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2	F.TOK11	DA PUBLIC SERVICE COMMISSION		
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4	In the Matter of	:		
5		DOCKET NO. 20250078-EI		
6		ermination of need for		
7	DeLand West - Dona Vista Transmission Line in Volusia and Lake Counties by Duke Energy			
8	Florida, LLC.			
9				
10		VOLUME 1 PAGES 1 - 33		
11	PROCEEDINGS:	HEARING		
12	COMMISSIONERS			
13	PARTICIPATING:	CHAIRMAN MIKE LA ROSA COMMISSIONER ART GRAHAM		
14		COMMISSIONER GARY F. CLARK COMMISSIONER ANDREW GILES FAY COMMISSIONER GABRIELLA PASSIDOMO SMITH		
15	DATE:			
16		Tuesday, July 22, 2025		
17	TIME:	Commenced: 9:30 a.m. Concluded: 9:36 a.m.		
18	PLACE:	Betty Easley Conference Center Room 148		
19		4075 Esplanade Way Tallahassee, Florida		
20	REPORTED BY:	DEBRA R. KRICK		
21	METONIED DI:	Court Reporter		
22				
23				
24		PREMIER REPORTING		
25		TALLAHASSEE, FLORIDA (850) 894-0828		

1	APPEARANCES:
2	DIANNE M. TRIPLETT, MATTHEW R. BERNIER and
3	STEPHANIE CUELLO, ESQUIRES, 299 First Avenue North, St.
4	Petersburg, Florida 33701; appearing on behalf of Duke
5	Energy Florida, LLC (DEF).
6	JENNIFER AUGSPURGER, ESQUIRE, FPSC General
7	Counsel's Office, 2540 Shumard Oak Boulevard,
8	Tallahassee, Florida 32399-0850, appearing on behalf of
9	the Florida Public Service Commission (Staff).
10	ADRIA HARPER, GENERAL COUNSEL; MARY ANNE
11	HELTON, DEPUTY GENERAL COUNSEL, Florida Public Service
12	Commission, 2540 Shumard Oak Boulevard, Tallahassee,
13	Florida 32399-0850, Advisor to the Florida Public
14	Service Commission.
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1	I N D E X	
2	WITNESS:	PAGE
3	DAVE RAHMAN	
4	Prefiled Direct Testimony inserted	9
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1		EXHIBITS		
2	NUMBER:		ID	ADMITTED
3	1	Comprehensive Exhibit List	7	7
4	2-15	As identified in the CEL	7	7
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1	PROCEEDINGS
2	CHAIRMAN LA ROSA: All right. Good morning,
3	everyone. Today is July 22nd, 2025. This hearing
4	is now called to order.
5	Staff, will you go ahead and please read the
6	notice?
7	MS. AUGSPURGER: Good morning, Chairman.
8	By notice issued on June 6th, 2025, this time
9	and place has been set for a hearing in Docket No.
10	20250078-EI. The purpose of this hearing is more
11	fully set forth in the notice.
12	CHAIRMAN LA ROSA: Excellent. Thank you.
13	Let's go ahead and take appearances. Let's
14	start with Duke.
15	MS. CUELLO: Good morning. Stephanie Cuello
16	on behalf of Duke Energy Florida. And I would also
17	like to enter an appearance for Dianne Triplett and
18	Matt Bernier.
19	MS. AUGSPURGER: Good morning, Jennifer
20	Augspurger for staff.
21	MS. HELTON: And Mary Anne Helton here as your
22	Advisor. And I am very happy to be here with your
23	new General Counsel, Adria Harper.
24	CHAIRMAN LA ROSA: Excellent. Excellent.
25	Well, we are happy to be here as well.

1	All right. Ms. Augspurger, are there any
2	preliminary matters that we need to address?
3	MS. AUGSPURGER: Staff is not aware of any
4	preliminary matters, Chairman.
5	CHAIRMAN LA ROSA: All right. Let's go ahead
6	and move to opening statements.
7	MS. CUELLO: Duke Energy will waive opening
8	statements. I would just like to make a comment,
9	appreciation for your staff for working with us,
10	and everyone is really busy right now, especially
11	over the summer, and we just appreciate all of the
12	help and the time that they put into this docket.
13	CHAIRMAN LA ROSA: Excellent. Thank you. It
14	has been a busy summer.
15	So normally we would go to public testimony
16	for the type of hearing that we are in. Is there
17	anyone here from the public? I am looking out, I
18	do not see anybody here from the public. So I will
19	go ahead then and move on from that portion.
20	Staff, are there any stipulated exhibits?
21	MS. AUGSPURGER: Yes, Chairman. Staff has
22	compiled a Comprehensive Exhibit List, which
23	includes the prefiled exhibits attached to the
24	witness' testimony in this case and a number of
25	staff exhibits. The list has been provided to Duke

