SOUTHERN INDIANA GAS AND ELECTRIC COMPANY d/b/a CENTERPOINT ENERGY INDIANA SOUTH (CENTERPOINT)

IURC CAUSE NO. 45501

FILED
February 23, 2021
INDIANA UTILITY
REGULATORY COMMISSION

OF
STEVEN C. GREENLEY
SENIOR VICE PRESIDENT, GENERATION DEVELOPMENT

ON

OVERVIEW OF PETITIONER'S GENERATION TRANSITION PLAN AND PROPOSED RENEWABLE PROJECTS

SPONSORING PETITIONER'S EXHIBIT NO. 1 (PUBLIC)
ATTACHMENT SCG-1

DIRECT TESTIMONY OF STEVEN C. GREENLEY

- 2 Q. Please state your name and business address.
- 3 A. My name is Steven C. Greenley. My business address is 211 NW Riverside Drive,

4 Evansville, Indiana, 47708.

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- 6 Q. On whose behalf are you submitting this direct testimony?
- 7 A. I am submitting testimony on behalf of Southern Indiana Gas and Electric Company d/b/a
- 8 CenterPoint Energy Indiana South ("Petitioner", "CenterPoint", or "Company"), which is an
- 9 indirect subsidiary of CenterPoint Energy, Inc.

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- Q. What is your role with respect to Petitioner?
- 12 A. I am the Senior Vice President of Generation Development for CenterPoint Energy, Inc.

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- 14 Q. Please describe your educational background and professional experience.
- 15 A. I graduated in 1998 from the University of Texas at Austin with a Bachelor of Science Degree
- in Mechanical Engineering. Since graduating in 1998, I have been employed by CenterPoint
- 17 Energy, Inc. or one of its affiliates in various positions with increasing responsibility. My
- positions have included Engineer; Gas Integrity Group Manager; Technical Field Operations
- 19 Manager; District Director; Service Area Director; Division Vice President Regional
- 20 Operations for Louisiana and Mississippi; Division Vice President Regional Operations for
- 21 Texas; Division Vice President Customer Services; Vice President of Electric Distribution
- 22 Operations; and Senior Vice President of Gas Operations. I was named to my present
- position in August 2020.

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- Q. What are your present duties and responsibilities as Senior Vice President of Generation Development?
- 27 A. I am responsible for all aspects of the Company's Generation Transition Plan as set forth in

its 2019/2020 Integrated Resource Plan ("IRP") submitted on June 29, 2020. Direct

- responsibilities include development, execution, and oversight of new renewable projects
- 30 as well as project development and construction of natural gas generation to complement
- 31 the renewables in the portfolio. In addition, I oversee Power Supply Services, which

1 includes Market Settlements and Wholesale Power Marketing.

Q. Have you previously testified before the Indiana Utility Regulatory Commission (the "Commission") or other public utility commission?

A. I have not provided written or oral testimony before the Commission. However, I have provided written and oral testimony on behalf of CenterPoint Energy, Inc. before the Public Utility Commission of Texas in its Distribution Cost Recovery Factor ("DCRF") in Docket Nos. 45747, 47032, and 48226; and before the Railroad Commission of Texas in its Gas Utilities Docket No. 10182.

II. PURPOSE & SCOPE OF TESTIMONY

Q. What is the purpose of your testimony in this proceeding?

A. For decades, Petitioner has relied upon coal-fired units to provide reliable service to its customers. My testimony provides an overview of CenterPoint's Generation Transition Plan and its request to diversify its generation portfolio with two solar projects; summarizes the benefits of adding solar resources to the Company's existing portfolio of generation assets; and addresses the reasonableness of the transition.

Specifically, my testimony provides support for CenterPoint's request for an Order in this Cause: (1) issuing a certificate of public convenience and necessity ("CPCN") to purchase and acquire, indirectly through a Build Transfer Agreement ("BTA"), a solar facility in Posey County, Indiana, (the "Posey County Solar Project" or "Posey Project") pursuant to Ind. Code ch. 8-1-8.5; and (2) authorizing Petitioner to enter into a Power Purchase Agreement ("PPA") with Clenera's LLC affiliate, Rustic Hills Solar II, LLC ("Clenera"), to purchase energy and capacity from a 100 megawatts alternating current ("MWac") solar project in Warrick County, Indiana (the "Warrick County Solar Project" or "Warrick Project"), over a 25-year term, finding the terms of the PPA reasonable and necessary.

In addition to the broad overview of the proposed transactions, my testimony provides references to the other witnesses who provide more in-depth discussions of the topics.

1 Q. Are you sponsoring any attachments to your direct testimony in this proceeding?

- 2 A. Yes. I am sponsoring the following attachment in this proceeding:
- Petitioner's Exhibit No. 1, Attachment SCG-1: Verified Petition

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- Q. Was this attachment prepared by you or under your supervision?
- 6 A. Yes, and I verified the factual content of the Petition on behalf of the Company.

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III. COMPANY DESCRIPTION

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- 11 Q. Please describe Petitioner's corporate structure as it relates to Petitioner.
- A. CenterPoint Energy, Inc. is a company with more than six million metered gas and electric customers and a long history of utility service. CenterPoint Energy, Inc. is the ultimate parent company of Petitioner, which is an indirect utility subsidiary that renders electric utility service to approximately 145,000 customers in seven counties in Southwestern Indiana. Additional information concerning CenterPoint Energy, Inc. and its affiliates is available in the 2019 Annual Report and SEC Form 10-K filing submitted on behalf of CenterPoint Energy, Inc., each of which can be found at CenterPointEnergy.com.

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- Q. Please provide an overview of CenterPoint's existing generation resources.
- A. The table below shows Petitioner's generating units. Petitioner's current generation mix consists of approximately 1,329 megawatts (MW) of installed capacity with limited ownership of renewables. With respect to solar, currently, Petitioner owns and operates two 2-MW solar arrays on its system, in accordance with the Commission's Order in Cause No. 44909; and one 50-MW solar facility in Spencer County, in accordance with the Commission's Order in Cause No. 45086 (which was placed in-service in January 2021).

