FILED
June 17, 2021
INDIANA UTILITY
REGULATORY COMMISSION

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

IURC CAUSE NO. 45564

DIRECT TESTIMONY
OF
STEVEN C. GREENLEY
SENIOR VICE PRESIDENT, GENERATION DEVELOPMENT

ON

OVERVIEW OF PETITIONER'S GENERATION TRANSITION PLAN, PROPOSED COMBUSTION TURBINE PROJECT, AND COMPLIANCE PROJECTS

SPONSORING PETITIONER'S EXHIBIT NO. 1

ATTACHMENT SCG-1

DIRECT TESTIMONY OF STEVEN C. GREENLEY

I. INTRODUCTION

Q. Please state your name and business address.

A. My name is Steven C. Greenley. My business address is 211 NW Riverside Drive, Evansville, Indiana, 47708.

Q. On whose behalf are you submitting this direct testimony?

A. I am submitting testimony on behalf of Southern Indiana Gas and Electric Company d/b/a CenterPoint Energy Indiana South ("Petitioner", "CenterPoint Indiana South", "CEI South", or "Company"), which is an indirect subsidiary of CenterPoint Energy, Inc.

Q. What is your role with respect to Petitioner?

A. I am the Senior Vice President of Generation Development for CenterPoint Energy, Inc.

Q. Please describe your educational background.

A. I graduated in 1998 from the University of Texas at Austin with a Bachelor of Science Degree in Mechanical Engineering.

Q. Please describe your professional experience.

A. Since graduating in 1998, I have been employed by CenterPoint 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 Manager; District Director; Service Area Director; Division Vice President Regional Operations for Louisiana and Mississippi; Division Vice President Regional Operations for Texas; Division Vice President Customer Services; Vice President of Electric Distribution Operations; and Senior Vice President of Gas Operations. I was named to my present position in August 2020.

Q. What are your present duties and responsibilities as Senior Vice President of Generation Development?

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 as well as project development and construction of natural gas generation to complement the renewables in the portfolio. In addition, I oversee Power Supply Services, which 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. Yes. I recently provided testimony before the Commission in Cause No. 45501 in support of Petitioner's request for: (i) 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 ("Posey County Solar Project"); and (ii) authority to enter into a Power Purchase Agreement ("PPA") to purchase energy and capacity from a 100 megawatts alternating current ("MWac") solar project in Warrick County, Indiana ("Warrick County Solar Project"). I have also 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. My testimony provides an overview of CenterPoint Indiana South's Generation Transition Plan (the "Plan") and its request to diversify its generation portfolio with the addition of two natural gas combustion turbines ("CTs") as well as summarizes the benefits of adding two CTs to the Company's existing portfolio of generation assets. Specifically, I support Petitioner's request for an Order in this Cause: (1) issuing a CPCN pursuant to Ind. Code ch. 8-1-8.5 to construct two CTs providing approximately 460 MW of capacity ("CT Project"); (2) approving the associated ratemaking and accounting treatment for the CT Project; (3) issuing a CPCN pursuant to Ind. Code ch. 8-1-8.4 for the compliance project to construct new dry ash handling facilities at A.B. Brown (the "Dry Fly Ash Compliance Project"); (4) issuing a CPCN pursuant to Ind. Code ch. 8-1-8.4 for the compliance project to construct two new ponds (one with respect to Brown and one with respect to Culley) to handle coal-

pile runoff, flue gas desulphurization ("FGD") wastewater, and other flows such as stormwater and landfill leachate in compliance with the Coal Combustion Residuals ("CCR") Rule (the "Pond Compliance Project" and together with the Dry Fly Ash Compliance Project, the "Compliance Projects"), (5) authorizing Petitioner to timely recover 80% of the approved federally mandated costs incurred during construction and operation of the Compliance Projects, including post-in-service carrying costs ("PISCC"), both debt and equity, and deferred depreciation expense associated with the Project through Petitioner's environmental cost adjustment ("ECA") mechanism; (6) authorizing Petitioner to defer for recovery in Petitioner's ensuing general rate case 20% of such approved federally mandated costs; (7) in the event the CPCN for the CTs is not granted or the CTs are otherwise not placed in service, authorizing Petitioner to defer, as a regulatory asset, costs incurred in planning its 2019/2020 IRP and presenting this case for consideration, for future recovery through retail electric rates; (8) granting Petitioner's request for ongoing review of the CT Project; and (9) authorizing Petitioner to establish depreciation rates for the CT Project and the Compliance Projects.

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

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

A. Yes. I am sponsoring the following attachment in this proceeding:

- Petitioner's Exhibit No. 1, **Attachment SCG-1**: Petition

Q. Was this attachment prepared by you or under your supervision?

A. Yes, and I verified the factual content of the Petition on behalf of the Company.

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

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

Mr. Wayne D. Games, Vice President, Power Generation Operations, provides an overview of CenterPoint Indiana South's current generation fleet and challenges facing it; the Company's decision to construct two natural gas CTs on available property at its A.B. Brown

Generating Station and other options explored; and the Company's best estimate of the costs of the CT Project as well as the basis for cost estimate. In addition, Mr. Games describes the Dry Fly Ash Compliance Project and the Pond Compliance Project. He provides the cost estimates for the Compliance Projects as well as alternatives that were considered.

Ms. Erin Carroll, Senior Vice President, Power Advocate, describes analysis performed by PowerAdvocate to assess the market competitiveness of the bid selected in addition to describing the process to be used for the procurement of the CTs.

Ms. Angila Retherford, Vice President, Environmental and Corporate Responsibility, explains the federal environmental regulations applicable to Petitioner's generation fleet and in particular how such regulations make it difficult and cost-prohibitive for Petitioner to continue to burn coal as the fuel source at the A.B. Brown Generating Station. Ms. Retherford also explains how Petitioner's Preferred Portfolio in its 2019/2020 IRP, including the two new combustion turbine generators proposed here, will allow Petitioner to achieve compliance with current regulations and will provide flexibility to address future regulations. Finally, Ms. Retherford explains the CCR regulation, how CCR applies to Petitioner's ash ponds, and how Petitioner's proposed Compliance Projects will allow Petitioner to achieve compliance with the CCR regulation.

Mr. Matthew A. Rice, Director of Indiana Electric Regulatory & Rates, describes the analysis and results of the Company's 2019/2020 Integrated Resource Plan ("2019/2020 IRP") process, including the process leading to its development, and benefits of the Preferred Portfolio; provides an overview of the draft Director's report issued on April 12, 2021; summarizes how the proposed CT Project is consistent with the Final Report of Indiana's 21st Century Energy Policy Development Task Force; and describes the proposed ratemaking treatment for construction of the two CTs. Finally, Mr. Rice describes how customer rates are projected to be impacted by the CTs and provides a high-level estimate of the anticipated impact of securitization.

Mr. Nelson Bacalao, Principal Consultant, Siemens PTI, formerly Pace Global ("Siemens PTI") evaluates Petitioner's 2019/2020 IRP and Generation Transition Plan.

Mr. Jason Zoller, Chief Engineer, Black & Veatch, provides an overview of the engineering and technical specifications of the two natural gas CTs; describes the cost estimates of the CTs; and discusses the analysis completed with respect to gas conversion of the A.B. Brown coal units as well as selection of FGD wastewater treatment.

Ms. Paula J. Grizzle, Director of Gas Supply and Portfolio Optimization, discusses the Company's evaluation of upstream pipeline services required for provision of reliable natural gas service to the A.B. Brown delivery location; and the gas transportation and pipeline lateral contract the Company reached with Texas Gas Transmission, LLC ("TGT").

Ms. Kara Gostenhofer, Director and Assistant Controller, discusses CenterPoint Indiana South's proposed accounting treatment for the two natural gas CTs as well as the proposed accounting treatment pursuant to Ind. Code ch. 8-1-8.4 ("Federal Mandate Statute") for the proposed costs incurred (including capital, operating and maintenance, depreciation, tax, and finance) to complete the Compliance Projects. In addition, Ms. Gostenhofer will discuss how the costs of the Compliance Projects will be reflected as recoverable costs within the currently authorized Environmental Cost Adjustments ("ECA") Revenue Requirement calculation. Finally, she will discuss the proposed adjustment to the authorized return amount utilized in the Fuel Adjustment Clause ("FAC") net operating income ("NOI") earnings test (Ind. Code § 8-1-2-42(d) and § 8-1-2-42.3) because of the proposed ECA, consistent with the Federal Mandate Statute. Ms. Gostenhofer also supports Petitioner's request for certain deferral authority related to planning costs in the event the CPCN for the CTs is not granted or the CT Project assets are otherwise not placed in service.

Ms. Rina H. Harris, Director, Energy Solutions and Business Services, describes how part of the Company's load obligation is met through Conservation and Demand Side Management ("DSM") initiatives (*e.g.* Energy Efficiency ("EE") and Demand Response ("DR")); and discusses the target level of EE that CenterPoint Indiana South's modeling has indicated is the most economic.

Mr. Shane Bradford, Director, Power Supply Services, provides an overview of the All-Source Request for Proposals ("RFP") conducted by the Company in conjunction with its

2019/2020 IRP. Mr. Bradford also describes how the current proposal fits within the overall capacity forecast for the Midcontinent Independent System Operator ("MISO") footprint and any congestion impacts.

III. COMPANY DESCRIPTION

Q. Please describe Petitioner's corporate structure.

A. Petitioner renders electric utility service to approximately 145,000 customers in seven counties in Southwestern Indiana. Petitioner's ultimate parent company – CenterPoint Energy, Inc. – is a company with more than seven million metered gas and electric customers and a long history of utility service.

IV. OVERVIEW OF THE COMPANY'S GENERATION TRANSITION PLAN

Q. Please provide an overview of CenterPoint Indiana South's existing generation resources.

A. The below table shows Petitioner's generating units. Petitioner's current generation mix consists of approximately 1,329 megawatts (MW) of installed capacity with a heavy reliance on coal and limited ownership of natural gas or renewables. Specifically, over 78% of Petitioner's installed capacity, or 1,032 MWs, consists of coal-fired generation, which includes 32 MWs associated with a 1.5% ownership in the Ohio Valley Electric Cooperative ("OVEC") and 150 MWs associated with Petitioner's 50% ownership in Warrick Unit #4 operated by Alcoa Power Generating, Inc. ("Alcoa").

