Exhibit G - Public

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TESTIMONY

OF

PATRICK JEHRING

ON BEHALF OF

GRIDLIANCE LOUISIANA, LLC

PUBLIC VERSION

March 7, 2025

1		I. INTRODUCTION
2	Q.	PLEASE STATE YOUR NAME AND BUSINESS ADDRESS.
3	A.	Patrick Jehring and my business address is 700 Universe Boulevard Juno Beach FL, 33408.
4	Q.	BY WHOM ARE YOU EMPLOYED AND IN WHAT CAPACITY?
5	A.	I am employed by NextEra Energy Transmission ("NEET"), LLC as a Director of Systems
6		Planning.
7	Q.	PLEASE DESCRIBE YOUR EDUCATIONAL AND PROFESSIONAL EXPERIENCE.
8	А.	I earned a Bachelor of Science degree and a Master of Science degree in Electrical
9		Engineering with an emphasis on Power Systems from the University of Wisconsin -
10		Madison in 2007 and 2009 respectively. I have also earned a Master of Business
11		Administration from the Indiana University Kelley School of Business in 2022. I have over
12		fifteen years of experience in the electric utility industry with roles in reliability and
13		economic transmission planning as well as wholesale energy market analysis. I started my
14		career at Siemens Power Technologies International ("PTI") in their consulting group where
15		I performed various transmission planning studies for generator interconnection, long-term
16		transmission service, and system reliability. Following my time at PTI, I worked for 10
17		years at the Midcontinent Independent System Operator ("MISO") in its modeling,
18		transmission expansion planning, and market analytics groups. During my time in the
19		transmission expansion planning group my focus was the MISO South region as well as
20		being a subject matter expert for North American Electric Reliability Corporation
21		("NERC") compliance. I joined NEET in 2022 where my duties include long range
22		transmission planning for our GridLiance Heartland transmission assets and supporting our

TESTIMONY OF PATRICK JEHRING

Page 3

1		work with cooperatives and municipal utilities across the country. I am also currently the
2		acting chair of MISO's Planning Subcommittee group.
3	Q.	ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS PROCEEDING?
4	А.	I am testifying on behalf of GridLiance Louisiana, LLC ("GLL"). GLL is an indirect
5		subsidiary of NEET.
6	Q.	HAS THIS TESTIMONY BEEN PREPARED BY YOU OR UNDER YOUR
7		SUPERVISION?
8	А.	Yes.
9	Q.	HAVE YOU PREVIOUSLY TESTIFIED BEFORE THE LOUISIANA PUBLIC
10		SERVICE COMMISSION ("LPSC")?
11	А.	No.
12		II. PURPOSE AND SUMMARY OF DIRECT TESTIMONY
13	Q.	WHAT IS THE PURPOSE OF YOUR DIRECT TESTIMONY IN THIS PROCEEDING?
14	А.	The purpose of my testimony is to: (1) provide an overview of the application of the Federal
15		Energy Regulatory Commission's ("FERC") seven factor test to the of the proposed transfer
16		of certain transmission assets ("Transmission Assets") between GLL and Southwest
17		Louisiana Electric Membership Corporation ("SLEMCO"), as set forth in Table 1 of the
18		Application, and (2) address the following public interest factors set forth in the LPSC 1994
19		General Order: 1 and 4.
20	Q.	PLEASE DESCRIBE THE TRANSMISSION ASSETS.
21	А.	The Transmission Assets set forth in the Asset Purchase Agreement between SLEMCO and
22		GLL are a set of substations that SLEMCO is acquiring from Big Pelican LLC and Pelican
23		South Central LLC ("Pelican") (formerly Cleco Cajun, LLC) on April 1, 2025. The
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TESTIMONY OF PATRICK JEHRING

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1 Transmission Assets proposed to be transferred to GLL are set forth in Table 1 of the 2 Application, which is also set forth below.

Table 1			
Transmission Assets to be tr	ansferred from SLEMCO to GLL		
Substation	kilovolt ("kV")		
Crowley	138		
East Opelousas	138		
Hebert	138		
Judice	138		
Krotz Springs	138		
LeBlanc Bulk	138		
Scanlan	138		
Semere Road	138		
Vatican	138		

3 GLL is only proposing to acquire assets that qualify for inclusion in MISO.

4 Q. ARE YOU SPONSORING ANY EXHIBITS WITH YOUR TESTIMONY?

- 5 A. Yes. I am sponsoring the following exhibits:
 - Exhibit 1 Seven-Factor Test Analysis.
 - Exhibit 2 Benefit Analysis.

TESTIMONY OF PATRICK JEHRING

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1		III. SEVEN FACTOR TEST
2	Q.	PLEASE PROVIDE A GENERAL OVERVIEW OF FERC'S SEVEN FACTOR TEST.
3	А.	In FERC Order No. 888 (75 FERC ¶ 61,080, pp. 435-440), FERC established a seven-factor
4		test for determining whether a line segment or substation, as applicable, is to be classified
5		as transmission or distribution. The seven-factor test was designed to be applied by FERC,
6		an Independent System Operator ("ISO"), or a state commission. The following are the
7		seven-factors:
8		Factor #1: Local distribution facilities are normally in close proximity to retail customers.
9		Factor #2: Local distribution facilities are primarily radial in character.
10		Factor #3: Power flows into local distribution systems; it rarely, if ever, flows out.
11		Factor #4: When power enters a local distribution system, it is not reconsigned or
12		transported on to some other market.
13		Factor #5: Power entering a local distribution system is consumed in a comparatively
14		restricted geographical area.
15		Factor #6: Meters are based at the transmission/local distribution interface to measure
16		flows into the local distribution system.
17		Factor #7: Local distribution systems will be of reduced voltage.
18		
19		If an asset is appropriately classified as transmission using the seven-factor test, the asset
20		is also appropriate for inclusion in an ISO, such as MISO, and the associated costs
21		recovered under the MISO tariff.