1	Energy, the Commissioners and the court reporter.
2	This list is marked as the first hearing exhibit,
3	and the other exhibits should be marked as set
4	forth in the chart.
5	The staff exhibits and prefiled exhibits have
6	all been stipulated.
7	At this time, staff asks that the
8	Comprehensive Exhibit List, marked as Exhibit 1, be
9	entered into the record.
10	CHAIRMAN LA ROSA: All right. Exhibit 1 is
11	then entered.
12	(Whereupon, Exhibit No. 1 was marked for
13	identification and received into evidence.)
14	MS. AUGSPURGER: Staff further asks that
15	stipulated Exhibits 2 through 15 also be included
16	in the record.
17	CHAIRMAN LA ROSA: All right. And 2 through
18	15 will be entered.
19	(Whereupon, Exhibit Nos. 2-15 were marked for
20	identification and received into evidence.)
21	CHAIRMAN LA ROSA: Are there any agreements
22	with respect to the testimony of the DEF witnesses?
23	MS. AUGSPURGER: Yes, Chairman. No
24	Commissioner has an objection to the excusal of
25	Witness Rahman. Staff asks that Witness Rahman's

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1
          testimony be entered into the record as though
 2
          read.
 3
               CHAIRMAN LA ROSA:
                                    Okay. That testimony,
          then, of Witness Rahman is inserted into the record
 4
          as though read, and the witness has been excused.
 5
 6
                (Whereupon, prefiled direct testimony of Dave
 7
    Rahman was inserted.)
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IN RE: DUKE ENERGY FLORIDA, LLC'S PETITION TO DETERMINE NEED FOR ELECTRICAL TRANSMISSION LINE

DOCKET NO. 20250078-EI

DIRECT TESTIMONY OF DAVE RAHMAN

JUNE 9, 2025

1	I.	INTRODUCTION AND PURPOSE.
2		
3	Q.	Please state your name and business address.
4	A.	My name is Dave Rahman. My current business address is 6565 38th Ave N, St
5		Petersburg, FL 33710.
6		
7	Q.	By whom are you employed and what is your position?
8	A.	I am employed by Duke Energy Florida, LLC ("DEF" or the "Company")
9		as Director, Power Grid Planning.
10		
11	Q.	Please describe your duties and responsibilities in that position.
12	A.	My responsibilities include the direct supervision of engineers in the development
13		of long-range electric transmission expansion plans. Major responsibilities for my
14		position include ensuring transmission plans and assessments are done in

1		accordance with an applicable FERC, NERC, and Regional Planning Standards and
2		requirements. I also oversee transmission service request studies performed in
3		accordance with DEF's Open Access Transmission Tariff (OATT) as well as NERC
4		compliance activities associated with the Transmission Planner functional role. I
5		have held this position and performed these responsibilities since May of 2022.
6		
7	Q.	Please describe your educational background and professional experience.
8	A.	I graduated from the University of Florida with a Bachelor of Science degree in
9		Electrical Engineering in 2002. I've been a licensed Professional Engineer in the
10		state of Florida since 2008 and I have been with the Company, and its predecessor
11		companies, since 2002 in positions of increasing responsibility. Before my current
12		role as Director of Power Grid Planning, I have held multiple leadership positions
13		as well as engineering positions in Generation, Transmission and Distribution.
14		
15	Q.	Are you sponsoring any exhibits in this case?
16	A.	Yes. I am sponsoring the following exhibits, which are attached to my direct
17		testimony:
18		• Exhibit DR-1: DEF Electric Facilities Map (DEF general map);
19		• Exhibit DR-2: DeLand West to Dona Vista Reliability Upgrade Project
20		Map;
21		• Exhibit DR-3: Schedules 3.1.1 and 3.2.1 of DEF's Ten Year Site Plan,
22		filed April 1, 2025;