Table 1: Generating Units

	Installed				Coal Unit
- Mr. 1945	Capacity ICAP	Primary	Year in	Unit	Environmental
Unit	(MW)	Fuel	Service	Age	Controls ¹
A.B. Brown 1	245	Coal	1979	42	Yes
A.B. Brown 2	245	Coal	1986	35	Yes
F.B. Culley 2	90	Coal	1966	55	Yes
F.B. Culley 3	270	Coal	1973	48	Yes
Warrick Unit	150	Coal	1970	51	Yes
4					
OVEC ²	≈32	Coal	≈1955	66	
A.B. Brown 3	80	Gas	1991	30	
A.B. Brown 4	80	Gas	2002	19	
Blackfoot ³	3	Landfill	2009	12	
		Gas			
Fowler Ridge	50	Wind PPA	2010	11	
Benton County	30	Wind PPA	2007	14	
Oak Hill ⁴	2	Solar	2018	3	
Volkman Rd ⁵	2	Solar	2018	3	
Troy	50	Solar	2021	<1	

1 IV. OVERVIEW OF COMPANY'S REQUEST

3 Q. Please briefly introduce the other witnesses testifying on behalf of Petitioner.

4 A. In addition to my testimony, the Company offers the testimony of the following Petitioner's

5 Witnesses:

¹ All coal units are controlled for Sulfur Dioxide (SO₂), Nitrous Oxide (NO_x), Particulate Matter (dust), and Mercury. All coal units are controlled for Sulfur Trioxide (SO₃) and Sulfuric Acid (H2SO₄) except F.B. Culley 2.

² See EIA 860 Survey for OVEC environmental controls.

³ The Blackfoot landfill gas generators are connected at the distribution level.

⁴ Oak Hill Solar is connected at the distribution level.

⁵ Volkman Rd Solar is connected at the distribution level.

Mr. Justin M. Joiner, Director, Power Supply Services sponsors the BTA and PPA. Mr. Joiner also provides an overview of CenterPoint's decision to pursue two solar projects; describes the All-Source request for proposal ("All-Source RFP") process used to identify not only viable but highly competitive renewable projects; and summarizes the benefits of adding solar resources to Petitioner's existing portfolio of generation assets.

Mr. Wayne D. Games, Vice President, Power Generation Operations, discusses operational details, components, and benefits of adding solar resources generally, and the Posey County Solar Project in particular, to the Company's existing portfolio of generation assets. In addition, Mr. Games describes the 2019/2020 IRP-based decision to retire the Company's aging coal-fired unit – F.B. Culley 2 ("Culley 2") – and uncertainty surrounding the joint operations of Warrick Unit #4 with Alcoa Corporation ("Alcoa").

Mr. Matthew A. Rice, Director, Rates & Regulatory Indiana Electric, describes the analysis and results of the Company's 2019/2020 IRP, including the process leading to its development; benefits of the Preferred Portfolio; as well as the proposed ratemaking treatment for the Posey County Solar Project within the Company's Clean Energy Cost Adjustment ("CECA"), which the Commission approved in Cause No. 44909; and the Company's proposal to recover the cost of the Warrick County Solar Project through the Company's Fuel Adjustment Clause ("FAC"). Finally, Mr. Rice describes how customer rates will be impacted by the two projects.

Mr. Art Holland, Principal Consultant at Siemens PTI, formerly Pace Global ("Siemens PTI"), describes the modeling used to evaluate Petitioner's 2019/2020 IRP and its use for generation planning. Mr. Holland also describes the methodology used to achieve the high-level certainty of costs estimates deployed within the 2019/2020 IRP modeling scenarios, as well as assumptions associated with the new solar resource options modeled therein.

Mr. Joseph M. Manzo, Director, Financial Planning & Analysis Generation Development, explains the Company's proposed accounting treatment for the Posey County Solar Project, including the levelized cost approach; calculation of the Levelized Rate incorporated into Petitioner's CECA mechanism; proposed depreciation of the Posey County Solar Project;

and exclusion of its earnings from Petitioner's FAC earnings test.

Ms. Brenda L. Musser, Director, Tax, explains the Federal Investment Tax Credit ("ITC") for solar systems and how the Company's tax capacity allows the Company to directly realize applicable tax incentives without the added cost of a Tax Equity Partner; and use such benefits to immediately reduce the cost of the Posey County Solar Project for our customers.

Mr. Brett A. Jerasa, Assistant Treasurer, describes Petitioner's current credit ratings; rating agency treatment of PPAs; the potential impact of proposed PPAs on Petitioner's credit metrics; and the mechanisms, or treatment, proposed by the Company to mitigate the potential impact of cost of debt increases attributable to the PPAs.

Ms. Rina H. Harris, Director, Energy Solutions and Business Services, explains the increased importance of renewable energy to large customers and other customer classes. In addition, Ms. Harris describes the significance of both renewable projects being located within CenterPoint's service territory.

V. OVERVIEW OF COMPANY'S GENERATION TRANSITION PLAN

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Q. Please provide an overview of CenterPoint's Generation Transition Plan (the "Plan").

CenterPoint is facing relatively near-term decisions about investments in its generation portfolio. CenterPoint cannot continue to operate its A.B. Brown generating facility beyond October 2023 without making significant investments to bring the facility in compliance with applicable environmental standards. Likewise, Warrick Unit #4 requires significant investment in this similar timeframe to comply with applicable environmental compliance requirements. CenterPoint's 2019/2020 IRP considered these investments compared to changing generation resources and concluded that customers will likely pay lower costs over the next two decades by retiring A.B. Brown and F.B. Culley 2 and exiting the joint operations of Warrick Unit #4; and investing in a diversified generation portfolio consisting of wind, solar, storage, natural gas, and coal generation resources. CenterPoint intends to make multiple filings in 2021 to implement this Plan. With this filing, CenterPoint is taking its first step to implement this Generation Transition Plan by seeking approval for a portion

of the solar generation resources called for by the Plan.