Table 1: Generating Units

Unit	Installed Capacity ICAP (MW)	Primary Fuel	Year in Service
A.B. Brown 1	245	Coal	1979
A.B. Brown 2	245	Coal	1986
F.B. Culley 2	90	Coal	1966
F.B. Culley 3	270	Coal	1973
Warrick Unit 4	150	Coal	1970
OVEC	≈32	Coal	1950s – 1960s
A.B. Brown 3	80	Gas	1991
A.B. Brown 4	80	Gas	2002
Blackfoot	3	Landfill Gas	2009
Benton County	30	Wind PPA	2008
Fowler Ridge	50	Wind PPA	2009
Oak Hill	2	Solar	2018
Volkman Rd	2	Solar	2018
Troy	50	Solar	2021

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

A. CenterPoint Indiana South is facing relatively near-term decisions about investments in its generation portfolio and 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. As Mr. Games discusses in his direct testimony, the long-term future of Warrick Unit #4 is uncertain.

CenterPoint Indiana South'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. Specifically, the Plan requires an initial step of identifying and selecting approximately 700 MWac of solar generation, 300 MWac of wind generation, and approximately 500 MW of natural gas Combustion Turbine generation.

With Cause No. 45501, which CenterPoint Indiana South filed in February of 2021, CenterPoint Indiana South took an important first step to implement the Plan. This proceeding represents the next step in the Plan and seeks approval of a CPCN to construct the two natural gas CTs called for by the Plan. Then, later this year, CenterPoint Indiana South will make an additional filing, related to renewables, to continue implementing its Plan.

Q. Explain what you mean by relatively "near-term" decisions needing to be made about CenterPoint Indiana South's generation resources.

A. Significant time is required to design, obtain approval of, and construct new generation resources and improvements to existing generation resources. As Witness Bradford is testifying, there is approximately 3.5 years of lag between project selection and placement in service. Assuming the relief in Cause No. 45501 is granted, a portion of the 240 MW of capacity shown on the above table as being provided by F.B. Culley 2 and Warrick Unit #4 will be replaced with the combined 400 MW of installed capacity provided by the Posey County and Warrick County Solar Projects. However, as Witness Rice discusses, additional capacity is also needed to replace the capacity currently provided by A.B. Brown, which is why CenterPoint Indiana South has filed this second proceeding. And, as explained more by Witness Games, due to the construction lead time for the new generation resources, Petitioner needs to act quickly to ensure it has resources in place. This past Session, the Indiana General Assembly enacted House Enrolled Act 1520, which requires the five investor-owned electric utilities in Indiana to have sufficient Summer and anticipated Winter UCAP to meet their planning reserve margin requirements while purchasing not more than 30% from the regional transmission organization capacity auction. The capacity provided by the Brown units represents more than 30% of the Company's Summer and Winter UCAP, and so the Company must have replacement capacity before these units are retired.

Q. Are you familiar with the Commission's Order issued in Cause No. 45052, which denied the Company's request for a CPCN to install a combined cycle gas turbine?

A. That Order was issued before I assumed my current position, but I have read that Order. The Commission made several findings regarding deficiencies in the Company's planning which led to the overall denial. I would describe these deficiencies as "lessons learned." These lessons learned have guided the Company's approach to the 2019/2020 IRP and ultimately the request that is being submitted in this case.

Q. What are those lessons learned?

A. The lessons learned were:

- Consider the risk of being wrong. As the Commission explained: "Because unwinding assured cost recovery should an asset become uneconomic is not a commonly employed regulatory option, it is prudent to ensure during the pre-approval process that we understand and consider the risk that customers could sometime in the future be saddled with an uneconomic investment. Outcomes that reasonably minimize such potential risk and serve to foster utility and customer flexibility in an environment of rapid technological innovation on both the utility and customer side of the meter are, therefore, a lens through which we will review Vectren South's request." *Cause No. 45052* (IURC 4/24/2019), at p. 20.
- Remove restrictions from the RFP. "The Commission acknowledges Vectren South's issuance of an RFP but believes the RFP was unduly restrictive given the rapid changes in technology and costs being seen in the market, especially regarding renewable energy. The narrow RFP with its focus on a large baseload dispatchable resource limited the options Vectren South evaluated to those larger than 600 MW. As a result, Vectren South foreclosed consideration of combinations of smaller resources that might have offered greater resource diversity, flexibility and cost efficiencies than reliance on the acquisition of a single large natural-gas facility." *Id.* at p. 21.
- Consider refueling Brown and also lower cost FGD options. "Vectren South's chosen FGD replacement technology was the most expensive and only technology reviewed." Further, "[a] reasonable alternative [to the CCGT] would have been the refurbishment of these units through refueling." *Id.* at p. 22.
- Consider resource diversity. "The acquisition of an 850 MW generation facility represents approximately 77 percent of the 2019 peak load and just under 71 percent of the summer peak load for 2036. We are hard pressed to see how reliance

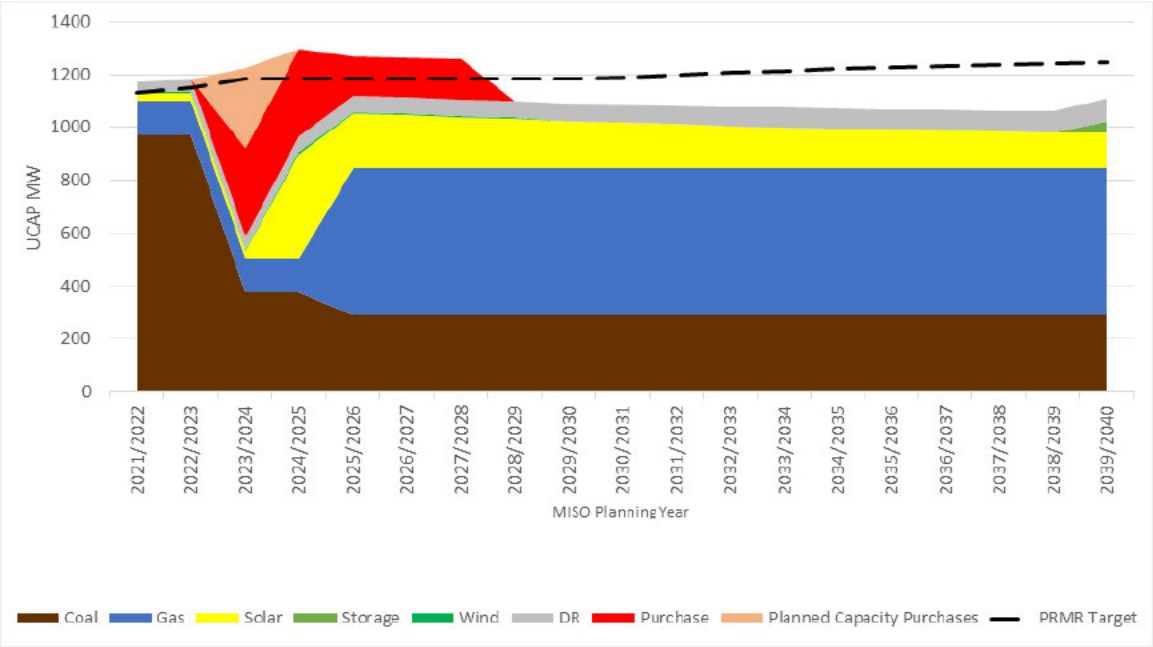
on one facility for so much of the Vectren South system requirements is consistent with maintaining flexibility to respond to changing market conditions and technological change." *Id.* at p. 28.

- Incorporate flexibility in the modeling. "While we find Vectren South's request is "consistent" with its 2016 IRP, the subsequent modeling for this case effectively screened out multiple less-expensive alternatives. Vectren South did not allow its models to choose refueling or smaller units in combination." *Id.* at p. 26.
- Do not rely heavily on market revenues. "Heavy dependence on market revenues to support a regulated investment choice is a speculative influence that we find must be materially discounted to limit the risk of customers being saddled with uneconomic options should such speculation unfold differently than forecasted. A metric biased in favor of portfolios with surplus generation is speculation we decline to embrace." *Id.* at pp. 27-28.

Q. Please describe how the Company's Plan detailed in its 2019/2020 IRP is responsive to these lessons learned.

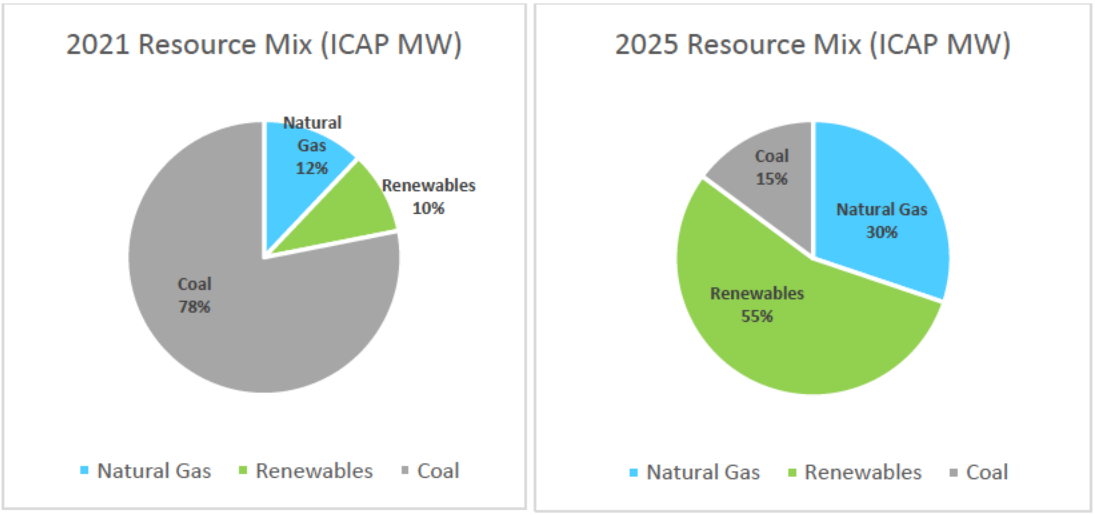
A. These lessons learned have been the Company's guideposts as we approached the 2019/2020 IRP and as we have prepared this case. (1) Our portfolio retains flexibility, with a series of smaller increments of diverse generation. Even the CTs proposed here retain flexibility, with the capability later to convert them to hydrogen. Witness Bacalao evaluated our Preferred Portfolio and concludes the results of the risk of a decision proving later to be uneconomic are less severe with the Preferred Portfolio than with the alternatives. As shown in Figure 1: Generation Transition Plan below, the Preferred Portfolio has the flexibility to pivot in the future if needed. The dotted black line represents the expected MISO Planning Reserve Margin Requirement through the IRP planning period. Once bilateral capacity purchases fall off in the 2027/2028 MISO planning year, resources will be needed. Future IRPs will help determine the path forward, with consideration for future DSM, energy storage, etc.