1 Q. HOW IS THE SEVEN FACTOR TEST APPLIED?

Each factor of the seven-factor test is applied to each Transmission Asset, which in this case 2 A. are substations. The application of the factor results in a pass or fail determination. For 3 some assets, the application of all factors will indicate a uniform pass or fail grade. An 4 overall passing grade indicates that the asset is appropriately classified as distribution. 5 Conversely, if the overall grade is failing, then the asset is appropriately classified as 6 transmission. If the asset fails some factors and passes others, then a comprehensive 7 consideration is employed to determine whether the substation is appropriately classified as 8 either distribution or transmission. FERC has elaborated on the use of the seven-factor test 9 10 as follows:¹

When the characteristics of facilities are consistent with a factor, the facilities are more likely to be classified as distribution. Conversely, when the characteristics of facilities are inconsistent with a factor, the facilities are more likely to be classified as transmission. The Commission has also stated that the seven-factor test is 'not subject to formulaic application or categorical standards' but instead requires 'comprehensive consideration of how the totality of the circumstances bears on each of the seven factors.'

- 19 For example, MISO performed a transmission determination for 69 kV assets in Arkansas
- 20 where MISO concluded the assets under evaluation failed certain factors, and, yet, were still

21 considered transmission.²

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¹ *Midcontinent Independent System Operator, Inc.*, 181 FERC ¶ 61,056, 61374 (Opinion 580) (2022), quoting *S. Cal. Edison Co.*, 153 FERC P 61,384, at P 19 (2015) (Southern California Edison) (citing Order No. 888, FERC Stats. & Regs. P 31,036, app. G at 31,980-81; *Cal. Pac. Elec. Co., LLC*, 133 FERC P 61,018, at PP 45-48 (2010)); see also *Commonwealth Edison Co.*, 167 FERC P 61,173, at P 26 (2019).

² <u>https://cdn.misoenergy.org/20221115%20PSC%20Item%2005a%20Transmission%20Determination%20-</u> %20City%20Water%20and%20Light%20(CWL)%20-%20Jonesboro626965.pdf

1	Q.	WHAT SUBSTATIONS DID YOU APPLY THE SEVEN FACTOR TEST TO?
2	А.	As shown in Exhibit 1, the seven-factor test was applied to the substation Transmission
3		Assets set forth in Table 1.
4	Q.	PLEASE EXPLAIN THE APPLICATION OF FACTOR #1 TO THE TRANSMISSION
5		ASSETS.
6	A.	As explained in Exhibit 1, I reviewed factor #1 in the context of the electrical system and
7		the geographical proximity to the location of retail customers. From an electrical system
8		perspective, the 138 kV substation Transmission Assets all require to be stepped down to
9		lower voltages to serve the retail customers. Therefore, from an electrical perspective, the
10		Transmission Assets are not in close proximity to the retail customers; instead, the assets
11		are remote compared to distribution facilities serving retail customers. Additionally, from
12		a geographic perspective the Transmission Assets are not close to retail customers when
13		compared to the distribution facilities serving these customers. I provide illustrations and
14		maps in Exhibit 1 to show the remoteness of the Transmission Assets to retail customers.
15		Thus, based on my application of the methodology explained above, all Transmission Assets
16		fail factor #1.
17	Q.	PLEASE EXPLAIN THE APPLICATION OF FACTOR #2 TO THE TRANSMISSION
18		ASSETS.
19	A.	As explained in Exhibit 1, the methodology applied under factor #2 involved whether the
20		Transmission Assets are radial in nature, meaning their electrical configuration emanates
21		from a single point and does not have any other electrical connections to the overall
22		transmission system. Conversely, if transmission assets are not radial and are rather

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networked, they will have two or more electrical connections to the transmission system.

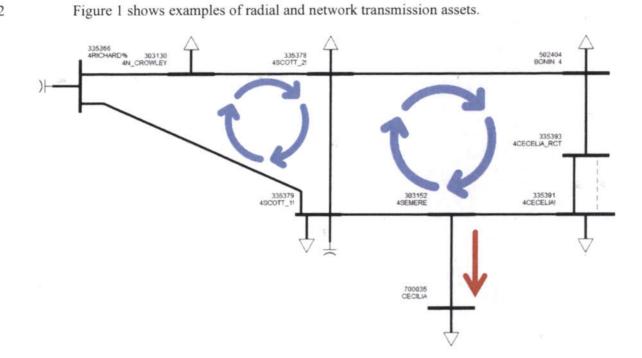


Figure 1: Example of Network and Radial Transmission

3	Figure 1 shows two examples of networked transmission as noted with the blue circles and
4	one example of radial transmission as noted with the red arrow. Networked transmission
5	has multiple connections whereas radial transmission has a single connection. Figure 1
6	shows that Entergy Louisiana, LLC ("Entergy")'s Richard, Scott, and Cecelia, Lafayette
7	Utilities System ("LUS")'s Bonin, and SLEMCO's Crowley and Semere Road create a
8	network allowing power to flow between all six stations. In contrast the single, radial,
9	connection from SLEMCO's Semere Road to Cecilia only allows power to flow between
10	those two stations.

A review of the Transmission Assets, during normal operating conditions, shows that they 1 all have two connections to the transmission system and are networked, therefore, failing 2 To reach this conclusion, I reviewed one-line diagrams of the Transmission factor #2. 3 Assets and their electrical connection to the boarder transmission network. Additionally, 4 for the two 138 kV lines connected to each substation I reviewed their connections to the 5 transmission system and found the lines had additional connections and are not radial. 6 Finally, all of the 138 kV lines connected to the stations under review are listed in Entergy's 7 Attachment O Appendix H list of transmission lines which means they have been transferred 8 to MISO's functional control. A transmission line transferred to MISO's functional control 9 means the Transmission Owner is allowing the line to be used by MISO to facilitate energy 10 market flows and is subject to MISO's Open Access Transmission Tariff. This also means 11 the Transmission Owner includes those lines in their Annual Transmission Revenue 12 Requirement ("ATRR"). This provides clear evidence that the Transmission Assets are 13 networked with other assets that are already considered transmission by the neighboring 14 Transmission Owner and existing System Operator. 15 PLEASE EXPLAIN THE APPLICATION OF FACTOR #3 TO THE TRANSMISSION 16 Q. 17 ASSETS.