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- Q. Explain what you mean by relatively "near-term" decisions needing to be made about
 CenterPoint's generation resources.
- A. Significant time is required to design, obtain approval of, and construct new generation resources and improvements to existing generation resources. Petitioner's Witness Justin M. Joiner discusses the need for timely approval in more detail. However, CenterPoint needs to act quickly to ensure it has resources in place.

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- Q. Please describe how the Company's Plan detailed in its 2019/2020 IRP is responsive to previous Commission guidance.
 - The Company began its 2019/2020 IRP evaluation and analysis process in April 2019 with an objective of being responsive to guidance and observations provided in the Commission's recent Orders related to the Petitioner's Preferred Portfolio described in its 2016 IRP. In developing its Plan, the Company selected a Preferred Portfolio that offers a balanced and prudently diverse mix of traditional and emerging generation resources (wind, solar, storage, energy efficiency, natural gas, coal) with flexibility to hedge against risk and opportunity to pivot and react to changing circumstances as opposed to placing too much emphasis on a few large resources. In addition to the Plan both containing a more diverse mix of resources and the gas units within the Plan representing a much smaller portion of the Company's generation portfolio compared to the Company's 2016 IRP Preferred Portfolio, the Company's proposed solar projects offer diversity and flexibility in relation to the type of investment (ownership and power purchase agreements) as well as duration varying PPA terms providing additional options and/or off-ramps. The 2019/2020 Preferred Portfolio is also reliable and resilient, offering a transition to a cleaner energy future while complementing renewable energy resources with fast start and fast ramping capability to ensure sufficient dispatchable capacity to cover the Company's load in the winter when there is less solar output.

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Moreover, the 2019/2020 Preferred Portfolio is cost-effective, reducing the Company's cost of providing service to its customers over the next 20 years by more than \$320 million as compared to continued operation of the Company's existing generation portfolio. Responsive to previous Commission guidance, the Company's 2019/2020 IRP utilized an

All-Source RFP not only to determine the price and availability of renewables but also to fully explore and evaluate all new and existing resource options and alternatives to reliably serve customers in a cost-effective manner over the next 20 years and beyond as well as reasonably minimize any potential risk of a generation asset becoming uneconomic in an environment of rapid technological innovation.

Q. Please describe the benefits of CenterPoint's Plan, and in particular the benefits of diversifying its generation portfolio and adding renewable resources to its generation assets.

A. The significance of a balanced, diverse portfolio cannot be over emphasized. First, a diverse mix of generation resources offers reliability, resiliency, and offsets volatility through reliance on a mix of generation resources available to serve customers in uncertain environments or despite unforeseen changes in regulation, technology, or market. Second, a balanced and diversified portfolio offers risk mitigation by helping to protect customers from marketplace risks such as increases in fuel costs or in the event the future differs from the IRP reference case scenario.

Aside from the benefits associated with diversifying the Company's generation assets, solar resources are an important part of the future of electric generation with utility scale solar energy ("Universal Solar") having emerged as an efficient, low cost source of energy that complements other generation alternatives. Electric utilities are actively building and investing in solar infrastructure and expanding solar energy options for customers. As explained by Petitioner's Witness Rina H. Harris, the Company's customers are increasingly interested in the utility's use of more renewable resources to meet the customers' energy needs. Not only does the Company's addition of solar energy help CenterPoint achieve its commitments to environmental stewardship and sustainability, but it also helps southwestern Indiana, and in particular, the City of Evansville, move towards its sustainability and renewable energy goals, and aligns with, and supports, the City of Evansville's recently developed Climate Action Plan, by reducing greenhouse gases and moving towards a cleaner energy generation portfolio.

Moreover, the addition of the Posey County Solar Project also offers the added benefit of allowing the Company and its customers to receive the benefit of the ITC as explained by

Petitioner's Witness Brenda L. Musser. And, as discussed by Petitioner's Witness Matthew A. Rice, other benefits of the Company's 2019/2020 Preferred Portfolio include avoiding long term reliance on the capacity market and heavy reliance on battery energy storage, an emerging technology.

VI. OVERVIEW OF THE POSEY COUNTY SOLAR PROJECT

Q. Please provide an overview of the Posey County Solar Project.

A. The Clean Energy Infrastructure business unit of Capital Dynamics, through a special purpose limited liability company known as Posey Solar, LLC, ("Capital Dynamics") is constructing a photovoltaic electric generating facility with aggregate nameplate capacity of approximately 300 MWac in Posey County, Indiana. Pursuant to Ind. Code ch. 8-1-8.5, the Company is seeking a CPCN to purchase and acquire the completed project indirectly through the purchase of a membership interest in Posey Solar CEI, LLC. The Posey County Solar Project is located near CenterPoint's A.B. Brown coal units; is within Petitioner's assigned service territory; and once completed, will interconnect to the Company's A.B. Brown – Gibson 345 kV transmission line. The project is scheduled to be operational during the second half of 2023.

Q. Briefly describe the transaction structure for the Posey County Solar Project.

A. Structured as a BTA, the Posey County Solar Project will be fully developed, engineered, procured, and constructed by Capital Dynamics and then acquired by CenterPoint in a transfer of the project company, which is a Special Entity established to facilitate the ownership transfer of the Posey County Solar Project. Under the BTA, Capital Dynamics will own the project until it achieves mechanical completion, upon which time, the Company will acquire the project and all of its attributes which are being held in a limited liability corporation known as Posey Solar CEI, LLC. In exchange for the membership interests in Posey Solar, CEI, LLC, the Company will pay an amount set forth in the BTA.

Q. Please briefly describe the terms of the BTA for Posey County Solar Project.

A. As described in greater detail by Petitioner's Witness Joiner, to protect customers from hidden costs and future price increases, CenterPoint negotiated a firm, fixed price for the

In addition, given the life expectancy of the project of 35-years, the project is supported with land leases for a 30-year period with a 5-year extended option and a 2-year manufacturer's warranty for defects, which is extended one year if there is a claim during the initial warranty period.

A.

Q. Please describe the benefits of the transaction structure for the Posey County Solar Project and how such transaction structure may differ from a PPA.

