Control Number: 51023

Item Number: 761

Addendum StartPage: 0

SOAH DOCKET NO. 473-21-0247 PUC DOCKET NO. 51023

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APPLICATION OF CITY OF SAN ANTONION TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE SCENIC LOOP 138-KV TRANSMISSION LINE PROJECT IN BEXAR COUNTY, TEXAS BEFORE THE STATE OFFICE OF ADMINISTRATIVE HEARNGS

ERRATA TO THE DIRECT TESTIMONY OF JOHN POOLE

The Staff (Staff) of the Public Utility Commission of Texas (Commission) files the following Errata to the Direct Testimony of John Poole, originally filed on March 22, 2021. The errata corrects data throughout Mr. Poole's testimony to reflect additional route options proposed by certain intervenors and by CPS Energy. The errata also corrects a sentence that inadvertently stated this project was for a radial transmission line. This filing includes a redlined copy and a clean copy of Mr. Poole's testimony with errata, both attached hereto.





Respectfully submitted,

PUBLIC UTILITY COMMISSION OF TEXAS LEGAL DIVISION

Rachelle Nicolette Robles Division Director

Heath D. Armstrong Managing Attorney

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SOAH DOCKET NO. 473-21-0247 PUC DOCKET NO. 51023 CERTIFICATE OF SERVICE

I certify that, unless otherwise ordered by the presiding officer, notice of the filing of this document was provided to all parties of record via electronic mail on April 26, 2021, in accordance with the Order Suspending Rules, issued in Project No. 50664.

/s/ Rustin Tawater_____ Rustin Tawater

SOAH DOCKET NO. 473-21-0247 PUC DOCKET NO. 51023

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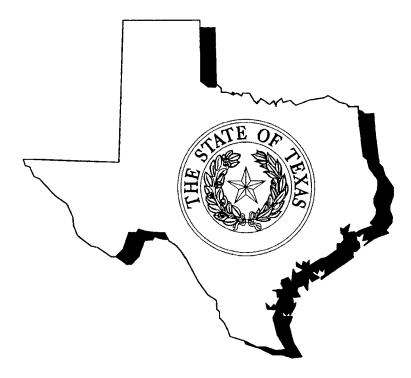
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APPLICATION OF THE CITY OF SAN ANTONIO ACTING BY AND THROUGH THE CITY PUBLIC SERVICE BOARD (CPS ENERGY) TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE PROPOSED SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY **BEFORE THE STATE OFFICE**

OF

ADMINISTRATIVE HEARINGS



ERRATA TO DIRECT TESTIMONY OF

JOHN POOLE, P.E., ENGINEER

INFRASTRUCTURE DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

APRIL 26MARCH 22, 2021

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ATTACHMENTS

JP-1	Qualifications of John Poole
JP-2	List of Previous Testimony
JP-3	Letter from Texas Parks and Wildlife Department dated September 10, 2020
JP-4	Letter from Texas Parks and Wildlife Department dated February 18, 2021

SOAH Docket No. 473-21-0247

PUC Docket No. 51023

1	I.	STATEMENT OF QUALIFICATIONS
2		
3	Q.	Please state your name, occupation and business address.
4	A.	My name is John Poole. I am employed by the Public Utility Commission of
5		Texas (Commission) as an Engineer within the Infrastructure Division. My
6		business address is 1701 North Congress Avenue, Austin, Texas 78701.
7		
8	Q.	Please briefly outline your educational and professional background.
9	A.	I have a Bachelor of Science degree in Electrical Engineering. I completed my
10		degree in December of 2014 and have been employed at the Commission since
11		February 2015. A more detailed resume is provided in Attachment JP-1.
12		
13	Q.	Are you a registered professional engineer?
14	A.	Yes, I am a registered Professional Engineer in Texas and my member number
15		is 133982.
16		
17	Q.	Have you previously testified as an expert before the Commission?
18	A.	Yes. A list of previous testimony is provided in Attachment JP-2.
19		
20	II.	SCOPE OF TESTIMONY
21		
22	Q.	What is the purpose of your testimony in this proceeding?
23	A.	The purpose of my testimony is to present Commission Staff's recommendations

1		concerning the application of the City of San Antonio, acting by and through the
2		City Public Service Board (CPS Energy) to amend its Certificate of Convenience
3		and Necessity (CCN) to construct a new double circuit 138-kilovolt (kV) electric
4		transmission line to be built on brown colored steel monopole structures in Bexar
5		County, Texas.1 The proposed transmission line will connect the existing
6		Ranchtown to Menger Creek 138-kV to the proposed Scenic Loop Substation that
7		will be located in one of several locations in the area of the intersection of Scenic
8		Loop Road and Toutant Beauregard Road (Proposed Project). ²
9		
10	Q.	What is the scope of your testimony?
11	A.	The scope of my testimony is to provide Commission Staff's recommendation
12		regarding the need for the project and regarding selection of routes from among
13		the alternative routes presented by CPS Energy and intervenors.
14		
15	Q.	What are the statutory requirements that a utility must meet to amend its
16		CCN to construct a new transmission line?
17	A.	Section 37.056(a) of the Public Utility Regulatory Act (PURA) ³ states that the
18		Commission may approve an application for a CCN only if the Commission finds
19		that the CCN is necessary for the service, accommodation, convenience, or safety

¹ Application of the City of San Antonio Acting by and through the City Public Service Board (CPS Energy) to Amend its Certificate of Convenience and Necessity for the Proposed Scenic Loop 138-kV Transmission Line Project in Bexar County (Application) at 4-5 (July 22, 2020).

² Application at 7.

³ Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-66.016 (PURA).

1		of the public.	Further	, PURA provides that the Commission shall approve, deny, or
2		modify a req	uest fo	r a CCN after considering the factors specified in PURA §
3		37.056(c), wł	nich are	as follows:
4		(1)	the ad	equacy of existing service;
5		(2)	the ne	ed for additional service;
6		(3)	the e	ffect of granting the certificate on the recipient of the
7			certifi	cate and any electric utility serving the proximate area; and
8		(4)	other	factors, such as:
9			(A)	community values;
10			(B)	recreational and park areas;
11			(C)	historical and aesthetic values;
12			(D)	environmental integrity;
13			(E)	the probable improvement of service or lowering of cost to
14				consumers in the area if the certificate is granted; and
15			(F)	to the extent applicable, the effect of granting the certificate
16				on the ability of this state to meet the goal established by
17				PURA § 39.904(a).
18				
19	Q.	Do the Co	mmissi	on's rules provide any instruction regarding routing
20		criteria?		
21	A.	Yes. 16 Tex	as Adn	ninistrative Code (TAC) § 25.101(b)(3)(B) requires that an
22		application for	or a nev	v transmission line address the criteria in PURA § 37.056(c),
23		and that upor	n consid	lering those criteria, engineering constraints and costs, the line

		Page 7			
1		shall be routed to the extent reasonable to moderate the impact on the affected			
2		community and landowners, unless grid reliability and security dictate otherwise.			
3		The following factors shall be considered in the selection of CPS Energy's			
4		alternative routes:			
5		(i) whether the routes parallel or utilize existing compatible rights-of-			
6		way for electric facilities, including the use of vacant positions on			
7		existing multiple-circuit transmission lines;			
8		(ii) whether the routes parallel or utilize existing compatible rights-of-			
9		way, including roads, highways, railroads, or telephone utility			
10		rights-of-way;			
11		(iii) whether the routes parallel property lines or other natural or cultural			
12		features; and			
13		(iv) whether the routes conform with the policy of prudent avoidance.			
14					
15	Q.	What issues identified by the Commission must be addressed in this docket?			
16	A.	In the Order of Referral and Preliminary Order issued on September 29, 2020, the			
17		Commission identified the following issues that must be addressed:			
18		1. Is CPS Energy's application to amend its CCN adequate? Does the			
19		application contain an adequate number of reasonably differentiated			
20		alternative routes to conduct a proper evaluation? In answering this			
21		question, consideration must be given to the number of proposed			
22		alternatives, the locations of the proposed transmission line, and any			
23		associated proposed facilities that influence the location of the line.			

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		Page 8
1		Consideration may also be given to the facts and circumstances specific to
2		the geographic area under consideration, and to any analysis and reasoned
3		justification presented for a limited number of alternative routes. A limited
4		number of alternative routes is not in itself a sufficient basis for finding an
5		application inadequate when the facts and circumstances or a reasoned
6		justification demonstrates a reasonable basis for presenting a limited
7		number of alternatives. If an adequate number of routes is not presented in
8		the application, the ALJ must allow CPS Energy to amend the application
9		and to provide proper notice to affected landowners; if CPS Energy
10		chooses not to amend the application, the ALJ may dismiss the case
11		without prejudice.
12	2.	Are the proposed facilities necessary for the service, accommodation,
13		convenience, or safety of the public within the meaning of PURA \S
14		37.056(a) taking into account the factors set out in PURA § 37.056(c)? In
15		addition,
16		a) How does the proposed facility support the reliability and adequacy
17		of the interconnected transmission system?
18		b) Does the proposed facility facilitate robust wholesale competition?
19		c) What recommendation, if any, has an independent organization, as
20		defined in PURA § 39.151, made regarding the proposed facility?
21		d) Is the proposed facility needed to interconnect a new transmission
22		service customer?
23	3.	Is the transmission project the better option to meet this need when

Page	9
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1		compared to employing distribution facilities? If CPS Energy is not subject
2		to the unbundling requirements of PURA § 39.051, is the project the better
3		option to meet the need when compared to a combination of distributed
4		generation and energy efficiency?
5	4.	Which proposed transmission line route is the best alternative weighing the
6		factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?
7	5.	Are there alternative routes or facilities configurations that would have a
8		less negative impact on landowners? What would be the incremental cost
9		of those routes?
10	6.	If alternative routes or facility configurations are considered due to
11		individual landowner preference:
12		a) Have the affected landowners made adequate contributions to offset
13		any additional costs associated with the accommodations?
14		(b) Have the accommodations to landowners diminished the electric
15		efficiency of the line or reliability?
16	7.	On or after September 1, 2009, did the Texas Parks and Wildlife
17		Department provide any recommendations or informational comments
18		regarding this application in accordance with Section 12.0011(b) of the
19		Texas Parks and Wildlife Code? If so, please address the following issues:
20		a) What modifications, if any, should be made to the proposed project
21		as a result of any recommendations or comments?

1		b)	What conditions or limitations, if any, should be included in the
2			final order in this docket as a result of any recommendations or
3			comments?
4		c)	What other disposition, if any, should be made of any
5			recommendations or comments?
6		d)	If any recommendation or comment should not be incorporated in
7			this project or the final order, or should not be acted upon, or is
8			otherwise inappropriate or incorrect in light of the specific facts and
9			circumstances presented by this application or the law applicable to
10			contested cases, please explain why that is the case.
11		8. Are th	ne circumstances for this line such that the seven-year limit discussed
12		in sect	tion III of this Order should be changed?
13			
14	Q.	Which issues	s in this proceeding have you addressed in your testimony?
15	А.	I have addres	sed all issues included in the Order of Referral and Preliminary Order
16		and the requir	rements of PURA § 37.056 and 16 TAC § 25.101.
17			
18	Q.	If you do no	t address an issue or position in your testimony, should that be
19		interpreted a	as Staff supporting any other party's position on that issue?
20			
21	A.	No. The fact t	hat I do not address an issue in my testimony should not be construed
22		as agreeing, e	endorsing, or consenting to any position taken by any other party in
23		this proceedir	ng.

1 2 Q. What have you relied upon or considered to reach your conclusions and make 3 your recommendation? 4 A. I have relied upon my review and analysis of the data contained in CPS Energy's 5 application and the application's accompanying attachments, including the Environmental Assessment (EA)⁴ prepared by Power Engineers, Inc. (Power 6 Engineers). I have also relied upon my review of the direct testimonies and 7 statements of position filed in this proceeding by or on behalf of CPS Energy and 8 9 the intervenors, responses to requests for information, and the letters from the 10 Texas Parks and Wildlife Department (TPWD) to Ms. Rachelle Robles, dated September 10, 2020 and February 18, 2021.⁵ 11 12 13 III. **CONCLUSIONS AND RECOMMENDATIONS** 14 Based on your evaluation of CPS Energy's application and other relevant 15 **Q**. 16 material, what conclusions have you reached regarding the application and 17 the Proposed Project? I conclude that the application is adequate and that CPS Energy's proposed 18 1. 19 routes are adequate in number and geographic diversity. 20 2. I conclude that the application complies with the notice requirements in 16 21 TAC § 22.52(a). ⁴ Application Attachment 1

⁵ Attachment JP-3 and JP-4.

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		Page 12
1		3. I conclude that, taking into account the factors set out in PURA §
2		37.056(c), the Proposed Project is necessary for the service,
3		accommodation, convenience and safety of the public.
4		4. I conclude that the Proposed Project is the best option to meet the need
5		when compared with other alternatives.
6		5. I conclude that Route P (Substation Site 6, Segments 50, 15, 22, 25, 37,
7		38, and 43) is the best route when weighing, as a whole, the factors set
8		forth in PURA § 37.056(c)(4) and in 16 TAC § 25.101(b)(3)(B).
9		6. I conclude that TPWD recommended mitigation measures regarding the
10		application, and that the mitigation measures I recommend on Pages 12
11		through 15 of my testimony, as well as mitigation measures recommended
12		in the environmental concerns on pages 28 through 31 of my testimony, are
13		sufficient to address TPWD's mitigation recommendations. I also conclude
14		that CPS Energy has the resources and procedures in place in order to
15		accommodate the mitigation recommendations.
16		
17	Q.	What recommendation do you have regarding CPS Energy's application?
18	A.	I recommend that the Commission approve CPS Energy's application to amend
19		their CCN in order to construct a new 138-kV electric transmission line in Bexar
20		County, Texas.
21		I also recommend that the Commission order CPS Energy to construct the
22		Proposed Project on Route P (Substation Site 6, Segments 50, 15, 22, 25, 37, 38,
23		and 43). I further recommend that the Commission include in its order approving

ERRATA TO DIRECT TESTIMONY OF JOHN POOLE, P.E.<u>APRIL 23MARCH 22,</u> 2021

CPS Energy's application the following paragraphs in order to mitigate the impact
 of the Proposed Project:

CPS Energy shall conduct surveys, if not already completed, to identify
 pipelines that could be affected by the transmission lines and coordinate
 with pipeline owners in modeling and analyzing potential hazards because
 of alternating-current interference affecting pipelines being paralleled.

If CPS Energy encounters any archeological artifacts or other cultural
resources during project construction, work must cease immediately in the
vicinity of the artifact or resource, and the discovery must be reported to
the Texas Historical Commission. In that situation CPS Energy must take
action as directed by the Texas Historical Commission.