Figure 1: Generation Transition Plan



(2) The RFP that we conducted was an All Source RFP, and the results fed our modeling assumptions as well as generated particular projects for selection as proposed in Cause No. 45501. (3) We have considered in the modeling refueling one or both of the A.B. Brown units with natural gas; considered and modeled multiple FGD technologies for retaining A.B. Brown as coal-fired; and also modeled BAU 2029 which included A.B. Brown through 2029 without new FGD technology. (4) We are going from a generation mix consisting of 78% coal to a diverse mix among several generating units of renewables, coal, and natural gas as represented by the following Figure 2: Resource Mix.

Figure 2: Resource Mix



(5) We have eliminated restrictions in the modeling that could have screened out smaller and diverse options; and (6) We have attempted to minimize the risk of capacity sales or purchases in choosing our Preferred Portfolio.

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 or uneconomic investments.

In addition to containing a more diverse mix of resources, including gas units (subject of this proceeding) that represent a much smaller portion of the Company's generation portfolio compared to the 2016 IRP Preferred Portfolio, the Company's 2019/2020 Preferred Portfolio is 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. Further, as described in greater detail by Petitioner's Witnesses Games and Rice, 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, as discussed in greater detail by Witness Bradford, 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 (supply and demand side) and alternatives, to include options that extend the life of existing generation resources, 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.

Finally, the 400 MWs of capacity attributable to the two solar projects pending approval in

Cause No. 45501 coupled with the approximately 460 MWs associated with the CT Project helps fill a portion of the capacity necessary to meet Petitioner's retail electric load and adequate reserve margins. The CT Project represents 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.

Q. Why is the proposed Plan in the public interest?

A. The Plan is the step-by-step process to execute on the IRP's Preferred Portfolio, which calls for the orderly transition away from coal resources to clean renewable resources, complemented by natural gas combustion turbines and F.B. Culley 3 coal unit. The Plan will enhance or maintain the reliability and efficiency of service provided by Petitioner. The Plan is consistent with Petitioner's 2019/2020 IRP and is an economic choice to help meet Petitioner's retail electric load as further described by Witnesses Games and Rice.

Q. Please describe the benefits of CenterPoint Indiana South's Plan, and in particular the benefits of diversifying its generation portfolio.

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 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, the flexible gas combustion turbines provide affordable, reliable, dispatchable technology which complements Petitioner's other generation resources and enables Petitioner to satisfy its obligation to provide safe and reliable electric service 24 hours a day, 7 days a week, 365 days a year. Not only does the addition of solar energy to Petitioner's generation portfolio help the Company achieve its commitments to environmental stewardship and sustainability, but the projected usage of the two CTs results in lower carbon dioxide emissions by approximately 67% by 2025 and 75% by 2035, when compared to 2005 levels,

which also helps meet customer expectations for cleaner, reliable, and affordable energy. As Witnesses Games and Harris explain, Southwest Indiana is an attractive site for economic development, such as industrial expansions and relocations, due to its robust rail system, and access to ports on the Ohio River and a nearby major highway infrastructure. The characteristics of the CTs, therefore, play a critical role balancing the customers' increasing desires for the utility to provide renewable energy options to serve their needs, and for some, satisfy their sustainability goals while ensuring the safe, reliable, and affordable provision of electric service to meet customers' demand and reliability needs. Therefore, a reliable, affordable and dispatchable resource is essential to the safety and health of our customers as well as our local and state economy.

Moreover, as discussed by Witness Games, the two proposed F-Class combustion turbine technology offers additional flexibility by presenting, with modifications, the opportunity to burn hydrogen and further reduce carbon emissions or produce green hydrogen from nearby solar facilities, if such facilities are approved in Cause No. 45501. Then, as discussed further by Witness Rice, other benefits of the Company's 2019/2020 Preferred Portfolio include avoiding long term reliance on the capacity market and heavy reliance on emerging technology.

IV. OVERVIEW OF PROPOSED F-CLASS COMBUSTION TURBINES ("CT PROJECT")

Q. Please provide an overview of the two proposed F-Class Combustion Turbines.

A. Consistent with its 2019/2020 IRP results, CenterPoint Indiana South plans to retire most of its current coal-fired generation and proposes to diversify its generation asset portfolio by adding two F-Class natural gas CTs with a combined output of approximately 460 MWs. F Class CTs, which have been in the market for over 30 years, feature solid and reliable performance and among the most efficient heat rates and lowest capital cost per kW when compared to other natural gas options. As discussed in greater detail by Petitioner's Witness Games, the Company proposes to construct the two F-Class CTs at the A.B. Brown site (the "Brown Site"), with an in-service date of fourth quarter 2024. The CTs will connect to Company's transmission system; and replace a portion of the Company's current 490 MWs of dispatchable coal generation at the A.B. Brown plant. The CT units will not be base loaded

and are projected to have a low-capacity factor only operating when economical for the customer. Further, the CTs are designed to provide fast start and fast ramping capability, providing dispatchable energy which is necessary to complement the Company's renewable energy resources and ensure sufficient dispatchable capacity to reliably and efficiently serve the Company's load when the intermittent renewable resources are not available for short or prolonged periods of time. As further explained by Witness Bacalao, the fast start capability means the economics of the CTs are largely unaffected by future fluctuation in the price of natural gas, which is a significant advantage over a A.B. Brown refueling option.

Q. Please describe how gas service will be provided to the two CTs at the Brown Site.

A. As explained by Witness Paula Grizzle, contingent upon approval of the CTs requested in this proceeding, CenterPoint Indiana South negotiated a 20-year service contract with TGT for provision of no-notice and firm transportation of gas service to the A.B. Brown site to supply the CTs. The agreement requires TGT to construct 24 miles of a 20" pipeline lateral for an in-service date of 2024. The firm, no-notice terms provide the Company with operational flexibility for quick start up and quick shut down, which allows the Company to start taking gas without a nomination in place, using storage as supply; or to quit taking gas without a nomination charge.

Q. Briefly describe the Request for Proposal for the CT Project.

A. As described in more detail by Witness Games, the Company used an RFP process to solicit full turnkey Engineering, Procurement, and Construction ("EPC") bids as well as alternative proposals that met the technical, commercial, and other required specifications of the CT Project and ensured the resultant contract was a result of a competitively bid engineering, procurement, or construction process. Because the original response from the RFP process yielded two Owner Furnished Equipment bids but only one turn-key proposal, the latter of which was preferred to ensure a competitive price and reduce performance risk, the Company elected to re-open the RFP process to obtain more turn-key proposals. The re-opened, or second, RFP offered bidders not only an opportunity to re-evaluate their submission for competitiveness, both with respect to pricing and terms, but also invited a new prospect to submit a proposal, ultimately yielding three turnkey bids. The Company, then working with Black & Veatch, an engineering and construction firm, and Power Advocate, a procurement consulting firm, analyzed and evaluated the bids to assist the

Company with identifying the best combustion turbine solution at the most competitive price. Based on the analysis and evaluation of commercial and technical information provided, the Company selected Kiewit Power as the EPC to install two GE "F"-Class combustion turbines under a full turnkey agreement.

Q. Briefly describe the best cost estimate for construction of the two proposed CTs.

A. As Petitioner's Witness Games describes in more detail, the best cost estimate for construction of the two proposed F-Class CTs is $323 million, and primarily consists of: an EPC Estimate; Owner's Costs to include project management, owner's engineer, and regulatory or permitting costs; Escalation Costs; and Planning and Development Costs, among other costs.

Q. Please briefly describe the project oversight and schedule.

A. The Company will use both internal and external resources for project management, and will engage an Owner's Engineer, in particular, to provide project oversight and monitor the safety, quality, costs, and schedule throughout the project's life cycle. To ensure placement of the CTs into service as soon as practicable following a Commission Order approving the CT Project, the Company intends to enter a Limited Notice to Proceed ("LNTP") with an EPC contractor during the third quarter of 2021 to perform certain planning and development tasks, such as site surveys, geotechnical investigations, permitting, and limited design work. Then, if approved, upon issuance of an Order in this Cause, the Company will enter into a Full Notice to Proceed ("FNTP) with the EPC contract to allow site preparations to begin along with the ordering of equipment given the long procurement lead times. The overall project is anticipated to take 27 – 31 months with 15 months allocated for design, fabrication, and delivery of the CTs to the Brown site, during which time, the site will be graded, underground utilities installed, and other preparations made. Following delivery of the CTs, the Company anticipates it will take an approximately eight to twelve months to construct the CTs, with the checkout, start-up, and commissioning processes taking an additional four months.

Q. Please describe the benefits of constructing at the Brown Site.

A. The location of the CT Project within CenterPoint Indiana South's service territory, and in particular on its A.B. Brown Site, provides reliability and economic benefits to our customers.

First, re-using some of the existing facilities and equipment at the A.B. Brown Site coupled with the ability to use the available MISO generation interconnection capacity lowers the capital investment cost of the CT Project. Next, unlike with a greenfield site, the environmental permitting at A.B. Brown allows for potential emissions netting due to retirement of existing coal plants with higher emissions than the proposed CTs. Moreover, as discussed in more detail by Witness Games, in addition to offsetting the loss of tax base that occurs when A.B. Brown coal units are retired, other benefits of locating the CT Project at the A.B. Brown Site include its proximity to the Ohio River, a main highway, and rail system, the latter of which is located on-site of the proposed facility, allowing for the large sections of the new plant to be barged to a nearby location for unloading and then movement by rail or truck, or in the alternative, transportation across the rail system from the manufacturing facility directly to the site location.

