1		BEFORE THE	
2	FLORIDA	A PUBLIC SERVICE COMMISSION	
3		FILED 4/11/2019 DOCUMENT NO. 03652-2019	
		FPSC - COMMISSION CLERK	
4	In the Matter of:		
5		DOCKET NO. 20180149-EI	
6	PETITION FOR A LIN PROCEEDING TO APPR		
	SOLAR BASE RATE ADJUSTMENT, BY DUKE ENERGY FLORIDA, LLC.		
7			
8		/	
9			
		VOLUME 1	
10		PAGES 1 through 121	
11			
12	PROCEEDINGS: COMMISSIONERS	HEARING	
13	PARTICIPATING:	CHAIRMAN ART GRAHAM COMMISSIONER JULIE I. BROWN	
14		COMMISSIONER DONALD J. POLMANN	
15		COMMISSIONER GARY F. CLARK COMMISSIONER ANDREW GILES FAY	
		COMMISSIONER ANDREW GILLS PAI	
16	DATE:	Tuesday, April 2, 2019	
17	TIME:	Commenced: 10:55 a.m. Concluded: 3:35 p.m.	
18			
19	PLACE:	Betty Easley Conference Center Room 148	
		4075 Esplanade Way	
20		Tallahassee, Florida	
21	REPORTED BY:	ANDREA KOMARIDIS	
22		Court Reporter	
23		PREMIER REPORTING	
43		114 W. 5TH AVENUE	
24		TALLAHASSEE, FLORIDA (850) 894-0828	
25		(030) 094 0020	

1 APPEARANCES:

- DIANNE M. TRIPLETT, ESQUIRE, 299 First Avenue
- 3 North, St. Petersburg, Florida 33701; and MATTHEW R.
- 4 BERNIER, ESQUIRE, 106 East College Avenue, Suite 800,
- 5 Tallahassee, Florida 32301-7740, appearing on behalf of
- 6 Duke Energy Florida, LLC.
- J.R. KELLY, PUBLIC COUNSEL; CHARLES REHWINKEL,
- 8 DEPUTY PUBLIC COUNSEL; Office of Public Counsel, c/o the
- 9 Florida Legislature, 111 W. Madison Street, Room 812,
- 10 Tallahassee, Florida 32399-1400, appearing on behalf of
- 11 the Citizens of the State of Florida.
- JON C. MOYLE, JR., ESQUIRE, Moyle Law Firm,
- 13 P.A., 118 North Gadsden Street, Tallahassee, Florida
- 14 32301, appearing on behalf of Florida Industrial Power
- 15 Users Group.
- 16 JAMES W. BREW, ESOUIRES, Stone Matheis
- 17 Xenopoulos & Brew PC, 1025 Thomas Jefferson Street, NW,
- 18 Eighth Floor, West Tower, Washington, DC 20007,
- 19 appearing on behalf of PCS Phosphate White Springs.
- JENNIFER CRAWFORD, ESQUIRE, FPSC General
- 21 Counsel's Office, 2540 Shumard Oak Boulevard,
- 22 Tallahassee, Florida 32399-0850, appearing on behalf of
- 23 the Florida Public Service Commission Staff.

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1
    APPEARANCES (Continued):
 2
               KEITH HETRICK GENERAL COUNSEL; MARY ANNE
 3
    HELTON, DEPUTY GENERAL COUNSEL, Florida Public Service
 4
    Commission, 2540 Shumard Oak Boulevard, Tallahassee,
5
    Florida 32399-0850, advisers to the Florida Public
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    Service Commission.
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1	PROCEEDINGS
2	CHAIRMAN GRAHAM: Good morning, once again.
3	THE AUDIENCE: Morning.
4	CHAIRMAN GRAHAM: Let the record show that it
5	is still Tuesday, April the 2nd, and this is the
6	SoBRA hearing, Docket No. 20180149-EI. So, we will
7	convene this hearing.
8	And staff, if I could get you to read the
9	notice, please.
10	MS. CRAWFORD: Certainly. Commissioners, by
11	notice, this time and place has been set for a
12	hearing in Docket 20180149-EI. The purpose of the
13	hearing is set forth more fully in the notice.
14	CHAIRMAN GRAHAM: Okay. Let's take
15	appearances.
16	MS. TRIPLETT: Good morning. Dianne Triplett
17	and Matt Bernier on behalf of Duke Energy Florida.
18	MR. MOYLE: Good morning. Jon Moyle on behalf
19	of the Florida Industrial Power Users Group, FIPUG.
20	MR. BREW: Good morning. James Brew for PCS
21	Phosphate.
22	MR. REHWINKEL: Good morning, Commissioners.
23	Charles Rehwinkel and J.R. Kelly with the Office of
24	Public Counsel on behalf of Duke's customers.
25	MS. CRAWFORD: Jennifer Crawford for staff.

1	MS. HELTON: Mary Anne Helton. I'm here as
2	your adviser, along with Keith Hetrick, your
3	general counsel.
4	CHAIRMAN GRAHAM: All right. Again,
5	everybody, welcome.
6	Preliminary matters. Staff, any preliminary
7	matters we need to address?
8	MS. CRAWFORD: Yes, sir, I'd note that the
9	parties in each Commissioner's office have
10	indicated that there were no questions for Duke
11	Witness Olivier and, therefore, that witness has
12	been excused from the hearing. Her prefiled
13	testimony and exhibits will be entered into the
14	record at the appropriate time during the witness-
15	testimony portion of the hearing.
16	Staff is aware of no further preliminary
17	matters at this time.
18	CHAIRMAN GRAHAM: Do any of the parties have
19	any preliminary matters?
20	Mr. Rehwinkel.
21	MR. REHWINKEL: Yes, Mr. Chairman. I have
22	passed out all of the non-confidential exhibits
23	that I have. I have three potential confidential
24	exhibits that I will pass out only if needed and at
25	that time.

1	There is one exhibit that I withheld passing	
2	out until I talk with Counsel for Duke because it	
3	was, as I thought, inadvertently marked	
4	confidential. And the company has confirmed that	
5	it should not have been marked confidential. It is	
6	part of a larger confidential a larger document	
7	that was, in the first part of it, appropriately	
8	confidential.	
9	I have given that document to staff, but	
10	before I had it passed out, I wanted to confirm on	
11	the record it's a it's an exhibit entitled	
12	I believe it's "Columbia memorandum of lease"	
13	that it is not confidential.	
14	And at the appropriate time, staff can hand	
15	that out, but I tried to do pass these out in	
16	advance to streamline these things.	
17	CHAIRMAN GRAHAM: Ms. Triplett, do you confirm	
18	that?	
19	MS. TRIPLETT: Yes, sir, I confirm. And after	
20	the hearing, we will make a modification to our	
21	pending confidentiality request to reflect that	
22	this document was inadvertently marked as	
23	confidential.	
24	CHAIRMAN GRAHAM: Okay. Staff, is there	
25	anything else that we need to do with that?	

1	MS. CRAWFORD: That sounds good to us, sir.
2	CHAIRMAN GRAHAM: Okay. Any other preliminary
3	matters?
4	All right. Exhibits, staff.
5	MS. CRAWFORD: So, staff has prepared a
6	comprehensive exhibit list. It consists of the
7	prefiled exhibits attached to each wit each
8	witness' testimony, as well as the number of
9	exhibits identified by staff consisting of
10	discovery responses. And the list has been
11	provided to the parties, the Commissioners, and,
12	hopefully, the court reporter as well.
13	And at this time, staff would request that
14	that comprehensive exhibit list be marked as
15	Exhibit 1 for the hearing.
16	CHAIRMAN GRAHAM: We will mark that
17	comprehensive comprehensive exhibit list as
18	No. 1.
19	(Whereupon, Exhibit No. 1 was marked for
20	identification.)
21	MS. CRAWFORD: And then we would ask that the
22	other exhibits that are marked on that list be
23	identified and marked as indicated on the list.
24	CHAIRMAN GRAHAM: If there's no objection, we
25	will do that as well.

1	(Whereupon, Exhibit Nos. 2 through 20 were
2	marked for identification.)
3	MS. CRAWFORD: Okay. The parties have
4	indicated that they do not object to the admission
5	of the staff exhibits. Those are marked as
6	number as Nos. 15 through 20 on Exhibit No. 1.
7	And with that, staff would request that
8	Exhibits 1 and 15 through 20 be entered into the
9	record at this time.
10	CHAIRMAN GRAHAM: Still seeing no objections
11	we will enter 1 and 15 through 20 into the record.
12	(Whereupon, Exhibit Nos. 1 and 15 through 20
13	were admitted into the record.
14	CHAIRMAN GRAHAM: All right. Opening
15	statements. Each party will have five minutes.
16	And we will start with Duke.
17	MS. TRIPLETT: Thank you. And I don't need
18	anywhere close to five minutes.
19	Thank you, Mr. Chairman and Commissioners.
20	Duke Energy Florida has presented two projects for
21	approval pursuant to its 2017 settlement agreement.
22	The prefiled testimony, exhibits, and evidence
23	demonstrate that these projects meet all the
24	requirements of the settlement. The costs are
25	reasonable, within the cost cap. They're cost-

1 effective and the projects are needed. 2. So, these projects will provide Duke Energy's 3 customers with clean, reliable, renewable energy; 4 and we, therefore, respectfully request that the 5 Commission approve them today. 6 Thank you. 7 CHAIRMAN GRAHAM: Okay. OPC. 8 MR. REHWINKEL: Thank you, Commissioner and --I mean, Mr. Chairman and Commissioners. 9 The Public 10 Counsel supports the cost-effective advancement of 11 large-scale solar and other forms of renewable in 12 the State of Florida. We have been signatories, as 13 you are aware, to all three agreements that have 14 jump-started a large amount of solar generation in the State of Florida. 15 16 Our agreement and ongoing support for solar 17 deployment does not come without limits, however. 18 In the 2017 Revised and Restated Stipulation and 19 Settlement Agreement, we agreed that Duke can 20 increase base rates for its customers for solar 21 deployment that meets two primary criteria: total 22 cost below \$1,650-per-kilowatt-AC, and cost-23 effective in the context of the overall Duke-24 generation portfolio. 25 At this point, the Public Counsel has a

1	concern about the land-acquisition costs and how
2	they factor into the determination of eligibility
3	in meeting the cost threshold established in this
4	docket. We are also concerned that Duke has leased
5	the land instead of purchasing it.
6	Our inquiry today will be limited, and it will
7	primarily be focused on this aspect of Duke's
8	filing.
9	Thank you.
10	MR. BREW: Thank you. Good morning.
11	PCS is also a signatory to the 2017 revised
12	and restated stipulation agreement. We do not
13	disagree with or or oppose Duke's projects here.
14	The only thing I actually oppose is our constant
15	reference to the RRSSA because you would think that
16	lawyers could do better naming the agreement.
17	We are also acutely aware that these projects
18	and this filing sets Duke, the Commission, and
19	ratepayers down a new path in terms of resource
20	planning and cost to serve. We have some concerns
21	that will that we will address as we go forward
22	re regarding reliability and performance, but
23	we don't object to these proposed projects as
24	presented.
25	Thank you.

1	CHAIRMAN GRAHAM: Thank you, sir.		
2	Mr. Moyle?		
3	MR. MOYLE: Thank you, Mr Mr. Chairman.		
4	FIPUG, I believe, has indicated its position		
5	with respect to renewable energy on prior		
6	occasions. And I would just reiterate and		
7	underscore that again today, which is that the		
8	organization that I'm privileged to represent		
9	supports renewable energy with a couple of		
10	conditions: that renewable energy should be cost-		
11	effective and it should be needed.		
12	And as things unfold in in the State of		
13	Florida with respect to energy policy, you'll		
14	continue to have opportunities to look at		
15	renewable-energy projects. And I would		
16	respectfully commend that that those are		
17	important criteria; you know, is is the are		
18	the projects cost-effective and are they are		
19	they needed.		
20	Like the other intervenors who you've heard		
21	from, FIPUG has signed on to to this agreement.		
22	And we'll ask some questions today, but believes		
23	that, at the conclusion of the case I know the		
24	prehearing officer had a bit of a discussion about		
25	should we maybe take five minutes and allow the		

l	
1	parties to to have a conversation, but we we
2	would think, more likely than not, depending on the
3	answers to the questions, that we could possibly
4	take a break and then facilitate the way for a
5	bench decision after you have heard heard the
6	evidence, and waive the the filing of briefs.
7	So, we will be asking some questions, but
8	again, we signed the agreement; understand, you
9	know, when we strike a deal, we stick to the deal.
10	And so, that's that's the position that FIPUG is
11	in today.
12	CHAIRMAN GRAHAM: Thank you, Mr. Moyle.
13	Okay. Witnesses. If you are a witness who is
14	going to be speaking today, if I can get you to
15	stand and raise your right hand, please.
16	MR. BORSCH: Other right.
17	(Laughter.)
18	(Witnesses sworn en masse.)
19	CHAIRMAN GRAHAM: Thanks.
20	All right. Duke, call your first witness.
21	MS. TRIPLETT: Thank you, sir. We call
22	Matthew Stout. He's conveniently already there.
23	Whereupon,
24	MATTHEW STOUT
25	was called as a witness, having been previously duly

- 1 sworn to speak the truth, the whole truth, and nothing
- 2 but the truth, was examined and testified as follows:
- 3 EXAMINATION
- 4 BY MS. TRIPLETT:
- 5 Q So, would you please introduce yourself and
- 6 provide your address to the Commission.
- 7 A Yes. Hi. My name is Matt Stout. I'm
- 8 managing director of wind and solar development for --
- 9 for Duke Energy. My office is Mail Stop 14A, 400 South
- 10 Tryon Street, in Charlotte, North Carolina 28202.
- 11 Q Thank you.
- 12 And did you file in this proceeding direct
- 13 testimony and exhibits?
- 14 A Yes, I did.
- 15 Q Do you have any changes to make to that
- 16 testimony or those exhibits?
- 17 A No, I do not.
- 18 O And if I asked you the same questions today,
- 19 would you give the same answers as is -- as is provided
- in your prefiled direct testimony and exhibits?
- 21 A Yes, I would.
- MS. TRIPLETT: Mr. Chairman, we would request
- 23 that the prefiled testimony be entered into the
- 24 record as though read.
- 25 CHAIRMAN GRAHAM: We will enter Mr. Stout's

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1
          direct -- direct -- excuse me -- we will enter his
          direct testimony in the record as though read.
 2
                (Whereupon, Witness Stout's prefiled direct
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 4
          testimony was inserted into the record as though
 5
          read.)
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IN RE: DUKE ENERGY FLORIDA, LLC'S PETITION FOR A LIMITED PROCEEDING TO APPROVE FIRST SOLAR BASE RATE ADJUSTMENT

FPSC DOCKET NO.	
PSC DUCKET NO.	

DIRECT TESTIMONY OF MATTHEW G. STOUT JULY 31, 2018

1	Q.	Please state your name and business address.	
2	A.	My name is Matthew G. Stout. My business address is Mail Code ST-14A, 400 South	
3		Tryon Street, Charlotte, NC 28202.	
4			
5	Q.	By whom are you employed and what is your position?	
6	A.	I am employed by Duke Energy as a Managing Director of Business Development for	
7		Wind and Solar Development.	
8			
9	Q.	Please describe your duties and responsibilities in that position.	
10			
10	A.	I am responsible for the development of new solar facilities in Florida on behalf of	
11	A.	I am responsible for the development of new solar facilities in Florida on behalf of Duke Energy Florida, LLC ("DEF" or the "Company"). I lead a team that conducts	
	A.		
11	A.	Duke Energy Florida, LLC ("DEF" or the "Company"). I lead a team that conducts	
11 12	A.	Duke Energy Florida, LLC ("DEF" or the "Company"). I lead a team that conducts solar development activities including project siting, land acquisition, resource	
11 12 13	A.	Duke Energy Florida, LLC ("DEF" or the "Company"). I lead a team that conducts solar development activities including project siting, land acquisition, resource assessment, permitting, obtaining interconnection rights, project layout and design,	

Q. Please describe your educational background and professional experience.

I received a BA degree in Economics from Connecticut College in 1998. I began my career as a management consultant for PricewaterhouseCoopers and later worked as an investment banking associate for Morgan Joseph. In 2007, I earned an MBA from the Ross School of Business and an MS in Environmental Policy from the School of Natural Resources at the University of Michigan with a focus on renewable energy. During graduate school, I managed business development at STM Power, Inc., a startup manufacturer of renewable power generation equipment. Upon finishing graduate school, I joined Catamount Energy Corporation, a renewable energy development company, where I helped site new wind energy facilities across the United Sates. I joined Duke Energy in 2008 and have had several positions focused on renewable energy development, including Manager of Business Development for Solar and Wind, Managing Director of Project Acquisitions, and most recently Managing Director of Wind and Solar Development for the regulated utilities. In total, I have over 20 years of professional work experience, including 12 years of renewable energy business development.