12 3. CPS Energy must follow the procedures to protect raptors and migratory 13 birds as outlined in the following publications: Reducing Avian Collisions with Power Lines: The State of the Art in 2012, Edison Electric Institute 14 15 and Avian Power Line Interaction Committee, Washington, D.C. 2012; 16 Suggested Practices for Avian Protection on Power Lines: The State of the Art in 2006, Edison Electric Institute, Avian Power Line Interaction 17 18 Committee, and the California Energy Commission, Washington, D.C. and 19 Sacramento, CA 2006; and Avian Protection Plan Guidelines, Avian 20 Power Line Interaction Committee and United States Fish and Wildlife 21 Service, April 2005. CPS Energy must take precautions to avoid disturbing 22 occupied nests and take steps to minimize the burden of construction on 23 migratory birds during the nesting season of the migratory bird species

ERRATA TO DIRECT TESTIMONY OF JOHN POOLE, P.E.<u>APRIL 23MARCH 22</u>, 2021

1

identified in the area of construction.

- 4. CPS Energy must exercise extreme care to avoid affecting non-targeted
 vegetation or animal life when using chemical herbicides to control
 vegetation within rights-of-way. CPS Energy must ensure that the use of
 chemical herbicides to control vegetation within the rights-of-way
 complies with rules and guidelines established in the Federal Insecticide
 Fungicide and Rodenticide Act and with Texas Department of Agriculture
 regulations.
- 9 5. CPS Energy must minimize the amount of flora and fauna disturbed during 10 construction of the transmission lines, except to the extent necessary to 11 establish appropriate right-of-way clearance for the transmission lines. In addition. CPS Energy must revegetate, using native species and must 12 13 consider landowner preferences and wildlife needs in doing so. 14 Furthermore, to the maximum extent practical, CPS Energy must avoid 15 adverse environmental influence on sensitive plant and animal species and 16 their habitats, as identified by the TPWD and the United States Fish and 17 Wildlife Service (USFWS).
- 6. CPS Energy must implement erosion control measures as appropriate. Erosion control measures may include inspection of the right-of-way before and during construction to identify erosion areas and implement special precautions as determined necessary. CPS Energy must return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowner or the landowner's representative.

			Page 15
1			CPS Energy is not required to restore the original contours and grades
2			where a different contour or grade is necessary to ensure the safety or
3			stability of the project's structures or the safe operation and maintenance of
4			the lines.
5		7.	CPS Energy must use best management practices to minimize the potential
6			impacts to migratory birds and threatened or endangered species.
7		8.	CPS Energy must cooperate with directly affected landowners to
8			implement minor deviations from the approved route to minimize the
9			burden of the transmission lines. Any minor deviations from the approved
10			route must only directly affect landowners who were sent notice of the
11			transmission line in accordance with 16 TAC § 22.52(a)(3) and landowners
12			that have agreed to the minor deviation.
13		9.	CPS Energy must report the transmission line approved by the Commission
14			on its monthly construction progress reports before the start of construction
15			to reflect the final estimated cost and schedule in accordance with 16 TAC
16			§ 25.83(b). In addition, CPS Energy must provide final construction costs,
17			with any necessary explanation for cost variance, after completion of
18			construction when all costs have been identified.
19			
20	Q.	Does	your recommended route differ from the route that CPS Energy believes
21		best a	addresses the requirements of PURA and the Commission's rules?
22	A.	Yes.	CPS Energy believes Route Z best meets the requirements of PURA and the

1		Commission's rules. ⁶ However, in CPS Energy's Application Amendment, it
2		appears CPS Energy replaced the original Route Z with Route Z1 following some
3		segment adjustments. ⁷
4		
5	IV.	PROJECT JUSTIFICATION
6	A.	DESCRIPTION OF THE PROJECT
7		
8	Q.	Please describe the Proposed Project.
9	А.	The Proposed Project consists of the construction of a new double circuit 138-kV
10		electric transmission line to be built on brown colored steel monopole structures in
11		Bexar County, Texas. ⁸ The transmission line project will begin at the proposed
12		CPS Energy Scenic Loop Substation, that will be built in one of seven locations in
13		the area of the intersections of Scenic Loop Road and Toutant Beauregard Road.
14		The transmission line will then proceed generally westwards to one of six points
15		along the existing CPS Energy Ranchtown to Menger Creek 138-kV transmission
16		line.9 CPS Energy proposes to support the transmission line using single circuit
17		steel single pole structures generally ranging between 70 to 130 feet in height. ¹⁰
18		
19		

⁶ Application at 29.

⁷ Amendment to CPS Energy's Application (Application Amendment) at 2 (Dec. 22, 2020).

- ⁸ Application at 4-5.
- ⁹ Application at 3.

¹⁰ Application Attachment 1 at 1-17 through 1-20.

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1 0. Does CPS Energy's application contain a number of alternative routes 2 sufficient to conduct a proper evaluation? 3 A. Yes. CPS Energy's application and application amendment proposed three routes 4 from Substation Site 1 (Routes A, B1, and C1), three routes routes from Substation 5 Site 2 (Routes D1, E, and F1), six routes from Substation Site 3 (Routes G1, H, I1, 6 J1, K, and L), one route from Substation Site 4 (Route M1), two routes from 7 Substation Site 5 (Routes N1 and O), eight routes from Substation Site 6 (Routes 8 P, O1, R1, S, T1, U1, V, and W), and eight routes from Substation Site 7 (Routes 9 X1, Y, Z1, AA1, BB, CC, DD, and EE). Four routes then terminate at the existing 10 CPS Energy Ranchtown to Menger Creek 138-kV transmission line at Segment 40 11 (Routes A, E, H, and Y), nine routes terminate at Segment 46b (Routes B1, C1, 12 D1, I1, M1, T1, X1, Z1, and DD), four routes terminate at Segment 49a (Routes 13 G1, J1, AA1, and EE), seven routes terminate at Segment 43 (Routes F1, K, N1, P, 14 R1, BB, and CC), four routes terminate at Segment 44 (Routes O, Q1, V, and W), 15 and three routes terminate at Segment 45 (Routes L, S, and U1).11 16 Seven further routes have been proposed by intervenors in this proceeding, Routes 17 AA2,¹² Dreico 1, Dreico 2, Dreico 3, Dreico 4, Dreico 5, and Dreico 6.¹³ All of 18 these proposed seven routes start from Substation Site 7. Three of these routes 19 terminate at Segment 46b (Routes Dreico 2, Dreico 4, and Dreico 6) and four 20 terminate at Segment 49a (Routes AA2, Dreico 1, Dreico 3, and Dreico 5).

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¹¹ Application Amendment Attachment 2 at Table 2-1.

¹² Lisa Chandler's First Requests for Information to CPS Energy at 7, (Jan 25, 2021).

¹³ Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'S First Set of Requests for Information to CPS Energy at 6, (Feb 12, 2021).

1		
2	Q.	Is the Proposed Project located within the incorporated boundaries of any
3		municipality?
4	A.	None of alternative routes would be constructed within an incorporated
5		municipality. ¹⁴
6		
7	B.	TEXAS COASTAL MANAGEMENT PROGRAM
8		
9	Q.	Does any part of this project lie within the Texas Coastal Management
10		Program (TCMP) boundary?
11	A.	No. The Proposed Project is not located, either in whole or in part, within the
12		TCMP boundary. ¹⁵
13		
14	C.	NEED FOR THE PROJECT
15		
16	Q.	Could you briefly summarize the need for the project?
17	A.	Yes. As stated in the Application, this CCN is needed to address a projected 4-7
18		percent annual growth rate in the northwest corner of Bexar County. ¹⁶ This growth
19		is projected to see the 2018 load in the area of Scenic Loop grow from 149,952
20		kilowatts (kW) to 255,932 kW by 2031. This CCN would also address the very

¹⁴ Application at 8.

¹⁵ Application at 41.

¹⁶ Application Attachment 13 at 5.

1		long distribution circuits origination from the CPS Energy La Sierra and Fair Oaks
2		Ranch Substations which are up to seven times longer than the average CPS
3		Energy distribution circuit needed to support the current load. The combination of
4		this load growth and long distribution circuits is projected, by Burns & McDonnell
5		Engineering Company, Inc. (Burns & McDonnell) in its Scenic Loop Substation
6		Analysis Report attached to the application as Attachment 13, to reach the existing
7		distribution system's reliability limit by 2024.17
8		
9	Q.	Has an independent organization, as defined in PURA § 39.151, determined
10		that there is a need for the Proposed Project?
11	A.	No. This project is for a-radial transmission line to service load growth and is
12		therefore classified as a Tier 4 Neutral project. The Electric Reliability Council of
13		Texas (ERCOT) protocols do not require Tier 4 Neutral projects to be submitted to
14		ERCOT for review. ¹⁸
15		
16	Q.	Are the proposed facilities necessary for the service, accommodation,
17		convenience, or safety of the public within the meaning of PURA § 37.056(a)?
18	A.	Yes. In my opinion, based on the data and load projections provided by CPS
19		Energy and Burns & McDonnell in the Scenic Loop Substation Analysis Report, ¹⁹
20		it is evident that this project is necessary and is the best way to address the

¹⁷ Application Attachment 13 at 44.

¹⁸ Application at 4.

¹⁹ Application Attachment 13.

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1		reliability issues resulting fro	om the load growth in t	the area.
2				
3				
4	D.	PROJECT ALTERNATIV	'ES	
5				
6	Q.	Did CPS Energy consider o	listribution alternativ	ves to the Proposed Project?
7	A.	Yes. Burns & McDonnell	studied five differen	nt alternatives to the Proposed
8		Project, three of which were	distribution alternative	es. ²⁰
9				
10	Q.	What was the conclusion	Burns & McDonnel	ll reached as a result of that
11		study?		
12	A.	Burns & McDonnell investi	gated three distributio	n alternatives and none of them
13		met the reliability criteria fo	r serving both the forc	asted load growth and resolving
14		the issues with the length o	f the distribution circu	nits in a cost effective fashion. ²¹
15		Burns & McDonnell also in	vestigated distributed	generation alternatives but these
16		were substantially more ex	spensive then the tra	nsmission project alternative. ²²
17		Burns & McDonnell therefo	re concluded that the c	current Proposed Project by CPS
18		Energy was the most cost-e	ffective solution ²³	
19				

- ²⁰ Application Attachment 13 at 39.
- ²¹ Application Attachment 13 at 37-41.
- ²² Application Attachment 13 at 38-40.
- ²³ Application at 17.

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1		
2	Q.	Do you agree that the Proposed Project is the best option when compared to
3		other alternatives?
4	A.	Yes.
5		
6	V.	ROUTING
7		
8	А.	STAFF RECOMMENDATION
9	Q.	What routes do you recommend upon considering all factors, including the
10		factors in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?
11	A.	Based on my analysis of all the factors that the Commission must consider under
12		PURA § 37.056 and 16 TAC § 25.101, I recommend that Route P be approved for
13		the Proposed Project. The basis for my recommendation is discussed in more detail
14		in the remainder of my testimony.
15		
16	Q.	Which route did CPS Energy select as the route that it believes best meets the
17		requirements of PURA and the Commission's rules?
18	A.	CPS Energy selected Route Z as the route that it believes best meets the
19		requirements of PURA and the Commission's rules. ²⁴ However, in CPS Energy's
20		Application Amendment, it appears CPS Energy replaced the original Route Z
21		with Route Z1 following some segment adjustments. ²⁵

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²⁴ Application at 29.

²⁵ Application Amendment at 2.

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1		
2	B.	COMMUNITY VALUES
3		
4	Q.	Has CPS Energy sought input from the local community regarding
5		community values?
6	A.	Yes. CPS Energy held a public meeting as required by 16 TAC § 22.52(a)(4). The
7		public meeting was conducted on October 3, 2019, from 5:30 pm to 7:30 pm at the
8		Cross Mountain Church, 24891 Boerne Stage Road in San Antonio, Texas. ²⁶ CPS
9		Energy sent 592 notices of the meeting to land owners owning property within 300
10		feet of each of the proposed alternative route segment centerlines. ²⁷ Notice of the
11		meeting was also published in the San Antonio Express News on September 22
12		and 29, 2019.28 A total of 172 individuals signed in at the meeting and CPS
13		Energy received 146 questionnaire responses at, or shortly after, the meeting with
14		40 additional questionnaires received later. ²⁹
15		
16	Q.	Did members of the community who returned questionnaires express
17		concerns about the Proposed Project?
18	A.	Yes. CPS Energy received 186 questionnaires at and after the public meeting.
19		Section 6.0 of Attachment 1 of CPS Energy's application, the EA, contains a

- ²⁶ Application Attachment 1 at 6-1.
- ²⁷ Application Attachment 1 at 6-1.
- ²⁸ Application Attachment 1 at 6-1.
- ²⁹ Application Attachment 1 at 6-2.

1 discussion and summary of the questionnaire responses. The respondents were asked to rank criteria in routing the project that they considered to be the most 2 3 important. The two criteria that ranked highest were maximizing distance from residences and visibility of structures.³⁰ The respondents were asked to list any 4 5 segments or substation sites for which they had concerns. The segments which had 6 the most negative comments were Segments 15, 26, and 16^{31} The Substation Sites 7 which had the most negative comments were Substation sites 5, 2, and 4. However, other segments such as Segments 46a, 42a, 26a, and 54 were added only 8 9 after the public meetings and thus did not receive any direct opposition at the meetings.³² Likewise some substation sites such as Substation Site 6 and 10 11 Substation Site 7 were added only after the public meetings and thus did not receie 12 any direct opposition at the meetings.³³

13

14 Q. In your opinion, would construction of the Proposed Project on Route P
15 mitigate the concerns expressed by members of the community at the open
16 houses?

A. In my opinion, Route P would mitigate some of the concerns expressed by
members of the community at the open houses. Route P does contain one of the
segments negatively mentioned in the questionnaires received during and after the

³³ Application Attachment 1 at 6-5.

³⁰ Application Attachment 1 at 6-2.

³¹ Application Attachment 1 at 6-4.

³² Application Attachment 1 at 6-5 and Application Amendment Attachment 2 at 33-35.

1		public meetings, Segment 15. The criteria that ranked first in the questionnaires
2		received during and after the public meeting was maximizing distance from
3		residences. Route P has only 12 habitable structures within 300 feet of the
4		centerline of its segments, which is tied for the fifth fewest among the 31
5		alternative routes. The criteria that ranked second in the questionnaires received
6		during and after the public meeting was reducing visibility of structures and Route
7		P is 4.89 miles long, which is the eighthsixth longest route and only 0.36 miles
8		longer than the shortest route. ³⁴
9		I will specifically address recreational and park areas, historical values, aesthetic
10		values, environmental integrity, engineering constraints, costs, moderation of
11		impact on the affected community and landowners, and right-of-way later in my
12		testimony.
13		
14	Q.	Are property values and the impact on future/potential development factors
15		considered by the Commission in a CCN proceeding under PURA §
16		37.056(c)(4) or in 16 TAC § 25.101(b)(3)(B)?
17	A.	No. PURA and the Commission's rules do not list these two issues as factors that
18		are to be considered by the Commission in a CCN proceeding. However, these
19		rules do require consideration of using or paralleling existing rights-of-way, which
20		may minimize concerns about these impacts.