1		 Exhibit DR-4: CONFIDENTIAL Load Flow Summary Table;
2		• Exhibit DR-5: DEF Transmission Planning Criteria;
3		• Exhibit DR-6: CONFIDENTIAL Alternative Projects Load Flow
4		Summary Table;
5		• Exhibit DR-7: Indicative schedule of licensing, design, and
6		construction; and
7		• Exhibit DR-8: Project Decision Matrix.
8		These exhibits are true and correct to the best of my knowledge. The confidential
9		exhibits are subject to a Request for Confidential Classification, filed under
10		separate cover.
11		
12	Q.	What is the purpose of your testimony?
12 13	Q. A.	What is the purpose of your testimony? The purpose of my testimony is to sponsor and support DEF's request for a
13		The purpose of my testimony is to sponsor and support DEF's request for a
13 14		The purpose of my testimony is to sponsor and support DEF's request for a determination of need for the DeLand West to Dona Vista Project ("Project").
13 14 15		The purpose of my testimony is to sponsor and support DEF's request for a determination of need for the DeLand West to Dona Vista Project ("Project"). Specifically, my testimony presents the following information in support of the
13141516		The purpose of my testimony is to sponsor and support DEF's request for a determination of need for the DeLand West to Dona Vista Project ("Project"). Specifically, my testimony presents the following information in support of the Project:
1314151617		The purpose of my testimony is to sponsor and support DEF's request for a determination of need for the DeLand West to Dona Vista Project ("Project"). Specifically, my testimony presents the following information in support of the Project: 1) General overview of the DEF transmission system;
13 14 15 16 17		The purpose of my testimony is to sponsor and support DEF's request for a determination of need for the DeLand West to Dona Vista Project ("Project"). Specifically, my testimony presents the following information in support of the Project: 1) General overview of the DEF transmission system; 2) A general description of the Project including the design and operating
13 14 15 16 17 18		The purpose of my testimony is to sponsor and support DEF's request for a determination of need for the DeLand West to Dona Vista Project ("Project"). Specifically, my testimony presents the following information in support of the Project: 1) General overview of the DEF transmission system; 2) A general description of the Project including the design and operating voltage of the proposed transmission line, the starting and ending
13 14 15 16 17 18 19 20		The purpose of my testimony is to sponsor and support DEF's request for a determination of need for the DeLand West to Dona Vista Project ("Project"). Specifically, my testimony presents the following information in support of the Project: 1) General overview of the DEF transmission system; 2) A general description of the Project including the design and operating voltage of the proposed transmission line, the starting and ending points of the line, the approximate cost of the Project, estimate of the

demonstrate the need for the Project, including a discussion of DEF's
transmission planning process, the reliability benefits of the Project, and
the general time in which the Project will be needed;

- 4) A summary discussion of the major alternative transmission lines or transmission improvements which DEF examined and evaluated in arriving at the decision to pursue the Project;
- 5) A statement of the major reason or reasons for adding the Project; and
- 6) The adverse consequences to DEF's electric system and customers if the Project is delayed or denied.

A.

Q. Please summarize your testimony.

DEF is proposing to build a new 230 kV transmission line extending from DEF's DeLand West Substation in Volusia County to DEF's Dona Vista Substation in Lake County. This transmission line would upgrade portions of DEF's existing 69 kV line between DeLand West and Dona Vista to address future reliability limitations, which have been previously identified in DEF's transmission planning process. The Project for which DEF seeks a determination of need in this proceeding is for the new 230 kV transmission line, but the scope of work associated with the Project will also include a rebuild of the existing 69 kV line. An analysis of transmission alternatives resulted in DEF's selection of the project as the most reliable and efficient means to: (a) improve reliability for DEF customers served from the existing 69 kV circuits between Haines Creek and

Piedmont substations; (b) increase east-to-west power transfer capabilities of the transmission network by providing a new 230 kV circuit between the Volusia and Lake County areas of DEF's territory south of DeLand (the "Project Service Area"); (c) relieve potential overloads and low voltage conditions under contingency events; and (d) reduce line loading on existing transmission circuits. This Project is the most effective solution, considering the demand for electricity, improving the reliability and integrity of the electric system, and meeting the need for abundant, low-cost electrical energy to ensure the economic well-being of the state's citizens.

Furthermore, the Project meets area load requirements by serving existing customers and allowing for future industrial, commercial, and residential load growth. The estimated construction cost for the Project, which includes the 69 kV work, is \$165 million. The final cost of the Project is subject to the ultimate line routing, length, and conditions of certification required by the Transmission Line Siting Board.

DEF asserts that the estimated cost of the Project is reasonable, and the transmission line will assure the economic well-being of the citizens of the state by providing electric service to projected new load in the region and improving the region's electric reliability by minimizing the region's exposure to multiple contingency events, and the need to mitigate single contingency events with uneconomic redispatch and operational grid reconfiguration.

II. OVERVIEW OF DEF'S TRANSMISSION SYSTEM	II.	OVERVIEW OF DEF'S TRANSMISSION SYST	$\mathbf{E}\mathbf{M}$
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Q. Please describe DEF's transmission system.