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Q. What is the purpose of your testimony?

My testimony is provided to support DEF's request for cost recovery approval of the first group of its solar power plants or projects authorized under the approved 2017 Second Revised and Restated Stipulation and Settlement Agreement ("2017 Settlement"), under Docket Number 20170183-EI. My testimony describes the solar power plants that DEF plans to build to serve its customers and includes an overview

1 of the process DEF has used to ensure that the project costs meet the requirements of 2 the 2017 Settlement. My testimony supports the reasonableness of the proposed 3 project costs. 4 5 Q. Are you presenting exhibits in this proceeding? 6 A. Yes. They consist of the following exhibits: 7 Exhibit No. ___ (MGS-1) Hamilton Solar Power Plant Site Plan; Exhibit No. (MGS-2) Hamilton Solar Power Plant Costs; 8 9 Exhibit No. (MGS-3) Columbia Solar Power Plant Site Plan; Exhibit No. ___ (MGS-4) Columbia Solar Power Plant Costs; and 10 Exhibit No. ___ (MGS-5) Cost Comparison To Other Utilities. 11 12 These exhibits are true and accurate. 13 Please describe DEF's methodology for selecting and evaluating potential 14 Q. 15 projects. DEF is dedicated to providing solar energy in a cost-effective, reliable, and 16 A. 17 sustainable way. The 2017 Settlement paves the way for a smarter energy future. 18 Pursuant to that settlement, DEF has committed to build or acquire up to 700 MW 19 over the next four years (2018-2021). To meet this goal, DEF began a comprehensive 20 review of greenfield sites (including sites that it already owns) and projects already in 21 development in DEF's service territory. To date, we have screened over 120 22 properties for greenfield development and over 50 projects for acquisition that are 23 already in development in DEF's service territory. We have selected sites that will

provide cost effective solar generation by screening on several key criteria such as, but not limited to: close proximity to DEF's transmission system; land holdings large enough to support utility scale solar projects; land that is disturbed or otherwise in agricultural use to minimize the need and costs for site clearing; land that avoids wetlands, flood zones and any environmentally sensitive habitat for plant and animal species of concern; contiguous property that is minimally divided by roads, streams, and easements; land that is not within heavily populated areas or that can be visually blend into the surrounding area through vegetative buffers; flat property with less than 5% slope in any area; land that has a suitable soil map with minimal to no known sink holes; local planning, zoning, and building authorities supportive of sustainable economic development, and for projects already under development, in addition to the criteria above, we look for projects with: favorable geotechnical studies showing soils capable of accepting steel pilings with minimal rejects; favorable environmental site assessments demonstrating minimal need for environmental mitigation; and advanced transmission interconnection studies demonstrating reasonable costs and system upgrades to connect the project to the grid. Ultimately, sites are selected that reasonably balance costs and risks to DEF's customers based on our experience while optimizing the 1) site specific solar generation forecasts; 2) the estimated total costs to acquire the land, to develop the site, and to construct the facility given the land conditions, permitting requirements, and interconnection costs; and 3) the costs to operate the system based on the quality of design, technology, and construction.

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Q. What solar projects is DEF proposing for approval in this filing?

A. DEF is proposing the following projects: (a) the Hamilton Solar Power Plant

("Hamilton Project") and (b) the Columbia Solar Power Plant ("Columbia Project").

DEF notes that it will be making another filing in 2019 to present additional future projects.

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A.

Q. Please describe the Hamilton Project.

The Hamilton Project is a 74.9 MWac / 109.9 MWdc solar photovoltaic ("PV") facility located in Hamilton County, Florida. The project will utilize high-efficiency monocrystalline solar modules fixed to a single axis tracking racking system, yielding an expected capacity factor of approximately 30%. The project will use a mixture of 360-watt and 365-watt modules, procured from JA Solar (a top five ranked manufacturer by global shipping volume) and the single axis tracking racking system will be procured from Array Technologies, Inc., one of the leading tracker manufacturers. Inverters will be sourced from Toshiba Mitsubishi Electric Industries Corporation ("TMEIC"), a 50-50 joint venture between Toshiba and Mitsubishi Electric. TMEIC is a \$2.1B company with installed solar inverter capacity in excess of 11 GW, including approximately 200 MW installed in the Carolinas. The facility will be constructed upon 565 acres of agricultural fields, where minimal site preparation is required (i.e. timbering, clearing, or grading). M. A. Mortenson Company ("Mortenson") was selected to perform final facility engineering, design and construction. Mortenson has proven to be a reliable Engineering, Procurement, and Construction ("EPC") partner, having constructed over 3,200 MW of solar energy facilities. The project anticipates receiving back-feed from the

1		transmission system by December 11, 2018 in order to start commissioning inverters	
2		to achieve placed in service by December 2018. My Exhibit No (MGS-1) shows	
3		the location of the Hamilton Project and the general site plan.	
4			
5	Q.	What is the projected installed cost for the Hamilton Project?	
6	A.	The projected cost of the Hamilton Project is \$113,143,609 or \$1,511/kWac. My	
7		Exhibit No (MGS-2) shows the categories that make up the total installed cost.	
8			
9	Q.	Will the Hamilton Project qualify for the statewide property tax exemption for	
10		solar generation?	
11	A.	No. The project applied for development zoning in Hamilton County in 2017 in order	
12		to meet the schedule for 2018 in-service. The property tax exemption is not available	
13		to projects that applied for comprehensive plan amendments or zoning permits on or	
14		before December 31, 2017.	
15			
16	Q.	Please describe the Columbia Project.	
17	A.	The Columbia Project is a 74.9 MWac / 105.6 MWdc solar single-axis tracking PV	
18		project, yielding an expected capacity factor of approximately 31%, located	
19		Columbia County, Florida. DEF entered into an agreement on November 20, 2017	
20		with First Solar Development, LLC to purchase the project. The project is currently	
21		under development with the expectation to start engineering in Q2 2019 and	
22		construction in Q3 2019 with an expected placed in-service date in March 2020.	
23		Following an RFP, DEF executed a panel supply agreement with First Solar, Inc. for	

competitively priced Series 6 (435W) thin film solar modules. These panels will be exempt from the recently passed solar tariff, but due to a backlog in orders will not be made available for shipment in time to support a 2019 in-service date for the Columbia Project. First Solar, Inc. is a vertically integrated solar PV manufacturer with over 17GW of solar panels installed worldwide. The project expects to purchase 25 3.36 MVA TMEIC inverters and 25 step up transformers. The Columbia Project will be constructed on approximately 580 acres that are under a long term lease. The site is bisected by a 69kV DEF transmission line that will allow the interconnection facilities to be co-located on the project site next to the generation substation. The site is relatively flat with minimal sloping that will allow for the use of a tracking system. The project has received the following grid interconnection studies: a Feasibility Study, a System Impact Study, and a Facilities Study, which is the final study before receiving a Large Generator Interconnection Agreement. The interconnection will include the installation of a 69 kV Columbia Switching Station with a 4- terminal configuration and associated transmission line work. A constraints analysis, habitat assessment, Phase 1 Environmental Site Assessment ("ESA") and wetlands delineation have been completed for the project. A full Phase II Cultural Resources Assessment Survey ("CRAS") was completed for the project in June 2018 with no findings of concern and is being sent to the State Historic Preservation Office for concurrence. All required pre-construction permits will be obtained prior to the start of construction; a Conditional Use permit was approved by the Columbia County Commissioners on July 26, 2018. My Exhibit No. __ (MGS-3) shows the location of the Columbia Project and the general site plan.

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2 Q. What is the projected installed cost for the Columbia Project?

3 A. The projected cost of the Columbia Project is \$109,463,984 or \$1,461/kWac. My

Exhibit No. __ (MGS-4) shows the categories that make up the total installed cost.

Q. Will the Columbia Project qualify for the statewide property tax exemption?

7 A. Yes.

A.

Q. Please describe the process DEF used to select the Hamilton and Columbia sites for development.

DEF began a comprehensive review of greenfield sites (including sites that it already owns) and projects already in development in DEF's service territory. DEF identified projects already in the interconnection queue with favorable queue positions. DEF is willing to purchase solar projects in various stages of completion from third-party developers but projects must meet our standards of development and construction and fit into our strategic build plan. The primary factors when considering the purchase of a third-party developed site are interconnection queue position for transmission connection to the grid and expected grid upgrades, environmental impacts, constructability of the site, development status and schedule, overall cost, quality/type of materials (such as panel, inverter and racking, manufacturers), project location, zoning entitlements, experience and competencies of developer, and construction schedule. The Hamilton Project and the Columbia Project were selected from among over 50 projects that have been reviewed for acquisition of existing projects in DEF's

service territory. The projects were identified from publicly available information. Additional project details were submitted to DEF by the project developers upon execution of a confidentiality agreement. Projects that met first round screening criteria were asked to submit non-binding indicative proposals for the sale of the development assets to DEF. DEF developed a shortlist of proposals to advance into further negotiations, including those for the Hamilton Project and the Columbia Project. Additional projects for future development remain under consideration and new projects are frequently presented by third party developers to my team for review.

The Hamilton Project was acquired from a third-party developer due to its senior queue position, agricultural land with transmission access, and mid stage development status. DEF acquired the project from Tradewind Energy while it was still being developed and completed the remaining development tasks, including permitting, design, final interconnection rights, and contracting for engineering, procurement, and construction services.

DEF selected the Columbia Project due to its senior queue position, land holding with transmission access, and mid stage development status. DEF agreed to acquire the project from First Solar, that is being developed by Core Solar, LLC, once all project development milestones are achieved and, separately, agreed to acquire First Solar thin film solar panels for the project. The site has no sensitive habitat or cultural concerns and all consultations with the appropriate agencies have occurred. The Columbia project has a finalized Facilities Study with a draft LGIA, as well as a Conditional Use Permit approved by Columbia County's Board of Commissioners.

Α.

Q. Please describe the process DEF used to contract for the construction of the
 Hamilton Project and the Columbia Project.

DEF conducted a competitive RFP (Request For Proposals) process to select the EPC contractor for the Hamilton Project and the Columbia Project. DEF administered each RFP to ensure a fair and transparent process was used for all communication, evaluation and selection. After qualification of EPC contractors, four high quality EPC contractors were invited to provide bids to provide engineering, design, procurement and construction services for the Hamilton Project, and five high quality EPC contractors were invited to bid for the Columbia Project. Bidders were provided with all relevant site investigation and design criteria documents applicable to the project. Bidders were instructed to comply with all company design and construction policies. Bids were evaluated on bidder experience, price, schedule, design, risk and ability to deliver the project in a safe, reliable and cost-effective manner.

As a result of these evaluations, for the Hamilton Project, Mortenson was selected as the most cost-effective and highest value supplier, and the parties executed an EPC Agreement.

For the Columbia Project, based on the evaluation results, DEF created a shortlist of final bidders. These finalists were asked to provide updated bids in June 2018 for the final costs estimates for this filing. DEF will begin contract negotiations with these bidders this year and select a final EPC company before the start of construction in 2019.

1	Q.	Why did DEF enter long-term leases for t	the Hamilton Project and the Columbia
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- 2 **Project, rather than purchasing the property?**
- A. More generally, when there is an option to purchase versus enter into a long-term lease, DEF evaluates the net present value ("NPV") of the costs of each option over the life of the project and chooses the least cost option on a present value basis. With respect to the Hamilton Project and the Columbia Project, the developers had already signed long term leases with the landowners with rents priced in line with the current market (at terms that match or exceed the useful life of the facilities), so DEF had no ability to purchase those properties. Given the overall value of these projects to

DEF's customers, DEF believes it is prudent to move forward with long term leases

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- 13 Q. What is the weighted average cost for the two projects described above?
- 14 A. The weighted average cost for the two projects is \$1,486 \$/kWac.

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- Q. Your costs are different from recent costs filed by other utilities in Florida. Can
- 17 you explain the reasonableness of the differences?

for these projects.

A. Yes. As required by Paragraph 15(a) of the 2017 Settlement, DEF has reviewed publicly available information from Florida Power & Light Company's ("FPL") solar base rate adjustment filing in their 2017 and 2018 fuel docket and Tampa Electric Company's ("Tampa Electric") solar base rate adjustment filing in Docket Number 20170260-EI and Docket Number 20180133-EI. My Exhibit No. __ (MGS-5) shows how the Hamilton Project and Columbia Project compare to costs filed by other

utilities, where such information was publicly available to DEF. Generally, the costs for Hamilton Project and Columbia Projects are in line with those filed by other utilities while being designed to achieve higher Net Capacity Factors¹ than those reported by other utilities in Florida. DEF also notes that, as explained above, it competitively solicited all aspects of the projects and therefore its costs are reasonable, cost effective, and at market.

Α.

Q. Please describe the impacts of the solar tariff/steel tariff on the solar panels or other equipment used in these projects.

The solar tariff added 30% to the cost of manufacturing of the JA Solar panels that will be used at the Hamilton Project. The First Solar panels to be used at the Columbia Project are exempt from the solar tariff due to their thin film design. The steel tariff added 25% to cost of steel used in the racking system for the Hamilton Project. However, based on our negotiations with the project's EPC provider some of this added cost will be borne by its suppliers and therefore not included in the agreed-to EPC contract price. The pricing we received from EPC firms for the Columbia Project included a similar cost sharing element due to the steel tariff. While the solar and steel tariffs have negatively impacted pricing, overall the project cost for the Hamilton Project and Columbia Project are reasonable and within the cap set forth in the 2017 Settlement.

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¹ Net Capacity Factor is the ratio of the net electricity generated, for the time considered, to the energy that could have been generated at continuous full-power operation during the same period. For solar plants, higher Net Capacity Factors are most often obtained by: increasing the DC/AC ratio, use of tracking systems in place of fixed-tilt racking, and locating plants in areas with greater solar resource.

1

2 Q. Are the projected costs for the solar projects described in your testimony eligible

3 for cost recovery under the 2017 Settlement?

4 **A.** Yes. As demonstrated above, DEF utilized a reasonable competitive process to select its contractors and to procure equipment and material. Its costs are reasonable and within the strict \$1,650/kWac cap set forth in the 2017 Settlement. DEF reasonably considered buying out projects in various stages of development. Mr. Borsch will demonstrate the cost effectiveness of, and the need for, these solar projects, as

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9

11 Q. Does that conclude your testimony?

required by the 2017 Settlement.

12 A. Yes.

- MS. TRIPLETT: And in the interest of time,
- we're going to waive the witness summary and tender
- 3 Mr. Stout for cross-examination.
- 4 CHAIRMAN GRAHAM: Okay. Sounds very good.
- 5 OPC.
- 6 MR. REHWINKEL: Thank you, Mr. Chairman.
- 7 EXAMINATION
- 8 BY MR. REHWINKEL:
- 9 Q Good -- still morning. Good morning,
- 10 Mr. Stout. My name is Charles Rehwinkel with the Office
- of Public Counsel. And I want to ask you a few
- 12 questions today in -- in several areas, including
- primarily the fact that you leased the -- the property
- on these first two projects.
- 15 But the first thing I would like to do is ask
- 16 you if you are familiar with the -- I'm -- I'm going to
- 17 call it the 2017 agreement that -- I mean by that the
- 18 Revised and Restated Stipulation and Settlement
- 19 Agreement.
- 20 A Yes, I am familiar with it.
- Q Okay. And -- and when I ask you if you're
- 22 familiar with it, I'm only asking you if you're familiar
- 23 really with Paragraph 15, not the entire document. Is
- 24 that fair?
- 25 A Yes.

