<u>Docket No. 20200107-EM</u> Comprehensive Exhibit List for Entry into Hearing Record June 18, 2020								
EXH #	Witness	I.D. # As Filed	Exhibit Description	Issue Nos.	Entered			
STAFF								
1		Exhibit List	Comprehensive Exhibit List *All confidential information identified on this list is available only through a virtual folder maintained by the Office of Commission Clerk.					
ORLAN	ORLANDO UTILITIES COMMISSION – DIRECT							
2	Aaron B. Staley	AS-1	Resume of Aaron B. Staley, P.E.	1, 2, 3, 4				
3	Aaron B. Staley	AS-2	Map of Major Transmission Lines in the Project Area.	1, 2, 3, 4				
4	Aaron B. Staley	AS-3	Diagram of St. Cloud Area Transmission Lines & Facilities.	1, 2, 3, 4				
5	Aaron B. Staley	AS-4	Potential Routes within Study Area.	1, 2, 3, 4				
6	Aaron B. Staley	AS-5	Typical Pole Design.	1, 2, 3, 4				
7	Aaron B. Staley	AS-6	Load Flow Study Results - Summary and Details. Contained in Confidential DN. 02353-2020*	1, 2, 3, 4				
8	Aaron B. Staley	AS-7	Load Flow Study Solar Integration With and Without Project.	1, 2, 3, 4				

COMPREHENSIVE EXHIBIT LIST DOCKET NO. 20200107-EM PAGE 2

STAFF	'HEARING EX	XHIBITS		
9	Staley	OUC's Response to Staff's 1 st Set Of Interrogatories Nos. 1 - 8. Additional files included in Interrogatories responses 2 and 6 are on Staff Hearing Exhibits CD/USB.	1, 2, 3, 4	
		Confidential DN. 02872-2020* [Bates Nos. 00001-00054]		
10	Staley	OUC's Notice of filing proofs of publication of final hearing notices with attached Composite Exhibit A DN. 02877-2020 [Bates Nos. 00055-00063]		
11	Staley	(Composite Exhibit) Petition for determination of need for the Orlando/St. Cloud Regional Resiliency Connection 230 kV transmission line project in Orange and Osceola Counties, by Orlando Utilities Commission, DN. 02338- 2020, and Confidential DN. 02353- 2020,* Exhibit A to petition for determination of need, with appendices, filed May 1, 2020 [Bates Nos. 00064-00077]		

AARON STALEY, PE

217 Southern Magnolia Lane, Sanford FL 32771: (407) 832-0779: Astaley@ouc.com

	Duthern Magnolia Lane, Sanford FL 32771: (407) 832-0779: Astaley@ouc.com
OBJECTIVE	
WORK HISTOR	/ /
2006 -	Manager of Transmission Planning and Reliability,
Current	Orlando Utilities Commission (OUC)
	Manage five Transmission Planners and one CoOp student
	Operational and Long Term Transmission Planning studies
	· OATT Development, administration and supporting deployment
	Real time and procedural support for Transmission Operators
	Represent OUC at regional and national organizations
	· Development of new tools and techniques locally and at a regional level
	· Specification, development and deployment of software systems
	Train and Develop Transmission Planners at OUC and other entities
2003 - 2006	Senior Transmission Planner, Progress Energy Florida (now Duke Energy)
2000 - 2003	Project Engineer, Siemens Westinghouse Power Corporation (now Siemens) Designed auxiliary systems for combustion turbine plants
1997 - 2000	Engineer, <i>Florida Power Corporation (now Duke Energy)</i> • Street Lighting, Distribution Design, Power Quality and Transmission design
FDUCATION	
EDUCATION 1997	DCEE University of Florida
2005	BSEE, University of Florida Masters in Engineering Management, University of Florida
Ongoing	IEEE, NERC, FRCC and vendor educational events
LEADERSHIP	Elevide Designed Consultantian Consult (EDCC)
	Florida Regional Coordinating Council (FRCC) • Planning Committee Member
	 Transmission Technical Subcommittee, Chair and Technical Lead 2009- 2020
	 Organize annual technical trainings for FRCC members
	Participation and leadership roles in other subgroups
	Florida Transmission Capacity Determination Group (FTCDG): • Founding Member and Chair since 2008

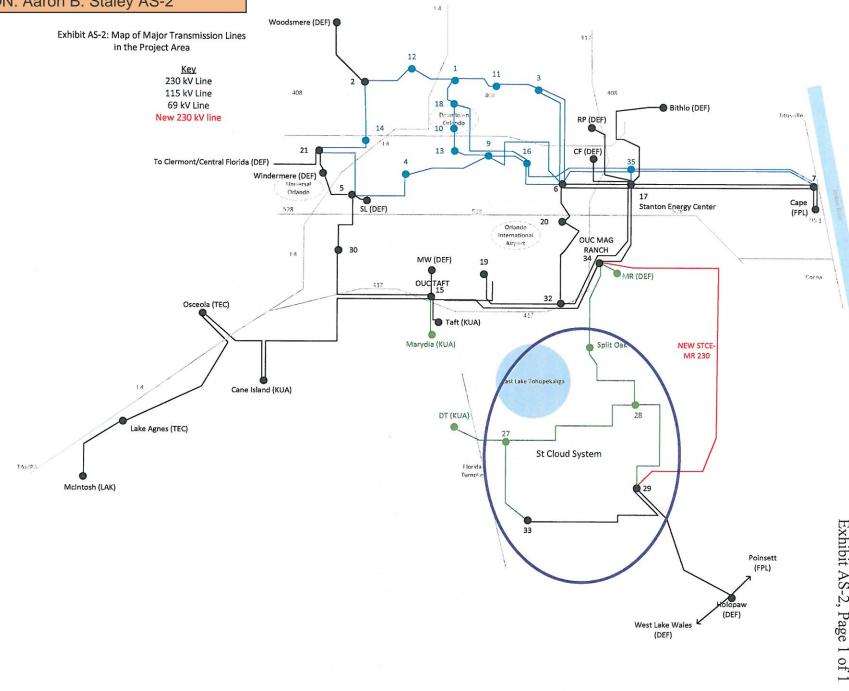
FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 2 PARTY: ORLANDO UTILITIES COMMISSION – DIRECT DESCRIPTION: Aaron B. Staley AS-1

	• A designer of the robust transmission transfer calculation tool used by FTCDG				
	Institute of Electrical and Electronic Engineers (IEEE) – Power & Energy Society (PES)				
	Excom member or executive officer since 1998 of local PES chapter				
	CoChair (representing OUC) for the 2012 IEEE PES T&D Expo				
	Florida Municipal Power Pool (FMPP) • Formal and informal leadership roles in Transmission Planner working groups				
ACHIEVEMENT	 S				
	• Expanded the OUC Planning group to meet the needs of OUC from one part time planner to five planners + CoOp student with 24/7 support				
	\cdot Established OUC's first EMS State Estimator on time and on budget				
	 Actively work with OUC IT to develop and test technology to provide for more secure but also user friendly environment at OUC 				
	\cdot Deployment of PowerGEM TARA software throughout the FRCC				
	 Developed procedures to meet several generations NERC standards for OUC and in a leadership role at the FRCC 				
	 Represented OUC's on NERC audits, served as an FRCC auditor or entity subject matter expert on multiple non OUC audits 				
	 Organized annual training classes for all Transmission Planners in FRCC using staff at the FRCC and member utilities 				
	 Chairman of a NERC drafting team, and a voting member on two additional teams that all worked on substantial changes to existing standards 				
	 Developed a method of predicting operational limits for the FMPP using existing unconnected information sources without additional software cost 				
CURRENT ACT	TIVITIES				
(m. 6. 1)) ,	• Working with Energy Control Center and various vendors to develop OUC's next outage, tagging and switching order software solution				
	 Leading the FTCDG to develop the next generation transfer capability calculation engine to incorporate more real time information, including solar 				
	 Working with the FRCC TTS and the PC to develop a revised new transmission service study process that is reliable – but more efficient 				

 Working with OUC Data and Analytics group to build Qlik Dashboards that will allow fast access to data in HISPRD that was impractical to use before 	
 Working with OUC Data and Analytics group to build Qlik Dashboards that will allow instant calculation of FMPP operational limits and allow real time benchmarking and adjustment of those limits 	

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 3 PARTY: ORLANDO UTILITIES COMMISSION – DIRECT DESCRIPTION: Aaron B. Staley AS-2

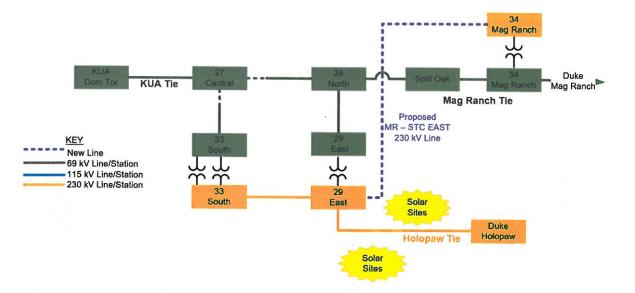
Docket No. 20200107-EM Map of Major Transmission Lines in the Project Area Exhibit AS-2, Page 1 of 1



Docket No. 20200107-EM Map of Major Transmission Lines in the Project Area Exhibit AS-2, Page 1 of 1

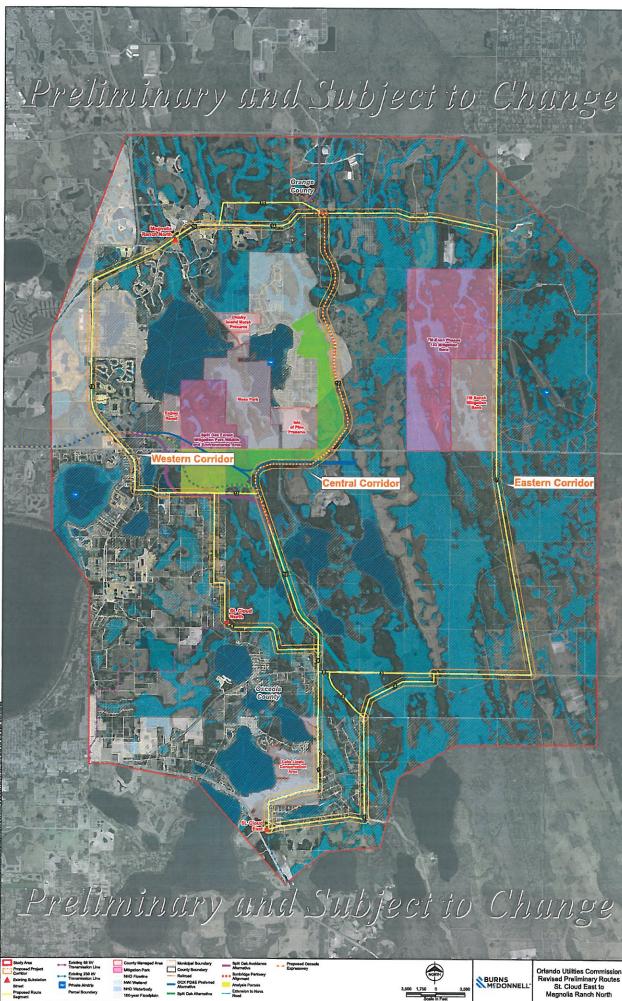
Docket No. 20200107-EM Diagram of St. Cloud Area Transmission Lines & Facilities Exhibit AS-3, Page 1 of 1

Exhibit AS-3: Diagram of St. Cloud Area Transmission Lines and Facilities.



FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 4 PARTY: ORLANDO UTILITIES COMMISSION – DIRECT DESCRIPTION: Aaron B. Staley AS-3 FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 5 PARTY: ORLANDO UTILITIES COMMISSION – DIRECT DESCRIPTION: Aaron B. Staley AS-4

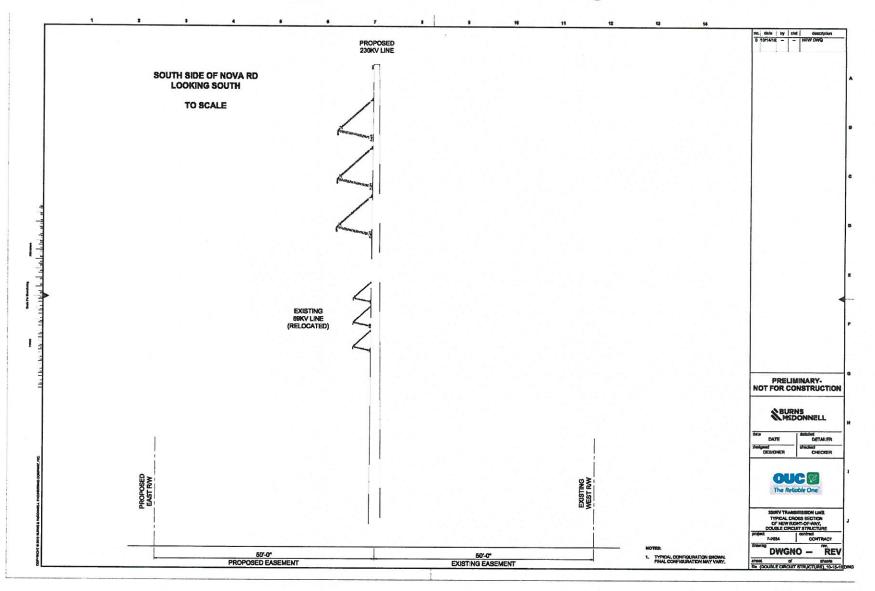
> Odmokultititel Siche MeßwonistickeißoepeikulterfekkutboentEryste Praininery Routes 2020/011 witghwerund - jähemen 5 Spicet Erk Dirindiche, Gesche, Eintheir Oessenetes OktEVA DS. I. 3. USOS, Amrosto, Dio 40 in die Gemeinen



Docket No. 20200107-EM Potential Routes within Study Area Exhibit AS-4, Page 1 of 1

Docket No. 20200107-EM Typical Pole Design Exhibit AS-5, Page 1 of 1

Typical Structure Designs



FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 6 PARTY: ORLANDO UTILITIES COMMISSION – DIRECT DESCRIPTION: Aaron B. Staley AS-5



Docket No. 20200107-EM Typical Pole Design Exhibit AS-5, Page 1 of 1

Exhibit AS-6: Load Flow Study Results - Details												
						i constante la	Base Cas	e			With I	Project
			Year ->	2023	2023	2023	2023	2024	2025	2026	2025	Future
Condition	Most Limiting Constraints	St Cloud Le	oad (MW) ->	117 MW	170 MW	200 MW	219 MW	225 MW	231 MW	237 MW	231 MW	325 MW
	constraints	Criteria	Rating	off peak	off peak	Peak	Peak	Peak	Peak	Peak	and the second division of the second divisio	Future

REDACTED

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 7 PARTY: ORLANDO UTILITIES COMMISSION – DIRECT DESCRIPTION: Aaron B. Staley AS-6

Contains Critical Energy Infrastructure Information (CEII) – Do Not Distribute

CONFIDENTIAL

and Without Project Exhibit AS-6, Page 1 of 2

2020 Load

Flow Study With

DOCKEL INO. 2020010/-EM

CONFIDENTIAL

2020 Load Flow Study With and Without Project Exhibit AS-6, Page 2 of 2

Exhibit AS-6 Continued - Load Flow Study Results - Summary

Seasonal Maintenance Outages + Forced Outage Forced Outage of St Cloud East - Holopaw
--

AS-6 Load Flow Study Summary

Docket No. 20200107-EM 2020 Load Flow Study Solar Integration With and Without Project Exhibit AS-7, Page 1 of 1

Exhibit AS-7: 2020 Load Flow Study Solar Integration With and Without Project

Condition / Outage	Before Project Full Integration	Before Project Occasional Curtailment	Project Full Integration
Normal Operation – All Times	225 MW	300 MW	375 MW
During Forced/Maintenance Outage	150 MW	225 MW	375 MW

Full Integration means that outside of extraordinary circumstances there should be no curtailment of the site

Occasional Curtailment means that under the most common stressed conditions the combined solar site outputs should be able to maintain this level.

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 8 PARTY: ORLANDO UTILITIES COMMISSION – DIRECT DESCRIPTION: Aaron B. Staley AS-7

OUC's Response to Staff's 1^{st} Set Of Interrogatories Nos. 1 - 8.

Additional files included in Interrogatories responses 2 and 6 are on Staff Hearing Exhibits CD/USB.

Confidential DN. 02872-2020*

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 9 PARTY: STAFF HEARING EXHIBITS DESCRIPTION: Staley

RESPONSES TO INTERROGATORIES

 Please refer to witness Staley's testimony, Page 14, Line 19 through Page 15, Line 13. Please explain what Right-of-Way/Land Acquisition difficulties, if any, each of the three corridor routes face.

OUC RESPONSE:

OUC does not anticipate any insurmountable difficulties in obtaining the land, easements, rights-of-way, and other property rights needed for the construction, operation, and maintenance of the Orlando/St. Cloud Regional Resiliency Connection 230 kV Line (the "Project") in any of the three potential transmission line corridors. Nonetheless, OUC recognizes there are likely to be some difficulties in obtaining the necessary lands and property rights in any case involving the installation of an electrical transmission line that will be more than 20 miles long and will cross the property of multiple landowners.

OUC has taken several steps to minimize the potential for such difficulties in the instant case. OUC's proposed transmission line corridors for the Project are located, to the extent practicable, in or adjacent to the right-of-way ("ROW") for existing or proposed linear projects (e.g., roads; electrical transmission lines). OUC also has met with the major landowners along the central and eastern corridors and is attempting to address their concerns about the Project. OUC is hopeful that its ongoing efforts with these landowners will enable OUC to successfully negotiate mutually acceptable agreements for the acquisition of the land and property rights OUC needs for the Project. At this time, however, OUC can only speculate about the ultimate outcome of OUC's negotiations and other efforts to work with the landowners. If the negotiations are unsuccessful, OUC has the ability to exercise its right of eminent domain.

The following discussion summarizes some of the key facts concerning each of the three corridors that are being considered by OUC.

- a. Western Corridor (Narcoossee Road Area). The western corridor is the shortest of the three proposed corridors (approximately 19 miles). This corridor would generally follow existing roads and electric transmission lines for the entire route. However, most of this corridor is in or adjacent to heavily developed residential and commercial areas. OUC would need to obtain easements from numerous landowners along this corridor because the ROW for the existing transmission line infrastructure (69 kV facilities) is not sufficient to accommodate the proposed Project. The new easements would be located outside of the ROW used for the existing roads and electric transmission lines. By comparison to the other two potential corridors, using the western corridor in the Narcoossee Road area would affect the greatest number of property owners and would require OUC to obtain easements from the greatest number of property owners. Construction of the Project in the western corridor and, to a lesser degree, maintenance of the proposed transmission line in this corridor, is expected to cause considerable disruption of the traffic on a major roadway (Narcoossee Road).
- b. <u>Central Corridor (Sunbridge Stewardship District Area)</u>. The central corridor has an intermediate length (approximately 22 miles) compared to the other two proposed routes. It follows existing and proposed roads and transmission line infrastructure along the entire route. However, OUC's proposed Project would be constructed prior to the construction of some of the roads and transportation infrastructure that have been planned along the central corridor. This corridor would be located primarily on large tracts of land owned by a relatively small number of landowners, who are preparing 3

plans for the development of their properties. OUC is actively coordinating with these major landowners and attempting to design the Project in a manner that is compatible with the landowners' plans. For example, OUC and the landowners are discussing the possibility that approximately one mile of the proposed transmission line may be installed underground to minimize the Project's impacts on the landowners' proposed developments.

c. <u>Eastern Corridor (Dallas Boulevard Area</u>). The eastern corridor is the longest of the three potential corridors (approximately 27 miles). It would follow existing transmission line and transportation infrastructure along the entire route. The eastern corridor is the most rural and, therefore, it affects the smallest number of individual property owners. However, the eastern corridor would likely require: (a) easements from a large private landowner; (b) easements across a private wetland mitigation bank; (c) easements across Orange County's wetland mitigation bank; and (d) easements across the City of Cocoa's well fields.

- 2. Please refer to witness Staley's testimony, Page 18, Lines 2 through 5. Please explain in detail the assumptions, facts, and figures used to determine these values. Also, please answer the questions below regarding the project.
 - a. Please provide the estimated total cost for each corridor route.
 - b. Please provide the estimated annual and cumulative net system cost values over the life of the project (in nominal and net present value). This should include at least the following categories: Land Costs, Avoided Costs, Equipment and Installation. Please add additional categories as needed. Please provide this response in electronic (Excel) format.
 - c. Please provide the total projected annual bill impact (at 1,000 kilowatt-hours (kWh)) on the general body of customers' monthly bills for the project.

OUC RESPONSE

a. The current estimated total costs as of 2020 for each of the potential corridors for the Orlando/St. Cloud Regional Reliability Connection 230 kV Transmission Line Project ("Project"), also identified as the St. Cloud East-Magnolia Ranch 230 kV line, are as follows, stated in 2020 "overnight construction cost" dollars.

Corridor	Total Cost
Western Corridor	\$ 99.1 MM
Central Corridor	\$ 94.5 MM
Eastern Corridor	\$103.5 MM

Please note that these total cost estimates have been updated since Mr. Staley's direct testimony was filed on May 1. The estimated total costs for each potential corridor, including the calculations of the current total cost estimates as derived beginning with the estimates from the 2017 Study, and including

the specific assumptions for each cost component for each corridor or route, are shown on the CONFIDENTIAL individual spreadsheets attached with these responses.

The costs developed and presented in the 2017 Study were planning-level estimates based on the costs of constructing and installing transmission facilities and equipment, including any related upgrades necessary to support each option and a pro forma contingency allowance, for purposes of comparing the options. As such, they did not include detailed estimates for several cost components that would be incurred for actual construction and installation in the field, including: land and land acquisition costs; land clearing and preparation costs, costs of removing existing infrastructure, costs for special construction activities needed for construction in wetlands (e.g., muck excavation and removal, backfill, and matting to support vehicles), special access roads to support construction, use of double-circuit structures where necessitated by co-locating the new lines on existing poles, and sales taxes. The current 2020 estimated total cost for each of the potential corridors for the Project includes estimates for these cost components and also includes escalation of certain items from the values in the 2017 Study and updated contingency allowance values. These values are presented in the spreadsheets provided with these responses

b. The estimated annual cost and cumulative total cost, expressed as system revenue requirements, for each of the three potential corridors, are as follows:

Corridor	Annual Rev. Req't	Cumulative Total Rev. Req'ts
Western Corridor	\$ 6,752,888	\$ 270,115,509
Central Corridor	\$ 6,437,541	\$ 257,501,629
Eastern Corridor	\$ 7,053,483	\$ 282,139,328

6

Because the addition of new facilities does not change total energy delivered and because O&M costs for such facilities are generally nominal in any event, OUC has not attempted to calculate a cost or bill impact component for O&M costs.

c. The estimated bill impacts per 1000 kWh of Residential service and also per 1000 kWh of system retail sales are shown below and on the attached spreadsheets.

	Bill Impact per 1000 kWh		
Corridor	Residential	System Retail	
Western Corridor	\$ 1.11	\$ 0.98	
Central Corridor	\$ 1.05	\$ 0.94	
Eastern Corridor	\$ 1.16	\$ 1.03	

 Please refer to witness Staley's testimony, Page 22, Lines 3 through 6. Please provide examples of underlying conditions that have not changed from the 2017 Study.

OUC Response:

The underlying conditions mentioned in Page 22 Lines 3 through 6 are the factors that would drive the conclusions made from a load flow study. The St. Cloud system is fairly simple in layout and the primary problem is the limited number of ties and high load relative to the capability of the existing 69 kV facilities. Since the Burns & McDonnell study was completed, while St. Cloud has experienced continued load growth, the St. Cloud system has not seen a change in its interconnectivity to the surrounding systems (69 kV to OUC and KUA, 230 kV to DEF) nor a change in the load distribution that would change the conclusion of that study work. 4. Please refer to witness Staley's testimony, Page 23, Line 5 through Page 24, Line 4. Please explain the process of elimination that resulted in the selection of the five options for additional analysis from the original list of potential solutions.

OUC RESPONSE:

OUC considered a significant number of potential solutions to the projected reliability issues affecting the St. Cloud area. These included:

- Adding a new capacitor bank at St. Cloud South with an expanded relaying scheme at Magnolia Ranch;
- Upgrading one of the 69kV lines connecting into St. Cloud;
- Constructing new 230kV lines from OUC's Magnolia Ranch Substation to St. Cloud East, St. Cloud North, and St. Cloud Central;
- Constructing an additional 69kV circuit from Magnolia Ranch to St. Cloud North;
- Several 230kV alternatives with connections to St. Cloud South; and
- Installation of fossil fuel generation or energy storage within the St. Cloud area.

OUC reviewed a list of potential solutions to address the reliability issues affecting the St. Cloud Area and, working with Burns & McDonnell engineers, reduced the list to five key projects to evaluate further. The evaluation involved looking at each solution for how well it addressed the postcontingency thermal and voltage constraints within the St. Cloud system. Specific factors that OUC considered in addition to the post-contingency performance included whether the option would increase the non-load-flow-based tie capacity between OUC and St. Cloud, whether it was a unique solution compared to other options, and the difficulty of construction compared to other options. In addition, as OUC finalized its decision in 2019 to proceed with the Orlando/St. Cloud Regional Resiliency Connection, all options have been considered and evaluated from the perspective of supporting significant solar generation that is planned within the St. Cloud area (and that will have load flow impacts on the St. Cloud system). <u>New Capacitor Bank with Expanded Relaying:</u> A new capacitor bank and expanded relaying scheme at Magnolia Ranch made it into the finalist list because it represented a unique and low cost starting point relative to other options. After the initial installation of the capacitor bank, additional projects would be required over the next several years to maintain minimum system reliability requirements, including the following specific measures and projects:

- St. Cloud Central expanded relaying modified
- Magnolia Ranch Transformer replacement
- Magnolia Ranch Split Oak St. Cloud North 69 kV rebuild

Additionally, the cost estimate includes a possible wheeling cost to represent that in this scenario OUC would exceed the non-load-flow-based tie capacity between OUC and St. Cloud at times.