A. The Company's transmission system includes approximately 5,400 circuit miles of 4 5 transmission lines, which includes 500 kV, 230 kV, 115 kV and 69 kV lines. The 6 Transmission system has approximately 530 transmission substations and over 50,000 structures including towers, poles and other related equipment and material 7 that support a peak load of approximately 13,000 MWs. These assets deliver 8 9 electric service to more than 2 million retail customers located throughout a 20,000 10 square mile area in densely populated areas around Orlando, St. Petersburg, and Clearwater, as well as rural north Florida, and west central Florida. 11

DEF's transmission system is part of the Florida interconnected power grid that enables utilities to exchange power. Within Florida, the Company's system is extensively networked and interconnected with other investor-owned utilities, municipal electric utilities, and rural electric cooperatives.

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Q. Please provide a brief description of the existing load and electric characteristics.

DEF's load characteristics consist primarily of residential and commercial load with limited industrial load. DEF's historic and forecasted peak demand are provided in Schedule 3.1.1 and 3.2.1 of DEF's Ten Year Site Plan, filed April 1, 2025, provided in Exhibit DR-3. An overview of DEF's existing electrical

1		transmission network indicating the general location of major substations and
2		transmission lines is shown in Exhibit DR-1.
3		
4	Q.	Does DEF expect load growth in the vicinity of the Project?
5	A.	Yes. Based on DEF's analysis, load local to this Project is expected to grow by
6		approximately 25% over the 10-year horizon.
7		
8	III.	DESCRIPTION OF THE PROJECT
9		
10	Q.	Please describe the proposed transmission line for which DEF is seeking a
11		determination of need in this docket.
12	A.	The Project will consist of a new 230 kV transmission line extending approximately
13		26.5 miles from DEF's DeLand West substation in Volusia County to DEF's Dona
14		Vista substation in Lake County (subject to final certification under the Florida
15		Transmission Line Siting Act or "TLSA"). At the time of construction, DEF will
16		also rebuild/upgrade an existing 69 kV transmission line in Volusia and Lake
17		Counties along the same route. To be clear, DEF's TLSA application only applies
18		to the new 230 kV transmission line, but DEF plans to rebuild the existing 69 kV
19		line at the same time with the new 230 kV transmission line. This 69 kV work is an
20		ancillary benefit to the Project.
21		

The Project will serve DEF's existing and future distribution substations in DEF's service territory and increase reliability of the transmission network with a new 230 kV line. This Project is the most effective and efficient means to: (a) improve reliability for DEF customers served from the existing 69 kV circuits between Haines Creek and Piedmont substations; (b) increase north-to-south power transfer capabilities of the transmission network by providing a new 230 kV circuit between the Volusia and Lake County areas of DEF's territory south of DeLand; (c) relieve potential overloads and low voltage conditions under contingency events; and (d) reduce line loading on existing transmission circuits.

Exhibit DR-2 is a map showing the Project corridor route, along with the existing electrical facilities in the area. The corridor route is conceptual and for illustrative purposes only. The ultimate route will be selected through the TLSA process.

A.

Q. What is DEF's timetable for licensing, design, and construction of the Project?

Pending the final TLSA determination, we anticipate initiating Land Acquisition activities and conceptual design in mid-2026. Engineering and Land Acquisition efforts are currently planned to conclude by June 2027. However, Eminent Domain proceedings are expected in this Project, and they may extend approximately one year before construction can commence, tentatively scheduled for May 2028. Construction is expected to take approximately 20 months, with a targeted

1	Energization date of January 2030. For additional detail, see the indicative schedule
2	of licensing, design, and construction in Exhibit DR-7.
3	

Q. What is DEF's estimated construction cost of the Project?

The current estimated construction cost of the Project is \$165 million. This estimated Project cost includes the cost of the 69 kV rebuild, which is approximately \$13.8 million of the \$165 million. If DEF were to rebuild the 69 kV line as a stand-alone project, the cost would be higher (although DEF has not prepared an estimate for such a stand-alone project). Since the new 230 kV transmission line is proposed to follow the existing 69 kV transmission line, DEF is achieving efficiencies by including the 69 kV rebuild into the overall new 230 kV Project. As stated above, since the final route has not been selected, pending determination of the TLSA process, the costs are subject to various factors including but not limited to the length and route of the line, land and easement acquisition costs, environmental impacts, right-of-way preparation costs, etc.

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Q. What is the proposed in-service date for the Project?

A. The projected in-service date is January 1, 2030.

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IV. DEF PLANNING PROCESS AND FACTORS WHICH INDICATE NEED FOR THE PROJECT

Q. How does DEF determine the need for new transmission lines?

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A.