- 1 MR. REHWINKEL: Okay. I have passed out an
- 2 exhibit that's -- Mr. Chairman, that I would like
- 3 to ask marked. It -- it says, "2017 RRSSA SoBRA
- 4 provision." And what it is is the cover page of
- 5 the order, and then Paragraph 15, which is Pages 31
- 6 through 37 of -- of the order.
- 7 CHAIRMAN GRAHAM: All right. We will mark
- 8 that as Exhibit 21.
- 9 (Whereupon, Exhibit No. 21 was marked for
- identification.)
- MR. REHWINKEL: Okay. Thank you.
- 12 BY MR. REHWINKEL:
- 13 O So, what I'd like to ask you to do -- but
- 14 first, you're testifying today to support the company's
- 15 contention that the Hamilton and Columbia SoBRA projects
- 16 comply with the conditions of Paragraph 15, specifically
- 17 Paragraph 15A; is that right?
- 18 A That is correct. I am responsible for the
- 19 reasonableness of the -- the cost, and that we're under
- 20 the -- the weighted average cost for the filing.
- 21 If Paragraph 15A addresses the cost-
- 22 effectiveness and the need, Ben Borsch will follow me
- 23 with his testimony.
- Q Okay. So, to the extent that issue is over in
- 25 15C, that's not your bailiwick in this hearing; is that

- 1 right?
- 2 A Correct.
- Q Okay. So, what I'd like to do is -- is get
- 4 you to go to this Exhibit 21 and ask you to turn to
- 5 Page 25, if you can see -- well, it's actually 25 of
- 6 the -- of the set- -- settlement agreement, at the
- 7 bottom of the page. Do you see that there?
- 8 And in -- in here, looks like three-
- 9 fourths of way down, we first see that \$1,650-per-
- 10 kilowatt-alternating-current cap. Do you see that?
- 11 A Yes, I do.
- 12 Q And it's your testimony that the -- both
- 13 Hamilton and Columbia projects meet that cap; is that
- 14 right?
- 15 A That is correct. And more specifically, the
- 16 weighted average cost of the projects in this filing are
- 17 underneath that cap.
- 18 O Okay. Together. And that's what the -- the
- 19 language says. It's -- it -- it says that -- the
- weighted average costs of all projects and any filing.
- 21 And since this is your filing and you've put two in
- 22 there, it's -- it's -- those two together are under the
- 23 cap; is that right?
- 24 A Yes.
- Q Okay. So, if you could, turn to the next

- 1 page. And I -- I would ask you, if you wouldn't mind
- 2 reading the sentence aloud -- and slowly for the court
- 3 reporter's benefit -- that starts at the top of the page
- 4 at -- where it says, "DEF agrees that."
- 5 A Sure: DEF agrees that, for projects
- 6 constructed or acquired by DEF, the following cost
- 7 categories will be included in the 1,650-kilowatt-per-
- 8 AC cost cap, but that the cost cap is not limited to
- 9 these categories of costs. That includes any and all
- 10 construction costs attributable to the solar projects,
- 11 engineering, procurement, and construction costs,
- 12 otherwise known as EPC, development costs including
- third-party development fees, if any, permitting and
- 14 land acquisition, taxes and utility costs to support or
- 15 complete development, transmission, interconnection
- 16 costs, installation, labor and equipment, electrical,
- 17 balance of systems, structural balance of system,
- 18 inverters, and modules.
- 19 O Okay. Thank you.
- So, if I could ask you to put that aside for a
- 21 second and -- and go to your testimony. And do you have
- 22 both the redacted and the confidential version of your
- 23 testimony with you?
- 24 A Yes, I do have the confidential version.
- Q Okay. I'm going to ask you some questions

- about the Exhibits MGS-2 and MGS-4. And I'd like you to
- 2 have your confidential version, but I would want to --
- 3 and I know your Counsel has instructed you and you --
- 4 you know not to verbalize any confidential information
- 5 in this, but what I -- I want to ask you is -- let's go
- 6 to the Hamilton project, which is MGS-2, first.
- 7 And here, we see the -- at the -- this -- this
- 8 table here at the bottom, there's a non-confidential
- 9 number of 1,511. And that's the estimated costs for the
- 10 Hamilton project on a kWac basis, correct?
- 11 A Correct.
- 12 O Okay. And what we see above that is a
- 13 \$113.1-million figure in the total with AFUDC -- right
- 14 above that, correct?
- 15 A Correct.
- Okay. And so, all you did to get the 1,511
- was to divide 113.1 million by 74,900; is that right?
- 18 A Correct.
- O Okay. And that gives you this figure here.
- So, when we look at all of the cost categories
- 21 above, we see a confidential number for major equipment,
- 22 a confidential number for balance of system, and then
- 23 five categories that are not confidential below that --
- 24 well, actually four -- below that, with nothing for
- 25 AFUDC; is that right?

- 1 A Correct.
- 2 Q And there's nothing for AFUDC because this
- 3 project is expected to be started and -- and completed
- 4 within a year?
- 5 A That is correct.
- 6 Q Okay. So, when -- when you read the cost
- 7 categories in Exhibit 21 that are -- that says --
- 8 that -- that's the cost categories that will be included
- 9 in the 1,650-kWac cost cap -- there was not a cost in
- 10 what we just reviewed on MGS-2 for land acquisition, is
- 11 there?
- 12 A Is the question that there's not a land-
- 13 acquisition cost in my table, MGS-2, or --
- 14 Q That's correct, yes.
- 15 A Yes. The answer is that that is stated as
- 16 zero.
- 17 O Okay. There is a land cost that's in there
- 18 that, in the Footnote 3, it says that development and
- 19 permitting includes items such as lease rental payments
- 20 during construction, right?
- 21 A That is correct. So, the -- during the
- 22 development and construction phase, the payments under
- 23 the land lease are part of the capital, correct.
- Q Okay. And I kind of got ahead of myself by
- not asking you to explain why there's no land-

- 1 acquisition costs in the -- in the 1,511 calculation
- 2 that we -- we reviewed here. So, could you tell me why
- 3 that is?
- 4 A The -- the reason is that the -- the structure
- 5 of the -- the land control is in the form of a land --
- 6 what we call land ground lease or lease agreement, as
- opposed to purchasing the property outright, fee simple,
- 8 you know, having a deed.
- 9 Q Okay. But -- so, except for the cost of
- 10 leasing the land while you build the project, there are
- 11 no land ownership costs, if you will, in this \$1,511; is
- 12 that fair?
- 13 A That's correct. The -- the future rent paid
- 14 under the lease, the -- is -- is an operating-and-
- 15 maintenance expense.
- 16 O Okay. And the difference would be that,
- 17 while -- that the cost to control the land while you
- 18 build it is a -- is a cost that will be in -- considered
- 19 a construction cost and capitalized and -- and, once the
- 20 project is completed, that would form a portion of the
- 21 rate base; is that your understanding?
- 22 A Correct.
- Q Okay. So, if I took you to confidential
- 24 MGS-4, which is the Columbia project, the number that we
- 25 see at the bottom for -- of total, is 1,461. And that's

- in dollars, right?
- 2 A It's in dollars per kWac.
- 3 Q Right.
- 4 A Correct.
- 5 Q The same questions would apply here, except
- 6 there is an AFUDC component because this project has
- 7 lasted more than a year; is that right?
- 8 A That's correct.
- 9 Q And there are two confidential categories,
- 10 major equipment and balance of system, but with respect
- 11 to land-acquisitions costs, other than the rent payments
- 12 for the construction period, there are no land-
- acquisition costs included in the 1,461; is that right?
- 14 A That is correct. They're in the operating-
- 15 and-maintenance expense budget.
- Okay. So, I want to ask you -- I want to go
- 17 back to Exhibit 21, which is the excerpt from the RRSSA.
- 18 And I -- I understand, from reading your background,
- 19 that you have significant experience in renewables
- 20 development. And you're not an attorney --
- 21 A That is --
- 22 Q -- fortunately.
- 23 A -- correct.
- Q Okay. So -- but you're testifying that
- 25 these -- these projects comport with the requirements of

- 1 Paragraph 15A; is that right?
- 2 A Yes.
- 3 Q So, my question to you is: In that ca- -- in
- 4 that capacity, can you explain why there -- there are no
- 5 land-acquisition costs included in the calculation of
- 6 the 1,650, in the sense that it says, "The following
- 7 cost categories will be included in the 1,650-kWac cost
- 8 cap"?
- 9 A Well, the best explanation I can give is that
- 10 the -- the rents due under the lease agreement are
- 11 future contingent payments. We -- we have to be in the
- 12 operation. We have to build the facility. And those
- are owed during the operation life.
- And so, the accounting for that would have
- those in the operating-and-maintenance budget as opposed
- 16 to in a capital budget or the up-front cost of a
- 17 project.
- 18 Q Okay. And I -- I don't know the answer to
- 19 this because I think you filed this while I was
- otherwise occupied, but you recently filed a proffer for
- 21 a second round of SoBRAs; is that correct?
- 22 A Yes, we did.
- 23 Q And can you explain to me how the land
- 24 acquisition occurred in those, just for information.
- 25 A For informational purposes, yes. Two of the

- 1 projects, we are leasing the property; one is company-
- 2 owned. And we are open to purchasing land in the future
- 3 for other projects that we may file.
- 4 Q Okay. Are you also aware -- I -- I think
- 5 in -- in your testimony, beginning on Page 11 and
- 6 carrying forward to Page 12, as well as in your M- --
- your exhibit, MGS-5, you comply with another element
- 8 of -- of Paragraph 15. And then you describe any
- 9 material differences in Duke's cost to the cost of -- of
- 10 other utilities that would have filed similar SoBRA
- 11 projects; is that correct?
- 12 A Yes, it is.
- O Okay. So, as part of your ability to provide
- 14 that explanation to the Commission, I -- I take it
- 15 you -- to extent there was publicly-available
- 16 information, you sought to compare the costs that Duke
- incurred with the costs that other utilities incurred;
- 18 is that right?
- 19 A Correct, without any change to numbers. Just
- 20 took them as -- as filed; did not try to piece together
- 21 what was in their numbers versus what's in ours, just
- took the number as filed on a dollar-per-kWac basis.
- Q Okay. Well, in -- in doing your research, did
- you understand that both TECO and FPL only placed or
- 25 planned to place filed SoBRA projects on land that

- 1 they -- they either already owned or that they bought
- 2 for purposes of those projects?
- 3 A Yes, I have become aware over time that, as
- 4 those filings have been made, that they have purchased
- 5 or already own the land.
- 6 Q Okay. Is it your understanding that owning
- 7 land that you might place a generation facility on has
- 8 advantages that leasing a -- land for generation
- 9 facilities does not?
- 10 A I would phrase it as each structure has its
- 11 pros and cons, and both is -- are -- both are adequate
- 12 for constructing, operating, ultimately decommissioning
- 13 a -- a facility.
- 14 And I would further state that it is -- it is
- 15 very common for renewable energy to be sited on property
- 16 that is leased. That is, I think, the nature of just
- 17 the technology. It -- it is changing. It -- there's
- 18 flexibility to a lease that maybe a purchase option
- 19 would not have.
- 20 Ultimately, you don't use all of the -- the
- 21 land. So, our -- our -- our landowner/farmer is able,
- 22 in this case, to -- to use some of that land in
- 23 agriculture again once we determine the actual footprint
- 24 of land required.
- 25 And we have all the rights that we need during

- 1 the period of construction -- or development,
- 2 construction, and operations, beyond the useful life of
- 3 the project.
- 4 MR. REHWINKEL: Okay. Well, I would like to,
- 5 Mr. Chairman, turn to -- to an exhibit that I've
- 6 passed out that's entitled "TECO SoBRA costs." And
- 7 I would ask this be given a number.
- 8 CHAIRMAN GRAHAM: Yeah, this will be No. 22.
- 9 (Whereupon, Exhibit No. 22 was marked for
- identification.)
- 11 BY MR. REHWINKEL:
- 12 O Okay. So, Mr. Stout, I would represent to you
- 13 this is an excerpt from testimony by a witness who was
- 14 your counterpart in the TECO SoBRA hearing. And he
- 15 presented, for the Payne Creek solar project and the
- 16 Balm solar project, a similar presentation of -- of
- 17 costs relative to the kWac target. Are you -- would you
- 18 agree with that?
- 19 A Yes, I've -- I've read it.
- 20 Q Okay. Are you somewhat familiar with this --
- 21 this document or these two exhibits?
- 22 A Yes, I am.
- Q Okay. What I would like to ask you is if you
- 24 could look at -- at what is now Exhibit 22 and the Payne
- 25 Creek project -- this shows a total kWac cost for Payne

- 1 Creek of \$1,324. Do you see that?
- 2 A Yes, I do.
- 3 Q And it has land costs of 1.408400. Do you see
- 4 that?
- 5 A I -- I do.
- 6 Q Okay. And it also has transmission-
- 7 interconnect costs of 4,400,000; do you see that?
- 8 A Yes, I do.
- 9 Q Okay. And if we turn over to the Balm project
- 10 comparison, we see the cost is \$1,480 per kWac. Do you
- 11 see that?
- 12 A Yes.
- 13 Q And that includes \$18,720,128 of land costs.
- 14 Do you see that?
- 15 A Yes, I do.
- 16 O And \$2.5 million of transmission-interconnect
- 17 cost. Do you see that?
- 18 A Yes.
- 19 O And even -- and if we go back and look at your
- 20 MGS-2 and 4, you have a hundred thousand dollars in each
- 21 cost development for transmission-interconnection costs;
- 22 is that fair?
- 23 A Correct.
- Q Okay. So, even with those amounts of -- of
- 25 transmission interconnect and those amounts of land,

- 1 these costs for Tampa Electric are well-below your two
- 2 project costs; is that correct? You can take out the
- 3 "well." They're below.
- 4 A Yeah, well, well-below is a bit of a stretch
- 5 because I believe the Columbia project was at 1,461 and
- 6 pump -- Balm solar is at 1,480.
- 7 O That's fair. So --
- 8 A So, I think, as I said in this -- in the
- 9 testimony, our -- our costs seem to be in line --
- 10 Q All right.
- 11 A -- with the other utilities.
- 12 Q Now, your 1,561 and your 14- -- your 15- --
- 13 your 1,461 and your 1,511 -- those costs are really --
- 14 would require there to be an adder for revenue-
- 15 requirements purposes of the stream of lease payments;
- 16 is that right?
- 17 A It's included in the cost-effectiveness
- 18 measure. And I would defer to Ben Borsch on that piece.
- O Okay. But those stream of revenues are not
- included in the 1,511 and the 1,461 as a cost, right?
- 21 A I wouldn't consider them streams of revenues.
- 22 T would --
- 23 Q Streams of cost, I apologize.
- 24 A Thank you. I would just say, yes, those costs
- 25 are not included because we pay them in the future

- 1 for -- for land.
- Q Okay. But I -- I -- you would -- being in the
- development business, you would probably be comfortable
- 4 with assuming that the fact that TECO bought the land in
- 5 these two projects would mean they would not, in the
- 6 revenue requirements for their projects, have a stream
- of -- of costs or payments that represented lease
- 8 payments; is that right?
- 9 A That's correct. They would not.
- 10 Q Okay. I have passed out an exhibit that I can
- 11 take you through, but would you accept, subject to
- 12 check, that the math works out that the 18,721,028 for
- 13 land for the Balm project is about 34-million- -- I
- mean, \$34,500 per acre for that project?
- 15 A I haven't done the math.
- 16 Q Okay.
- 17 A So, I'll -- I'll trust that you have.
- 18 O Okay. And that the \$1.4 million of land --
- 19 1.406400 of land for Payne Creek is about \$2,700 an
- 20 acre?
- 21 A Yes.
- 22 **Q** Okay.
- 23 A Assuming you've divided the purchase price by
- 24 the number of acres, yes.
- Q Okay. So -- all right.

- 1 Are you aware that, for these two projects,
- 2 that -- that TECO testified that they reserved 111 acres
- 3 and 80 acres, respectively, for their purchases for
- 4 battery-storage siting?
- 5 A No, I'm not specifically aware of that.
- 6 MR. REHWINKEL: Okay. Mr. Chairman, if we
- 7 could, I would like to pass -- ask identified
- 8 Exhibit 23. And this will be TECO hearing
- 9 transcript excerpt.
- 10 CHAIRMAN GRAHAM: Okay. We will do that.
- 11 (Whereupon, Exhibit No. 23 was marked for
- identification.)
- 13 MR. REHWINKEL: And just for the record, I've
- included the cover page of Volume 1, Pages 1 thru
- 15 209, for the hearing that was held on May 8th,
- 16 2018, in Docket 20170260, which is TECO's first
- Sobra, and attached to that an excerpt that starts
- 18 at Page 42 and goes through Page 54. That's what
- 19 the exhibit should entail.
- 20 BY MR. REHWINKEL:
- 21 Q So, if -- if I could ask you to turn to
- 22 transcript Pages 43 and 44, do you see the TECO
- 23 witness -- who I'll represent to you was Mr. Ward -- on
- 24 Page 43, states that: For the Balm property, 111 acres
- 25 may be available for future cost-effective battery

- 1 storage to be integrated with the solar project.
- 2 Do you see that?
- 3 A Yes.
- 4 Q Okay. And then, if we look on Page 44,
- 5 Lines 9 through 11, with respect to the Payne Creek
- 6 project, he says that 80 acres may be available for a
- 7 future -- approximately 80 acres may be available for a
- 8 future cost-effective battery-storage project to be
- 9 integrated with a solar project.
- 10 Do you see that?
- 11 A Yes.
- 12 Q Okay. So, does TECO -- I mean, does Duke have
- a similar amount of land available for placement of the
- 14 battery-storage project in the future?
- 15 A I'll --
- 16 Q For these two projects.
- 17 A Sure. Let me address maybe the bigger --
- 18 bigger question of, if we chose to site energy storage
- 19 at -- co-located with the solar-generation facilities,
- 20 would -- would we have the rights to do so. Would there
- 21 be land available.
- 22 And the answer is -- is yes. Under the lease
- 23 agreements, the -- the uses that are defined for so- --
- 24 solar generation include energy -- conversion to energy
- 25 storage. And it's explicitly mentioned in multiple --

- 1 multiple sentences in both lease agreements that we can
- 2 put battery storage on the land.
- And with respect to the -- with the site --
- 4 would there be ample room. And the answer is -- is yes.
- 5 I mean, you could fit most of what you need for battery
- 6 storage in a room this size. You -- they come in the
- 7 size of a -- a container that you'd see on the back of
- 8 a -- on a -- on a train or on a semi truck. You may use
- 9 multiple of them, but we -- we wouldn't need 80 acres.
- 10 You'd use maybe half of an acre.
- But if we needed more land, we -- we still
- 12 have a right to go back to that landowner and expand the
- 13 amount of land to -- to include siting of co- --
- 14 co-located battery-storage project.
- Okay. Let me ask you if you have -- do you
- 16 have the discovery that -- well, I -- I would ask you if
- 17 you have ex- -- interrogatories -- your response to
- 18 Staff Interrogatories 35 and 36 with you?
- 19 A Was that the first, second, or third
- 20 interrogatory?
- 21 Q It's the first set of interrogatories.
- 22 A Yes.
- 23 **Q** Okay.
- 24 A And what question number?
- MR. REHWINKEL: And I think -- 35 and 36.