A. The methodology applied under factor #3 involved examining the Transmission Assets
 using powerflow analysis to quantify the flow and direction of real power flowing through
 the Transmission Assets. A powerflow analysis was used rather than historical flow data as
 GridLiance and SLEMCO only have access to historical meter data measuring the flows
 from the Transmission Assets to SLEMCO's distribution step-down transformers and
 SLEMCO's radially operated 138 kV lines. This type of historical data does not provide

TESTIMONY OF PATRICK JEHRING

Page 10

the amount of power flowing through the station, but, rather, the amount of power being
withdrawn from the transmission system.

To quantify the amount of power flowing through each of the stations, I used the latest 3 available MISO Transmission Expansion Plan ("MTEP") powerflow cases developed for 4 the current 2024 planning cycle, and, specifically, the 2025 Spring Light Load, Spring Peak, 5 Summer Shoulder, Summer Peak, Fall Peak, and 2025-2026 Winter Peak load scenarios. I 6 used this set of cases to get a broad set of load conditions and as a result understand the 7 typical flows on the system. Additionally, I simulated over 6,000 contingencies on each of 8 the powerflow cases to identify any situations where the powerflow flow significantly 9 changed from the system intact condition. The complete findings of the powerflow analysis 10 are provided in Exhibit 1 and examples for Scanlan and Vatican substations are shown in 11 Table 2 and Table 3 respectively. 12

	Table 2			
	Scanlan			
Season	N-0 Through	Max N-1 Through	Events w/ through	
	Flow	Flow	flow	
25SLL	40.3	57.8	6293	
25SPR	56.7	89.6	6293	
25SHHW	83.4	126.2	6334	
25SUM	71.3	107.8	6334	
25FAL	41.4	73.4	6351	
26WIN	75.0	121.9	6401	

TESTIMONY OF PATRICK JEHRING

Page 11

Table 3				
	Vatican			
Season	N-0 Through	Max N-1 Through	Events w/ through	
	Flow	Flow	flow	
25SLL	0.0	31.8	45	
25SPR	0.0	46.9	43	
25SHHW	0.0	39.5	39	
25SUM	0.0	56.1	78	
25FAL	0.0	23.7	21	
26WIN	0.0	21.0	12	

The powerflow analysis results for Scanlan, shown in Table 3, show under nearly all system 1 conditions power is flowing through the station to support the larger transmission and not 2 just power flowing into the distribution step-down transformers. For Vatican, the 3 powerflow analysis results, displayed in Table 4 hereinbelow, show through-flow only 4 occurs under contingencies and does not occur system intact. Although through-flows only 5 occur under contingency events, through-flows occurs for numerous different events and 6 across all the loading scenarios which leads to the conclusion that through-flows occurring 7 at Vatican is not rare. For the real-world operation of the transmission system, often 8 multiple transmission elements are out of service either for planned maintenance or 9

unexpectedly forced out of service (for example a tree falling onto a transmission line). 1 Additionally, for forward-looking planning of the transmission system, various contingency 2 conditions are evaluated, and future upgrades were developed to meet NERC Reliability 3 Standards as well as the local planning criteria set by the NERC-registered Transmission 4 Owners. Both in real-time operations and planning of the transmission system, a set of 5 contingencies were examined to ensure the system is dispatched in such a manner to avoid 6 any of the transmission facilities from exceeding their applicable rating. As such, it is 7 prudent to examine all feasible single element initiating contingencies to identify what the 8 flows would be through the stations. Based on the results of the above explained powerflow 9 10 analysis as set forth in Exhibit 1, I concluded that power often is flowing through these 11 stations, and, therefore, the Transmission Assets fail factor #3.

12 Q. PLEASE EXPLAIN THE APPLICATION OF FACTOR #4 TO THE TRANSMISSION13 ASSETS.

14 A. The methodology applied under factor #4 involved examining the real power flowing 15 through the Transmission Assets and identifying where the power is flowing from and to. If power is only flowing into a transmission asset, such an asset's power is only flowing 16 17 through the Transmission Asset to serve SLEMCO's retail customers. Conversely, if power is flowing in and out of a Transmission Asset, this shows that power is flowing through the 18 19 Transmission Asset not only to serve SLEMCO's retail customers, but, also, to other 20 Louisiana customers. In the latter case, the power flows into the MISO market flows. 21 Therefore, if MISO market flows are occurring on the Transmission Assets, the asset would 22 fail factor #4. The application of the methodology showed the Transmission Assets fail 23 factor #4, because the assets all have power flowing in and out. This conclusion is based on

1		the same powerflow analysis performed for Factor #3 wherein numerous system conditions
2		were simulated and showed that power often flowed in and out of the Transmission Assets.
3		The power flowing through the Transmission Assets in excess of that needed to serve
4		SLEMCO's retail customers demonstrates the assets inject power into the MISO market,
5		which ultimately serves Entergy, Cleco, and LUS customers.
6	Q.	PLEASE EXPLAIN THE APPLICATION OF FACTOR #5 TO THE TRANSMISSION
7		ASSETS.
8	А.	The methodology applied under factor #5 involved examining the real power flowing
9		through the Transmission Assets and identifying the typical direction of flow and how often
10		flows occur in the opposite direction. Additionally, the overall configuration and
11		connections of the Transmission Assets to the transmission system are considered to identify
12		if the power goes beyond the SLEMCO's service territory.
13		
14		The application of the methodology showed the Transmission Assets fail factor #5 because
15		there are numerous loading and contingency conditions where power flows through the
16		Transmission Assets that goes on to serve customers beyond SLEMCO. For example, the
17		typical flow through the Vatican substation is from north to south which means power is
18		coming from Entergy's Bloomfield and Cleco's Plaisance transmission in the north and
19		flowing south towards Entergy's Scott and LUS's Bonin transmission. As shown in Table
20		4, this typical north to south flow occurs under multiple loading scenarios and contingency
21		conditions. Further there are several contingency conditions where the typical north to south
22		flow reverses and a south to north flow is observed. Based on these facts, the analysis of
23		Vatican substation demonstrates that power is consumed in a broad geographical area
	TEST	TIMONY OF PATRICK JEHRING Page 14

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spanning multiple service territories. The remaining Transmission Assets are similarly situated as explained in Exhibit 1, and, therefore, also fail factor# 5.