Each calendar year, DEF's Transmission Planning group performs analyses for the long-term, ten-year transmission planning cycle. These analyses are performed from three distinct planning perspectives. First, Transmission Planning must demonstrate that the DEF system will be in compliance for the ten-year planning period with the mandatory and enforceable NERC Reliability Standards, particularly NERC Reliability Standard TPL-001 (see Exhibit DR-5 for additional detail). If the analysis shows that the DEF system deviates from these standards, the Company must initiate either an operational mitigation strategy or a new transmission capital project to bring the system back in compliance with the standards. Second, analysis is performed to demonstrate transmission system compliance with FRCC reliability standards. This analysis is similar to the analysis performed to ensure system compliance with the NERC Reliability Standards, the primary difference between the two analyses being that the FRCC treats the 69 kV system as if it is part of the Bulk Electric System (normally 100 kV and higher voltage facilities). Third, additional analysis is performed to address the interconnection of generation, transmission, and end-user facilities. This includes new residential and commercial loads that require capital expansion of DEF's existing transmission system. Proposed transmission capital investment projects resulting from these analyses must, per DEF's transmission planning process, be reviewed by other DEF departments and work groups affected by the proposals for

1		feasibility and implementation. Projects are then added to the overall Transmission
2		long term capital plan.
3		
4	Q.	Did DEF perform any studies to determine the need for the Project?
5	A.	Yes, DEF conducted transmission assessment studies in 2024. See Section V below
6		for additional details.
7		
8	Q.	Please describe the contingencies that support the need for reliability
9		improvements and increased transfer capacity.
10	A.	DEF transmission assessment studies identified the contingency events shown in
11		CONFIDENTIAL Exhibit DR-4 as the most critical scenarios for the Project
12		Service Area.
13		
14	Q.	Does the Project introduce any new contingency scenarios that present a risk
15		to the transmission system?
16	A.	No. The Project mitigates contingencies without introducing any new ones.
17		
18	V.	MAJOR REASONS AND NEED FOR THE PROJECT
19		
20	Q.	Please explain the need for the Project.
21	A.	Studies performed in 2024 revealed a need for the Project. Specifically, by 2025
22		there are multiple system limitations that will require reliability improvements for

Lake, Volusia, Seminole, and Orange Counties. These issues are explained below:

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There is a need to provide an additional power source to the Dona Vista load center. Historically, this load center had been served by three sources of power—the Central Florida to Haines Creek 230 kV line, the Piedmont to Welch Road 230 kV line, and the Lake Co-generation plant ("Lake Cogen"). For the outage of one of these 230 kV lines followed by the outage of the other (defined as a Category P6 multiple contingency event in NERC Reliability Standard TPL-001), the Dona Vista load center historically could rely upon Lake Cogen to serve the area while restoration of the lines took place. With the retirement of Lake Cogen and its 110 MW of power several years ago, there has been a need to implement a third power source and thereby avoid voltage collapse to the Dona Vista load center for the occurrence of the P6 event. Following the retirement of Lake Cogen and in the ongoing absence of a third power source, the Lake County Under Voltage Load Shed ("UVLS") scheme was implemented to prevent cascading voltage collapse and line overloads in the Dona Vista load center should the P6 event occur.

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• Increased load growth has made it such that generation is now too far from the load center. As such, north-to-south power flow in the area is limited under several contingency scenarios. An additional transmission path via the Project will increase these much-needed north-to-south power transfer capabilities. Adding this new source also redistributes the power flows in the Volusia and

1		North Orlando load areas to a more robust condition.
2		• DEF must maintain its voltage and thermal loading criteria, in the event of
3		unplanned outages. These contingency outage scenarios present a formidable
4		challenge in our transmission system, which as stated previously must be
5		addressed not only for the sake of reliability and customer service but also to
6		ensure compliance with regulatory standards. By addressing this issue with the
7		Project, DEF will enhance the reliability of our transmission system and ensure
8		adherence to both FERC 715 and NERC TPL-001 requirements, thereby
9		maintaining the integrity and stability of the power grid.
10		• As part of the aforementioned reliability needs, there is a correlating need to
11		improve reliability for DEF customers served from the existing 69 kV circuits
12		between Haines Creek, Piedmont and DeLand West substations.
13		In addition to these stated needs from a transmission planning perspective, there is
14		also a need for increased flexibility for operations and maintenance, as well as to
15		accommodate switching activities for future construction in the local area.
16		
17	Q.	Please explain the benefits of the Project.
18	A.	The construction of the Project provides the following benefits to the Project
19		Service Area:
20		Provides a more reliable delivery of power to DEF customers now and
21		into the future while addressing future customer load growth.
22		Substantially mitigates customer impacts during contingency events.