The Posey County Solar Project is ideal for CenterPoint to own, operate, and maintain for several reasons. Aside from being among the lowest cost of proposals received from the 2019 All-Source RFP, the BTA provides the advantages of direct utility ownership which when combined with PPAs in a diversified generation portfolio can provide multiple off-ramps and optimize flexibility and certainty for customers, which is responsive to Commission guidance in previous filings.

Separately, the BTA structure offers benefits over a PPA. Most important is the realization of ITC. As discussed by Petitioner's Witness Musser, CenterPoint Energy, Inc. has tax capacity that allows the Company to directly realize applicable tax incentives without the added cost of a Tax Equity Partner, thereby using these benefits to provide the most cost-effective project possible for our customers. The BTA also allows CenterPoint to claim environmental benefits of renewable energy, such as carbon reductions. Further, with the BTA, CenterPoint acquires the project and all assets, properties, rights, interests, and attributes associated with the project (to include, but are not limited to, the project site, land, and equipment) over its useful life, whereas in a PPA, a third party retains ownership and furnishes certain stated attributes from a project over a defined period of time. Finally, the

BTA delivers the benefit of long-term price and performance certainty, whereas PPAs, in 1 2 general, offer shorter terms of performance. 3 4 5 VII. **OVERVIEW OF THE WARRICK COUNTY SOLAR PROJECT** 6 7 Please provide an overview of the Warrick County Solar Project. Q. 8 A. Petitioner is seeking authorization to enter into a PPA with Clenera to purchase energy and 9 capacity from a solar project in Warrick County, Indiana. The Warrick County Solar Project has planned nameplate capacity of 100 MWac; is within Petitioner's assigned service 10 11 territory; and when completed, will interconnect to the MISO transmission system at 138 kV 12 on the Culley – Castle Transmission Line. The project is scheduled to be operational during the second half of 2023. 13 14 Please describe the terms and transaction structure for the Warrick County Solar 15 Q. 16 Project. 17 A. Structured as a PPA offering, Clenera will provide CenterPoint all product and attributes 18 associated with the 100 MWac solar plant for a period of 25-years at a price per MW-19 hour ("MWh") . The PPA price is 20 21 22 As described in greater detail by Petitioner's Witness Joiner, in addition to being 23 contingent on Commission approval, the PPA contains additional negotiated terms related 24 to commercial operation date, guarantees of delivery and capacity, and protections related 25 to development and operational security. 26 27 Please describe the benefits of the PPA for the Warrick County Solar Project. Q. 28 Aside from representing the lowest cost PPA pricing from the Petitioner's 2019 All-Source A. 29 RFP, the Warrick County Solar Project offers customers the benefit of a low-cost, 30 for a period of 25 years. The PPA, when combined 31 with the BTA, not only offers a diversified solar portfolio that optimizes cost, flexibility, and 32 risk, but also provides off-ramps allowing the Company to pivot and react to changing market 33 conditions and technological advancements, which is responsive to Commission guidance

in previous filings. Similar to the Posey County Solar Project, the Warrick County Solar Project is located on CenterPoint's transmission system and within the Company's load footprint, thereby providing opportunity for reduced congestion and enhanced system operation.

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VIII. CUSTOMER EXPECTATIONS

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- Q. In your opinion, are the PPA and BTA economical options for meeting CenterPoint's electric load?
- 11 Α. Yes. As demonstrated within the 2019/2020 IRP, Universal Solar is a cost competitive 12 resource that helps provide stable, low cost energy and sufficient energy at times of peak 13 demand in the summer. As explained in more detail by Petitioner's Witness Joiner, the BTA 14 and PPA represent two of the best scoring proposals submitted in response to the 15 Company's 2019 All-Source RFP, with the Posey County Solar Project representing the 16 lowest cost solar BTA offering the benefits of a long-term, fixed price and performance 17 certainty; and the Warrick Project representing the least cost solar PPA offering from the 18 All-Source RFP, providing low cost energy with a price over the life of the contract 19 thereby offering reasonable and stable energy costs over the long-term. Moreover, the 20 value of the Posey County Solar Project is further evidenced in its leveraging economies of 21 scale and location, providing opportunity for enhanced reliability due not only to being sited 22 in the portion of Indiana having the richest solar resource but also due to it being within 23 CenterPoint's own transmission network.

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- Q. Please explain how Petitioner's proposal to purchase the Posey County Solar Project and enter into a PPA for the Warrick County Solar Project is responsive to the Company's customers or communities in which it serves.
- A. The Posey County and Warrick County Solar Projects represent an important step in facilitating the ability to provide our large customers with a portion of their demand via renewable energy. As Petitioner's Witness Harris explains, the addition of both projects to Petitioner's generation portfolio will play a critical role in retaining large customers given utilities will soon be expected to provide solutions to assist with manufacturers' renewable and sustainable energy goals or risk the companies procuring energy from other sources or

making strategic decisions to relocate manufacturing load.

Aside from being responsive to the sustainability policies of existing and potential large customers, the addition of renewable resources offers other benefits within the Company's service territory. For instance, the communities in which CenterPoint serves will benefit to the extent the projects support growth among the Company's large customers or attract new customers, creating a potential ripple effect on the local economy and/or potentially spreading fixed costs over a larger customer base to the benefit of all customers.

IX. OTHER CONSIDERATIONS

Q. Please explain how the relief requested is consistent with Petitioner's 2019/2020 IRP and Plan.

A. With Petitioner's existing coal-fired units near retirement and Universal Solar emerging as an efficient, low-cost energy source that complements other generation alternatives, the Company's Plan, and relief sought in this proceeding, represent a step towards diversifying its generation assets while ensuring reliable service to its customers in a cost-effective manner.

Solar resources were selected in all portfolios including the Preferred Portfolio and together, the capacity attributable to each project, helps fill a portion of the capacity necessary to meet Petitioner's retail electric load and adequate reserve margins – 400 MWac of the initial 700 MWac installed solar capacity need identified in Petitioner's 2019/2020 IRP. Further, the Solar Projects represent a reasonable addition to Petitioner's generation resource portfolio that, in the aggregate, serves to increase reliability and efficiency as well as mitigate risk through diversification, not only of resource mix but asset type, and fosters an economic mix of capacity resources, consistent with Commission guidance in previous generation filings.

