2)	(42.0)		143.7
2033														(241.1)	(0.0)	(0.2)	(44.8)	(0.8)	(1.7)	(27.4)	(61.2)		126.6
2035														(256.4)	(0.0)	(0.2)	(51.6)	(0.7)	(2.1)	(28.3)	(76.3)		105.0
2036														(270.7)	(0.0)	(0.2)	(59.1)	(0.7)	(2.6)	(29.2)	(90.3)		83.3
2037														(285.7)	(0.0)	(0.2)	(67.4)	(0.7)	(2.9)	(31.4)	(103.3)	-	58.4
2038														(300.1)	(0.0)	(0.2)	(76.5)	(0.7)	(3.3)	(32.7)	(115.3)	-	34.3
2039														(313.7)	(0.0)	(0.2)	(86.1)	(0.7)	(3.7)	(33.3)	(126.3)	-	11.3
2040														(326.7)	(0.0)	(0.2)	(95.7)	(0.7)	(4.0)	(34.3)	(136.6)	-	(11.8)
2041														(338.4)	(0.0)	(0.2)	(104.9)	(0.7)	(4.4)	(35.3)	(146.0)	-	(33.6)
2042														(350.9)	(0.0)	(0.2)	(115.1)	(0.7)	(4.7)	(36.2)	(154.7)	-	(57.3)
2043														(361.6)	(0.0)	(0.2)	(124.7)	(0.7)	(5.0)	(36.5)	(162.8)	-	(78.2)
2044														(372.7)	(0.0)	(0.2)	(134.7)	(8.0)	(5.3)	(37.1)	(170.3)	-	(100.3)
2045														(383.7)	(0.0)	(0.2)	(144.8)	(0.8)	(5.6)	(37.8)	(177.3)	-	(122.6)
2046														(394.1)	(0.0)	(0.2)	(154.5)	(0.8)	(5.9)	(38.6)	(183.7)	-	(144.1)
2047														(403.6)	(0.0)	(0.2)	(163.9)	(0.8)	(6.1)	(39.0)	(189.7)	-	(164.3)
2048														(413.7)	(0.0)	(0.2)	(174.0)	(0.8)	(6.4)	(39.9)	(195.2)		(186.3)
2049														(422.2)	(0.0)	(0.2)	(182.9)	(0.8)	(6.6)	(40.5)	(200.4)		(205.2)
2050 2051														(430.5) (434.6)	(0.0)	(0.2)	(192.0)	(0.8)	(6.9)	(40.9)	(205.2)	-	(223.7)
CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe		Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	(0.0) Emissions SO2 Savings	Emissions Nox Savings	(196.8) Emissions CO2 Savings	Other Environmental Savings	(7.1) Avoided FOM	(40.1) Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

- 09.Please refer to DEF witness Borch's [sic] direct testimony, Exhibit BMHB-4. For the combined SoBRA projects, please provide the annual and cumulative values over the period 2020-2052 (in nominal and net present value) for each of the following categories: capital, incremental fixed O&M, and other cost(s) for the SoBRA projects, and avoided capital, fixed O&M, capacity purchases, fuel cost, emissions cost (excluding carbon), carbon emissions cost, variable O&M, and other cost(s) for the system as a whole. Please provide the response in electronic (Excel) format
- a. Please explain in detail the assumptions used to determine the value of each of the components evaluated in this analysis.

DeBary

- b. Explain whether DEF's emissions savings include CO2 emissions. If so, provide a sensitivity analysis without those costs and provide the revised annual and cumulative values for each category in electronic format. DEF's emission savings include CO2 emissions savings.

 c. Please provide sensitivity analysis for each of the alternative fuel forecasts (high and low) included in the exhibit, with revised annual and cumulative values for each category in electronic (Excel) format.

Iominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmenta I Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020																							-
2021														(9.5)	(0.0)	(0.0)	-	(0.1)		(1.9)	-	-	22
2022														(20.4)	(0.0)	(0.0)		(0.2)	-	(3.0)	-	-	47
2023														(21.0)	(0.0)	(0.0)	-	(0.2)		(3.2)	-	-	3
2024														(25.3)	(0.0)	(0.1)		(0.2)		(3.0)	-	-	3
2026														(27.4)	(0.0)	(0.0)		(0.2)		(2.8)			2
2027														(23.7)	(0.0)	0.0	-	(0.1)	(0.3)	(2.7)	(10.7)		1
2028														(33.1)	(0.0)	(0.0)	-	(0.1)	(0.2)	(2.6)	(7.1)	-	1
2029														(28.1)	(0.0)	0.0	-	(0.2)		(3.1)	(10.2)	-	1
2030														(35.4)	(0.0)	(0.0)	-	(0.2)		(3.6)	(17.7)	-	
2031														(35.0)	(0.0)	(0.0)		(0.1)	(0.5)	(3.9)	(17.2)	-	
2032														(38.0)	(0.0)	(0.0)		(0.2)	(0.5)	(2.8)	(16.7)	-	(:
2033														(36.2)	(0.0)	(0.0)	-	(0.0)	(0.5)	(4.7)	(16.2)	-	(2
2035														(40.8)	-	(0.0)		(0.0)	(1.1)	(2.4)	(40.1)	-	(3
2036														(39.7)	(0.0)	(0.0)		(0.0)		(2.6)	(39.5)	-	(:
2037														(45.1)	(0.0)	(0.0)	-	(0.0)		(7.3)	(39.0)	-	(5
2038														(47.0)	(0.0)	(0.0)		(0.0)	(1.2)	(4.2)	(38.5)	-	(4
2039														(46.8)	-	(0.0)	-	(0.0)	(1.3)	(2.2)	(37.9)	-	(4
2040														(47.7)	(0.0)	(0.0)	-	(0.0)		(3.2)	(37.4)		(4
2041														(43.9)	-	(0.0)	-	(0.0)		(4.3)	(36.9)	-	(4
2042														(52.2)	-	(0.0)	-	(0.0)		(3.1)	(36.4)	-	(5
2043														(47.4)	-	(0.0)	-	(0.0)		(1.4)	(36.0)	-	(5
2044														(52.6)	(0.0)	(0.0)		(0.0)		(2.5)	(35.5)	-	(5
2045														(55.5)	(0.0)	(0.0)	-	(0.0)		(4.3)	(34.8)	-	(6
2046														(54.6)	- (0.0)	(0.0)		(0.0)		(2.4)	(34.4)	-	(6
2048														(61.5)	(0.0)	(0.0)	-	(0.0)		(5.4)	(34.1)		(7
2049														(55.7)	-	(0.0)	-	(0.0)		(4.2)	(33.7)	-	(6
2050														(58.2)	(0.0)	(0.0)	-	(0.0)	(1.6)	(2.7)	(33.4)		(6
2051														(30.8)	(0.0)	(0.0)	-	(0.0)	(1.7)	6.3	(33.1)		(3:
Iominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmenta I Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Saving

PV \$M	Equipment and Installation, Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipme nt and Installati on Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmenta I Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020																-		-	-		-		-
2021														(8.9)	(0.0)	(0.0)		(0.1)		(1.8)		-	20
2022														(17.9)	(0.0)	(0.0)	-	(0.2)		(2.6)			41
2023														(17.3)	(0.0)	(0.0)		(0.1)		(2.6)			39
2024														(20.7)	(0.0)	(0.0)	-	(0.1)	-	(2.5)		-	29 27
2025														(18.6)	(0.0)	(0.0)		(0.1)	-	(1.9)		-	19
2027														(15.1)	(0.0)	0.0	-	(0.1)	(0.2)	(1.7)			11
2028														(19.7)	(0.0)	(0.0)	-	(0.1)	(0.1)	(1.6)			6
2029														(15.7)	(0.0)	0.0		(0.1)	(0.2)	(1.7)	(5.7)		6
2030														(18.5)	(0.0)	(0.0)	-	(0.1)	(0.2)	(1.9)	(9.3)		(3
2031														(17.1)	(0.0)	(0.0)		(0.1)	(0.2)	(1.9)			(3
2032														(17.4)	(0.0)	(0.0)		(0.1)	(0.2)	(1.3)		-	(4
2033														(15.6)	(0.0)	(0.0)	-	(0.0)	(0.2)	(2.0)		-	(4
2034														(15.7) (15.4)	0.0	(0.0)		(0.0)	(0.3)	(1.4)		-	(11
2035														(14.1)	(0.0)	(0.0)		(0.0)	(0.4)	(0.9)		-	(14
2037														(15.0)	(0.0)	(0.0)	-	(0.0)	(0.4)	(2.4)		-	(14
2038														(14.6)	(0.0)	(0.0)	-	(0.0)	(0.4)	(1.3)			(15
2039														(13.6)	-	(0.0)		(0.0)	(0.4)	(0.6)		-	(13
2040														(13.0)	(0.0)	(0.0)		(0.0)	(0.4)	(0.9)	(10.2)		(13
2041														(11.2)		(0.0)	-	(0.0)	(0.3)	(1.1)			(12
2042														(12.5)		(0.0)		(0.0)	(0.3)	(0.7)			(13
2043														(10.7)		(0.0)		(0.0)	(0.3)	(0.3)		-	(11
2044														(11.1)	-	(0.0)		(0.0)	(0.3)	(0.5)			(12
2045														(11.0)	(0.0)	(0.0)		(0.0)	(0.3)	(0.7)			(12
2046														(10.3)	(0.0)	(0.0)	- :	(0.0)	(0.3)	(0.8)		-	(1:
2047														(10.0)	(0.0)	(0.0)		(0.0)	(0.3)	(0.4)		-	(11
2049														(8.5)	- (0.0)	(0.0)	-	(0.0)	(0.2)	(0.6)			(10
2050														(8.3)	(0.0)	(0.0)	-	(0.0)	(0.2)	(0.4)			(9
2051														(4.1)	(0.0)	(0.0)		(0.0)	(0.2)	0.8	(4.4)		(5
PV \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipme nt and Installati on Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmenta I Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020																-			-				
2021														(8.9)	(0.0)	(0.0)		(0.1)		(1.8)		-	20.8
2022														(26.8)	(0.0)	(0.0)	-	(0.3)		(4.4)			62.6
2023														(44.1)	(0.0)	(0.1)		(0.4)		(7.0)	-		101.8
2024														(64.8)	(0.0)	(0.1)	-	(0.6)		(9.5)	-		131.4
2025														(83.1)	(0.0)	(0.1)	-	(0.7)		(11.7)	-		158.6
2026														(101.7)	(0.0)	(0.2)	-	(0.8)		(13.5)	-		177.6
2027														(116.8)	(0.0)	(0.1)	-	(0.9)		(15.3)	(6.8)		189.1
2028														(136.5)	(0.0)	(0.2)	-	(0.9)	(0.3)	(16.8)	(11.0)		195.6
2029														(152.1)	(0.0)	(0.2)	-	(1.1)	(0.4)	(18.5)	(16.7)		201.6
2030														(170.7)	(0.0)	(0.2)		(1.2)		(20.4)	(26.0)		198.6
2031														(187.8)	(0.0)	(0.2)		(1.2)		(22.3)	(34.4)		195.3
2032														(205.2)	(0.0)	(0.2)	-	(1.3)		(23.6)	(42.0)		191.0
2033														(220.8)	(0.0)	(0.2)	-	(1.3)		(25.7)	(49.0)		186.6
2034														(236.5)	(0.0)	(0.2)	-	(1.3)		(27.0)	(61.2)		175.7
2035														(251.9)	(0.0)	(0.2)	-	(1.3)		(27.9)	(76.3)		160.7
2036														(266.0)	(0.0)	(0.2)	-	(1.3)		(28.9)	(90.3)		146.7
2037														(281.0)	(0.0)	(0.2)	-	(1.4)		(31.3)	(103.3)		130.0
2038														(295.6)	(0.0)	(0.2)	-	(1.4)		(32.6)	(115.3)		114.8
2039														(309.3)	(0.0)	(0.2)	-	(1.4)		(33.2)	(126.3)		101.3
2040														(322.3)	(0.0)	(0.2)	-	(1.4)		(34.1)	(136.6)	-	87.8 75.6
2041														(333.6)	(0.0)	(0.2)	-	(1.4)		(36.0)	(146.0) (154.7)	-	62.2
2042 2043														(356.8)	(0.0)	(0.2)		(1.4)		(36.3)	(162.8)		51.0
2043														(367.8)	(0.0)	(0.2)	-	(1.4)		(36.8)	(170.3)	-	39.0
2044														(378.8)	(0.0)	(0.2)		(1.4)		(37.5)	(170.3)	- :	26.7
2045														(389.1)	(0.0)	(0.2)	-	(1.4)		(38.3)	(183.7)		15.0
2047														(398.6)	(0.0)	(0.2)		(1.4)		(38.7)	(189.7)	-	4.3
2048														(408.6)	(0.0)	(0.2)	-	(1.4)		(39.6)	(195.2)	-	(7.5
2049														(417.1)	(0.0)	(0.2)		(1.4)		(40.2)	(200.4)		(17.5
2050														(425.4)	(0.0)	(0.2)	-	(1.4)		(40.6)	(205.2)		(26.9
2051														(429.5)	(0.0)	(0.2)	-	(1.4)		(39.8)	(209.6)	-	(31.9
CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

- 09 Please refer to DEF witness Borch's [sic] direct testimony, Exhibit BMHB-4. For the combined SoBRA projects, please provide the annual and cumulative values over the period 2020-2052 (in nominal and net present value) for each of the following categories: capital, incremental fixed O&M, and other cost(s) for the SoBRA projects, and avoided capital, fixed O&M, capacity purchases, fuel cost, emissions cost (excluding carbon), carbon emissions cost, variable O&M, and other cost(s) for the system as a whole. Please provide the response in electronic (Excel) format
- a. Please explain in detail the assumptions used to determine the value of each of the components evaluated in this analysis.
- b. Explain whether DEF's emissions savings include CO2 emissions. If so, provide a sensitivity analysis without those costs and provide the revised annual and cumulative values for each category in electronic format. DEF's emission savings include CO2 emissions savings.

 c. Please provide sensitivity analysis for each of the alternative fuel forecasts (high and low) included in the exhibit, with revised annual and cumulative values for each category in electronic (Excel) format.

High Fuel with	Carbon Case																						
Nominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020 2021														(9.7)	(0.0)	(0.0)	-	(0.1)	-	(2.0)	-	-	21.9
2021														(21.8)	(0.0)	(0.0)		(0.1)	-	(3.0)		-	45.9
2023														(24.1)	(0.0)	(0.0)	-	(0.2)	-	(3.8)	-	-	43.9
2024														(32.7)	(0.0)	(0.0)	-	(0.1)		(3.0)			32.8
2025														(32.8)	(0.0)	(0.0)	(2.5)	(0.2)		(2.8)	-		27.7
2026														(34.8)	(0.0)	(0.0)	(4.2)	(0.2)	-	(2.6)		-	16.6
2027 2028														(31.8)	(0.0)	(0.0)	(6.1)	(0.2)	(0.3)	(2.5)	(10.7)	-	4.0
2029														(36.9)	(0.0)		(9.1)	(0.2)	(0.2)	(3.1)	(10.2)		(7.0
2030														(45.4)	(0.0)	(0.0)	(11.0)	(0.1)	(0.5)	(4.1)	(17.7)		(27.4
2031														(43.8)	(0.0)	(0.0)	(12.2)	(0.1)	(0.5)	(3.9)	(17.2)		(27.0
2032														(49.5)	(0.0)	(0.0)	(16.2)	(0.2)	(0.5)	(2.7)	(16.7)		(37.
2033 2034														(48.1)	(0.0)	(0.0)	(15.2) (15.6)	(0.1)	(0.5)	(4.4)	(16.2)		(37.
2034														(55.9)	(0.0)	(0.0)	(18.3)	(0.0)	(1.1)	(2.4)	(40.1)	- :	(72.5
2036														(54.4)	(0.0)		(21.0)	(0.0)	(1.2)	(2.6)	(39.5)	-	(75.
2037														(60.7)	-	(0.0)	(24.9)	(0.0)	(1.2)	(6.7)	(39.0)		(90.
2038														(64.8)	(0.0)	(0.0)	(29.6)	(0.0)	(1.2)	(4.1)	(38.5)		(95.5
2039														(64.9)	(0.0)	(0.0)	(32.8)	(0.0)	(1.3)	(2.2)	(37.9)		(97. (103.
2040 2041														(66.9) (65.2)	(0.0)	(0.0)	(35.1)	(0.0)	(1.3)	(2.9)	(37.4)	-	(103.
2042														(74.1)	-	(0.0)	(42.4)	(0.0)	(1.3)	(3.4)	(36.4)	-	(120.
2043														(69.4)	(0.0)	(0.0)	(42.7)	(0.0)	(1.4)	(2.0)	(36.0)		(115.
2044														(74.8)	-	(0.0)	(47.4)	(0.0)	(1.4)	(2.5)	(35.5)		(126.
2045														(78.9)	(0.0)	(0.0)	(51.1)	(0.0)	(1.5)	(3.5)	(35.1)	-	(136.
2046 2047														(80.3)	(0.0)	(0.0)	(52.3) (54.1)	(0.0)	(1.5)	(4.1)	(34.8)	-	(140.
2047														(91.2)	(0.0)	(0.0)	(62.3)	(0.0)	(1.6)	(5.4)	(34.1)		(164.4
2049														(82.4)	(0.0)	(0.0)	(58.4)	(0.0)	(1.6)	(3.8)	(33.7)		(150.
2050														(87.4)	(0.0)	(0.0)	(63.6)	(0.0)	(1.6)	(2.7)	(33.4)	-	(158.4
2051														(46.4)	(0.0)	(0.0)	(35.8)	(0.0)	(1.7)	5.9	(33.1)	-	(89.5
Nominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

h Fuel wit	Equipment and							Incremental															
PV \$M	Installation Hamilton, Columbia, Trenton, Lake Placid, and	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	FOM Hamilton, Columbia, Trenton, Lake Placid,	Increment al FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
	DeBary							and DeBary															
2020														(9.0)	(0.0)	(0.0)	-	(0.1)	-	(1.9)	-	-	20
021														(19.2)	(0.0)	(0.0)		(0.1)		(2.7)	-		41
2023														(19.9)	(0.0)	(0.0)	-	(0.1)	-	(3.1)	-	-	36
2024														(25.2)	(0.0)	(0.0)	-	(0.1)	-	(2.3)	-		2!
1025														(23.7)	(0.0)	(0.0)	(1.8)	(0.2)	-	(2.0)	-		20
026														(23.6)	(0.0)	(0.0)	(2.8)	(0.1)	-	(1.8)	-		11
027														(20.2)	(0.0)	0.0	(3.9)	(0.1)	(0.2)	(1.6)			
2028														(24.6)	(0.0)	(0.0)	(4.8)	(0.1)	(0.1)	(1.6)			(:
029														(20.6)	(0.0)	0.0	(5.1)	(0.1)	(0.2)	(1.7)	(5.7)		(
2030														(23.7)	(0.0)	(0.0)	(5.7)	(0.0)	(0.2)	(2.2)	(9.3)		(1
2031														(21.5)	(0.0)	(0.0)	(6.0)	(0.1)	(0.2)	(1.9)		-	(1
1032														(20.7)	(0.0)	(0.0)	(6.6)	(0.1)	(0.2)	(1.2)	(7.7)		(1
2033														(21.8)	0.0	(0.0)	(6.3)	0.0	(0.2)	(1.1)	(12.2)		(2:
2035														(21.1)	(0.0)	(0.0)	(6.9)	(0.0)	(0.4)	(0.9)	(15.1)	-	(27
2036														(19.3)	(0.0)	(0.0)	(7.5)	(0.0)	(0.4)	(0.9)	(14.0)	-	(26
037														(20.2)	-	(0.0)	(8.3)	(0.0)	(0.4)	(2.2)	(12.9)		(30
1038														(20.2)	(0.0)	(0.0)	(9.2)	(0.0)	(0.4)	(1.3)	(12.0)		(29
039														(18.9)	(0.0)	(0.0)	(9.6)	(0.0)	(0.4)	(0.6)	(11.1)		(28
040														(18.3)	(0.0)	(0.0)	(9.6)	(0.0)	(0.4)	(0.8)	(10.2)		(28
2041														(16.7)		(0.0)	(9.3)	(0.0)	(0.3)	(0.8)	(9.5)		(26
042														(17.8)	- (0.0)	(0.0)	(10.2)	(0.0)	(0.3)	(0.8)	(8.7)	-	(28
043														(15.6) (15.8)	(0.0)	(0.0)	(9.6)	(0.0)	(0.3)	(0.4)	(8.1)	-	(25
044														(15.8)	(0.0)	(0.0)	(10.0)	(0.0)	(0.3)	(0.5)	(6.9)		(2)
2045														(14.9)	(0.0)	(0.0)	(9.7)	(0.0)	(0.3)	(0.7)	(6.4)		(2)
2047														(14.0)	(0.0)	(0.0)	(9.4)	(0.0)	(0.3)	(0.4)	(6.0)	-	(24
2048														(14.8)	(0.0)	(0.0)	(10.1)	(0.0)	(0.3)	(0.9)	(5.5)		(2)
2049														(12.6)	(0.0)	(0.0)	(8.9)	(0.0)	(0.2)	(0.6)	(5.1)		(2:
2050														(12.5)	(0.0)	(0.0)	(9.1)	(0.0)	(0.2)	(0.4)	(4.8)		(22
2051														(6.2)	(0.0)	(0.0)	(4.8)	(0.0)	(0.2)	0.8	(4.4)		(12
PV \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid,	Increment al FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Saving