³⁴ <u>Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's</u> response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021). Application Amendment Attachment 2 at Table 4 1 Amended.

1		
2	Q.	Are there any routes that did not receive specific opposition from
3		intervenors?
4	A.	No.
5		
6	C.	RECREATIONAL AND PARK AREAS
7		
8	Q.	Are any parks or recreational areas located within 1,000 feet of the centerline
9		of any of the alternative routes?
10	A.	No, none of the proposed alternative routes cross or are located within 1,000 feet
11		of any park or recreation area. ³⁵
12		
13	D.	HISTORICAL VALUES
14		
15	Q.	Are there possible impacts from the Proposed Project on archeological and
16		historical values, including known cultural resources crossed by any of the
17		proposed alternative routes or that are located within 1,000 feet of the
18		centerline of any of the alternative routes?
19	А.	There are seventeen recorded archeological or historical sites with an additional
20		three National Register of Historic Places (NRHP) listed resources and two
21		cemeteries are within 1,000 feet from the centerline of at least one routing segment

.

³⁵ Application Amendmenat Attachment 2 at 4-25.

1 of the proposed alternative routes.³⁶ Some routes, such as Routes A, B1, C1, D1, 2 E. G1. H. I1. J1. M1. X1. Y. Z1. AA1. DD.-and EE. AA2. Dreico 1, Dreico 2, 3 Dreico 3, Dreico 4, Dreico 5, and Dreico 6 do not cross any cultural resource sites 4 and but every route has at least one cultural site within 1,000 feet of their centerlines.³⁷ Route P crosses one recorded archeological or historic site and 5 crosses one NRHP listed site. Route P has 10 additional archeological or historic 6 7 sites within 1,000 feet of its centerline along with one cemetery within 1,000 feet 8 of its centerline.³⁸ The table below shows the proposed alternative routes in this 9 project and how many cultural resources they cross and the number of additional 10 cultural resources within 1,000 feet of each of their centerlines.³⁹

11

Route	Number of Recorded Archeological or Historical Sites Crossed	Number of additional Recorded Archeological or Historical Sites within 1,000 feet of the centerline	Number of NRHP listed properties crossed	Number of additional NRHP listed properties within 1,000 feet of the centerline	Number of Cemeteries within 1,000 feet of the centerline
А	0	0	0	1	0
Н	0	0	0	1	0
К	0	0	1	0	0
L	0	0	1	0	0

³⁶ Application Amendment Attachment 2 at 4-27.

³⁸ <u>Id.</u>Application Amendment Attachment 2 at Table 4-1 Amended.

³⁹<u>Id.</u>, Application Amendment-Attachment-2 at Table-4-1-Amended.

³⁷ <u>Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's</u> response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021). Application Amendment Attachment 2 at Table 4 1 Amended.

BB	0	0	1	0	0
CC	0	0	1	0	0
E	0	2	0	1	0
X1	0	2	0	1	0
Dreico 3	<u>0</u>	2	<u>0</u>	1	<u>0</u>
Dreico 4	<u>0</u>	2	<u>0</u>	1	<u>0</u>
C1	0	2	0	1	1
D1	0	2	0	1	1
11	0	2	0	1	1
J1	0	2	0	1	1
M1	0	2	0	1	1
Z1	0	2	0	1	1
AA1	0	2	0	1	1
DD	0	2	0	1	1
EE	0	2	0	1	1
AA2	<u>0</u>	2	<u>0</u>	1	1
Dreico 5	<u>0</u>	2	<u>0</u>	1	1
Dreico 6	<u>0</u>	2	<u>0</u>	1	1
B1	0	2	0	2	1
G1	0	2	0	2	1
Y	0	2	0	2	1
Dreico 1	<u>0</u>	2	<u>0</u>	2	1
Dreico 2	<u>0</u>	2	<u>0</u>	2	1
V	1	0	1	0	0

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0	1	1	1	0	0
S	1	1	1	0	0
W	1	1	1	0	0
Р	1	10	1	0	1
T1	1	12	0	1	2
F1	2	12	1	0	1
N1	2	12	1	0	1
Q1	2	12	1	0	1
R1	2	12	1	0	1
UI	2	12	1	0	1

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The lengths of the proposed alternative routes that cross areas of high archeological potential range from 1.<u>4</u>14 miles for Route H to 4.77 miles for Route U1.⁴⁰ Route P crosses 2.49 miles of high archeological potential, which is the <u>14thninth</u> least of the proposed alternative routes. While Route P has 10 Recorded Archeological or Historical Sites sites and 1 cemetery within 1,000 feet of its centerline, it only crosses 1 Recorded Archeological or Historical Site and 1 NHRP listed property while being <u>14thninth</u> among all proposed alternative routes in areas of high archeological potential crossed. Therefore, I conclude that Route P is acceptable from a historical values perspective.

Should the Commission order that one of the routes that crosses a Recorded

⁴⁰ <u>Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021). Application - Amendment Attachment 2 at Table 4-1 Amended.</u>

		rage 29
1		Archeological or Historical Sites site be constructed (Routes V, O, S, W, P, T1,
2		F1, N1, Q1, R1, or U1), CPS Energy should work with the Texas Historical
3		Commission to determine what appropriate actions should be taken to mitigate the
4		impacts on the site. If any further archeological or cultural resources are found
5		during construction of the proposed transmission line, CPS Energy should
6		immediately cease work in the vicinity of the archeological or cultural resources,
7		and should immediately notify the Texas Historical Commission.
8		
9	Ε.	AESTHETIC VALUES
10		
11	Q.	In your opinion, which of the proposed routes would result in a negative
12		impact on aesthetic values, and which portions of the study area will be
13		affected?
13 14	A.	affected? In my opinion, all of the proposed alternative routes would result in a negative
	A.	
14	A.	In my opinion, all of the proposed alternative routes would result in a negative
14 15	A.	In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the
14 15 16	A.	In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the visibility from homes and public roadways. Temporary effects would include
14 15 16 17	A.	In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the visibility from homes and public roadways. Temporary effects would include views of the actual transmission line construction (e.g. assembly and erection of
14 15 16 17 18	A.	In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the visibility from homes and public roadways. Temporary effects would include views of the actual transmission line construction (e.g. assembly and erection of the structures) and of any clearing of right-of-way. Permanent effects would
14 15 16 17 18 19	A.	In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the visibility from homes and public roadways. Temporary effects would include views of the actual transmission line construction (e.g. assembly and erection of the structures) and of any clearing of right-of-way. Permanent effects would involve the visibility of the structures and the lines. I therefore conclude that
14 15 16 17 18 19 20	A.	In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the visibility from homes and public roadways. Temporary effects would include views of the actual transmission line construction (e.g. assembly and erection of the structures) and of any clearing of right-of-way. Permanent effects would involve the visibility of the structures and the lines. I therefore conclude that aesthetic values would be impacted throughout the study area, and that these
14 15 16 17 18 19 20 21	A.	In my opinion, all of the proposed alternative routes would result in a negative impact on aesthetic values, some routes more than others, depending on the visibility from homes and public roadways. Temporary effects would include views of the actual transmission line construction (e.g. assembly and erection of the structures) and of any clearing of right-of-way. Permanent effects would involve the visibility of the structures and the lines. I therefore conclude that aesthetic values would be impacted throughout the study area, and that these temporary and permanent negative aesthetic effects will occur on any proposed

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1		the shortest route, and impacts the fourth fifth fewest habitable structures of the
2		proposed alternative routes, both of which would help to mitigate those impacts
3		compared to the majority of the proposed alternative routes in this docket.
4		
5	F.	ENVIRONMENTAL INTEGRITY
6		
7	Q.	Please provide a general description of the area traversed by the proposed
8		alternative routes.
9	A.	The area traversed by the project is within the the transitional area between the
10		Balcones Escarpment/Blackland Prairies and the Edwards Plateau physiographic
11		region of Texas. The region's topography is characterized by flat upper surfaces,
12		interspersed by drainages that open up into larger draws or box canyons. The study
13		area has its lowest elevation at approximately 1,250 feet above mean sea level and
14		its highest elevation at 1,400 feet above mean sea level. The elevation tends to
15		decrease from northeast to southeast. ⁴¹
16		
17	Q.	What was involved in your analysis of the environmental impact of the
18		Proposed Project?
19	A.	I reviewed the information provided in the Application and the EA, the
20		Application Amendment, the direct testimonies and statements of position of the
21		intervenors, responses to requests for information, and the letters from TPWD to

⁴¹ Application Attachment 1 at 3-1.

		145001
1		Ms. Rachelle Robles, dated September 10, 2020 and February 18, 2021.42
2		
3		
4		
5		
6	Q.	Based on your review of the information identified above, in your opinion,
7		will the Proposed Project present a significant negative impact to
8		environmental integrity?
9	A.	No. Transmission lines do not often create many long-term impacts on soils. Most
10		of those impacts will be during intial construction and would be erosion and soil
11		compaction. However, CPS Energy has confirmed that it will employ erosion
12		control during initial construction.43 Impacts on vegetation would be the result of
13		clearing and maintaining the right-of-way, and the length of upland woodland or
14		brushland along the right-of-way of the proposed alternative routes range from
15		3.0542 miles for Route <u>Dreico 6</u> to 6.52 miles for Route V. ⁴⁴ Power Engineers
16		do not anticipate encountering endangered or threatened plant or animal species in
17		the study area, though the bracted twistflower, the Madla Cave meshweaver, two
18		unnamed beetles, the Helotes mold beetle, the whooping crane, or golden-cheeked

⁴² Attachment JP-3 and JP-4.

⁴³ Application Amendment Attachment 2 at 4-9.

⁴⁴ <u>Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's</u> response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021). Application Attachment 1 at 4-4.

1		warbler might occur.45 In the event endangered or threatened plant or animal
2		species are encountered, CPS Energy should attempt to span or avoid them as
3		much as practicable. None of the proposed alternative routes cross any known
4		occupied habitat for any federally listed endangered or threatened species.46
5		Nevertheless, construction of some of the alternative routes could, at some
6		locations, present a negative impact on the environment.
7		In its letter dated February 18, 2021, TPWD stated that it selects Route DD as the
8		route having the least potential impact on environmental integrity.47
9		
10	Q.	In your opinion, how would construction of the Proposed Project on Route P
10 11	Q.	In your opinion, how would construction of the Proposed Project on Route P compare from an environmental perspective to construction on the other
	Q.	
11	Q. A.	compare from an environmental perspective to construction on the other
11 12		compare from an environmental perspective to construction on the other routes?
11 12 13		compare from an environmental perspective to construction on the other routes? The Proposed Project is expected to cause only short-term effects to water, soil,
11 12 13 14		<pre>compare from an environmental perspective to construction on the other routes? The Proposed Project is expected to cause only short-term effects to water, soil, and ecological resources during the initial construction phase. Route P is generally</pre>
11 12 13 14 15		compare from an environmental perspective to construction on the other routes? The Proposed Project is expected to cause only short-term effects to water, soil, and ecological resources during the initial construction phase. Route P is generally ranked well among the proposed alternative routes in most alternative categories.
 11 12 13 14 15 16 		compare from an environmental perspective to construction on the other routes? The Proposed Project is expected to cause only short-term effects to water, soil, and ecological resources during the initial construction phase. Route P is generally ranked well among the proposed alternative routes in most alternative categories. It has the sixth least length of right-of-way across the Edwards Aquifer

⁴⁵ Application Amendment Attachment 2 at 4-16.

⁴⁶ Application Amendment Attachment 2 at 4-15.

⁴⁷ Attachment JP-4 at 2.

		Page 33
1		Moderate High and 4-High Quality which is the worst of any route. ⁴⁸ CPS Energy
2		has not yet confirmed this or the presence of the golden-cheeked warbler in the
3		study area via field survey. TPWD recommended that CPS should, prior to
4		conducting surveys of the approved alternative route, contact the United States
5		Fish and Wildlife Services (USFWS) for appropriate survey protocols for
6		surveying for golden-cheeked warblers.49
7		
8	Q.	Do you conclude that Route P is acceptable from an environmental and land
9		use perspective?
10	A.	Yes.
11		
12	G.	ENGINEERING CONSTRAINTS
13		
14	Q.	Are there any possible engineering constraints associated with this project?
15	A.	There are no specific engineering constraints that are not present in typical
16		transmission line projects. In my opinion, all of the possible constraints can be
17		adequately addressed by using design and construction practices and techniques
18		that are usual and customary in the electric utility industry.
10		

- 19
- 20 Q. Are there any special circumstances in this Project that would warrant an

⁴⁹ Attachemnt JP-3 at 4.

⁴⁸ Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021). Amendment Attachment 2 at Table 4-1 Amended.

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		C
1		extension beyond the seven-year limit for the energization of the line?
2	A.	No, CPS Energy has not described any special circumstances that would merit an
3		extension of this limit for this project.
4		
5	H.	COSTS
6		
7	Q.	What are CPS Energy's estimated costs of constructing the Proposed Project
8		on each of the proposed alternative routes?
9	A.	Attachment 3 of the Application Amendment, Exhibit SDL-2R of the Rebuttal
10		Testimony of Scott D. Lyssy on behalf of CPS Energy, and CPS Energy's
11		response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and
12		Crighton Development Co.'s First Request for Information 1-1 lists CPS Energy's
13		estimated costs of constructing each proposed route. The cost of each route has
14		three components: the proposed CPS Energy Scenic Loop Substation, the
15		transmission line, and a 10% contingency fee to cover unknown project costs not
16		evident at the time of the estimate.50 The cost for the Scenic Loop Substation
17		varies, depending on which subsite is selected. ⁵¹ The table below shows the total
18		estimated cost, with all three components included, for each of the routes from
19		least expensive to the most expensive proposed alternative route:
20		

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Route	Estimated Cost of the Route
AA1	\$38,291,571.63

⁵⁰ Application Amendment at 136-138.

⁵¹ Application Amendment at 138.

Z1	<u>Φ</u> 20 474 771 50
Dreico 6	\$38,474,771.50
	\$38,815,298.00
DD	\$38,996,942.59
AA2	\$39,048,155.00
EE	\$39,757,434.71
Dreico 5	\$40,113,172.00
Dreico 4	\$41,670,814.00
Y	\$42,723,886.97
BB	\$42,741,654.35
Dreico 2	<u>\$42,745,438.00</u>
I1	\$42,877,497.33
Р	\$43,408,742.18
R1	\$43,522,858.14
Dreico 3	\$43,829,483.00
CC	\$43,897,472.16
D1	\$43,904,817.64
J1	\$44,068,605.60
Dreico 1	\$44,720,445.00
X1	\$45,496,086.62
Q1	\$45,890,914.04
M1	\$46,044,319.76
K	\$46,467,251.17
N1	\$46,803,781.14
T1	\$47,259,332.79
C1	\$47,373,300.80
F1	\$49,658,757.14
B1	\$50,551,923.25
U1	\$50,562,535.51
G1	\$51,216,233.88
W	\$52,869,827.60
Н	\$53,621,914.79
L	\$54,086,148.54
V	\$54,169,034.11
E	\$54,505,459.92
A	\$54,695,383.90
S	\$55,327,169.75
0	\$56,194,702.73
	\$30,194, <i>1</i> 02.73

- 1
- 2

3

As the table illustrates, Route P is the <u>13theighth</u> least expensive proposed alternative route.