Not only does the PPA structure, in combination with the BTA structure, provide a diversified solar portfolio, optimizing cost, flexibility, and customer risk; but the diversified solar structures provide important off ramps and adds flexibility allowing the Company to pivot in the future should there be a better solution for customers, whether due to changing market

conditions or technological advancements.

In addition, as described in Witness Musser's testimony, CenterPoint's tax capacity allows the Company to directly realize the ITC without the added cost of a Tax Equity Partner, thereby allowing the Company to monetize the tax benefit and pass on savings to its customers.

A.

Q. Please describe the benefits to the location of the Posey County and Warrick County Solar Projects.

Aside from the symbolism of having solar arrays located in counties near our existing coal facilities as a demonstration of a continued commitment to southwestern Indiana and a transition towards a cleaner energy portfolio, the location of both projects within CenterPoint's customer service territory provides reliability and economic benefits to our customers. The Posey County Solar Project is within two miles of the A.B. Brown coal units, and the Warrick County Solar Project is within five miles of F.B. Culley 2, which are slated for retirement by the time the projects come into service. Further, both projects interconnect directly to the Company's transmission system, with the Posey Project interconnection at A.B. Brown – Gibson 345 kV transmission line and the Warrick Project interconnection at Culley-Castle-Northeast 138 kV transmission line. The interconnection of each project near the load it is intended to serve reduces the probability of congestion and enhances operation and maintenance of the system. Further, the retirement of the existing units has potential to further reduce transmission system impacts from interconnecting the solar facility, ultimately reducing interconnection costs.

Next, constructing these solar facilities in Warrick and Posey Counties will help offset the loss of tax base that occurs when the coal units are retired. The Posey County Solar Project is anticipated to create over 250 jobs in Posey County during peak construction, and, upon completion, the project will be part of the tax base in Posey County. Likewise, the Warrick County Solar Project has the potential to create 200 jobs within Warrick County during peak construction and, upon completion, will be in Warrick County's tax base, replacing some of the economic benefit lost with the planned closure of F.B. Culley 2.

Finally, both Solar Projects represent a valuable marketing tool for industry considering

Posey or Warrick County as a location and that values renewable energy and its attributes, as further explained by Petitioner's Witness Harris.

Q. In your opinion, are the Posey County and Warrick County Solar Projects prudent, valuable, and reasonably priced renewable energy resources?

A. Yes. Investing in solar energy resources is reasonable and appropriate; and will benefit Indiana and CenterPoint's customers. Both Solar Projects serve to diversify the Company's generation portfolio; are consistent with the Preferred Portfolio in Petitioner's 2019/2020 IRP; provide additional solar generation located in Indiana; encourage economic development; and meet customers' increasing desire for the utility to provide renewable energy options to serve their needs and for some, satisfy their renewable energy goals.

The costs for both projects are reasonable, with the Posey County Solar Project representing the lowest cost solar BTA, and Warrick County Solar Project representing the least cost solar PPA offering, from the 2019 All-Source RFP. Further, not only are the risks reasonable and similar to those that exist with any solar project, the risks for both projects have been mitigated. The negotiated BTA terms and conditions for the Posey County Solar Project include a firm, fixed price and liquidated damages whereas the risks of the Warrick County Solar Project were further mitigated through the PPA structure with financial guarantees and a price.

Moreover, the PPA structure, in combination with the BTA structure, diversifies the solar portfolio, optimizing cost, flexibility, and customer risk by offering off-ramps and flexibility both in relation to whether the asset is owned or energy and capacity is acquired pursuant to a PPA, which would allow the Company to react to changing market conditions, regulations, or technological advancements.

Therefore, Commission approval of both Solar Projects and associated relief sought within the subject cause is in the public interest, will enhance or maintain the reliability and efficiency of service provided by the Company, and is otherwise consistent with Ind. Code § 8-1-8.8-11.

X. <u>STAKEHOLDER ENGAGEMENT</u>

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- Q. Please describe any steps CenterPoint has taken to meet with interested
 stakeholders to discuss this filing.
- A. CenterPoint met with the Commission on November 20, 2020; with the Indiana Office of the
 Utility Consumer Counselor on February 18, 2021; and with other interested stakeholders,
 including Citizens Action Coalition of Indiana, Inc. on February 22, 2021, and the Industrial
 Group on February 10, 2021.

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XI. CONCLUSION

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- 13 Q. In your opinion, are the Posey County and Warrick County Solar Projects reasonable
 14 and necessary and in the public interest?
- 15 Yes. Investing in solar energy resources is reasonable and appropriate and will benefit Α. 16 Indiana and CenterPoint's customers. The Solar Projects serve to diversify the Company's 17 generation portfolio; are consistent with the Preferred Portfolio in Petitioner's 2019/2020 18 IRP; provide additional solar generation located in Indiana; encourage economic 19 development; and meet our customers' increasing desire to have renewable energy options 20 available to serve their needs and, for some, satisfy their renewable energy goals. 21 Accordingly, Petitioner respectfully requests that the Commission approve CenterPoint's 22 proposed Solar Projects and requested ratemaking and accounting relief.

- 24 Q. Does this conclude your direct testimony?
- 25 A. Yes, at the present time.

VERIFICATION

I, Steven C. Greenley, Senior Vice President of Generation Development for CenterPoint Energy Inc., under the penalty of perjury, affirm that the answers in the foregoing Direct Testimony are true to the best of my knowledge, information and belief.