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, 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. As described above, the Plan requires an initial step of identifying and selecting approximately 700 MWac of solar generation, 300 MWac of wind generation, and approximately 500 MW of natural gas Combustion Turbine generation.

The relief sought in Cause No. 45501 was the first step in CenterPoint Indiana South's Generation Transition Plan. Assuming the relief requested in Cause No. 45501 is approved, during the second half of 2023, CenterPoint Indiana South would add an approximately 300 MWac solar facility in Posey County, Indiana to its generation portfolio; as well as purchase energy and capacity from a 100 MW solar project in Warrick County, Indiana. The addition of those two projects, which represents a combined 400 MW of capacity, are anticipated to replace a portion of the 240 MW of capacity currently provided by F.B. Culley 2 and Warrick Unit #4.

The relief sought within in this second generation filing represents the next step in Petitioner's Generation Transition Plan. The two combustion turbines were identified in the

Preferred Portfolio to provide low cost capacity needed to support the low-cost renewable energy resources and help replace 730 MWs of coal generation. The CTs, which are part of a balanced mix of renewables, gas, coal, and DSM resources to serve customers, fills another portion of the capacity necessary to meet Petitioner's retail electric load and adequate reserve margins. Specifically, the flexible gas combustion turbines will provide reliable, dispatchable technology that complements Petitioner's other generation resources and enables Petitioner to satisfy its obligation to provide safe and reliable electric service 24 hours a day, 7 days a week, 365 days a year. Therefore, the approximately 460 MWs associated with the CT Project represents 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 and fosters an economic mix of capacity resources.

Q. You have testified that the CTs are needed to support the Company's low-cost renewable energy resources. What do you mean?

A. As several witnesses are testifying, renewables provide a low-cost and clean source of energy. We are seeing a transition throughout the nation from portfolios that are heavily dependent upon fossil fuel (mainly coal) to portfolios that are much more heavily concentrated in renewable resources. As Witness Bradford is testifying, MISO expects that 33% of its members' Planning Reserve Margin Requirement that is fulfilled with fossil fuel generation could potentially retire by 2025. The new potential generation currently in the MISO queue is made up of 93% renewables. In our industry, we are seeing a rapid transition from coal to renewables, and in the long term this is a good thing for the cost of electricity and for our environment. But renewables resources are intermittent. They are not dispatchable when we hit a winter peak in the middle of the night or in the early evening hours of the summer after the sun sets. Renewables cannot, by themselves, satisfy utilities' hourly peak demands. Renewables must be supported by dispatchable generation in order that customer demands are fulfilled. That is why I say these CTs are necessary to support our renewable portfolio, because they provide the dispatchable power that allows us to take advantage of renewable resources. Moreover, as Witness Bradford is testifying, we operate within MISO Zone 6, as do three other investor-owned Indiana electric utilities. Because of the way that MISO operates, calling on generation to fulfill the need, our CTs will not only support the renewable resources that the Company is developing but also the renewables that are being developed across Zone 6. These CTs will help assure that all of these Indiana

utilities will be able to meet their peak needs when energy from renewables may be insufficient.

V. PUBLIC CONVENIENCE AND NECESSITY

Q. Please discuss whether other options were considered to extend the life of existing resources as opposed to constructing a new generation resource.

A. As discussed above, the Company began its 2019/2020 IRP process with the objective of being responsive to Commission guidance and observations. The Company's 2019/2020 IRP process followed a very structured, comprehensive process, lasting 14 months, over which time the Company conducted extensive risk-based analysis to ensure relevant technologies were evaluated, and the resulting portfolio combinations tested in a wide range of future market and regulatory conditions and included evaluation of new and existing resources as well as other alternatives. Aside from the significant investments required to bring the A.B. Brown Facility in compliance with applicable environmental standards to extend its existing life, the Company also analyzed the feasibility of converting A.B. Brown units from burning coal to natural gas as well as operating the A.B. Brown units through 2029 without replacing the Dual Alkali Scrubbers. As Witness Games explains, while the analysis yielded lower capital requirements for the conversion due to removal of costs for some environmental requirements and equipment, the Company's Preferred Portfolio still out-performed the coal to gas conversion scenario because of the inability of the conversion units to provide the necessary quick start and fast ramping dispatchable generation to reliably and efficiently serve the Company's load when intermittent renewable resources are not available.

Q. Please explain how the addition of the CT Project to CenterPoint Indiana South's generation portfolio is consistent with the five pillars of the 21st Century Energy Policy Development Task Force ("Final Report").

A. As described in greater detail by Witness Rice, the combustion turbines promote resiliency, stability, and reliability by providing quick start, fast-ramping dispatchable generation that minimizes the risk of sustained disruption; provides the electric system with the ability to withstand sudden disturbances; and helps the Company meet its MISO Planning Reserve

Margin Requirements. The CTs are affordable and can supply power and energy when called upon by MISO for reliability or when market prices are sufficiently high, shielding customers from price risk. Finally, not intended to run much, but rather to complement the renewable resources in Petitioner's generation portfolio, the CTs support the addition of clean renewable energy, consistent with the environmental sustainability pillar.

Q. Please discuss, in your opinion, why construction of the two CTs represents an economic option for meeting CenterPoint Indiana South's electric load.

A. As Witness Rice explains, the Preferred Portfolio was among the most cost-effective options for customers, with pricing of other evaluated portfolios varying more depending on the future state – regulatory or otherwise. Moreover, as further discussed by Witness Rice, the Preferred Portfolio also minimizes the bill impacts in the near term compared to continuing to run A.B. Brown units through 2029 or conversion to natural gas. Witness Rice goes on to explain that estimated day one bill impacts for customers for the generation transition plan are expected to be relatively flat, ranging from a slight bill decrease to slight increase in revenue requirements for the generation portion of the bill.

Q. Please explain why the addition of the CT Project to CenterPoint Indiana South's generation portfolio serves the public convenience and necessity.

A. The CT Project is consistent with CenterPoint Indiana South's 2019/2020 IRP and is an economic choice to help meet CenterPoint Indiana South's retail electric load 24 hours a day, 365 days a year. The expected capacity attributable to the CT Project is necessary to meet CenterPoint Indiana South's load and adequate reserve margins, particularly in the winter. In addition to providing necessary capacity, the CT Project is a reasonable addition to a portfolio of capacity resources that in the aggregate serve to mitigate risk through diversification. Public convenience and necessity require the construction of the CT Project and Commission approval of the CT Project and associated relief sought herein is in the public interest, will enhance or maintain the reliability and efficiency of service provided by CenterPoint.

Q. Please explain how Petitioner's proposal to construct two CTs is responsive to the Company's customers or communities in which it serves.

A. The CTs are one component of a balanced mix of renewables, gas, coal, and DSM

resources to serve customers and fills another portion of the capacity necessary to meet Petitioner's retail electric load and adequate reserve margins. With easy access to a robust rail system, ports on the Ohio River and a nearby major highway infrastructure, Southwestern Indiana offers opportunities for economic development – industrial expansions and relocations. Therefore, having a reliable affordable dispatchable technology – which flexible gas combustion turbines provide -- is critical to the safety and health of our customers as well as our local and state economy. The quick start and fast-ramping dispatchable characteristics of the CTs complement Petitioner's other generation resources while playing a critical role in balancing the customers' increasing desires for the utility to provide renewable energy options to serve their needs and satisfy sustainability goals while ensuring the safe, reliable, and affordable provision of electric service to meet customers' demand and reliability needs.

Aside from being responsive to the sustainability policies of existing and potential large customers, the addition of the CTs offers other benefits within the Company's service territory. For instance, the communities in which CenterPoint Indiana South 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.

Q. Please describe any steps CenterPoint Indiana South has taken to meet with interested stakeholders to discuss this filing.

A. CenterPoint Indiana South met with the Commission on May 14, 2021; with the Indiana Office of the Utility Consumer Counselor on June 11, 2021; and with other interested stakeholders, including Citizens Action Coalition of Indiana, Inc. on June 16, and the Industrial Group on June 10, 2021.

Q. What would you say to those who might argue there is no need immediately to choose the generation portfolio and that, if the Company were to wait, perhaps technology might provide another viable solution?

A. I would say that if you choose not to decide, you still have made a choice. And that choice will have consequences. We have done a robust analysis and kept close at hand the "lessons learned" from Cause No. 45052. On this question, perhaps the most important

lesson is the first one: understand the risk of being wrong. Any choice we make, including business as usual in hopes that technology will present another solution, presents a risk of the decision proving to be uneconomic with 20/20 hindsight. We know today that the business-as-usual choice is uneconomic. We must make our decision based upon the facts and circumstances as we know them today. We have an obligation to serve our customers' needs and to have capacity in place to do so. Further, the General Assembly's interest in reliability adequacy metrics as evidenced by the adoption of House Enrolled Act 1520 confirms that standing pat while the entire industry transitions to non-dispatchable renewables is not the proper choice. The Company's proposal is in the public interest and should be approved.

VI. DRY FLY ASH PROJECT

Q. Please provide an overview of the Dry Fly Ash Project.

A. As discussed by Witness Retherford, federal environmental regulations applicable to Petitioner's generation fleet, in particular the CCR regulation, prohibits ash from being placed in unlined ash ponds after April 2021, unless an extension is granted. While Petitioner's A.B. Brown unit qualifies for an extension, given the Company's commitment to retire the plant in October 2023, Petitioner still needs a solution for ash from the F.B. Culley and Warrick Unit #4 units. To achieve compliance with the CCR regulations, in addition to seeking the extension for ash from A.B. Brown, Petitioner is proposing to construct a dry fly ash loading facility at the Archer Daniels Midland ("ADM") site in Evansville, Indiana, located on the Ohio River ("Dry Fly Ash Compliance Project"). The Dry Fly Ash Compliance Project would consist of three components (1) a silo for accepting ash from A.B. Brown, Warrick Unit #4 and F.B. Culley; (2) a barge loading facility to load ash onto barges and transport to Missouri for beneficial reuse; and (3) a new dry ash handling system since the previous conveyor system was converted for handling of ponded ash. Witness Games provides additional information related to the other options for dry fly ash disposal considered, how the project will be managed, and how the ADM site was chosen.