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Table 4			
	Vatican		
Season	Events w/ North to	Events w/ South to	
	South Flow	North Flow	
25SLL	32	13	
25SPR	42	1	
25SHHW	26	13	
25SUM	78	0	
25FAL	20	1	
26WIN	3	9	

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Q. PLEASE EXPLAIN THE APPLICATION OF FACTOR #6 TO THE TRANSMISSION

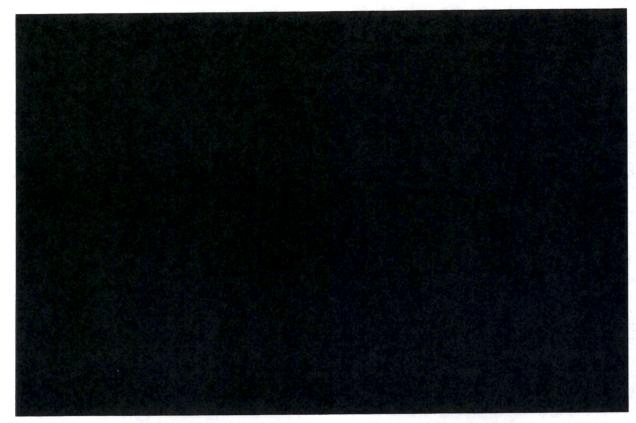
8 ASSETS.

9 A. The methodology applied under factor #6 involved examining the one-line diagrams of the 10 transmission facilities and identifying the locations of the meters. The locations of these 11 meters provide a strong indication of where the historical boundary of transmission system 12 was drawn.

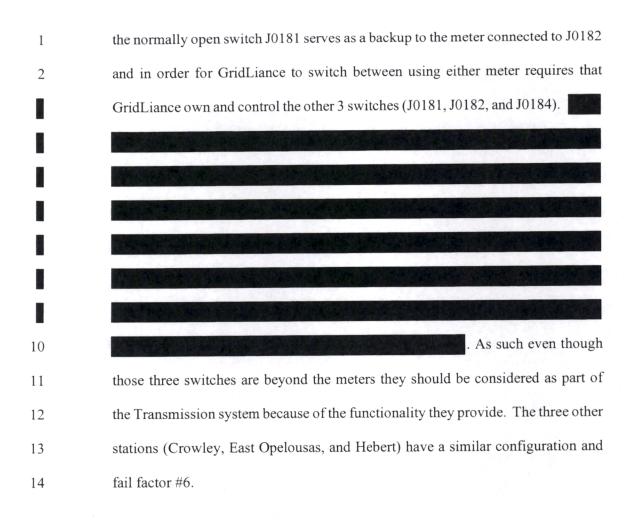
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2	The application of the methodology showed that the location of meters for Transmission
3	Assets fell into two categories: (1) GridLiance ownership extends up to and includes the
4	meter and (2) GridLiance ownership extends beyond the meter location up to the high-side
5	of SLEMCO's 138/25 kV stepdown transformers. For both categories, the Transmission
6	Assets fail factor #6 because GridLiance's ownership only extends to equipment that would
7	have network flows from the transmission system. In five (5) of the Transmission Assets
8	(Judice, LeBlanc, Scanlan, Semere Road, and Vatican) GridLiance ownership extends up to
9	and includes the single meter in the station. Beyond the meters in these substations are
10	either a SLEMCO 138/25 kV step-down transformer(s) to their distribution system or
11	radially operated 138 kV line(s) which feed other SLEMCO stations, which are eventually
12	step-downed to the SLEMCO distribution system to provide service to SLEMCO retail
13	customers. For example, examining the Judice substation, GridLiance's ownership would
14	extend up to and include the meter as shown in Figure 2, beyond the meter are two radially
15	operated 138 kV lines. The meter provides a good boundary to differentiate the power
16	flowing through the station to serve Entergy, Cleco, and LUS customers versus power
17	flowing only to serve SLEMCO's retail customers.

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1	Figure 2: One-line diagram of Judice Substation
2	In the second category of Transmission Assets where GridLiance ownership
3	extends beyond the meter, the key difference is that these substations have two
4	parallel meters which allow for an alternate path for power to flow under outage
5	conditions within the station. Hence, the normal operation power would flow from
6	the transmission system and through one or more of the meters to SLEMCO's
7	retail customers; however, when portions of the station are in outage, power will
8	flow down one meter with a portion going to SLEMCO's retail customers and
9	another portion going through the other meter and back out to the transmission
10	system. For example, in Krotz Springs, GridLiance's ownership will include three
11	switches beyond the two meters as shown in Figure 3. The meter connected to



1		
2	L	Figure 3: One-line diagram of Krotz Springs Substation
3		
4	Q.	PLEASE EXPLAIN THE APPLICATION OF FACTOR #7 TO THE TRANSMISSION
5		ASSETS.
6	A.	The methodology applied under factor #7 involved examining the transmission facilities
7		one-line diagrams to identify the operating voltage(s) with the substation and then
8		comparing the operating voltages for the transmission facilities with other neighboring
9		transmission facilities in the area.
10		
11		The application of the methodology showed that all the Transmission Assets fail factor #7,
12		because they are all operated at 138 kV, and 138 kV is not a reduced voltage for the area.
		D 10

1Table 5 shows the highest and lowest operating voltages for each of the Transmission2Assets. All the Transmission Assets operate at 138 kV and most of the step-down to a3reduced voltage is 25 kV or 13.8 kV to supply power to SLEMCO's retail customers.4Further, Judice, LeBlanc, and Semere Road only have 138 kV equipment and no step-down5transformers which is a strong indication that 138 kV is not considered a reduced voltage in6the area.