1		• Provides resilient transmission service to the area.
2		• Improves voltage support in the area to efficiently and effectively
3		serve existing and future customers in DEF distribution substations
4		along the route of the project.
5		• Increases north-to-south power transfer capabilities of the transmission
6		network by providing an additional circuit between the east and west
7		areas of DEF's territory between north of DeLand West and Dona Vista.
8		• Increased north-to-south transfer capability helps support customers
9		in the populated areas of the north Orlando portion of the DEF service
10		territory under several contingency situations that could occur during
11		high customer demand periods and/or storm situations.
12		Reduces line loading on existing transmission circuits.
13		Meets the Project Service Area's long-term reliability requirements.
14		
15	Q.	Is the Project the best alternative to meet the identified need based on the
16		criteria in the applicable transmission line need determination statute, Section
17		403.537, Florida Statutes?
18	A.	Yes. For the reasons discussed in my testimony, the Project is the best
19		alternative, considering the demand for electricity, enhancing electric system
20		reliability and integrity, and addressing the need for abundant, low-cost electrical
21		energy to assure the economic well-being of the citizens of this state.
22		

1	VI.	DISCUSSION OF TRANSMISSION ALTERNATIVES
2		
3	Q.	Did DEF consider transmission alternatives to the Project?
4	A.	Yes, DEF considered transmission alternatives to the Project to meet the
5		identified need.
6		
7	Q.	Please describe the transmission alternatives that were considered and explain
8		the reasons why they were rejected.
9	A.	DEF evaluated four transmission alternatives to the proposed Project. Exhibit DR-
10		8 is a matrix reflecting the four alternatives and how they rank on various criteria.
11		Below is a narrative explanation regarding why each of the alternatives is not as
12		preferable as the selected option. DEF notes that alternatives 1, 2, and 4 do not
13		include the 69 kV rebuild scope that the Project includes, so these alternatives do
14		not include the collateral benefit of completing that work within another project. If
15		any of those alternatives were selected, DEF would have to incur the cost to
16		complete the 69 kV rebuild project in the future. As discussed above, this would
17		add more than \$13.8 million to the cost of alternative 1, 2, and 4 below. The

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work.

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Alternative I: The Seneca Lakes to DeLand West Project consists of a new 230 kV transmission line extending from DEF's Seneca Lakes substation in Lake County

estimates provided for these alternatives do not include this additional scope of

to DEF's DeLand West substation in Volusia County. The estimated construction cost of this alternative is \$161 million. This alternative was rejected for the following reasons: 1) It does not provide the needed reliability improvements for all customers served from the existing 69 kV circuit between Haines Creek, DeLand West, and Piedmont substations as Seneca Lakes is not a centrally located substation and additional new 69 kV lines with new impacts to customers would be necessary to achieve the same level of reliability as the proposed project; 2) It requires eight (8) miles of new linear impacts to the area, which does not already have transmission due to no co-location opportunities with existing lines.

Alternative II: The Sorrento to DeLand West Project consists of a new 230 kV transmission line extending from DEF's Sorrento substation in Lake County to FPL's DeLand West substation in DeSoto County. The estimated construction cost of this alternative is \$171 million. This alternative was rejected for the following reasons: 1) It does not provide the needed reliability improvements for all customers served from the existing 69 kV circuit between Haines Creek, DeLand West substations and Piedmont substations as Sorrento is not a centrally located substation and additional new 69 kV lines with new impacts to customers would be necessary to achieve the same level of reliability as the Project; 2) It requires eight (8) miles of new linear impacts to the area, which does not already have transmission due to no co-location opportunities with existing lines.

Alternative III: The DeLand West to Dona Vista 170 kV Project consists of a new 170 kV transmission line extending from DEF's DeLand West substation in Volusia County to DEF's Dona Vista substation in Lake County. The estimated construction cost of this alternative is \$159 million. This alternative was rejected for the following reasons: 1) It does not provide the needed reliability improvements for all customers served from the existing 69 kV circuit between Okeechobee and Whidden substations; 2) It would require an extra cost of at least two new 230/170 kV transformers and a spare transformer, significantly increasing construction costs; 3) DEF does not have any 170 kV lines on its system, so if this alternative were selected, DEF would incur additional costs to maintain a spare transformer that could only be used for this line; 4) It does not provide for nearly as much power transfer from north to south as does the Project. Additionally, it offers limited transmission network flexibility and does not significantly enhance reliability in the service area of the Project. This is due to its greater susceptibility to adverse impacts of numerous contingencies in the event of a single point of failure, such as a 230/170 kV transformer outage, as compared to the Project.