1	And and Commissioners, these are already
2	included in the comprehensive exhibit list as
3	Ex as part of Exhibit 15. And Mr. Stout is
4	identified on on Questions 35 and 36 in there.
5	CHAIRMAN GRAHAM: Mr. Rehwinkel?
6	MR. REHWINKEL: Yes.
7	CHAIRMAN GRAHAM: The Hamilton lease,
8	you're you're talking about some of the dollar
9	amounts in there. Is it possible for us to get
10	staff to get the copy of that confidential?
11	MR. REHWINKEL: Are you talking about the
12	the confidential exhibit that I had him walk
13	through?
14	CHAIRMAN GRAHAM: Yeah.
15	MR. REHWINKEL: Okay. Yes. I do you do
16	you want to look for that? And I can have staff
17	also pass out the Columbia lease memorandum that
18	we
19	CHAIRMAN GRAHAM: Okay.
20	MR. REHWINKEL: We agreed is not confidential.
21	CHAIRMAN GRAHAM: Okay. Now, this is the
22	Columbia one. Do we have the Hamilton?
23	MR. REHWINKEL: It I passed it out earlier.
24	It had not been marked confidential, so
25	CHAIRMAN GRAHAM: Oh, it's not confidential.

```
1
               MR. REHWINKEL: Yeah, neither one is, but
2.
         it -- I was being cautious because --
 3
               CHAIRMAN GRAHAM: I -- I don't see any dollar
4
         amounts on this thing.
5
               MR. REHWINKEL: They should not.
                                                  They're --
         the -- the dollar amounts that -- that are --
6
7
         that -- are in his exhibit to his testimony --
8
               CHAIRMAN GRAHAM:
                                 Okay.
9
              MR. REHWINKEL: -- MGS-2 and 4.
10
               CHAIRMAN GRAHAM: Okay.
                                        Thank you.
11
               MR. REHWINKEL: Thank you.
12
              CHAIRMAN GRAHAM:
                                 Sure.
13
              Commissioner Brown.
14
               COMMISSIONER BROWN:
                                    Thank -- thank you,
15
         Mr. Chairman. And I appreciate you passing these
16
         out.
17
               These are -- you're referencing a lease
18
                      These are both really brief,
         agreement.
19
         abbreviated memorandums of lease. And you're
20
         getting into details about battery storage. Of
21
         course, that's not contemplated in the memorandum
22
         of lease.
23
               Where are the lease agreements?
24
               MR. REHWINKEL:
                               Well, I -- I'll -- we have
25
         them here.
                      I will take -- Mr. Stout, I believe,
```

1	can answer your question from these documents. And
2	I have a colloquy that I can go through with him, I
3	think, that will satisfy you.
4	COMMISSIONER BROWN: Okay. Second
5	MR. REHWINKEL: But but there are your
6	staff, I believe, in the discovery, has copies of
7	the lease documents that that memorandum
8	summarizes.
9	COMMISSIONER BROWN: If it would be really
10	helpful, as you go through the questions, for the
11	bench to at least have be able to access that
12	lease agreement with the terms you're you're
13	discussing the terms with the witness.
14	Can staff point us to the document in our
15	on our drive?
16	CHAIRMAN GRAHAM: Ms. Triplett.
17	MS. TRIPLETT: So, Madam Ms. Commissioner,
18	I I think that the Hamilton lease was produced
19	in response to staff's second request for
20	production of documents, which is part of
21	Exhibit 18.
22	COMMISSIONER BROWN: Okay.
23	MS. TRIPLETT: And I let me just I think
24	the Columbia we answered later. Give me a moment.
25	So, Mr. Chairman, I think that the Columbia

1	lease was actually produced in response to Office
2	of Public Counsel's discovery. And I don't see
3	that on the comprehensive exhibit list. I mean, I
4	have it, and I know they have it, but that
5	but so, that's about as helpful as I can be at
6	this moment. Sorry.
7	MS. CRAWFORD: Per perhaps, Commissioners,
8	if we could take about five minutes or so to see if
9	we can get a handle on what we're referring to and
10	where we can get you to it.
11	CHAIRMAN GRAHAM: Okay. We'll take a five-
12	minute break, which is a quarter 'til on that clock
13	at the back of the room.
14	(Brief recess.)
15	CHAIRMAN GRAHAM: Okay. Let's see if we can't
16	reconvene.
17	Mr. Rehwinkel, you have the floor.
18	MR. REHWINKEL: Thank you, Mr. Chairman. And
19	I apologize for the for the confusion. My
20	effort was to try to not introduce any more
21	confidential information than I had to.
22	I I use the memorandum-of-lease documents,
23	which are Exhibits what did we call it 24 and
24	25 did we give those numbers?
25	CHAIRMAN GRAHAM: No.

- 1 MR. REHWINKEL: Okay. So, if we could give --
- 2 24 will be Columbia; and Hamilton would be 25,
- 3 then.
- 4 CHAIRMAN GRAHAM: Okay. We will reflect that.
- 5 MR. REHWINKEL: All right.
- 6 (Whereupon, Exhibit Nos. 24 and 25 were marked
- 7 for identification.)
- 8 BY MR. REHWINKEL:
- 9 Q And Mr. Stout, do you have both Exhibit 24 and
- 10 Exhibit 25 --
- 11 A Yes, I do.
- 12 **O** -- with you?
- Okay. Is it a fair characterization to say
- 14 that -- well, if -- if -- let's open up 24. And if you
- look at Item 3 on what is the -- the Bates-numbered 198,
- 16 DEF 000198 -- do you see that in the lower right-hand
- 17 corner?
- 18 A Yes, I do.
- 19 Q Okay. If you look, beginning with the second
- 20 paragraph in three, with the word "during," and you
- 21 carry all the way through -- right above five on the
- 22 next page --
- 23 A Yes.
- Q Do you see that?
- Is that long paragraph -- is that essentially

- 1 the same verbiage that's in the lease agreement that
- 2 says what you, Duke, can do with the land?
- 3 A Yes, I believe it to be consistent. I -- I --
- 4 I'm not positive if it's any shorter, longer, but the
- 5 general concept is, when we file a memorandum of lease,
- 6 we want to explicitly say what the land is being used
- 7 for. And we just do not file the full lease which has
- 8 all the commercial terms.
- 9 Q Okay. So, if I -- if I go to No. 25, which is
- 10 the Hamilton -- I'm going to call it the MOL, the
- 11 memorandum of lease, the relevant comparable section
- would be on DEF 109, and it would be this 1.2 section;
- 13 am I right about that?
- 14 A Yes. That's where a definition of the solar
- 15 energy facilities is established. So, yes, that's a
- 16 similar paragraph.
- 17 O Okay. So, what I would like you to do is --
- 18 just start with Columbia first -- is, if you could, tell
- 19 me, if you know, from -- from this Section 3, what of
- 20 this -- what the verbiage in here would allow you to put
- 21 a battery-storage facility on this -- on this site.
- 22 A I think it's most-easily explained five
- 23 sentences up from the bottom, on Page B-2. And it says:
- 24 For the purposes of this lease, the meaning of the
- 25 solar-energy purposes includes, without limitation, the

- 1 right to convert the irradiant energy emitted by the sun
- 2 into electrical energy, and to collect, store, and
- 3 transmit electrical energy together with any and all
- 4 activities related thereto.
- 5 And I could keep reading, but the -- the
- 6 ability to store electrical energy is stated explicitly.
- 7 Q Okay. So -- and I'm not trying to test your
- 8 technical knowledge about battery storage and -- and
- 9 transmission balancing and issues like that, but if you
- 10 were to put a battery-storage facility on a -- on the
- 11 land where there was a solar array, it could be used,
- 12 not only to store the output of the solar array, but it
- 13 could also be used for other transmission purposes on
- 14 your overall network; is that right?
- 15 A De- -- depending on how you electrically
- 16 connect it, if it's connected to the AC system's
- 17 transmission system, yes. Less -- a little less so if
- 18 it's connected to the DC side of the -- the solar
- 19 facility.
- 20 Q Okay. How would -- how would Duke provision a
- 21 battery-storage facility co-located with a solar array?
- 22 A Just -- it depends on the -- the specific
- 23 purpose of the project and what we're trying to
- 24 accomplish.
- Q Okay. Would your understanding of the -- what

- 1 this lease allows allow you to place a -- a large-scale
- 2 battery-storage facility there that not only would
- 3 accept the output from the array, such that you could
- 4 use that output, not only during the peak period, but
- 5 during the non-peak hours -- would -- if -- if
- 6 you were to use it for that purpose as well as any other
- 7 network-reliability purpose, would the lease allow that?
- 8 A Yes. In fact, the -- the lease would probably
- 9 be the easiest part of my job at that point because
- 10 adding a new, you know, battery-storage project to an
- 11 already-existing solar project would -- would not be a
- 12 small measure. I mean, we would need to amend,
- 13 potentially, the permits. We would need to file for a
- 14 new interconnect request to -- possibly.
- And -- and then, of course, the -- we would
- 16 need to file for recover- -- recovery of those assets,
- 17 if -- if allowed. But the one thing I do know is that
- 18 I -- I don't have to rewrite the lease --
- 19 **O** Okay.
- 20 A -- which is --
- 21 Q That's fair enough. And just for purposes of
- 22 completing the -- the record, to some degree on this,
- 23 I'm -- any battery-storage facility that was to be put
- 24 here is hypothetical at this point; is that right?
- 25 A Correct.

- 1 Q And in addition, any cost associated with any
- 2 battery-storage facility is not included in any of the
- 3 cost of the SoBRA for either site; is that right?
- 4 A That is accurate.
- Okay. And just to close this issue out, if I
- 6 could get you to turn to Exhibit 25, and ask you if you
- 7 could point to me the language in -- in this memorandum
- 8 of lease, that would allow you to put a similar battery-
- 9 storage facility co-located on this site.
- 10 A So, in Paragraph 1.2, Page B-3, and on the
- 11 ninth sentence down, right after, in bold: Solar-energy
- 12 facilities, facilities for the storage, collection,
- 13 distribution -- so, it explicitly states storage.
- And then, again, if you make your way down to
- 15 the 16th line down, it states that we can install
- 16 energy-storage facilities. Again, it -- it's stated
- 17 multiple times here.
- 18 Q Okay. So, the leases don't restrict you from
- 19 doing that.
- Let me ask you if you -- I -- be- -- before we
- 21 took the break, I was asking you about Questions 35 and
- 22 36 for -- of the staff's first set of interrogatories.
- 23 And just so I understand, the staff had asked
- 24 you in -- in 35, "Please answer the following questions
- 25 regarding" -- do you -- are you there yet?

- 1 A Yes, I'm here.
- 2 Q Okay. "Please answer the following questions
- 3 regarding the Hamilton property and project." And then
- 4 it says, in "A," how many acres in the Hamilton property
- 5 are planned for this solar installation.
- And the answer is: The Hamilton solar power
- 7 plant includes 564.49 acres designated under the
- 8 Hamilton lease agreement for long-term construction and
- 9 operation of the solar facility.
- 10 And then, Subpart B asked you: How many acres
- in the Hamilton property would be suitable for future
- development as a solar installation or other utility
- purposes.
- And the answer for "B" is: There are zero
- 15 acres that would be a suitable for future development as
- 16 a solar installation or for other utility purposes. The
- 17 564.49 acres, which has been leased long-term, is fully
- 18 utilized for the Hamilton solar power plant.
- 19 Do you see that?
- 20 A Yes.
- 21 Q So, what I'm trying to understand is, under
- 22 the Hamilton lease, with respect to those answers for
- 23 "A" and "B," is there any place to put a battery-storage
- 24 project, if you so wanted to?
- 25 A So, I -- I can't say definitively right now,

- 1 without knowing the designs for the battery-storage
- 2 project, whether we would be able to co-locate it ex- --
- 3 you know, right here -- I mean, I was just out at the
- 4 Hamilton site, and I can think of an area where we have
- our 0 & M building, where you drive in to access the
- 6 site that would provide potentially-adequate space, but
- 7 I think if we truly wanted to expand the footprint
- 8 and -- and add storage, that is within our -- our rights
- 9 under the broader agreement with the landowner.
- 10 **Q** Okay.
- 11 A W- -- I can see why it might be confusing that
- 12 I said zero for future. I was answering the question
- 13 mostly about future solar. And we only leased -- once
- 14 we submitted our final designs, we only leased and are
- 15 paying rent for the property that we are utilizing for
- 16 the solar facility.
- 17 O Okay. But you have not -- it -- it -- to the
- 18 extent, under the discussion we just had, that you
- 19 needed to increase the footprint in order to put battery
- 20 storage in to suit whatever purposes you had, you
- 21 would -- you would have to go out and acquire land. And
- 22 any such land-acquisition costs are not included in the
- 23 costs that we've discussed earlier in your -- in your
- 24 MGS-2 and 4; is that right?
- 25 A Tho- -- yeah, those costs are not included in

- 1 here, but we do have the right under the agreement with
- 2 the landowner to expand the size of the prop- -- I mean,
- 3 we can take more land and pay for it, as long as the
- 4 development period has not expired.
- 5 Q Okay. And just for completeness, if --
- 6 Question 36, the staff asked the same questions, but
- 7 with respect to Columbia, the -- the same zero-acres
- 8 answer is in 36B. Do you see that in your -- would the
- 9 same answer apply with respect to Columbia, if you
- 10 wanted to put a battery-storage capability co-located
- 11 there?
- 12 A Yes, as currently designed, it's a solar-
- 13 generation facility. We leased the land for that
- 14 purpose.
- 15 **Q** Okay.
- 16 A And I would just add that we s- --
- 17 **O** Sure.
- 18 A Under that lease option, we have a similar
- 19 right to expand the footprint, if we wanted to, with the
- 20 landowner.
- Q Okay. Let me get you to turn back, if you
- will, to Exhibit 23, which is a TECO transcript excerpt.
- 23 And if I could ask you to turn -- just -- just since I
- 24 asked you to rely on my representation, to Page 48,
- 25 the -- at the bottom, for Payne Creek, on Lines 22

- 1 through 25, it says that the 80 -- the Payne Creek land
- 2 was \$2,700 an acre. Do you see that?
- 3 A Yes.
- 4 Q And then, if you turn over to the next page on
- 5 49, for Balm -- it says Baum Road. I think we're used
- 6 to -- that's a place here in Tallahassee, spelled
- 7 differently, but this is the Balm project, B-a-l-m --
- 8 \$34,500 an acre. Do you see that?
- 9 A Yes.
- 10 Q Okay. And -- so, let's put that aside for a
- 11 second. I just want to ask you, to understand -- I know
- 12 we focused on the -- on the lease issue, but I wanted to
- ask you about, if we go back to your testimony and
- 14 the -- the MGS-2 and MGS-4 documents, your exhibits,
- 15 there -- the transmission interconnect costs, you show a
- 16 hundred thousand dollars, where TECO shows 1.2 and
- 17 **\$4.4 million.**
- 18 Do you have any insight into why there's such
- 19 a difference between your interconnection costs and
- 20 theirs?
- 21 A I do not know anything about their
- 22 interconnection costs. I can describe ours and why
- 23 it's -- it's a lower number. We are connecting to a
- 24 115kV site -- or line that's on -- on the -- the site
- 25 that we've -- we've leased.