Steven C. Greenley

Senior Vice President, Generation Development



STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF SOUTHERN INDIANA GAS AND ELECTRIC COMPANY d/b/a CENTERPOINT ENERGY INDIANA SOUTH ("CENTERPOINT") FOR AN ORDER: (1) ISSUING CENTERPOINT A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY, PURSUANT TO IND. CODE CH. 8-1-8.5, TO PURCHASE AND ACQUIRE, THROUGH A BUILD TRANSFER AGREEMENT ("BTA"), A SOLAR POWER ELECTRIC GENERATING FACILITY IN POSEY COUNTY, INDIANA, THAT WILL HAVE AN AGGREGATE NAMEPLATE CAPACITY OF APPROXIMATELY 300 **MEGAWATTS ALTERNATING** CURRENT ("MWAC") (THE "POSEY COUNTY **SOLAR** PROJECT"); (2) FINDING THE POSEY COUNTY SOLAR PROJECT CONSTITUTES A CLEAN ENERGY PROJECT UNDER IND. CODE CH. 8-1-8.8; (3) APPROVING ASSOCIATED RATEMAKING AND ACCOUNTING TREATMENT FOR THE BTA PURSUANT TO IND. CODE § 8-1-8.8-11; (4) AUTHORIZING CENTERPOINT TO ENTER INTO A POWER PURCHASE AGREEMENT ("PPA") TO PURCHASE ENERGY CAPACITY FROM A 100 MWAC SOLAR PROJECT IN WARRICK COUNTY, INDIANA (THE "WARRICK COUNTY SOLAR PROJECT"), OVER A 25-YEAR TERM AND FINDING THE TERMS OF THE PPA REASONABLE; (5) DETERMINING THE WARRICK COUNTY SOLAR PROJECT TO BE AN ELIGIBLE CLEAN ENERGY PROJECT FOR PURPOSES OF IND. CODE CH. 8-1-8.8; (6) AUTHORIZING FULL RECOVERY OF THE POWER PURCHASE COSTS UNDER THE PPA FROM CUSTOMERS **THROUGH** THE **FUEL ADJUSTMENT** CLAUSEOVER THE ENTIRE TERM OF THE PPA; (7) APPROVING ASSOCIATED RATEMAKING AND ACCOUNTING TREATMENT FOR THE PPA PURSUANT TO IND. CODE § 8-1-8.8-11; AND (8) APPROVING CONFIDENTIAL TREATMENT OF THE BTA AND PPA PRICING AND OTHER NEGOTIATED RELATED COMMERCIAL TERMS AND CONFIDENTIAL INFORMATION.

CAUSE NO. 45501

VERIFIED PETITION

Southern Indiana Gas and Electric Company d/b/a CenterPoint Energy Indiana South ("Petitioner" or "CenterPoint") respectfully petitions the Indiana Utility Regulatory Commission ("Commission") for an Order: (1) issuing CenterPoint a certificate of public convenience and necessity ("CPCN") to purchase and acquire a solar power electric generating facility in Posey County, Indiana, through a Build Transfer Agreement ("BTA") that will have an aggregate

nameplate capacity of approximately 300 megawatts alternating current ("MWac") (the "Posey County Solar Project") pursuant to Ind. Code ch. 8-1-8.5; (2) finding the Posey County Solar Project constitutes a clean energy project under Ind. Code ch. 8-1-8.8; (3) approving associated ratemaking and accounting treatment for the Posev County Solar Project pursuant to Ind. Code § 8-1-8.8-11, including recovery of the cost of the project through a Levelized Rate applied to energy generated by the facility; (4) authorizing CenterPoint to enter into a 25-year Power Purchase Agreement ("PPA") with an affiliate of Clenera LLC to purchase energy and capacity from a solar project being constructed in Warrick County, Indiana, with an aggregate nameplate capacity of 100 MWac (the "Warrick County Solar Project") and finding the terms of the PPA to be reasonable; (5) determining the Warrick County Solar Project to be an eligible clean energy project for purposes of Ind. Code ch. 8-1-8.8; (6) authorizing full recovery of the power purchase costs under the PPA from customers through the fuel adjustment clause ("FAC") over the entire term of the PPA; (7) approving ratemaking treatment to account for increased cost of debt related to the Warrick County Solar Project PPA and to allow CenterPoint to earn a fair return on PPAs, as well as operations and maintenance expenses associated with entering into the PPA pursuant to Ind. Code § 8-1-8.8-11; and (8) approving confidential treatment of pricing and other negotiated commercial terms of the PPA and BTA and related confidential information. In support of this Verified Petition, Petitioner submits the following:

1. <u>CenterPoint's Characteristics</u>. CenterPoint is an operating public utility incorporated under the laws of the State of Indiana and has its principal office at 211 NW Riverside Drive, Evansville, Indiana. CenterPoint has charter power and authority to engage in, and is engaged in the business of, rendering retail electric service solely within the State of Indiana under indeterminate permits, franchises, and necessity certificates heretofore duly acquired. CenterPoint owns, operates, manages, and controls, among other things, plant, property, equipment, and facilities which are used and useful for the production, storage, transmission, distribution, and furnishing of electric service to approximately 145,000 electric consumers in

southwestern Indiana. Its service territory is spread throughout seven counties: Pike, Gibson, Dubois, Posey, Vanderburgh, Warrick, and Spencer counties.

- 2. CenterPoint is a "public utility" within the meaning of Ind. Code § 8-1-2-1 and Ind. Code ch. 8-1-8.5. CenterPoint is an "eligible business" as defined in Ind. Code § 8-1-8.8-6. Petitioner is subject to the jurisdiction of this Commission in the manner and to the extent provided by the Public Service Commission Act, as amended, and other pertinent laws of the State of Indiana.
- CenterPoint's 2019/2020 IRP and All Source RFP. On June 30, 2020, CenterPoint submitted an Integrated Resource Plan (the "2019/2020 IRP") to the Commission. The 2019/2020 IRP identifies a need for the addition of 700 to 1,000 MWs of solar resources (some solar paired with storage) and 300 MWs of wind resources as part of the "Preferred Portfolio" to meet capacity and energy requirements. The additional renewable resources will replace approximately 730 MWs of coal generation. In accordance with the 2019/2020 IRP, CenterPoint plans to close its smallest, most inefficient coal unit, F.B. Culley Unit 2 (90 MWs) by December 31, 2023. In addition, CenterPoint's ability to rely on the joint operation of Warrick Unit #4 (150 MW) in the future is uncertain. Based on the retirement or exit of energy provided by F.B. Culley Unit 2 and Warrick Unit #4, the "Preferred Portfolio" set forth in the 2019/2020 IRP calls for CenterPoint to make changes to its generation portfolio in the next three years. Pursuing renewable projects during that timeframe has the added benefit of allowing CenterPoint customers to take advantage of renewable tax incentives before they expire.
- 4. Consistent with the short-term plan identified in the 2019/2020 IRP, CenterPoint conducted an all-source request for proposals ("All-Source RFP") on August 12, 2019. CenterPoint received 110 proposals, 91 of which were for projects located in Indiana. Each proposal was evaluated and scored independently by CenterPoint. The projects scoring the highest were short-listed and proceeded to negotiation of definitive agreements.