Upgrading one of the 69 kV lines connecting into St Cloud: The upgrade of the KUA Carl Wall – Domingo Toro 69 kV line did address one of the reliability concerns and was a unique and lower cost solution relative to 230 kV options, which led to its being included for further consideration. To meet minimum reliability standards this option included a later rebuild of the St. Cloud Central – North 69kV line as well as possible wheeling costs representing that these options did not address the non-load-flow-based tie capacity between OUC and St. Cloud. Upgrading the existing 69 kV circuit from Magnolia Ranch to St. Cloud North was also evaluated but did not progress as one of the five stand-alone options because it did not address the weaker links, although it is one of the steps in the "new capacitor bank with expanded relaying" option. Further, standing alone, upgrading the St. Cloud North-Magnolia Ranch 69 kV line would provide very little benefit in system performance beyond eliminating that line as a limiting constraint.

KUA installed the Domingo Toro station after the completion of the Burns and McDonnell study; however, instead of being installed near the ownership transition point of the St. Cloud Central – Carl Wall line as anticipated, it was built much closer to Carl Wall and had two connections to Carl Wall as well as a circuit to KUA's Hansel Substation. As a result, as noted in response to Staff's Interrogatory No. 6 below, when the cost of these options are revised to 2020 numbers this project is instead an upgrade of the KUA portion of the Domingo Toro – St. Cloud Central line, but it serves the same purpose and includes most of the same conductor spans as the original Carl Wall – Domingo Toro upgrade. (KUA's change did not affect either the relative economics of the five "finalist" options or OUC's selection of the St. Cloud East-Magnolia Ranch 230 kV lie as the best option.)

Constructing new 230 kV lines from OUC's Magnolia Ranch Substation to St. Cloud East, St. Cloud North, or St. Cloud Central: The construction of a new 230 kV line from Magnolia Ranch to St. Cloud East carried into the final 5 options because it addressed the primary reliability concerns for the area and connected directly to the 230 kV system, thereby not making any of the 69 kV lines a weak link between 230 kV connection points. Also given the likelihood of being able to deal with a small number of large landowners and the status and projected pattern of development in St. Cloud, it was believed a viable route could be found. The Burns and McDonnell study in 2017 also included an upgrade of the Carl Wall - Domingo Toro 69 kV line; however, given the changes made by KUA when it constructed the Domingo Toro station, this upgrade would no longer be required and this is reflected in the updated 2020 costs for the Project. The 230 kV connection from Magnolia Ranch to St. Cloud Central was carried forward for further consideration because it addressed the concerns for the area and would eliminate the need for a future St. Cloud North - St. Cloud Central upgrade by bringing 230 kV right into the main load center of St. Cloud, even though there were (and still are) clear physical challenges in getting the line into St. Cloud Central and in expanding the substation in the center of downtown St. Cloud to include a 230 kV yard.

A 230 kV Line from Magnolia Ranch to St. Cloud North, while shorter than the other options, would have accelerated the need to rebuild the line from St. Cloud North to St. Cloud Central and would also have made the St. Cloud East – St. Cloud North 69 kV line a future constraint. An additional factor was that the existing 69 kV corridor didn't (and doesn't) include property rights for 230 kV line and so a new route would likely have been required. Further, during construction the St. Cloud system would have been isolated from the OUC system if parts of the existing corridor were used, and post-construction, St. Cloud would still only have a single connection to the OUC System. Because the Magnolia Ranch-St. Cloud North option did not provide the level of constraint resolution offered by the other two 230 kV options, and further because its lower performance would not be offset by providing a more easily buildable route, this option was eliminated from further consideration. As a result of these analyses, a 230 kV line from Magnolia Ranch to St. Cloud East and a line from Magnolia Ranch to St. Cloud Central were made finalists.

<u>Constructing an additional 69 kV circuit from Magnolia Ranch to St. Cloud North:</u> Double circuiting the existing 69 kV circuit from Magnolia Ranch to St. Cloud North was also evaluated but did not progress as one of the five options for further consideration. Upgrading the circuit did not address the weakest links into the St Cloud System and would have accelerated the eventual need to upgrade the St. Cloud North – St. Cloud Central line. In addition to the limited performance benefits, the existing corridor was designed and property rights were only acquired for a single 69 kV conductor, so adding the double circuit would have required extensive rework of existing structures, acquisition of additional property rights, and even a new route in some sections, all of which would entail increased costs that would offset this option's limited benefits.

Evaluation of 230 kV alternatives with connections to St. Cloud South: The construction of a St. Cloud South to Taft line, addressed the constraints within St. Cloud and presented a unique solution that warranted further evaluation. The Burns and McDonnell study in 2017 also included an upgrade of the Carl Wall – Domingo Toro 69 kV line as part of the St. Cloud South-Taft 230 kV option; however, given the changes made by KUA when they constructed the Domingo Toro station this upgrade would no longer be required and this is reflected in the updated 2020 costs for the project. Alternative projects to address possible physical or power flow congestion at Taft were evaluated, such as having the new line or some existing lines bypass Taft to another 230 kV station. Those solutions didn't represent significant performance differences for St. Cloud and could be further evaluated if the basic idea of connecting St. Cloud South to Taft became the best final project.

A connection from St. Cloud South to KUA's Clay 230 kV Substation was also evaluated. However, this option created additional issues on the 230 kV components of the system, and KUA was not interested in the additional connection at the time, and therefore, it was not carried into the list of finalists. A connection of St. Cloud South to DEF's Canoe Creek Substation either at 230 kV or 69 kV was also evaluated. This solution did not provide a new connection back to the OUC footprint and it connected to essentially the same sources as the St. Cloud East – DEF Holopaw 230 kV circuit. This would not have provided a diverse source for St. Cloud and may have created parallel flows on the St. Cloud system resulting in additional reliability issues. As a result, this project was not carried forward as a finalist.

Evaluation of fossil fuel generation or energy storage within St. Cloud area: OUC also examined the option of installing generation within the St. Cloud Area. Additional generation could be effective at addressing the transmission reliability constraints within the system; however, generation would

require locating suitable sites ideal to meet transmission system needs, rather than the best site for generation from an economic and permitting perspective. There would be ongoing expenses for operating the entire generation fleet out of economic dispatch sequence to provide for reliability support in St. Cloud and the need to continually grow the installed generation base to keep up with load growth. OUC has also recently looked at using energy storage; however, current technology does not provide the same useful life that a transmission line does and similar to generation, energy storage would require substantial investment to meet the needs of St. Cloud. Holding that energy storage in reserve to meet transmission reliability needs would also defeat some of the other grid uses of that storage that could help offset its cost. For these reasons, neither generation nor energy storage became a finalist among the options that were considered to address the St. Cloud reliability issues; however, both generation and energy storage options are regularly reviewed as OUC's generation needs and industry technology change.

5. Please refer to witness Staley's testimony, Page 24, Lines 8 through 13. Please identify which of the three transmission alternatives is the next best alternative. Please explain why each of the other two alternatives were rejected compared to the Orlando/St. Cloud Regional Resiliency Connection.

OUC RESPONSE:

Each alternative has advantages and disadvantages. The St. Cloud South-Taft 230 kV option would be the next best option, because it addresses the basic reliability issues that underlie OUC's need for the new line. This project would also support solar interconnections but likely would require the reconductoring of the existing 10.7 mile St. Cloud East - St. Cloud South 230 kV line once solar generation reached a certain level. It is the second choice due to higher cost, greater community impacts, and potential electrical congestion around Taft substation. The line is longer and would pass through much more densely developed areas (in and around Kissimmee) than the St. Cloud East -Magnolia ranch line and so would have a higher cost as well as greater community impact and a significantly greater number of impacted landowners. Additionally, while it would be feasible to install another 230 kV tie into the ring bus at the Taft Substation or to replace the existing KUA Buenaventura Lakes Substation connection to Taft, that bus is physically crowded, such that adding the additional tie is not recommended as a matter of long-term transmission engineering. The area around Taft may also have 230 kV issues caused by the additional connection that would require more in depth studies and the possible realignment of corridors at an additional expense.

The St. Cloud Central to Magnolia Ranch line is in some ways a better solution since it connects right at the highest St. Cloud load pocket. However, this alternative was and is limited by the fact that it is, as its name implies, located in the central area of St. Cloud, which is substantially developed and which thus has extensive physical limitations on construction and configuration. For example, building a line from St. Cloud Central to Magnolia Ranch would require special construction including

¹⁵

at least some underground 230 kV construction and locating and acquiring land sufficient to add a 230 kV yard at the St. Cloud Central substation, which would greatly increase the cost. Moreover, this alternative would not provide support for integrating the solar facilities planned for the area since it would still place the 69 kV system between those resources and the OUC 230 kV System. For these reasons, OUC determined that the Orlando/St. Cloud Regional Resiliency Connection option, connecting St. Cloud East to Magnolia Ranch, was the best option, with a connection between St. Cloud South and Taft the second best.

The Orlando/St. Cloud Regional Resiliency Connection, which will connect Magnolia Ranch to St. Cloud East, addresses all reliability issues, provides very good benefits for the integration of planned solar facilities, and is located in lightly developed areas where it will be easier and less costly to construct and operate and less impactful on the public.

- 6. Please refer to witness Staley's testimony, Page 23, Line 20 through Page 24, Line 7. For each of the final five options OUC considered please answer the following economics questions.
 - a. Please provide an estimate of the total system cost of each option.
 - b. Please provide the annual and cumulative net system cost values over the life of each option (in nominal and net present value). This should include at least the following categories: Land Costs, Avoided Costs, Equipment and Installation. Please add additional categories as needed. Please provide this response in electronic (Excel) format.
 - c. Please explain in detail the assumptions, facts, and figures used to determine the value of each of the components discussed in your response to 6.b.
 - d. Please provide the total projected annual bill impact (at 1,000 kWh) on the general body of customers' monthly bills for each of the options.

OUC RESPONSES

a. Following the completion of the 2017 St. Cloud Transmission Reinforcement Study ("2017 Study"), OUC evaluated the five options identified as having the greatest potential to meet the identified reliability needs on the basis of estimated cost and other considerations. These other considerations included the following for each option:

- i. enhancement of transfer capability;
- ii. integration of solar generation facilities planned for the St. Cloud area;
- iii. long-term flexibility for OUC; and
- iv. ability to construct the option in light of physical congestion of the route (not congestion of load flows on the transmission system).

17

At that point in OUC's evaluations, OUC considered the preliminary cost estimates that were included in the 2017 Study, which are presented here, in "overnight construction cost" dollars as of 2017:

<u>Option</u>	<u>2017 Cost</u>
Capacitor Bank with Relays	\$ 42.7 MM
Upgrade KUA Carl Wall-Dom Tor 69 kV	\$ 70.2 MM
St. Cloud East-Magnolia Ranch 230 kV	\$48.4 MM
St. Cloud Central-Magnolia Ranch 230 kV	\$ 57.3 MM
St. Cloud South-Taft 230 kV	\$ 53.0 MM

These planning-level estimates were based on the costs of constructing and installing transmission facilities and equipment, including any related upgrades necessary to support each option and a pro forma contingency allowance, for purposes of comparing the options; as such, they did not include detailed estimates for several cost components that would be incurred for actual construction in the field, including: land and land acquisition costs; land clearing and preparation costs, costs of removing existing infrastructure, costs for special construction activities needed for construction in wetlands (e.g., muck excavation and removal, backfill, and matting to support vehicles), special access roads to support construction, use of double-circuit structures where necessitated by co-locating the new lines on existing poles, and sales taxes.

As explained in Mr. Staley's testimony, considering all of these factors, OUC determined that the St. Cloud East-Magnolia Ranch 230 kV line was the best option, and accordingly, OUC chose that option to be constructed as the Project in this case, i.e., the Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line Project.

In preparing its petition for determination of need, OUC prepared detailed cost estimates, including current 2020 estimates for the additional cost components listed above, for each of the three potential corridor routes for the Project, and these details are provided in OUC's CONFIDENTIAL

responses to Staff's Interrogatory No. 2.a. In responding to this Interrogatory No. 6 for the other four options, it is not practical for OUC to create specific 2020 estimates for these additional cost components for the four options that were not chosen. Having said that, however, considering the range of factors applicable to the options (other than the Capacitor Bank and transformer components of the Capacitor Bank with Expanded Relaying option) and the fact that some factors will apply to some options more or less intensively than to the others, OUC's engineers responding to this Interrogatory believe that reasonable estimates for the other four options can be calculated by applying the ratio of the detailed 2020 cost estimate for the Project to the estimated construction cost for the Project in the 2017 Study to the 2017 construction cost estimates for the other four options. That calculation yields the following results for the three transmission line options. (The Capacitor Bank with Relays option was not selected because, while it would satisfy the minimum reliability requirements at a lower cost, it would not increase overall transmission capacity, would not provide flexibility or other benefits as compared to new transmission line construction, and, perhaps most significantly under the circumstances, would not address the integration of planned new solar generation.) The values shown are "overnight construction cost" values for 2020.