- 1 O Which -- for which --
- 2 A For Hamilton -- and -- both for -- and for
- 3 Columbia, which is a 69kV.
- 4 And in the -- the case for Hamilton -- and in
- 5 Columbia, it's a very, very short distance from our
- 6 project substation where we step up the electricity to
- 7 transmission voltage to the actual point of
- 8 interconnect.
- 9 And in the case of Hamilton, the large-
- 10 generator interconnection agreement only assigned the
- 11 cost to us to bring the power from our substation to the
- 12 point of interconnect, which -- which is a very short
- 13 115kV line.
- Q Okay. So, the large-generator interconnection
- 15 agreement that you reference -- and that's referenced
- in -- in this MGS-2 and MGS-4, is that right,
- 17 Footnote 4?
- 18 A Yes.
- 19 Q And if I look at that agreement, it's an
- agreement between Duke Energy Florida and Duke Energy
- 21 Florida; is that right?
- 22 A Correct.
- Q Okay. So -- and if I go back to your answer
- 24 to Exhibit -- to Interrogatory 35 and 36, under -- let's
- 25 go to 35E first. The staff asked you, "Please describe

- 1 the work needed to develop transmission interconnection
- 2 for the Hamilton property." Do you see that?
- 3 A Yes.
- 4 Q And your answer excerpts, it appears, the
- 5 large-generator inter- -- interconnection agreement.
- 6 And it -- it -- it has two items: Item 1,
- 7 interconnection facilities; and Item 2, network
- 8 upgrades.
- 9 And 2B says, "Other network upgrades:
- 10 Transmission provider will construct, own, and operate a
- 11 new five-terminal, five-breaker, 115kV switching
- 12 substation." Did I read that right?
- 13 A Yes.
- 14 Q Now, the -- under the large-generator
- interconnection agreement, the provider is Duke --
- 16 the -- Duke Energy Florida as the -- the network owner,
- 17 right?
- 18 A Correct.
- 19 O So, there's a cost that that Duke incurs. Is
- 20 that cost included in the -- in the -- the 1,56- --
- 21 **1,511 for Hamilton?**
- 22 A No, it is not. If you're referring to the
- 23 other network-upgrades line --
- 24 **Q Yes.**
- 25 A -- the description of -- of those facilities

- were deemed network upgrades. And they're not recovered
- 2 through the SoBRA base-rate adjustment. They -- they
- 3 were factored in to the cost-effectiveness test. And
- 4 Ben could -- could elaborate there.
- 5 Q Okay.
- 6 A But the only projects assigned to -- to the --
- 7 the only cost assigned to the project are described in
- 8 1A.
- 9 Q And that's the -- that's about a hundred
- 10 thousand dollars?
- 11 A That's about hundred thousand.
- 12 Q Okay. In your testimony, you describe some
- 13 studies that were done.
- 14 A Correct.
- 15 Q Were those costs included in this -- in -- in
- 16 **1A?**
- 17 A Upon receipt of a facility study, the cost
- 18 became more clear, yes.
- 19 O Okay. And -- and where -- was that in- --
- were those costs included in -- in the 1,511 and 1,461
- 21 numbers?
- 22 A The 1A --
- 23 **Q Yeah.**
- 24 A Those costs are.
- 25 O And are the studies in 1A or are they in 2?

- 1 A Sorry. Ask again?
- 2 Q The transmission studies that you do on the
- 3 front end to decide, you know, whether it's compatible
- 4 with the network and how you get in the queue, et
- 5 cetera -- are those costs -- are they factored in to the
- 6 cost-cap numbers anywhere?
- 7 A The only costs included in the cost-cap
- 8 calculation are the hundred thousand to build the
- 9 connection from our project substation to the five-ring
- 10 breaker bus, which is what is described in 1A.
- 11 Q Okay. So --
- 12 A And those -- those costs, to correct something
- 13 I had said, are not listed specifically in the facility
- 14 study. Our -- our engineering-procurement-construction
- 15 firm read and understood and looked at the -- the
- 16 designs and the requirements, and included that
- 17 estimated cost in their -- their quote to build the
- 18 project.
- So, we asked them what would that cost to --
- 20 to build that piece. And that's where we obtained the
- 21 hundred -- approximately hundred thousand.
- 22 Q So, when you say "this piece," you're talking
- 23 about the -- the -- the interconnection cost that the
- 24 generator would incur under the agreement; is that
- 25 right?

- 1 A Correct. Just like if a -- any other third
- 2 party asked to connect at that point of interconnect.
- Q Okay. But when we look at network upgrades,
- 4 2B, in this answer -- and before I ask this question,
- 5 this same answer for 2B is in 36 as well; is that right?
- 6 A Yes.
- 7 Q And your same answer would be, those costs
- 8 were not included in -- in your revenue-requirement
- 9 costs -- well, I take that back -- in your 1,511 and
- 10 your 1,461; is that right?
- 11 A That's correct, but they were included in the
- 12 cost-effectiveness analysis.
- Q Okay. So, do you -- do you know how much for
- 14 Hamilton and how much for Columbia the cost would be for
- 15 **2B?**
- 16 A Approximately 10 million.
- 17 **Q** Each or --
- 18 A Yes, just -- it was somewhat coincidence, but,
- 19 yes, for both Columbia and Hamilton.
- 20 **Q** Okay.
- 21 A I would just add that the -- the configuration
- 22 at Hamilton involved two separate 115kV lines. When the
- 23 project connected, those two were -- were connected
- 24 electrically with a ring bus so that it -- it was
- 25 something that strengthened the entire system, rather

- 1 than having two separate lines there tied in and can
- 2 share load.
- 3 Q Okay. Is that something that was required
- 4 because of the solar array being at that position in the
- 5 grid?
- 6 A That was -- because the solar project
- 7 requested it, it was -- it was required.
- 8 Q Okay.
- 9 A But it was deemed to benefit the -- the grid,
- 10 generally.
- 11 Q And did you say that was at Hamilton?
- 12 A Yes.
- 13 Q You didn't do a similar arrangement at
- 14 Columbia?
- 15 A No, a single 69kV line.
- 16 Q Okay. And -- and I -- so, I -- in your
- 17 testimony, if we could go and look at -- on Page 7,
- 18 looking at Lines 6 through 9 --
- 19 A Sorry. Say the page number again?
- 20 Q I apologize. Page 7, Lines 6 through 9, we
- 21 see -- you say here: The site is bisected by a 69kV
- 22 DEF tran- -- excuse me, transmission line; is that
- 23 right?
- 24 A Yes.
- 25 Q And that's what you described earlier in a

- 1 prior answer is -- is that -- that site had Duke
- 2 transmission on it already.
- 3 A That is correct.
- 4 Q And was that a factor in -- in -- in why that
- 5 project was selected?
- 6 A Yes.
- Okay. If we go over to Page 9, Lines 10
- 8 through 15, it starts off: The Hamilton project was
- 9 acquired from a third-party developer due to the
- 10 senior -- due to its senior queue position, agricultural
- 11 land with transmission access and mid-stage development
- 12 status.
- 13 Did I read that right?
- 14 A Yes.
- 15 Q So, here, you don't use the language that "DEF
- transmission line bisected the property." So, I would
- 17 ask you, is there a qualitative difference between
- 18 transmission here vers- -- at Hamilton versus Columbia?
- 19 A The -- in both cases, it was essentially
- 20 adjacent -- in -- in the case of Columbia, it comes
- 21 through the property. In the case of Hamilton, it runs
- 22 perfect- -- you know, perfectly adjacent to the -- the
- 23 property, and within the property that we leased.
- Q Okay. So, it's -- it's not adjacent, since
- 25 it's a mile away. It's -- abuts one of the property

1	lines?
2	A Correct.
3	Q It is is it Duke
4	A Duke
5	Q transmission line?
6	A Duke owns that transmission line.
7	MR. REHWINKEL: Okay. All right. So,
8	Mr. Chairman, I have three confidential exhibits
9	that I would like to pass out at this time.
10	CHAIRMAN GRAHAM: Okay.
11	MR. REHWINKEL: And I I'll give them to
12	staff. These are the response to OPC POD6 and 7.
13	And I I've entitled two documents "Lease-versus-
14	buy Analysis, Columbia," and "Lease-versus-buy
15	Analysis, Hamilton." And I would ask if the first
16	document, the response, could be given are we at
17	26?
18	CHAIRMAN GRAHAM: We are at 25, I believe
19	no, 26. You're correct.
20	MR. REHWINKEL: 26. And the "Lease-vers-"
21	versus-buy, Columbia" and I've given a copy to
22	the to the witness already.
23	"Lease-versus-buy, Columbia" would be 27, and
24	"Lease-versus-buy, Hamilton" would be 28.
25	THE WITNESS: I have I have Columbia. I do

1 not have Hamilton. 2. MS. TRIPLETT: Okay. I have --3 THE WITNESS: That's it. 4 MR. REHWINKEL: I'm sorry. 5 I messed up the copies. MS. TRIPLETT: (Discussion off the record.) 6 7 Okay. Mr. Rehwinkel, lease-CHAIRMAN GRAHAM: 8 versus-buy for Columbia you said was 20- --9 I apologize, Mr. Chairman. MR. REHWINKEL: 10 That's fine. Lease-versus-CHAIRMAN GRAHAM: 11 buy, Columbia, you said is 26 or 27? 12 MR. REHWINKEL: That would be 27. 13 Lease-versus-buy, Columbia, CHAIRMAN GRAHAM: 14 is 27. 15 MR. REHWINKEL: Yes. 16 CHAIRMAN GRAHAM: Okav. 17 MR. REHWINKEL: And lease-versus-buy, 18 Hamilton, would be 28. 19 CHAIRMAN GRAHAM: Lease-versus-buy, Hamilton, 20 is -- what number? 21 MR. REHWINKEL: 28. 22 CHAIRMAN GRAHAM: 28. 23 And then the OPC response is 26. 24 MR. REHWINKEL: Yes, sir. 25 And for the record, Mr. Chairman, I have

1	
1	included all of O Duke's response to OPC POD1
2	through 7, but I'm only going to be asking about 6
3	and 7.
4	CHAIRMAN GRAHAM: Okay.
5	MS. TRIPLETT: Mr. Chairman, I'm so sorry.
6	Can I have the exhibit numbers again for what we
7	assigned to what?
8	CHAIRMAN GRAHAM: Okay. No. 26 is the OPC 6
9	and 7, the response; 27 is lease-versus-buy,
10	Columbia; and 28 is lease-versus-buy, Hamilton.
11	Staff, did you get all that? Commissioners?
12	Commissioner Fay.
13	COMMISSIONER FAY: So, are we we can put
14	aside Hamilton and Columbia memorandum of lease at
15	this point or are you still referencing this?
16	CHAIRMAN GRAHAM: No, this is
17	MR. REHWINKEL: Yes, Commissioner, they can
18	be for my purposes, they can be put aside for
19	questions.
20	COMMISSIONER FAY: Okay. Great. Thank you.
21	(Whereupon, Exhibit No. 26, 27, and 28 were
22	marked for identification.)
23	CHAIRMAN GRAHAM: Mr. Rehwinkel, you have the
24	floor, sir.
25	MR. REHWINKEL: Thank you, Mr. Chairman.

- 1 BY MR. REHWINKEL:
- Q Okay. Mr. Stout, I -- I was going to ask
- 3 you -- I want to ask you about 26, which is the
- 4 discovery response, and ask you to turn to the
- 5 questions -- the answers to the Questions 6 and 7.
- 6 And before I ask you any -- any questions, I
- 7 see you're doing what I was going to ask you to do next,
- 8 which was to turn to Exhibits 27 and 28. And I would
- 9 like to represent to you -- I think I told your Counsel
- 10 this is -- 27 is Bates No. 1468, and 28 is
- 11 Bates No. 1479, in the lower right-hand corner.
- 12 I have omitted -- there was some back-up
- documentation in Excel-spreadsheet form that was rather
- 14 large and -- and cumbersome. I have omitted that from
- this because my questions only really need the summary
- document that -- which is 27 and 28.
- But what -- Mr. Stout, would you agree with me
- 18 that 27 and 28 are -- 27 for -- at first, is the summary
- 19 of the response that is further summarized in Exhibit 26
- 20 for Question No. 6?
- 21 A Yes. Exhibit 27 is the detailed calculation
- 22 behind the summarized answer in response to No. 6.
- 23 Q And the same would go with POD7, is it -- that
- 24 Exhibit 28 is the summarized answer for the -- for --
- 25 the summarized calculation for the summarized answer in

- 1 No. 7; is that right?
- 2 A Yes, that's correct.
- 3 Q Okay. Now, I -- I believe that -- well, is --
- 4 are you or Mr. Borsch primarily responsible for these --
- 5 the responses to these POD questions? Or is it a
- 6 combination?
- 7 A It -- it -- it's a combination. If I'm not
- 8 comfortable, with my knowledge, I -- I will defer to
- 9 Mr. Borsch.
- MR. REHWINKEL: Okay. Thank you.
- 11 And Mr. Chairman, I've designated all three of
- 12 these exhibits for either witness. And I -- I
- figured I would start with -- with Mr. Stout first.
- 14 BY MR. REHWINKEL:
- 15 Q So, we had asked in our discovery response,
- 16 which is shown in six and seven, to -- if you had done
- 17 a -- an analysis to decide whether leasing or buying was
- 18 more advantageous from a -- a customer standpoint; is
- 19 that fair?
- 20 A Yes, that was the -- the gist of the question
- 21 asked in -- in the discovery.
- Q Okay. And that's how you understood it and
- 23 answered; is that right?
- 24 A Yes.
- Q Can you tell me -- the response doesn't

- 1 say when this analysis was performed, but just for the
- 2 record, was this performed before or after the -- the
- 3 project -- you closed on the project?
- 4 A It was performed after.
- 5 Q Okay.
- 6 A And I would just clarify that, when I -- and I
- 7 state in the testimony, we -- we purchase the rights to
- 8 this project from a developer who had entered into
- 9 the -- the lease agreement. So, at that time, we did
- 10 our due diligence on the payments under the lease.
- But this specific analysis was performed after
- 12 we had prepared the -- the revenue requirements, which
- we needed to do this particular analysis.
- Q Okay. Was this done before the question was
- 15 asked by Public Counsel?
- 16 A No, it was response to the question.
- 17 Q Okay. All right. So, can you explain, if --
- 18 if you go -- let's -- let's look at -- at Columbia
- 19 first, which is -- which is 27. Can you explain, under
- 20 summary of analysis, what -- what we're seeing here and
- 21 what -- what you've done?
- 22 A Yes. I think the easiest way to explain it
- is, without changing the revenue requirements, what
- 24 could you have paid for the -- the land to purchase it
- 25 instead of leasing it over the life of the project. And

- in the case of the Columbia project, we calculated that
- 2 to be (STRICKEN), which --
- 3 MS. TRIPLETT: Oh, I'm --
- 4 THE WITNESS: Oh, sorry. I switched pages.
- 5 MR. REHWINKEL: Well --
- 6 MS. TRIPLETT: I would just caution the
- 7 witness to -- to point and refer to lines because
- 8 it's confidential.
- 9 MR. MOYLE: (Inaudible.)
- MS. TRIPLETT: Yes, that was totally wrong.
- 11 (Laughter.)
- 12 BY MR. REHWINKEL:
- 13 Q Let me ask you this: Are -- are the numbers
- 14 of the -- of a derived land-purchase number -- is there
- anything confidential about them, just by themselves?
- 16 A I absolutely think there is. And I -- I wish
- 17 I had not just blurted it out.
- 18 **Q** Okay.
- 19 A Because, I mean, real estate is a negotiation,
- 20 and it's local and --
- 21 **Q** Okay.
- 22 A It doesn't help to broadcast what you're
- 23 willing to pay.
- Q Okay. But just so I understand, this is not a
- 25 number that you had -- that -- any de- -- derived number