4 Q. Could you briefly discuss the routes less expensive than Route P and why

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Page 36 1 **Route P is still preferred?** 2 Α. Yes. All Routes that are less expensive than Route P impact more habitable 3 structures. Routes AA1, BB, DD,-and Z1, and AA2 have more habitable structures 4 within 300 feet of their centerlines and make less use of compatible right-of-way 5 or property lines as a percentage of their length. Routes EE, Dreico 2, Dreico 4, and Dreico 5 haves more habitable structures within 300 feet of its centerline, 6 7 makes less use of compatible right-of-way or property lines as a percentage of its 8 length, and areis longer. Routes Y and I1 have more habitable structures within 9 300 feet of their centerlines and are longer. 10 11 12 Q. Does CPS Energy's estimated cost of constructing the Proposed Project 13 appear to be reasonable? 14 After reviewing CPS Energy's estimates, the estimated costs for the alternative A. 15 routes are roughly what I would expect considering the terrain. However, the 16 reasonableness of the final installed cost of the completed project will be 17 determined at a future date in the course of a rate proceeding. 18 19 I. MODERATION OF IMPACT ON THE AFFECTED COMMUNITY AND 20 LANDOWNERS 21 22 Q. Do the Commission's rules address routing alternatives intended to moderate 23 the impact on landowners?

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1	A.	Yes. Under 16 TAC § 25.101(b)(3)(B), "the line shall be routed to the extent
2		reasonable to moderate the impact on the affected community and landowners
3		unless grid reliability and security dictate otherwise."
4		
5	Q.	Subsequent to filing its application, has CPS Energy made or proposed any
6		routing adjustments to accommodate landowners?
7	A.	Yes. These routing adustments were made in CPS Energy's Application
8		Amendment.
9		
10		
11		
12	Q.	Has CPS Energy proposed any specific means by which it will moderate the
13		impact of the Proposed Project on landowners or the affected community
14		other than adherence to the Commission's orders, the use of good utility
15		practices, acquisition of and adherence to the terms of all required permits,
16		and what you have discussed above?
17	A.	Not to my knowledge.
18		
19	J.	RIGHT-OF-WAY
20		
21	Q.	Do the Commission's rules address routing along existing corridors?
22	A.	Yes. The following factors are to be considered under 16 TAC § 25.101(b)(3)(B):
23		(i) whether the routes utilize existing compatible rights-of-way, including the

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	SOAH	Docket I	No. 473-21-0247	Page 38	PUC Docket No. 51023
1			use of vacant posi	itions on existing multi	ple-circuit transmission lines;
2		(ii)	whether the route	s parallel existing com	patible rights-of-way;
3		(iii)	whether the rout	tes parallel property	ines or other natural or cultural
4			features; and		
5		(iv)	whether the route	s conform with the pol	cy of prudent avoidance.
6					
7	1.	USE	AND PARALLE	LING OF EXISTIN	G, COMPATIBLE RIGHT-OF-
8		WAY	(INCLUDING AI	PPARENT PROPER	FY BOUNDARIES)
9					
10					
11					
12	Q.	Descr	ibe how CPS End	ergy proposes to use	existing, parallel, or compatible
13		right-	of-way for the Pro	oposed Project.	
14	A.	Each	proposed alternat	ive route parallels a	pparent property boundaries and
15		parall	els or utilizes exist	ing compatible rights-o	of-way. The percentage of Route P
16		length	n that parallels or	utilizes existing com	patible right-of-way and apparent
17		prope	rty boundaries is	approximately 71%	of its length. The table below
18		summ	arizes the overall lo	ength, the length parall	el to a compatible rights-of-way or
19		to a p	roperty boundary, a	and the total percentag	e of parallel rights-of-way used by
20		the pr	oposed alternative	routes. Commission R	ule 16 TAC § 25.101(b)(3)(B) does
21		not co	onsider existing pipe	eline rights-of-way as c	ompatible rights-of-way.

Route	Length (Miles)	Length Parallel to Right- of-Way (Miles)	Percentage
Α	6.66	5.50	82.59%

1

,	1 1	I	1
Y	5.23	4.27	81.53%
Н	6.32	5.09	80.46%
Е	6.62	4.99	75.38%
T1	5.93	4.46	75.24%
Dreico 6	<u>4.57</u>	3.36	<u>73.52%</u>
CC	5.23	3.84	73.43%
V	6.60	4.82	73.01%
M1	5.85	4.25	72.67%
I1	5.03	3.59	71.43%
Р	4.89	3.47	71.00%
DD	4.64	3.27	70.49%
F1	5.66	3.97	70.12%
К	5.29	3.71	70.07%
BB	4.73	3.30	69.81%
D1	5.22	3.62	69.38%
Q1	5.56	3.83	68.80%
N1	5.33	3.64	68.28%
Dreico 2	5.32	3.63	<u>68.23%</u>
Z1	4.53	3.09	68.21%
B1	6.19	4.19	67.69%
Dreico 4	5.27	3.55	<u>67.36%</u>
C1	5.77	3.82	66.23%
X1	5.34	3.46	64.87%
R1	4.76	3.06	64.32%
L	6.91	4.38	63.42%
0	6.83	4.21	61.58%
	6.36	3.74	58.77%
Dreico 5	4.92	2.88	<u>58.54%</u>
W	6.25	3.63	58.03%
AA1	4.82	2.72	56.48%
EE	4.99	2.81	56.22%
J1	5.46	3.04	55.71%
Dreico 1	5.67	3.15	<u>55.56%</u>
Dreico 3	5.62	3.07	<u>54.63%</u>
G1	6.20	3.31	53.37%

SOAH Docket No. 473-21-0247

PUC Docket No. 51023

	SUAH	I Docket No. 4/3-21-024/	Page 40	PUC Docket	No. 51023
		AA2	4.89	2.59	<u>52.92%</u>
I		S	6.73	3.31	49.09%
1 2		As the chart shows,	Route P is the <u>eighthsixth</u>	shortest route and ranks	s <u>11th</u> tenth in
3		terms of percentage	of compatible right-of-wa	ay compared to the othe	er alternative
4		routes.			
5					
6	Q.	Could you briefly	discuss the routes with a	a higher percentage of	f compatible
7		right-of-way and w	hy Route P is still prefer	red?	
8	А.	Yes. Routes A, H, E	E, T1, CC, V, and M1 are n	nore expensive, have m	ore habitable
9		structures within 30	00 feet of their centerlines	s, and are longer. Rout	tes Y and I1
10		have more habitable	e structures within 300 fee	t of their centerlines an	d are longer.
11		Route Dreico 6 has	more habitable structures v	within 300 feet of its cer	<u>iterline.</u>
12					
13	2.	PARALLELING C	OF NATURAL OR CULT	FURAL FEATURES	
14					
15	Q.	Describe how CPS	Energy proposes to pa	rallel natural or cultu	iral features
16		for the Proposed P	roject.		
17	A.	None of the propose	ed alternative routes paralle	el natural or cultural feat	tures.
18					
19					
20	K.	PRUDENT AVOII	DANCE		
21					
22	Q.	Define prudent avo	bidance.		

SOAH Docket No. 473-21-0247 PUC Docket No. 51023 Page 41 Prudent avoidance is defined by 16 TAC § 25.101(a)(6) as follows: "The limiting A. 1 2 of exposures to electric and magnetic fields that can be avoided with reasonable 3 investments of money and effort." 4 5 **Q**. How can exposure to electric and magnetic fields be limited when routing 6 transmission lines? 7 Primarily by proposing alternative routes that would minimize, to the extent Α. 8 reasonable, the number of habitable structures located in close proximity to the 9 routes. 10 11 12 13 14 Q. How many habitable structures are located in close proximity to each of the 15 proposed alternative routes? 16 A. The table below ranks the number of habitable structures that are within 300 feet

17 of the centerline of the proposed routes in this project.

Route	Number of habitable structures
Q1	<u>126</u>
U1	<u>126</u>
R1	<u>13</u> 7
<u>PN1</u>	<u>17</u> 11
<u>N1</u> P	<u>17</u> +2
F1	1842
BB	2724
S	29 25
W	<u>2925</u>
AA2	30
<u>Z1</u> 0	3129

<u>AA1Z1</u>	<u>31</u> 30
VAA1	<u>32</u> 30
EEV	<u>32</u> 31
OEE	<u>33</u> 34
DD	<u>33</u> 32
Dreico 5	<u>33</u>
Dreico 6	34
T1	<u>3734</u>
L	<u>3835</u>
K	<u>39</u> 36
Υ	4039
X1	<u>41</u> 40
Dreico 3	<u>41</u>
J1	<u>4241</u>
Dreico 4	42
D1	<u>44</u> 4 3
	<u>44</u> 43
M1	<u>44</u> 43
Dreico 1	44
Dreico 2	<u>45</u>
C1	<u>49</u> 48
G1	<u>53</u> 52
CC	<u>57</u> 54
Е	<u>61</u> 60
<u>H</u> B1	<u>62</u> 61
BIH	<u>64</u> 61
A	<u>72</u> 69

1

2

3

There are 1<u>7</u>² habitable structures that are within 300 feet of the centerline of Route P. Therefore, Route P ranks tied for <u>fourth</u>fifth among all the proposed alternative routes with regard to this criterion.

5

4

6 Q. Could you briefly discuss the routes with the same or fewer habitable 7 structures and why Route P is still preferred?

8 A. Yes. Route Q1, U1, and N1, and F1 are more expensive, make less use of
9 compatible right-of-way or property lines as a percentage of their length, and are
10 longer. Route R1 is more expensive and makes less use of compatible right-of-way

	SOAH	I Docket No. 473-21-0247 PUC Docket No. 51023 Page 43
1		or property lines as a percentage of its length.
2		
3	Q.	Do you conclude that CPS Energy's proposed alternative routes have
4		minimized, to the extent reasonable, the number of habitable structures
5		located in close proximity to the routes?
6	А.	Yes.
7		
8	VI.	CONCLUSION
9		
10	Q.	In your opinion, is any one of the proposed alternative routes better than <u>all</u>
11		of the other routes in <u>all</u> respects?
12	A.	No.
13		
14		
15	Q.	If no proposed alternative route is better than all of the others in all respects,
16		why have you recommended Route P instead of the other proposed
17		alternative routes?
18	А.	In summary, after analyzing all the factors that the Commission must consider
19 20		under PURA § 37.056 and 16 TAC § 25.101, I conclude that Route P best meets
20		the criteria of PURA and the Commission's rules because:
21		 (1) Route P is the <u>13theighth</u> least expensive route at \$43,408,742.18, (2) Route P is tigd for fourth fifth least number of hebitable structures
22		(2) Route P is tied for <u>fourth</u> fifth-least number of habitable structures
23		within 300 feet of its centerline with $17+2$,

ERRATA TO DIRECT TESTIMONY OF JOHN POOLE, P.E.<u>APRIL 23MARCH 22,</u> 2021

1		(3) Route P is the <u>eighth</u> sixth shortest route at 4.89 miles, and
2		(4) Route P is <u>11thtenth</u> best proposed alternative route utilizing existing
3		compatible right-of-way and property lines at 71% of its total length.
4		Route P, like all of the proposed alternative routes, has some advantages and some
5		disadvantages as I have discussed in my testimony. However, I consider Route P
6		overall to have the most advantages and to be superior to the other proposed
7		alternative routes.
8		
9	Q.	Does this conclude your testimony?

10 A. Yes.

SOAH DOCKET NO. 473-21-0247 PUC DOCKET NO. 51023

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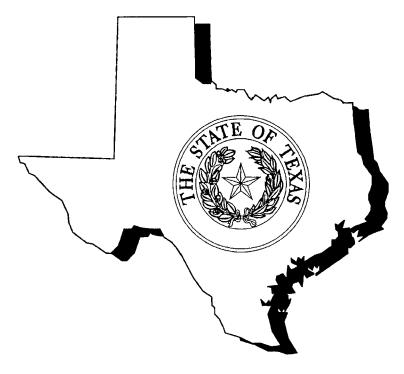
§

§

APPLICATION OF THE CITY OF SAN ANTONIO ACTING BY AND THROUGH THE CITY PUBLIC SERVICE BOARD (CPS ENERGY) TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE PROPOSED SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY **BEFORE THE STATE OFFICE**

OF

ADMINISTRATIVE HEARINGS



DIRECT TESTIMONY WITH ERRATA OF

JOHN POOLE, P.E., ENGINEER

INFRASTRUCTURE DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

APRIL 26, 2021

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ATTACHMENTS

JP-1	Qualifications of John Poole
JP-2	List of Previous Testimony
JP-3	Letter from Texas Parks and Wildlife Department dated September 10, 2020
JP-4	Letter from Texas Parks and Wildlife Department dated February 18, 2021

SOAH Docket No. 473-21-0247

PUC Docket No. 51023

1	I.	STATEMENT OF QUALIFICATIONS
2		
3	Q.	Please state your name, occupation and business address.
4	A.	My name is John Poole. I am employed by the Public Utility Commission of
5		Texas (Commission) as an Engineer within the Infrastructure Division. My
6		business address is 1701 North Congress Avenue, Austin, Texas 78701.
7		
8	Q.	Please briefly outline your educational and professional background.
9	A.	I have a Bachelor of Science degree in Electrical Engineering. I completed my
10		degree in December of 2014 and have been employed at the Commission since
11		February 2015. A more detailed resume is provided in Attachment JP-1.
12		
13	Q.	Are you a registered professional engineer?
14	A.	Yes, I am a registered Professional Engineer in Texas and my member number
15		is 133982.
16		
17	Q.	Have you previously testified as an expert before the Commission?
18	A.	Yes. A list of previous testimony is provided in Attachment JP-2.
19		
20	II.	SCOPE OF TESTIMONY
21		
22	Q.	What is the purpose of your testimony in this proceeding?
23	A.	The purpose of my testimony is to present Commission Staff's recommendations

		Page 5
1		concerning the application of the City of San Antonio, acting by and through the
2		City Public Service Board (CPS Energy) to amend its Certificate of Convenience
3		and Necessity (CCN) to construct a new double circuit 138-kilovolt (kV) electric
4		transmission line to be built on brown colored steel monopole structures in Bexar
5		County, Texas. ¹ The proposed transmission line will connect the existing
6		Ranchtown to Menger Creek 138-kV to the proposed Scenic Loop Substation that
7		will be located in one of several locations in the area of the intersection of Scenic
8		Loop Road and Toutant Beauregard Road (Proposed Project). ²
9		
10	Q.	What is the scope of your testimony?
11	A.	The scope of my testimony is to provide Commission Staff's recommendation
12		regarding the need for the project and regarding selection of routes from among
13		the alternative routes presented by CPS Energy and intervenors.
14		
15	Q.	What are the statutory requirements that a utility must meet to amend its
16		CCN to construct a new transmission line?
17	A.	Section 37.056(a) of the Public Utility Regulatory Act (PURA) ³ states that the
18		Commission may approve an application for a CCN only if the Commission finds
19		that the CCN is necessary for the service, accommodation, convenience, or safety

¹ Application of the City of San Antonio Acting by and through the City Public Service Board (CPS Energy) to Amend its Certificate of Convenience and Necessity for the Proposed Scenic Loop 138-kV Transmission Line Project in Bexar County (Application) at 4-5 (July 22, 2020).