Option	2020 Cost
Capacitor Bank with Relays (includes escalation and contingency)	\$ 75.0 MM
Upgrade KUA Carl Wall-Dom Toro* 69 kV	\$ 121.9 MM
St. Cloud East-Magnolia Ranch 230** kV	\$ 94.5 MM
St. Cloud Central-Magnolia Ranch 230** kV	\$ 140.5 MM
St. Cloud South-Taft 230** kV	\$ 105.7 MM

* This cost estimate is to replace the KUA portion of the Domingo Toro – St. Cloud Central line which is discussed in more detail in the response to question #4.

**The 2020 estimated values estimate do not include the Carl Wall – Domingo Toro 69 kV rebuild due to changes made by KUA when Domingo Toro was constructed after the 2017 study that remove the necessity for those changes.

b-c. The assumptions for the three potential corridor routes for the Project are provided in response to Staff's Interrogatory No. 2. The initial system cost and the cumulative and annual costs for each of the other four options are shown in the spreadsheets accompanying these responses. As explained in response to Interrogatory No. 6.a above, the estimates for the other four options are based on the ratio of the detailed total 2020 costs for the Project to its estimated cost in the 2017 Study; accordingly, OUC has not created new detailed estimates for the additional cost components for the other four options. Additionally, because the addition of new facilities does not change total energy delivered and because O&M costs for such facilities are generally nominal in any event, OUC has not attempted to calculate a cost or bill impact component for O&M costs.

 d. The estimated bill impacts per 1000 kWh are included on the spreadsheets attached with this Interrogatory response.

20

- 7. Please refer to witness Staley's testimony, Page 23, Line 20 through Page 24, Line 7. For each of the final five options OUC considered please answer the following questions.
 - Please describe whether the option meets the thermal and voltage performance requirements to address OUC's reliability needs.
 - b. Please describe the contribution to transfer capacity for serving the St. Cloud area.
 - c. Please describe whether the option provides access to diverse supply sources.
 - d. Please describe whether the congestion concerns with the option.
 - e. Please describe any noteworthy short-term and long-term considerations for the option, such as upgrade opportunities.
 - f. Please describe the degree to which the option would support integration of solar generating capacity.
 - g. Please explain what Right-of-Way/Land Acquisition difficulties, if any, that each option is presented with.

OUC RESPONSE

Please see the following table, which presents OUC's answers to each of the foregoing interrogatory subparts with respect to each of the final five options considered by OUC.

	Capacitor Bank w/ Expanded Relays	Upgrade KUA Carl Wall-Dom Tor 69kV Line	New St. Cloud Central – Mag. Ranch 230 kV Line	New St. Cloud East – Mag. Ranch 230 kV Line	New St. Cloud South – Taft 230 kV Line
a. Thermal & Voltage	Satisfies minimum requirements	Satisfies minimum requirements	Satisfies minimum requirements; this option defers additional projects for longer than Capacitor Bank or KUA Upgrade	Satisfies minimum requirements; this option defers additional projects for longer than Capacitor Bank or KUA Upgrade	Satisfies minimum requirements; this option defers additional projects for longer than Capacitor Bank or KUA Upgrade

b. Contributions to Transfer Capacity*	313 MW (B&M Study)	293 MW (B&M Study)	381.5 MW (B&M Study)	300 MW (B&M Study) 325 MW (2020 Study)	325 MW (B&M Study)
c. Access to Diverse Supply Resources	No	No	Yes, but route may not be as independent as other 230 kV options	Yes	Yes
d. Describe Congestion Concerns	No significant physical congestion issues (uses existing corridor)	No significant physical congestion issues (uses existing corridor)	Would traverse heavily congested downtown St. Cloud & require additional land for expanded substation	No significant physical congestion issues	Would traverse heavily congested downtown Kissimmee area and congested Taft substation
e. Short-Term and Long-Term Considerations	Requires additional projects and may eventually require installation of a 230 kV line outside the planning horizon. Outages to rebuild existing lines would place system at risk for the next event.	Requires additional projects and may eventually require installation of a 230 kV line outside the planning horizon. Outages to rebuild existing lines would place system at risk for the next event.	Provides best long term relief to load based issues on 69 kV lines. Provides limited opportunity for interconnecting new stations.	Provides opportunities for direct interconnections for solar plants and new load serving substations.	Provides opportunities for new load serving substations and to provide 230 kV support to KUA in the future. Potentially complicates situation around Taft Substation by introducing additional flows into the substation and using up limited expansion capability.
f. Support Integration of Solar	No support	No support	Would not allow solar generation to bypass St. Cloud 69 kV en route to OUC system and so doesn't provide any support for new solar generation.	Routing of line provides opportunities for physical solar interconnections and provides a direct 230 kV path for solar into the OUC system bypassing the St. Cloud 69 kV system.	Routing of line doesn't provide much opportunity for direct solar interconnection but does provide a direct 230 kV path to OUC. Will require upgrading St. Cloud East – South 230 kV line to support higher levels of solar injection.

g. Potential	No	No	No	Least difficult and	No insurmountable
ROW/Land	significant	significant	insurmountable	least impactful to	land/ROW issues, but
Acquisition	issues;	issues <u>if</u> the	land/ROW	the community of	probably the most
Difficulties	probably	upgrade can	issues, but	the three 230 kV	difficult route in terms
	does not	be	would require	options. No	of obtaining needed
	require	constructed	additional	insurmountable	easements, ROW
	additional	in existing	easements	land/ROW issues.	rights, and other
	property	ROWs and	from hundreds	Some corridor	property rights; would
		easements; if	of individual	alternatives may	require additional
		upgrade	property	have more	easements, ROW
		requires	owners, ROW	ROW/easement/land	rights, or other
		additional	rights, or other	acquisition issues	property rights,
		land rights,	land acquisition	than others. See	probably including
		the	for line and	OUC's response to	removal of existing
		acquisition	expanded	Int. No. 1.	residences, in
		issues could	substation in		substantially
		be numerous	heavily		developed Kissimmee
		and	developed		area
		significant	downtown St.		
		because the	Cloud area		
		route			
		traverses			
		many			
		individual			
		properties,			
		including			
		residential			
		properties			

* Contributions to Transfer Capability are addressed here based on the existing study work and the amount of load in St. Cloud that the solutions were tested for to serve on a load flow basis. None of the projects are expected to provide a significant benefit to transfer capabilities between Balancing Areas in the FRCC under normal conditions.

8. Please refer to witness Staley's testimony, Page 23, Line 20 through Page 24, Line 7. Please provide the estimated total system cost for the next best alternative to the project.

OUC RESPONSE

As explained in OUC's response to Staff's Interrogatory No. 5 above, the next best option for meeting reliability requirements for the St. Cloud area transmission system and integrating planned solar resources (with additional upgrades) would be the St. Cloud South-Taft 230 kV line. The estimated total system cost for this project in 2020 "overnight construction cost" dollars is \$105,690,988.

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail this <u>1st</u> day of June, 2020, to the following parties.

Charles Murphy	J.R. Kelly
Gabriella Passidomo	Patricia Christensen
Office of the General Counsel	Thomas David
Florida Public Service Commission	A. Mireille Fall-Fry
2540 Shumard Oak Blvd.	Office of Public Counsel
Tallahassee, FL 32399-0850	c/o The Florida Legislature
cmurphy@psc.state.fl.us	111 West Madison Street, Room 812
gpassido@psc.state.fl.us	Tallahassee, Florida 32399
	kelly.jr@leg.state.fl.us
	christensen.patty@leg.state.fl.us
	david.tad@leg.state.fl.us
	fall-fry.mireille@leg.state.fl.us

/s/ Robert Scheffel Wright Attorney

25

20200107.EM Staff Hearing Exhibits 00025

Docket No. 20200107-EM OUC's Response to Staff's Interrogatory No. 2.a Page 1 of 3



CONFIDENTIAL

ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION WESTERN CORRIDOR ESTIMATE

Customer: OUC

Project No: Orlando/St. Cloud Regional Resiliency Connection

Description:

Location: FL

NO.	DESCRIPTION	Total
1	Site Work	
2	Foundations	
3	Grounding	Q
4	Structures / Poles	- All
5	Pole Assemblies	REDACTED
6	Conductors / OPGW	Q'
7	Interruptions	- &
8	Substation Upgrades (St. Cloud East, Magnolia Ranch North)	
	Total Direct Installation	¢57,450.0
		\$57,453,8
9	Demo / Removal	REDACTED
	Total Direct Removal	
	Total Direct Cost (TDC)	\$3,876,2
	Total Direct Cost (IDC)	\$61,330,0
	Engineering/Project Management	
	Sales Tax	REDACTED
	Construction Management (without risk)	- ACIUS
	OUC Overhead	BEUN
	Land Acquisition/Rights	<u>,</u>
	Total Indirect Cost	\$20,135,72
	Contingency (30%)	REDACTED
	Total Direct and Indirect Costs (PTC)	

Docket No. 20200107-EM OUC's Response to Staff's Interrogatory No. 2.a Page 2 of 3



CONFIDENTIAL

ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION CENTRAL CORRIDOR ESTIMATE

Customer: OUC

Project No: Orlando/St. Cloud Regional Resiliency Connection

Description:

Location: FL

NO.	DESCRIPTION	Total
1	Site Work	
2	Access Roads/Matting	
3	Foundations	
4	Grounding	N.
5	Structures / Poles	PEDACTED
6	Pole Assemblies	AU
7	Conductors / OPGW	EN.
8	Interruptions	- W
9	Underground Transmission Line	
10	Substation Upgrades (St. Cloud East, Magnolia Ranch North)	
	Total Direct Installation	\$59,134,9
11	Demo / Removal	
		REDACTEE
	Total Direct Removal	\$1,010,9
<u></u>	Total Direct Cost (TDC)	\$60,145,9
	Engineering/Project Management	
	Sales Tax	
	Construction Management (without risk)	REDACTED
	OUC Overhead	PEDAC
	Land Acquisition/Rights	Kr
	Total Indirect Cost	\$22,383,09
	Contingency (20%)	REDACTED
	Total Direct and Indirect Costs (PTC)	

Docket No. 20200107-EM OUC's Response to Staff's Interrogatory No. 2.a Page 3 of 3



CONFIDENTIAL

ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION EASTERN CORRIDOR ESTIMATE

Customer: OUC

Project No: Orlando/St. Cloud Regional Resiliency Connection

Description: Location: FL

NO. DESCRIPTION Total Site Work 1 Access Roads/Matting 2 3 Foundations 4 Grounding 5 Structures / Poles 6 Pole Assemblies 7 Conductors / OPGW 8 Interruptions Substation Upgrades (St. Cloud East, Magnolia Ranch North) 9 **Total Direct Installation** \$58,352,519 10 Demo / Removal REDACTED **Total Direct Removal** \$874,229 Total Direct Cost (TDC) \$59,226,748 Engineering/Project Management REDACTED Sales Tax Construction Management (without risk) **OUC Overhead** Land Acquisition/Rights **Total Indirect Cost** \$26,048,384 Contingency (30%) REDACTED Total Direct and Indirect Costs (PTC) \$103,531,671

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatory No. 2.c - Spreadsheet 1 of 6

Orlando Utilities Commission Orlando/St. Cloud Regional Resiliency Connection - Western Corridor Estimated Residential Bill Impact in 2020

Estimated capital cost Incremental annual revenue requirement <i>(assumes 40-year life and 6.25% return on rate base</i> ¹) Residential share of incremental annual revenue requirement (41.7%) ² Forecast annual weighted residential kWh ³ Incremental cost per kWh	\$ \$ \$ \$	99,119,503 6,752,888 2,815,954 2,545,807,712 0.00111
Residential monthly bill for 1,000 kWh with 10-1-2019 rates and without incremental transmission cost Incremental transmission cost % increase	\$ \$	109.50 1.11 1.0%
Cumulative Total Estimated Revenue Requirements - Residential (40-year life)		\$112,638,167
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

⁽²⁾ % allocation from Table 7, line 15 of COS supporting electric rates effective October 1, 2019

Orlando Utilities Commission Orlando/St. Cloud Regional Resiliency Connection - Central Corridor Estimated Residential Bill Impact in 2020

Estimated capital cost Incremental annual revenue requirement <i>(assumes 40-year life and 6.25% return on rate base</i> ¹ <i>)</i> Residential share of incremental annual revenue requirement (41.7%) ²	\$ \$ \$	94,490,811 6,437,541 2,684,454
Forecast annual weighted residential kWh ³	_	2,545,807,712
Incremental cost per kWh	\$	0.00105
Residential monthly bill for 1,000 kWh with 10-1-2019 rates and without incremental transmission cost	\$	109.50
Incremental transmission cost	\$	1.05
% increase		1.0%
Cumulative Total Estimated Revenue Requirements - Residential (40-year life)		\$107,378,179
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

⁽²⁾ % allocation from Table 7, line 15 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatory No. 2.c - Spreadsheet 3 of 6

Orlando Utilities Commission Orlando/St. Cloud Regional Resiliency Connection - Eastern Corridor Estimated Residential Bill Impact in 2020