- 1 here has nothing to do with what you were faced with
- when you made your decision to buy the -- to purchase
- 3 the project from the developer because they had already
- 4 entered into a lease. You didn't have the option to buy
- 5 the land; is that right?
- 6 A That is correct.
- 7 Q Okay.
- 8 A With that said, you can still look at what has
- 9 been agreed to in the lease and determine whether that
- 10 lease rate is -- is a market, fair, competitive offer to
- 11 the landowner.
- MR. REHWINKEL: Okay. So, you know, I don't
- know what -- as far as the record goes -- I was not
- trying to elicit a number. I wanted to ask about
- the type of number and have him point.
- I have no problem with the record being -- in
- the transcript, being adjusted that way, if it's
- 18 appropriate. I know this is broadcast, but --
- 19 CHAIRMAN GRAHAM: I think we could strike that
- 20 number that was -- if it's in the record, we'll
- just strike it from the record.
- MR. REHWINKEL: Okay.
- 23 BY MR. REHWINKEL:
- Q So, let's -- let's switch gears. Let's go to
- 25 Hamilton so we get away from -- from this document for a

- 1 second because I think we can -- we can do this without
- 2 disclosing numbers.
- But if I look in -- on the land-purchase line,
- 4 and I see the number under "buy" -- do you see that?
- 5 A Yes.
- 6 O And this -- this number is a number -- I think
- you were trying to describe this number is what a
- 8 theoretical purchase price would be if -- if the
- 9 relationship between the lease payments and the land
- value held true; is that fair?
- 11 A Yes. Under present-value basis, yes.
- 12 O Okay. So, a present-value basis would be, if
- 13 I took the confidential numbers that are the sum of all
- 14 the lease payments that you project to pay from -- for
- 15 Hamilton, from 2019 through 2048, assuming that the term
- 16 stays at 30 years -- if I summed all those numbers and I
- 17 would get a number, that would be a nominal value of --
- 18 of payment streams. That would have to be present value
- 19 to understand what the cost would be today, if you were
- 20 to buy, in -- in today's world; is that right?
- 21 A Yes.
- Q Okay. So, you did that and then you made some
- 23 assumptions about what the land value would be or is it
- just because you held the -- the revenue requirement?
- 25 A It was because we held the revenue requirement

- 1 constant, the same.
- 2 Q Okay. So, if you don't know whether the
- 3 landowner -- the farmers that you deal with in Hamilton
- 4 and Columbia -- you don't know whether they would be
- 5 willing to sell this property or not; all you know is
- 6 that there was already a lease. And that was -- that
- 7 was the cards you were dealt until you --
- 8 A That's --
- 9 made all your other judgments and -- and
- 10 bought the project; is that right?
- 11 A That is correct.
- 12 O So, we -- we looked at some land prices that
- 13 Tampa Electric said they paid for their first two
- 14 projects in the range from \$2,700 to 3,400 -- fif- --
- 15 five -- 34.5- -- thousand dollars per acre, right?
- 16 If you had land prices for people who are
- 17 willing to pay to -- I mean, to sell, in this area,
- 18 the -- the cost of the land would have been higher, in
- 19 this cal- -- the revenue requirement related to the land
- 20 would be higher; is that right?
- 21 A Say that one more time?
- Q Okay. If you were to have to pay the TECO --
- 23 high end of the TECO price for land in -- in your area
- 24 that -- where you were trying to acquire land for a
- 25 solar site, the revenue-requirement amount would be --

- 1 would be higher than what is --
- 2 A Yes, if we paid at the high end of the two
- 3 projects you showed me earlier, Balm and Payne Creek,
- 4 yes, then it would require a higher cost recovery.
- 5 Q Okay. So, I guess the -- the -- we would have
- 6 to assume that the -- the land value that is in your
- 7 analysis here can be equated, for purposes of
- 8 comparison, only if -- if the assumption that you had a
- 9 willing seller of the same property; is that fair?
- 10 A Correct.
- 11 Q All right. So -- and then, if you go down
- 12 here and we look at incremental CAPEX impact, and you
- 13 see a number that may or may not be confidential, but
- it's -- we're going to not voi- -- vocalize it, right?
- 15 That number is the delta between what you actually show
- 16 as your costs, which is the -- the 1,511 here is not a
- 17 confidential number, right?
- 18 A That's correct.
- 19 Q Okay. But the number below it, depending on
- 20 the -- whether the cap -- incremental CAPEX number, is
- 21 confidential, for our purposes today, right?
- 22 A Yes.
- Q Okay. But that -- that delta between 1,511
- 24 and the -- and the number below the incremental CAPEX
- impact is what you would plug into your 1,511 to get a

- 1 number to show that, even had that occurred on a land
- 2 price, you would be below the threshold; is that fair?
- 3 A Yes, that's what it establishes. We would
- 4 otherwise be indifferent if we had paid that amount to
- 5 the landowner to purchase the property. And if we
- 6 had -- in a hypothetical, the resulting dollar per kWac
- 7 would be the bottom number in the -- in Exhibit 28,
- 8 bottom right, and below the 1,650 on an individual
- 9 project basis.
- 10 Q Okay. So, if we go back over to Exhibit 27,
- 11 the same -- we could look at that incremental CAPEX
- impact delta to 1,461, and the resulting derived
- 13 purchase cost would be the same. It would be a
- 14 different number, but the same theory --
- 15 A Yes.
- 16 Q -- applies; is that right?
- 17 A Yes, same methodology applied here.
- 18 O Okay. Now, this may be a Mr. Borsch question,
- 19 but if I go over here and I look at the lease column on
- 20 both 27 and 28, I see a revenue-requirement NPV number
- 21 for -- for each project.
- Is -- do you -- is that a number he calculated
- or was it calculated by Ms. Olivier? Do you know?
- 24 A It was an analyst in our -- our company
- 25 that -- that provided it.

- 1 Q Okay. Now, we've talked about this number.
- 2 Is it your testimony that this -- let's just look at --
- is this a confidential number, this revenue-requirement
- 4 number?
- 5 A I would, at this moment, say it is the way
- 6 it's expressed here because it's -- it's just the NPV of
- 7 the revenue requirement as related to the -- the land, I
- 8 believe.
- 9 Q Is this related to the land or the -- the
- 10 project overall?
- 11 A I do not know the answer at this moment.
- 12 **Q** Okay.
- 13 A This -- I'd have to think about it.
- 14 Q Are the lease payments included in this
- 15 **number?**
- 16 A In which number, now, are you referring to
- 17 here?
- 18 O The revenue-requirement NPV?
- 19 A That starts with the word "Goal-seek value"?
- 20 Q No, the one below that: Resulting in the NVP
- 21 [sic] of revenue requirements. It's the second line
- 22 **down**.
- 23 A And -- and you're asking me if that's the
- 24 resulting NPV of all of the revenue requirements?
- 25 **Q** Yes.

- 1 A I -- I'm not sure. I could defer to Ben or
- 2 we --
- 3 Q Okay.
- 4 A -- could follow up.
- 5 Q All right. So, I would ask this of Mr. --
- 6 Mr. Borsch.
- What I'm trying to understand is -- is, if
- 8 either of these numbers have the lease payments included
- 9 in them as a revenue requirement because the revenue
- 10 requirement is going to be more than your capital cost,
- it's going to be 0 & M as well, right?
- 12 A It's going to be 0 & M.
- 13 O And also the tran- -- any transmission
- 14 costs -- you said those were in a revenue-requirement
- 15 number or the cost-effectiveness --
- 16 A That was in the cost-effectiveness analysis.
- 17 **Q** Okay.
- 18 A But not in the revenue requirement because the
- 19 network upgrades are re- -- recovered -- network
- 20 upgrades are recovered under a different mechanism,
- 21 not. -- not. Sobra.
- Q Okay. All right. I think I'm done with these
- 23 confidential exhibits.
- 24 CHAIRMAN GRAHAM: He's going to use these on
- 25 the next witness as well.

- 1 MR. REHWINKEL: But -- I'm done with him --
- 2 CHAIRMAN GRAHAM: Yeah.
- 3 MR. REHWINKEL: -- but I will use them for
- 4 Mr. Borsch.
- 5 BY MR. REHWINKEL:
- 6 Q All right. Just a last set of questions for
- 7 you -- maybe one or two. In your testimony, on Pages 7
- 8 and -- well, let's start at -- at Page 7 -- 5 and -- I'm
- 9 sorry -- Pages 5 and 7. If we look at Page 5,
- generally, Lines 14 through 16 or 17, you reference
- inverters from TMEIC. Do you see that?
- 12 A Yes, I see that.
- 13 O And that's Toshiba Mitsubishi Electric
- 14 Industries Corporation, which is a 50/50 joint venture
- 15 between those two Japanese firms; is that right?
- 16 A Yes.
- 17 Q And on Page 7, you also mention that for --
- 18 for the -- that you also put TMEIC inverters on the
- 19 Columbia project. Those for Hamilton and Columbia both
- 20 had inverters from that firm; is that right?
- 21 A Yes.
- 22 Q Okay. And I -- and I -- we asked you some
- 23 discovery about the -- the -- how you came to pick that
- vendor, but I would just ask you if you could state for
- 25 the record that the res- -- the resolution of past

- disputes with either member of this joint venture had --
- whether it had any bearing on se- -- selection of these
- 3 inverters.
- 4 A I can state for the record that I had no
- 5 knowledge of any past dispute with either Mitsubishi or
- 6 Toshiba, and that our decision to choose this inverter
- 7 was -- was solely based on its, you know, qual- --
- 8 quality, reliability, and -- and the price and the
- 9 intent to keep our technology consistent, which low- --
- 10 lowers the operating cost.
- MR. REHWINKEL: Okay. Thank you, Mr. Stout.
- 12 Those are all questions I have, Mr. Chairman.
- 13 CHAIRMAN GRAHAM: Thank you.
- 14 Mr. Brew?
- MR. BREW: Thank you, Your Honor.
- 16 EXAMINATION
- 17 BY MR. BREW:
- 18 O Good afternoon, Mr. Stout. I'll only be twice
- 19 as long as Mr. Rehwinkel.
- 20 First, just so I understand the layout of the
- 21 testimony, your responsibility was to describe the
- 22 projects, how you picked them, and to assert that they
- 23 met the cost-effectiveness requirements of the 2017
- 24 agreement; is that right?
- 25 A I would state it a little differently. Ben is

- 1 responsible for the cost-effectiveness analysis, which
- 2 derives a -- a customer-savings over the life and the
- 3 need.
- 4 And I am responsible for the reasonableness of
- 5 the installed costs; so as compared to other utilities
- 6 and as compared to the 1,650-dollar-per-kWac cap.
- 7 Q Okay. But to simplify, the description of the
- 8 projects, what got into how you picked them, what they
- 9 are expected to cost, and how they're expected to run
- would be you; the need for them, the cost-effectiveness,
- 11 would be Mr. Borsch; and Ms. Olivier was responsible for
- 12 turning the resulting revenue requirement into rates.
- 13 A That is correct.
- 14 Q All right. There was one item that
- 15 Mr. Rehwinkel mentioned that I -- I wanted to get
- 16 clarification on. He had asked you about the responses
- 17 to Questions 35 and 36 of the staff first set of
- 18 interrogatories. Do you recall that?
- 19 A Yes.
- 20 Q And he specifically asked you about the
- 21 reference to 2B, which was labeled "Other network
- 22 upgrades."
- 23 A Correct.
- Q Okay. And I think you had mentioned that the
- 25 estimated cost of the other network upgrades were

- 1 roughly ten million each for both Columbia and Hamilton.
- 2 A Yes.
- 3 Q Okay. And that the improvements in Hamilton
- 4 involved the 115kV system and ring busing that -- the
- 5 two lines.
- 6 A Correct.
- 7 Q And the upgrades for the Columbia were on the
- 8 69kV system.
- 9 A That's correct.
- 10 Q Okay. And am I correct that none of that
- 11 \$20 million is reflected in your cost -- installed cost
- 12 estimate that's reflected on MGS-2 and 4 for their
- 13 respective projects?
- 14 A Yes, that is correct. As they were deemed
- 15 network upgrades, they're not specifically assigned to
- 16 the -- the customer and the large-generator
- 17 interconnection agreement.
- 18 O Okay. And so -- and then, on the other side,
- 19 the -- and Mr. Rehwinkel touched base on this, but
- 20 the -- your exhibits and your testimony don't describe
- 21 the O & M costs for either facility; is that right?
- 22 A My testimony does not. I think, in response
- 23 to a discovery question, I did provide a -- an annual
- 0 & M expense.
- Q Okay. But your -- your estimated ex- -- your

- 1 exhibits showing the estimated installed cost by
- 2 category, MGS-2 and 4, don't show 0 & M costs, do they?
- 3 A That's correct. Those are just --
- 4 Q Okay.
- 5 A -- installed costs.
- 6 Q And so, looking at the total cost of the
- 7 projects, apart from the numbers shown on your exhibits,
- 8 there's \$20 million in other network upgrades and the
- 9 O & M costs; is that right?
- 10 A There's approximately 20 million across both
- 11 projects of other network upgrades.
- 12 Q And the O & M cost for each project.
- 13 A Oh, and then the -- yes, but the other O & M
- 14 costs are not part of the capital budget, correct.
- 15 Q Okay. I'm just asking --
- 16 A Yes.
- 17 Q -- in terms of total cost of the projects.
- 18 You described the projects and how they were
- 19 developed. Was that -- was -- was negotiating those
- agreements within your area of responsibility?
- 21 A Yes.
- 22 Q And you were directly responsible?
- 23 A I have staff -- I have a development team.
- 24 O Your team.
- A And so, my team, and I am responsible, yes.

- 1 Q Okay. And so, the -- for both projects, I
- 2 guess the one thing they have in common is an
- 3 opportunity because both were senior projects in an
- 4 existing queue for interconnection?
- 5 A Correct.
- 6 Q Okay. And you mentioned that, in -- in both
- 7 cases, the developers that you acquired the -- the
- 8 projects from had already enter- -- entered into land-
- 9 lease agreements?
- 10 A Yes.
- 11 Q And so, not to say you bought the farm, but
- 12 you bought the lease; is that right?
- 13 A It's one of the -- yeah, that's a good
- 14 expression. It's one of the assets acquired when we
- 15 acquired all of the development assets for the project.
- 16 It's not the only assets, but it's a critical asset.
- Q Okay. So, let's break that down. You
- 18 purchased 565 -- or you leased 565 acres for Hamilton,
- 19 and you acquired the land-lease arrangement that the
- 20 prior developer had already signed.
- 21 A Yes, it was -- in the case of Hamilton, it's
- 22 assigned to us.
- 23 **Q** Okay.
- 24 A So, we become the counter-party to the lease.
- 25 Q Did you take any more or less acreage than

- 1 they -- than the prior developer then had entered into
- 2 for a land lease?
- 3 A No, we -- those documents were assigned to us
- 4 as is -- I think Hamilton had been amended at a --
- 5 twice -- had a third amendment by the time we acquired
- 6 it.
- 7 Q Okay. And the same applies for Columbia?
- 8 A Correct, we acquired the rights to the option
- 9 to lease agreement.
- 10 Q So, the -- and then both cases, the decision
- on whether to buy or lease the property was pretty much
- 12 moot because you were acquiring projects for which a
- 13 land lease was already in place.
- 14 A That is correct.
- 15 Q Okay. And for Columbia, you purchased the --
- or you acquired the -- the project from First Solar; is
- 17 that right?
- 18 A Yes.
- 19 Q And you bought the -- or you're buying the --
- 20 the solar modules from First Solar, too?
- 21 A For Columbia, correct.
- 22 Q For Columbia.
- 23 And for 74.9 megawatts -- that would be what,
- 24 about 300,000 panels?
- 25 A That's a good -- I don't know if we stated

- 1 that, but yes, that's a good number to use.
- 2 Q Okay. And the same for Hamilton --
- 3 A Rough -- roughly, yes. If you look at the DC
- 4 capacity and the size of the panels, you can -- you can
- 5 calculate how many actual glass panels there will be.
- 6 Q Okay. Now, under the -- the land lease,
- you're paying a -- an annual lease payment to the
- 8 property owner?
- 9 A Correct.
- 10 Q Are you paying property taxes?
- 11 A In the case of Hamilton, we are paying
- 12 property taxes. And in the case of Columbia, we are
- 13 paying property taxes at an exempted -- at a lower rate.
- Q Okay. Are those costs included in the lease
- or separately stated?
- 16 A Separate from the lease. And they're paid to
- 17 the county.
- Q Okay. And those are costs -- are -- are also
- 19 not included in your estimate of the installed costs?
- 20 A Correct. They're operating-and-maintenance
- 21 costs. They're future -- I will rephrase. During the
- development period and construction period, any property
- 23 tax payments that we make during that period are
- 24 included -- they are included in capital.
- So, they would be included in that table,

- 1 MGS-2, MGS-4, but the amount that we would pay once we
- 2 start operating are in an operating-and-maintenance
- 3 budget.
- 4 Q Okay. So, the operating lease payments for
- 5 Hamilton from 2018 for the next 25 years is an O & M
- 6 cost?
- 7 A Yes.
- 8 Q Okay.
- 9 A So is the property tax.
- 10 Q Okay. Is the cost of solar panel -- solar
- 11 panels evolving?
- 12 A Yes, it's -- I mean, it's a very competitive,
- 13 global market. It's somewhat like a -- a commodity.
- 14 It's somewhat like, you know, processing chips and
- 15 computers. They keep improving the technology. They
- become more efficient over time and, generally, we've
- 17 seen decline in costs in the dollar-per-watt DC.
- 18 Q As they become more efficient in
- 19 manufacturing --
- 20 A As they become more efficient, as they can put
- 21 more actual cells on a -- on a piece of glass, and as
- 22 the -- the cost of manufacturing has come down.
- MR. BREW: Okay. That's all I have. Thank
- you.
- 25 CHAIRMAN GRAHAM: Sure.