Table 5						
Operating Voltage	Operating Voltages of the Transmission Assets					
Substation	Highest kV	Lowest kV				
Crowley	138 kV	25 kV				
East Opelousas	138 kV	25 kV				
Hebert	138 kV	25 kV				
Judice	138 kV	138 kV				
Krotz Springs	138 kV	13.8 kV				
LeBlanc Bulk	138 kV	138 kV				
Scanlan	138 kV	25 kV				
Semere Road	138 kV	138 kV				
Vatican	138 kV	25 kV				

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8 Additional evidence that 138 kV is not a reduced voltage is provided by Entergy's 9 Attachment O filing with MISO. In Attachment O, Entergy lists transmission assets with an 10 operating voltage from 69 kV up to 500 kV. Attachment O further shows what a TESTIMONY OF PATRICK JEHRING Page 20

1		Transmission Owner and MISO consider to be transmission and are included in their ATTR,
2		which clearly includes 138 kV.
3	Q.	ARE THE TRANSMISSION ASSETS COMPARABLE TO SIMILAR SUBSTATIONS
4		THAT OTHER UTILITIES IN LOUISIANA INCLUDE IN THE MISO TARIFF?
5	А.	Yes, several of the neighboring 138 kV stations owned by Entergy are of a similar
6		configuration. For example, Colton and Delcambre Rural have essentially the same
7		configuration as the majority of the Transmission Assets. Both substations have two 138
8		kV lines coming in and out of the station and the stations have transformers that step-down
9		the voltage from 138 kV to 13.8 kV which feed Entergy's distribution system and serve
10		retail customers.
11		
12		Entergy's Bloomfield 138 kV is another example of a similar station to the Transmission
13		Assets. Bloomfield has three 138 kV lines coming in and out of the station but does not have
14		any transformers to step-down the voltage to the distribution system. This configuration is
15		similar to Judice, LeBlanc Bulk, and Semere Road.
16		All three of the Entergy station examples are considered transmission by Entergy and MISO
17		since they are included in Entergy's Attachment O, Appendix H, which means that they are
18		under MISO's functional control and are included in Entergy's ATRR.
19	Q.	DID EACH OF THE TRANSMISSION ASSETS FAIL THE SEVEN-FACTOR TEST?
20	A.	Yes. Each Transmission Asset failed all seven factors. Therefore, each Transmission Asset
21		should be classified as transmission.
22		
23		IV. GENERAL ORDER 1994 FACTORS

Q. PLEASE ADDRESS FACTOR 1 FROM GENERAL ORDER 1994: WHETHER THE TRANSFER IS IN THE PUBLIC INTEREST?

The proposed transfer of the Transmission Assets is in the public interest. For example, 3 A. since the Transmission Assets are classified as part of the Bulk Electric System, they are 4 required to comply with the applicable set of NERC Reliability Standards. NERC 5 compliance of the Transmission Assets was previously accomplished by CLECO-Cajun but 6 will become SLEMCO's obligation when SLEMCO acquires ownership of the assets on 7 April 1, 2025. Transferring the Transmission Assets to GLL will provide the benefit of 8 utilizing GLL's existing capability to own and operate these Transmission Assets in 9 compliance with applicable NERC Reliability Standards. If SLEMCO were to retain 10 ownership of the Transmission Assets and not transfer them to GLL, SLEMCO would have 11 two options: (1) develop the internal resources necessary to comply with the NERC 12 Reliability Standards or (2) hire third-party consultants to comply with the NERC 13 Reliability Standards. The cost of these options is set forth in Table 5 of Exhibit 2. As 14 Table 5 shows, there is considerable cost savings from the Proposed Transaction, because 15 of GLL's ability to leverage existing NERC compliance staff, resources, and expertise. 16

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Additionally, GLL intends to integrate the Transmission Assets into MISO which is also in the public interest. Currently, the Transmission Assets are not integrated into MISO even though the assets are physically networked into the MISO system. Since the assets are not under MISO's functional control, the Transmission Assets are a black box to MISO which results in the assets being essentially ignored in all of MISO's processes. For example, the Transmission Assets are not currently considered when MISO evaluates the future needs of

1	the system through their annual MTEP. The lack of integration of the Transmission Assets
2	into MISO can result in higher cost transmission being constructed. For example, in 2019,
3	MISO selected a transmission solution that cost \$65.2M more than if certain SLEMCO
4	system assets were integrated in MISO. Entergy, during MTEP17 and MTEP18, originally
5	proposed a \$198.9M project to address a P6 (N-1-1) condition where load shed would have
6	been required. After approval of the Entergy projects, Entergy requested, and MISO agreed,
7	to replace the original transmission project with a joint Entergy-Cleco project developed
8	through the joint planning study that cost \$82M (a \$116.9M savings). The underlying
9	reliability issue was the inability of the transmission system to adequately serve Entergy
10	load as well as SLEMCO load being served from SLEMCO's Le Blanc Station. If the
11	SLEMCO transmission assets were included in the MISO joint planning study, the least-
12	cost solution to the underlying N-1-1 conditions could have been as simple as redistributing
13	SLEMCO load by temporarily closing in portions of the underlying SLEMCO 138 kV
14	system through operator actions after the initial N-1 condition occurred. A more robust
15	solution which avoids relying on operator intervention could have been operating the
16	SLEMCO 138 kV system as a closed loop which would require rebuilding a portion of
17	SLEMCO's transmission lines, for an estimated cost of \$16.8M. This more robust solution
18	would have resulted in a \$65.2M savings to the Louisiana transmission pricing zones when
19	compared to the Entergy-Cleco project. Although the SLEMCO assets that would have
20	produced the savings are not part of the current Proposed Transaction, the example
21	demonstrates: (1) the cost savings of including more Louisiana transmission assets in MISO;
22	and (2) the value of having GLL advocating on behalf of Louisiana for cost-effective

solutions at MISO, which can only be accomplished by GLL owning the Transmission
 Assets.