² Application at 7.

³ Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-66.016 (PURA).

1		of the public.	Further	, PURA provides that the Commission shall approve, deny, or
2		modify a request for a CCN after considering the factors specified in PURA §		
3		37.056(c), which are as follows:		
4		(1)	1) the adequacy of existing service;	
5		(2)	the need for additional service;	
6		(3)	the e	ffect of granting the certificate on the recipient of the
7			certifi	cate and any electric utility serving the proximate area; and
8		(4)	other	factors, such as:
9			(A)	community values;
10			(B)	recreational and park areas;
11			(C)	historical and aesthetic values;
12			(D)	environmental integrity;
13			(E)	the probable improvement of service or lowering of cost to
14				consumers in the area if the certificate is granted; and
15			(F)	to the extent applicable, the effect of granting the certificate
16				on the ability of this state to meet the goal established by
17				PURA § 39.904(a).
18				
19	Q.	Do the Co	mmissi	on's rules provide any instruction regarding routing
20		criteria?		
21	A.	Yes. 16 Tex	as Adn	ninistrative Code (TAC) § 25.101(b)(3)(B) requires that an
22		application for	or a nev	v transmission line address the criteria in PURA § 37.056(c),
23		and that upor	n consid	lering those criteria, engineering constraints and costs, the line

		Page 7		
1		shall be routed to the extent reasonable to moderate the impact on the affected		
2		community and landowners, unless grid reliability and security dictate otherwise.		
3		The following factors shall be considered in the selection of CPS Energy's		
4		alternative routes:		
5		(i) whether the routes parallel or utilize existing compatible rights-of-		
6		way for electric facilities, including the use of vacant positions on		
7		existing multiple-circuit transmission lines;		
8		(ii) whether the routes parallel or utilize existing compatible rights-of-		
9		way, including roads, highways, railroads, or telephone utility		
10		rights-of-way;		
11		(iii) whether the routes parallel property lines or other natural or cultural		
12		features; and		
13		(iv) whether the routes conform with the policy of prudent avoidance.		
14				
15	Q.	What issues identified by the Commission must be addressed in this docket?		
16	A.	In the Order of Referral and Preliminary Order issued on September 29, 2020, the		
17		Commission identified the following issues that must be addressed:		
18		1. Is CPS Energy's application to amend its CCN adequate? Does the		
19		application contain an adequate number of reasonably differentiated		
20		alternative routes to conduct a proper evaluation? In answering this		
21		question, consideration must be given to the number of proposed		
22		alternatives, the locations of the proposed transmission line, and any		
23		associated proposed facilities that influence the location of the line.		

-

1 Consideration may also be given to the facts and circumstances specific to 2 the geographic area under consideration, and to any analysis and reasoned 3 justification presented for a limited number of alternative routes. A limited number of alternative routes is not in itself a sufficient basis for finding an 4 application inadequate when the facts and circumstances or a reasoned 5 6 justification demonstrates a reasonable basis for presenting a limited 7 number of alternatives. If an adequate number of routes is not presented in 8 the application, the ALJ must allow CPS Energy to amend the application 9 and to provide proper notice to affected landowners; if CPS Energy chooses not to amend the application, the ALJ may dismiss the case 10 11 without prejudice. 12 2. Are the proposed facilities necessary for the service, accommodation, 13 convenience, or safety of the public within the meaning of PURA § 14 37.056(a) taking into account the factors set out in PURA § 37.056(c)? In 15 addition, 16 a) How does the proposed facility support the reliability and adequacy 17 of the interconnected transmission system? 18 b) Does the proposed facility facilitate robust wholesale competition? 19 What recommendation, if any, has an independent organization, as c) 20 defined in PURA § 39.151, made regarding the proposed facility? 21 d) Is the proposed facility needed to interconnect a new transmission 22 service customer? 23 3. Is the transmission project the better option to meet this need when

Page 9)
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1		compared to employing distribution facilities? If CPS Energy is not subject
2		to the unbundling requirements of PURA § 39.051, is the project the better
3		option to meet the need when compared to a combination of distributed
4		generation and energy efficiency?
5	4.	Which proposed transmission line route is the best alternative weighing the
6		factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?
7	5.	Are there alternative routes or facilities configurations that would have a
8		less negative impact on landowners? What would be the incremental cost
9		of those routes?
10	6.	If alternative routes or facility configurations are considered due to
11		individual landowner preference:
12		a) Have the affected landowners made adequate contributions to offset
13		any additional costs associated with the accommodations?
14		(b) Have the accommodations to landowners diminished the electric
15		efficiency of the line or reliability?
16	7.	On or after September 1, 2009, did the Texas Parks and Wildlife
17		Department provide any recommendations or informational comments
18		regarding this application in accordance with Section 12.0011(b) of the
19		Texas Parks and Wildlife Code? If so, please address the following issues:
20		a) What modifications, if any, should be made to the proposed project
21		as a result of any recommendations or comments?

b)

1

2		final order in this docket as a result of any recommendations or
3		comments?
4		c) What other disposition, if any, should be made of any
5		recommendations or comments?
6		d) If any recommendation or comment should not be incorporated in
7		this project or the final order, or should not be acted upon, or is
8		otherwise inappropriate or incorrect in light of the specific facts and
9		circumstances presented by this application or the law applicable to
10		contested cases, please explain why that is the case.
11		8. Are the circumstances for this line such that the seven-year limit discussed
12		in section III of this Order should be changed?
10		
13		
13	Q.	Which issues in this proceeding have you addressed in your testimony?
	Q. A.	Which issues in this proceeding have you addressed in your testimony? I have addressed all issues included in the Order of Referral and Preliminary Order
14	-	
14 15	-	I have addressed all issues included in the Order of Referral and Preliminary Order
14 15 16	-	I have addressed all issues included in the Order of Referral and Preliminary Order
14 15 16 17	А.	I have addressed all issues included in the Order of Referral and Preliminary Order and the requirements of PURA § 37.056 and 16 TAC § 25.101.
14 15 16 17 18	А.	I have addressed all issues included in the Order of Referral and Preliminary Order and the requirements of PURA § 37.056 and 16 TAC § 25.101. If you do not address an issue or position in your testimony, should that be
14 15 16 17 18 19	А.	I have addressed all issues included in the Order of Referral and Preliminary Order and the requirements of PURA § 37.056 and 16 TAC § 25.101. If you do not address an issue or position in your testimony, should that be
14 15 16 17 18 19 20	А. Q.	I have addressed all issues included in the Order of Referral and Preliminary Order and the requirements of PURA § 37.056 and 16 TAC § 25.101. If you do not address an issue or position in your testimony, should that be interpreted as Staff supporting any other party's position on that issue?
14 15 16 17 18 19 20 21	А. Q.	 I have addressed all issues included in the Order of Referral and Preliminary Order and the requirements of PURA § 37.056 and 16 TAC § 25.101. If you do not address an issue or position in your testimony, should that be interpreted as Staff supporting any other party's position on that issue? No. The fact that I do not address an issue in my testimony should not be construed

Page 10

What conditions or limitations, if any, should be included in the

Page 11 1 2 **Q**. What have you relied upon or considered to reach your conclusions and make 3 your recommendation? I have relied upon my review and analysis of the data contained in CPS Energy's 4 A. 5 application and the application's accompanying attachments, including the 6 Environmental Assessment (EA)⁴ prepared by Power Engineers, Inc. (Power 7 Engineers). I have also relied upon my review of the direct testimonies and 8 statements of position filed in this proceeding by or on behalf of CPS Energy and 9 the intervenors, responses to requests for information, and the letters from the 10 Texas Parks and Wildlife Department (TPWD) to Ms. Rachelle Robles, dated 11 September 10, 2020 and February 18, 2021.⁵ 12 III. 13 **CONCLUSIONS AND RECOMMENDATIONS** 14 15 Based on your evaluation of CPS Energy's application and other relevant **Q**. 16 material, what conclusions have you reached regarding the application and 17 the Proposed Project? 18 1. I conclude that the application is adequate and that CPS Energy's proposed 19 routes are adequate in number and geographic diversity. 2. I conclude that the application complies with the notice requirements in 16 20 21 TAC § 22.52(a).

⁴ Application Attachment 1

⁵ Attachment JP-3 and JP-4.

Page	12
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			rage 12
1		3.	I conclude that, taking into account the factors set out in PURA §
2			37.056(c), the Proposed Project is necessary for the service,
3			accommodation, convenience and safety of the public.
4		4.	I conclude that the Proposed Project is the best option to meet the need
5			when compared with other alternatives.
6		5.	I conclude that Route P (Substation Site 6, Segments 50, 15, 22, 25, 37,
7			38, and 43) is the best route when weighing, as a whole, the factors set
8			forth in PURA § 37.056(c)(4) and in 16 TAC § 25.101(b)(3)(B).
9		6.	I conclude that TPWD recommended mitigation measures regarding the
10			application, and that the mitigation measures I recommend on Pages 12
11			through 15 of my testimony, as well as mitigation measures recommended
12			in the environmental concerns on pages 28 through 31 of my testimony, are
13			sufficient to address TPWD's mitigation recommendations. I also conclude
14			that CPS Energy has the resources and procedures in place in order to
15			accommodate the mitigation recommendations.
16			
17	Q.	What	recommendation do you have regarding CPS Energy's application?
18	A.	I recor	nmend that the Commission approve CPS Energy's application to amend
19		their C	CN in order to construct a new 138-kV electric transmission line in Bexar
20		County	y, Texas.
21		I also	recommend that the Commission order CPS Energy to construct the
22		Propos	ed Project on Route P (Substation Site 6, Segments 50, 15, 22, 25, 37, 38,
23		and 43). I further recommend that the Commission include in its order approving

CPS Energy's application the following paragraphs in order to mitigate the impact
 of the Proposed Project:

CPS Energy shall conduct surveys, if not already completed, to identify
 pipelines that could be affected by the transmission lines and coordinate
 with pipeline owners in modeling and analyzing potential hazards because
 of alternating-current interference affecting pipelines being paralleled.

If CPS Energy encounters any archeological artifacts or other cultural
resources during project construction, work must cease immediately in the
vicinity of the artifact or resource, and the discovery must be reported to
the Texas Historical Commission. In that situation CPS Energy must take
action as directed by the Texas Historical Commission.

12 3. CPS Energy must follow the procedures to protect raptors and migratory 13 birds as outlined in the following publications: Reducing Avian Collisions 14 with Power Lines: The State of the Art in 2012, Edison Electric Institute 15 and Avian Power Line Interaction Committee, Washington, D.C. 2012; 16 Suggested Practices for Avian Protection on Power Lines: The State of the 17 Art in 2006, Edison Electric Institute, Avian Power Line Interaction 18 Committee, and the California Energy Commission, Washington, D.C. and 19 Sacramento, CA 2006; and Avian Protection Plan Guidelines, Avian 20 Power Line Interaction Committee and United States Fish and Wildlife 21 Service, April 2005. CPS Energy must take precautions to avoid disturbing 22 occupied nests and take steps to minimize the burden of construction on 23 migratory birds during the nesting season of the migratory bird species

DIRECT TESTIMONY WITH ERRATA OF JOHN POOLE, P.E. APRIL 26, 2021

1

identified in the area of construction.

- 4. CPS Energy must exercise extreme care to avoid affecting non-targeted
 vegetation or animal life when using chemical herbicides to control
 vegetation within rights-of-way. CPS Energy must ensure that the use of
 chemical herbicides to control vegetation within the rights-of-way
 complies with rules and guidelines established in the Federal Insecticide
 Fungicide and Rodenticide Act and with Texas Department of Agriculture
 regulations.
- 9 5. CPS Energy must minimize the amount of flora and fauna disturbed during 10 construction of the transmission lines, except to the extent necessary to 11 establish appropriate right-of-way clearance for the transmission lines. In 12 addition, CPS Energy must revegetate, using native species and must 13 consider landowner preferences and wildlife needs in doing so. 14 Furthermore, to the maximum extent practical, CPS Energy must avoid 15 adverse environmental influence on sensitive plant and animal species and 16 their habitats, as identified by the TPWD and the United States Fish and 17 Wildlife Service (USFWS).
- 6. CPS Energy must implement erosion control measures as appropriate. Erosion control measures may include inspection of the right-of-way before and during construction to identify erosion areas and implement special precautions as determined necessary. CPS Energy must return each affected landowner's property to its original contours and grades unless otherwise agreed to by the landowner or the landowner's representative.

			Page 15
1			CPS Energy is not required to restore the original contours and grades
2			where a different contour or grade is necessary to ensure the safety or
3			stability of the project's structures or the safe operation and maintenance of
4			the lines.
5		7.	CPS Energy must use best management practices to minimize the potential
6			impacts to migratory birds and threatened or endangered species.
7		8.	CPS Energy must cooperate with directly affected landowners to
8			implement minor deviations from the approved route to minimize the
9			burden of the transmission lines. Any minor deviations from the approved
10			route must only directly affect landowners who were sent notice of the
11			transmission line in accordance with 16 TAC § $22.52(a)(3)$ and landowners
12			that have agreed to the minor deviation.
13		9.	CPS Energy must report the transmission line approved by the Commission
14			on its monthly construction progress reports before the start of construction
15			to reflect the final estimated cost and schedule in accordance with 16 TAC
16			§ 25.83(b). In addition, CPS Energy must provide final construction costs,
17			with any necessary explanation for cost variance, after completion of
18			construction when all costs have been identified.
19			
20	Q.	Does	your recommended route differ from the route that CPS Energy believes
21		best a	addresses the requirements of PURA and the Commission's rules?
22	A.	Yes.	CPS Energy believes Route Z best meets the requirements of PURA and the

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1		Commission's rules. ⁶ However, in CPS Energy's Application Amendment, it
2		appears CPS Energy replaced the original Route Z with Route Z1 following some
3		segment adjustments. ⁷
4		
5	IV.	PROJECT JUSTIFICATION
6	А.	DESCRIPTION OF THE PROJECT
7		
8	Q.	Please describe the Proposed Project.
9	A.	The Proposed Project consists of the construction of a new double circuit 138-kV
10		electric transmission line to be built on brown colored steel monopole structures in
11		Bexar County, Texas.8 The transmission line project will begin at the proposed
12		CPS Energy Scenic Loop Substation, that will be built in one of seven locations in
13		the area of the intersections of Scenic Loop Road and Toutant Beauregard Road.
14		The transmission line will then proceed generally westwards to one of six points
15		along the existing CPS Energy Ranchtown to Menger Creek 138-kV transmission
16		line.9 CPS Energy proposes to support the transmission line using single circuit
17		steel single pole structures generally ranging between 70 to 130 feet in height. ¹⁰
18		

Page 16

19

- ⁸ Application at 4-5.
- ⁹ Application at 3.
- ¹⁰ Application Attachment 1 at 1-17 through 1-20.