- 1 Mr. Moyle.
- MR. MOYLE: Thank you.
- 3 EXAMINATION
- 4 BY MR. MOYLE:
- 5 Q We met earlier. I'm Jon Moyle. I represent
- 6 the large industrial users.
- 7 I welcomed you to Tallahassee because,
- 8 according to your testimony, you're based in North
- 9 Carolina; is that right?
- 10 A Yes. I have an office in Charlotte, correct.
- 11 Q Right. And you say that you're responsible
- 12 for new solar facilities in Florida on behalf of Duke
- 13 Energy Florida. That -- that's correct.
- 14 A That is correct.
- 15 Q Are your responsibilities limited to solar in
- 16 Florida or do you also have responsibilities for solar
- and wind for other Duke companies?
- 18 A I have responsibilities for solar and wind,
- 19 for each of the utilities owned by Duke Energy
- 20 Corporation; so, beyond Duke Energy Florida, the
- 21 Carolinas and the Midwest.
- O Okay. And that -- that would be four or five
- 23 companies, Kentucky, Ohio --
- 24 A Yeah, Duke Energy Indiana, Duke Energy
- 25 Kentucky, Duke Energy Ohio, Duke Energy Progress in

- 1 North and South Carolina, and Duke Energy Carolinas in
- 2 North and South Carolina.
- 3 Q Y'all are developing facilities there as well?
- 4 A Yes.
- 5 Q Yeah. How did -- how do your costs there
- 6 compare to your costs here?
- 7 A I would say they're -- they're pretty much
- 8 very similar. When we are quoted solar panels, you
- 9 know, there can be a small difference in the
- 10 transportation charge depending on which port the -- the
- 11 modules are brought into, but there's not generally much
- 12 of a -- a difference on the price of a panel, whether
- 13 you know, it's in California, North Carolina, or --
- 14 or -- or Florida.
- We may see some differences on the
- 16 construction costs. So, you -- the firms that you work
- 17 with to construct the project will -- will do
- 18 geotechnical analysis.
- 19 They'll -- they'll come to the site and submit
- 20 proposals under a request for -- under an RFP. And
- 21 it's depending on topography, the soil, the layout --
- there are a number of things that can influence cost
- 23 that make it more expensive if you have very, you know,
- 24 rocky soil or -- or not.
- Q Could you just briefly describe the two

- 1 different types of solar facilities? There's the -- the
- 2 fixed facility and then there's the tracking facility,
- 3 as I understand it, correct?
- 4 A Correct.
- 5 Q And -- and let me take a shot at it: The
- 6 fixed doesn't follow the sun, but the tracking does
- 7 follow the sun. And the tracking gives you additional
- 8 energy because it is more efficient; is that fair?
- 9 A That is correct. A fixed-tilt is -- is just
- 10 what it sounds like. It -- it's a panel that's fixed to
- 11 its racking and it cannot change positions. A single-
- 12 axis tracking has the ability to face the sun in the
- 13 morning when it's lower in the horizon, and then to
- 14 vertically sort of rotate toward the sun when it's
- 15 higher in the horizon.
- And that's a single-axis tracking system, and
- 17 it results in higher energy output. You capture more of
- 18 the sun's irradiance.
- 19 Q Yeah. Does the company stick to one -- one
- 20 type of solar panel or the other? Is it a mixed bag?
- 21 Can you just explain that?
- 22 A So, that's not the type of panel. That's
- 23 the -- the type of racking system, whether it's fixed or
- 24 single-axis. And in that -- that decision is really
- 25 based on the -- the land constraint. You do -- you do

- 1 need more land when you go to a tracking system. And
- 2 the -- the main reason is that it casts a further
- 3 shadow, and so, you need more space between the rows.
- 4 So, we don't -- we don't -- we don't fix to one design
- 5 over -- over the other.
- I think, if the land is suitable, we would
- 7 pursue the single-axis tracking because it's -- it's got
- 8 higher output and it pays for itself once you've
- 9 installed it.
- 10 Q So, I was going to ask you, if you had a green
- 11 field development, you'd probably go with the tracking.
- 12 A Yes. Like Hamilton, which has been fully
- 13 constructed is a single-axis tracking.
- 14 Q And -- and just to be clear -- I think you --
- 15 I think you've covered this, but you -- you indicated in
- 16 your testimony that favorable queue positions were
- 17 significant in your decisions to -- to purchase these
- 18 projects, correct?
- 19 A Yes.
- 20 **Q** Okay.
- 21 A The -- it drives the -- the schedule and the
- 22 timing to achieve your -- your back feet under the --
- 23 under the grid. So, to basically energize your facility
- 24 and go into commercial operation, the transmission
- 25 upgrades --

- 1 O Yeah.
- 2 A -- need to be ready.
- 3 Q Is -- is your company -- is Duke also in the
- 4 queue, in addition to private developers?
- 5 A Yes, we are.
- 6 Q And are you below private developers or above
- 7 them? I assume that you were below these because that
- 8 was part of your decision to -- you know, to -- to
- 9 purchase their projects; is that right?
- 10 A Yes, higher number, but -- but that's relative
- 11 to these projects, but we could be before or after other
- 12 developers who have -- have entered the queue.
- 13 Q I -- I notice that you -- in your testimony,
- 14 you said that local government had given you a
- 15 conditional use. I was curious what -- what the
- 16 condition was, if you knew.
- 17 A It's -- I mean, that's just generally the name
- 18 of a permit under -- under local county zoning. It --
- 19 it provides for the use of solar upon certain
- 20 conditions. So, it's -- we call it a CUP, a conditional
- 21 use permit. It's very common language in the industry
- 22 and in any development and building industry.
- 23 And generally, conditions might just
- 24 include -- depending on the -- the county, whether or
- 25 not you put in a vegetative buffer, whether or not

- 1 you -- you do dust su- -- suppression. I've -- I've
- 2 worked in counties that put, you know, 300-page lists
- 3 together, and I've worked in others that have one or two
- 4 conditions.
- 5 Q Okay. You also spent some time in your
- 6 testimony talking about tariff implications. And as I
- 7 read it, it related to thin-film design. Are there
- 8 benefits with respect to using thin-film-design solar
- 9 panels? And if so, could you explain.
- 10 A We would use crystalline or thin-film.
- 11 Hamilton is crystalline and Columbia is thin-film. And
- 12 they -- they both accomplish what you would -- what you
- want, and that's converting the -- the sun's energy into
- 14 electrical energy.
- In the case specifically of the tariff, the
- 16 way the tariff was written, it defined very explicitly
- 17 that it applied to crystalline, and thin-film does not
- 18 use crystalline. That uses a different technology. So,
- 19 they were exempt from the tariff.
- 20 Q So -- so, for these two projects, as I
- 21 understand it, one of them, you -- you -- I say "you"
- 22 collectively because it includes the ratepayers -- were
- 23 subject to the increase steel tariff. And another,
- 24 you -- that was not the case; is that right?
- 25 A Steel tariff is different. Steel, aluminum

- 1 hit -- hit both projects, but -- but the solar-panel
- 2 tariff, which came before the steel and alum- --
- 3 aluminum tariff, only applied to the panels that are
- 4 being used at Hamilton. And they -- it did not apply to
- 5 the thin-film panels being used at Columbia.
- 6 Q And -- and that was because of the --
- 7 A Because --
- 8 Q -- of the exemption that you just described?
- 9 A Because of the very narrow language that was
- 10 used in the tariff as it was written. Thin-film is --
- 11 it does not apply to thin-film.
- 12 Q In -- in terms of cost-effectiveness,
- 13 with respect to what -- what other possible generating
- 14 sources were -- were considered -- would that be you or
- 15 Mr. Borsch?
- 16 A I would defer to Mr. Borsch.
- 17 Q Yeah. So -- so, I want to ask just a couple
- 18 of questions about solar compared to -- to gas-fired
- 19 combined cycle. That's a Mr. Borsch question?
- 20 A I would defer to Ben -- Mr. Borsch.
- 21 Q Okay. You were shown some documents related
- 22 to lease payments. And I -- I would assume that, if you
- were going to look at purchasing this property, one of
- the things y'all would do would be to do an analysis of
- 25 what land is selling for in -- in the area, correct?

- 1 A Yes.
- 2 Q And -- and that's a pretty good driver of what
- 3 land costs are. I mean, I know you looked at a lease,
- 4 but if a lease was higher than surrounding land costs --
- 5 I get the net present value, but you would agree the
- 6 price per acreage is a good indicator of what land is
- 7 going for --
- 8 A It's --
- 9 in Columbia and Hamilton County?
- 10 A Yes, it's -- it's very -- although I would say
- 11 it's very local, it's -- it really depends on where you
- 12 are in the -- the specific project, but -- but yes, you
- 13 could look at dollar-per-acre in the real estate
- 14 market --
- 15 Q All right.
- 16 A -- until, you know, five or six other
- developers start asking the same landowner who has the
- 18 cream-of-the-crop site next to transmission whether
- 19 they'll sell for a higher price. Then -- then the
- 20 market shifts a little --
- 21 Q Yeah.
- 22 A -- because it has a new use.
- Q What are the capa- -- capacity factors on
- 24 these -- on these units?
- 25 A Hamilton is 29 percent, and Columbia is

- 1 predicted to be 30 percent.
- 2 Q And just explain, if you would, what that
- 3 means?
- 4 A It is essentially the net energy output
- 5 divided by the theoretical gross energy output. If --
- 6 if the sun were shining all the time, that would be the
- 7 gross theoretical output, but of course, it doesn't.
- 8 So, it only produces a -- a portion of the rated full
- 9 capacity. So, that, in essence, is the capacity factor.
- 10 Q And for solar, that's in part because of the
- 11 nighttime and also because of cloudy weather conditions.
- 12 You get energy -- your number is 29 or 30 percent of the
- 13 time is when you actually get energy; is that right?
- 14 A That's correct, once you take into account
- when it's dark and when it's cloudy.
- 16 O Okay. And with respect to questions about
- 17 reserve margin and how the company looks at something
- 18 that provides 30-percent capacity value -- would that be
- 19 a -- a question for Mr. Borsch or could you tackle that?
- 20 A Yeah, with respect to reserve margin, that
- 21 would be for Ben.
- 22 **Q** Okay.
- 23 A Mr. Borsch.
- Q All right. And -- and then, with respect to
- your duties and responsibilities, which are -- are

- 1 broad, as you described them, being responsible for
- 2 Duke's solar and wind and all their areas where they
- 3 have operating companies, is -- is the -- is the company
- 4 looking at battery storage actively or do they have
- 5 battery storage actively? Could you describe that, if
- 6 you would.
- 7 A Yes, we -- we have installed battery, and we
- 8 are evaluating sites here in -- in Florida that are
- 9 suitable as part of the 2017 settlement agreement.
- 10 We -- we expect to install up to 50 megawatts during
- 11 that -- that period. And we're doing it in other
- 12 jurisdictions as well, where -- where it makes sense.
- 13 Q And -- and are those typically co-located
- 14 with -- with solar facilities or not necessarily?
- 15 A Not necessarily. They can be, but they don't
- 16 need to be.
- 17 O Okay. And Mr. Brew asked you a few questions,
- 18 but the -- the system upgrade that you were talking
- 19 about that -- the two \$10-million transmission-system
- upgrades -- you had said one was for a 69kV upgrade.
- 21 Could you just explain what -- what your
- 22 understanding of the upgrade that was a system -- system
- 23 asset was with respect to that -- I think it was
- 24 Columbia County; is that right?
- 25 A Yes, it's -- it's adding a switching station

- 1 on the 69kV line.
- 2 Q And -- and where -- where is that switching
- 3 station vis-a-vis the solar facility in Columbia County?
- 4 A It's on the property that we have leased.
- 5 Q So, it's -- it's co-located there?
- 6 A Yes, it's co-located.
- 7 Q And -- and the other \$10-million
- 8 expenditure -- these -- these are not being attributed
- 9 to the project; they're being attributed to the -- I
- 10 guess the general body of ratepayers; is that right?
- 11 A Correct.
- 12 O Okay. And -- and -- and what was the
- improvement on the second one?
- 14 A At Hamilton?
- 15 Q Right.
- 16 A It was a switching station, a ring bus that
- 17 tied in together two 115kV lines; allowed for the
- 18 project to insert its capacity.
- 19 Q And then the same question with respect to the
- 20 location of the asset vis-a-vis the solar facility.
- 21 A Yeah, immediately adjacent.
- Q Okay. And -- and these -- these requests
- were -- were made by the -- the people you bought the
- 24 project from; is that right?
- 25 A Yes, the initial queue requests were submitted

- 1 by the original developer.
- 2 Q Okay. You -- you've been asked a lot of
- 3 questions about leases and -- and different
- 4 expenditures. You know, the O- -- and the O & M
- 5 costs -- do you have those figures handy, in terms of
- 6 the O- -- O & M cost for each project, just the all-in
- 7 sum number?
- 8 A I believe we did submit that as a response to
- 9 discovery. I have to find it.
- 10 Q It's not a confidential number, is it?
- 11 A I suspect we might have filed it as
- 12 confidential.
- 13 O So, let me ask you this: Could you -- could
- 14 you just identify, for the -- the O & M costs, the
- all-in O & M costs for both projects, if you would? And
- 16 if it's confidential, I'm sure your lawyers will tell
- 17 me.
- 18 MS. TRIPLETT: If I may, Mr. Chairman --
- 19 CHAIRMAN GRAHAM: Sure.
- MS. TRIPLETT: So, I know the lease payments
- 21 are -- are confidential and I -- I mean, I guess
- I -- my question is -- there's other parts of that
- 23 O & M cost that's an annual number because it's
- operating-and-maintenance expense, as you would
- expect. So, I don't -- I'm not sure I understand

- what you mean by all-in number.
- 2 Do you mean -- I think we -- I probably could
- dig out in discovery a number. I'm not sure if
- 4 it's confidential. It's -- in total. I think it
- depends on how many bits and pieces to make sure
- 6 that the lease payment is protected.
- 7 And then I don't know if -- if he has a total
- 8 number, it's one thing to take all the numbers for
- 9 30 years and add them up. Or are you talking
- 10 annual? Are you talking net present value? I
- just -- I'm not sure.
- MR. MOYLE: I can come at it a different way.
- 13 CHAIRMAN GRAHAM: Sure.
- 14 BY MR. MOYLE:
- 15 Q So -- so, you're familiar with O & M costs,
- 16 right?
- 17 A Yes.
- 18 O Okay. So -- so, typically in a -- in a
- 19 project -- and it doesn't even necessarily have to be a
- 20 Florida project. What are your -- what your biggest
- 21 drivers of your O & M in a solar project?
- 22 A I -- I would say it's -- over time, it could
- 23 be inverter replacements. It could be panel
- 24 replacements, but you know, it's -- generally, we have a
- 25 technician who is available either half or quarter time.

- 1 You know, we don't always need a full-time technician at
- 2 each site.
- So, there's -- there's labor. Those are some
- 4 of the direct operating-and-maintenance costs, but we
- 5 also pay insurance. We pay the -- the leases. We pay
- 6 the property taxes. Those all, in combination, make up
- 7 the operating budget.
- 8 Q Okay. And if you just had to roughly say, you
- 9 know, the -- I -- I assume land would be one of the
- 10 biggest? Or is that not right, in terms of your -- what
- 11 goes into 0 & M?
- 12 A No, I wouldn't characterize it as the
- 13 biggest --
- 14 Q Inverters?
- 15 A It's -- I -- I'd have to look at a detailed
- 16 budget. We've, I think, provided the total annual
- 17 expenses in the response to discovery.
- 18 O Right. And I'm just asking you, as someone
- 19 familiar and -- and skilled in this area, just to -- you
- 20 know, at a very high level, you know, give me your
- 21 assessment as to what, you know, the biggest components
- 22 of that were.
- 23 A And I think I responded that it's mostly
- 24 replacements of -- of parts and the labor to do that.
- 25 Q Do you know when these projects will be

1 operational?