High Fuel wit	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020														-	-	-	-			-		-	-
2021														(9.0)	(0.0)	(0.0)	-	(0.1)	-	(1.9)		-	20.6
2022														(28.2)	(0.0)	(0.0)	-	(0.4)	-	(4.5)		-	60.9
2023 2024														(48.1)	(0.0)	(0.1)	-	(0.5)		(7.7)		-	97.0 122.4
2024														(97.1)	(0.0)	(0.1)	(1.8)	(0.8)	<u> </u>	(10.0)			142.4
2025														(120.7)	(0.0)	(0.1)	(4.7)	(0.8)		(13.8)			153.6
2027														(140.9)	(0.0)	(0.1)	(8.5)	(1.0)	(0.2)	(15.4)	(6.8)	-	156.2
2028														(165.4)	(0.0)	(0.2)	(13.3)	(1.1)	(0.3)	(16.9)	(11.0)		153.0
2029														(186.1)	(0.0)	(0.2)	(18.4)	(1.2)	(0.4)	(18.6)	(16.7)	-	149.1
2030														(209.8)	(0.0)	(0.2)	(24.1)	(1.3)	(0.7)	(20.8)	(26.0)	-	134.8
2031														(231.3)	(0.0)	(0.2)	(30.1)	(1.3)	(0.9)	(22.7)	(34.4)		121.3
2032														(254.0)	(0.0)	(0.2)	(37.6)	(1.4)	(1.1)	(23.9)	(42.0)	-	104.3
2033														(274.7)	(0.0)	(0.2)	(44.1)	(1.5)	(1.4)	(25.8)	(49.0)	-	88.4
2034														(296.5)	(0.0)	(0.2)	(50.4)	(1.4)	(1.7)	(26.9)	(61.2)	-	65.3
2035														(317.6)	(0.0)	(0.2)	(57.3)	(1.4)	(2.1)	(27.9)	(76.3)	-	37.7
2036														(336.9)	(0.0)	(0.2)	(64.8) (73.0)	(1.4)	(2.6)	(28.8)	(90.3)	-	11.1
2037														(377.3)	(0.0)	(0.2)	(82.2)	(1.4)	(3.3)	(32.3)	(115.3)	-	(48.8
2039														(396.2)	(0.0)	(0.2)	(91.8)	(1.5)	(3.7)	(32.9)	(126.3)		(77.2
2040														(414.5)	(0.0)	(0.2)	(101.4)	(1.5)	(4.0)	(33.7)	(136.6)	-	(105.5
2041														(431.2)	(0.0)	(0.2)	(110.7)	(1.5)	(4.4)	(34.5)	(146.0)		(132.1
2042														(449.0)	(0.0)	(0.2)	(120.8)	(1.5)	(4.7)	(35.3)	(154.7)	-	(161.0
2043														(464.6)	(0.0)	(0.2)	(130.5)	(1.5)	(5.0)	(35.8)	(162.8)		(186.9
2044														(480.4)	(0.0)	(0.2)	(140.4)	(1.5)	(5.3)	(36.3)	(170.3)	-	(213.6
2045														(496.0)	(0.0)	(0.2)	(150.5)	(1.5)	(5.6)	(37.0)	(177.3)		(240.6
2046														(510.9)	(0.0)	(0.2)	(160.2)	(1.5)	(5.9)	(37.8)	(183.7)	-	(266.6
2047														(524.9)	(0.0)	(0.2)	(169.6)	(1.5)	(6.1)	(38.1)	(189.7)	-	(291.1
2048														(539.7)	(0.0)	(0.2)	(179.8)	(1.5)	(6.4)	(39.0)	(195.2)	-	(317.9
2049 2050														(552.3) (564.8)	(0.0)	(0.2)	(188.7)	(1.5)	(6.6)	(39.6)	(200.4)	-	(340.9
2050														(564.8)	(0.0)	(0.2)	(202.6)	(1.5)	(7.1)	(39.2)	(205.2)	- :	(375.5)
CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid,	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek				Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

- 09. Please refer to DEF witness Borch's [sic] direct testimony, Exhibit BMHB-4. For the combined SoBRA projects, please provide the annual and cumulative values over the period 2020-2052 (in nominal and net present value) for each of the following categories: capital, incremental fixed O&M, and other cost(s) for the SoBRA projects, and avoided capital, fixed O&M, capacity purchases, fuel cost, emissions cost (excluding carbon), carbon emissions cost, variable O&M, and other cost(s) for the system as a whole. Please provide the response in electronic (Excel) format
- a. Please explain in detail the assumptions used to determine the value of each of the components evaluated in this analysis.
- b. Explain whether DEF's emissions savings include CO2 emissions. If so, provide a sensitivity analysis without those costs and provide the revised annual and cumulative values for each category in electronic format. DEFs emission savings include CO2 emissions savings.

 c. Please provide sensitivity analysis for each of the alternative fuel forecasts (high and low) included in the exhibit, with revised annual and cumulative values for each category in electronic (Excel) format.

Nominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020														-						-	-	-	-
2021														(9.6)	(0.0)	(0.0)		(0.1)		(1.9)	-		22
2022														(20.4)	(0.0)	(0.0)		(0.2)		(3.0)	-		47
2023														(21.0)	(0.0)	(0.0)	-	(0.2)		(3.2)	-		4
2024														(26.8)	(0.0)	(0.1)	-	(0.1)		(3.1)	-		3
2025														(25.7)	(0.0)	(0.0)	(2.3)	(0.1)		(2.6)	-		3!
2026														(26.8)		(0.0)	(4.0)	(0.1)		(2.6)	-		24
2027														(22.0)		0.0	(4.9)	0.0	(0.3)	(2.5)	(10.7)		1
2028														(31.5)		(0.0)	(6.9)	0.1	(0.2)	(3.2)	(7.1)	-	
2029														(26.3)	0.0	0.0	(7.9)	0.0	(0.3)	(2.8)	(10.2)		
2030														(32.1)		(0.0)	(9.4)	0.1	(0.5)	(3.6)	(17.7)		(1
2031														(32.6)		(0.0)	(12.7)	(0.0)	(0.5)	(4.0)	(17.2)		(1
2032														(31.7)		0.0	(11.3)	0.1	(0.5)	(3.5)	(16.7)		(1
2033														(33.3)		(0.0)	(14.0)	0.1	(0.5)	(2.7)	(16.2)		(2
2034														(34.5)		(0.0)	(18.1)	(0.0)	(1.1)	(2.7)	(40.1)	<u>:</u>	(5
2036														(33.2)		(0.0)	(21.2)	(0.0)	(1.2)	(2.4)	(39.5)	-	(54
2037														(37.2)		(0.0)	(24.9)	(0.0)	(1.2)	(6.6)	(39.0)	-	(6)
2038														(38.1)		(0.0)	(29.7)	(0.0)	(1.2)	(4.4)	(38.5)	-	(69
2039														(37.8)		(0.0)	(32.7)	(0.0)	(1.3)	(1.9)	(37.9)		(69
2040														(38.3)		(0.0)	(35.0)	(0.0)	(1.3)	(3.6)	(37.4)		(7
2041														(36.8)	-	(0.0)	(35.9)	(0.0)	(1.3)	(3.6)	(36.9)		(7
2042														(41.8)	-	(0.0)	(42.5)	(0.0)	(1.3)	(3.7)	(36.4)		(8
2043														(37.1)	(0.0)	(0.0)	(42.8)	(0.0)	(1.4)	(1.6)	(36.0)		(8
2044														(41.8)	-	(0.0)	(47.5)	(0.0)	(1.4)	(2.9)	(35.5)		(9
2045														(43.6)	-	(0.0)	(50.9)	(0.0)	(1.5)	(3.5)	(35.1)		(10
2046														(43.7)	(0.0)	(0.0)	(52.3)	(0.0)	(1.5)	(4.2)	(34.8)		(10:
2047														(42.7)	-	(0.0)	(54.1)	(0.0)	(1.5)	(2.6)	(34.4)	-	(104
2048														(47.6)		(0.0)	(62.3)	(0.0)	(1.6)	(5.3)	(34.1)		(120
2049														(41.8)		(0.0)	(58.3)	(0.0)	(1.6)	(3.9)	(33.7)		(110
2050														(44.0)		(0.0)	(63.6)	(0.0)	(1.6)	(2.8)	(33.4)		(115
2051														(22.7)	-	(0.0)	(35.8)	(0.0)	(1.7)	6.0	(33.1)		(65
Nominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Saving:

ow Fuel with	h Carbon Case																						
PV \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020														- (0.0)	- (0.0)	- (0.0)	-	-		- (1.0)	-		20.
2021														(9.0) (17.9)	(0.0)		-	(0.1)		(1.8)		-	41.
2022														(17.3)	(0.0)		-	(0.2)		(2.6)		-	39.
2024														(20.7)	(0.0)			(0.1)	-	(2.4)	-		29.
2025														(18.6)	(0.0)		(1.7)	(0.1)		(1.9)	-		25.
2026														(18.2)	(0.0)		(2.7)	(0.1)		(1.8)	-	-	16.
2027														(14.0)	0.0	0.0	(3.1)	0.0	(0.2)	(1.6)	(6.8)	-	9.
2028														(18.7)	0.0		(4.1)	0.0	(0.1)	(1.9)	(4.2)		3.
2029														(14.7)	0.0			0.0	(0.2)	(1.5)	(5.7)		3.
2030														(16.8)	0.0		(4.9)	0.1	(0.2)	(1.9)	(9.3)	-	(6.
2031														(16.0)	(0.0)		(6.2)	(0.0)	(0.2)	(1.9)	(8.4)		(8
2032														(14.6)	0.0		(5.2)	0.1	(0.2)	(1.6)	(7.7)	-	(6.
2033														(13.6)	0.0		(6.0) (6.3)	0.0	(0.2)	(2.9)	(7.0)	-	(9.
2034														(13.4)	(0.0)		(6.9)	(0.0)	(0.4)	(0.9)	(15.1)	-	(19.
2036														(11.8)	(0.0)		(7.5)	(0.0)	(0.4)	(0.8)	(14.0)		(19.
2037														(12.4)	(0.0)		(8.3)	(0.0)	(0.4)	(2.2)	(12.9)	-	(22.
2038														(11.8)	(0.0)		(9.2)	(0.0)	(0.4)	(1.4)	(12.0)		(21.
2039														(11.0)	(0.0)	(0.0)	(9.5)	(0.0)	(0.4)	(0.6)	(11.1)		(20.
2040														(10.5)	-	(0.0)	(9.6)	(0.0)	(0.4)	(1.0)	(10.2)	-	(20.
2041														(9.4)		(0.0)	(9.2)	(0.0)	(0.3)	(0.9)	(9.5)	-	(19.
2042														(10.0)	-	(0.0)	(10.2)	(0.0)	(0.3)	(0.9)	(8.7)	-	(21.
2043														(8.4)	(0.0)		(9.6)	(0.0)	(0.3)	(0.3)	(8.1)		(18.
2044														(8.8)		(0.0)	(10.0)	(0.0)	(0.3)	(0.6)	(7.5)	-	(19.
2045 2046														(8.6)	(0.0)	(0.0)	(10.1)	(0.0)	(0.3)	(0.7)	(6.9)	-	(19.
2046														(7.4)	(0.0)	(0.0)	(9.7)	(0.0)	(0.3)	(0.8)	(6.0)	-	(19.
2047														(7.4)	(0.0)		(10.1)	(0.0)	(0.3)	(0.4)	(5.5)	-	(19.
2049														(6.4)	(0.0)		(8.9)	(0.0)	(0.2)	(0.6)	(5.1)		(16.
2050														(6.3)	(0.0)		(9.1)	(0.0)	(0.2)	(0.4)	(4.8)	-	(16.
2051														(3.0)	-	(0.0)	(4.8)	(0.0)	(0.2)	0.8	(4.4)		(8.
PV \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

Low Fuel with	h Carbon Case																						
CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	SO2	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020														-	-	-	-	-	-	-	-	-	-
2021														(9.0)	(0.0)	(0.0)		(0.1)		(1.8)	-		20.7
2022														(26.9)	(0.0)	(0.0)	-	(0.3)	-	(4.4)	-	-	62.5
2023														(44.2)	(0.0)	(0.1)	-	(0.4)	-	(7.0)	-	-	101.7
2024														(64.8)	(0.0)	(0.1)	-	(0.6)	-	(9.3)	-	-	131.6
2025														(83.4)	(0.0)	(0.1)	(1.7)	(0.6)	-	(11.2)	-	-	157.
2026														(101.6)	(0.0)	(0.2)		(0.7)	-	(13.0)	-	-	173.
2027														(115.6)	(0.0)	(0.2)	(7.6)	(0.7)	(0.2)	(14.6)	(6.8)		183.
2028														(134.3)	(0.0)	(0.2)		(0.7)	(0.3)	(16.4)	(11.0)	-	186.
2029														(149.0)	(0.0)	(0.2)	(16.0)	(0.7)	(0.4)	(18.0)	(16.7)	-	189.
2030														(165.8)	(0.0)	(0.2)		(0.6)	(0.7)	(19.9)	(26.0)	-	183.
2031														(181.8)	(0.0)	(0.2)		(0.6)	(0.9)	(21.8)	(34.4)	-	175.
2032														(196.3)	(0.0)	(0.2)	(32.4)	(0.6)	(1.1)	(23.5)	(42.0)	-	168
2033														(209.9)	(0.0)	(0.2)	(38.4)	(0.5)	(1.4)	(26.3)	(49.0)	-	159
2034														(223.3)	(0.0)	(0.2)	(44.7)	(0.5)	(1.7)	(27.4)	(61.2)		144.
2035														(236.4)	(0.0)	(0.2)	(51.6)	(0.5)	(2.1)	(28.3)	(76.3)		125.
2036														(248.1)	(0.0)	(0.2)	(59.1)	(0.5)	(2.6)	(29.1)	(90.3)	-	106.
2037														(260.5)	(0.0)	(0.2)	(67.4)	(0.5)	(2.9)	(32.7)	(103.3)	-	83. 62.
2038														(283.4)	(0.0)	(0.2)	(86.1)	(0.5)	(3.7)	(33.2)	(115.3)	-	41.
2039 2040														(283.4)	(0.0)	(0.2)	(95.7)	(0.5)	(4.0)	(34.2)	(126.3)	-	21.
2040														(303.3)	(0.0)	(0.2)	(104.9)	(0.5)	(4.4)	(35.1)	(146.0)	-	1.5
2041														(313.3)	(0.0)	(0.2)		(0.5)	(4.7)	(36.0)	(154.7)	-	(19.
2042														(321.6)	(0.0)	(0.2)		(0.5)	(5.0)	(36.4)	(162.8)		(37.
2043														(330.4)	(0.0)	(0.2)	(134.8)	(0.5)	(5.3)	(37.0)	(170.3)		(57.
2044														(339.1)	(0.0)	(0.2)	(144.8)	(0.6)	(5.6)	(37.0)	(177.3)	-	(77.
2045														(347.2)	(0.0)	(0.2)	(154.5)	(0.6)	(5.9)	(38.4)	(183.7)	-	(96.
2047														(354.6)	(0.0)	(0.2)	(163.9)	(0.6)	(6.1)	(38.9)	(189.7)	-	(115.
2048														(362.3)	(0.0)	(0.2)		(0.6)	(6.4)	(39.8)	(195.2)		(134.
2049														(368.7)	(0.0)	(0.2)	(182.9)	(0.6)	(6.6)	(40.4)	(200.4)		(151.
2050														(375.0)	(0.0)	(0.2)	(192.0)	(0.6)	(6.9)	(40.8)	(205.2)		(167.
2051														(378.0)	(0.0)	(0.2)	(196.8)	(0.6)	(7.1)	(40.0)	(209.6)	-	(176.
CPVRR \$M	Equipment and Installation Hamilton, Columbia,	Equipment and Installation	Equipment and Installation	and	Equipment and Installation	Equipment and Installation	Land Lease Rental	Incremental FOM Hamilton, Columbia,	Incremental FOM Santa Fe	Incremental FOM Twin	Incremental FOM Duette	Incremental FOM Charlie	Incremental FOM Sandy	Fuel Costs	SO2	Emissions Nox	CO2	Other Environmental	Avoided FOM	Avoided Variable	Avoided Replacement	Avoided Capacity	Total Saving
	Trenton, Lake Placid, and DeBary	Santa Fe	Twin Rivers	Duette	Charlie Creek	Sandy Creek	Payments	Trenton, Lake Placid, and DeBary		Rivers		Creek	Creek	Savings	Savings	Savings	Savings	Savings		O&M	Costs	Purchases	

10. Please refer to DEF witness Borch's direct testimony, Exhibit BMHB-4. Please complete the table below providing the annual list of unit additions, retirements, and uprates/dowrates used to determine the proposed savings for each scenario, with and without the proposed SoBRA projects.