VII. CCR POND COMPLIANCE PROJECT

Q. Please provide an overview of the Pond Compliance Project.

A. Petitioner is proposing to construct a 2- to 3-acre lined CCR pond at the F.B. Culley Generating Station and a 10-acre lined CCR pond at the A.B. Brown Generating Station (collectively referred to as the "Pond Compliance Project") to handle coal-pile runoff, FGD wastewater, and other flows such as stormwater and landfill leachate in compliance with EPA's CCR rule. Witness Games provides additional information related to the projected federally mandated costs associated with the Pond Compliance Project and other options considered. As described by Witness Retherford, a recent modification of the CCR Rule ("Part A Reconsideration") requires Petitioner to pursue the fastest technically feasible option to obtain alternative disposal capacity and the Pond Compliance Project is necessary to demonstrate to EPA that Petitioner is complying with the CCR Part A Reconsideration.

VIII. CONCLUSION

Q. In your opinion, does public convenience and necessity require the construction of two CTs?

A. Yes. CenterPoint Indiana South believes that investing in two CTs is reasonable and appropriate at this time and will benefit Indiana and CenterPoint Indiana South's customers. The construction of the two natural gas generation resources serves to diversify the Company's generation portfolio; provides affordable, reliable, and stable dispatchable generation; encourages economic development; and meets our customers' needs both by with respect to demand and sustainability goals. Therefore, Commission approval of the CT Project and associated relief sought within this Cause is in the public interest, will enhance or maintain the reliability and efficiency of service provided by the Company. Accordingly, CenterPoint respectfully requests that the Commission approve the construction of two CTs, as well as the other relief requested in this proceeding.

Q. In your opinion, will public convenience and necessity be served by the Compliance Projects?

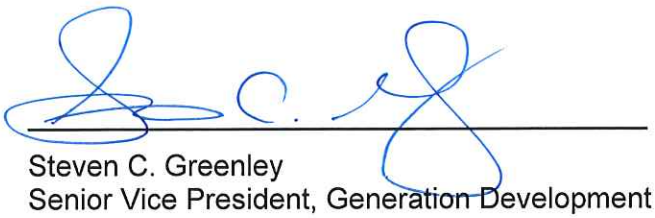
A. Yes. the Dry Fly Ash Compliance Project and the Pond Compliance Project both will allow Petitioner to comply with federally mandated requirements as described by Witnesses Games and Retherford.

Q. Does this conclude your direct testimony?

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

FILED
June 17, 2021
INDIANA UTILITY
REGULATORY COMMISSION

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF SOUTHERN INDIANA GAS AND ELECTRIC COMPANY d/b/a CENTERPOINT ENERGY INDIANA SOUTH ("CEI SOUTH") FOR (1) ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY PURSUANT TO IND. CODE CH. 8-1-8.5 FOR THE CONSTRUCTION OF TWO NATURAL GAS COMBUSTION TURBINES ("CTs") PROVIDING APPROXIMATELY 460 MW OF BASELOAD CAPACITY ("CT PROJECT"); (2) APPROVAL OF ASSOCIATED RATEMAKING AND ACCOUNTING TREATMENT FOR THE CT PROJECT; (3) ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY PURSUANT TO IND. CODE CH. 8-1-8.4 FOR COMPLIANCE PROJECTS TO MEET FEDERALLY MANDATED REQUIREMENTS ("COMPLIANCE PROJECTS"); (4) AUTHORITY TO TIMELY RECOVER 80% OF THE FEDERALLY MANDATED COSTS OF THE COMPLIANCE PROJECTS THROUGH CEI SOUTH'S ENVIRONMENTAL COST ADJUSTMENT MECHANISM ("ECA"); (5) AUTHORITY TO CREATE REGULATORY ASSETS TO RECORD (A) 20% OF THE FEDERALLY MANDATED COSTS OF THE COMPLIANCE PROJECTS AND (B) POST-IN-SERVICE CARRYING CHARGES, BOTH DEBT AND EQUITY, AND DEFERRED DEPRECIATION ASSOCIATED WITH THE CT PROJECT AND COMPLIANCE PROJECTS UNTIL SUCH COSTS ARE REFLECTED IN RETAIL ELECTRIC RATES; (6) IN THE EVENT THE CPCN IS NOT GRANTED OR THE CTS OTHERWISE ARE NOT PLACED IN SERVICE, AUTHORITY TO DEFER, AS A REGULATORY ASSET, COSTS INCURRED IN PLANNING PETITIONER'S 2019/2020 IRP AND PRESENTING THIS CASE FOR CONSIDERATION FOR FUTURE RECOVERY THROUGH RETAIL ELECTRIC RATES; (7) ONGOING REVIEW OF THE CT PROJECT; AND (8) AUTHORITY TO ESTABLISH DEPRECIATION RATES FOR THE CT PROJECT AND COMPLIANCE PROJECTS ALL UNDER IND. CODE §§ 8-1-2-6.7, 8-1-2-23, 8-1-8.4-1 *ET SEQ.*, AND 8-1-8.5-1 *ET SEQ.*	**CAUSE NO.** 45564

PETITION

Southern Indiana Gas and Electric Company d/b/a CenterPoint Energy Indiana South ("Petitioner" or "CEI South") respectfully petitions the Indiana Utility Regulatory Commission ("Commission") to authorize Petitioner to implement its Generation Transition Plan as set forth in its 2019/2020 Integrated Resource Plan (the "2019/2020 IRP"") as follows: (1) issue a certificate of public convenience and necessity ("CPCN") pursuant to Ind. Code ch. 8-1-8.5 to construct two natural gas combustion turbines ("CTs") providing approximately 460 MW of capacity ("CT Project"); (2) approve associated ratemaking and accounting treatment for the CT Project; (3) issue a CPCN pursuant to Ind. Code ch. 8-1-8.4 for the construction of equipment and facilities necessary to comply with the United States Environmental Protection Agency's ("EPA") Coal Combustion Residuals ("CCR") rule for the handling and disposal of dry ash, including construction of a new dry fly ash loading facility on the Ohio River in order to store, load on barges and transport dry ash from the A.B. Brown, Warrick Unit #4 and Culley Plants for beneficial reuse (collectively the "Dry Ash Compliance Project"), (4) issue a CPCN pursuant to Ind. Code ch. 8-1-8.4 for a compliance project to construct two new small ponds (one with respect to A.B. Brown and one with respect to Culley) to handle coal-pile runoff, flue gas desulfurization ("FGD") wastewater and other flows such as stormwater and landfill leachate in compliance with EPA's CCR rule (the "Pond Compliance Project" and together with the Dry Ash Compliance Project, the "Compliance Projects"), (5) authorize Petitioner to timely recover 80% of the costs incurred in connection with the Compliance Projects (including capital, operating, maintenance, depreciation, tax and financing) (collectively the "revenue requirement") through CEI South's environmental cost adjustment mechanism; (6) authorize CEI South to create regulatory assets to record (A) 20% of the revenue requirement on the Compliance Projects and (B) post-in-service carrying costs, both debt and equity, and deferral of depreciation associated with the Compliance Projects and the CT Project until such costs are reflected in retail electric rates; (7) in the event the CPCN for the CTs is not granted or the CTs are otherwise not placed in service, authorize Petitioner to

defer, as a regulatory asset, costs incurred in planning its 2019/2020 IRP and presenting this case for consideration, for future recovery through retail electric rates; (8) grant Petitioner's request for ongoing review of the CT Project; and (9) authorize Petitioner to establish depreciation rates for the CT Project and the Compliance Projects.

Public convenience and necessity require or will require the construction of the CTs, and the CT Project is consistent with Petitioner's 2019/2020 IRP.

The Compliance Projects are reasonably necessary to comply with EPA requirements under the CCR rule. Absent the Dry Ash Compliance Project, CEI South would have no way of loading ash from the A.B. Brown, Culley and Warrick Plants onto barges and transporting this ash for beneficial reuse. That would leave Petitioner unable to properly handle and dispose of ash under the CCR rule. Further, in order for Petitioner to qualify for an extension to operate its unlined ash ponds beyond April 11, 2021 under the CCR Part A Reconsideration (as discussed below), Petitioner is required to demonstrate to EPA that it is pursuing the "fastest technically feasible option" for acquiring alternative disposal capacity. The Pond Compliance Project is the fastest technically feasible option available for the A.B. Brown and Culley unlined ash ponds, and if Petitioner does not construct the Pond Compliance Project, it will be in violation of the extension requirements of the CCR Part A Reconsideration. All of the costs to be incurred in connection with construction and operation of the Compliance Projects qualify as federally mandated costs under Ind. Code ch. 8-1-8.4.

In support hereof, CEI South shows the Commission:

Petitioner's Corporate and Regulated Status

1. CEI South 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. CEI South 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. CEI South 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. CEI South is a "public utility" within the meaning of Ind. Code § 8-1-2-1 and § 8-1-8.5-1 and an "energy utility" under Ind. Code § 8-1-8.4-3. 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. Petitioner is also subject to the jurisdiction of the Federal Energy Regulatory Commission ("FERC").

Background – CEI South's 2019/2020 IRP and All Source RFP

3. On June 30, 2020, CEI South submitted its 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, CEI South plans to close its smallest, most inefficient coal unit, F.B. Culley Unit 2 (90 MWs). In addition, CEI South's ability to rely on the joint operation of Warrick Unit #4 (150 MW) in the future is unlikely. Also in accordance with the 2019/2020 IRP, CEI South plans to retire A.B. Brown Units 1 and 2 because substantial capital investments at these units would otherwise be needed before the end of 2023 as a result of environmental regulations. Based on the retirement or exit of energy provided by A. B. Brown Units 1 and 2, F.B. Culley Unit 2 and Warrick Unit #4, the "Preferred Portfolio" set forth in the 2019/2020 IRP calls for CEI South to make changes to its generation portfolio in the next three years.