⁶ Application at 29.

⁷ Amendment to CPS Energy's Application (Application Amendment) at 2 (Dec. 22, 2020).

Q. Does CPS Energy's application contain a number of alternative routes sufficient to conduct a proper evaluation?

Page 17

3 A. Yes. CPS Energy's application and application amendment proposed three routes from Substation Site 1 (Routes A, B1, and C1), three routes routes from Substation 4 5 Site 2 (Routes D1, E, and F1), six routes from Substation Site 3 (Routes G1, H, I1, 6 J1, K, and L), one route from Substation Site 4 (Route M1), two routes from 7 Substation Site 5 (Routes N1 and O), eight routes from Substation Site 6 (Routes P. O1, R1, S, T1, U1, V, and W), and eight routes from Substation Site 7 (Routes 8 9 X1, Y, Z1, AA1, BB, CC, DD, and EE). Four routes then terminate at the existing 10 CPS Energy Ranchtown to Menger Creek 138-kV transmission line at Segment 40 11 (Routes A, E, H, and Y), nine routes terminate at Segment 46b (Routes B1, C1, 12 D1, I1, M1, T1, X1, Z1, and DD), four routes terminate at Segment 49a (Routes 13 G1, J1, AA1, and EE), seven routes terminate at Segment 43 (Routes F1, K, N1, P, 14 R1, BB, and CC), four routes terminate at Segment 44 (Routes O, Q1, V, and W), 15 and three routes terminate at Segment 45 (Routes L, S, and U1).11 16 Seven further routes have been proposed by intervenors in this proceeding. Routes 17 AA2,¹² Dreico 1, Dreico 2, Dreico 3, Dreico 4, Dreico 5, and Dreico 6.¹³ All of 18 these proposed seven routes start from Substation Site 7. Three of these routes 19 terminate at Segment 46b (Routes Dreico 2, Dreico 4, and Dreico 6) and four 20 terminate at Segment 49a (Routes AA2, Dreico 1, Dreico 3, and Dreico 5).

¹¹ Application Amendment Attachment 2 at Table 2-1.

¹² Lisa Chandler's First Requests for Information to CPS Energy at 7, (Jan 25, 2021).

¹³ Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'S First Set of Requests for Information to CPS Energy at 6, (Feb 12, 2021).

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1		
2	Q.	Is the Proposed Project located within the incorporated boundaries of any
3		municipality?
4	A.	None of alternative routes would be constructed within an incorporated
5		municipality.14
6		
7	B.	TEXAS COASTAL MANAGEMENT PROGRAM
8		
9	Q.	Does any part of this project lie within the Texas Coastal Management
10		Program (TCMP) boundary?
11	A.	No. The Proposed Project is not located, either in whole or in part, within the
12		TCMP boundary. ¹⁵
13		
14	C.	NEED FOR THE PROJECT
15		
16	Q.	Could you briefly summarize the need for the project?
17	А.	Yes. As stated in the Application, this CCN is needed to address a projected 4-7
18		percent annual growth rate in the northwest corner of Bexar County. ¹⁶ This growth
19		is projected to see the 2018 load in the area of Scenic Loop grow from 149,952
20		kilowatts (kW) to 255,932 kW by 2031. This CCN would also address the very

¹⁴ Application at 8.

¹⁵ Application at 41.

¹⁶ Application Attachment 13 at 5.

1		long distribution circuits origination from the CPS Energy La Sierra and Fair Oaks
2		Ranch Substations which are up to seven times longer than the average CPS
3		Energy distribution circuit needed to support the current load. The combination of
4		this load growth and long distribution circuits is projected, by Burns & McDonnell
5		Engineering Company, Inc. (Burns & McDonnell) in its Scenic Loop Substation
6		Analysis Report attached to the application as Attachment 13, to reach the existing
7		distribution system's reliability limit by 2024.17
8		
9	Q.	Has an independent organization, as defined in PURA § 39.151, determined
10		that there is a need for the Proposed Project?
11	A.	No. This project is for a transmission line to service load growth and is therefore
12		classified as a Tier 4 Neutral project. The Electric Reliability Council of Texas
13		(ERCOT) protocols do not require Tier 4 Neutral projects to be submitted to
14		ERCOT for review. ¹⁸
15		
16	Q.	Are the proposed facilities necessary for the service, accommodation,
17		convenience, or safety of the public within the meaning of PURA § 37.056(a)?
18	A.	Yes. In my opinion, based on the data and load projections provided by CPS
19		Energy and Burns & McDonnell in the Scenic Loop Substation Analysis Report, ¹⁹
20		it is evident that this project is necessary and is the best way to address the

¹⁷ Application Attachment 13 at 44.

¹⁸ Application at 4.

¹⁹ Application Attachment 13.

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1		reliability issues resulting from the load growth in the area.
2		
3		
4	D.	PROJECT ALTERNATIVES
5		
6	Q.	Did CPS Energy consider distribution alternatives to the Proposed Project?
7	A.	Yes. Burns & McDonnell studied five different alternatives to the Proposed
8		Project, three of which were distribution alternatives. ²⁰
9		
10	Q.	What was the conclusion Burns & McDonnell reached as a result of that
11		study?
11 12	A.	study? Burns & McDonnell investigated three distribution alternatives and none of them
	A.	
12	A.	Burns & McDonnell investigated three distribution alternatives and none of them
12 13	A.	Burns & McDonnell investigated three distribution alternatives and none of them met the reliability criteria for serving both the forcasted load growth and resolving
12 13 14	A.	Burns & McDonnell investigated three distribution alternatives and none of them met the reliability criteria for serving both the forcasted load growth and resolving the issues with the length of the distribution circuits in a cost effective fashion. ²¹
12 13 14 15	A.	Burns & McDonnell investigated three distribution alternatives and none of them met the reliability criteria for serving both the forcasted load growth and resolving the issues with the length of the distribution circuits in a cost effective fashion. ²¹ Burns & McDonnell also investigated distributed generation alternatives but these
12 13 14 15 16	A.	Burns & McDonnell investigated three distribution alternatives and none of them met the reliability criteria for serving both the forcasted load growth and resolving the issues with the length of the distribution circuits in a cost effective fashion. ²¹ Burns & McDonnell also investigated distributed generation alternatives but these were substantially more expensive then the transmission project alternative. ²²

- 20
- ²⁰ Application Attachment 13 at 39.
- ²¹ Application Attachment 13 at 37-41.
- ²² Application Attachment 13 at 38-40.
- ²³ Application at 17.

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1	Q.	Do you agree that the Proposed Project is the best option when compared to
2		other alternatives?
3	A.	Yes.
4		
5	V.	ROUTING
6		
7	А.	STAFF RECOMMENDATION
8	Q.	What routes do you recommend upon considering all factors, including the
9		factors in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?
10	A.	Based on my analysis of all the factors that the Commission must consider under
11		PURA § 37.056 and 16 TAC § 25.101, I recommend that Route P be approved for
12		the Proposed Project. The basis for my recommendation is discussed in more detail
13		in the remainder of my testimony.
14		
15	Q.	Which route did CPS Energy select as the route that it believes best meets the
16		requirements of PURA and the Commission's rules?
17	A.	CPS Energy selected Route Z as the route that it believes best meets the
18		requirements of PURA and the Commission's rules. ²⁴ However, in CPS Energy's
19		Application Amendment, it appears CPS Energy replaced the original Route Z
20		with Route Z1 following some segment adjustments. ²⁵
21		

²⁴ Application at 29.

²⁵ Application Amendment at 2.

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B. COMMUNITY VALUES

2

1

Q. Has CPS Energy sought input from the local community regarding community values?

Page 22

5 Yes. CPS Energy held a public meeting as required by 16 TAC § 22.52(a)(4). The A. 6 public meeting was conducted on October 3, 2019, from 5:30 pm to 7:30 pm at the 7 Cross Mountain Church, 24891 Boerne Stage Road in San Antonio, Texas.²⁶ CPS 8 Energy sent 592 notices of the meeting to land owners owning property within 300 feet of each of the proposed alternative route segment centerlines.²⁷ Notice of the 9 10 meeting was also published in the San Antonio Express News on September 22 and 29, 2019.28 A total of 172 individuals signed in at the meeting and CPS 11 12 Energy received 146 questionnaire responses at, or shortly after, the meeting with 40 additional questionnaires received later.²⁹ 13

14

15 Q. Did members of the community who returned questionnaires express 16 concerns about the Proposed Project?

A. Yes. CPS Energy received 186 questionnaires at and after the public meeting.
Section 6.0 of Attachment 1 of CPS Energy's application, the EA, contains a
discussion and summary of the questionnaire responses. The respondents were
asked to rank criteria in routing the project that they considered to be the most

- ²⁸ Application Attachment 1 at 6-1.
- ²⁹ Application Attachment 1 at 6-2.

²⁶ Application Attachment 1 at 6-1.

²⁷ Application Attachment 1 at 6-1.

1		important. The two criteria that ranked highest were maximizing distance from
2		residences and visibility of structures. ³⁰ The respondents were asked to list any
3		segments or substation sites for which they had concerns. The segments which had
4		the most negative comments were Segments 15, 26, and 16.31 The Substation Sites
5		which had the most negative comments were Substation sites 5, 2, and 4.
6		However, other segments such as Segments 46a, 42a, 26a, and 54 were added only
7		after the public meetings and thus did not receive any direct opposition at the
8		meetings. ³² Likewise some substation sites such as Substation Site 6 and
9		Substation Site 7 were added only after the public meetings and thus did not receie
10		any direct opposition at the meetings. ³³
11		
11 12	Q.	In your opinion, would construction of the Proposed Project on Route P
	Q.	In your opinion, would construction of the Proposed Project on Route P mitigate the concerns expressed by members of the community at the open
12	Q.	
12 13	Q. A.	mitigate the concerns expressed by members of the community at the open
12 13 14		mitigate the concerns expressed by members of the community at the open houses?
12 13 14 15		mitigate the concerns expressed by members of the community at the open houses? In my opinion, Route P would mitigate some of the concerns expressed by
12 13 14 15 16		mitigate the concerns expressed by members of the community at the open houses? In my opinion, Route P would mitigate some of the concerns expressed by members of the community at the open houses. Route P does contain one of the
12 13 14 15 16 17		mitigate the concerns expressed by members of the community at the open houses? In my opinion, Route P would mitigate some of the concerns expressed by members of the community at the open houses. Route P does contain one of the segments negatively mentioned in the questionnaires received during and after the

³⁰ Application Attachment 1 at 6-2.

³¹ Application Attachment 1 at 6-4.

³² Application Attachment 1 at 6-5 and Application Amendment Attachment 2 at 33-35.

³³ Application Attachment 1 at 6-5.

	SUAH	Page 24
1		centerline of its segments, which is tied for the fifth fewest among the 31
2		alternative routes. The criteria that ranked second in the questionnaires received
3		during and after the public meeting was reducing visibility of structures and Route
4		P is 4.89 miles long, which is the eighth longest route and only 0.36 miles longer
5		than the shortest route. ³⁴
6		I will specifically address recreational and park areas, historical values, aesthetic
7		values, environmental integrity, engineering constraints, costs, moderation of
8		impact on the affected community and landowners, and right-of-way later in my
9		testimony.
10		
11	Q.	Are property values and the impact on future/potential development factors
12		considered by the Commission in a CCN proceeding under PURA §
13		37.056(c)(4) or in 16 TAC § 25.101(b)(3)(B)?
14	A.	No. PURA and the Commission's rules do not list these two issues as factors that
15		are to be considered by the Commission in a CCN proceeding. However, these
16		rules do require consideration of using or paralleling existing rights-of-way, which
17		may minimize concerns about these impacts.
18		

19Q.Are there any routes that did not receive specific opposition from20intervenors?

21 A. No.

³⁴ Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

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1		
2	C.	RECREATIONAL AND PARK AREAS
3		
4	Q.	Are any parks or recreational areas located within 1,000 feet of the centerline
5		of any of the alternative routes?
6	A.	No, none of the proposed alternative routes cross or are located within 1,000 feet
7		of any park or recreation area. ³⁵
8		
9	D.	HISTORICAL VALUES
10		
10		
11	Q.	Are there possible impacts from the Proposed Project on archeological and
11	Q.	Are there possible impacts from the Proposed Project on archeological and historical values, including known cultural resources crossed by any of the
11 12	Q.	
11 12 13	Q.	historical values, including known cultural resources crossed by any of the
11 12 13 14	Q. A.	historical values, including known cultural resources crossed by any of the proposed alternative routes or that are located within 1,000 feet of the
11 12 13 14 15		historical values, including known cultural resources crossed by any of the proposed alternative routes or that are located within 1,000 feet of the centerline of any of the alternative routes?
11 12 13 14 15 16		historical values, including known cultural resources crossed by any of the proposed alternative routes or that are located within 1,000 feet of the centerline of any of the alternative routes? There are seventeen recorded archeological or historical sites with an additional
		historical values, including known cultural resources crossed by any of the proposed alternative routes or that are located within 1,000 feet of the centerline of any of the alternative routes? There are seventeen recorded archeological or historical sites with an additional three National Register of Historic Places (NRHP) listed resources and two
 11 12 13 14 15 16 17 		historical values, including known cultural resources crossed by any of the proposed alternative routes or that are located within 1,000 feet of the centerline of any of the alternative routes? There are seventeen recorded archeological or historical sites with an additional three National Register of Historic Places (NRHP) listed resources and two cemeteries are within 1,000 feet from the centerline of at least one routing segment

³⁵ Application Amendment Attachment 2 at 4-25.

³⁶ Application Amendment Attachment 2 at 4-27.

every route has at least one cultural site within 1,000 feet of their centerlines.³⁷
Route P crosses one recorded archeological or historic site and crosses one NRHP
listed site. Route P has 10 additional archeological or historic sites within 1,000
feet of its centerline along with one cemetery within 1,000 feet of its centerline.³⁸
The table below shows the proposed alternative routes in this project and how
many cultural resources they cross and the number of additional cultural resources
within 1,000 feet of each of their centerlines.³⁹

8

Route	Number of Recorded Archeological or Historical Sites Crossed	Number of additional Recorded Archeological or Historical Sites within 1,000 feet of the centerline	Number of NRHP listed properties crossed	Number of additional NRHP listed properties within 1,000 feet of the centerline	Number of Cemeteries within 1,000 feet of the centerline
A	0	0	0	1	0
Н	0	0	0	1	0
К	0	0	1	0	0
L	0	0	1	0	0
BB	0	0	1	0	0
CC	0	0	1	0	0
E	0	2	0	1	0
X1	0	2	0	1	0

³⁷ Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co's First Request for Information 1-1 (March 1, 2021).

38 Id.

39 *Id.* .