Q. PLEASE ADDRESS FACTOR 4 FROM GENERAL ORDER 1994: WHETHER THE
 PROPOSED TRANSFER WILL MAINTAIN OR IMPROVE THE QUALITY OF
 SERVICE TO PUBLIC UTILITY OR COMMON CARRIER?

A. The proposed transfer of the Transmission Assets to GLL will maintain or improve the
 quality of service associated with the Transmission Assets. The Transmission Assets are
 nearing the end of their useful life. In Table 6, I provide the age of each Transmission Asset.

Table 6				
Transmissio	n Assets Useful l	Life		
Substation	kV	Age		
East Opelousas	138	21		
Hebert	138	45		
Judice	138	42		
Krotz Springs	138	42		
LeBlanc 138	138	56		
Scanlan	138	37		
Semere Road	138	40		
Vatican	138	48		
Crowley	138	32		

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The useful life of the Transmission Assets in Table is generally considered to be 30 to 40 years. Since the initial construction of the Transmission Assets, the assets have not been TESTIMONY OF PATRICK JEHRING Page 24

upgraded to extend their useful life or replaced. As with any element of the transmission
system, ensuring the Transmission Assets are available for use is of paramount importance
to ensuring that an unforced outage does not occur and impact the transmission network and
customers. GLL is committed to implementing a plan to upgrade or replace, as needed, the
Transmission Assets to ensure the continued reliable operation of the overall transmission
grid. GLL's proposed upgrade and replacement plan is set forth in Exhibit 2.

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The plan includes installing targeted breaker additions and replacements at various stations. 8 The upgrades and replacements proposed in GLL's plan will extend the life of the 9 Transmission Assets and increase the reliability of the system. To understand the impact of 10 improving the reliability of the Transmission Assets, I examined 6 years of historical outage 11 data of the Transmission Assets and then quantified the amount of load lost as a result of 12 those outages. The historical data includes outages resulting from major events such as 13 Based on this historical data, I calculated the average Hurricane Laura and Delta. 14 occurrence of an outage and the average amount of load lost as a result of an outage for a 15 given year and estimated the amount of load loss in the future assuming the historical trends 16 continue. This estimate is conservative as it does not factor in any future load growth on 17 the system and does not increase the rate of occurrence that will result as the Transmission 18 Assets continue to age. GLL expects to reduce the frequency and/or duration of non-major 19 storm outages by 37% through the upgrade and replacement plan. Additionally, GLL 20 expects to reduce the duration of major events by 13% by implementing best practices 21 established by our affiliate, Florida Power & Light Company and improved operational 22 flexibility. Based on the historical outage information and GLL's expected improvement, 23

TESTIMONY OF PATRICK JEHRING

Page 25

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Louisiana customers will see loss of load amount reduced by over 1,100 megawatt hours over 10 years. Combining the projected reduced loss of load amount with MISO's current system value of lost load (VOLL), which is \$35,000 MWh, I estimate a benefit of approximately \$39.8M over the next 10 years.

- As previously explained, the transfer of the Transmission Assets to GLL, and the operational 6 control to MISO, will enable the Assets to be included in MISO transmission planning 7 models and activities. MISO only has visibility into assets that are under their operational 8 control. Therefore, transmission facilities in Louisiana, such as the Transmission Assets, 9 that are not under the operational control of MISO not only are not visible to MISO, but the 10 assets are also not considered in transmission planning, including solutions for reliability 11 issues and economic constraints. Such a lost transmission planning opportunity comes at a 12 cost. The historical example was a missed opportunity to save customers \$62.5M. I do not 13 expect joint planning to result in a more optimized transmission solution every year. The 14 greater Lafayette area served by SLEMCO, Entergy, Cleco, and LUS continues to grow and 15 there will be the need to increase the transmission capacity from the 500 kV north of 16 Lafayette to the south. Although the exact need and solution is unknown at this time, if the 17 Transmission Assets are utilized on a scale similar to the past example, we can expect a 18 savings of \$43.5M in the next 10 years. 19
- 20

In summary, the transfer of the Transmission Assets to GLL will benefit the Louisiana ratepayers by over \$103.7M over 10 years. This estimate is based on the three categories of savings I previously described: (1) integration & compliance cost savings (\$20.4M); (2)

TESTIMONY OF PATRICK JEHRING

Page 26

- reduced expected unserved energy savings (\$39.8M); and (3) Joint planning savings
 (\$43.5M).
- 3 Q. DOES THIS CONCLUDE YOUR PREFILED DIRECT WRITTEN TESTIMONY?
- 4 A. Yes.

BEFORE THE

LOUISIANA PUBLIC SERVICE COMMISSION

DOCKET NO. U-

SOUTHWEST LOUISIANA ELECTRIC MEMBERSHIP CORPORATION AND GRIDLIANCE LOUISIANA, LLC'S JOINT APPLICATION

AFFIDAVIT OF WITNESS

I, Patrick Jehring, being duly sworn, depose that the Direct Testimony in the above referenced matter on behalf of Gridliance Louisiana, LLC is true and correct to the best of my knowledge, information and belief.