4. On February 23, 2021, CEI South took the first step in implementing its 2019/2020 IRP with the filing of its Petition in Cause No. 45501 for approval of a CPCN to purchase and acquire a solar facility in Posey County, Indiana, and authorization to enter into a power purchase agreement ("PPA") to purchase energy and capacity from a 100 megawatts alternating current ("MWac") solar project in Warrick County, Indiana. This filing represents the next step in implementing Petitioner's Generation Transition Plan and 2019/2020 IRP, as the "Preferred Portfolio" also identified the CT Project as a means to provide capacity to support the low-cost renewable energy resources and to help replace a portion of the 730 MWs of coal generation. The CTs, which are part of a balanced mix of renewables, gas, coal, and DSM resources to serve customers, satisfy another portion of the capacity necessary to meet Petitioner's retail electric load and adequate reserve margins.

Background – Environmental Regulations

5. Petitioner's operations are subject to federal, state and local rules promulgated by, among others, EPA and the Indiana Department of Environmental Management ("IDEM"). Such rules establish environmental compliance standards that govern Petitioner's electric generating units.

6. Petitioner and the electric utility industry are subject to federal environmental laws and regulations, including the Clean Water Act ("CWA"), the Clean Air Act ("CAA") and CCR rules.

7. The CCR rule was promulgated by EPA under Subtitle D of the Resource Conservation & Recovery Act (42 U.S.C. 6901 *et seq*.) ("RCRA"). The CCR rule establishes specific requirements that must be met in order to continue operation of an existing ash pond: (1) a safety factor assessment which must have been completed by October 2016, (2) a groundwater assessment, and (3) various location restrictions. If the requirements are not met, use of the ash pond must cease and closure of the ash pond must begin.

8. In 2017, the Trump administration identified the CCR rule (as well as the Effluent Limitations Guidelines (ELG) rule) for reconsideration as part of a regulatory reform initiative focused in part on removing regulatory burdens on the generation of electricity from coal. In July 2018, EPA finalized its Phase I Part I reconsideration. In that action, EPA revised the final cessation deadline (i.e. the date by which an owner must cease disposal in an ash pond) by two years, from October 2018 to October 2020, for those ponds, like CEI South's, that fail to meet a location restriction and/or demonstrate an exceedance of groundwater protection standards.

9. In August 2020, the final cessation deadline was revised further to April 11, 2021, in EPA's "Hazardous and Solid Waste Management System: Disposal of Coal Combustion Residuals from Electric Utilities; A Holistic Approach to Closure Part A: Deadline To Initiate Closure (the "CCR Part A Reconsideration"). The CCR Part A Reconsideration now requires all unlined ash ponds to close no later than April 11, 2021 unless an extension is granted by EPA. The CCR Part A Reconsideration became effective in September 2020. If an extension is not granted, the rule requires CEI South to pursue alternative capacity for handling CCR and non-CCR waste streams that are currently managed in unlined CCR impoundments in the fastest technically feasible timeframe. If an extension is granted under the rule, an ash pond may be used until the fastest technically feasible option can be completed or October 15, 2023, whichever is sooner.

Petitioner's Existing Generation

10. To provide reliable electricity to its customers, CEI South's generation portfolio consists of 1,032 MWs of coal fired generation which includes 32 MWs associated with a 1.5% ownership in the Ohio Valley Electric Cooperative and 150 MWs associated with 50% ownership in Warrick Unit #4 operated by Alcoa Power Generating, Inc. ("Alcoa"). The portfolio also contains 160 MWs of natural gas peaking generation, 54 MWs of solar,[1] 3 MWs of landfill gas, 1 MW of

[1] Not including the 400 MWs of proposed solar projects pending in Cause No. 45501.

battery storage and two wind PPAs totaling 80 MWs. This equals a total of 1,329 MWs of installed capacity.

11. Coal makes up over 78% of CEI South's installed capacity. Petitioner currently operates five (5) coal-fired baseload units as listed below:

Unit	Capacity (MW)	Fuel
A.B. Brown 1	245	Coal
A.B. Brown 2	245	Coal
F.B. Culley 2	90	Coal
F.B. Culley 3	270	Coal
Warrick 4	150[2]	Coal

Petitioner procures 100% of its coal supply from mines located in Indiana.

12. Petitioner has previously made substantial investments in its Culley Unit 3 generation facilities during the past decade to remain in compliance with changing air and water emissions standards. Specifically, investments have been made in a Dry Fly Ash system (allowing CEI South to collect ash from all of its units in a dry form and transport it to a storage silo located at the A.B. Brown site (the "Brown Site") near the Ohio River to be loaded onto barges to be transported to a cement manufacturing facility for beneficial reuse), a bag house, a scrubber and a selective catalytic reduction ("SCR") system. These significant investments in Culley Unit 3 are reflected in Petitioner's current rates. The Commission also previously approved Petitioner's request for a CPCN pursuant to Ind. Code ch. 8-1-8.4 in Cause No. 45052 to construct compliance projects needed to meet federally mandated requirements to allow Petitioner to maintain Culley Unit 3 in compliance with EPA's ELG and CCR rules (the "Culley 3 Compliance

[2] Represents Petitioner's ½ interest in Warrick 4 – a 300 MW unit.

Projects"). The Culley 3 Compliance Projects will allow Petitioner to continue operating Culley Unit 3 beyond 2023.

13. A.B. Brown Units 1 and 2 are different, however. Due to CCR, the Brown units are facing a hard stop compliance deadline of October 15, 2023. The Brown Units are also rapidly running out of landfill space. In addition, ELG prohibits the discharge of fly ash transport water. So modifications to the Brown fly ash handling system are needed before the end of 2023. In total, the improvements that are needed to keep Brown Units 1 and 2 in operation beyond 2023 as coal units are estimated to cost over $150 million.

Proposed CT Project

14. Consistent with its 2019/2020 IRP results, CEI South plans to retire most of its current coal-fired generation and proposes to diversify its generation asset portfolio. CEI South took the first step in implementing its Generation Transition Plan in requesting approval of the two solar projects in Cause No. 45501. In this Cause, CEI South is proposing to further diversify its generation fleet based on its 2019/2020 IRP by constructing two F-Class CTs at the Brown Site, with an in-service date of fourth quarter 2024. The CTs will connect at the Brown site and replace a portion of the Company's current 490 MWs of dispatchable coal generation at the A.B. Brown plant. The CTs will also support the 700-1,000 MWs of solar and 300 MWs of wind, a part of which is currently proposed to replace a portion of the 90 MWs of Culley Unit 2 and CEI South's share of Warrick Unit #4.

15. While historically CEI South's coal plants have been operated as base load units, over the years the market and regulatory conditions in which these facilities operate has changed. Increasingly, the Midcontinent Independent System Operator ("MISO") dispatches other forms of generation before coal-fired generation. This has impacted both the efficiency and reliability of Petitioner's coal-fired generation facilities. The CTs are designed to provide fast start and fast ramping capability, providing dispatchable energy to complement the initial 700 MWs of installed

renewable energy capacity identified in Petitioner's 2019/2020 IRP and ensuring sufficient dispatchable capacity to reliably and efficiently serve the Company's load when the intermittent renewable resources are not available for short or prolonged periods of time.

16. The proposed CTs will be built on the Brown Site, allowing Petitioner's customers to realize cost savings generated by the benefits of re-using existing facilities and equipment. The site has a designated entrance road off of a main highway and rail access to the location of the proposed facility. This will allow for large sections of the new plant to be moved by rail or truck into the facility with the option to rail large sections from the manufacturing facility directly to the plant. Since the Brown Site is located within Petitioner's service territory, the economic benefits of the investment will inure to CEI South's customers. The Brown Site also holds 500 MWs of MISO grid interconnect capacity. The MISO grid interconnect rights at the Brown Site can be transferred from the coal units to the CTs for up to three years after the Brown coal plants are retired.

17. Consistent with the 2019/2020 IRP, CEI South proposes to retain Culley Unit 3 as a coal-fired unit and retire the remaining coal units. The 400 MW solar projects proposed in Cause No. 45501 will replace a portion of the capacity supplied by Culley Unit 2 and CEI South's share of Warrick Unit #4. The two CTs totaling 460 MWs in this Cause would replace a portion of the current 490 MWs of dispatchable coal generation at the A.B. Brown plant. The remainder of the capacity need will be supplied by additional solar and wind resources which will be the subject of a future proceeding and through purchases of capacity. This generation mix will provide a reliable, low-cost portfolio with renewable resources being dispatched as available and the two CTs, Culley Unit 3 and the two natural gas peaking units providing enough dispatchable energy to serve CEI South's current customer load 98% of the time.

Approval of CT Project

18. The estimated capital cost of the new CTs is reasonable and is estimated to be $323 million. This is the best estimate of the total cost of the CT Project. As described in Petitioner's case-in-chief, Petitioner undertook a robust Request for Proposal ("RFP") process to solicit full turnkey Engineering, Procurement and Construction ("EPC") bids as well as alternative proposals that met the technical, commercial and other required specifications of the CT Project. Petitioner also engaged outside consultants to analyze and evaluate the bids to assist Petitioner with identifying the best combustion turbine solution at the most competitive price.

19. Petitioner's evidence presents how it has taken into account (1) current and potential arrangements with other electric utilities including the interchange of power, pooling of facilities, purchase of power, and joint ownership of facilities; and (2) other methods for providing reliable, efficient, and economical electric service, including the refurbishment of existing facilities, conservation, load management, cogeneration and renewable energy sources. Petitioner solicited bids to obtain purchased power capacity and energy from alternative suppliers through an all-source request for proposals.

20. The CT Project is consistent with Petitioner's 2019/2020 IRP, and so the request is consistent with a utility specific proposal under Ind. Code §8-1-8.5-4(e) and submitted for approval under Ind. Code §8-1-8.5-5(d). The CT Project is a reasonable addition to a portfolio of capacity resources that in the aggregate serves to mitigate risk through diversification. The

project will allow Petitioner to further diversify its generation assets while ensuring reliable service to its customers in a cost-effective manner.

21. The proposed CT Project is also consistent with the Commission's analysis for expansion of electric generating capacity under Ind. Code §8-1-8.5-3.

22. Petitioner has the managerial and technical expertise to construct the proposed CT Project.

23. The estimated costs of the CT Project are the result of competitively bid engineering, procurement or construction contracts, and Petitioner has allowed third parties to submit firm and binding bids for the CT Project's construction that meet all of the technical, commercial and other specifications required for the CT Project so that ownership of the CT Project will vest with Petitioner no later than the date on which it becomes commercially available.