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Dreico 3	0	2	0	1	0
Dreico 4	0	2	0	1	0
Cl	0	2	0	1	1
D1	0	2	0	1	1
11	0	2	0	1	1
J1	0	2	0	1	1
M1	0	2	0	1	1
Z1	0	2	0	1	1
AA1	0	2	0	1	1
DD	0	2	0	1	1
EE	0	2	0	1	1
AA2	0	2	0	1	1
Dreico 5	0	2	0	1	1
Dreico 6	0	2	0	1	1
B1	0	2	0	2	1
G1	0	2	0	2	1
Y	0	2	0	2	1
Dreico 1	0	2	0	2	1
Dreico 2	0	2	0	2	1
V	1	0	1	0	0
0	1	1	1	0	0
S	1	1	1	0	0
W	1	1	1	0	0
Р	1	10	1	0	1
T1	1	12	0	1	2

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F1	2	12	1	0	1	
N1	2	12	1	0	1	
Q1	2	12	1	0	1	
RI	2	12	1	0	1	
U1	2	12	1	0	1	

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1

2 The lengths of the proposed alternative routes that cross areas of high 3 archeological potential range from 1.44 miles for Route H to 4.77 miles for 4 Route U1.⁴⁰ Route P crosses 2.49 miles of high archeological potential, which is 5 the 14th least of the proposed alternative routes. While Route P has 10 Recorded 6 Archeological or Historical Sites sites and 1 cemetery within 1,000 feet of its 7 centerline, it only crosses 1 Recorded Archeological or Historical Site and 1 NHRP listed property while being 14th among all proposed alternative routes in 8 9 areas of high archeological potential crossed. Therefore, I conclude that Route P is 10 acceptable from a historical values perspective.

Should the Commission order that one of the routes that crosses a Recorded Archeological or Historical Sites site be constructed (Routes V, O, S, W, P, T1, F1, N1, Q1, R1, or U1), CPS Energy should work with the Texas Historical Commission to determine what appropriate actions should be taken to mitigate the impacts on the site. If any further archeological or cultural resources are found during construction of the proposed transmission line, CPS Energy should immediately cease work in the vicinity of the archeological or cultural resources,

⁴⁰ Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

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1		and should immediately notify the Texas Historical Commission.
2		
3	E.	AESTHETIC VALUES
4		
5	Q.	In your opinion, which of the proposed routes would result in a negative
6		impact on aesthetic values, and which portions of the study area will be
7		affected?
8	А.	In my opinion, all of the proposed alternative routes would result in a negative
9		impact on aesthetic values, some routes more than others, depending on the
10		visibility from homes and public roadways. Temporary effects would include
11		views of the actual transmission line construction (e.g. assembly and erection of
12		the structures) and of any clearing of right-of-way. Permanent effects would
13		involve the visibility of the structures and the lines. I therefore conclude that
14		aesthetic values would be impacted throughout the study area, and that these
15		temporary and permanent negative aesthetic effects will occur on any proposed
16		alternative routes approved by the Commission. However, Route P is the eighth
17		shortest of the proposed alternative routes, only 0.36 miles longer than the shortest
18		route, and impacts the fourth fewest habitable structures of the proposed
19		alternative routes, both of which would help to mitigate those impacts compared to
20		the majority of the proposed alternative routes in this docket.
21		
22		
23		

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F. ENVIRONMENTAL INTEGRITY

2

1

3 Q. Please provide a general description of the area traversed by the proposed 4 alternative routes.

5 A. The area traversed by the project is within the the transitional area between the 6 Balcones Escarpment/Blackland Prairies and the Edwards Plateau physiographic 7 region of Texas. The region's topography is characterized by flat upper surfaces, 8 interspersed by drainages that open up into larger draws or box canyons. The study 9 area has its lowest elevation at approximately 1,250 feet above mean sea level and 10 its highest elevation at 1,400 feet above mean sea level. The elevation tends to 11 decrease from northeast to southeast.⁴¹

12

Q. What was involved in your analysis of the environmental impact of the Proposed Project?

A. I reviewed the information provided in the Application and the EA, the
Application Amendment, the direct testimonies and statements of position of the
intervenors, responses to requests for information, and the letters from TPWD to
Ms. Rachelle Robles, dated September 10, 2020 and February 18, 2021.⁴²

19

20

Q.

Based on your review of the information identified above, in your opinion,

21

will the Proposed Project present a significant negative impact to

⁴¹ Application Attachment 1 at 3-1.

⁴² Attachment JP-3 and JP-4.

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1 environmental integrity?

2 A. No. Transmission lines do not often create many long-term impacts on soils. Most of those impacts will be during intial construction and would be erosion and soil 3 4 compaction. However, CPS Energy has confirmed that it will employ erosion control during initial construction.⁴³ Impacts on vegetation would be the result of 5 6 clearing and maintaining the right-of-way, and the length of upland woodland or 7 brushland along the right-of-way of the proposed alternative routes range from 3.05 miles for Route Dreico 6 to 6.52 miles for Route V.⁴⁴ Power Engineers do not 8 9 anticipate encountering endangered or threatened plant or animal species in the 10 study area, though the bracted twistflower, the Madla Cave meshweaver, two 11 unnamed beetles, the Helotes mold beetle, the whooping crane, or golden-cheeked warbler might occur.⁴⁵ In the event endangered or threatened plant or animal 12 13 species are encountered, CPS Energy should attempt to span or avoid them as 14 much as practicable. None of the proposed alternative routes cross any known 15 occupied habitat for any federally listed endangered or threatened species.⁴⁶ 16 Nevertheless, construction of some of the alternative routes could, at some 17 locations, present a negative impact on the environment.

18

In its letter dated February 18, 2021, TPWD stated that it selects Route DD as the

⁴³ Application Amendment Attachment 2 at 4-9.

⁴⁴ Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

⁴⁵ Application Amendment Attachment 2 at 4-16.

⁴⁶ Application Amendment Attachment 2 at 4-15.

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1 route having the least potential impact on environmental integrity.⁴⁷ 2 3 Q. In your opinion, how would construction of the Proposed Project on Route P 4 compare from an environmental perspective to construction on the other routes? 5 The Proposed Project is expected to cause only short-term effects to water, soil, 6 Α. 7 and ecological resources during the initial construction phase. Route P is generally 8 ranked well among the proposed alternative routes in most alternative categories. 9 It has the sixth least length of right-of-way across the Edwards Aquifer 10 contributing zone, it has the fifth least length across FEMA mapped 100-year 11 floodplains, and it has the fifth least stream crossings. However, Route P does 12 cross 25.11 acres of golden-cheeked warbler modeled habitat designated as 3-13 Moderate High and 4-High Quality which is the worst of any route.⁴⁸ CPS Energy 14 has not yet confirmed this or the presence of the golden-cheeked warbler in the 15 study area via field survey. TPWD recommended that CPS should, prior to 16 conducting surveys of the approved alternative route, contact the United States 17 Fish and Wildlife Services (USFWS) for appropriate survey protocols for 18 surveying for golden-cheeked warblers.49

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19

⁴⁷ Attachment JP-4 at 2.

⁴⁸ Rebuttal Testimony of Lisa Meaux Exhibit LBM-1R (April 7, 2021) and CPS Energy's response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and Crighton Development Co.'s First Request for Information 1-1 (March 1, 2021).

⁴⁹ Attachemnt JP-3 at 4.

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1	Q.	Do you conclude that Route P is acceptable from an environmental and land
2		use perspective?
3	A.	Yes.
4		
5	G.	ENGINEERING CONSTRAINTS
6		
7	Q.	Are there any possible engineering constraints associated with this project?
8	A.	There are no specific engineering constraints that are not present in typical
9		transmission line projects. In my opinion, all of the possible constraints can be
10		adequately addressed by using design and construction practices and techniques
11		that are usual and customary in the electric utility industry.
12		
13	Q.	Are there any special circumstances in this Project that would warrant an
14		extension beyond the seven-year limit for the energization of the line?
15	A.	No, CPS Energy has not described any special circumstances that would merit an
16		extension of this limit for this project.
17		
18	H.	COSTS
19		
20	Q.	What are CPS Energy's estimated costs of constructing the Proposed Project
21		on each of the proposed alternative routes?
22	A.	Attachment 3 of the Application Amendment, Exhibit SDL-2R of the Rebuttal
23		Testimony of Scott D. Lyssy on behalf of CPS Energy, and CPS Energy's

1	response to Toutant Ranch, Ltd., ASR Parks, LLC, Pinson Interests Ltd. LLP, and
2	Crighton Development Co.'s First Request for Information 1-1 lists CPS Energy's
3	estimated costs of constructing each proposed route. The cost of each route has
4	three components: the proposed CPS Energy Scenic Loop Substation, the
5	transmission line, and a 10% contingency fee to cover unknown project costs not
6	evident at the time of the estimate.50 The cost for the Scenic Loop Substation
7	varies, depending on which subsite is selected. ⁵¹ The table below shows the total
8	estimated cost, with all three components included, for each of the routes from
9	least expensive to the most expensive proposed alternative route:

10

Route	Estimated Cost of the Route
AA1	\$38,291,571.63
Z1	\$38,474,771.50
Dreico 6	\$38,815,298.00
DD	\$38,996,942.59
AA2	\$39,048,155.00
EE	\$39,757,434.71
Dreico 5	\$40,113,172.00
Dreico 4	\$41,670,814.00
Y	\$42,723,886.97
BB	\$42,741,654.35
Dreico 2	\$42,745,438.00
II	\$42,877,497.33
P	\$43,408,742.18
RI	\$43,522,858.14
Dreico 3	\$43,829,483.00
CC	\$43,897,472.16
D1	\$43,904,817.64
J1	\$44,068,605.60
Dreico 1	\$44,720,445.00
X1	\$45,496,086.62
Q1	\$45,890,914.04

⁵⁰ Application Amendment at 136-138.

⁵¹ Application Amendment at 138.

\$46,044,319.76
\$46,467,251.17
\$46,803,781.14
\$47,259,332.79
\$47,373,300.80
\$49,658,757.14
\$50,551,923.25
\$50,562,535.51
\$51,216,233.88
\$52,869,827.60
\$53,621,914.79
\$54,086,148.54
\$54,169,034.11
\$54,505,459.92
\$54,695,383.90
\$55,327,169.75
\$56,194,702.73

1

2

3

As the table illustrates, Route P is the 13th least expensive proposed alternative route.

4 Q. Could you briefly discuss the routes less expensive than Route P and why 5 Route P is still preferred?

6 A. Yes. All Routes that are less expensive than Route P impact more habitable structures. Routes AA1, BB, DD, Z1, and AA2 have more habitable structures 7 within 300 feet of their centerlines and make less use of compatible right-of-way 8 9 or property lines as a percentage of their length. Routes EE, Dreico 2, Dreico 4, 10 and Dreico 5 have more habitable structures within 300 feet of its centerline, make 11 less use of compatible right-of-way or property lines as a percentage of its length, and are longer. Routes Y and I1 have more habitable structures within 300 feet of 12 13 their centerlines and are longer.

- 14
- 15

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1	Q.	Does CPS Energy's estimated cost of constructing the Proposed Project
2		appear to be reasonable?
3	А.	After reviewing CPS Energy's estimates, the estimated costs for the alternative
4		routes are roughly what I would expect considering the terrain. However, the
5		reasonableness of the final installed cost of the completed project will be
6		determined at a future date in the course of a rate proceeding.
7		
8	I.	MODERATION OF IMPACT ON THE AFFECTED COMMUNITY AND
9		LANDOWNERS
10		
11	Q.	Do the Commission's rules address routing alternatives intended to moderate
12		the impact on landowners?
13	A.	Yes. Under 16 TAC § 25.101(b)(3)(B), "the line shall be routed to the extent
14		reasonable to moderate the impact on the affected community and landowners
15		unless grid reliability and security dictate otherwise."
16		
17	Q.	Subsequent to filing its application, has CPS Energy made or proposed any
18		routing adjustments to accommodate landowners?
19	A.	Yes. These routing adustments were made in CPS Energy's Application
20		Amendment.
21		
22		
23		

		Page 37
1	Q.	Has CPS Energy proposed any specific means by which it will moderate the
2		impact of the Proposed Project on landowners or the affected community
3		other than adherence to the Commission's orders, the use of good utility
4		practices, acquisition of and adherence to the terms of all required permits,
5		and what you have discussed above?
6	A.	Not to my knowledge.
7		
8	J.	RIGHT-OF-WAY
9		
10	Q.	Do the Commission's rules address routing along existing corridors?
11	A.	Yes. The following factors are to be considered under 16 TAC § 25.101(b)(3)(B):
12		(i) whether the routes utilize existing compatible rights-of-way, including the
13		use of vacant positions on existing multiple-circuit transmission lines;
14		(ii) whether the routes parallel existing compatible rights-of-way;
15		(iii) whether the routes parallel property lines or other natural or cultural
16		features; and
17		(iv) whether the routes conform with the policy of prudent avoidance.
18		
19	1.	USE AND PARALLELING OF EXISTING, COMPATIBLE RIGHT-OF-
20		WAY (INCLUDING APPARENT PROPERTY BOUNDARIES)
21		
22		
23		

Q. Describe how CPS Energy proposes to use existing, parallel, or compatible right-of-way for the Proposed Project.

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3 A. Each proposed alternative route parallels apparent property boundaries and 4 parallels or utilizes existing compatible rights-of-way. The percentage of Route P 5 length that parallels or utilizes existing compatible right-of-way and apparent 6 property boundaries is approximately 71% of its length. The table below 7 summarizes the overall length, the length parallel to a compatible rights-of-way or 8 to a property boundary, and the total percentage of parallel rights-of-way used by 9 the proposed alternative routes. Commission Rule 16 TAC § 25.101(b)(3)(B) does 10 not consider existing pipeline rights-of-way as compatible rights-of-way.

Route	Length (Miles)	Length Parallel to Right- of-Way (Miles)	Percentage
А	6.66	5.50	82.59%
Y	5.23	4.27	81.53%
Н	6.32	5.09	80.46%
Е	6.62	4.99	75.38%
	5.93	4.46	75.24%
Dreico 6	4.57	3.36	73.52%
CC	5.23	3.84	73.43%
v	6.60	4.82	73.01%
M1	5.85	4.25	72.67%
<u>I1</u>	5.03	3.59	71.43%
Р	4.89	3.47	71.00%
DD	4.64	3.27	70.49%
F1	5.66	3.97	70.12%
K	5.29	3.71	70.07%
BB	4.73	3.30	69.81%
D1	5.22	3.62	69.38%
Q1	5.56	3.83	68.80%
N1	5.33	3.64	68.28%
Dreico 2	5.32	3.63	68.23%

DIRECT TESTIMONY WITH ERRATA OF JOHN POOLE, P.E. APRIL 26, 2021

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1	1	I	
Z1	4.53	3.09	68.21%
B1	6.19	4.19	67.69%
Dreico 4	5.27	3.55	67.36%
C1	5.77	3.82	66.23%
X1	5.34	3.46	64.87%
R1	4.76	3.06	64.32%
L	6.91	4.38	63.42%
0	6.83	4.21	61.58%
UI	6.36	3.74	58.77%
Dreico 5	4.92	2.88	58.54%
W	6.25	3.63	58.03%
AA1	4.82	2.72	56.48%
EE	4.99	2.81	56.22%
J1	5.46	3.04	55.71%
Dreico 1	5.67	3.15	55.56%
Dreico 3	5.62	3.07	54.63%
G1	6.20	3.31	53.37%
AA2	4.89	2.59	52.92%
S	6.73	3.31	49.09%

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1

2

3

As the chart shows, Route P is the eighth shortest route and ranks 11th in terms of percentage of compatible right-of-way compared to the other alternative routes.