ır	SoBra Tranche 3 without the proposed Solar Projects	Firm Summer Rating MWs	Year	SoBra Tranche 3 with the proposed Solar Projects	Firm Summ Ratin MWs
	Columbia Solar 74.9MW Addition (Mar '20)	43		Columbia Solar 74.9MW Addition (Mar '20)	43
0	Debary Solar 74.5MW Addition (May '20)	34	2020	Debary Solar 74.5MW Addition (May '20)	34
┵	Avon Park 1-2 Retirement (Sep '20)	(48)		Avon Park 1-2 Retirement (Sep '20)	(48
	Southern UPS Contract Expires - Franklin (May '21)	(424)		Santa Fe Solar 74.9MW Addition (Jan '21)	43
				Twin Rivers Solar 74.9MW Addition (Jan '21)	43
1			2021	Southern UPS Contract Expires - Franklin (May '21)	(424
				Duette Solar 74.5MW Addition (Dec '21)	42
				Charlie Creek 74.9MW Addition (Dec '21)	43
4				Sandy Creek Solar 56.6MW Addition (Dec '21)	32
2		(4.45)	2022		
3	Orlando Contract Expires (Dec '23)	(115)	2023	Orlando Contract Expires (Dec '23)	(11
4	Shady Hills Contract Expires (Apr '24)	(480)		Shady Hills Contract Expires (Apr '24)	(48)
	Osprey Transmission Upgrade (May '24) *	337	2024	Osprey Transmission Upgrade (May '24) *	33
┵	Mulberry Contract Expires (Aug '24)	(115)	\perp	Mulberry Contract Expires (Aug '24)	(11
5	Bayboro 1-4 Retirement (Nov '25)	(171)	2025	Bayboro 1-4 Retirement (Nov '25)	(17
4	Orange Contract Expires (Dec '25)	(104)		Orange Contract Expires (Dec '25)	(10
6		$oxed{oxed}$	2026		
	Debary 2-6 Retirement (May '27)	(249)		Debary 2-6 Retirement (May '27)	(249
	Bartow 1 and 3 Retirement (May '27)	(82)		Bartow 1 and 3 Retirement (May '27)	(82
7	Vandolah Contract Expires (May '27)	(640)	2027	Vandolah Contract Expires (May '27)	(64
	3 CTs Addition (June '27)	677		2 CTs Addition (June '27)	45
4	UF Retirement (Oct '27)	(44)		UF Retirement (Oct '27)	(44
8			2028	CT Addition (Jun '28)	22
9	CT Addition (Jun '29)	226	2029		
N	CT Capacity CC Capacity Number of CTs Number of CCs	205 226 1,277 16 2		CT Capacity CC Capacity Number of CTs Number of CCs	18
	Total CTs MWs	3,613		Total CTs MWs	3,3
- 1	Total CCs MWs	2,554		Total CCs MWs	2,5
_	Solar MWs	6 243		Solar MWs	6.3

6,243

Total MWs

Total MWs

6,220

GROUND LEASE AGREEMENT

Site No.:	
Land Unit No.:	
Project No.:	

Summary of Ground Lease Agreement Terms:

This section provides a summary of the general business terms. In the event of any discrepancy, the

terms and conditions in the attached Ground Lease	Agreement shall prevail. All capitalized terms shall have
the same meaning as set forth in the attached Grour	
Effective Date: February 21, 2019.	
Landlord: Crews Groves Inc.	
Tenant: Duke Energy Florida, LLC d/b/a Duke Energy	1
<u>Summary Description of Land</u> : _Hardee County, Florid 0000- 02430-0000, 01-33-26-0000-05920-0000, and 01	da, parcel numbers: 06-33-27-0000-10020-0000, 07-33-27-1-33-26-0000-02500-0000.
<u>Term of Lease</u> : The term of this Lease shall commence time on the date that is twenty-five (25) years after the	on the Commencement Date and shall end at 11:59 P.M. local Commencement Date.
Commencement Date: The Commencement Date of the 2(a) of the Lease).	Term is the Commercial Operation Date (as defined in Section
Number and Length of Optional Renewal Term(s): Thr	ree (3) optional Renewal Terms of five (5) years each.
after the Effective Date. Tenant shall pay Landlord the	uests extension of the Initial Due Diligence Period for one (1)
	ences upon the Construction Commencement Date (as defined Commercial Operation Date (which is the same date as the andlord the sum of
Rent: During the Term, Tenant shall pay Landlord re of the Land (prorated for fractional acres)	
Rent Increase: Commencing on the first annual anniversor one year annual anniversary date thereafter, the annual	rsary date of the Commencement Date and on each subsequent Rent shall increase by
Addresses:	
Landlord:	Tenant:
Crews Groves Inc. P.O Box 1669 Avon Park, FL 33826	Duke Energy Florida, LLC c/o Jones Lang LaSalle Americas, Inc. 550 South Tryon Street

Mail Code: DEC22A Charlotte, NC 28202

governmental authorities having jurisdiction and the applicable electrical transmission provider for the Solar Generating Facility; and (iii) the Solar Generating Facility begins delivering electricity to the electrical grid. Once the Commencement Date is ascertained, the parties agree to execute a memorandum or other writing confirming the Commencement Date.

- (b) <u>Renewal Terms.</u> Tenant shall have the right to extend the initial Term granted herein for up to three (3) additional terms of five (5) years each (each a "<u>Renewal Term</u>" and collectively, the "<u>Renewal Terms</u>") by providing Landlord with written notice of Tenant's desire to extend the Term for the applicable Renewal Term prior to the Expiration Date (or prior to the expiration of the preceding Renewal Term, as applicable).
- 3. Due Diligence Period; Construction Period; and Landlord's Rights Before Construction Commencement Date.
- Due Diligence Period. Commencing on the Effective Date and continuing for a period of two (2) years after the Effective Date (the "Initial Due Diligence Period), Tenant shall have the right to enter the Premises to perform its due diligence, inspection, investigation and preconstruction activities to determine if the Premises is suitable for leasing by Tenant, the Intended Use, and obtaining permits and approvals for the Intended Use. Tenant shall pay Landlord the sum of for the first year of the Initial Due Diligence Period. Prior to the end of the first year of the Initial Due Diligence Period Tenant may notify Landlord in writing of any portion of the Land it has determined will not be leased and developed for the Intended Use. Tenant shall pay to Landlord of Land that is still under consideration during the second year of the Initial Due Diligence Period. Payments for the first and second year of the Initial Due Diligence Period shall be made in two (2) equal installments, with the first (1st) installment payable on January 1st of each year, and the second (2nd) installment payable on July 1st of each year. Tenant may extend the Initial Due Diligence Period for one (1) additional year commencing after the expiration date of the Initial Due Diligence Period (the "Extended Due Diligence Period"), by delivering written notice to Landlord prior to the expiration date of the Initial Due Diligence Period and paying Landlord the sum of (The Initial Due Diligence Period and Extended Due Diligence Period are collectively referred to herein as the "Due
- (b) <u>Construction Period.</u> The <u>"Construction Period"</u> shall commence upon the Construction Commencement Date (as hereinafter defined) and expire upon the Commercial Operation Date (which is the same date as the Commencement Date of the Term of this Lease).

 Tenant shall pay Landlord the sum of during the Construction Period. The "<u>Construction Commencement Date</u>" shall be the earlier of (i) the date Tenant issues written to Landlord advising Landlord of Tenant's intent to begin construction activities at the Premises, (ii) the date specified in Tenant's written notice to Landlord after which Landlord (or any other party claiming, by, through or under Landlord) may no longer plant or harvest crops on the Premises (the <u>"Interim Crop Notice Date"</u>), or (iii) the date Tenant commences the construction or installation of the Solar Generation Facility at the Premises; provided however, the Construction Commencement Date shall not be deemed to have occurred by virtue of any testing conducted by Tenant on the Land, minimal site clearing to support such testing, or by virtue of Tenant installing access routes or roads on the Land. To be effective for any calendar year, Tenant must deliver any written notice to Landlord specifying the Interim Crop Notice Date

Diligence Period").

otherwise feasible. Landlord, at no cost to Landlord, agrees to sign any applications or other documents (that require signature by the fee owner of the Premises), and to take all such other actions, as are reasonably required to allow Tenant to, at Tenant's expense, obtain any re-zonings, variances, permits or other approvals required by Tenant for the Intended Use. If Tenant is unable to satisfy the Contingencies to Tenant's satisfaction prior to the expiration date of the Due Diligence Period, or if Tenant otherwise determines that Tenant's leasing of the Premises is not feasible or desirable for any reason whatsoever, Tenant may terminate this Lease by giving written notice to Landlord prior to the expiration date of the Due Diligence Period. In addition, the Tenant's right to terminate this Lease pursuant to this Section 4(a) shall expire on the Construction Commencement Date and is further subject to the conditions specified in Section 9 of this Lease. If Tenant terminates this Lease prior to the expiration date of the Due Diligence Period and the Construction Commencement Date pursuant to this Section 4(a), no payment by Tenant for the Construction Period as set forth in Section 3(b) of this Lease and no rent as set forth in Section 5 of this Lease shall be due or payable to Landlord hereunder.

(b) <u>Due Diligence, Inspections, Title and Survey</u>. After the Effective Date, Tenant and its employees, agents, contractors, and authorized representations shall be entitled to enter the Premises and conduct, at Tenant's expense, inspections, investigations, studies, surveys, borings, sampling, and testing of the Premises as Tenant deems necessary or desirable to determine if the Premises is suitable for Tenant's Intended Use (the "<u>Due Diligence Work</u>"). Within sixty (60) days after the Commencement Date, Tenant shall obtain a survey of the Premises (the "<u>Survey</u>"). The Survey's legal description shall be deemed to be the legal description of the Land for all purposes under this Lease (including determining the amount of rent payable during the Term). After the Commencement Date, Tenant may, at Tenant's expense, conduct the necessary survey(s) and submit the required filings to the local governmental authority having jurisdiction to subdivide the parcel(s) of Land comprising the Premises so that the Premises are contained within one or more tax parcels separate from other adjacent property owned by the Landlord.

5. Rent.

(a) Rent During Term. Commencing on the Commencement Date, Tenant shall pay Landlord annual rent during the Term in the sum of

of Land located within the Premises (prorated for any fractional acres), as evidenced and determined by the Survey. As used herein, "<u>Usable Acre</u>" shall mean the gross acreage of the Land including shade buffers, less any acreage located within public road right of way, wetlands, jurisdictional streams, NCDEQ-required stream buffers, watersheds, endangered species habitat, sites of protected cultural resources and/or flood plains, as determined by the Survey. Rent shall be payable on a semiannual basis, with the first (1st) rent installment payable within thirty (30) days after the Commencement Date, the second (2nd) rent installment being due on the date that is six (6) months after the Commencement Date, and subsequent payments of rent being due every six (6) months thereafter.

(b) Rent Increase. Commencing on the first (1st) annual anniversary date of the Commencement Date, and on each one annual anniversary date of the Commencement Date thereafter (including any such anniversary dates occurring during any exercised Renewal Term), the annual rent payable hereunder shall increase over the annual rent payable for the prior year by

- (c) Rent Payments. The payment of rent for any fractional calendar year during the Term shall be prorated. The Tenant shall receive a credit against the initial installment(s) of rent due pursuant to Section 5(a) in an amount that is the-portion paid by Tenant during the Construction Period during the semiannual period in which Tenant previously made payment pursuant to Section 3(b) of this Lease. If Tenant fails to pay any installment of rent to Landlord by the date that the same is due hereunder, and such failure continues for a period of (15) days after Landlord provides Tenant with written notice of such failure to pay, Tenant will pay a late fee to the Landlord in the amount of
- 6. <u>Utilities, Maintenance and Repairs</u>. Tenant shall pay for all utilities used at the Premises by Tenant. Tenant, at Tenant's cost, shall be responsible for the repair and maintenance of the Solar Generating Facility and Tenant's improvements on the Premises.

7. Alterations.

- Tenant may, at its expense, make any alterations, additions, improvements and (a) changes to the Premises as it may deem necessary or desirable in the operation of its business or Solar Generating Facility, without the consent of Landlord, including without limitation any fencing, security devices and or signage desired by Tenant. Any alteration, addition, improvement or change conducted by Tenant shall be done in compliance with applicable laws and requirements of governmental agencies having jurisdiction. Landlord, at no cost to Landlord, agrees to sign any permit applications and to take all such other actions as are reasonably required to allow Tenant to accomplish any such alterations, additions, improvements and changes to the Premises. The Solar Generating Facility and any and all improvements constructed on the Premises by or for Tenant, and all machinery, fixtures, trade fixtures, equipment, and other personal property installed or placed in the Premises by or for Tenant, shall, regardless of the manner of attachment to the Premises or the improvements thereon, be and at all times remain the property of Tenant, and shall be removable by it at any time and from time to time during the Term and at the expiration or earlier termination of this Lease. In the event that Tenant removes any trees, crops or other vegetation from the Premises during the Term, Tenant may sell and/or dispose of the same, and any revenues derived by Tenant from the sale of the same shall belong to Tenant.
- (b) Within thirty (30) days after the Tenant notifies Landlord that the Construction Commencement Date has occurred, Landlord shall, at Landlord's sole cost and expense, remove and dispose of all of the following from the Premises:
- 8. <u>Use and Occupancy</u>. Tenant shall be entitled to use the Premises for the Intended Use. Tenant agrees that no unlawful use of the Premises will be made. Landlord shall deliver sole and exclusive possession of the Premises to the Tenant on the Construction Commencement Date.

9. Lease Termination and Surrender of Land.

(a) <u>Termination Rights</u>. Tenant shall have the right to terminate this Lease as of the date that is thirty-six (36) months <u>after</u> the Commencement Date (the "<u>Termination Date</u>") by providing Landlord with written notice of such termination on or before the date that is thirty (30) days prior to the Termination Date. Rent shall be prorated as of the Termination Date. Additionally, Tenant shall have the right to terminate this Lease in the event that its power purchase

agreement, or other agreement, under which Tenant provides power generated at the Premises to a third party, is terminated for any reason whatsoever (other than a termination due to a default by Tenant under such agreement). Upon a termination of this Lease by Tenant permitted hereunder, this Lease shall terminate and become null and void, and Tenant shall have no further obligations hereunder.

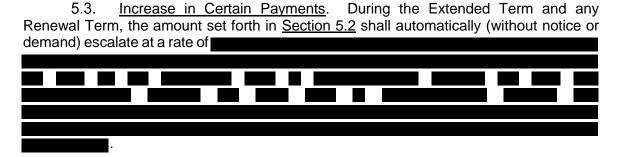
- (b) Surrender of Land. Upon the expiration or earlier termination of this Lease, Tenant shall (i) return the Land to Landlord in substantially the same condition the same were in as of the Construction Commencement Date, to the extent practicable and reasonable wear and tear excepted; and if applicable, (ii) decommission and remove Tenant's Solar Generating Facility and all improvements and equipment constructed or installed by Tenant on the Land. Notwithstanding the foregoing, in no event shall Tenant have any obligation to replace any crops or other vegetation damaged or removed by Tenant during the Term.
- 10. **Insurance**. Tenant may, after the Solar Generating Facility and its improvements are completed, keep such improvements insured against loss or damage by fire, windstorm, earthquake and similar hazards. Each party hereto shall keep in force, at its sole cost and expense, comprehensive commercial general liability insurance, with a combined single limit of not less than per occurrence and insuring such party, and the other party hereto as additional insured, against liability arising out of the use, occupancy or ownership of the Premises. Any provisions herein to the contrary notwithstanding, Landlord and Tenant mutually agree that, in respect to any loss which is covered by insurance then being carried by them respectively (or which would have been covered had such party maintained the insurance required hereunder), the one carrying such insurance and suffering said loss hereby releases the other of and from any and all claims with respect to such loss, and waives any rights of subrogation which might accrue to the carrier of such insurance. Notwithstanding the foregoing, Tenant may self-insure (either by use of deductibles or self-insured retention) the coverage required of Tenant hereunder and Tenant may satisfy its insurance obligations hereunder through a "blanket" policy or policies covering other properties or liabilities of Tenant. Within ten (10) days after the Effective Date, the parties shall provide each other with a Certificate of Insurance (or evidence of self-insurance, as applicable), evidencing the coverages required by this Section 10.
- 11. **Taxes.** Tenant shall be solely responsible for any ad valorem property taxes that are assessed against either the Premises or Tenant's personal property for periods falling within the Term. Landlord and Tenant shall apportion taxes appropriately between the parties for any partial tax years falling within the Term. Tenant shall also be responsible for any deferred property taxes ("Deferred Taxes") due on the Premises as a result of Tenant's use of the Premises for the Intended Use to the extent required by applicable Florida laws. However, in the event that Tenant's use of the Premises for the Intended Use triggers the obligation to pay any Deferred Taxes, or any other taxes, assessments, penalties, fees or interest, on any other property owned by Landlord (other than the Premises), Landlord shall be solely responsible for paying the same. In the event that the Premises is a part of a larger tax parcel owned by Landlord, and Deferred Taxes become payable on the entire tax parcel as a result of Tenant's use of the Premises for the Intended Use, the Deferred Taxes shall be equitably apportioned as to Landlord and Tenant in a pro-rata manner such that Tenant is responsible only for such costs as they relate to the Premises and Landlord is responsible for the remainder. During the Term, Tenant, at its cost, shall have the right, at any time, to seek a reduction in the assessed valuation of the Premises or to contest any taxes that are assessed against

For purposes of this Lease, if the Extended Term Commencement Date does not fall on January 1st, the first year of the Extended Term shall be the remainder of the calendar year in which Lessee exercises the Lease Extension Option (with Rent and all other annual payments being prorated during such partial year to include prorated credit for Development Term Rent for the remainder of such partial year) and the first full calendar year thereafter (with Rent and all other annual payments being made for such first full calendar year of the Extended Term and every year thereafter as provided in Section 5.2 below). If Lessee so requests, the Parties shall promptly execute and record a supplemental memorandum of this Lease setting forth the expiration date of the Extended Term, and to the extent Lessee has exercised the Lease Extension Option with respect to less than all of the Property, then, upon the expiration of the Development Term, Lessee shall release from this Lease any such portions of the Property not constituting the Extended Term Property. Notwithstanding Section 2, Lessee shall not be permitted to commence construction of any Solar Energy System on any portion of the Property (other than meteorological and solar and radiation measurement, monitoring and recording equipment and facilities) unless and until Lessee has exercised the Lease Extension Option with respect to such portion of the Property. Lessee shall have the right to renew the Lease (as to the Extended Term Property) for two (2) additional five (5) year periods (the "Renewal Term") on the same terms and conditions as this Lease.

- 5. **Payments.** Lessee shall pay or tender the following amounts to Lessor (collectively, the "*Rent*"):

 - 5.2. Extended Term Rent. If Lessee exercises the Lease Extension Option with respect to all or any portion of the Property, then for each calendar year during the Extended Term and any Renewal Term (if any) until this Lease expires or is earlier terminated, Lessee shall pay to Lessor the greater of (the "Extended Term Rent"): (i) an annual amount equal to the total acreage of the Extended Term Property multiplied by and multiplied by and multiplied by The Extended Term Rent will be increased on an annual basis pursuant to Section 5.3 below.
 - 5.2.1. The per-acre amount set forth above shall be calculated and paid annually in advance, and shall be due and payable within fifteen (15) days after the first day of the applicable calendar year. The first payment of Extended Term Rent shall be paid within thirty (30) days after the Extended Term Commencement Date. Any Extended Term Rent that is payable for less than a full calendar year shall be prorated by Lessee on the basis of a 365-day year. If any Development Term Rent is prepaid for any part of the Extended Term, then

Lessee may credit a prorated portion of said Development Term Rent against any Extended Term Rent then or thereafter due to Lessor hereunder, as determined by Lessee.



5.4. Reimbursement for Damage.

- 5.4.1. Except as provided in <u>Section 2.4</u>, if any of Lessor's Structures or improvements existing as of the Effective Date are materially damaged or destroyed as a result of Solar Operations, then Lessee shall promptly repair or replace such Structures or improvements.
- 5.4.2. The "Option Exercise Date" means the date on which Lessee exercises the Lease Extension Option. If the Option Exercise Date occurs prior to the planting of any agricultural products ("Agricultural Products"), Lessee shall not be liable for the destruction or loss of any Agricultural Products planted on the Property. If the Option Exercise Date occurs after the Agricultural Products have been planted, Lessee shall pay to Lessor the Full Value (defined below) of any such Agricultural Products actually planted. Lessor agrees to accept input from Lessee and to cooperate and coordinate with Lessee in determining the areas of the Property in which Agricultural Products will be planted in order to limit the amount of damages under this Section 5.4. For the purposes of this Lease, the "Full Value" means an amount equal to the revenue that the Lessor would have received on the open market for said Agricultural Products during the planting season in which such Agricultural Products were removed from the Property. The Full Value shall be determined based upon (a) the amount of acreage affected, (b) the average yield per acre of the Agricultural Products actually planted as of the Option Exercise Date, and (c) the market price received for that particular type of Agricultural Product during such planting season. Should Lessee disagree with the calculation of the amount determined by Lessor, then Lessor and Lessee shall cooperate in good faith to determine the amount of any payment in consultation with the local Farm Service Agency to obtain the average yield per acre and market value of any particular Agricultural Products during such planting season. Any costs or expenses related to such determination will be paid by Lessee. Notwithstanding the foregoing, Lessee will not be obligated to reimburse Lessor the Full Value of the Agricultural Products, unless such Agricultural Products were planted at least sixty (60) days prior to the removal of such Agricultural Products
- 5.5. Reimbursement for CRP Losses. If Lessor is a party to a Conservation Reserve Program ("*CRP*") contract with the U.S. Department of Agriculture (the "*USDA*"), Lessor shall provide Lessee with a copy of such CRP contract, together with all amendments and modifications thereto; and if applicable, Lessee shall reimburse Lessor

out-of-pocket costs of establishing and maintaining the Planting Work (the "**Planting Costs**"). Lessor agrees to keep Lessee reasonably informed during establishment of the Planting Plan.