	Estimated capital cost Incremental annual revenue requirement <i>(assumes 40-year life and 6.25% return on rate base</i> ¹) Residential share of incremental annual revenue requirement (41.7%) ² Forecast annual weighted residential kWh ³ Incremental cost per kWh	\$ \$ \$	103,531,671 7,053,483 2,941,302 2,545,807,712
	Residential monthly bill for 1,000 kWh with 10-1-2019 rates and without incremental transmission cost Incremental transmission cost % increase	\$ \$ \$	0.00116 109.50 1.16 1.1%
	Cumulative Total Estimated Revenue Requirements - Residential (40-year life) Amounts exclude incremental O&M costs		\$117,652,100
(¹⁾ Return from Table 6, line 22 of COS supporting all static states of the states of		

(1) Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

⁽²⁾ % allocation from Table 7, line 15 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatory No. 2.c - Spreadsheet 4 of 6

Orlando Utilities Commission Orlando/St. Cloud Regional Resiliency Connection - Western Corridor Estimated Total System Average Bill Impact in 2020

Estimated capital cost Incremental annual revenue requirement (assumes 40-year life and 6.25% return on rate base ¹)	\$ \$	99,119,503 6,752,888
Forecast annual weighted total OUC retail & St. Cloud MWh ² Incremental cost per Retail MWh	\$	6,867,551 0.98
Cumulative Total Estimated Revenue Requirements		\$270,115,509
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatory No. 2.c - Spreadsheet 5 of 6

Orlando Utilities Commission Orlando/St. Cloud Regional Resiliency Connection - Central Corridor Estimated Total System Average Bill Impact in 2020

Estimated capital cost Incremental annual revenue requirement (assumes 40-year life and 6.25% return on rate base ¹)	\$ \$	94,490,811 6,437,541
Forecast annual weighted total OUC retail & St. Cloud MWh ² Incremental cost per Retail MWh	\$	6,867,551 0.94
Cumulative Total Estimated Revenue Requirements	ç	\$257,501,629
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatory No. 2.c - Spreadsheet 6 of 6

Orlando Utilities Commission Orlando/St. Cloud Regional Resiliency Connection - Eastern Corridor Estimated Total System Average Bill Impact in 2020

Estimated capital cost Incremental annual revenue requirement (assumes 40-year life and 6.25% return on rate base ¹)	\$ \$	103,531,671 7,053,483
Forecast annual weighted total OUC retail & St. Cloud MWh ² Incremental cost per Retail MWh	\$	6,867,551 1.03
Cumulative Total Estimated Revenue Requirements		\$282,139,328
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM OUC's Responses to Staff's Interrogatory Nos. 6.a - 6.cPage 1 of 5



ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION Capacitor Bank with SPS

Customer: OUC Project No: Description: Location: FL

1	SPS at St. Cloud Central and Magnolia Ranch New 10.6 MVAR cap bank at St. Cloud South New SPS at Magnolia Ranch Breaker for ring bus Capacitor switching breaker \$200k for UG 69kV line to capacitors in corner of substation Steel & switches	\$1,000,00
	New 10.6 MVAR cap bank at St. Cloud South New SPS at Magnolia Ranch Breaker for ring bus Capacitor switching breaker \$200k for UG 69kV line to capacitors in corner of substation	\$1,000,00
	New SPS at Magnolia Ranch Breaker for ring bus Capacitor switching breaker \$200k for UG 69kV line to capacitors in corner of substation	
	Breaker for ring bus Capacitor switching breaker \$200k for UG 69kV line to capacitors in corner of substation	
	Capacitor switching breaker \$200k for UG 69kV line to capacitors in corner of substation	
	\$200k for UG 69kV line to capacitors in corner of substation	
	Steel 9 autobar and to support of substation	
	Steel & Switches	
2	Magnolia Ranch Substation Transformer Upgrade	
	Rough estimate compared to other substation estimates	\$5,000,00
	New 230/69kV auto transformer replacing an existing transformer	
	New breaker (replaces existing)	
	No Tline upgrades involved in this option	
3	St. Cloud North - Magnolia Ranch 69kV Line	
	Overhead cost - \$22,142,843	\$22,198,05
	Conductor adder - \$55,215	
	Upgrade to 1272 ACSS/TW conductor for 2000A	
	Assumes new structures would be needed	
	No substation upgrades required for this option	
4	Wheeling	
	Charges paid to Duke	\$14,600,000
5	Added Specific Cost Components - 2020 Estimates:	
	Land & Land Rights	\$32,187,184
	Additional Equipment & Installation Costs (e.g., double circuited poles,	
	incremental substation infrastructure)	
	Escalation in labor and steel costs	
	Land Clearing & Preparation	
	Contingency	

Docket No. 20200107-EM OUC's Responses to Staff's Interrogatory Nos. 6.a - 6.cPage 2 of 5



ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION Upgrade KUA Domingo Toro to St. Cloud Central (69 kV)

Customer: OUC Project No: Description: Location: FL

NO.	DESCRIPTION	Total
1	Carl Wall - Dom Toro 69kV Upgrade (Now KUA Domingo Toro - St. Cloud Central - KUA Portion) (2017 Estimate)	
	Overhead cost - \$8,654,969 (Now 4.71 Miles)	\$9,004,96
	Substation cost - \$350,000	
	212MVA, 954 ACSS/TW	
	New SPS at Magnolia Ranch	
2	St. Cloud Central - St. Cloud North - 69kV Rebuild (2017 Estimate)	
	Phase 1 - overhead upgrade only to 200MVA	\$36,518,09
	Overhead cost - \$15,068,099	
	Phase 2 - overhead and underground upgrade to 200MVA	
	Underground cost - \$21,450,000	
3	Wheeling (2017 Estimate)	
	Charges paid to Duke	\$23,400,00
4	Added Specific Cost Components - 2020 Estimates:	
	Land & Land Rights	\$52,951,24
	Additional Equipment & Installation Costs (e.g., double circuited poles,	
	incremental substation infrastructure)	
	Escalation in labor and steel costs	
	Land Clearing & Preparation	
	Contingency	
	Total Direct Installation	\$121,874,31

Docket No. 20200107-EM OUC's Responses to Staff's Interrogatory Nos. 6.a – 6.c Page 3 of 5

CONFIDENTIAL



ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION ST. CLOUD EAST-MAGNOLIA RANCH 230 kV LINE OPTION

Customer: OUC Project No: Description: Location: FL

NO.	DESCRIPTION	Total
1	Site Work	
2	Access Roads/Matting	
3	Foundations	
4	Grounding	REDACTED
5	Structures / Poles	C/*
6	Pole Assemblies	A
7	Conductors / OPGW	ptr
8	Interruptions	7
9	Underground Transmission Line	
10	Substation Upgrades (St. Cloud East, Magnolia Ranch North)	
	Total Direct Installation	\$59,134,96
11	Demo / Removal	REDACTED
	Total Direct Removal	\$1,010,95
	Total Direct Cost (TDC)	\$60,145,91
	Engineering/Project Management	
	Sales Tax	- FV
	Construction Management (without risk)	- CV
	OUC Overhead	REDACTED
	Land Acquisition/Rights	¥~
	Total Indirect Cost	£22 202 00
		\$22,383,09
	Contingency (20%)	REDACTED
	Note: Carl Wall-Dom Toro 69 kV Upgrade - deleted per project change by KUA	ILD/ICIED
	Total Direct and Indirect Costs (PTC)	

Docket No. 20200107-EM OUC's Responses to Staff's Interrogatory Nos. 6.a – 6.c Page 4 of 5



ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION St. Cloud Central - Magnolia Ranch 230kV Line Option

Customer: OUC Project No: Description:

Location: FL

NO.	DESCRIPTION	Total
1	St. Cloud Central - Magnolia Ranch 230kV Line (2017 Estimate)	•••••••••••••
	Overhead line	\$57,346,04
	Overhead cost - \$37,155,726	
	Conductor adder - \$92,883	
	Structure adder - \$2,672,437	
	Underground line	
	Underground cost - \$14,300,000	
	813 MVA, 1272 ACSS/TW	
	Move spare 230/69kV transformer from South to Central	
	Leave existing 69kV line in place (no demo work)	
	No transformer needed at Magnolia Ranch	
	No transformer or tie into St. Cloud North	
2	Added Specific Cost Components - 2020 Estimates:	\$83,151,76
	Land & Land Rights	
	Additional Equipment & Installation Costs (e.g., double circuited poles,	
	incremental substation infrastructure)	
	Escalation in labor and steel costs	
	Land Clearing & Preparation	
	Contingency	
3	Carl Wall - Dom Toro 69 kV Upgrade - deleted	\$0
- Same	Total Direct Installation	\$140,497,812

Docket No. 20200107-EM OUC's Responses to Staff's Interrogatory Nos. 6.a - 6.cPage 5 of 5



ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION St. Cloud South - Carl Wall - Taft 230kV Line

Customer: OUC Project No: Description:

Location: FL

NO.	DESCRIPTION	Total
1	St. Cloud South - Carl Wall - Taft 230kV Line	\$43,139,179
	Overhead cost - \$42,264,179	\$43,139,178
/ .	Substation cost - \$875,000	
	Route is going past Carl Wall	
	KUA responsible for connecting	
	Term structure used at Taft exists	
	Add term structure at South (position avail, structure not present)	
2	Added Specific Cost Components - 2020 Estimates:	\$62,551,810
	Land & Land Rights	φ02,551,61U
	Additional Equipment & Installation Costs (e.g., double circuited poles,	
	incremental substation infrastructure)	
	Escalation in labor and steel costs	
L	Land Clearing & Preparation	
	Contingency	
3	Carl Wall - Dom Toro 69kV Upgrade - deleted	\$0
	Total Direct Installation	\$105,690,988

Orlando Utilities Commission St. Cloud Transmission Reinforcement Projects Considered Orlando/St. Cloud Regional Resiliency Connection (St. Cloud East-Magnolia Ranch 230 kV Line) Estimated Residential Bill Impact in 2020

Estimated capital cost	\$	94,490,811
Incremental annual revenue requirement (assumes 40-year life and 6.25% return on rate base 1)	\$	6,437,541
Residential share of incremental annual revenue requirement (41.7%) ²	\$	2,684,454
Forecast annual weighted residential kWh ³	2	2,545,807,712
Incremental cost per kWh-Residential	\$	0.00105
Residential monthly bill for 1,000 kWh with 10-1-2019 rates w/o incremental transmission cost Incremental transmission cost per 1000 Residential kWh % increase	\$ \$	109.50 1.05 0.96%
Cumulative Total Estimated Revenue Requirements - Residential (40-year life)	\$	107,378,179
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

⁽²⁾ % allocation from Table 7, line 15 of COS supporting electric rates effective October 1, 2019

Orlando Utilities Commission St. Cloud Transmission Reinforcement Projects Considered Capacitor Bank with Expanded Relaying Protection Estimated Residential Bill Impact in 2020

Estimated capital cost	\$ 74,985,241
Incremental annual revenue requirement (assumes 40-year life and 6.25% return on rate base 1)	\$ 5,108,651
Residential share of incremental annual revenue requirement (41.7%) ²	\$ 2,130,307
Forecast annual weighted residential kWh ³	2,545,807,712
Incremental cost per kWh	\$ 0.00084
Residential monthly bill for 1,000 kWh with 10-1-2019 rates w/o incremental transmission cost	\$ 109.50
Incremental transmission cost per 1000 Residential kWh	\$ 0.84
% increase	0.77%
Cumulative Total Estimated Revenue Requirements - Residential (40-year life)	\$ 85,212,293
Amounts exclude incremental O&M costs	

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

⁽²⁾ % allocation from Table 7, line 15 of COS supporting electric rates effective October 1, 2019

Orlando Utilities Commission St. Cloud Transmission Reinforcement Projects Considered Upgrade KUA 69 kV Line from Domingo Toro to St. Cloud Central with Needed Additional Upgrades Estimated Residential Bill Impact in 2020

Estimated capital cost	\$ 121,874,311
Incremental annual revenue requirement (assumes 40-year life and 6.25% return on rate base 1)	\$ 8,303,144
Residential share of incremental annual revenue requirement (41.7%) ²	\$ 3,462,411
Forecast annual weighted residential kWh ³	2,545,807,712
Incremental cost per kWh	\$ 0.00136
Residential monthly bill for 1,000 kWh with 10-1-2019 rates w/o incremental transmission cost Incremental transmission cost per 1000 Residential kWh % increase	\$ 109.50 \$ 1.36 1.2%
Cumulative Total Estimated Revenue Requirements - Residential (40-year life)	\$ 138,496,447
Amounts exclude incremental O&M costs	

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

⁽²⁾ % allocation from Table 7, line 15 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatories 6.b & 6.d - Page 4 of 10

Orlando Utilities Commission

St. Cloud Transmission Reinforcement Projects Considered St. Cloud Central - Magnolia Ranch 230 kV Line

Estimated Residential Bill Impact in 2020

Estimated capital cost Incremental annual revenue requirement <i>(assumes 40-year life and 6.25% return on rate base</i> ¹) Residential share of incremental annual revenue requirement (41.7%) ² Forecast annual weighted residential kWh ³ Incremental cost per kWh	\$ \$ \$ \$	-,,
Residential monthly bill for 1,000 kWh with 10-1-2019 rates w/o incremental transmission cost Incremental transmission cost per 1000 Residential kWh % increase	\$ \$	109.50 1.57 1.43%
Cumulative Total Estimated Revenue Requirements - Residential (40-year life)	\$	159,659,962
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