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5. The Posey County Solar Project and Warrick County Solar Project (collectively, the "Projects"), which are described in greater detail below, were two of best scoring proposals from the All-Source RFP. The Projects are consistent with CenterPoint's 2019/2020 IRP and are an economic choice to help meet CenterPoint's retail electric load. The expected capacity attributable to the Projects is necessary to meet CenterPoint's load and adequate reserve margins. In addition to providing necessary capacity, the Projects are reasonable additions to a portfolio of capacity resources that in the aggregate serve to mitigate risk through diversification and foster an economic mix of capacity resources. Commission approval of the Projects and associated relief sought herein is in the public interest, will enhance or maintain the reliability and efficiency of service provided by CenterPoint, and is otherwise consistent with Ind. Code § 8-1-8.8-11.

- 6. The Posey County Solar Project and BTA. The Clean Energy Infrastructure business unit of Capital Dynamics, through a special purpose limited liability company known as Posey Solar CEI, LLC ("Capital Dynamics") is constructing the Posey County Solar Project on approximately 2,500 to 3,000 acres of land west of the City of Evansville, Indiana, within Petitioner's assigned service territory. Once completed, the Posey County Solar Project will be a solar photovoltaic power plant with a nameplate capacity of approximately 300 MWac that will interconnect to CenterPoint's A.B. Brown Gibson 345 kV transmission line. The Posey County Solar Project is a clean energy project as defined in Ind. Code § 8-1-8.8-2(2).
- 7. CenterPoint and Capital Dynamics entered into a BTA under which CenterPoint will purchase all of the membership interests in Posey Solar, LLC, upon Mechanical Completion and subject to fulfillment of the conditions precedent to closing. Prior to closing, Capital Dynamics will complete or enter into any and all contracts, permitting, land agreements, Midcontinent Independent System Operator, Inc. ("MISO") processes, etc., as necessary to successfully place the Posey County Solar Project into service. In exchange for the membership interests in Posey

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Solar, LLC, CenterPoint will pay an amount set forth in the BTA. The terms and conditions of the BTA are described in detail in Petitioner's evidence submitted herewith.

- 8. The Warrick County Solar Project and PPA. Clenera LLC, through its affiliate Rustic Hills Solar II LLC ("Clenera"), is constructing the Warrick County Solar Project in Warrick County, Indiana, south of the Town of Boonville, which will have an approximate nameplate capacity of approximately 100 MWac. Clenera is a privately held renewable energy company headquartered in Boise, Idaho. Clenera acquires, develops, builds, and manages utility-scale solar farms and energy storage facilities throughout the United States. Clenera's current operating portfolio exceeds 1.3 GW, with more than 14 GW of solar and storage assets in development. The Warrick County Solar Project will interconnect to the MISO transmission system at 138 kV on the Culley Castle Transmission Line.
- 9. Under the PPA, Clenera will sell and CenterPoint will be entitled to: (a) all of the as-available solar energy generated by the Warrick County Solar Project and (b) all services and attributes associated with such energy and the Warrick County Solar Project, including: (i) all capacity attributes, (ii) all ancillary products, and (iii) all renewable energy credits. CenterPoint will only be obligated to pay for energy actually delivered to the agreed-upon energy delivery point. The PPA extends for a term of 25 years commencing on the commercial operation date of the Warrick County Solar Project, and its terms and conditions are described in detail in Petitioner's evidence submitted herewith.
- 10. Relief Requested. Indiana Code § 8-1-8.5-2 requires that a public utility must obtain a CPCN prior to constructing, purchasing or leasing a facility for the generation of electricity. A request for approval under Ind. Code § 8-1-8.8-1 does not relieve a public utility of the obligation to obtain a CPCN under Ind. Code ch. 8-1-8.5. Accordingly, and in accordance with Ind. Code § 8-1-8.5-2, CenterPoint requests that the Commission approve the BTA, in its entirety, and grant to CenterPoint a CPCN to purchase the Posey County Solar Project pursuant to Ind. Code § 8-1-8.5-1 et seq.

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- 11. In accordance with Ind. Code § 8-1-8.5-6.5 and Ind. Code § 8-1-8.8-11, CenterPoint further requests that the Commission approve a fixed Levelized Rate per kWh to be applied to energy produced by the Posey County Solar Project for the life of the investment therein. The amount of the Levelized Rate will be supported in CenterPoint's case-in-chief and subject to adjustment only under certain circumstances. The Levelized Rate will be incorporated in the Clean Energy Cost Adjustment ("CECA") mechanism, which the Commission approved on August 16, 2017, in Cause No. 44909 for renewable energy projects.
- 12. CenterPoint requests the Commission also approve the Warrick County Solar Project PPA, in its entirety, and authorize CenterPoint to recover the costs associated therewith throughout the full 25-year term of the PPA via a rate adjustment mechanism in accordance with Ind. Code §§ 8-1-2-42(a) and 8-1-8.8-11. For administrative efficiency and simplicity, CenterPoint proposes that timely cost recovery be administered through CenterPoint's FAC proceedings (or successor mechanism). Although CenterPoint is proposing to have the cost recovery administered through its FAC, CenterPoint proposes that this cost recovery not be subject to the Section 42(d)(1) test or any other FAC benchmarks. Rather, CenterPoint requests that the Commission make a definitive finding in this Cause that the PPA, and associated costs, are reasonable and necessary so that CenterPoint will be authorized to recover those costs over the full term of the PPA.
- 13. In accordance with Ind. Code § 8-1-8.8-11, CenterPoint also requests Commission approval of a PPA adjustment mechanism to account for increased cost of debt related to the Warrick County Solar Project PPA and to allow CenterPoint to earn a fair return on PPAs. The PPA adjustment is intended to incentivize the company to implement the competitive-bid methodology and execute PPAs that are cost-effective for customers, while compensating CenterPoint for the inherent financial burden associated with the imputed debt and corresponding financial obligations associated with PPAs. In addition, CenterPoint requests that it be authorized

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to recover operations and maintenance expenses associated with entering into the Warrick County Solar Project PPA.