- 5.8.3. Once Lessor has established the Planting Plan it will submit such Planting Plan (including the Planting Costs) to the Lessee for approval, such approval not to be unreasonably withheld, conditioned, or delayed. After Lessee has approved the Planting Plan, Lessor shall begin the Planting Work in accordance with the terms of the Planting Plan.
- 5.8.4. Lessee agrees that it will reimburse Lessor for the Planting Costs pursuant to a schedule that will be established in the Planting Plan, but in any event such reimbursement payments shall not occur more frequently than one (1) payment per calendar month.
- 5.8.5. Notwithstanding the foregoing, in the event Lessor fails to establish the Planting Plan or carry out the Planting Work in accordance therewith, Lessee reserves the right to perform the Planting Work on its own behalf. In the event Lessee performs the Planting Work it shall reserve the right to withhold the reasonable costs of completing the Planting Work from the next due payment(s) of Additional Development Term Rent (as defined below), Development Term Rent, or Extended Term Rent (at Lessee's sole discretion).

6. Covenants By Lessee.

- 6.1. <u>No Construction Liens</u>. Lessee shall keep the Property free and clear of all liens and claims of lien for labor and materials resulting from its Solar Operations; provided, however, that Lessee shall have the right to contest any such liens and claims by legal proceedings, which may be brought in the name(s) of Lessor and/or Lessee where appropriate or required. Lessor shall in all respects cooperate with Lessee in such contest, and shall be reimbursed for such cooperation as provided in <u>Section 7.3</u>.
- 6.2. <u>Lessee's Obligation to Pay Taxes</u>. Lessee shall pay when due all real and personal property taxes and assessments levied against the Property. Lessee shall also be responsible for any increase in real or personal property taxes levied against the Property during the term of this Lease as a direct result of Lessee's Solar Operations on the Property. However, Lessee shall not be liable for taxes or assessments attributable to improvements or facilities installed by Lessor or others on the Property, which taxes and assessments shall be paid by Lessor. Lessee and Lessor shall use their best efforts to cause the Property to be taxed separately as provided in this Section. Lessee shall have the right to contest by legal proceedings (which may be brought in the name(s) of Lessor and/or Lessee where appropriate or required), the validity or amount of any taxes or assessments for which it is responsible hereunder. Lessor shall in all respects cooperate with Lessee in such contest, and shall be reimbursed for such cooperation as provided in <u>Section 7.3</u>.
- 6.3. <u>Lessee's Obligation to Carry Insurance</u>. Prior to commencing Solar Operations on the Property, Lessee shall obtain, and thereafter keep in force during the term of this Lease, (a) a policy of commercial general liability insurance covering property damage and liability for personal injury or death on or about the Property, with limits in the amount of per occurrence and in the aggregate and

- (b) an umbrella or excess liability policy in the amount of provided, however, that such coverage may be provided as part of a blanket policy that also covers other properties. Lessee shall cause Lessor to be named as an additional insured in such policies and Lessee shall deliver a certificate of such insurance to Lessor. Notwithstanding the foregoing, Lessee may self-insure (either by use of deductibles or self-insured retention) the coverage required of Lessee hereunder and Lessee may satisfy its insurance obligations hereunder through a "blanket" policy or policies covering other properties or liabilities of Lessee.
- 6.4. Lessee's Obligation To Restore the Property. Lessee shall do the following with respect to any portions of the Property disturbed by Lessee in the course of Solar Operations: (a) within six (6) months after completion of construction of Lessee's solar project, Lessee shall restore such portions of the Property to a condition reasonably similar to its condition as of the Effective Date, except for any parts of the Property that Lessee determines it needs for continuing Solar Operations and (b) within twelve (12) months after the expiration, surrender or termination of this Lease, Lessee shall (i) remove from such portions of the Property any Solar Energy System owned or installed by Lessee thereon and (ii) restore such portions of the Property to a condition reasonably similar to its condition as of the Effective Date, including without limitation, exercising commercially reasonable efforts to de-compact any substantially compacted soil and, if applicable, reseed disturbed soil with seed consistent with grass types in the vicinity of the Property. Lessee shall have a continuing easement to enter the Property for such purpose during such twelve (12) month period.
- 6.5. <u>Lessee's Obligation to Comply with Law.</u> Lessee shall comply in all material respects with all laws, statutes, ordinances, regulations, decrees, orders and decisions of or issued by any governmental authority that are applicable to Lessee's Solar Operations on the Property ("*Law*" or "*Laws*"). Lessee shall have the right to contest by legal proceedings (which may be brought in the name(s) of Lessor and/or Lessee where appropriate or required), the validity or applicability of any such Law. Lessor shall in all respects cooperate with Lessee in such contest, and shall be reimbursed for such cooperation as provided in <u>Section 7.3</u>.
- 6.6. <u>Hazardous Materials</u>. Without limiting the generality of <u>Section 6.5</u>, in conducting its Solar Operations on the Property, Lessee shall comply in all material respects with any Law (each, an "*Environmental Law*") governing the generation, manufacture, production, use, storage, release, discharge, transportation or presence of any substance, material or waste which is now or hereafter classified by any such Law as hazardous or toxic (each, a "*Hazardous Material*"). Further, Lessee shall promptly clean up, remove or take other legally-authorized remedial action as required by Environmental Law with regard to any contamination or damage to soil or ground water on or in the Property caused by any Hazardous Material brought onto the Property by Lessee, and for which clean up, removal or remedial action is required pursuant to Environmental Law.
- 6.7. <u>Indemnification of Lessor</u>. Lessee shall indemnify, defend and hold harmless Lessor against claims, liability, losses, damages, costs and expenses (collectively, "*Liability*") arising out of (a) physical damage to property and physical injuries or death to Lessor, Lessor's property or the public, (b) the presence or release of Hazardous Materials in, under, on or about the Property, or (c) the violation of any Environmental Law; in each case only to the extent proximately caused by Lessee's Solar Operations on the Property, and except to the extent such Liability is caused or contributed

Exhibit B REDACTED

which has not yet been negotiated, but DEF has included a budget of	for this
land purchase. The project could add battery storage at a later time within the exist	ting land
since the batteries and associated equipment can be added within the solar ins	tallation
design and do not require much space.	

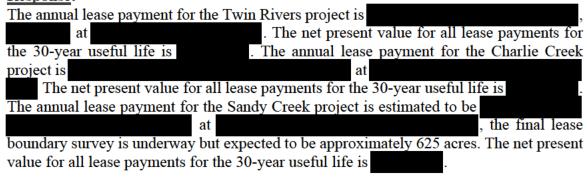
6. Please refer to DEF witness Stout's direct testimony, page 9, lines 18 to 20. Please specify if the land for the Sandy Creek project has been or will be purchased by DEF.

Response:

The Sandy Creek project is leasing the land for the project. The land has been secured via a Solar Option and Lease Agreement and will exercise the option prior to construction. Additionally, DEF plans to purchase the land required for the transmission switching station, which is permitted under the Solar Option and Lease Agreement.

7. Please refer to DEF witness Stout's direct testimony, page 15, line 12 through 14. For the Twin Rivers, Charlie Creek and Sandy Creek projects, please specify the amount of lease payments for the useful life of the facility. As part of this response, please also provide a net present value for all lease payments.

Response:



- 8. Please refer to DEF witness Stout's direct testimony, page 15, lines 12 through 14. Please specify the length of the lease and the expected useful life of the Twin Rivers, Charlie Creek and Sandy Creek projects.
 - a. Please compare the estimated lifespan of the solar facility to the duration of the lease.

- 09 Please refer to DEF witness Borch's [sic] direct testimony, Exhibit BMHB-4. For the combined SoBRA projects, please provide the annual and cumulative values over the period 2020-2052 (in nominal and net present value) for each of the following categories: capital, incremental fixed O&M, and other cost(s) for the SoBRA projects, and avoided capital, fixed O&M, capacity purchases, fuel cost, emissions cost (excluding carbon), carbon emissions cost, variable O&M, and other cost(s) for the system as a whole. Please provide the response in electronic (Excel) format
- a. Please explain in detail the assumptions used to determine the value of each of the components evaluated in this analysis.
- b. Explain whether DEF's emissions savings include CO2 emissions. If so, provide a sensitivity analysis without those costs and provide the revised annual and cumulative values for each category in electronic format. DEF's emission savings include CO2 emissions savings.

 c. Please provide sensitivity analysis for each of the alternative fuel forecasts (high and low) included in the exhibit, with revised annual and cumulative values for each category in electronic (Excel) format.

Mid	Fuel	with	Carbon	Case	

Nominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	and	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020																-		-					
2021														(9.5)	(0.0)		-	(0.1)	-	(1.9)	-	-	22.2
2022 2023														(20.4)	(0.0)	(0.0)	-	(0.2)	-	(3.0)	-	-	47.5 47.7
2023														(26.9)	(0.0)	(0.0)	-	(0.2)		(3.2)		-	38.4
2025														(26.1)	(0.0)		(2.4)	(0.2)		(3.0)	-	-	34.5
2026														(28.1)	(0.0)	(0.0)	(4.3)	(0.2)	-	(2.4)	-		23.4
2027														(23.8)	(0.0)		(5.4)	(0.1)		(2.5)	(10.7)		12.9
2028														(34.0)	(0.0)	(0.0)	(7.1)	(0.0)		(3.0)	(7.1)	-	2.7
2029														(28.7)	(0.0)	(0.0)	(7.8)	(0.0)		(3.3)	(10.2)	-	2.5
2030														(37.2)	0.0	(0.0)	(10.7)	0.0	(0.5)	(3.7)	(17.7)	-	(20.4
2032														(38.4)	0.0	(0.0)	(11.7)	0.1	(0.5)	(3.2)	(16.7)	-	(21.5
2033														(37.7)	0.0	(0.0)	(12.8)	0.2	(0.5)	(6.0)	(16.2)	-	(25.0
2034														(40.1)	0.0	0.0	(14.7)	0.1		(2.9)	(30.2)	-	(42.4
2035														(40.6)	(0.0)	(0.0)	(17.9)	(0.0)		(2.4)	(40.1)	-	(57.:
2036														(40.4) (45.1)	(0.0)	(0.0)	(21.2)	(0.0)	(1.2)	(2.5)	(39.5)	-	(61.3
2037														(46.4)	(0.0)	(0.0)	(29.4)	(0.0)	(1.2)	(4.2)	(38.5)		(77.4
2039														(46.6)	(0.0)		(32.8)	(0.0)	(1.3)	(2.1)	(37.9)	-	(79.1
2040														(47.5)	-	(0.0)	(35.0)	(0.0)	(1.3)	(3.6)	(37.4)	-	(84.5
2041														(45.8)	-	(0.0)	(36.0)	(0.0)	(1.3)	(3.8)	(36.9)	-	(85.0
2042														(52.0)	-	(0.0)	(42.5)	(0.0)		(3.7)	(36.4)	-	(98.5
2043														(47.4) (52.8)	(0.0)	(0.0)	(42.8) (47.4)	(0.0)	(1.4)	(1.6)	(36.0)	-	(93.0
2044 2045														(55.6)	(0.0)	(0.0)	(50.9)	(0.0)	(1.4)	(3.4)	(35.1)		(112.8
2046														(55.9)	(0.0)		(52.4)	(0.0)		(4.2)	(34.8)	-	(116.2
2047														(54.9)	-	(0.0)	(54.1)	(0.0)	(1.5)	(2.5)	(34.4)	-	(116.1
2048														(62.0)	(0.0)		(62.3)	(0.0)		(5.4)	(34.1)	-	(135.1
2049														(55.6)	(0.0)	(0.0)	(58.3)	(0.0)		(3.9)	(33.7)	-	(124.0
2050 2051														(58.4)	(0.0)	(0.0)	(63.6)	(0.0)	(1.6)	(2.8)	(33.4)	-	(129.5 (73.8
2031	Equipment and							Incremental						(30.7)	(0.0)	(0.0)	(35.9)	(0.0)	(1.7)	5.9	(33.1)		(/3.8
Nominal \$M	Installation Hamilton, Columbia, Trenton, Lake	Equipment and Installation	and Installation	Equipment and Installation	Equipment and Installation	Equipment and Installation	Land Lease Rental Payments	FOM Hamilton, Columbia, Trenton, Lake	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
	Placid, and DeBary	Santa Fe	Twin Rivers	Duette	Charlie Creek	Sandy Creek	. 27	Placid, and DeBary				GCC.	- Coccu					50111150				. Di Gilodes	

Mid Fuel	vith Carbon Case																						
	Equipment and Installation				F			Incremental FOM															
	Hamilton,	Equipment and	Equipment	Equipment	Equipment and	Equipment	Land Lease	Hamilton,	Incremental	Incremental	Incremental	Incremental	Incremental	Fuel	Emissions	Emissions	Emissions	Other		Avoided	Avoided	Avoided	Total
PV \$M	Columbia,	Installation	and Installation	and Installation	Installation	and Installation	Rental	Columbia,	Incremental FOM Santa Fe	FOM Twin	FOM Duette	FOM Charlie	FOM Sandy	Costs	SO2	Nox	CO2	Environmental	Avoided FOM	Variable	Replacement	Capacity	Savings
	Trenton, Lake Placid, and	Santa Fe	Twin Rivers	Duette	Charlie Creek	Sandy Creek	Payments	Trenton, Lake Placid,		Rivers		Creek	Creek	Savings	Savings	Savings	Savings	Savings		O&M	Costs	Purchases	
	DeBary							and DeBary															
2020														(8.9)	(0.0)	(0.0)	-	(0.1)	-	(1.8)	-	-	20.8
2022														(17.9)	(0.0)	(0.0)	-	(0.2)		(2.6)	-	-	41.8
2023														(17.3)	(0.0)	(0.0)	-	(0.1)		(2.6)		-	39.2
2024														(20.7)	(0.0)	(0.0)	(1.7)	(0.1)		(2.5)		-	29.6 24.9
2026														(19.1)	(0.0)	(0.0)	(2.9)	(0.1)		(1.6)		-	15.9
2027														(15.1)	(0.0)	0.0	(3.4)	(0.1)		(1.6)	(6.8)	-	8.2
2028														(20.2)	(0.0)	(0.0)	(4.2)	(0.0)		(1.8)	(4.2)	-	1.6 1.4
2030														(18.8)	(0.0)	(0.0)	(5.6)	(0.0)		(1.9)	(9.3)		(8.8)
2031														(18.2)	0.0	(0.0)	(5.8)	0.0		(1.8)	(8.4)	-	(10.0)
2032														(17.6)	0.0	(0.0)	(5.4)	0.0		(1.5)	(7.7)	-	(11.0)
2034														(16.2)	0.0	0.0	(5.9)	0.1	(0.3)	(1.2)	(12.2)		(17.1)
2035														(15.3)	(0.0)	(0.0)	(6.8)	(0.0)		(0.9)	(15.1)	-	(21.7)
2036														(14.3)	(0.0)	(0.0)	(7.5)	(0.0)		(0.9)	(14.0)	-	(24.9)
2038														(14.4)	(0.0)	(0.0)	(9.1)	(0.0)	(0.4)	(1.3)	(12.0)	-	(24.1)
2039														(13.6)	(0.0)	(0.0)	(9.6)	(0.0)		(0.6)	(11.1)	-	(23.1) (23.1)
2040														(11.7)	-	(0.0)	(9.2)	(0.0)		(1.0)	(9.5)	-	(21.8)
2042														(12.5)	-	(0.0)	(10.2)	(0.0)		(0.9)	(8.7)		(23.7)
2043														(10.7)	(0.0)	(0.0)	(9.6)	(0.0)		(0.4)	(8.1)	-	(20.9)
2044														(11.1)	(0.0)	(0.0)	(10.1)	(0.0)		(0.7)	(6.9)		(22.3)
2046														(10.4)	(0.0)	(0.0)	(9.7)	(0.0)		(0.8)	(6.4)	-	(21.5)
2047														(9.5)	(0.0)	(0.0)	(9.4)	(0.0)		(0.4)	(6.0)	-	(20.2)
2049														(8.5)	(0.0)	(0.0)	(8.9)	(0.0)		(0.6)	(5.1)	-	(18.9)
2050														(8.4)	(0.0)	(0.0)	(9.1)	(0.0)		(0.4)	(4.8)	-	(18.5)
2051	Equipment and							Incremental						(4.1)	(0.0)	(0.0)	(4.8)	(0.0)	(0.2)	0.8	(4.4)	-	(9.9)
	Installation	Equipment	Equipment	Equipment	Equipment	Equipment		FOM															
DV čes	Hamilton,	and	and	and	and	and	Land Lease	Hamilton,	Incremental	Incremental FOM Twin	Incremental	Incremental	Incremental	Fuel	Emissions	Emissions	Emissions	Other	Avaided CO.	Avoided	Avoided	Avoided	Total
PV \$M	Columbia, Trenton, Lake	Installation	Installation	Installation	Installation Charlie	Installation	Rental Payments	Columbia, Trenton,	FOM Santa Fe	Rivers	FOM Duette	FOM Charlie Creek	FOM Sandy Creek	Costs Savings	SO2 Savings	Nox Savings	CO2 Savings	Environmental Savings	Avoided FOM	Variable O&M	Replacement	Capacity Purchases	Savings
	Placid, and	Santa Fe	Twin Rivers	Duette	Creek	Sandy Creek		Lake Placid,						3-									
	DeBary							and DeBary															

	th Carbon Case																						
CPVRR \$N	Equipment and Installation Hamilton,	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020																		-	-		-	-	-
2021														(8.9)	(0.0)	(0.0)		(0.1)	-	(1.8)			20.8
2022														(26.8)	(0.0)	(0.0)		(0.3)	-	(4.4)			62.6
2023														(44.1)	(0.0)	(0.1)		(0.4)	-	(7.0)	-	-	101.8
2024														(64.8)	(0.0)	(0.1)	-	(0.6)	-	(9.5)	-	-	131.4
2025														(83.7)	(0.0)	(0.1)	(1.7)	(0.7)	-	(11.6)	-	-	156.4
2026														(102.7)	(0.0)	(0.2)	(4.6)	(0.8)	-	(13.2)	-	-	172.2
2027														(117.8)	(0.0)	(0.2)	(8.0)	(0.9)	(0.2)	(14.8)	(6.8)		180.4
2028														(138.1)	(0.0)	(0.2)	(12.2)	(0.9)	(0.3)	(16.6)	(11.0)	-	182.0
2029														(154.1)	(0.0)	(0.2)	(16.6)	(0.9)	(0.4)	(18.5)	(16.7)		183.4 174.6
2030 2031														(172.8)	(0.0)	(0.2)	(22.2)	(0.9)	(0.7)	(20.3)	(26.0)	-	164.6
2031														(208.7)	(0.0)	(0.2)	(33.4)	(0.8)	(0.9)	(22.2)	(42.0)		154.8
2032														(224.9)	(0.0)	(0.2)	(38.9)	(0.8)	(1.1)	(26.2)	(49.0)		143.7
2034														(241.1)	(0.0)	(0.2)	(44.8)	(0.7)	(1.7)	(27.4)	(61.2)		126.6
2035														(256.4)	(0.0)	(0.2)	(51.6)	(0.7)	(2.1)	(28.3)	(76.3)		105.0
2036														(270.7)	(0.0)	(0.2)	(59.1)	(0.7)	(2.6)	(29.2)	(90.3)		83.3
2037														(285.7)	(0.0)	(0.2)	(67.4)	(0.7)	(2.9)	(31.4)	(103.3)		58.4
2038														(300.1)	(0.0)	(0.2)	(76.5)	(0.7)	(3.3)	(32.7)	(115.3)		34.3
2039														(313.7)	(0.0)	(0.2)	(86.1)	(0.7)	(3.7)	(33.3)	(126.3)	-	11.3
2040														(326.7)	(0.0)	(0.2)	(95.7)	(0.7)	(4.0)	(34.3)	(136.6)	-	(11.8)
2041														(338.4)	(0.0)	(0.2)	(104.9)	(0.7)	(4.4)	(35.3)	(146.0)	-	(33.6)
2042														(350.9)	(0.0)	(0.2)	(115.1)	(0.7)	(4.7)	(36.2)	(154.7)		(57.3)
2043														(361.6)	(0.0)	(0.2)	(124.7)	(0.7)	(5.0)	(36.5)	(162.8)	-	(78.2)
2044														(372.7)	(0.0)	(0.2)	(134.7)	(0.8)	(5.3)	(37.1)	(170.3)	-	(100.3)
2045														(383.7)	(0.0)	(0.2)	(144.8)	(0.8)	(5.6)	(37.8)	(177.3)		(122.6)
2046														(394.1)	(0.0)	(0.2)	(154.5)	(0.8)	(5.9)	(38.6)	(183.7)	-	(144.1)
2047														(403.6)	(0.0)	(0.2)	(163.9)	(0.8)	(6.1)	(39.0)	(189.7)	-	(164.3)
2048														(413.7)	(0.0)	(0.2)	(174.0)	(0.8)	(6.4)	(39.9)	(195.2)	-	(186.3)
2049														(422.2)	(0.0)	(0.2)	(182.9)	(0.8)	(6.6)	(40.5)	(200.4)		(205.2)
2050 2051														(430.5) (434.6)	(0.0)	(0.2)	(192.0)	(0.8)	(6.9)	(40.9)	(205.2)	-	(223.7)
CPVRR \$N	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe		Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	(0.0) Emissions SO2 Savings	Emissions Nox Savings	(196.8) Emissions CO2 Savings	Other Environmental Savings	(7.1) Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

- 09.Please refer to DEF witness Borch's [sic] direct testimony, Exhibit BMHB-4. For the combined SoBRA projects, please provide the annual and cumulative values over the period 2020-2052 (in nominal and net present value) for each of the following categories: capital, incremental fixed O&M, and other cost(s) for the SoBRA projects, and avoided capital, fixed O&M, capacity purchases, fuel cost, emissions cost (excluding carbon), carbon emissions cost, variable O&M, and other cost(s) for the system as a whole. Please provide the response in electronic (Excel) format
- a. Please explain in detail the assumptions used to determine the value of each of the components evaluated in this analysis.