⁽²⁾ % allocation from Table 7, line 15 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatories 6.b & 6.d - Page 5 of 10

Orlando Utilities Commission St. Cloud Transmission Reinforcement Projects Considered St. Cloud South - Taft 230 kV Line Estimated Residential Bill Impact in 2020

Estimated capital cost	\$	105,690,988
Incremental annual revenue requirement (assumes 40-year life and 6.25% return on rate base 1)	\$	7,200,595
Residential share of incremental annual revenue requirement (41.7%) ²	\$	3,002,648
Forecast annual weighted residential kWh ³	7	2,545,807,712
Incremental cost per kWh	\$	0.00118
Residential monthly bill for 1,000 kWh with 10-1-2019 rates w/o incremental transmission cost Incremental transmission cost per 1000 Residential kWh % increase	\$ \$	109.50 1.18 1.08%
Cumulative Total Estimated Revenue Requirements - Residential (40-year life)	\$	120,105,921
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

⁽²⁾ % allocation from Table 7, line 15 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatories 6.b & 6.d - Page 6 of 10

Orlando Utilities Commission St. Cloud Transmission Reinforcement Projects Considered Orlando/St. Cloud Regional Resiliency Connection (St. Cloud East-Magnolia Ranch 230 kV Line) Estimated Total System Average Bill Impact in 2020

Estimated capital cost	\$ 94,490,811
Incremental annual revenue requirement (assumes 40-year live and 6.25% return on rate base 1)	\$ 6,437,541
Forecast annual weighted retail & St. Cloud MWh ²	6,867,551
Incremental cost per 1000 Retail kWh	\$ 0.94
Cumulative Total Estimated Revenue Requirements	\$257,501,629
Amounts exclude incremental O&M costs	

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatories 6.b & 6.d - Page 7 of 10

Orlando Utilities Commission

St. Cloud Transmission Reinforcement Projects Considered Capacitor Bank with Expanded Relaying Protection Estimated Total System Average Bill Impact in 2020

Estimated capital cost	\$	74,985,241
Incremental annual revenue requirement (assumes 40-year live and 6.25% return on rate base 1)	\$	5,108,651
Forecast annual weighted retail & St. Cloud MWh ²		6,867,551
Incremental cost per 1000 Retail kWh	\$	0.74
Cumulative Total Estimated Revenue Requirements	1	\$204,346,026
Amounts exclude incremental O&M costs		

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019
 ⁽²⁾ From Table 1, line 15 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatories 6.b & 6.d - Page 8 of 10

Orlando Utilities Commission St. Cloud Transmission Reinforcement Projects Considered Upgrade KUA 69 kV Line from Domingo Toro to St. Cloud Central with Needed Additional Upgrades Estimated Total System Average Bill Impact in 2020

Estimated capital cost	\$ 121,874,311
Incremental annual revenue requirement (assumes 40-year live and 6.25% return on rate base 1)	\$ 8,303,144
Forecast annual weighted retail & St. Cloud MWh ²	 6,867,551
Incremental cost per 1000 Retail kWh	\$ 1.21
Cumulative Total Estimated Revenue Requirements	\$332,125,773
Amounts exclude incremental O&M costs	

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatories 6.b & 6.d - Page 9 of 10

Orlando Utilities Commission St. Cloud Transmission Reinforcement Projects Considered St. Cloud Central - Magnolia Ranch 230 kV Line Estimated Total System Average Bill Impact in 2020

Estimated capital cost Incremental annual revenue requirement <i>(assumes 40-year live and 6.25% return on rate base</i> ¹) Forecast annual weighted retail & St. Cloud MWh ² Incremental cost per 1000 Retail kWh	<pre>\$ 140,497,812 \$ 9,571,940 6,867,551 \$ 1.39</pre>
Cumulative Total Estimated Revenue Requirements	\$382,877,606
Amounts exclude incremental O&M costs	

⁽¹⁾ Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

Docket No. 20200107-EM - OUC's Response to Staff's Interrogatories 6.b & 6.d - Page 10 of 10

Orlando Utilities Commission St. Cloud Transmission Reinforcement Projects Considered St. Cloud South - Taft 230 kV Line Estimated Total System Average Bill Impact in 2020

Estimated capital cost Incremental annual revenue requirement <i>(assumes 40-year live and 6.25% return on rate base</i> ¹) Forecast annual weighted retail & St. Cloud MWh ² Incremental cost per 1000 Retail kWh	 \$ 105,690,988 \$ 7,200,595 6,867,551 \$ 1.05
Cumulative Total Estimated Revenue Requirements	\$288,023,791
Amounts exclude incremental O&M costs	

(1) Return from Table 6, line 23 of COS supporting electric rates effective October 1, 2019

I sponsored the answer to Interrogatory No. 1. from the Florida Public Service Commission Staff's First Set of Interrogatories to Orlando Utilities Commission in Docket No. 20200107-EM, and the response is true and correct based on my personal knowledge.

Under penalties of perjury, I declare that I have read the foregoing declaration and the interrogatory answers identified above, and that the facts stated therein are true.

Stephen G. Thornhill, LEED AP Project Manager, Environmental Services Burns & McDonnell

20200107.EM Staff Hearing Exhibits 00050

I sponsored the answer to Interrogatories No. 2.a, Nos. 6.a & c, No. 6.b (in part), and No. 8 from the Florida Public Service Commission Staff's First Set of Interrogatories to Orlando Utilities Commission in Docket No. 20200107-EM, and the responses are true and correct based on my personal knowledge.

Under penalties of perjury, I declare that I have read the foregoing declaration and the interrogatory answers identified above, and that the facts stated therein are true.

Richard Ridenour, P.E.

Richard Ridenour, P.E. Transmission Line Engineer, Transmission & Distribution Services Burns & McDonnell

Date: 6/1/2020

l sponsored the answer to Interrogatories No. 2.a, Nos. 6.a & c, No. 6.b (in part), and No. 8 from the Florida Public Service Commission Staff's First Set of Interrogatories to Orlando Utilities Commission in Docket No. 20200107-EM, and the responses are true and correct based on my personal knowledge.

Under penalties of perjury, I declare that I have read the foregoing declaration and the interrogatory answers identified above, and that the facts stated therein are true.

Carolyn Greenwell, P.E. Project Manager, Transmission and Distribution Services Burns & McDonnell

Date: 6/1/2020

20200107.EM Staff Hearing Exhibits 00052

I sponsored the answers to Interrogatory Nos. 2.b, 2.c, 6.b and 6.d relating to revenue requirements and bill impacts from the Florida Public Service Commission Staff's First Set of Interrogatories to Orlando Utilities Commission in Docket No. 20200107-EM, and the responses are true and correct based on my personal knowledge.

Under penalties of perjury, I declare that I have read the foregoing declaration and the interrogatory answers identified above, and that the facts stated therein are true.

Lawrence M. Strawn, Manager, Corporate Analytics and Planning Orlando Utilities Commission

Date: _____ 1,2020

I sponsored the answers to Interrogatory Nos. 3, 4, 5, and 7 from the Florida Public Service Commission Staff's First Set of Interrogatories to Orlando Utilities Commission in Docket No. 20200107-EM, and the responses are true and correct based on my personal knowledge.

Under penalties of perjury, I declare that I have read the foregoing declaration and the interrogatory answers identified above, and that the facts stated therein are true.

Aaron Staley, P.E. Manager of Transmission Planning & Reliability Orlando Utilities Commission

Date: 6/1/2020

20200107.EM Staff Hearing Exhibits 00054

OUC's Notice of filing proofs of publication of final hearing notices with attached Composite Exhibit A

DN. 02877-2020

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 10 PARTY: STAFF HEARING EXHIBITS DESCRIPTION: Staley

20200107.EM Staff Hearing Exhibits 00055

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Determination of Need for the Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line Project in Orange and Osceola Counties, by Orlando Utilities Commission

DOCKET NO. 20200107-EM

FILED: June 2, 2020

ORLANDO UTILITIES COMMISSION'S NOTICE OF FILING PROOFS OF PUBLICATION OF FINAL HEARING NOTICES

Orlando Utilities Commission ("OUC"), by and through undersigned counsel and pursuant to Rule 25-22.075(4), Florida Administrative Code ("F.A.C."), hereby gives notice that it has complied with the hearing notice publication requirements of Rule 25-22.075, F.A.C. by publishing an appropriate hearing notice in the Orlando Sentinel on May 1, 2020, and in the Osceola News Gazette on April 30, 2020. OUC hereby files the hearing notices and affidavits demonstrating proof of publication from these newspapers; copies of the affidavits and notices are attached as Composite Exhibit A to this Notice of Filing. These documents should be made an exhibit to the record of the hearing in this docket.

Respectfully submitted this 2nd day of June, 2020.

/s/ Robert Scheffel Wright

Robert Scheffel Wright <u>schef@gbwlegal.com</u> John T. LaVia, III <u>jlavia@gbwlegal.com</u> Gardner, Bist, Bowden, Bush, Dee, LaVia & Wright, P.A. 1300 Thomaswood Drive Tallahassee, Florida 32308 Telephone (850) 385-0070 Facsimile (850) 385-5416

Attorneys for the Orlando Utilities Commission

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail this 2nd day of June, 2020, to the following parties.

Charles Murphy	ID IZ 11
	J.R. Kelly
Gabriella Passidomo	Patricia Christensen
Office of the General Counsel	Thomas David
Florida Public Service Commission	A. Mireille Fall-Fry
2540 Shumard Oak Blvd.	Office of Public Counsel
Tallahassee, FL 32399-0850	c/o The Florida Legislature
cmurphy@psc.state.fl.us	111 West Madison Street, Room 812
gpassido@psc.state.fl.us	Tallahassee, Florida 32399
	kelly.jr@leg.state.fl.us
	christensen.patty@leg.state.fl.us
	david.tad@leg.state.fl.us
	fall-fry.mireille@leg.state.fl.us

/s/ Robert Scheffel Wright Attorney

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Determination of Need for the Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line Project in Orange and Osceola Counties, by Orlando Utilities Commission DOCKET NO. 20200107-EM

FILED: June 2, 2020

COMPOSITE EXHIBIT A

TO

OUC'S NOTICE OF FILING PROOFS OF PUBLICATION OF FINAL HEARING NOTICES

Orlando Sentinel

Published Daily ORANGE County, Florida

State Of Illinois County Of Cook

Before the undersigned authority personally appeared <u>Jeremy Gates</u>, who on oath says that he or she is an Advertising Representative of the ORLANDO SENTINEL, a DAILY newspaper published at the ORLANDO SENTINEL in ORANGE County, Florida; that the attached copy of advertisement, being a Legal Notice in the matter of 11150-Public Hearing Notice, In the matter of Prehearing Conference and Hearing was published in said newspaper in the issues of May 01, 2020.

Affiant further says that the said ORLANDO SENTINEL is a newspaper Published in said ORANGE County, Florida, and that the said newspaper has heretofore been continuously published in said ORANGE County, Florida, each day and has been entered as periodicals matter at the post office in ORANGE County, Florida, in said ORANGE County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that he or she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

VILL

Jeremy Gates

Signature of Affiant

Name of Affiant

Sworn to and subscribed before me on this 13 day of May, 2020, by above Affiant, who is personally known to me (X) or who has produced identification ().

J- DM

Signature of Notary Public



Name of Notary, Typed, Printed, or Stamped

Sold To: Harmonie Wilson - CU80081346 100 W Anderson St Orlando, FL, 32801

Bill To: Harmonie Wilson - CU80081346 100 W Anderson St Orlando, FL, 32801

6661548

Orlando Sentinel

NOTICE OF PREHEARING AND HEARING The FLORIDA PUBLIC SERVICE COMMISSION announces a prehearing conference and a hearing in the following docket to which all persons

following access to an access of a constraint of the second secon Counties, Commission.

PREHEARING CONFERENCE

PREHEARING CONFERENCE DATE AND TIME: June 9, 2020, starting immediately after the Commission's Internal Affairs Conference scheduled for that date. PLACE: Room 148, Betty Easley Conference Center, 4075 Esplanade Way, Tallahassee, FL GENERAL SUBJECT MATTER TO BE CONSIDERED: The purposes of this prehearing conference are to: (1) simplify the issues; (2) identify the positions of the parties on the issues; (3) consider the possibility of obtaining admissions of fact and of documents which will avoid unnecessary proof; admissions of raci and or documents which will avoid unnecessary proof; (4) identify exhibits; (5) establish an order of witnesses; and (δ) consider such other matters and actions as may aid in the efficient disposition of the case.

HEARING DATE AND TIME: June 18, 2020 crt 9:30 a.m.