- 14. Clean energy projects are specifically encouraged by Ind. Code ch. 8-1-8.8. Indiana Code § 8-1-8.8-11 authorizes the Commission to create financial incentives for the development of alternative resources. Therefore, approval of the relief CenterPoint seeks is consistent with Indiana energy and regulatory policy.
- 15. CenterPoint further requests confidential treatment of the pricing and other negotiated commercial terms in the PPA and BTA, as well as certain other confidential, proprietary and competitively sensitive information, since that information is properly considered "trade secrets" under Ind. Code § 5-14-3-4(a)(4). A separate motion under 170 IAC 1-1.1-4 is being filed in this Cause to make this request.
- 16. Applicable Law. Petitioner considers the provisions of the Public Service Commission Act, as amended, including Ind. Code §§ 8-1-2-10, -12, -14, and -42(a), Ind. Code ch. 8-1-8.5 and Ind. Code ch. 8-1-8.8, among others, to be applicable to the subject matter of this proceeding and believes that such statutes provide the Commission authority to approve the requested relief.
- Solar Project and the Warrick County Solar Project PPA are included in Petitioner's case-in-chief, and specifically in the testimony of Justin M. Joiner. Petitioner believes the plan proposed herein will result in a net decrease in customer rates. However, the percentage increase in rates resulting from just the operation of the Posey County Solar Project and the Warrick County Solar Project PPA by customer class are set forth in the testimony and attachments of Petitioner's Witness Matthew A. Rice.
- 18. <u>CenterPoint's Counsel</u>. CenterPoint's counsel of record, duly authorized to accept service of papers in this Cause are:

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19. **Procedural Matters**. To facilitate Petitioner's ability to proceed with the Posey County Solar Project and for CenterPoint to purchase energy from the Warrick County Solar Project in accordance with the PPA, Petitioner requests that the Commission approve a procedural schedule agreed to by Petitioner and the OUCC and dispense with conducting a prehearing conference. The agreed upon schedule is as follows:

Date	Event
April 23, 2021	OUCC/Intervenors File Cases-in-Chief
May 17, 2021	Petitioner's Rebuttal Testimony
June 8, 2021	Hearing

Discovery will be conducted on an informal basis with responses due within ten (10) calendar days until Petitioner files its rebuttal testimony. Thereafter, responses will be due within five (5) business days. Discovery served after noon on Friday or the day preceding a legal holiday will be deemed served the following business day.

WHEREFORE, Southern Indiana Gas and Electric Company d/b/a CenterPoint Energy Indiana South respectfully requests that the Commission promptly publish notice, make such

investigation and hold hearings as are necessary or advisable and thereafter, make and enter appropriate orders in this Cause:

- (a) authorizing CenterPoint to enter into a BTA and issuing CenterPoint a CPCN to purchase and acquire the Posey County Solar Project indirectly through the BTA pursuant to Ind. Code ch. 8-1-8.5;
- (b) finding the Posey County Solar Project constitutes a clean energy project under Ind. Code ch. 8-1-8.8;
- (c) approving associated ratemaking and accounting treatment for the Posey County Solar Project pursuant to Ind. Code § 8-1-8.8-11, including the proposed Levelized Rate;
- (d) authorizing CenterPoint to enter into a PPA with Clenera's affiliate, Rustic Hills Solar II, LLC, to purchase energy and capacity from the Warrick County Solar Project over a 25-year term and finding the terms of the PPA reasonable and necessary;
- (e) determining the Warrick County Solar Project to be an eligible clean energy project for purposes of Ind. Code ch. 8-1-8.8;
- (f) authorizing full recovery of the power purchase costs under the PPA from customers through FAC proceedings, over the entire term of the PPA;
- (g) approving ratemaking treatment to account for increased cost of debt related to the PPA and allow CenterPoint to earn a fair return on the PPA pursuant to Ind. Code § 8-1-8.8-11, as well as to recover operations and maintenance costs incurred associated with the PPA;
- (h) approving confidential treatment of pricing and other negotiated commercial terms in the PPA and BTA, as well as other related confidential information;
 - (i) approving the procedural schedule agreed to among Petitioner and the OUCC; and
- (j) granting to Petitioner such additional and further relief as may be deemed necessary or appropriate.

Dated this 22nd day of February 2021.

SOUTHERN INDIANA GAS AND ELECTRIC COMPANY d/b/a CENTERPOINT ENERGY INDIANA SOUT, H

Steven C. Greenley

Senior Vice President - Generation Development

VERIFICATION

I, Steven C. Greenley, under penalty of perjury, affirm that the foregoing representations are true and correct to the best of my knowledge, information and belief.

SOUTHERN INDIANA GAS AND ELECTRIC COMPANY d/b/a CENTERPOINT ENERGY INDIANA SOUTH

Steven C. Greenley

Senior Vice President - Generation Development

Dated: February 22, 2021

CERTIFICATE OF SERVICE

The undersigned hereby certifies that the foregoing Verified Petition was served via electronic mail transmission or by depositing a copy thereof in the United States mail, first class postage prepaid, addressed to:

Indiana Office of Utility Consumer Counselor PNC Center 115 West Washington Street, Suite 1500 South Indianapolis, Indiana 46204 infomgt@oucc.in.gov

Heather Watts

Hlather O. Warn

Dated: February 23, 2021