DeBary

- b. Explain whether DEF's emissions savings include CO2 emissions. If so, provide a sensitivity analysis without those costs and provide the revised annual and cumulative values for each category in electronic format. DEF's emission savings include CO2 emissions savings.

 c. Please provide sensitivity analysis for each of the alternative fuel forecasts (high and low) included in the exhibit, with revised annual and cumulative values for each category in electronic (Excel) format.

Iominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmenta I Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020																							-
2021														(9.5)	(0.0)	(0.0)	-	(0.1)		(1.9)	-	-	22
2022														(20.4)	(0.0)	(0.0)		(0.2)	-	(3.0)	-	-	47
2023														(21.0)	(0.0)	(0.0)	-	(0.2)		(3.2)	-	-	3
2024														(25.3)	(0.0)	(0.1)		(0.2)		(3.0)	-	-	3
2026														(27.4)	(0.0)	(0.0)		(0.2)		(2.8)			2
2027														(23.7)	(0.0)	0.0	-	(0.1)	(0.3)	(2.7)	(10.7)		1
2028														(33.1)	(0.0)	(0.0)	-	(0.1)	(0.2)	(2.6)	(7.1)	-	1
2029														(28.1)	(0.0)	0.0	-	(0.2)		(3.1)	(10.2)	-	1
2030														(35.4)	(0.0)	(0.0)	-	(0.2)		(3.6)	(17.7)	-	
2031														(35.0)	(0.0)	(0.0)		(0.1)	(0.5)	(3.9)	(17.2)	-	
2032														(38.0)	(0.0)	(0.0)		(0.2)	(0.5)	(2.8)	(16.7)	-	(:
2033														(36.2)	(0.0)	(0.0)	-	(0.0)	(0.5)	(4.7)	(16.2)	-	(2
2035														(40.8)	-	(0.0)		(0.0)	(1.1)	(2.4)	(40.1)	-	(3
2036														(39.7)	(0.0)	(0.0)		(0.0)		(2.6)	(39.5)	-	(:
2037														(45.1)	(0.0)	(0.0)	-	(0.0)		(7.3)	(39.0)	-	(5
2038														(47.0)	(0.0)	(0.0)		(0.0)	(1.2)	(4.2)	(38.5)	-	(4
2039														(46.8)	-	(0.0)	-	(0.0)	(1.3)	(2.2)	(37.9)	-	(4
2040														(47.7)	(0.0)	(0.0)	-	(0.0)		(3.2)	(37.4)		(4
2041														(43.9)	-	(0.0)	-	(0.0)		(4.3)	(36.9)	-	(4
2042														(52.2)	-	(0.0)	-	(0.0)		(3.1)	(36.4)	-	(5
2043														(47.4)	-	(0.0)	-	(0.0)		(1.4)	(36.0)	-	(5
2044														(52.6)	(0.0)	(0.0)		(0.0)		(2.5)	(35.5)	-	(5
2045														(55.5)	(0.0)	(0.0)	-	(0.0)		(4.3)	(34.8)	-	(6
2046														(54.6)	- (0.0)	(0.0)		(0.0)		(2.4)	(34.4)	-	(6
2048														(61.5)	(0.0)	(0.0)	-	(0.0)		(5.4)	(34.1)		(7
2049														(55.7)	-	(0.0)	-	(0.0)		(4.2)	(33.7)	-	(6
2050														(58.2)	(0.0)	(0.0)	-	(0.0)	(1.6)	(2.7)	(33.4)		(6
2051														(30.8)	(0.0)	(0.0)	-	(0.0)	(1.7)	6.3	(33.1)		(3:
Iominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmenta I Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Saving

PV \$M	Equipment and Installation, Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipme nt and Installati on Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmenta I Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020																-		-	-		-		-
2021														(8.9)	(0.0)	(0.0)		(0.1)		(1.8)		-	20
2022														(17.9)	(0.0)	(0.0)	-	(0.2)		(2.6)			41
2023														(17.3)	(0.0)	(0.0)		(0.1)		(2.6)			39
2024														(20.7)	(0.0)	(0.0)	-	(0.1)	-	(2.5)		-	29 27
2025														(18.6)	(0.0)	(0.0)		(0.1)	-	(1.9)		-	19
2027														(15.1)	(0.0)	0.0	-	(0.1)	(0.2)	(1.7)			11
2028														(19.7)	(0.0)	(0.0)	-	(0.1)	(0.1)	(1.6)			6
2029														(15.7)	(0.0)	0.0		(0.1)	(0.2)	(1.7)	(5.7)		6
2030														(18.5)	(0.0)	(0.0)	-	(0.1)	(0.2)	(1.9)	(9.3)		(3
2031														(17.1)	(0.0)	(0.0)		(0.1)	(0.2)	(1.9)			(3
2032														(17.4)	(0.0)	(0.0)		(0.1)	(0.2)	(1.3)		-	(4
2033														(15.6)	(0.0)	(0.0)	-	(0.0)	(0.2)	(2.0)		-	(4
2034														(15.7) (15.4)	0.0	(0.0)		(0.0)	(0.3)	(1.4)		-	(11
2035														(14.1)	(0.0)	(0.0)		(0.0)	(0.4)	(0.9)		-	(14
2037														(15.0)	(0.0)	(0.0)	-	(0.0)	(0.4)	(2.4)		-	(14
2038														(14.6)	(0.0)	(0.0)		(0.0)	(0.4)	(1.3)			(15
2039														(13.6)	-	(0.0)		(0.0)	(0.4)	(0.6)		-	(13
2040														(13.0)	(0.0)	(0.0)		(0.0)	(0.4)	(0.9)	(10.2)		(13
2041														(11.2)		(0.0)	-	(0.0)	(0.3)	(1.1)			(12
2042														(12.5)		(0.0)		(0.0)	(0.3)	(0.7)			(13
2043														(10.7)		(0.0)		(0.0)	(0.3)	(0.3)		-	(11
2044														(11.1)	-	(0.0)		(0.0)	(0.3)	(0.5)			(12
2045														(11.0)	(0.0)	(0.0)		(0.0)	(0.3)	(0.7)			(12
2046														(10.3)	(0.0)	(0.0)	- :	(0.0)	(0.3)	(0.8)		-	(1:
2047														(10.0)	(0.0)	(0.0)		(0.0)	(0.3)	(0.4)		-	(11
2049														(8.5)	- (0.0)	(0.0)	-	(0.0)	(0.2)	(0.6)			(10
2050														(8.3)	(0.0)	(0.0)	-	(0.0)	(0.2)	(0.4)			(9
2051														(4.1)	(0.0)	(0.0)		(0.0)	(0.2)	0.8	(4.4)		(5
PV \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipme nt and Installati on Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmenta I Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020																-			-				
2021														(8.9)	(0.0)	(0.0)		(0.1)		(1.8)		-	20.8
2022														(26.8)	(0.0)	(0.0)	-	(0.3)		(4.4)			62.6
2023														(44.1)	(0.0)	(0.1)		(0.4)		(7.0)	-		101.8
2024														(64.8)	(0.0)	(0.1)	-	(0.6)		(9.5)	-		131.4
2025														(83.1)	(0.0)	(0.1)	-	(0.7)		(11.7)	-		158.6
2026														(101.7)	(0.0)	(0.2)	-	(0.8)		(13.5)	-		177.6
2027														(116.8)	(0.0)	(0.1)	-	(0.9)		(15.3)	(6.8)		189.1
2028														(136.5)	(0.0)	(0.2)	-	(0.9)	(0.3)	(16.8)	(11.0)		195.6
2029														(152.1)	(0.0)	(0.2)	-	(1.1)	(0.4)	(18.5)	(16.7)		201.6
2030														(170.7)	(0.0)	(0.2)		(1.2)		(20.4)	(26.0)		198.6
2031														(187.8)	(0.0)	(0.2)		(1.2)		(22.3)	(34.4)		195.3
2032														(205.2)	(0.0)	(0.2)	-	(1.3)		(23.6)	(42.0)		191.0
2033														(220.8)	(0.0)	(0.2)	-	(1.3)		(25.7)	(49.0)		186.6
2034														(236.5)	(0.0)	(0.2)	-	(1.3)		(27.0)	(61.2)		175.7
2035														(251.9)	(0.0)	(0.2)	-	(1.3)		(27.9)	(76.3)		160.7
2036														(266.0)	(0.0)	(0.2)	-	(1.3)		(28.9)	(90.3)		146.7
2037														(281.0)	(0.0)	(0.2)	-	(1.4)		(31.3)	(103.3)		130.0
2038														(295.6)	(0.0)	(0.2)	-	(1.4)		(32.6)	(115.3)		114.8
2039														(309.3)	(0.0)	(0.2)	-	(1.4)		(33.2)	(126.3)		101.3
2040														(322.3)	(0.0)	(0.2)	-	(1.4)		(34.1)	(136.6)	-	87.8 75.6
2041														(333.6)	(0.0)	(0.2)	-	(1.4)		(36.0)	(146.0) (154.7)	-	62.2
2042 2043														(356.8)	(0.0)	(0.2)		(1.4)		(36.3)	(162.8)		51.0
2043														(367.8)	(0.0)	(0.2)	-	(1.4)		(36.8)	(170.3)	-	39.0
2044														(378.8)	(0.0)	(0.2)		(1.4)		(37.5)	(170.3)	- :	26.7
2045														(389.1)	(0.0)	(0.2)	-	(1.4)		(38.3)	(183.7)		15.0
2047														(398.6)	(0.0)	(0.2)		(1.4)		(38.7)	(189.7)	-	4.3
2048														(408.6)	(0.0)	(0.2)	-	(1.4)		(39.6)	(195.2)	-	(7.5
2049														(417.1)	(0.0)	(0.2)		(1.4)		(40.2)	(200.4)		(17.5
2050														(425.4)	(0.0)	(0.2)	-	(1.4)		(40.6)	(205.2)		(26.9
2051														(429.5)	(0.0)	(0.2)	-	(1.4)		(39.8)	(209.6)	-	(31.9
CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

- 09 Please refer to DEF witness Borch's [sic] direct testimony, Exhibit BMHB-4. For the combined SoBRA projects, please provide the annual and cumulative values over the period 2020-2052 (in nominal and net present value) for each of the following categories: capital, incremental fixed O&M, and other cost(s) for the SoBRA projects, and avoided capital, fixed O&M, capacity purchases, fuel cost, emissions cost (excluding carbon), carbon emissions cost, variable O&M, and other cost(s) for the system as a whole. Please provide the response in electronic (Excel) format
- a. Please explain in detail the assumptions used to determine the value of each of the components evaluated in this analysis.
- b. Explain whether DEF's emissions savings include CO2 emissions. If so, provide a sensitivity analysis without those costs and provide the revised annual and cumulative values for each category in electronic format. DEF's emission savings include CO2 emissions savings.

 c. Please provide sensitivity analysis for each of the alternative fuel forecasts (high and low) included in the exhibit, with revised annual and cumulative values for each category in electronic (Excel) format.

High Fuel with	Carbon Case																						
Nominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020 2021														(9.7)	(0.0)	(0.0)	-	(0.1)	-	(2.0)	-	-	21.9
2021														(21.8)	(0.0)	(0.0)		(0.1)	-	(3.0)		-	45.9
2023														(24.1)	(0.0)	(0.0)	-	(0.2)	-	(3.8)	-	-	43.9
2024														(32.7)	(0.0)	(0.0)	-	(0.1)		(3.0)			32.8
2025														(32.8)	(0.0)	(0.0)	(2.5)	(0.2)		(2.8)	-		27.7
2026														(34.8)	(0.0)	(0.0)	(4.2)	(0.2)	-	(2.6)		-	16.6
2027 2028														(31.8)	(0.0)	(0.0)	(6.1)	(0.2)	(0.3)	(2.5)	(10.7)	-	4.0
2029														(36.9)	(0.0)		(9.1)	(0.2)	(0.2)	(3.1)	(10.2)		(7.0
2030														(45.4)	(0.0)	(0.0)	(11.0)	(0.1)	(0.5)	(4.1)	(17.7)		(27.4
2031														(43.8)	(0.0)	(0.0)	(12.2)	(0.1)	(0.5)	(3.9)	(17.2)		(27.0
2032														(49.5)	(0.0)	(0.0)	(16.2)	(0.2)	(0.5)	(2.7)	(16.7)		(37.
2033 2034														(48.1)	(0.0)	(0.0)	(15.2) (15.6)	(0.1)	(0.5)	(4.4)	(16.2)		(37.
2034														(55.9)	(0.0)	(0.0)	(18.3)	(0.0)	(1.1)	(2.4)	(40.1)	- :	(72.9
2036														(54.4)	(0.0)		(21.0)	(0.0)	(1.2)	(2.6)	(39.5)	-	(75.
2037														(60.7)	-	(0.0)	(24.9)	(0.0)	(1.2)	(6.7)	(39.0)		(90.
2038														(64.8)	(0.0)	(0.0)	(29.6)	(0.0)	(1.2)	(4.1)	(38.5)		(95.5
2039														(64.9)	(0.0)	(0.0)	(32.8)	(0.0)	(1.3)	(2.2)	(37.9)		(97. (103.
2040 2041														(66.9) (65.2)	(0.0)	(0.0)	(35.1)	(0.0)	(1.3)	(2.9)	(37.4)	-	(103.
2042														(74.1)	-	(0.0)	(42.4)	(0.0)	(1.3)	(3.4)	(36.4)	-	(120.
2043														(69.4)	(0.0)	(0.0)	(42.7)	(0.0)	(1.4)	(2.0)	(36.0)		(115.
2044														(74.8)	-	(0.0)	(47.4)	(0.0)	(1.4)	(2.5)	(35.5)		(126.
2045														(78.9)	(0.0)	(0.0)	(51.1)	(0.0)	(1.5)	(3.5)	(35.1)	-	(136.
2046 2047														(80.3)	(0.0)	(0.0)	(52.3) (54.1)	(0.0)	(1.5)	(4.1)	(34.8)	-	(140.
2047														(91.2)	(0.0)	(0.0)	(62.3)	(0.0)	(1.6)	(5.4)	(34.1)		(164.4
2049														(82.4)	(0.0)	(0.0)	(58.4)	(0.0)	(1.6)	(3.8)	(33.7)		(150.
2050														(87.4)	(0.0)	(0.0)	(63.6)	(0.0)	(1.6)	(2.7)	(33.4)	-	(158.4
2051														(46.4)	(0.0)	(0.0)	(35.8)	(0.0)	(1.7)	5.9	(33.1)	-	(89.5
Nominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

h Fuel wit	Equipment and							Incremental															
PV \$M	Installation Hamilton, Columbia, Trenton, Lake Placid, and	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	FOM Hamilton, Columbia, Trenton, Lake Placid,	Increment al FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
	DeBary							and DeBary															
2020														(9.0)	(0.0)	(0.0)	-	(0.1)	-	(1.9)	-	-	20
021														(19.2)	(0.0)	(0.0)		(0.1)		(2.7)	-		41
2023														(19.9)	(0.0)	(0.0)	-	(0.1)	-	(3.1)	-	-	36
2024														(25.2)	(0.0)	(0.0)	-	(0.1)	-	(2.3)	-		2!
1025														(23.7)	(0.0)	(0.0)	(1.8)	(0.2)	-	(2.0)	-		20
026														(23.6)	(0.0)	(0.0)	(2.8)	(0.1)	-	(1.8)	-		11
027														(20.2)	(0.0)	0.0	(3.9)	(0.1)	(0.2)	(1.6)			
2028														(24.6)	(0.0)	(0.0)	(4.8)	(0.1)	(0.1)	(1.6)			(:
029														(20.6)	(0.0)	0.0	(5.1)	(0.1)	(0.2)	(1.7)	(5.7)		(
2030														(23.7)	(0.0)	(0.0)	(5.7)	(0.0)	(0.2)	(2.2)	(9.3)	-	(1
2031														(21.5)	(0.0)	(0.0)	(6.0)	(0.1)	(0.2)	(1.9)		-	(1
1032														(20.7)	(0.0)	(0.0)	(6.6)	(0.1)	(0.2)	(1.2)	(7.7)		(1
2033														(21.8)	0.0	(0.0)	(6.3)	0.0	(0.2)	(1.1)	(12.2)		(2:
2035														(21.1)	(0.0)	(0.0)	(6.9)	(0.0)	(0.4)	(0.9)	(15.1)	-	(27
2036														(19.3)	(0.0)	(0.0)	(7.5)	(0.0)	(0.4)	(0.9)	(14.0)	-	(26
037														(20.2)	-	(0.0)	(8.3)	(0.0)	(0.4)	(2.2)	(12.9)		(30
1038														(20.2)	(0.0)	(0.0)	(9.2)	(0.0)	(0.4)	(1.3)	(12.0)		(29
039														(18.9)	(0.0)	(0.0)	(9.6)	(0.0)	(0.4)	(0.6)	(11.1)		(28
040														(18.3)	(0.0)	(0.0)	(9.6)	(0.0)	(0.4)	(0.8)	(10.2)		(28
2041														(16.7)		(0.0)	(9.3)	(0.0)	(0.3)	(0.8)	(9.5)		(26
042														(17.8)	- (0.0)	(0.0)	(10.2)	(0.0)	(0.3)	(0.8)	(8.7)	-	(28
043														(15.6)	(0.0)	(0.0)	(9.6)	(0.0)	(0.3)	(0.4)	(8.1)	-	(25
044														(15.8)	(0.0)	(0.0)	(10.0)	(0.0)	(0.3)	(0.5)	(6.9)		(2)
2045														(14.9)	(0.0)	(0.0)	(9.7)	(0.0)	(0.3)	(0.7)	(6.4)		(2)
2047														(14.0)	(0.0)	(0.0)	(9.4)	(0.0)	(0.3)	(0.4)	(6.0)	-	(24
2048														(14.8)	(0.0)	(0.0)	(10.1)	(0.0)	(0.3)	(0.9)	(5.5)		(2)
2049														(12.6)	(0.0)	(0.0)	(8.9)	(0.0)	(0.2)	(0.6)	(5.1)		(2:
2050														(12.5)	(0.0)	(0.0)	(9.1)	(0.0)	(0.2)	(0.4)	(4.8)		(22
2051														(6.2)	(0.0)	(0.0)	(4.8)	(0.0)	(0.2)	0.8	(4.4)		(12
PV \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid,	Increment al FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Saving