9:30 a.m. PLACE: Room 148, Betty Easley Conference Center, 4075 Esplanade Way, Tallahassee, FL GENERAL SUBJECT MATTER TO BE CONSIDERED: The purpose of this hearing is for the Florida Public Service Commission to take evidence upon which it will take final action to determine the need, pursuant to Section determine the need, pursuant to Section 403.537, Florida Statutes (F.S.), for the Orlando Utilities Commission's (OUC) Orlando Utilities Commission's (OUC) proposed construction and operation of a 230 kV electrical transmission line that would be located in Orange and Osceola Counties. The proposed electrical line will start at OUC's existing Magnolia Ranch Substation in Orange County and will terminate at the St. Cloud East Substation in Osceola County. This proceeding shall: (1) allow OUC to present testimony and other evidence in support of its petition for a determination of need for the for a determination of need for the Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line; (2) permit any intervenors to present testimony and other evidence concerning the proposed line; (3) permit members of the public who are not parties to the need determination not parties to the need determination proceeding to present testimony concerning the proposed line; and (4) allow for such other proceedings relevant to the proposed line as the Commission may deem appropriate.

Members of the public who are not parties to the need determination proceeding shall have an opportunity to present sworn testimony at the hearing regarding the need for the proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV transmission line by OUC. By providing public sworn testimony, a person does not become a party to the proceeding. If you wish to have party status, you must file a Motion for Intervention at least twenty (20) due before the final beneficients (20) days before the final hearing, i.e., by Friday, May 29, 2020, pursuant to the requirements contained in Rule 28-106-205, Florida Administrative Code (F.A.C.). All witnesses shall

be subject to cross examination at the conclusion of their testimony.

Orlando Sentinel

Interested persons may also request to be listed as an interested person for this docket, in which case they will receive notices and orders published and issued in the docket. Such requests should be made to: Florida Public Service Commission, Office of the Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850, (850) 413-6770.

The hearing will be governed by the provisions of Chapter 120, F.S.; Section 403.537, F.S.; and Chapters 25-22, 28-106, and 28-109, F.A.C. Only issues relating to the need for the Orlando/St. Cloud Regional Resiliency Connection 230 kV transmission line will be considered at the June 18, 2020 hearing.

Separate public hearings will be held before an Administrative Law Judge of the Division of Administrative Hearings to consider environmental and other impacts of the Orlando/St. Cloud Regional Resiliency Connection 230 kV transmission line, as required by the Florida Electric Transmission Line Siting Act, Sections 403:52-403.5365, F.S.

Any person requiring some accommodation at this hearing because of a physical impairment is asked to advise the Commission at least 5 days before the hearing by contacting: Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, FL, 32399-0850 or by calling (850) 413-6770. If you are hearing or speech impaired, please contact the Commission using the Florida Relay Service, which can be reached at 1-800-955-8771 (TDD) or 1-800-955-8770 (Voice). For more information, you may contact: Florida Public Service Commission, Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850.

If the Commission is operating under a state of emergency due to COVID-19, at the time of the hearing, all public sworn testimony and participation will be handled remotely. If this, or other special procedures are needed to ensure the safety of participants, directions for participation will be posted on the Commission's website (www.floridapsc.com) under the Hot Topics link found on the home page. Any such procedures will be established and posted no less than 10 days before the hearing.

Emergency Cancellation of Hearings: If a named storm or other state of emergency requires cancellation of the hearing. Commission staff will attempt to give timely direct notice to the Parties. Notice of cancellation of the hearing will also be provided on the Commission's website (www.floridapsc. com) under the Hot Topics link found on the home page. Cancellation can also be confirmed by calling the Office of the General Counsel of the Commission at (850) 413-6199. For more information, you may contact: Florida Public Service Commission, Office of the Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850, (850 413-6770).

OS6661548

6661548

501/2020

OSCEOLA NEWS-GAZETTE

22 W. Monument, Suite 5, Kissimmee, FL 34741 • 407-846-7600 (P) • 321-402-2946 (F) • www.aroundosceola.com

Classified Advertising Receipt

SR. MARKETING COM 100 W. ANDERSON ST ORLANDO, FL 32801	MUNICATIONS			Acct#:59568 Ad#:30998 Phone#:407-434-448 Date:05/11/2020	9
Salesperson: GLUGO	Classification: Legals		Ad Size: 2.0 x 10.00		
Advertisement Informa	tion:	an			
Description	Start	Stop	Ins.	Cost/Day	Total
News Gazette Legals	04/30/2020	04/30/2020	1	150.80	150.80
Affidavit Fee	-	-	-	-	3.00
Payment Information: Date: 04/23/2020	Order# 30998	Type CreditCard			
				Total Amount Total Paymen Amount Due:	

Thank you for your business. Comment: 20200107-EM, NOTICE OF PREHEARING AND HEARING

Ad Copy

PROOF OF PUBLICATION From

OSCEOLA EWS-GAZETTE

STATE OF FLORIDA COUNTY OF OSCEOLA

Before me, the undersigned authority, personally appeared Rochelle Stidham, who on oath says that she is the Publisher of the Osceola News-Gazette, a twice-weekly newspaper published at Kissimmee, in Osceola County, Florida; that the attached copy of the advertisement was published in the regular and entire edition of said newspaper in the following issues:

April 30, 2020, ,

Affiant further says that the Osceola News-Gazette is a newspaper published in Kissimmee, in said Osceola County, Florida, and that the said newspaper has heretofore been continuously published in said Osceola County, Florida, each week and has been entered as periodicals postage matter at the post office in Kissimmee. in said Osceola County, Florida. for a period of one year preceding the first publication of the attached copy of advertisement; and affiant further says that he has neither paid nor promised any person. firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Sworn and subscribed before

me by Rochelle Stidham, who is

personally known to me, this

ril 30, 2020

GARY P. LUGO MY COMMISSION # GG 013269 EXPIRES: October 23, 2020 Bonded Thru Notary Public Underwriters

In THE MATTER OF: NOTICE OF PREHEARING AND HEARING 20200107-EM

NOTICE OF PREHEARING AND HEARING

The FLORIDA PUBLIC SERVICE COMMISSION announces a prehearing conference and a hearing in the following docket to which all persons are invited. DOCKET NO. AND ITTLE: Docket Number 20200107-EM - Petition for Determination of Need for the Orlanda/St. Cloud Regional Regiment Connection 230 kV Transmission Line Project in Orange and Osceola Counties, by Orlando Utilities commission.

Commission. PREHEARING CONFERENCE DATE AND TIME: June 9, 2020, starting immediately after the Commission's Internal Affairs Conference scheduled for that

PLACE: Room 148, Betty Easley Conference Center, 4075 Esplanade Way, Tallahassee, FL GENERAL SUBJECT MATTER TO BE CONSIDERED: The

GENERAL SUBJECT MATTER TO BE CONSIDERED: The purposes of this preheating conference are to: (1) simplify the issues; (2) identify the positions of the parties on the issues; (3) consider the possibility of obtaining admissions of lact and of documents which will avoid unnecessary proof; (4) identify exhibits; (5) establish an order of witnesses; and (6) consider such other matters and actions as may aid in the efficient disposition of the case.

disposition of the case. HEARING DATE AND TIME: June 18, 2020 at 9:30 a.m. PLACE: Room 146, Betty Easley Conference Center, 4075 Esplanade Way, Tallahassee, FL GENERAL SUBJECT MATTER TO BE CONSIDERED: The purpose of this hearing is for the Florida Public Service Commission to take evidence upon which it will take final action to determine the need, pursuant to Section 403.537, Florida Statutes (F.S.), for the Orlando Ultifiets Commission's (OUC) proposed construction and operation of a 230 kV electrical transmission line that would be located in Orange and Osceola Counties. The proposed electrical line will start at OUC's existing Magnolia Ranch Substation in Orange County and will terminate at the SL. Cloud East Substation in Graege County and will terminate at the SL. Cloud Regional Resiliency Connection 230 kV Transmission Line; (2) permit any infarvenors to present testimony and other evidence concerning the proposed determination proceeding to present testimony concerning the proposed line; and (4) allow for such other proceeding relevant to the proposed line as the Commission may deem appropriate.

Members of the public who are not parties to the need determination proceeding shall have an opportunity to present sworn testimony at the hearing regarding the need for the proposed Orlando'St. Cloud Regional Resiliency Connection 230 kV transmission line by OUC. By providing public swom testimony, a person does not become a party to the proceeding. If you wish to have party status, you must file a Motion for Intervention at least twenty (20) days before the final hearing, i.e., by Friday, May 28, 2020, pursuant to the requirements contained in Rule 28-106.205, Florida

FIRST PUBLICATION: April 30, 2020 LAST PUBLICATION: April 30, 2020

Administrative Code (F.A.C.). All witnesses shall be subject to cross examination at the conclusion of their testimony.

Interested persons may also request to be listed as an interested person for this docket, in which case they will receive notices and orders published and issued in the docket. Such requests should be made to: Florida Public Service Commission, Office of the Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850, (850) 413-6770.

The hearing will be governed by the provisions of Chapter 120, F.S.; Section 403.537, F.S.; and Chapters 25-22, 28-106, and 28-109, F.A.C. Only issues relating to the need for the Orlando/St. Cloud Regional Resiliency Connection 230 kV transmission line will be considered at the June 18, 2020 hearing.

Separate public hearings will be held before an Administrative Law Judge of the Division of Administrative Hearings to consider environmental and other impacts of the Orlando/SL Cloud Regional Resiliency Connection 230 kV transmission line, as required by the Florida Electric Transmission Line Siting Act, Sections 403.52-403.5365, F.S.

Any person requiring some accommodation at this hearing because of a physical impairment is asked to advise the commission at least 5 days before the hearing by contacting. Office of Commission Clerk, 2540 Shumard Oak Boulevard. Tallahassee, FL, 32393-0650 or by calling (850) 413-6770. If you are hearing or speech impaired, please contact the Commission using the Florida Relay Service, which can be reached at 1:800-955-8771 (TDD) or 1:800 955-8770 (Voice). For more information, you may contact: Florida Public Service Commission. Office of Commission Clerk, 2540 Shumard Oak Boulevard, Tallahassee, FL 32399-0850.

If the Commission is operating under a state of emergency due to COVID-19, at the time of the hearing, all public swom testimony and participation will be handled remotely. If this, or other special procedures are needed to ensure the safety of participants, directions for participation will be posted on the Commission's website (www.floridates.com) under the Hot Topics link found on the home page. Any such procedures will be established and posted no less than 10 days before the hearing.

Emergency Cancellation of Hearings: If a named storm or other state of emergency requires cancellation of the hearing. Commission staff will attempt to give timely direct noice to the Parties. Noice of cancellation of the hearing will also be provided on the Commission's website (www.flondapsc.com) under the Hol Topics link found on the home page. Cancellation can also be confirmed by calling the Office of the General Coursel of the Commission at (850) 413-6199. For more information, you may contact. Florida Public Service Commission, Office of the Commission Clerk, 2540 Shumard Oak Boulevard. Tailahassee, FL 32399 0850, (850 413-6770). April 30, 2020



Make remittance to: Osceola News-Gazette 22 W. Monument Ave., Suite 5 Kissimmee, FL 34741 Phone: (407) 846-7600 Fax: (321) 402-2946 Email: legalads@osceolanewsgazette.com You can also view your Legal Advertising on www.AroundOsceola.com or www.FloridaPublicNotices.com Ad#30998

(Composite Exhibit) Petition for determination of need for the Orlando/St. Cloud Regional Resiliency
Connection 230 kV transmission line project in Orange and Osceola Counties, by Orlando Utilities Commission, DN. 02338-2020, and Confidential DN. 02353-2020,*
Exhibit A to petition for determination of need, with appendices, filed May 1, 2020

FLORIDA PUBLIC SERVICE COMMISSION DOCKET: 20200107-EM EXHIBIT: 11 PARTY: STAFF HEARING EXHIBITS DESCRIPTION: Staley

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

In re: Petition for Determination of Need for the Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line Project in Orange and Osceola Counties, by Orlando Utilities Commission DOCKET NO. 20200107-EM

FILED: May 1, 2020

ORLANDO UTILITIES COMMISSION'S PETITION FOR DETERMINATION OF NEED FOR ELECTRICAL TRANSMISSION LINE

The Orlando Utilities Commission ("OUC"), pursuant to Section 403.537, Florida Statutes,¹ Chapter 120, Florida Statutes, Rules 25-22.075 and 25-22.076, Florida Administrative Code ("F.A.C."), and Rule 28-106.201, F.A.C., hereby respectfully petitions the Florida Public Service Commission ("PSC") for an order determining that OUC's proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line Project (the "Project") is needed, consistent with the criteria set forth in applicable statutes and the PSC's rules. In summary, as described and demonstrated in OUC's exhibits and testimony accompanying this Petition, the proposed transmission line is needed in the Summer 2025 time frame to maintain reliable service in the area to be served by the line and to provide abundant, low-cost electrical energy to assure the economic wellbeing of Florida residents and businesses. In addition to meeting these reliability and economic needs, the proposed line will support the integration of planned renewable electric generating facilities into Florida's power supply grid and strengthen the capacity and reliability of the state's transmission system as a whole.

In further support of its Petition, OUC states as follows.

¹ All references to the Florida Statutes are to the 2019 edition.