4

5

6

Q. Could you briefly discuss the routes with a higher percentage of compatible right-of-way and why Route P is still preferred?

A. Yes. Routes A, H, E, T1, CC, V, and M1 are more expensive, have more habitable
structures within 300 feet of their centerlines, and are longer. Routes Y and I1
have more habitable structures within 300 feet of their centerlines and are longer.
Route Dreico 6 has more habitable structures within 300 feet of its centerline.

11

1	2.	PARALLELING OF NATURAL OR CULTURAL FEATURES
2		
3	Q.	Describe how CPS Energy proposes to parallel natural or cultural features
4		for the Proposed Project.
5	A.	None of the proposed alternative routes parallel natural or cultural features.
6		
7		
8	K.	PRUDENT AVOIDANCE
9		
10	Q.	Define prudent avoidance.
11	А.	Prudent avoidance is defined by 16 TAC § 25.101(a)(6) as follows: "The limiting
12		of exposures to electric and magnetic fields that can be avoided with reasonable
13		investments of money and effort."
14		
15	Q.	How can exposure to electric and magnetic fields be limited when routing
16		transmission lines?
17	А.	Primarily by proposing alternative routes that would minimize, to the extent
18		reasonable, the number of habitable structures located in close proximity to the
19		routes.
20		
21		
22		
23		

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1 Q. How many habitable structures are located in close proximity to each of the

2 proposed alternative routes?

- 3 A. The table below ranks the number of habitable structures that are within 300 feet
- 4 of the centerline of the proposed routes in this project.

Route	Number of habitable structures
Q1	12
ŪI	12
R1	13
P	17
N1	17
F1	18
BB	27
S	29
W	29
AA2	30
Z1	31
AA1	31
V	32
EE	32
0	33
DD	33
Dreico 5	33
Dreico 6	34
T1	37
L	38
K	39
Y	40
X1	41
Dreico 3	41
J1	42
Dreico 4	42
D1	44
I1	44
M1	44
Dreico 1	44
Dreico 2	45
C1	49
G1	53
CC	57
Е	61
Н	62
B1	64
А	72

5

DIRECT TESTIMONY WITH ERRATA OF JOHN POOLE, P.E. APRIL 26, 2021

		Page 42
1		There are 17 habitable structures that are within 300 feet of the centerline of Route
2		P. Therefore, Route P ranks tied for fourth among all the proposed alternative
3		routes with regard to this criterion.
4		
5	Q.	Could you briefly discuss the routes with the same or fewer habitable
6		structures and why Route P is still preferred?
7	A.	Yes. Route Q1, U1, and N1 are more expensive, make less use of compatible
8		right-of-way or property lines as a percentage of their length, and are longer. Route
9		R1 is more expensive and makes less use of compatible right-of-way or property
10		lines as a percentage of its length.
11		
12	Q.	Do you conclude that CPS Energy's proposed alternative routes have
12 13	Q.	Do you conclude that CPS Energy's proposed alternative routes have minimized, to the extent reasonable, the number of habitable structures
	Q.	
13	Q . A.	minimized, to the extent reasonable, the number of habitable structures
13 14	-	minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes?
13 14 15	-	minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes?
13 14 15 16	A.	minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes? Yes.
13 14 15 16 17	A.	minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes? Yes.
13 14 15 16 17 18	A. VI.	minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes? Yes. CONCLUSION
13 14 15 16 17 18 19	A. VI.	<pre>minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes? Yes. CONCLUSION In your opinion, is any one of the proposed alternative routes better than all</pre>
 13 14 15 16 17 18 19 20 	A. VI. Q.	<pre>minimized, to the extent reasonable, the number of habitable structures located in close proximity to the routes? Yes. CONCLUSION In your opinion, is any one of the proposed alternative routes better than all of the other routes in all respects?</pre>

		0
1	Q.	If no proposed alternative route is better than all of the others in all respects,
2		why have you recommended Route P instead of the other proposed
3		alternative routes?
4	A.	In summary, after analyzing all the factors that the Commission must consider
5		under PURA § 37.056 and 16 TAC § 25.101, I conclude that Route P best meets
6		the criteria of PURA and the Commission's rules because:
7		(1) Route P is the 13th least expensive route at \$43,408,742.18,
8		(2) Route P is tied for fourth-least number of habitable structures within
9		300 feet of its centerline with 17,
10		(3) Route P is the eighth shortest route at 4.89 miles, and
11		(4) Route P is 11th best proposed alternative route utilizing existing
12		compatible right-of-way and property lines at 71% of its total length.
13		Route P, like all of the proposed alternative routes, has some advantages and some
14		disadvantages as I have discussed in my testimony. However, I consider Route P
15		overall to have the most advantages and to be superior to the other proposed
16		alternative routes.
17		
18	Q.	Does this conclude your testimony?

19 A. Yes.

SOAH DOCKET NO. 473-21-0247 PUC DOCKET NO. 51023

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APPLICATION OF THE CITY OF SAN ANTONIO ACTING BY AND THROUGH THE CITY PUBLIC SERVICE BOARD (CPS ENERGY) TO AMEND ITS CERTIFICATE OF CONVENIENCE AND NECESSITY FOR THE PROPOSED SCENIC LOOP 138-KV TRANSMISSION LINE IN BEXAR COUNTY **BEFORE THE STATE OFFICE**

OF

ADMINISTRATIVE HEARINGS



DIRECT TESTIMONY WITH ERRATA OF

JOHN POOLE, P.E., ENGINEER

INFRASTRUCTURE DIVISION

PUBLIC UTILITY COMMISSION OF TEXAS

APRIL 26, 2021

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ATTACHMENTS

JP-1	Qualifications of John Poole
JP-2	List of Previous Testimony
JP-3	Letter from Texas Parks and Wildlife Department dated September 10, 2020
ID 1	Letter from Texas Parks and Wildlife Department dated February 18

JP-4 Letter from Texas Parks and Wildlife Department dated February 18, 2021

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1	I.	STATEMENT OF QUALIFICATIONS
2		
3	Q.	Please state your name, occupation and business address.
4	A.	My name is John Poole. I am employed by the Public Utility Commission of
5		Texas (Commission) as an Engineer within the Infrastructure Division. My
6		business address is 1701 North Congress Avenue, Austin, Texas 78701.
7		
8	Q.	Please briefly outline your educational and professional background.
9	A.	I have a Bachelor of Science degree in Electrical Engineering. I completed my
10		degree in December of 2014 and have been employed at the Commission since
11		February 2015. A more detailed resume is provided in Attachment JP-1.
12		
13	Q.	Are you a registered professional engineer?
14	A.	Yes, I am a registered Professional Engineer in Texas and my member number
15		is 133982.
16		
17	Q.	Have you previously testified as an expert before the Commission?
18	A.	Yes. A list of previous testimony is provided in Attachment JP-2.
19		
20	II.	SCOPE OF TESTIMONY
21		
22	Q.	What is the purpose of your testimony in this proceeding?
23	A.	The purpose of my testimony is to present Commission Staff's recommendations

		Page 5
1		concerning the application of the City of San Antonio, acting by and through the
2		City Public Service Board (CPS Energy) to amend its Certificate of Convenience
3		and Necessity (CCN) to construct a new double circuit 138-kilovolt (kV) electric
4		transmission line to be built on brown colored steel monopole structures in Bexar
5		County, Texas. ¹ The proposed transmission line will connect the existing
6		Ranchtown to Menger Creek 138-kV to the proposed Scenic Loop Substation that
7		will be located in one of several locations in the area of the intersection of Scenic
8		Loop Road and Toutant Beauregard Road (Proposed Project). ²
9		
10	Q.	What is the scope of your testimony?
11	A.	The scope of my testimony is to provide Commission Staff's recommendation
12		regarding the need for the project and regarding selection of routes from among
13		the alternative routes presented by CPS Energy and intervenors.
14		
15	Q.	What are the statutory requirements that a utility must meet to amend its
16		CCN to construct a new transmission line?
17	A.	Section 37.056(a) of the Public Utility Regulatory Act (PURA) ³ states that the
18		Commission may approve an application for a CCN only if the Commission finds
19		that the CCN is necessary for the service, accommodation, convenience, or safety

¹ Application of the City of San Antonio Acting by and through the City Public Service Board (CPS Energy) to Amend its Certificate of Convenience and Necessity for the Proposed Scenic Loop 138-kV Transmission Line Project in Bexar County (Application) at 4-5 (July 22, 2020).

² Application at 7.

³ Public Utility Regulatory Act, Tex. Util. Code Ann. §§ 11.001-66.016 (PURA).

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1		of the public. Further, PURA provides that the Commission shall approve, deny, or
2		modify a request for a CCN after considering the factors specified in PURA §
3		37.056(c), which are as follows:
4		(1) the adequacy of existing service;
5		(2) the need for additional service;
6		(3) the effect of granting the certificate on the recipient of the
7		certificate and any electric utility serving the proximate area; and
8		(4) other factors, such as:
9		(A) community values;
10		(B) recreational and park areas;
11		(C) historical and aesthetic values;
12		(D) environmental integrity;
13		(E) the probable improvement of service or lowering of cost to
14		consumers in the area if the certificate is granted; and
15		(F) to the extent applicable, the effect of granting the certificate
16		on the ability of this state to meet the goal established by
17		PURA § 39.904(a).
18		
19	Q.	Do the Commission's rules provide any instruction regarding routing
20		criteria?
21	A.	Yes. 16 Texas Administrative Code (TAC) § 25.101(b)(3)(B) requires that an
22		application for a new transmission line address the criteria in PURA § 37.056(c),
23		and that upon considering those criteria, engineering constraints and costs, the line

		Page 7
1		shall be routed to the extent reasonable to moderate the impact on the affected
2		community and landowners, unless grid reliability and security dictate otherwise.
3		The following factors shall be considered in the selection of CPS Energy's
4		alternative routes:
5		(i) whether the routes parallel or utilize existing compatible rights-of-
6		way for electric facilities, including the use of vacant positions on
7		existing multiple-circuit transmission lines;
8		(ii) whether the routes parallel or utilize existing compatible rights-of-
9		way, including roads, highways, railroads, or telephone utility
10		rights-of-way;
11		(iii) whether the routes parallel property lines or other natural or cultural
12		features; and
13		(iv) whether the routes conform with the policy of prudent avoidance.
14		
15	Q.	What issues identified by the Commission must be addressed in this docket?
16	A.	In the Order of Referral and Preliminary Order issued on September 29, 2020, the
17		Commission identified the following issues that must be addressed:
18		1. Is CPS Energy's application to amend its CCN adequate? Does the
19		application contain an adequate number of reasonably differentiated
20		alternative routes to conduct a proper evaluation? In answering this
21		question, consideration must be given to the number of proposed
22		alternatives, the locations of the proposed transmission line, and any
23		associated proposed facilities that influence the location of the line.

DIRECT TESTIMONY WITH ERRATA OF JOHN POOLE, P.E. APRIL 26, 2021

		Page 8
1		Consideration may also be given to the facts and circumstances specific to
2		the geographic area under consideration, and to any analysis and reasoned
3		justification presented for a limited number of alternative routes. A limited
4		number of alternative routes is not in itself a sufficient basis for finding an
5		application inadequate when the facts and circumstances or a reasoned
6		justification demonstrates a reasonable basis for presenting a limited
7		number of alternatives. If an adequate number of routes is not presented in
8		the application, the ALJ must allow CPS Energy to amend the application
9		and to provide proper notice to affected landowners; if CPS Energy
10		chooses not to amend the application, the ALJ may dismiss the case
11		without prejudice.
12	2.	Are the proposed facilities necessary for the service, accommodation,
13		convenience, or safety of the public within the meaning of PURA §
14		37.056(a) taking into account the factors set out in PURA § 37.056(c)? In
15		addition,
16		a) How does the proposed facility support the reliability and adequacy
17		of the interconnected transmission system?
18		b) Does the proposed facility facilitate robust wholesale competition?
19		c) What recommendation, if any, has an independent organization, as
20		defined in PURA § 39.151, made regarding the proposed facility?
21		d) Is the proposed facility needed to interconnect a new transmission
22		service customer?
23	3.	Is the transmission project the better option to meet this need when

Page	9
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1		compared to employing distribution facilities? If CPS Energy is not subject
2		to the unbundling requirements of PURA § 39.051, is the project the better
3		option to meet the need when compared to a combination of distributed
4		generation and energy efficiency?
5	4.	Which proposed transmission line route is the best alternative weighing the
6		factors set forth in PURA § 37.056(c) and 16 TAC § 25.101(b)(3)(B)?
7	5.	Are there alternative routes or facilities configurations that would have a
8		less negative impact on landowners? What would be the incremental cost
9		of those routes?
10	6.	If alternative routes or facility configurations are considered due to
11		individual landowner preference:
12		a) Have the affected landowners made adequate contributions to offset
13		any additional costs associated with the accommodations?
14		(b) Have the accommodations to landowners diminished the electric
15		efficiency of the line or reliability?
16	7.	On or after September 1, 2009, did the Texas Parks and Wildlife
17		Department provide any recommendations or informational comments
18		regarding this application in accordance with Section 12.0011(b) of the
19		Texas Parks and Wildlife Code? If so, please address the following issues:
20		a) What modifications, if any, should be made to the proposed project
21		as a result of any recommendations or comments?

If you do not address an issue or position in your testimony, should that be

No. The fact that I do not address an issue in my testimony should not be construed

as agreeing, endorsing, or consenting to any position taken by any other party in

interpreted as Staff supporting any other party's position on that issue?

Docket No. 473-2	21-0247 Page 10	PUC Docket No. 51023				
b)	What conditions or limitations,	if any, should be included in the				
	final order in this docket as a	result of any recommendations or				
	comments?					
c)	What other disposition, if	any, should be made of any				
	recommendations or comments?					
d)	If any recommendation or com	ment should not be incorporated in				
	this project or the final order,	or should not be acted upon, or is				
	otherwise inappropriate or incor	rect in light of the specific facts and				
	circumstances presented by this	application or the law applicable to				
	contested cases, please explain w	vhy that is the case.				
8. Are the second secon	he circumstances for this line such	that the seven-year limit discussed				
in section III of this Order should be changed?						
Which issues in this proceeding have you addressed in your testimony?						
I have addressed all issues included in the Order of Referral and Preliminary Order						
and the requirements of PURA § 37.056 and 16 TAC § 25.101.						

Q.

A.

Q.

A.