High Fuel wit	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020														-	-	-	-			-		-	-
2021														(9.0)	(0.0)	(0.0)	-	(0.1)	-	(1.9)		-	20.6
2022														(28.2)	(0.0)	(0.0)	-	(0.4)	-	(4.5)		-	60.9
2023 2024														(48.1)	(0.0)	(0.1)	-	(0.5)		(7.7)		-	97.0 122.4
2024														(97.1)	(0.0)	(0.1)	(1.8)	(0.8)	<u> </u>	(10.0)			142.4
2025														(120.7)	(0.0)	(0.1)	(4.7)	(0.8)		(13.8)			153.6
2027														(140.9)	(0.0)	(0.1)	(8.5)	(1.0)	(0.2)	(15.4)	(6.8)	-	156.2
2028														(165.4)	(0.0)	(0.2)	(13.3)	(1.1)	(0.3)	(16.9)	(11.0)		153.0
2029														(186.1)	(0.0)	(0.2)	(18.4)	(1.2)	(0.4)	(18.6)	(16.7)	-	149.1
2030														(209.8)	(0.0)	(0.2)	(24.1)	(1.3)	(0.7)	(20.8)	(26.0)	-	134.8
2031														(231.3)	(0.0)	(0.2)	(30.1)	(1.3)	(0.9)	(22.7)	(34.4)		121.3
2032														(254.0)	(0.0)	(0.2)	(37.6)	(1.4)	(1.1)	(23.9)	(42.0)	-	104.3
2033														(274.7)	(0.0)	(0.2)	(44.1)	(1.5)	(1.4)	(25.8)	(49.0)	-	88.4
2034														(296.5)	(0.0)	(0.2)	(50.4)	(1.4)	(1.7)	(26.9)	(61.2)	-	65.3
2035														(317.6)	(0.0)	(0.2)	(57.3)	(1.4)	(2.1)	(27.9)	(76.3)	-	37.7
2036														(336.9)	(0.0)	(0.2)	(64.8) (73.0)	(1.4)	(2.6)	(28.8)	(90.3)	-	11.1
2037														(377.3)	(0.0)	(0.2)	(82.2)	(1.4)	(3.3)	(32.3)	(115.3)	-	(48.8
2039														(396.2)	(0.0)	(0.2)	(91.8)	(1.5)	(3.7)	(32.9)	(126.3)		(77.2
2040														(414.5)	(0.0)	(0.2)	(101.4)	(1.5)	(4.0)	(33.7)	(136.6)	-	(105.5
2041														(431.2)	(0.0)	(0.2)	(110.7)	(1.5)	(4.4)	(34.5)	(146.0)		(132.1
2042														(449.0)	(0.0)	(0.2)	(120.8)	(1.5)	(4.7)	(35.3)	(154.7)	-	(161.0
2043														(464.6)	(0.0)	(0.2)	(130.5)	(1.5)	(5.0)	(35.8)	(162.8)		(186.9
2044														(480.4)	(0.0)	(0.2)	(140.4)	(1.5)	(5.3)	(36.3)	(170.3)	-	(213.6
2045														(496.0)	(0.0)	(0.2)	(150.5)	(1.5)	(5.6)	(37.0)	(177.3)		(240.6
2046														(510.9)	(0.0)	(0.2)	(160.2)	(1.5)	(5.9)	(37.8)	(183.7)	-	(266.6
2047														(524.9)	(0.0)	(0.2)	(169.6)	(1.5)	(6.1)	(38.1)	(189.7)	-	(291.1
2048														(539.7)	(0.0)	(0.2)	(179.8)	(1.5)	(6.4)	(39.0)	(195.2)	-	(317.9
2049 2050														(552.3) (564.8)	(0.0)	(0.2)	(188.7)	(1.5)	(6.6)	(39.6)	(200.4)	-	(340.9
2050														(564.8)	(0.0)	(0.2)	(202.6)	(1.5)	(7.1)	(39.2)	(205.2)	- :	(375.5)
CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid,	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek				Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

- 09. Please refer to DEF witness Borch's [sic] direct testimony, Exhibit BMHB-4. For the combined SoBRA projects, please provide the annual and cumulative values over the period 2020-2052 (in nominal and net present value) for each of the following categories: capital, incremental fixed O&M, and other cost(s) for the SoBRA projects, and avoided capital, fixed O&M, capacity purchases, fuel cost, emissions cost (excluding carbon), carbon emissions cost, variable O&M, and other cost(s) for the system as a whole. Please provide the response in electronic (Excel) format
- a. Please explain in detail the assumptions used to determine the value of each of the components evaluated in this analysis.

Installatio

Duette

Twin Rivers

Installation

Charlie Creek

Installatio

Sandy Creek

Columbia,

renton, Lake

Placid, and

DeBary

Santa Fe

b. Explain whether DEF's emissions savings include CO2 emissions. If so, provide a sensitivity analysis without those costs and provide the revised annual and cumulative values for each category in electronic format. DEF's emission savings include CO2 emissions savings.

Rental

Columbia,

Placid, and

DeBary

c. Please provide sensitivity analysis for each of the alternative fuel forecasts (high and low) included in the exhibit, with revised annual and cumulative values for each category in electronic (Excel) format.

ominal \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020														-			-	-	-	-			-
2021														(9.6)	(0.0)	(0.0)	-	(0.1)	-	(1.9)	-	-	22
2022														(20.4)	(0.0)	(0.0)		(0.2)	-	(3.0)	-	-	47
2023														(21.0)	(0.0)	(0.0)	-	(0.2)	-	(3.2)	-		47
2024														(26.8)	(0.0)	(0.1)	-	(0.1)	-	(3.1)	-	-	38
2025														(25.7)	(0.0)	(0.0)		(0.1)	-	(2.6)	-	-	3
026														(26.8)	(0.0)	(0.0)	(4.0)	(0.1)	-	(2.6)	-	-	2
027														(22.0)	0.0	0.0		0.0	(0.3)	(2.5)	(10.7)	-	1
028														(31.5)	0.0	(0.0)		0.1	(0.2)	(3.2)	(7.1)	-	
029														(26.3)	0.0	0.0		0.0	(0.3)	(2.8)	(10.2)	-	
030														(32.1)	0.0	(0.0)		0.1	(0.5)	(3.6)	(17.7)	-	(:
31														(32.6)	(0.0)	(0.0)		(0.0)	(0.5)	(4.0)	(17.2)	-	(
32														(31.7)	0.0	0.0		0.1	(0.5)	(3.5)	(16.7)	-	(2
33														(31.5)	0.0	(0.0)	(14.0)	0.1	(0.5)	(6.7)	(16.2)	-	(2
034														(33.3)	0.0	(0.0)		0.1	(0.9)	(2.7)	(30.2)	-	(3
035														(34.5)	(0.0)	(0.0)		(0.0)	(1.1)	(2.3)	(40.1)	-	(5
036														(33.2)	(0.0)	(0.0)	(21.2)	(0.0)	(1.2)	(2.4)	(39.5)	-	(5
037														(37.2)	(0.0)	(0.0)		(0.0)	(1.2)	(6.6)	(39.0)	-	(6
38														(38.1)	(0.0)	(0.0)		(0.0)	(1.2)	(4.4)	(38.5)	-	(6
039														(37.8)	(0.0)	(0.0)		(0.0)	(1.3)	(1.9)	(37.9)	-	(6
040														(38.3)	-	(0.0)		(0.0)	(1.3)	(3.6)	(37.4)	-	(7
041														(36.8)	-	(0.0)		(0.0)	(1.3)	(3.6)	(36.9)	-	(7
042														(41.8)	-	(0.0)	(42.5)	(0.0)	(1.3)	(3.7)	(36.4)	-	3)
043														(37.1)	(0.0)	(0.0)		(0.0)	(1.4)	(1.6)	(36.0)	-	(8
044														(41.8)	-	(0.0)		(0.0)	(1.4)	(2.9)	(35.5)	-	(9
045														(43.6)	-	(0.0)	(50.9)	(0.0)	(1.5)	(3.5)	(35.1)	-	(10
046														(43.7)	(0.0)	(0.0)		(0.0)	(1.5)	(4.2)	(34.8)	-	(10
047														(42.7)	-	(0.0)		(0.0)	(1.5)	(2.6)	(34.4)	-	(10
2048														(47.6)	(0.0)	(0.0)	(62.3)	(0.0)	(1.6)	(5.3)	(34.1)	-	(12
049														(41.8)	(0.0)	(0.0)		(0.0)	(1.6)	(3.9)	(33.7)	-	(11
050														(44.0)	(0.0)	(0.0)		(0.0)	(1.6)	(2.8)	(33.4)		(11
2051														(22.7)	-	(0.0)	(35.8)	(0.0)	(1.7)	6.0	(33.1)	-	(6
	Equipment and Installation Hamilton,	Equipment and	Equipment	Equipment	Equipment	Equipment	Land Lease	Incremental FOM Hamilton,	Incremental	Incremental	Incremental	Incremental	Incremental	Fuel Costs	Emissions 503	Emissions Nox	Emissions CO3	Other	Avoided	Avoided	Avoided	Avoided	Total

FOM Twin

FOM Santa Fe

FOM Charlie

FOM Duette

FOM Sandy

Savings

Savings

Savings

Variable Replacement

FOM

Savings

Capacity

ow Fuel wit	h Carbon Case																						
PV \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020														- (0.0)	- (0.0)	- (0.0)	-	-		- (- 0)	-		20.
2021														(9.0) (17.9)	(0.0)		-	(0.1)	-	(1.8)		-	41.
2022														(17.3)	(0.0)		-	(0.2)		(2.6)		-	39.
2024														(20.7)	(0.0)			(0.1)	-	(2.4)	-		29.
2025														(18.6)	(0.0)		(1.7)	(0.1)		(1.9)	-		25.
2026														(18.2)	(0.0)		(2.7)	(0.1)		(1.8)	-	-	16.
2027														(14.0)	0.0	0.0	(3.1)	0.0	(0.2)	(1.6)	(6.8)	-	9.
2028														(18.7)	0.0		(4.1)	0.0	(0.1)	(1.9)	(4.2)		3.
2029														(14.7)	0.0			0.0	(0.2)	(1.5)	(5.7)		3.
2030														(16.8)	0.0		(4.9)	0.1	(0.2)	(1.9)	(9.3)	-	(6.
2031														(16.0)	(0.0)		(6.2)	(0.0)	(0.2)	(1.9)	(8.4)		(8
2032														(14.6)	0.0		(5.2)	0.1	(0.2)	(1.6)	(7.7)	-	(6.
2033														(13.6)	0.0		(6.0) (6.3)	0.0	(0.2)	(2.9)	(7.0)	-	(9.
2035														(13.4)	(0.0)		(6.9)	(0.0)	(0.4)	(0.9)	(15.1)	-	(19.
2036														(11.8)	(0.0)		(7.5)	(0.0)	(0.4)	(0.8)	(14.0)		(19.
2037														(12.4)	(0.0)		(8.3)	(0.0)	(0.4)	(2.2)	(12.9)	-	(22.
2038														(11.8)	(0.0)		(9.2)	(0.0)	(0.4)	(1.4)	(12.0)		(21.
2039														(11.0)	(0.0)	(0.0)	(9.5)	(0.0)	(0.4)	(0.6)	(11.1)		(20.
2040														(10.5)	-	(0.0)	(9.6)	(0.0)	(0.4)	(1.0)	(10.2)	-	(20.
2041														(9.4)		(0.0)	(9.2)	(0.0)	(0.3)	(0.9)	(9.5)	-	(19.
2042														(10.0)	-	(0.0)	(10.2)	(0.0)	(0.3)	(0.9)	(8.7)	-	(21.
2043														(8.4)	(0.0)		(9.6)	(0.0)	(0.3)	(0.3)	(8.1)		(18.
2044														(8.8)		(0.0)	(10.0)	(0.0)	(0.3)	(0.6)	(7.5)	-	(19.
2045														(8.6)	(0.0)	(0.0)	(10.1)	(0.0)	(0.3)	(0.7)	(6.9)	-	(19.
2046														(7.4)	(0.0)	(0.0)	(9.7)	(0.0)	(0.3)	(0.8)	(6.0)	-	(19.
2047														(7.4)	(0.0)		(10.1)	(0.0)	(0.3)	(0.4)	(5.5)	-	(19.
2049														(6.4)	(0.0)		(8.9)	(0.0)	(0.2)	(0.6)	(5.1)		(16.
2050														(6.3)	(0.0)		(9.1)	(0.0)	(0.2)	(0.4)	(4.8)	-	(16.
2051														(3.0)	-	(0.0)	(4.8)	(0.0)	(0.2)	0.8	(4.4)		(8.
PV \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	Emissions SO2 Savings	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings

Low Fuel with	h Carbon Case																						
CPVRR \$M	Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Equipment and Installation Santa Fe	Equipment and Installation Twin Rivers	Equipment and Installation Duette	Equipment and Installation Charlie Creek	Equipment and Installation Sandy Creek	Land Lease Rental Payments	Incremental FOM Hamilton, Columbia, Trenton, Lake Placid, and DeBary	Incremental FOM Santa Fe	Incremental FOM Twin Rivers	Incremental FOM Duette	Incremental FOM Charlie Creek	Incremental FOM Sandy Creek	Fuel Costs Savings	SO2	Emissions Nox Savings	Emissions CO2 Savings	Other Environmental Savings	Avoided FOM	Avoided Variable O&M	Avoided Replacement Costs	Avoided Capacity Purchases	Total Savings
2020														-	-	-	-	-	-	-			-
2021														(9.0)	(0.0)	(0.0)		(0.1)		(1.8)			20.7
2022														(26.9)	(0.0)	(0.0)	-	(0.3)	-	(4.4)	-	-	62.5
2023														(44.2)	(0.0)	(0.1)	-	(0.4)	-	(7.0)	-	-	101.7
2024														(64.8)	(0.0)	(0.1)	-	(0.6)	-	(9.3)	-	-	131.6
2025														(83.4)	(0.0)	(0.1)	(1.7)	(0.6)	-	(11.2)	-	-	157.
2026														(101.6)	(0.0)	(0.2)		(0.7)	-	(13.0)	-		173.
2027														(115.6)	(0.0)	(0.2)	(7.6)	(0.7)	(0.2)	(14.6)	(6.8)	-	183.
2028														(134.3)	(0.0)	(0.2)		(0.7)	(0.3)	(16.4)	(11.0)	-	186.
2029														(149.0)	(0.0)	(0.2)	(16.0)	(0.7)	(0.4)	(18.0)	(16.7)	-	189.
2030														(165.8)	(0.0)	(0.2)		(0.6)	(0.7)	(19.9)	(26.0)	-	183.
2031														(181.8)	(0.0)	(0.2)		(0.6)	(0.9)	(21.8)	(34.4)	-	175.
2032														(196.3)	(0.0)	(0.2)	(32.4)	(0.6)	(1.1)	(23.5)	(42.0)		168
2033														(209.9)	(0.0)	(0.2)	(38.4)	(0.5)	(1.4)	(26.3)	(49.0)		159
2034														(223.3)	(0.0)	(0.2)	(44.7)	(0.5)	(1.7)	(27.4)	(61.2)		144.
2035														(236.4)	(0.0)	(0.2)	(51.6)	(0.5)	(2.1)	(28.3)	(76.3)		125.
2036														(248.1)	(0.0)	(0.2)	(59.1)	(0.5)	(2.6)	(29.1)	(90.3)	-	106.
2037														(260.5)	(0.0)	(0.2)	(67.4)	(0.5)	(2.9)	(32.7)	(103.3)	-	83. 62.
2038														(283.4)	(0.0)	(0.2)	(86.1)	(0.5)	(3.7)	(33.2)	(126.3)	-	41.
2039 2040														(283.4)	(0.0)	(0.2)	(95.7)	(0.5)	(4.0)	(34.2)	(126.3)	-	21.
2040														(303.3)	(0.0)	(0.2)	(104.9)	(0.5)	(4.4)	(35.1)	(146.0)	-	1.5
2041														(313.3)	(0.0)	(0.2)		(0.5)	(4.7)	(36.0)	(154.7)	-	(19.
2042														(321.6)	(0.0)	(0.2)		(0.5)	(5.0)	(36.4)	(162.8)	-	(37.
2043														(330.4)	(0.0)	(0.2)	(134.8)	(0.5)	(5.3)	(37.0)	(170.3)		(57.
2044														(339.1)	(0.0)	(0.2)	(144.8)	(0.6)	(5.6)	(37.0)	(177.3)	-	(77.
2045														(347.2)	(0.0)	(0.2)	(154.5)	(0.6)	(5.9)	(38.4)	(183.7)	-	(96.
2047														(354.6)	(0.0)	(0.2)	(163.9)	(0.6)	(6.1)	(38.9)	(189.7)		(115.
2048														(362.3)	(0.0)	(0.2)		(0.6)	(6.4)	(39.8)	(195.2)		(134.
2049														(368.7)	(0.0)	(0.2)	(182.9)	(0.6)	(6.6)	(40.4)	(200.4)		(151.
2050														(375.0)	(0.0)	(0.2)	(192.0)	(0.6)	(6.9)	(40.8)	(205.2)		(167.
2051														(378.0)	(0.0)	(0.2)	(196.8)	(0.6)	(7.1)	(40.0)	(209.6)		(176.
CPVRR \$M	Equipment and Installation Hamilton, Columbia,	Equipment and Installation	Equipment and Installation	and	Equipment and Installation	Equipment and Installation	Land Lease Rental	Incremental FOM Hamilton, Columbia,	Incremental FOM Santa Fe	Incremental FOM Twin	Incremental FOM Duette	Incremental FOM Charlie	Incremental FOM Sandy	Fuel Costs	SO2	Emissions Nox	CO2	Other Environmental	Avoided FOM	Avoided Variable	Avoided Replacement	Avoided Capacity	Total Saving
	Trenton, Lake Placid, and DeBary	Santa Fe	Twin Rivers	Duette	Charlie Creek	Sandy Creek	Payments	Trenton, Lake Placid, and DeBary		Rivers		Creek	Creek	Savings	Savings	Savings	Savings	Savings		O&M	Costs	Purchases	

10. Please refer to DEF witness Borch's direct testimony, Exhibit BMHB-4. Please complete the table below providing the annual list of unit additions, retirements, and uprates/dowrates used to determine the proposed savings for each scenario, with and without the proposed SoBRA projects.