Patrick Jehring

Subscribed and sworn before me on February 24, 2025

HEMALKUMAR PATEL Commission Number NP0757123 SEAL My Commission Expires June 19, 2032

Hemaikumar Potel

Southwest Louisiana Electric Membership Corporation (SLEMCO)

FERC 7 Factor Analysis

PUBLIC VERSION



February 2025

Table of Contents

Executive Summary	
Background	
Description of Pelican Buy-back Assets	2
Crowley	2
East Opelousas	2
Hebert	
Judice	3
Krotz Springs	3
LeBlanc Bulk	3
Scanlan	3
Semere Road	4
Vatican	4
FERC 7 Factor Analysis	4
Factor 1: Local distribution facilities are normally in close proximity to retail customers	4
Factor 2: Local distribution facilities are primarily radial in character	6
Factor 3: Power flows into local distribution systems and it rarely, if ever, flows out	7
Crowley	8
East Opelousas	9
Hebert	9
Judice	10
Krotz Springs	10
LeBlanc Bulk	11
Scanlan	11
Semere Road	12
Vatican	12
Factor 4: When power enters a local distribution system, it is not re-consigned or transported or some other market	n to 13
Factor 5: Power entering a local distribution system is consumed in a comparatively restricted	10
geographical area	
Crowley	
East Opelousas	
Hebert	
Judice	
Krotz Springs	15



LeBlanc Bulk	
Scanlan	
Semere Road	
Vatican	
Factor 6: Meters are based at the transmission/local distribution interface to mea local distribution system	sure flows into the
Factor 7: Local distribution systems are of reduced voltage	
Totality of Circumstances	
Appendix A: SLEMCO Station Geographic Location	21
A1: Crowley	21
A2: East Opelousas	
A3: Hebert	23
A4: Judice	24
A5: Krotz Springs	25
A6: LeBlanc Bulk	
A7: Scanlan	27
A8: Semere Road	
A9: Vatican	
Appendix B: SLEMCO Station One-line Diagrams	
B1: Crowley Station One-line	
B2: East Opelousas Station One-line	
B3: Hebert Station One-line	
B4: Judice Station One-line	
B5: Krotz Springs Station One-line	
B6: Leblanc Bulk Station One-line	
B7: Scanlan Station One-line	
B8: Semere Road Station One-line	
B9: Vatican Station One-line	



Executive Summary

Southwest Louisiana Electric Membership Corporation (SLEMCO) is a member owned electric cooperative with over 117,000 members serving southwestern Louisiana. SLEMCO is currently not a transmission owner in MISO and none of their transmission is under MISO's functional control. SLEMCO has several substation assets that are currently owned by Pelican South Central LLC, formerly CLECO-Cajun and will revert back to SLEMCO ownership on April 1, 2025. SLEMCO intends to sell a subset of these substation assets to GridLiance Louisiana, LLC (GLL).

As part of the transaction, GridLiance applied the FERC 7 Factor Test to each of the stations to determine if the assets should be considered Transmission and thus be eligible for inclusion to MISO. The results of applying the FERC 7 Factor Test are shown in Table 1. Each of the nine stations GLL intends to purchase fail all seven factors and should be classified a transmission.

	FERC 7 Factor Determination							
Station	1	2	3	4	5	6	7	Conclusion
Crowley	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission
East Opelousas	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission
Hebert	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission
Judice	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission
Krotz Springs	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission
LeBlanc Bulk	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission
Scanlan	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission
Semere Road	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission
Vatican	Fail	Fail	Fail	Fail	Fail	Fail	Fail	Transmission

Table 1: Summary	of 7 Factor	Determination	for the Stations
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Background

SLEMCO is a member owned electric cooperative with over 117,000 members serving southwestern Louisiana and an aggregate system peak of approximately 797 megawatt (MW) in December 2022 which occurs in the Winter. SLEMCO is currently not a transmission owner in MISO and none of their transmission is under MISO's functional control.

Description of Pelican Buy-back Assets

SLEMCO has several substation assets that are currently owned by Pelican South Central LLC, formerly CLECO-Cajun and SLEMCO will acquire ownership of the assets on April 1, 2025. SLEMCO intends to sell a subset of these assets to GLL. A list of the transmission assets GLL is seeking to purchase and integrate into MISO is shown in Table 2 with a detailed description of the assets provided in the subsequent sections.

Station	Highest kV	Lowest kV	Year Constructed
Crowley	138 kV	25 kV	1992
East Opelousas	138 kV	25 kV	2003
Hebert	138 kV	25 kV	1979
Judice	138 kV	138 kV	1982
Krotz Springs	138 kV	13.8 kV	1982
LeBlanc Bulk	138 kV	138 kV	1968
Scanlan	138 kV	25 kV	1987
Semere Road	138 kV	138 kV	1984
Vatican	138 kV	25 kV	1976

Table	2.	CI CA	100	Transmission Asso	to
l able	21	SLEN	100	Transmission Asset	S

Crowley

As shown in A1: Crowley, Crowley is in Acadia Parish and has Entergy's Richard 138 kilovolt (kV) line coming in from the northwest and Entergy's Scott 138 kV line coming in from the east. In addition to the two Entergy 138 kV lines, Crowley has a single 138/25 kV transformer which feeds SLEMCO's distribution system and serves their retail customers.

GridLiance ownership starts at the dead-end structures for the incoming Entergy 138 kV lines from Richard and Scott and ends at SLEMCO's disconnect switches on the high-side of the 138/25 kV transformer. GridLiance ownership is shown in B1: Crowley Station One-line denoted by a red bubble.

East Opelousas

As shown in A2: East Opelousas, East Opelousas is in St. Landry Parish and has Entergy's Colton 138 kV line coming in from the southwest and Entergy's Champagne 138 kV line coming in from the northeast. In addition to the two Entergy 138 kV lines, East Opelousas has two 138/25 kV transformers which feed SLEMCO's distribution system and serves their retail customers.

GridLiance ownership starts at the dead-end structures for the incoming Entergy 138 kV lines from Scott and Champagne and ends at SLEMCO's disconnect switches, labeled 5032 and 5033, on the high-side of the 138/25 kV transformers. GridLiance ownership is shown in B2: East Opelousas Station One-line denoted by a red bubble.



Hebert

As shown in A3: Hebert, Hebert is in Acadia Parish and has Entergy's Henning 138 kV line coming in from the west and Entergy's Bayou Cove 138 kV coming in from the northeast. In addition to the two Entergy 138 kV lines, Hebert has two 138/25 kV transformers which feed SLEMCO's distribution system and serves their retail customers.