24. Therefore, the CT Project is reasonable and necessary and the public convenience and necessity will be served by the two CTs. Accordingly, Petitioner should be granted a certificate of public convenience and necessity and all other necessary Commission approval in order to proceed with the construction and use of the CT Project. Petitioner should also be provided the accounting and ratemaking treatment for its costs as requested herein.

Dry Ash Compliance Project

25. CEI South requests approval to construct, install and operate a new dry fly ash loading facility located on the Ohio River to enable Petitioner to continue complying with EPA's CCR rule. The Dry Ash Compliance Project consists of constructing three components: (1) a silo for accepting ash from A.B. Brown, Warrick Unit #4 and Culley; (2) a barge loading facility to load ash onto barges to transport for beneficial reuse; and (3) a new dry ash handling system since the previous conveyor system was converted for handling of ponded ash.

26. All four of CEI South's coal units, as well as Warrick Unit #4, have previously been converted to dry ash systems, although (as noted previously), additional dry ash handling

modifications would be needed at A.B. Brown Units 1 and 2. Currently, dry ash from the A.B. Brown Plant is pneumatically blown into a large storage silo near the Ohio River at the Brown Site. Dry ash from Culley and Warrick is also being transported to the Brown Site and placed in the same ash storage silo. Since the conveyor system at the A.B. Brown Plant has previously been converted to handle ponded ash, dry ash can no longer be transported and loaded on barges using the current conveyor system. Constructing the new dry ash handling system at the Brown Site will allow CEI South to load the dry ash from the Brown, Warrick and Culley Plants on barges and to transport this ash for beneficial reuse. Thus, the Dry Ash Compliance Project is required to enable CEI South to continue complying with dry ash handling and disposal requirements imposed under EPA's CCR rule.

Pond Compliance Project

27. CEI South also requests approval to construct two new ponds (one with respect to A.B. Brown and one with respect to Culley) to handle coal-pile runoff, FGD wastewater and other flows such as stormwater and landfill leachate in compliance with EPA's CCR rule. The Pond Compliance Project consists of constructing: (1) a 10-acre CCR-compliant lined pond at the A.B. Brown Plant; and (2) a 2- to 3-acre CCR-compliant lined pond at the Culley Plant. These ponds are necessary to demonstrate to EPA that Petitioner is pursuing alternative disposal capacity in the fastest technically feasible timeframe as required under the CCR Part A Reconsideration.

Approval of Compliance Projects

28. The Compliance Projects are being undertaken to comply with EPA's CCR rule, which has been duly promulgated under RCRA. The Dry Ash Compliance Project and the Pond Compliance Project each constitute a compliance project undertaken by Petitioner related to the direct or indirect compliance by Petitioner with one (1) or more federally mandated requirements under Ind. Code § 8-1-8.4-5.

29. The estimated capital cost of the Dry Ash Compliance Project is reasonable and is estimated to be approximately $12 million. Petitioner has worked with engineering experts to analyze the Dry Ash Compliance Project to ensure it will be effective in allowing CEI South to appropriately handle and dispose of dry ash in compliance with the CCR rule. Petitioner also considered other alternatives to the proposed Dry Ash Compliance Project and determined the proposed project is the lowest cost feasible alternative to ensure compliance with the CCR rule.

30. The construction, installation and use of the Dry Ash Compliance Project will enable Petitioner to ensure it is appropriately handling and disposing of dry ash produced by the Brown, Warrick and Culley Plants as required under the CCR rule. Therefore, the Dry Ash Compliance Project is reasonable and necessary and the public convenience and necessity will be served by the Dry Ash Compliance Project. Accordingly, Petitioner should be granted a certificate of public convenience and necessity and all other necessary Commission approval in order to proceed with the construction and use of the project. Petitioner should also be provided the accounting and ratemaking treatment for its costs as requested herein. The Dry Ash Compliance Project will allow Petitioner to continue to use all 5 coal-fired units through 2023, and longer for Culley.

31. The estimated capital cost of the Pond Compliance Project is reasonable and is estimated to be approximately $13 million for the A.B. Brown CCR-compliant lined pond and approximately $6 million for the Culley CCR-compliant lined pond. There are no other alternatives to be considered with respect to the Pond Compliance Project. The CCR Part A Reconsideration requires Petitioner to pursue the “fastest technically feasible option” and construction of the Pond Compliance Project is the only option that will satisfy the requirements of the rule.

32. The Pond Compliance Project will allow Brown Units 1 and 2 and Culley Unit 2 to operate through 2023 and Culley Unit 3 beyond 2023. The Pond Compliance Project will also allow Petitioner to evaluate the possibility of operating Culley Unit 2 through 2025.

33. The construction, installation and use of the Pond Compliance Project will enable Petitioner to demonstrate to EPA it is pursuing alternative disposal capacity in the fastest technically feasible timeframe as required under the CCR Part A Reconsideration and to otherwise comply with the CCR rule. Therefore, the Pond Compliance Project is reasonable and necessary and the public convenience and necessity will be served by the Pond Compliance Project. Accordingly, Petitioner should be granted a certificate of public convenience and necessity and all other necessary Commission approval in order to proceed with the construction and use of these projects. Petitioner should also be provided the accounting and ratemaking treatment for its costs as requested herein.

Ongoing Review

34. Pursuant to Ind. Code §8-1-8.5-6, Petitioner requests ongoing review of the CT Project, including review of progress reports and any revisions to the cost estimates, as the construction proceeds, and associated ratemaking treatment consistent with such review.

Ratemaking and Accounting

35. Upon approval of the projected federally mandated costs associated with the proposed Compliance Projects described herein and in Petitioner's case-in-chief, Indiana Code § 8-1-8.4-1 *et seq*. authorizes Petitioner to recover 80% of the costs of the Compliance Projects through a periodic rate adjustment mechanism. Petitioner requests authority to recover these federally mandated costs by: (1) recovering eighty percent (80%) of the approved federally mandated costs, including capital, operating, maintenance, depreciation, tax or financing costs through a periodic rate adjustment mechanism that allows the timely recovery of the approved federally mandated costs; and (2) deferring twenty percent (20%) of the approved federally mandated costs, including depreciation, post-in-service carrying costs on the overall cost of

capital most recently approved by the Commission, for recovery at the time of Petitioner's next general rate case.

36. Petitioner requests authority (1) to continue the accrual of post-in-service carrying costs, both debt and equity, and to defer the accrual of depreciation expense on the CT Project and the Compliance Projects from their respective in-service dates until the implementation of rates including recovery of a return thereon and including recovery of depreciation expense thereon in CEI South's recoverable operating expenses; (2) to record such post-in-service carrying costs (both debt and equity) and deferred depreciation as regulatory assets in Account 182.3 Other Regulatory Assets; (3) to amortize such regulatory assets as a recoverable expense for ratemaking purposes over the estimated life of each of the CTs and the Compliance Projects commencing on the date of approval of rates providing recovery of a return on the CT Project and the Compliance Projects, respectively, and including depreciation expense thereon in CEI South's recoverable operating expenses; and (4) to include the unamortized portion of the regulatory assets in CEI South's rate base upon which it is permitted to earn a return. Post-in-service carrying costs ("PISCC") would be computed using the FERC Uniform System of Accounts ("FERC USoA") requirements once the investments are placed in-service. The PISCC will be computed by applying Petitioner's overall cost of capital approved in its last base rate case, *Southern Indiana Gas and Elec. Co. d/b/a Vectren Energy Delivery of Indiana, Inc.,* Cause No. 43839 (IURC 4/27/2011).

37. In the event the Commission approves Petitioner's CT Project as requested herein and the CTs are placed in service, Petitioner proposes to capitalize allocable costs of preparing the IRP and presenting this case to the costs of the CT Project and to amortize these costs over the life of the asset. Such costs are included in the best estimate of costs previously provided. In the event the Commission does not approve the requested CPCN for the CTs or the CTs are otherwise not placed in service for whatever reason, Petitioner requests authority to defer such

costs at that time as a regulatory asset to be recovered through retail electric rates over a period of time to be determined in a future proceeding or capitalized to an alternative project.

38. Petitioner also requests the Commission authorize Petitioner to approve depreciation rates for the CTs and the Compliance Projects, which rates will be described in more detail as part of its case-in-chief.

Applicable Law

39. Petitioner considers the provisions of the Public Service Commission Act, as amended, may be applicable to this proceeding, including Ind. Code §§ 8-1-2-6.7, 8-1-2-12, 8-1-2-23, 8-1-8.4-1 *et seq.*, and 8-1-8.5-1 *et seq.*

CEI South's Counsel

40. CEI South's duly authorized representatives to whom all correspondence and communications in this Cause should be sent are:

P. Jason Stephenson (Atty. No. 21839-49)
Heather Watts (Atty. No. 35482-82)
Justin Hage (Atty. No. 33785-32)
CenterPoint Energy Indiana South
211 NW Riverside Drive
Evansville, IN 47708
Mr. Stephenson's Telephone: (812) 491-4231
Ms. Watts' Telephone: (812) 491-5119
Mr. Hage's Telephone: (317) 260-5399
Email: Jason.Stephenson@centerpointenergy.com
Heather.Watts@centerpointenergy.com
Justin.Hage@centerpointenergy.com

Nicholas K. Kile (Atty. No. 15203-53)
Hillary J. Close (Atty. No. 25104-49)
Lauren M. Box, (Atty. No. 32521-49)
Barnes & Thornburg LLP
11 South Meridian Street
Indianapolis, Indiana 46204
Kile Telephone: (317) 231-7768
Close Telephone: (317) 231-7785
Box Telephone: (317) 231-7289
Fax: (317) 231-7433
Email: nicholas.kile@btlaw.com
hillary.close@btlaw.com
lauren.box@btlaw.com

With a copy to:

Michelle D. Quinn
Matthew Rice
CenterPoint Energy Indiana South
211 NW Riverside Drive
Evansville, IN 47708
Email: Matt.Rice@centerpointenergy.com
Michelle.Quinn@centerpointenergy.com