ear	SoBra Tranche 3 without the proposed Solar Projects	Firm Summer Rating MWs	Year	SoBra Tranche 3 with the proposed Solar Projects	Firm Summe Rating MWs
Ī	Columbia Solar 74.9MW Addition (Mar '20)	43		Columbia Solar 74.9MW Addition (Mar '20)	43
20	Debary Solar 74.5MW Addition (May '20)	34	2020	Debary Solar 74.5MW Addition (May '20)	34
_	Avon Park 1-2 Retirement (Sep '20)	(48)	\vdash	Avon Park 1-2 Retirement (Sep '20)	(48)
	Southern UPS Contract Expires - Franklin (May '21)	(424)		Santa Fe Solar 74.9MW Addition (Jan '21)	43
				Twin Rivers Solar 74.9MW Addition (Jan '21)	43
21			2021	Southern UPS Contract Expires - Franklin (May '21)	(424)
				Duette Solar 74.5MW Addition (Dec '21)	42
				Charlie Creek 74.9MW Addition (Dec '21)	43
-			2022	Sandy Creek Solar 56.6MW Addition (Dec '21)	32
22	Orlando Contract Expires (Dec '23)	(115)	2022	Orlando Contract Expires (Dec '23)	(115
24	Shady Hills Contract Expires (Apr '24)	(480)	2023	Shady Hills Contract Expires (Apr '24)	(480
,,,,	Osprey Transmission Upgrade (May '24) *	337	2024	Osprey Transmission Upgrade (May '24) *	337
	Mulberry Contract Expires (Aug '24)	(115)	2024	Mulberry Contract Expires (Aug '24)	(115
25	Bayboro 1-4 Retirement (Nov '25)	(171)	\vdash	Bayboro 1-4 Retirement (Nov '25)	(171)
,,23	Orange Contract Expires (Dec '25)	(104)	2025	Orange Contract Expires (Dec '25)	(104)
26	Orange Contract Expires (Dec 23)	(104)	2026	Orange Contract Expires (Dec 23)	(104
-	Debary 2-6 Retirement (May '27)	(249)	2020	Debary 2-6 Retirement (May '27)	(249
	Bartow 1 and 3 Retirement (May '27)	(82)		Bartow 1 and 3 Retirement (May '27)	(82)
27	Vandolah Contract Expires (May '27)	(640)	2027	Vandolah Contract Expires (May '27)	(640)
	3 CTs Addition (June '27)	677		2 CTs Addition (June '27)	452
	UF Retirement (Oct '27)	(44)		UF Retirement (Oct '27)	(44)
28	or resilient (ost 21)	(,	2028	CT Addition (Jun '28)	226
29	CT Addition (Jun '29)	226	2029	,	
L	CT Capacity CC Capacity Number of CTs	205 226 1,277 16	(CT Capacity CC Capacity Number of CTs	182 22 1,27
ŀ	CC Capacity	226 1,277	1	CC Capacity	1,27
	CC Capacity Number of CTs	226 1,277 16	1	CC Capacity Number of CTs	1,2
-	CC Capacity Number of CTs Number of CCs	226 1,277 16 2) 1 7	CC Capacity Number of CTs Number of CCs	1,2

6,243

Total MWs

Total MWs

6,220

GROUND LEASE AGREEMENT

Site No.:	
Land Unit No.:	
Project No.:	

Summary of Ground Lease Agreement Terms:

This section provides a summary of the general business terms. In the event of any discrepancy, the

terms and conditions in the attached Ground Lease	Agreement shall prevail. All capitalized terms shall have
the same meaning as set forth in the attached Grour	
Effective Date: February 21, 2019.	
Landlord: Crews Groves Inc.	
Tenant: Duke Energy Florida, LLC d/b/a Duke Energy	1
<u>Summary Description of Land</u> : _Hardee County, Florid 0000- 02430-0000, 01-33-26-0000-05920-0000, and 01	da, parcel numbers: 06-33-27-0000-10020-0000, 07-33-27-1-33-26-0000-02500-0000.
<u>Term of Lease</u> : The term of this Lease shall commence time on the date that is twenty-five (25) years after the	on the Commencement Date and shall end at 11:59 P.M. local Commencement Date.
Commencement Date: The Commencement Date of the 2(a) of the Lease).	Term is the Commercial Operation Date (as defined in Section
Number and Length of Optional Renewal Term(s): Thr	ree (3) optional Renewal Terms of five (5) years each.
after the Effective Date. Tenant shall pay Landlord the	uests extension of the Initial Due Diligence Period for one (1)
	ences upon the Construction Commencement Date (as defined Commercial Operation Date (which is the same date as the andlord the sum of
Rent: During the Term, Tenant shall pay Landlord re of the Land (prorated for fractional acres)	
Rent Increase: Commencing on the first annual anniversor one year annual anniversary date thereafter, the annual	rsary date of the Commencement Date and on each subsequent Rent shall increase by
Addresses:	
Landlord:	Tenant:
Crews Groves Inc. P.O Box 1669 Avon Park, FL 33826	Duke Energy Florida, LLC c/o Jones Lang LaSalle Americas, Inc. 550 South Tryon Street

Mail Code: DEC22A Charlotte, NC 28202

governmental authorities having jurisdiction and the applicable electrical transmission provider for the Solar Generating Facility; and (iii) the Solar Generating Facility begins delivering electricity to the electrical grid. Once the Commencement Date is ascertained, the parties agree to execute a memorandum or other writing confirming the Commencement Date.

- (b) <u>Renewal Terms.</u> Tenant shall have the right to extend the initial Term granted herein for up to three (3) additional terms of five (5) years each (each a "<u>Renewal Term</u>" and collectively, the "<u>Renewal Terms</u>") by providing Landlord with written notice of Tenant's desire to extend the Term for the applicable Renewal Term prior to the Expiration Date (or prior to the expiration of the preceding Renewal Term, as applicable).
- 3. Due Diligence Period; Construction Period; and Landlord's Rights Before Construction Commencement Date.
- Due Diligence Period. Commencing on the Effective Date and continuing for a period of two (2) years after the Effective Date (the "Initial Due Diligence Period), Tenant shall have the right to enter the Premises to perform its due diligence, inspection, investigation and preconstruction activities to determine if the Premises is suitable for leasing by Tenant, the Intended Use, and obtaining permits and approvals for the Intended Use. Tenant shall pay Landlord the sum of for the first year of the Initial Due Diligence Period. Prior to the end of the first year of the Initial Due Diligence Period Tenant may notify Landlord in writing of any portion of the Land it has determined will not be leased and developed for the Intended Use. Tenant shall pay to Landlord of Land that is still under consideration during the second year of the Initial Due Diligence Period. Payments for the first and second year of the Initial Due Diligence Period shall be made in two (2) equal installments, with the first (1st) installment payable on January 1st of each year, and the second (2nd) installment payable on July 1st of each year. Tenant may extend the Initial Due Diligence Period for one (1) additional year commencing after the expiration date of the Initial Due Diligence Period (the "Extended Due Diligence Period"), by delivering written notice to Landlord prior to the expiration date of the Initial Due Diligence Period and paying Landlord the sum of (The Initial Due Diligence Period and Extended Due Diligence Period are collectively referred to herein as the "Due
- (b) <u>Construction Period.</u> The <u>"Construction Period"</u> shall commence upon the Construction Commencement Date (as hereinafter defined) and expire upon the Commercial Operation Date (which is the same date as the Commencement Date of the Term of this Lease).

 Tenant shall pay Landlord the sum of during the Construction Period. The "<u>Construction Commencement Date</u>" shall be the earlier of (i) the date Tenant issues written to Landlord advising Landlord of Tenant's intent to begin construction activities at the Premises, (ii) the date specified in Tenant's written notice to Landlord after which Landlord (or any other party claiming, by, through or under Landlord) may no longer plant or harvest crops on the Premises (the <u>"Interim Crop Notice Date"</u>), or (iii) the date Tenant commences the construction or installation of the Solar Generation Facility at the Premises; provided however, the Construction Commencement Date shall not be deemed to have occurred by virtue of any testing conducted by Tenant on the Land, minimal site clearing to support such testing, or by virtue of Tenant installing access routes or roads on the Land. To be effective for any calendar year, Tenant must deliver any written notice to Landlord specifying the Interim Crop Notice Date

Diligence Period").

otherwise feasible. Landlord, at no cost to Landlord, agrees to sign any applications or other documents (that require signature by the fee owner of the Premises), and to take all such other actions, as are reasonably required to allow Tenant to, at Tenant's expense, obtain any re-zonings, variances, permits or other approvals required by Tenant for the Intended Use. If Tenant is unable to satisfy the Contingencies to Tenant's satisfaction prior to the expiration date of the Due Diligence Period, or if Tenant otherwise determines that Tenant's leasing of the Premises is not feasible or desirable for any reason whatsoever, Tenant may terminate this Lease by giving written notice to Landlord prior to the expiration date of the Due Diligence Period. In addition, the Tenant's right to terminate this Lease pursuant to this Section 4(a) shall expire on the Construction Commencement Date and is further subject to the conditions specified in Section 9 of this Lease. If Tenant terminates this Lease prior to the expiration date of the Due Diligence Period and the Construction Commencement Date pursuant to this Section 4(a), no payment by Tenant for the Construction Period as set forth in Section 3(b) of this Lease and no rent as set forth in Section 5 of this Lease shall be due or payable to Landlord hereunder.

(b) <u>Due Diligence, Inspections, Title and Survey</u>. After the Effective Date, Tenant and its employees, agents, contractors, and authorized representations shall be entitled to enter the Premises and conduct, at Tenant's expense, inspections, investigations, studies, surveys, borings, sampling, and testing of the Premises as Tenant deems necessary or desirable to determine if the Premises is suitable for Tenant's Intended Use (the "<u>Due Diligence Work</u>"). Within sixty (60) days after the Commencement Date, Tenant shall obtain a survey of the Premises (the "<u>Survey</u>"). The Survey's legal description shall be deemed to be the legal description of the Land for all purposes under this Lease (including determining the amount of rent payable during the Term). After the Commencement Date, Tenant may, at Tenant's expense, conduct the necessary survey(s) and submit the required filings to the local governmental authority having jurisdiction to subdivide the parcel(s) of Land comprising the Premises so that the Premises are contained within one or more tax parcels separate from other adjacent property owned by the Landlord.

5. Rent.

(a) Rent During Term. Commencing on the Commencement Date, Tenant shall pay Landlord annual rent during the Term in the sum of

of Land located within the Premises (prorated for any fractional acres), as evidenced and determined by the Survey. As used herein, "<u>Usable Acre</u>" shall mean the gross acreage of the Land including shade buffers, less any acreage located within public road right of way, wetlands, jurisdictional streams, NCDEQ-required stream buffers, watersheds, endangered species habitat, sites of protected cultural resources and/or flood plains, as determined by the Survey. Rent shall be payable on a semiannual basis, with the first (1st) rent installment payable within thirty (30) days after the Commencement Date, the second (2nd) rent installment being due on the date that is six (6) months after the Commencement Date, and subsequent payments of rent being due every six (6) months thereafter.

(b) Rent Increase. Commencing on the first (1st) annual anniversary date of the Commencement Date, and on each one annual anniversary date of the Commencement Date thereafter (including any such anniversary dates occurring during any exercised Renewal Term), the annual rent payable hereunder shall increase over the annual rent payable for the prior year by

- (c) Rent Payments. The payment of rent for any fractional calendar year during the Term shall be prorated. The Tenant shall receive a credit against the initial installment(s) of rent due pursuant to Section 5(a) in an amount that is the-portion paid by Tenant during the Construction Period during the semiannual period in which Tenant previously made payment pursuant to Section 3(b) of this Lease. If Tenant fails to pay any installment of rent to Landlord by the date that the same is due hereunder, and such failure continues for a period of (15) days after Landlord provides Tenant with written notice of such failure to pay, Tenant will pay a late fee to the Landlord in the amount of
- 6. <u>Utilities, Maintenance and Repairs</u>. Tenant shall pay for all utilities used at the Premises by Tenant. Tenant, at Tenant's cost, shall be responsible for the repair and maintenance of the Solar Generating Facility and Tenant's improvements on the Premises.

7. Alterations.

- Tenant may, at its expense, make any alterations, additions, improvements and (a) changes to the Premises as it may deem necessary or desirable in the operation of its business or Solar Generating Facility, without the consent of Landlord, including without limitation any fencing, security devices and or signage desired by Tenant. Any alteration, addition, improvement or change conducted by Tenant shall be done in compliance with applicable laws and requirements of governmental agencies having jurisdiction. Landlord, at no cost to Landlord, agrees to sign any permit applications and to take all such other actions as are reasonably required to allow Tenant to accomplish any such alterations, additions, improvements and changes to the Premises. The Solar Generating Facility and any and all improvements constructed on the Premises by or for Tenant, and all machinery, fixtures, trade fixtures, equipment, and other personal property installed or placed in the Premises by or for Tenant, shall, regardless of the manner of attachment to the Premises or the improvements thereon, be and at all times remain the property of Tenant, and shall be removable by it at any time and from time to time during the Term and at the expiration or earlier termination of this Lease. In the event that Tenant removes any trees, crops or other vegetation from the Premises during the Term, Tenant may sell and/or dispose of the same, and any revenues derived by Tenant from the sale of the same shall belong to Tenant.
- (b) Within thirty (30) days after the Tenant notifies Landlord that the Construction Commencement Date has occurred, Landlord shall, at Landlord's sole cost and expense, remove and dispose of all of the following from the Premises:
- 8. <u>Use and Occupancy</u>. Tenant shall be entitled to use the Premises for the Intended Use. Tenant agrees that no unlawful use of the Premises will be made. Landlord shall deliver sole and exclusive possession of the Premises to the Tenant on the Construction Commencement Date.

9. Lease Termination and Surrender of Land.

(a) <u>Termination Rights</u>. Tenant shall have the right to terminate this Lease as of the date that is thirty-six (36) months <u>after</u> the Commencement Date (the "<u>Termination Date</u>") by providing Landlord with written notice of such termination on or before the date that is thirty (30) days prior to the Termination Date. Rent shall be prorated as of the Termination Date. Additionally, Tenant shall have the right to terminate this Lease in the event that its power purchase

agreement, or other agreement, under which Tenant provides power generated at the Premises to a third party, is terminated for any reason whatsoever (other than a termination due to a default by Tenant under such agreement). Upon a termination of this Lease by Tenant permitted hereunder, this Lease shall terminate and become null and void, and Tenant shall have no further obligations hereunder.

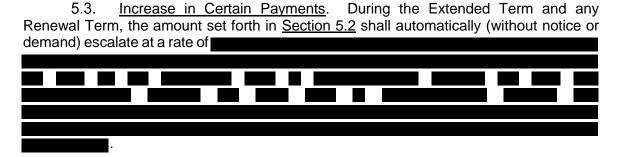
- (b) Surrender of Land. Upon the expiration or earlier termination of this Lease, Tenant shall (i) return the Land to Landlord in substantially the same condition the same were in as of the Construction Commencement Date, to the extent practicable and reasonable wear and tear excepted; and if applicable, (ii) decommission and remove Tenant's Solar Generating Facility and all improvements and equipment constructed or installed by Tenant on the Land. Notwithstanding the foregoing, in no event shall Tenant have any obligation to replace any crops or other vegetation damaged or removed by Tenant during the Term.
- 10. **Insurance**. Tenant may, after the Solar Generating Facility and its improvements are completed, keep such improvements insured against loss or damage by fire, windstorm, earthquake and similar hazards. Each party hereto shall keep in force, at its sole cost and expense, comprehensive commercial general liability insurance, with a combined single limit of not less than per occurrence and insuring such party, and the other party hereto as additional insured, against liability arising out of the use, occupancy or ownership of the Premises. Any provisions herein to the contrary notwithstanding, Landlord and Tenant mutually agree that, in respect to any loss which is covered by insurance then being carried by them respectively (or which would have been covered had such party maintained the insurance required hereunder), the one carrying such insurance and suffering said loss hereby releases the other of and from any and all claims with respect to such loss, and waives any rights of subrogation which might accrue to the carrier of such insurance. Notwithstanding the foregoing, Tenant may self-insure (either by use of deductibles or self-insured retention) the coverage required of Tenant hereunder and Tenant may satisfy its insurance obligations hereunder through a "blanket" policy or policies covering other properties or liabilities of Tenant. Within ten (10) days after the Effective Date, the parties shall provide each other with a Certificate of Insurance (or evidence of self-insurance, as applicable), evidencing the coverages required by this Section 10.
- 11. **Taxes.** Tenant shall be solely responsible for any ad valorem property taxes that are assessed against either the Premises or Tenant's personal property for periods falling within the Term. Landlord and Tenant shall apportion taxes appropriately between the parties for any partial tax years falling within the Term. Tenant shall also be responsible for any deferred property taxes ("Deferred Taxes") due on the Premises as a result of Tenant's use of the Premises for the Intended Use to the extent required by applicable Florida laws. However, in the event that Tenant's use of the Premises for the Intended Use triggers the obligation to pay any Deferred Taxes, or any other taxes, assessments, penalties, fees or interest, on any other property owned by Landlord (other than the Premises), Landlord shall be solely responsible for paying the same. In the event that the Premises is a part of a larger tax parcel owned by Landlord, and Deferred Taxes become payable on the entire tax parcel as a result of Tenant's use of the Premises for the Intended Use, the Deferred Taxes shall be equitably apportioned as to Landlord and Tenant in a pro-rata manner such that Tenant is responsible only for such costs as they relate to the Premises and Landlord is responsible for the remainder. During the Term, Tenant, at its cost, shall have the right, at any time, to seek a reduction in the assessed valuation of the Premises or to contest any taxes that are assessed against

For purposes of this Lease, if the Extended Term Commencement Date does not fall on January 1st, the first year of the Extended Term shall be the remainder of the calendar year in which Lessee exercises the Lease Extension Option (with Rent and all other annual payments being prorated during such partial year to include prorated credit for Development Term Rent for the remainder of such partial year) and the first full calendar year thereafter (with Rent and all other annual payments being made for such first full calendar year of the Extended Term and every year thereafter as provided in Section 5.2 below). If Lessee so requests, the Parties shall promptly execute and record a supplemental memorandum of this Lease setting forth the expiration date of the Extended Term, and to the extent Lessee has exercised the Lease Extension Option with respect to less than all of the Property, then, upon the expiration of the Development Term, Lessee shall release from this Lease any such portions of the Property not constituting the Extended Term Property. Notwithstanding Section 2, Lessee shall not be permitted to commence construction of any Solar Energy System on any portion of the Property (other than meteorological and solar and radiation measurement, monitoring and recording equipment and facilities) unless and until Lessee has exercised the Lease Extension Option with respect to such portion of the Property. Lessee shall have the right to renew the Lease (as to the Extended Term Property) for two (2) additional five (5) year periods (the "Renewal Term") on the same terms and conditions as this Lease.

- 5. **Payments.** Lessee shall pay or tender the following amounts to Lessor (collectively, the "*Rent*"):

 - 5.2. Extended Term Rent. If Lessee exercises the Lease Extension Option with respect to all or any portion of the Property, then for each calendar year during the Extended Term and any Renewal Term (if any) until this Lease expires or is earlier terminated, Lessee shall pay to Lessor the greater of (the "Extended Term Rent"): (i) an annual amount equal to the total acreage of the Extended Term Property multiplied by and multiplied by and multiplied by The Extended Term Rent will be increased on an annual basis pursuant to Section 5.3 below.
 - 5.2.1. The per-acre amount set forth above shall be calculated and paid annually in advance, and shall be due and payable within fifteen (15) days after the first day of the applicable calendar year. The first payment of Extended Term Rent shall be paid within thirty (30) days after the Extended Term Commencement Date. Any Extended Term Rent that is payable for less than a full calendar year shall be prorated by Lessee on the basis of a 365-day year. If any Development Term Rent is prepaid for any part of the Extended Term, then

Lessee may credit a prorated portion of said Development Term Rent against any Extended Term Rent then or thereafter due to Lessor hereunder, as determined by Lessee.