- 2 A Hamilton achieved commercial operation at the
- 3 end of December of 2018. And Columbia is scheduled
- 4 to -- and achieve commercial operation in the first
- 5 quarter of 2020.
- 6 Q Okay. And do you know when ratepayers will be
- 7 seeing an adjustment in their rates for these projects,
- 8 consequently?
- 9 A I believe it's the first bill after the month
- in which they go in service, but I would defer to either
- 11 Mr. Borsch or Marcia, who is not here.
- MR. MOYLE: If I could just have a minute,
- 13 Mr. Chairman.
- 14 CHAIRMAN GRAHAM: Sure.
- 15 BY MR. MOYLE:
- 16 Q I -- I just had one final question. Your EPC
- 17 contractor is M.A. Mortenson; is that right?
- 18 A Yes.
- 19 Q Yeah. Are they -- where are they out of? Do
- 20 you know?
- 21 A Minneapolis.
- 22 Q And have you used them on other -- other Duke
- 23 projects?
- 24 A Yes, we have.
- MR. MOYLE: Okay. That's -- that's all I

- 1 have. Thank you.
- 2 CHAIRMAN GRAHAM: Staff?
- MS. CRAWFORD: Just a few questions.
- 4 CHAIRMAN GRAHAM: Sure.
- 5 MS. CRAWFORD: Thank you.
- 6 EXAMINATION
- 7 BY MS. CRAWFORD:
- 8 Q Mr. Stout, it's correct that, in order to meet
- 9 the megawatts -- I'm sorry. Let me start again.
- 10 Did Duke pursue a purchase power agreement
- instead of the build options that are before us here
- 12 today?
- 13 A No, that was not within my scope. No.
- 14 Q Okay. And -- and why is that?
- 15 A It was not included in the 2017 settlement
- 16 agreement.
- 17 O Okay. And you talked about looking at -- in
- 18 your testimony, on Page 8, you talk about Duke started a
- 19 comprehensive review of green-field sites. It also
- looked at existing projects. And ultimately, what's
- 21 selected of the force today are -- are mid-stage
- development-status projects; is that correct?
- 23 A At the time that we agreed to acquire the
- 24 rights to those projects, they were -- I would
- 25 characterize them as mid-stage development, correct.

- 1 Q Okay. And -- and so, that kind of begs the
- 2 question that there must be something like an early-
- 3 stage development project, a late-stage development
- 4 project?
- 5 A Yes.
- 6 Q Okay. Can you give us just kind of a very
- 7 high-level understanding of what those various
- 8 categories would entail?
- 9 A Very early stage would be a developer in a
- 10 nice suit who's got a bright idea and not much more; you
- 11 know, maybe has an idea of where to site a project.
- No, but quite honestly, an early stage is --
- is land control but, perhaps, has not done any studies
- of the transmission system, has not studied any
- 15 potential environmental hazards on the site, has -- has
- 16 not had contractors look at the site for -- for
- 17 suitability, for construction, has not done any solar-
- 18 resource assessment.
- 19 You know, we -- we'd probably say mid-stage is
- 20 they've taken the project beyond just land-control
- 21 agreements and they have submitted into the interconnect
- 22 queue, have received feasibility study, has -- have done
- 23 a Phase 1 environmental site assessment, has started
- 24 survey work and title, and has sat down and at least
- 25 gone through the permitting requirements and has a good

- 1 sense of what permits will be required and the schedule
- 2 to obtain those.
- And then I would say late stage is we're
- 4 closing in on an interconnection agreement. We've filed
- 5 for permits. We have a good sense of whether they'll be
- 6 issued or not.
- 7 So, all still within development, prior to
- 8 start of construction, but clearly, differences in terms
- 9 of the probability of whether that project will be
- 10 constructed successful.
- 11 Q Okay. Thank you.
- 12 For Hamilton and Columbia, you did an RFP for
- 13 those projects, correct?
- 14 A We did an RFP for the engineering,
- 15 procurement, and the construction. So, we -- we did an
- 16 RFP for the construction work --
- 17 **Q** Okay.
- 18 A -- which is the bulk of the costs.
- 19 Q But you didn't do an RFP for the other costs
- 20 associated with the project?
- 21 A We did an RFP for -- for sourcing solar panels
- 22 and transformers. So, those are equipment that we
- 23 source outside of the EPC agreement.
- Q Did you do an RFP for -- did the RFP
- specifically target mid-stage development, early-stage

1 development? It was not specific about what stage 2 development you were interested in? 3 Α Just to clarify, the RFP is only for the 4 equipment I mentioned --5 Q Okay. -- the solar panels, the transformers, and 6 7 then for the EPC agreement to -- to source the rest of 8 the materials and to construct the rest of the project. 9 As far as selecting projects, there -- there 10 were only so many that were publicly available in the --11 in the interconnection queue to -- to consider. And we 12 considered any that could achieve the in-service in 13 the -- the dates that we were focusing on. 14 MS. CRAWFORD: I think that's all I have. 15 Thank you. 16 CHAIRMAN GRAHAM: Commissioners -- oh, before 17 that, Mr. Rehwinkel, Brew, and Moy- -- Moyle, for 18 Commissioner -- for the witness, Borsch, do you 19 have as many questions? Less questions? 20 MR. REHWINKEL: I have -- I have a relative 21 handful compared to Mr. Stout for Mr. Borsch. 22 About the same, 20, 30 minutes. MR. BREW: 23 MR. MOYLE: And I would suspect about the

same.

24

25

CHAIRMAN GRAHAM:

Some of the questions got punted to him.

Okay.

And staff?

1	
1	MS. CRAWFORD: Staff has none for Mr. Borsch
2	at this time.
3	CHAIRMAN GRAHAM: Okay. Commissioners.
4	Commissioner Polmann.
5	COMMISSIONER POLMANN: Thank you,
6	Mr. Chairman.
7	Afternoon, Mr. Stout.
8	THE WITNESS: Good afternoon.
9	COMMISSIONER POLMANN: First question is: Why
10	did Duke proceed with Hamilton and Columbia SoBRA
11	projects on on this schedule? In in other
12	words, why at this time?
13	THE WITNESS: The the settlement agreement
14	allows a period in which the projects must achieve
15	in-service. And we looked at the availability of
16	projects and the time it would take to interconnect
17	those projects, and have pursued somewhat of a
18	phase phasing-in schedule so that we will build
19	the projects over time during that period, rather
20	than all all in one year.
21	There are some advantages. If if costs
22	continue to decline, then we would benefit from
23	those declines in cost.
24	COMMISSIONER POLMANN: Okay. Thank you.
25	In your direct testimony, Pages 8 and 9, I had

1	just a couple of questions. You indicate on Page 8
2	of your testimony, Lines 16 through 18 and beyond,
3	the primary factors, considering purchase of
4	third-party developed sites. There's a lot of
5	discussion here about interconnection queue.
6	I'm not entirely clear maybe you can
7	elaborate for me this interconnection-queue
8	position how how was that established or
9	or who sets that or
10	THE WITNESS: It's
11	COMMISSIONER POLMANN: How how does that
12	assign to a particular project opportunity?
13	THE WITNESS: There's a FERC queue, a state
14	queue, and the projects submit a formal request.
15	And they submit the size of their project, the
16	location of the project, and the desired in-service
17	date. And anyone who submits after them would be
18	studied as as if they occurred behind them.
19	So, it is it's set by the order in which
20	you apply.
21	COMMISSIONER POLMANN: So, then at at the
22	bottom of Page 8, you ident explain Hamilton
23	project, Columbia project, selected among 50
24	different projects. So, you actually were looking,
25	in this process, at 50 different projects. So,

1	each of these had queue position or or some of
2	these were hypothetical projects.
3	THE WITNESS: Not all of the 50 in where
4	I state 50 in my testimony had had gone into the
5	queue
6	COMMISSIONER POLMANN: Okay.
7	THE WITNESS: but many of them had.
8	COMMISSIONER POLMANN: They were in the early
9	stage.
10	THE WITNESS: They were early stage.
11	COMMISSIONER POLMANN: Okay.
12	THE WITNESS: Right.
13	COMMISSIONER POLMANN: Okay. And then, on
14	Page 9, the project had met your first-round
15	screening criteria or asked to submit non-binding
16	indicative proposals.
17	About how many of those projects from the
18	50, you whittled it down to some number. Do you
19	recall how many were in that first round?
20	THE WITNESS: So, I did submit, under
21	confidentiality, what we call the short list
22	COMMISSIONER POLMANN: Okay.
23	THE WITNESS: in in the disc
24	discovery responses.
25	COMMISSIONER POLMANN: Are you able to give an

1	approximate number? I don't
2	THE WITNESS: I would say yeah, I would say
3	it's maybe a dozen of the 50.
4	COMMISSIONER POLMANN: Okay. Okay.
5	THE WITNESS: But we're in ongoing
6	negotiation. So, it's
7	COMMISSIONER POLMANN: Others.
8	THE WITNESS: Others.
9	COMMISSIONER POLMANN: All right. Thank you.
10	So, then, also on Page 9, the Hamilton project
11	and the Columbia, again, reference to the queue,
12	mid-stage and transmission-line access, but then
13	both of these are are land lease.
14	Can you tell me you may be familiar
15	and and you were asked by Counsel, your work in
16	other parts of the of the Duke business, how
17	many other projects are you aware of in any of the
18	Duke companies that have energy-production
19	facilities on leased land.
20	THE WITNESS: I don't the
21	COMMISSIONER POLMANN: Is is this very
22	typical or usual?
23	THE WITNESS: It is typical. I don't have
24	a the specific number, but we do have several
25	that are on leased property. And it's very common

1	in the industry.
2	So, prior to my responsibility of developing
3	projects for the regulated utilities in the
4	jurisdictions where we serve customers, I developed
5	projects across all of the the United States.
6	And and the lease form of agreement is
7	is common and is I think most importantly for
8	third-party developers is is fully financeable.
9	You can take that document to a Wall Street firm
10	and they will, you know, lend a billion dollars
11	against a wind farm with a lease.
12	So, it provides the the owner of the
13	facility all of the rights required to to
14	develop, construct, own, and operate.
15	COMMISSIONER POLMANN: So, from your your
16	experience with Duke and elsewhere, from a
17	practical perspective, you think own or owning
18	the property or having control through a lease is
19	essentially similar.
20	THE WITNESS: Yes, I think that is either
21	one suits your purposes.
22	COMMISSIONER POLMANN: Okay.
23	THE WITNESS: And it depends on the landowner.
24	It depend it depends on the price.
25	COMMISSIONER POLMANN: All right. Thank you,

1	Mr. Chairman. That's all I have.
2	CHAIRMAN GRAHAM: Commissioner Brown.
3	COMMISSIONER BROWN: Thank you.
4	Just a quick question. In your lease
5	agreement, it does have a right of first refusal to
6	purchase during the term and the extended term.
7	What would happen with the lease payments if the
8	utility went ahead and pursued a purchase at some
9	point in the term?
10	THE WITNESS: At that point, you'd no longer
11	be making lease payments if you become the owner of
12	the property.
13	COMMISSIONER BROWN: I mean, would you have to
14	pay? Would that be incorporated in the purchase
15	price, the remaining term?
16	THE WITNESS: At at that point, it would
17	just be like any other transaction; you know, you'd
18	have to agree to a fair-market value, and the
19	seller and the buyer would have to willingly agree
20	to to the value.
21	But if you're thinking about what's it worth,
22	you would look at the stream of cash payments
23	un owed under the lease to help value that
24	land.
25	COMMISSIONER BROWN: Now, on both Hamilton and

1	Columbia, the owner of the land is still operating
2	agriculture on part a por part of the
3	acreage?
4	THE WITNESS: Yeah, adjacent to the land that
5	we we leased, they're it was initially
6	carrots at Hamilton and it's just pasture, I
7	think, for some grazing at Columbia.
8	COMMISSIONER BROWN: And it it looks
9	yeah, it looks like the lease agreements it
10	wasn't like a a CAM lease, you would pay
11	directly the property taxes.
12	Why don't you get the benefit of agricultural
13	land for one of the pro Hamilton, I think? One
14	of the properties, you're not getting the
15	benefit
16	THE WITNESS: Oh, the benefit the
17	property
18	COMMISSIONER BROWN: Yeah.
19	THE WITNESS: tax exemption? So, when the
20	state passed the property tax exemption for solar
21	facilities, in 2017, any any projects that had
22	already applied for permits had were not
23	grandfathered. And so, we had already applied for
24	a permit for Hamilton in 2017.
25	So, we're paying the

1	COMMISSIONER BROWN: Got it.
2	THE WITNESS: full property tax. And then
3	in 2018, when we applied for a permit at Columbia,
4	we had we essentially qualified for the
5	exemption.
6	COMMISSIONER BROWN: Thank you.
7	And I Duke does need to be commended for
8	their commitment to invest in solar. They have
9	esp Duke Florida has a commitment to install a
10	lot of solar arrays at cost-effective rates,
11	according to the settlement agreement. And you
12	should be commended.
13	Thank you.
14	THE WITNESS: Thank you.
15	CHAIRMAN GRAHAM: Commissioner Fay.
16	COMMISSIONER FAY: Just really quick,
17	Mr. Chairman. Commissioner Brown actually just
18	asked part of my question. So, the the
19	presumption is that, because of the tax exemption,
20	the time frame was the only limitation that
21	prohibited you from getting in on Ham in
22	Hamilton and Columbia and going forward you
23	presume you'd be able to apply it, correct?
24	THE WITNESS: That's correct. The key
25	difference is just the timing. So, we had already

1	filed for an amendment to the the zoning code in
2	Hamilton County in 2017. So, just that action
3	of of filing was enough to basically
4	disqualify Hamilton from the property tax
5	exemption.
6	COMMISSIONER FAY: And that's about a about
7	a million-dollar difference. Does that sound
8	right?
9	THE WITNESS: I'm not I mean, it's it's
10	significant, but I would have to look at the two
11	budgets side by side and compare.
12	COMMISSIONER FAY: Okay. Great. Thank you.
13	CHAIRMAN GRAHAM: Okay. Redirect?
14	MS. TRIPLETT: No, sir, and I'm ready to move
15	exhibits if you are.
16	CHAIRMAN GRAHAM: Sure.
17	MS. TRIPLETT: All right. I would move
18	exhibits that have been marked as two through six
19	on the comprehensive exhibit list.
20	CHAIRMAN GRAHAM: Are there any objections to
21	two through six?
22	Okay. We'll enter those into the record.
23	(Whereupon, Exhibit Nos. 2 through 6 were
24	admitted into the record.)
25	MR. REHWINKEL: Public Counsel would move 21

1	through 28.
2	CHAIRMAN GRAHAM: Any objections through 21
3	through 28?
4	MS. TRIPLETT: No.
5	CHAIRMAN GRAHAM: We will enter those into the
6	record.
7	(Whereupon, Exhibit Nos. 21 through 28 were
8	admitted into the record.)
9	CHAIRMAN GRAHAM: Okay. Thank you, sir.
10	THE WITNESS: Thank you.
11	MS. TRIPLETT: May Mr. Stout be excused from
12	the hearing?
13	CHAIRMAN GRAHAM: He may be excused.
14	MS. TRIPLETT: He can he can enjoy this
15	lovely weather you're having in Tallahassee.
16	CHAIRMAN GRAHAM: Commissioners, I figure we
17	have about an hour left of testimony, it sounds
18	like. I have I was thinking we take a ten-
19	minute break and then push on through. Or do you
20	want to break for lunch?
21	(Discussion off the record.)
22	CHAIRMAN GRAHAM: Okay. All right. We will
23	take a ten-minute break. So, 1:30, that clock back
24	there, and we'll push on through.
25	(Brief recess.)

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                  (Transcript continues in sequence in Volume
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1	CERTIFICATE OF REPORTER
2	STATE OF FLORIDA)
3	COUNTY OF LEON)
4	I, ANDREA KOMARIDIS, Court Reporter, do hereby
5	certify that the foregoing proceeding was heard at the
6	time and place herein stated.
7	IT IS FURTHER CERTIFIED that I
8	stenographically reported the said proceedings; that the
9	same has been transcribed under my direct supervision;
10	and that this transcript constitutes a true
11	transcription of my notes of said proceedings.
12	I FURTHER CERTIFY that I am not a relative,
13	employee, attorney or counsel of any of the parties, nor
14	am I a relative or employee of any of the parties'
15	attorney or counsel connected with the action, nor am I
16	financially interested in the action.
17	DATED THIS 11th day of April, 2019.
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22	ANDREA KOMARIDIS NOTARY PUBLIC
23	COMMISSION #GG060963 EXPIRES February 9, 2021
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