GridLiance ownership starts at the dead-end structures for the incoming Entergy 138 kV lines from Bayou Cove and Lake Charles Bulk and ends at SLEMCO's disconnect switches, labeled 5070 and 5071, on the high-side of the 138/25 kV transformers. GridLiance ownership is shown in B3: Hebert Station One-line denoted by a red bubble.

Judice

As shown in A4: Judice, Judice is in Lafayette Parish and has Entergy's Scott 138 kV line coming in from the north and Entergy's Meaux 138 kV line coming in from the south. In addition to the two Entergy 138 kV lines, Judice has two radially operated 138 kV line that, one going west to Rayne and another going east to Mouton.

GridLiance ownership starts at the dead-end structures from the incoming Entergy lines from Scott and Meaux and extends to the metering equipment on the other side of the air break switch labeled 18342 and 18531. GridLiance ownership is shown in B4: Judice Station One-line denoted by a red bubble.

Krotz Springs

As shown in A5: Krotz Springs, Krotz Springs is in St. Landry Parish and has Entergy's Bobcat 138 kV line coming in from the west and Entergy's Colonial Springs 138 kV line coming in from the east. In addition to the two Entergy 138 kV lines, Krotz Springs has a radially operated 138 kV line going to the northwest to Teche Vermillion Fresh Water District pump station as well as two 138/25 kV transformers which SLEMCO's distribution system and served retail and industrial customers.

GridLiance ownership starts at the dead-end structures from the incoming Entergy 138 kV lines from Champagne and Wilbert and extends up to SLEMCO's air break switches labeled 7120, 7121, and 7122. GridLiance ownership is shown in B5: Krotz Springs Station One-line denoted by a red bubble.

LeBlanc Bulk

As shown in A6: LeBlanc Bulk, LeBlanc Bulk is in Allen Parish and has Entergy's Abbeville 138 kV line coming in from the northwest, Entergy's Delcambre Rural 138 kV line coming from the east and a connection to Entergy's adjacent Conrad 138 kV station. In addition to the three Entergy 138 kV connections, LeBlanc Bulk has a radially operated 138 kV line going north to SLEMCO's Youngsville station. LeBlanc Bulk is not electrically connected to SLEMCO's LeBlanc 69 kV although it is physically nearby.

GridLiance ownership starts at the dead-end structures from the incoming Entergy 138 kV lines from Delcambre and Abbeville and extends up to SLEMCO's air break switch labeled J0684. GridLiance ownership is shown in B6: Leblanc Bulk Station One-line denoted by a red bubble.

Scanlan

As shown in A7: Scanlan, Scanlan is in Acadia Parish and has Entergy's Acadia 138 kV line from the northwest and Entergy's Bosco 138 kV line coming from the southeast. In addition to the two Entergy 138 kV lines, Scanlan has two 138/25 kV transformers which feed SLEMCO's distribution system and serves their retail customers.

GridLiance ownership starts at the dead-end structures from the incoming Entergy 138 kV lines from Scott and Acadia and extends up to SLEMCO's air break switches labeled J0581 and 18448. GridLiance ownership is shown in B7: Scanlan Station One-line denoted by a red bubble.



Semere Road

As shown in A8: Semere Road, Semere Road is in St. Martin Parish and has Entergy's Scott 138 kV line coming from the southwest and Entergy's Cecelia 138 kV line coming from the northwest. In addition to the two Entergy 138 kV lines, Semere Road has a radially operated 138 kV line going north to SLEMCO's Cecelia station.

GridLiance ownership starts at the dead-end structures for the incoming Entergy 138 kV lines from Entergy's Cecilia and Scott stations and extends up to SLEMCO's switch labeled 18404. GridLiance ownership is shown in B8: Semere Road Station One-line denoted by a red bubble.

Vatican

As shown in A9: Vatican, Vatican is in Lafayette Parish and has Entergy's Bloomfield 138 kV line coming from the north and Entergy's Scott 138 kV line coming from the south. In addition to the two Entergy 138 kV lines, Vatican has two radially operated 138 kV lines going east to SLEMCO's East Rayne and west to U.J. Gajan as well as two 138/25 kV transformers which serves SLEMCO's distribution system and retail customers.

GridLiance ownership starts at the dead-end structures for the incoming Entergy 138 kV lines from Bloomfield and Scott and extends to the metering equipment up to SLEMCO's air break switch labeled 18529. GridLiance ownership is shown in B9: Vatican Station One-line denoted by a red bubble.

FERC 7 Factor Analysis

The FERC 7 Factor Test is a set of criteria used to determine if an electrical facility should be classified transmission or distribution. Failing a factor indicates that the facility is not distribution and should be classified transmission. Ideally, an electrical facility would fail all 7 factors and thus be considered transmission; however, even if the facility passes some factors it is possible for it to be considered transmission. Each 7 Factor Test is unique and the totality of the situation must be considered. A list of all 7 factors is shown in Table 3.

Factor #	FERC Factor (per FERC Order 888)				
1	Local distribution facilities are normally in close proximity to retail customers				
2	Local distribution facilities are primarily radial in character				
3	Power flows into local distribution systems and it rarely, if ever, flows out				
4	When power enters a local distribution system, it is not re-consigned or transported on to some other market				
5	Power entering a local distribution system is consumed in a comparatively restricted geographical area				
6	Meters are based at the transmission/local distribution interface to measure flows				
7	Local distribution systems are of reduced voltage				

Table 3: FERC 7 Factors

Factor 1: Local distribution facilities are normally in close proximity to retail customers

To assess the stations from the perspective of Factor #1 their electrical configuration and physical location is reviewed to characterize their "proximity" to SLEMCO's retail customers. Per FERC's order, in ER19-776-001, FERC references the Henderson Municipal's system noting that the Henderson Municipal transmission assets are located both within and outside of the Municipal boundary, which to a degree, bounds Henderson's electric service territory. Specifically, FERC states:



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