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Alternative IV: The DeLand West/Silver Springs to Dona Vista Project consists of two new 230 kV transmission lines extending from DEF's Dona Vista substation in Lake County to loop into the existing DEF's DeLand West substation to Silver Springs in Lake County. This creates two new circuits, separately connecting Dona Vista with DeLand West and Silver Springs substations. The estimated

construction cost of this alternative is \$179 million. This alternative was rejected for the following reasons: 1) New linear impact to a community that does not already have existing transmission; 2) Approximately 6.5 miles along U.S. 19 is surrounded by Ocala National Forest, and any impacts to the forest would trigger additional environmental reviews; 3) Eight (8) miles of new impacts to the area due to no co-location opportunities with existing lines.

Q.

Please provide an additional explanation why Alternative IV is more costly and challenging to construct, given that the lines for this alternative would be sited through a national forest.

There are several additional challenges associated with routing a new transmission line through that National Forest, even though there is an existing road, U.S. 19, that already goes through the forest. First, the County confirmed the ROW is very limited in the area, with many underground utilities and sidewalks. In addition, because DEF would need to obtain additional easements beyond the width of the existing U.S. 19 ROW for its transmission facilities, the proposed project would automatically trigger a full NEPA (National Environmental Policy Act) review process, likely requiring the preparation of an Environmental Impact Statement (EIS). The timeline for an Environmental Assessment under NEPA is typically 12 to 18 months, and the timeline for an EIS is typically 18 months to 30 months. NEPA reviews for projects involve extensive public input, consultation with federal agencies (e.g., U.S. Forest Service, U.S. Fish & Wildlife Service), and mitigation

requirements. The uncertainties and potential legal challenges inherent in NEPA make this route infeasible from a regulatory risk and project execution standpoint.

National Forests are highly valued by the public for recreation, conservation, and aesthetic reasons. Routing infrastructure through such areas often triggers strong opposition from local communities, environmental groups, and recreation users. This opposition can manifest in public hearings, legal challenges, and political resistance, complicating approvals and threatening project viability.

Assuming DEF could obtain approval under NEPA, routing through a national forest also requires extensive coordination with the U.S. Forest Service and possibly other federal agencies, introducing complexity and potential conflicts with existing land use plans, recreation zones, wilderness designations, or conservation easements. Forest Service policies often prioritize preservation and recreation over infrastructure development, leading to potential denial or stringent mitigation requirements.

Constructing a transmission line through national forest terrain presents considerable technical and logistical challenges. Forested areas often lack access roads, require specialized equipment and helicopter construction methods, and may involve steep grades, rock outcroppings, and unstable soils. These factors drive up both cost and schedule risk. In addition, construction windows are often restricted to protect wildlife or comply with seasonal environmental constraints, further

limiting feasibility. Once constructed, there may be additional challenges to maintaining, inspecting, and repairing the facilities. Specifically, access roads may be limited or subject to seasonal challenges due to weather or land management restrictions. Vegetation management is also more complex.

For all these reasons, DEF rejected Alternative IV.

Q. Did DEF perform load analyses to determine the impact of the alternative solutions?

A. Yes, a summary of those load flows is attached as CONFIDENTIAL Exhibit DR-6.

A.

Q. Did DEF consider any generation alternatives to the Project?

DEF did not perform any specific analysis to determine the viability of a generation solution at the location of the old Lake Cogen plant. However, DEF can say that a generation solution is not feasible because: 1) The Lake Cogen site is too small to site a new generation solution of the size DEF would consider; 2) The existing gas infrastructure may not be available to fuel a new unit; 3) Given that the Lake Cogen facility has not been operated for such a long period, it is likely that DEF could not reuse much of the Lake Cogen facility; and 4) Given DEF's standard unit prices for new generation, it would likely be more expensive to construct a new facility as compared to the Project cost.