5.4. Reimbursement for Damage.

- 5.4.1. Except as provided in <u>Section 2.4</u>, if any of Lessor's Structures or improvements existing as of the Effective Date are materially damaged or destroyed as a result of Solar Operations, then Lessee shall promptly repair or replace such Structures or improvements.
- 5.4.2. The "Option Exercise Date" means the date on which Lessee exercises the Lease Extension Option. If the Option Exercise Date occurs prior to the planting of any agricultural products ("Agricultural Products"), Lessee shall not be liable for the destruction or loss of any Agricultural Products planted on the Property. If the Option Exercise Date occurs after the Agricultural Products have been planted, Lessee shall pay to Lessor the Full Value (defined below) of any such Agricultural Products actually planted. Lessor agrees to accept input from Lessee and to cooperate and coordinate with Lessee in determining the areas of the Property in which Agricultural Products will be planted in order to limit the amount of damages under this Section 5.4. For the purposes of this Lease, the "Full Value" means an amount equal to the revenue that the Lessor would have received on the open market for said Agricultural Products during the planting season in which such Agricultural Products were removed from the Property. The Full Value shall be determined based upon (a) the amount of acreage affected, (b) the average yield per acre of the Agricultural Products actually planted as of the Option Exercise Date, and (c) the market price received for that particular type of Agricultural Product during such planting season. Should Lessee disagree with the calculation of the amount determined by Lessor, then Lessor and Lessee shall cooperate in good faith to determine the amount of any payment in consultation with the local Farm Service Agency to obtain the average yield per acre and market value of any particular Agricultural Products during such planting season. Any costs or expenses related to such determination will be paid by Lessee. Notwithstanding the foregoing, Lessee will not be obligated to reimburse Lessor the Full Value of the Agricultural Products, unless such Agricultural Products were planted at least sixty (60) days prior to the removal of such Agricultural Products
- 5.5. Reimbursement for CRP Losses. If Lessor is a party to a Conservation Reserve Program ("*CRP*") contract with the U.S. Department of Agriculture (the "*USDA*"), Lessor shall provide Lessee with a copy of such CRP contract, together with all amendments and modifications thereto; and if applicable, Lessee shall reimburse Lessor

out-of-pocket costs of establishing and maintaining the Planting Work (the "**Planting Costs**"). Lessor agrees to keep Lessee reasonably informed during establishment of the Planting Plan.

- 5.8.3. Once Lessor has established the Planting Plan it will submit such Planting Plan (including the Planting Costs) to the Lessee for approval, such approval not to be unreasonably withheld, conditioned, or delayed. After Lessee has approved the Planting Plan, Lessor shall begin the Planting Work in accordance with the terms of the Planting Plan.
- 5.8.4. Lessee agrees that it will reimburse Lessor for the Planting Costs pursuant to a schedule that will be established in the Planting Plan, but in any event such reimbursement payments shall not occur more frequently than one (1) payment per calendar month.
- 5.8.5. Notwithstanding the foregoing, in the event Lessor fails to establish the Planting Plan or carry out the Planting Work in accordance therewith, Lessee reserves the right to perform the Planting Work on its own behalf. In the event Lessee performs the Planting Work it shall reserve the right to withhold the reasonable costs of completing the Planting Work from the next due payment(s) of Additional Development Term Rent (as defined below), Development Term Rent, or Extended Term Rent (at Lessee's sole discretion).

6. Covenants By Lessee.

- 6.1. <u>No Construction Liens</u>. Lessee shall keep the Property free and clear of all liens and claims of lien for labor and materials resulting from its Solar Operations; provided, however, that Lessee shall have the right to contest any such liens and claims by legal proceedings, which may be brought in the name(s) of Lessor and/or Lessee where appropriate or required. Lessor shall in all respects cooperate with Lessee in such contest, and shall be reimbursed for such cooperation as provided in <u>Section 7.3</u>.
- 6.2. <u>Lessee's Obligation to Pay Taxes</u>. Lessee shall pay when due all real and personal property taxes and assessments levied against the Property. Lessee shall also be responsible for any increase in real or personal property taxes levied against the Property during the term of this Lease as a direct result of Lessee's Solar Operations on the Property. However, Lessee shall not be liable for taxes or assessments attributable to improvements or facilities installed by Lessor or others on the Property, which taxes and assessments shall be paid by Lessor. Lessee and Lessor shall use their best efforts to cause the Property to be taxed separately as provided in this Section. Lessee shall have the right to contest by legal proceedings (which may be brought in the name(s) of Lessor and/or Lessee where appropriate or required), the validity or amount of any taxes or assessments for which it is responsible hereunder. Lessor shall in all respects cooperate with Lessee in such contest, and shall be reimbursed for such cooperation as provided in <u>Section 7.3</u>.
- 6.3. <u>Lessee's Obligation to Carry Insurance</u>. Prior to commencing Solar Operations on the Property, Lessee shall obtain, and thereafter keep in force during the term of this Lease, (a) a policy of commercial general liability insurance covering property damage and liability for personal injury or death on or about the Property, with limits in the amount of per occurrence and in the aggregate and

- (b) an umbrella or excess liability policy in the amount of provided, however, that such coverage may be provided as part of a blanket policy that also covers other properties. Lessee shall cause Lessor to be named as an additional insured in such policies and Lessee shall deliver a certificate of such insurance to Lessor. Notwithstanding the foregoing, Lessee may self-insure (either by use of deductibles or self-insured retention) the coverage required of Lessee hereunder and Lessee may satisfy its insurance obligations hereunder through a "blanket" policy or policies covering other properties or liabilities of Lessee.
- 6.4. Lessee's Obligation To Restore the Property. Lessee shall do the following with respect to any portions of the Property disturbed by Lessee in the course of Solar Operations: (a) within six (6) months after completion of construction of Lessee's solar project, Lessee shall restore such portions of the Property to a condition reasonably similar to its condition as of the Effective Date, except for any parts of the Property that Lessee determines it needs for continuing Solar Operations and (b) within twelve (12) months after the expiration, surrender or termination of this Lease, Lessee shall (i) remove from such portions of the Property any Solar Energy System owned or installed by Lessee thereon and (ii) restore such portions of the Property to a condition reasonably similar to its condition as of the Effective Date, including without limitation, exercising commercially reasonable efforts to de-compact any substantially compacted soil and, if applicable, reseed disturbed soil with seed consistent with grass types in the vicinity of the Property. Lessee shall have a continuing easement to enter the Property for such purpose during such twelve (12) month period.
- 6.5. <u>Lessee's Obligation to Comply with Law.</u> Lessee shall comply in all material respects with all laws, statutes, ordinances, regulations, decrees, orders and decisions of or issued by any governmental authority that are applicable to Lessee's Solar Operations on the Property ("*Law*" or "*Laws*"). Lessee shall have the right to contest by legal proceedings (which may be brought in the name(s) of Lessor and/or Lessee where appropriate or required), the validity or applicability of any such Law. Lessor shall in all respects cooperate with Lessee in such contest, and shall be reimbursed for such cooperation as provided in <u>Section 7.3</u>.
- 6.6. <u>Hazardous Materials</u>. Without limiting the generality of <u>Section 6.5</u>, in conducting its Solar Operations on the Property, Lessee shall comply in all material respects with any Law (each, an "*Environmental Law*") governing the generation, manufacture, production, use, storage, release, discharge, transportation or presence of any substance, material or waste which is now or hereafter classified by any such Law as hazardous or toxic (each, a "*Hazardous Material*"). Further, Lessee shall promptly clean up, remove or take other legally-authorized remedial action as required by Environmental Law with regard to any contamination or damage to soil or ground water on or in the Property caused by any Hazardous Material brought onto the Property by Lessee, and for which clean up, removal or remedial action is required pursuant to Environmental Law.
- 6.7. <u>Indemnification of Lessor</u>. Lessee shall indemnify, defend and hold harmless Lessor against claims, liability, losses, damages, costs and expenses (collectively, "*Liability*") arising out of (a) physical damage to property and physical injuries or death to Lessor, Lessor's property or the public, (b) the presence or release of Hazardous Materials in, under, on or about the Property, or (c) the violation of any Environmental Law; in each case only to the extent proximately caused by Lessee's Solar Operations on the Property, and except to the extent such Liability is caused or contributed

Exhibit C

DUKE ENERGY FLORIDAConfidentiality Justification Matrix

DOCUMENT/RESPONSES	PAGE/LINE	JUSTIFICATION
DEF's Response to Staff's First Data Request (Nos. 1-15)	Question 5: The information after "a budget of" and before "for this land" is confidential. The information after "require much space" to the end of the paragraph is confidential in its entirety.	§366.093(3)(d), F.S. The document in question contains confidential information, the disclosure of which would impair DEF's efforts to contract for goods or services on favorable terms.
	Question 7: The information after "Twin Rivers project is" and before "at" is confidential. The information after "at" and before "The net present" is confidential. The information after "life is" and before "the annual" is confidential. The information after "Charlie Creek Project is" and before "at" is confidential. The information after "at" and before "The net present" is confidential. The information after "useful life is" and before "The annual lease" is confidential. The information after " estimated to be" and before "at" is confidential. The information after "at" and before "the final lease" is confidential. The information after "seful life is" to the end of the sentence is confidential.	§366.093(3)(e), F.S. The document in question contains confidential information relating to competitive business interests, the disclosure of which would impair the competitive business of the provider/owner of the information.
	Responsive Documents to Question 9: Bates No.	
	20200245-STAFF1DR- 000001: All information in the	

table titled, "Mid Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000002: All information in the table titled, "Mid Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000003: All information in the table titled, "Mid Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000005: All information in the table titled, "Mid Fuel no Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000006: All information in the table titled, "Mid Fuel no Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000007: All information in the table titled, "Mid Fuel no Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000008: All information in the table titled, "High Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000009: All information in the table titled, "High Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000010: All information in the table titled, "High Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000011: All information in the table titled, "Low Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000012: All information in the table titled, "Low Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000013: All information in the table titled, "Low Fuel with Carbon Case," under the column titled, "Equipment and Installation Hamilton, Columbia, Trenton, Lake Placid, and DeBary" to the column titled, "Incremental FOM Sandy Creek" is confidential in its entirety.

Responsive Documents to Question 10: Bates No. 20200245-STAFF1DR-000014: All the information under both rows titled, "2029" is confidential in its entirety.

Responsive Documents to Question 14: Bates No. 20200245-STAFF1DR-000018: The information after "the sum of" and before "for each year" is confidential.

Bates No. 20200245-STAFF1DR-000018: The information after "an additional" and before "nonrefundable option" is confidential.

Bates No. 20200245-STAFF1DR-000018: The information after "sum of" to the end of the sentence is confidential. Bates No. 20200245-STAFF1DR-000018: The information after "Landlord the sum of" and before "for each 12" is confidential.

Bates No. 20200245-STAFF1DR-000018: The information after "the sum of" and before "of the land" is confidential.

Bates No. 20200245-STAFF1DR-000018: The information after "shall increase by" to the end of the sentence is confidential.

Bates No. 20200245-STAFF1DR-000020: The information after "the sum of" and before "for the first" is confidential.

Bates No. 20200245-STAFF1DR-000020: The information after "the sum of" and before "of Land that" is confidential.

Bates No. 20200245-STAFF1DR-000020: The information after "the sum of" and before "The Initial Due" is confidential.

Bates No. 20200245-STAFF1DR-000020: The information after "the sum of" and before "During the Construction" is confidential.

Bates No. 20200245-STAFF1DR-000022: The information after "the sum of" and before "located within the" is confidential.

Bates No. 20200245-STAFF1DR-000022: The information after "prior year by" to the end of the sentence is confidential.

Bates No. 20200245-STAFF1DR-000023: The information after "the amount of" and before "of such unpaid" is confidential.

Bates No. 20200245-STAFF1DR-000024: The information after "not less than" and before "per occurrence and" is confidential.

Bates No. 20200245-STAFF1DR-000024: The information after "per occurrence and" and before "aggregate, the use" is confidential.

Bates No. 20200245-STAFF1DR-000040: The information after "the amount of" and before "the second biannual" is confidential.

Bates No. 20200245-STAFF1DR-000040: The information after "bi-annual installment of" and before "being due on" is confidential.

Bates No. 20200245-STAFF1DR-000040: The information after "Rent shall be" and before "For Any Development" is confidential. Bates No. 20200245-STAFF1DR-000040: The information after "Property multiplied by" and before "and multiplied by" is confidential.

Bates No. 20200245-STAFF1DR-000040: The information after "and multiplied by" and before "for the remaining" is confidential.

Bates No. 20200245-STAFF1DR-000040: The information after "acreage, or (ii)" and before "The Extended Term" is confidential.

Bates No. 20200245-STAFF1DR-000041: The information after "at a rate of" to the end of the paragraph is confidential in its entirety.

Bates No. 20200245-STAFF1DR-000043: The information after "the amount of" and before "per occurrence and" is confidential.

Bates No. 20200245-STAFF1DR-000044: The information after "the amount of" and before "provided, however, that" is confidential.

Exhibit D AFFIDAVIT OF MATTHEW G. STOUT

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for a Limited Proceeding to Approve Third Solar Base Rate Adjustment

by Duke Energy Florida, LLC

Docket No. 20200245-EI

Filed: January 26, 2021

AFFIDAVIT OF MATTHEW G. STOUT IN SUPPORT OF DUKE ENERGY FLORIDA'S REQUEST FOR CONFIDENTIAL CLASSIFICATION

STATE OF VERMONT

COUNTY OF WINDSOR

BEFORE ME, the undersigned authority duly authorized to administer oaths, personally appeared Matthew G. Stout, who being first duly sworn, on oath deposes and says that:

1. My name is Matthew G. Stout. I am over the age of 18 years old and I have been authorized by Duke Energy Florida, LLC (hereinafter "DEF" or the "Company") to give this affidavit in the above-styled proceeding on DEF's behalf and in support of DEF's Request for Confidential Classification (the "Request"). The facts attested to in my affidavit are based upon my personal knowledge.

- 2. I am the Managing Director of Business Development for Wind and Solar Development within the RGD Business Development Department. This department is responsible for the development of new solar facilities for DEF.
- 3. As the Managing Director of Business Development for Wind and Solar Development, I am responsible, along with the other members of the department, for conducting solar development activities including project siting, land acquisition, resource assessment,

permitting, obtaining interconnection rights, project layout and design, and arranging contracts for engineering, procurement and construction, as well as originating, structuring, and executing transactions to acquire rights to existing solar development projects.

- 4. DEF is seeking confidential classification for information contained in its Response to Staff's First Data Request (Nos. 1-15), specifically the responses to questions 5 and 7 and responsive documents to question 14, submitted on January 5, 2021.
- 5. DEF is seeking confidential classification for certain information provided to Staff in its response to question number 5, as it contains confidential proprietary business information relating to budgeted information, the disclosure of which would impair the efforts of the Company or its to negotiate contracts on favorable terms. Additionally, DEF is seeking confidential classification for certain information provided to Staff in its response to question 7 and responsive documents to question 14, as it contains confidential proprietary business information relating to contractual terms, costs and information with counterparties. If such information was disclosed to other counterparties, it could provide valuable insight into prices that DEF may be willing to pay in certain circumstances, thereby materially harming DEF's ability to negotiate competitive contracts in the future. DEF's efforts to obtain competitive contracts that provide economic value to both DEF and its customers could be compromised. Without DEF's measures to maintain the confidentiality of contractual terms, the Company's efforts to obtain competitive contracts could be undermined.
- 6. The confidential information at issue is contained in confidential Exhibit A attached to this Request and is outlined in DEF's Justification Matrix that is attached as Exhibit C. DEF is requesting confidential classification of this information because the disclosure of that information to the public would adversely impact DEF's competitive business interests and

would harm its competitive business interest and ability to contract for goods or services on favorable terms.

7. Upon receipt of confidential information from counterparties, and with its own confidential information, strict procedures are established and followed to maintain the confidentiality of the terms of the documents and information provided, including restricting access to those persons who need the information to assist the Company, and restricting the number of and access to the information and contracts. At no time since receiving the information in question has the Company publicly disclosed that information. The Company and counterparties have treated and continues to treat the information at issue as confidential.

and counterparties have treated and contin	ides to treat the information at issue as confidential.
8. This concludes my affidav	it.
Further affiant sayeth not.	
Dated the day of, 2021.	
	Matthew G. Stout Managing Director of Business Development for Wind and Solar Development RGD Business Development Department Duke Energy 400 South Tryon Charlotte, North Carolina 28202
	s sworn to and subscribed before me this day of driver tification.
	(Signature)
(AFFIX NOTARIAL SEAL)	(Printed Name) NOTARY PUBLIC, STATE OF VERMONT
	(Commission Expiration Date)

(Serial Number, If Any)

Exhibit D AFFIDAVIT OF Benjamin M. H. Borsch

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for a Limited Proceeding to Approve Third Solar Base Rate Adjustment

by Duke Energy Florida, LLC

Docket No. 20200245-EI

Filed: January 26, 2021

AFFIDAVIT OF BENJAMIN M. H. BORSCH IN SUPPORT OF DUKE ENERGY FLORIDA, LLC'S REQUEST FOR CONFIDENTIAL CLASSIFICATION

STATE OF FLORIDA

COUNTY OF PINELLAS

BEFORE ME, the undersigned authority duly authorized to administer oaths, personally appeared Benjamin M. H. Borsch, who being first duly sworn, on oath deposes and says that:

1. My name is Benjamin M. H. Borsch. I am over the age of 18 years old and I have been authorized by Duke Energy Florida (hereinafter "DEF" or the "Company") to give this affidavit in the above-styled proceeding on DEF's behalf and in support of DEF's Request for Confidential Classification (the "Request"). The facts attested to in my affidavit are based upon my personal knowledge.

2. I am the Director of IRP & Analytics in DEF's Florida Customer Delivery organization and direct the resource planning process in an integrated approach in order to find the most cost-effective alternatives to meet the Company's obligation to serve its customers in Florida. I also oversee the completion of the Company's Ten-Year Site Plan ("TYSP") filed each April.

- 3. DEF is seeking confidential classification for information contained in its Response to Staff's First Data Request (Nos. 1-15), specifically the responsive documents to questions 9 and 10, submitted on January 5, 2021.
- 4. DEF is seeking confidential classification for certain information provided to Staff in its responsive documents to question 9, as it contains confidential proprietary business information relating to contractual costs in capital leases with counterparties, the disclosure of which would violate the contractual obligation between DEF and counterparties that DEF is obligated to keep confidential and would harm its competitive business interest and ability to contract for goods or services on favorable terms. If such information was disclosed to DEF's competitors, DEF's efforts to obtain competitive contracts that add economic value to both DEF and its customers could be undermined.
- 5. Additionally, DEF is seeking confidential classification for certain information provided to Staff in its responsive documents to question 10, as it contains confidential proprietary business information related to unit retirements, the disclosure of which would harm DEF's competitive business interests, to the detriment of DEF's customers, if it were disclosed to the public.
- 6. The confidential information at issue is contained in confidential Exhibit A attached to this Request and is outlined in DEF's Justification Matrix that is attached as Exhibit C. DEF is requesting confidential classification of this information because the disclosure of that information to the public would adversely impact DEF's competitive business interests and would harm its competitive business interest and ability to contract for goods or services on favorable terms.
 - 7. Strict procedures are established and followed to maintain the confidentiality of

the Company's confidential business information relating to DEF's budgeted information and contractual information with counterparties, which includes restricting access to those persons who need the information to assist the Company, and restricting the number of, and access to the information. At no time since receiving the information in question has the Company publicly disclosed that information. The Company and counterparties have treated and continues to treat the information at issue as confidential.

continues to treat the information at issue a	as confidential.
8. This concludes my affidavit	t.
Further affiant sayeth not.	
Dated the day of, 2021.	
	(Signature) Benjamin M. H. Borsch Director of IRP & Analytics Florida Customer Delivery Organization Duke Energy 299 1st Avenue North St. Petersburg, FL 33701
	sworn to and subscribed before me this day of ly known to me or has produced his as identification.
	(Signature)
(AFFIX NOTARIAL SEAL)	(Printed Name) NOTARY PUBLIC, STATE OF FLORIDA
	(Commission Expiration Date)
	(Serial Number, If Any)