Procedural Matters

41. To facilitate Petitioner's ability to proceed with the CT Project and the Compliance Projects in a timely manner, Petitioner requests 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
October 15, 2021	OUCC/Intervenors File Cases-in-Chief
November 15, 2021	Petitioner's Rebuttal Testimony
December 15, 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, Petitioner 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 issue an Order in this Cause:

(a) making findings as to the best estimate for the construction of the proposed CT Project;

(b) making findings that the construction of the CT Project is consistent with the Commission's plan for expansion of electric generating capacity and Petitioner's 2019/2020 Integrated Resource Plan;

(c) making findings that public convenience and necessity require or will require the construction of the CT Project as proposed herein;

(d) making the required findings under Ind. Code §8-1-8.5-5(e);

(e) granting Petitioner a certificate of public convenience and necessity for the construction of the CT Project pursuant to Ind. Code § 8-1-8.5-1 *et seq.*;

(f) making findings that public convenience and necessity will be served by the Dry Ash Compliance Project and the Pond Compliance Project;

(g) granting Petitioner certificates of public convenience and necessity for the Dry Ash Compliance Project and the Pond Compliance Project, pursuant to Ind. Code § 8-1-8.4-1 *et seq.*;

(h) finding that each of the Dry Ash Compliance Project and the Pond Compliance Project constitutes a compliance project that will allow Petitioner to comply directly or indirectly with "federally mandated requirements" under Ind. Code § 8-1-8.4-5 and finding that the associated costs of each project are "federally mandated costs" under Ind. Code § 8-1-8.4-4 and therefore eligible for cost recovery set forth in Ind. Code § 8-1-8.4-7;

(i) making the required findings under each of the factors set forth in Ind. Code §8-1-8.4-6(b);

(j) authorizing Petitioner to timely recover 80% of the approved federally mandated costs incurred for the Compliance Projects through CEI South's environmental cost adjustment mechanism pursuant to Ind. Code § 8-1-8.4-7;

(k) authorizing Petitioner to create a regulatory asset to record 20% of the approved federally mandated costs incurred for the Compliance Projects until such costs are reflected in Petitioner's retail electric rates pursuant to Ind. Code § 8-1-8.4-7(c)(2);

(l) authorizing Petitioner to accrue post-in-service carrying costs, both debt and equity, related to the CT Project and Compliance Projects after their respective in-service dates using the overall cost of capital approved in Petitioner's last base rate case;

(m) authorizing Petitioner to defer depreciation expense relating to the CT Project and Compliance Projects until such expenses are recovered through either a rate adjustment mechanism or in base rates;

(n) in the event the CPCN for the CTs is not granted or the CTs are otherwise not placed in service, authorizing Petitioner to defer, as a regulatory asset, costs incurred in planning

Cause No. 45564

its 2019/2020 IRP and presenting this case for consideration, for future recovery through retail electric rates;

(o) providing for ongoing review of the CT Project;

(p) approving depreciation rates for the CT Project and the Compliance Projects; and

(q) making such further orders and providing such further relief to Petitioner as may be appropriate.

Dated this 17th day of June, 2021

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

Steven C. Greenley
Senior Vice President – Generation Development

CERTIFICATE OF SERVICE

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

William I. Fine
Indiana Office of Utility Consumer Counselor
PNC Center
115 W. Washington Street, Suite 1500 South
Indianapolis, Indiana 46204
wfine@oucc.in.gov
infomgt@oucc.in.gov

this 17th day of June, 2021.

Hillary J. Close

Hillary J. Close

Southern Indiana Gas and Electric Company
d/b/a CenterPoint Indiana South
A CenterPoint Energy Company
2021 CPCN
Index of Issues, Requests, and Supporting Witnesses[1]

Exhibit	Witness	Summary
1	Steven C. Greenley	Provides executive summary of the case and relief sought as well as introduction of witnesses.
2	Wayne D. Games	Provides an overview of CEI South's generation fleet and challenges facing it, the decision to construct two natural gas CTs at the A.B. Brown site and other options explored. He presents the best estimate of costs of the CT Project. He also describes the Compliance Projects and provides costs estimates therefore, as well as alternatives considered.
3	Erin Carroll	Describes the analysis performed by Power Advocate to assess the market competitiveness of the bid selected in addition to describing the process to be used for the procurement of the CTs.
4	Angila Retherford	Explains the federal environmental regulations applicable to the generation fleet and in particular how such regulations are effectively forcing the cessation of coal as the fuel source at the A.B. Brown station. She also explains how the Preferred Portfolio in the 2019/2020 IRP, including the two CTs here, will allow CEI South to achieve compliance with current regulations and provide flexibility to address future regulations. She also explains how the CCR rule is mandating the Compliance Projects for which CPCNs are sought.
5	Matthew A. Rice	Describes the analysis and results of the 2019/2020 IRP. He summarizes how the proposed CTs are consistent with the IRP, with the Final Report of Indiana's 21st Century Energy Policy Development Task Force, and with the Commission's analysis for expansion of electric generating capacity. Finally, he describes the anticipated rate impact of the proposal as compared to alternatives.
6	Nelson Bacalao	Evaluates CEI South's 2019/2020 IRP and generation transition plan, with specific reference to lessons learned from Cause No. 45052.
7	Jason Zoller	Provides an overview of the engineering and technical specifications of the two CTs and describes the cost estimates. He also discusses the analysis to evaluate conversion of A.B. Brown from coal to gas and the analysis of alternative FGD technologies under the Business-as-Usual scenario.

[1] This Index of the Company's case-in-chief is intended to highlight issues and is not an exhaustive list of the requests in this proceeding. A complete account of the requested relief can be found in the case-in-chief, including but not limited to petition, testimony, exhibits and workpapers.

8	Paula J. Grizzle	Presents the procurement of firm pipeline capacity for the provision of reliable natural gas service to the A.B. Brown delivery location.
9	Kara Gostenhofer	Discusses the request to accrue post-in-service carrying charges and to defer depreciation on the CTs after their in-service dates. She also discusses the proposed accounting treatment and reflection in rates of federally mandated costs pursuant to Ind. Code ch. 8-1-8.4 for the Compliance Projects. Finally, she discusses CEI South's proposal for deferral authority related to IRP and planning costs in the event the CTs are not placed in service.
10	Rina H. Harris	Discusses the portion of the Company's load obligation that will be met through conservation and demand side management initiatives.
11	Shane Bradford	Provides an overview of CEI South's All-Source RFP. He also describes how the CT proposal fits within the overall capacity forecast for the Midcontinent Independent System Operator footprint.

CT Project		
8-1-8.5-4(1)(A)	Current and potential arrangement with other electric utilities for . . . interchange of power	Pet. Ex. 2 (Games)
8-1-8.5-4(1)(B)	Current and potential arrangement with other electric utilities for . . . pooling of facilities	Pet. Ex. 2 (Games)
8-1-8.5-4(1)(C)	Current and potential arrangement with other electric utilities for . . . purchase of power	Pet. Ex. 5 (Rice) and Pet. Ex. 11 (Bradford)
8-1-8.5-4(1)(D)	Current and potential arrangement with other electric utilities for . . .joint ownership of facilities	Pet. Ex. 2 (Games) and Pet. Ex. 5 (Rice)
8-1-8.5-4(2)	Other methods for providing reliable, efficient, and economical service, including . . . refurbishment of existing facilities	Pet. Ex. 2 (Games), Pet. Ex. 5 (Rice) and Pet. Ex. 7 (Zoller)
8-1-8.5-4(2)	Other methods for providing reliable, efficient, and economical service, including . . .conservation, load management	Pet. Ex. 10 (Harris)
8-1-8.5-4(2)	Other methods for providing reliable, efficient, and economical service, including . . . cogeneration	Pet. Ex. 5 (Rice)
8-1-8.5-4(2)	Other methods for providing reliable, efficient, and economical service, including . . . renewable energy sources	Multiple witnesses
8-1-8.5-5(b)(1)	Best estimate of costs	Pet. Ex. 2 (Games)
8-1-8.5-5(b)(2)(A)	Consistent with the Commission's analysis for expansion of generating capacity, or	Pet. Ex. 5 (Rice)
8-1-8.5-5(b)(2)(B)	Consistent with a utility specific proposal under section 3(e)(1) and approved under subsection (d) and consistent with the Commission's analysis	Pet. Ex. 5 (Rice)
8-1-8.5-5(b)(3)	Public convenience and necessity	Multiple witnesses

8-1-8.5-5(e)(1)(A)	The estimated costs are the result of competitively bid engineering, procurement or construction contracts	Pet. Ex. 2 (Games) and Pet. Ex. 3 (Carroll)
8-1-8.5-5(e)(1)(B)	Applicant allowed or will allow third parties to submit firm and binding bids that meet all of the specifications required so as to enable ownership to vest with CEI South not later than the date on which the CTs become commercially available	Pet. Ex. 2 (Games) and Pet. Ex. 3 (Carroll)
8-1-8.5-5(e)(2)(A)	Reliability	Multiple witnesses
8-1-8.5-5(e)(2)(B)	Solicitation of competitive bids to obtain purchased power capacity and energy from alternative providers	Pet. Ex. 11 (Bradford)
Compliance Projects		
8-1-8.4-6(b)(1)(A)	Description of federally mandated requirements	Pet. Ex. 4 (Retherford)
8-1-8.4-6(b)(1)(B)	Description of federally mandated costs associated with the Compliance Projects	Pet. Ex. 2 (Games)
8-1-8.4-6(b)(1)(C)	Description of how the Compliance Projects will allow compliance	Pet. Ex. 4 (Retherford)
8-1-8.4-6(b)(1)(D)	Alternative plans	Pet. Ex. 2 (Games) and Pet. Ex. 4 (Retherford)
8-1-8.4-6(b)(1)(E)	Whether the Compliance Projects will extend the useful life of an existing energy utility facility	Pet. Ex. 2 (Games) and Pet. Ex. 4 (Retherford)
8-1-8.4-7(b)(1)	Public convenience and necessity	Pet. Ex. 2 (Games) and Pet. Ex. 4 (Retherford)
8-1-8.4-7(b)(2)	Projected federally mandated costs	Pet. Ex. 2 (Games)
8-1-8.4-7(c)	80% of federally mandated costs recovered through periodic rate adjustment and 20% of federally mandated costs deferred	Pet. Ex. 9 (Gostenhofer)