PROCEDURAL BACKGROUND

1. The name, address, and contact information of the Petitioner are:

Orlando Utilities Commission Reliable Plaza at 100 West Anderson Street Post Office Box 3193 Orlando, Florida 32802.

2. All pleadings, order, notices, correspondence, and other materials should be

directed to OUC's representatives as follows:

Robert Scheffel Wright John T. LaVia, III Gardner, Bist, Bowden, Bush, Dee, LaVia & Wright, P.A. 1300 Thomaswood Drive Tallahassee, Florida 32308 Telephone (850) 385-0070 Telecopier (850) 365-5416 <u>schef@gbwlegal.com</u> <u>jlavia@gbwlegal.com</u>

with a courtesy copy to:

W. Christopher Browder, Vice President & General Counsel Office of General Counsel Orlando Utilities Commission Reliable Plaza at 100 West Anderson Street Post Office Box 3193 Orlando, Florida 32802 Telephone (407) 434-2167 CBrowder@ouc.com

3. The agency affected by this Petition is:

Florida Public Service Commission 2540 Shumard Oak Boulevard Tallahassee, Florida 32399-0850.

LEGAL & FACTUAL BACKGROUND

4. OUC is an electric utility within the meaning of Section 366.02(2), Florida Statutes. OUC's retail electric service area covers approximately 248 square miles and includes the City of Orlando, portions of unincorporated Orange County, and portions of Osceola County. In addition, OUC and the City of St. Cloud ("St. Cloud") have entered into an interlocal agreement under Chapter 163, Florida Statutes (the "Interlocal Agreement"), pursuant to which OUC provides all services necessary to and associated with the provision of retail electric energy to all St. Cloud electric customers, including all services provided by OUC to OUC's customers. Including the retail customers in St. Cloud, OUC currently serves approximately 242,000 electric customer accounts, including approximately 211,000 electric residential customers, 25,000 electric commercial customers, 5,700 electric industrial customers, a small number of customers to whom OUC provides street and highway lighting service, and a similarly small number of other public authorities to which OUC provides service. While St. Cloud is a legally separate municipal electric utility, consistent with OUC's obligations pursuant to the Interlocal Agreement, OUC treats the St. Cloud load and customers as part of OUC's retail obligations for planning and energy conservation purposes.

5. OUC's obligations under the Interlocal Agreement specifically include providing all management services and resources necessary to maintain St. Cloud's electric utility system and assets, as well as operating and maintaining St. Cloud's transmission system (and distribution system) consistent with OUC's operating and maintenance practices. OUC's existing transmission system in Orlando/Orange County consists of 31

substations interconnected through approximately 335 miles of 230 kV, 115 kV, and 69 kV lines. OUC is integrated into the Florida Reliability Coordinating Council (FRCC) regional transmission grid through twenty-one 230 kV and one 69 kV metered interconnections with other utilities. Additionally, pursuant to the Interlocal Agreement, OUC is responsible for planning, operating, and maintaining St. Cloud's four substations, 55 miles of transmission lines, and three interconnections with other utilities.

6. The Florida Electric Transmission Line Siting Act, Sections 403.52-403.5365, Florida Statutes (the "TLSA"), requires applicants for certain transmission lines to obtain the PSC's determination of need for proposed lines. The proposed Orlando/St. Cloud Regional Resiliency Connection will operate at 230,000 volts (230 kilovolts or 230 kV) and will be located in Orange and Osceola Counties, and its length will exceed 15 miles. These factors bring the line under the mandatory jurisdiction of the TLSA. Fla. Stat. §§ 403.522(22) & 403.524(2)(d). Pursuant to the TLSA, the PSC has the jurisdiction and statutory responsibility to hold a hearing and issue an order determining the need for the proposed line in accordance with criteria set forth in the statute. Fla. Stat. §§403.526(2)(a)7 & 403.537. Specifically, in making its determination of need, the PSC is required to take into account

the need for electric system reliability and integrity, the need for abundant, low-cost electrical energy to assure the economic well-being of the residents of this state, the appropriate starting and ending point of the line, and other matters within its jurisdiction deemed relevant to the determination of need.

Fla. Stat. § 403.537. The PSC fulfills its responsibilities pursuant to PSC Rules 25-22.075 and 25-22.076, F.A.C. OUC expects to file its application for certification of the proposed

corridor for the Project later in 2020.

7. The need for the proposed Project results primarily from load growth in and around St. Cloud. Despite previous projections that electric load growth in that area would slow down, growth has in fact continued to be much stronger than previously projected, resulting in OUC projecting a need for new transmission capacity by the Summer of 2025. To meet this need, the projected in-service date for the line is approximately May or June of 2025. If the proposed line is not constructed in approximately the time frame sought, OUC will lack sufficient capacity to deliver all of the power requirements of customers in the St. Cloud area, certain transmission line segments in the region will exceed their capacity ratings, and certain line segments will also experience unacceptable low-voltage conditions. Based on transmission planning and engineering analyses, including load flow studies the results of which are reported in Exhibit A to the Petition and also in the exhibits accompanying the testimony of OUC's witness, Aaron Staley, P.E., OUC determined that the proposed line, with its starting point at the Magnolia Ranch Substation in Orange County and its ending point at the St. Cloud East Substation in Osceola County, will best meet the needs of the customers that OUC is responsible to serve.

STATEMENT OF SUBSTANTIAL INTERESTS AFFECTED

8. By its Petition, OUC asks the PSC to issue an order determining that OUC's proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line is needed. OUC is an electric utility within the meaning of Section 366.02(2), Florida Statutes, and is therefore a proper applicant for the PSC's determination of need pursuant to Section 403.522(4), Florida Statutes. OUC is responsible for meeting the electric service

needs of all of its retail customers and also, pursuant to the Interlocal Agreement, the electric service needs of all of the retail electric customers of the City of St. Cloud. OUC thus has standing under the TLSA to seek certification of its proposed line and to seek the PSC's determination of need for the line. OUC's substantial interests in meeting its obligations to serve its customers and St. Cloud's customers reliably and economically will be directly determined by the PSC in this proceeding.

DISPUTED ISSUES OF MATERIAL FACT

9. Pursuant to Section 403.537, Fla. Stat., the issues to be decided in this docket

are as follows:

- ISSUE 1: Is there a need for OUC's proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line, taking into the account the need for electric system reliability and integrity, in accordance with Section 403.537(1)(c), Florida Statutes?
- ISSUE 2: Is there a need for OUC's proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line, taking into the account the need for abundant, low-cost electrical energy to assure the economic well-being of the residents of the state, in accordance with Section 403.537(1)(c), Florida Statutes?
- ISSUE 3: Are OUC's existing Magnolia Ranch substation in Orange County and the St. Cloud East substation in Osceola County the appropriate starting and ending points of the proposed transmission line?
- ISSUE 4: Should the PSC grant OUC's petition for determination of need for the proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line project?

At this time, OUC is not aware of any disputes regarding these issues, and OUC has filed

with this Petition competent, substantial evidence that fully addresses all issues.

STATEMENT OF ULTIMATE FACTS ALLEGED

10. OUC asserts that the following ultimate facts, fully supported by the competent and substantial evidence set forth in Exhibit A to the Petition and in the testimony and exhibits of OUC's witness Aaron Staley, P.E., filed contemporaneously with this Petition, demonstrate that the Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line is needed, with the starting point at the Magnolia Ranch substation in Orange County and the ending point at the St. Cloud East substation in Osceola County, taking into account the need for system reliability and integrity and the need for abundant, low-cost electrical energy to assure the economic well-being of the residents of the state.

11. The specific conditions and contingencies that demonstrate the need for the proposed line include:

- A. The Project is needed to maintain and improve reliability to accommodate projected load growth in the area in and around the City of St. Cloud.
- B. The Project will improve power transfer capabilities of the transmission system serving St. Cloud, within the OUC system, and also in the bulk power grid serving the greater Orlando region.
- C. The Project will accommodate the integration of new renewable electric generating facilities in the region into Florida's power supply grid.
- D. If the Project is constructed in the Summer 2025 time frame as planned, it will avoid thermal overloads that are projected to occur if the line is not constructed as planned. The Project will also reduce the potential impacts of low-voltage conditions that may occur under contingency conditions and in subsequent years under normal load and operating conditions.
- E. The Project will result in lower costs to serve retail customers of OUC and the City of St. Cloud than if the line is not constructed.
- F. OUC considered several alternative configurations for proposed additional transmission capacity to serve the affected area, including corridors with

different starting and ending points, different line and transformer configurations, other transmission improvements, and other non-transmission measures, including distributed generation. OUC's analyses concluded that the proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line will best serve the reliability and economic needs of the customers that OUC is responsible to serve.

G. If the installation and operation of the Project is delayed beyond the Summer 2025 time frame as proposed by OUC, service reliability will be reduced and certain reliability criteria, specifically thermal overloads on some transmission facilities post-contingency will be violated under normal load conditions, even with all facilities in service pre-contingency. Additionally, the risk of low-voltage conditions impairing reliability will be increased under contingency conditions if the Project is delayed.

STATUTES AND RULES THAT ENTITLE OUC TO THE RELIEF REQUESTED

12. OUC is entitled to the relief requested, i.e., a hearing and an affirmative determination of need for the proposed transmission line with its starting point at the Magnolia Ranch Substation in Orange County and its ending point at the St. Cloud East Substation in Osceola County, by Sections 120.569 and 120.57, Florida Statutes, and Section 403.537, Florida Statutes. OUC is further entitled to the relief requested by PSC Rules 25-22.075 and 25-22.076, F.A.C.

CONCLUSION AND RELIEF REQUESTED

13. As explained above and demonstrated by the testimony and exhibits of OUC's witness, Aaron Staley, P.E., there is a need for OUC's proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line, with the starting point at the Magnolia Ranch Substation in Orange County and the ending point at the St. Cloud East Substation in Osceola County, taking into account the need for system reliability and integrity and the need for abundant, low-cost electrical energy to assure the economic well-

being of the residents of the state. Accordingly, OUC is entitled to the requested hearing and to the PSC's order determining that the proposed transmission line is needed, as set forth herein.

WAIVER OF STATUTORY HEARING TIME REQUIREMENT

Section 403.537(1)(a), Florida Statutes, provides that the PSC is to hold the hearing on a petition for determination of need for a jurisdictional transmission line "within 45 days after the filing of the request." Counsel for OUC and counsel for the PSC Staff have worked cooperatively on scheduling the proceedings for OUC's transmission line need determination in these difficult times, and have agreed that OUC will file its petition, testimony, and exhibits on May 1, 2020, which is more than 45 days in advance of the date that has been scheduled for the hearing. Accordingly, OUC hereby waives its right to a hearing within 45 days of filing its petition, to permit the hearing to be held as agreed on June 18, 2020.

WHEREFORE, the Orlando Utilities Commission respectfully requests that the Florida Public Service Commission:

- A. Hold a hearing on OUC's Petition in accordance with Section 403.537, Florida Statutes, Chapter 120, Florida Statutes, and Rules 25-22.075 and 25-22.076, F.A.C.;
- B. Determine that there is a need for OUC's proposed Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line, with the starting point at the Magnolia Ranch substation in Orange County and the ending point at the St. Cloud East substation in Osceola County, taking into account the need for system reliability and integrity and the need for abundant, low-cost electrical energy to

assure the economic well-being of the residents of the state; and

Facsimile (850) 385-5416

C. Enter its final order determining need for the Orlando/St. Cloud Regional Resiliency Connection 230 kV Transmission Line.

Respectfully submitted this 1st day of May, 2020.



Attorneys for the Orlando Utilities Commission

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a true and correct copy of the foregoing has been furnished by electronic mail this <u>1st</u> day of May, 2020, to the following parties.

Charles Murphy	J.R. Kelly		
Gabriella Passidomo	Patricia Christensen		
Office of the General Counsel	Thomas David		
Florida Public Service Commission	A. Mireille Fall-Fry		
2540 Shumard Oak Blvd.	Office of Public Counsel		
Tallahassee, FL 32399-0850	c/o The Florida Legislature		
cmurphy@psc.state.fl.us	111 West Madison Street, Room 812		
gpassido@psc.state.fl.us	Tallahassee, Florida 32399		
	kelly.jr@leg.state.fl.us		
	christensen.patty@leg.state.fl.us		
	david.tad@leg.state.fl.us		
	fall-fry.mireille@leg.state.fl.us		

Robert Scheffel Wright

Attorney

BEFORE THE FLORIDA PUBLIC SERVICE COMMISSION

DOCKET NO. 20200107-EM

ORLANDO UTILITIES COMMISSION

MAY 1, 2020

IN RE: PETITION FOR DETERMINATION OF NEED FOR THE ORLANDO/ST. CLOUD REGIONAL RESILIENCY CONNECTION 230 kV TRANSMISSION LINE PROJECT IN ORANGE AND OSCEOLA COUNTIES, BY ORLANDO UTILITIES COMMISSION

EXHIBIT A TO THE PETITION

EXHIBIT A IS CONFIDENTIAL IN ITS ENTIRETY AND IS BEING SUBMITTED SEPARATELY PURSUANT TO A REQUEST FOR CONFIDENTIAL CLASSIFICATION PURSUANT TO RULE 25-22.006, F.A.C.