1	VII.	ADVERSE CONSEQUENCES OF DELAY OR DENIAL OF THE PROJECT
2 3	Q.	Would there be adverse consequences for DEF's customers if the Project is
4		not timely approved?
5	A.	Yes, to ensure compliance with NERC standards and adequately serve the current
6		and anticipated industrial, commercial, and residential demand within the Project
7		service area, it is imperative to establish sufficient transmission. Without this added
8		transmission, the system's reliability and integrity would fall short of the levels
9		maintained and adhered to for other DEF customers, who benefit from adherence to
10		our voltage criteria. Additionally, this load center in Lake County remains susceptible
11		to multiple dual line outage scenarios.
12		
13	Q.	Should the Commission approve the need for the Project?
14	A.	Yes. For all the reasons described above, the Commission should determine that
15		there is a need for the DeLand West to Dona Vista 230 kV transmission line to
16		preserve electric system reliability and integrity in the area and to maintain low-
17		cost electrical energy for the economic well-being of the residents of Florida.
18		
19	Q.	Does this conclude your direct testimony?
20	A.	Yes.

1	CHAIRMAN LA ROSA: All hearing exhibits are
2	already, then, into the record.
3	Is there a proposed stipulation in this case?
4	MS. AUGSPURGER: Yes, Chairman.
5	The proposed stipulations as filed by Duke on
6	July 17th, 2025, have been provided to the
7	Commissioners and to the court reporter. The
8	stipulations represent affirmative answers on the
9	four substantive issues and the closure of the
10	docket.
11	Staff asks the Commission to vote on the
12	proposed stipulations for all issues in this
13	docket.
14	CHAIRMAN LA ROSA: Okay. I will go to the
15	company. Is there an agreement on that
16	stipulation?
17	MS. CUELLO: Yes.
18	CHAIRMAN LA ROSA: I thought there was.
19	Anything else you want to add related to it?
20	MS. CUELLO: Nothing else. Thank you.
21	CHAIRMAN LA ROSA: Commissioners, do we have
22	any discussion on this?
23	Commissioner Fay, you are recognized.
24	COMMISSIONER FAY: Thank you, Mr. Chairman.
25	Just a real quick comment. Whenever we get

1	into the engineering of some of these components, I
2	wouldn't consider that my strong suit as a lawyer.
3	Mr. Davis walked through some of these projects
4	with me yesterday, and the alternatives that were
5	presented, and a rebuild project, all the various
6	components of it, and it seems like this is
7	absolutely, based on the alternatives, the right
8	project for this determination. So I appreciate
9	staff walking me through that, and I will support
10	this.
11	Thank you.
12	CHAIRMAN LA ROSA: Thank you.
13	Commissioners, any further questions or
14	discussions related to this?
15	Okay. Seeing none, I am open for a motion if
16	we are I think we are ready to vote.
17	COMMISSIONER FAY: Thank you, Mr. Chairman.
18	I will move that we approve the stipulations
19	as presented.
20	COMMISSIONER CLARK: Second.
21	CHAIRMAN LA ROSA: All right. Hearing a
22	motion and hearing a second.
23	All those in favor signify by saying yay.
24	(Chorus of yays.)
25	CHAIRMAN LA ROSA: Yay.

1	Opposed no?
2	(No response.)
3	CHAIRMAN LA ROSA: Show that the stipulation
4	is agreed to and voted out.
5	Is there any other matters that need to be
6	addressed? Sorry, I keep looking at you,
7	Commissioner Fay, but I will go this direction.
8	Any other matters that need to be addressed?
9	MS. AUGSPURGER: There are no other matters,
10	Chairman.
11	As a bench decision has been made, the final
12	order will be issued by August 8th, 2025.
13	CHAIRMAN LA ROSA: Okay. I will go to the
14	company.
15	Are we good? Anything else that needs to be
16	addressed?
17	MS. CUELLO: No.
18	CHAIRMAN LA ROSA: It's a little easier in a
19	small setting like this.
20	All right. So seeing no further business
21	before us, I will go ahead and call this meeting
22	adjourned. Thank you.
23	(Proceedings concluded.)
24	
25	

1	CERTIFICATE OF REPORTER
2	STATE OF FLORIDA)
3	COUNTY OF LEON)
4	
5	I, DEBRA KRICK, Court Reporter, do hereby
6	certify that the foregoing proceeding was heard at the
7	time and place herein stated.
8	IT IS FURTHER CERTIFIED that I
9	stenographically reported the said proceedings; that the
10	same has been transcribed under my direct supervision;
11	and that this transcript constitutes a true
12	transcription of my notes of said proceedings.
13	I FURTHER CERTIFY that I am not a relative,
14	employee, attorney or counsel of any of the parties, nor
15	am I a relative or employee of any of the parties'
16	attorney or counsel connected with the action, nor am I
17	financially interested in the action.
18	DATED this 4th day of August, 2025.
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22	$\alpha \leftrightarrow \alpha \lor \gamma$
23	Albert Frice
24	NOTARY PUBLIC COMMISSION #HH575054
25	EXPIRES AUGUST 13, 2028