

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

IN THE MATTER OF THE PETITION OF)
 HOOSIER ENERGY RURAL ELECTRIC)
 COOPERATIVE, INC. FOR ISSUANCE OF A) CAUSE NO. 43893
 CERTIFICATE OF PUBLIC CONVENIENCE)
 AND NECESSITY TO CONSTRUCT NEW)
 GENERATING FACILITIES PURSUANT TO) APPROVED: OCT 14 2010
 IND. CODE 8-1-8.5 ET SEQ)

BY THE COMMISSION:
David E. Ziegner, Commissioner
Aaron A. Schmoll, Senior Administrative Law Judge

On April 27, 2010, Hoosier Energy Rural Electric Cooperative, Inc. (“Hoosier Energy” or “Petitioner”) filed its Petition in this Cause with the Indiana Utility Regulatory Commission (“Commission”) requesting, pursuant to Ind. Code §8-1-8.5, a Certificate of Public Convenience and Necessity (“CPCN”) to construct a new Coal Bed Methane (“CBM”) gas facility of up to a cap of 15 MW. On May 25, 2010, Petitioner filed its Amended Petition seeking to increase the cap from 15 MW to 30 MW. On May 28, 2010, Petitioner filed a Motion for a Procedural Schedule agreed upon by the Petitioner and the Indiana Office of Utility Consumer Counselor (“OUCC”), which was approved by Docket Entry issued on June 16, 2010.

Pursuant to legal notice published in accordance with applicable law, the Commission conducted an evidentiary hearing on July 23, 2010 in Room 222 of the PNC Center, 101 W. Washington St., Indianapolis, Indiana. At the hearing, Petitioner presented testimony and exhibits sponsored by Heath Norrick, Manager, Renewable Projects, Mike Mooney, Manager, Corporate Planning, and David Sandefur, Vice-President, Power Supply. The Petitioner also offered into evidence its July 20, 2010 responses to questions the Commission issued by Docket Entry on July 16, 2010. The OUCC presented testimony sponsored by Ronald L. Keen, Senior Analyst, Resource Planning and Communications Division. The party’s respective evidence was admitted into the record without objection. No members of the general public appeared or participated at the evidentiary hearing.

The Commission, having examined the evidence in this cause and being sufficiently advised, now finds as follows:

- 1. Notice and Jurisdiction.** Notice of the evidentiary hearing conducted in this proceeding was duly given and published as required by law. Petitioner is a public utility within the meaning of that term as defined by Ind. Code § 8-1-8.5-1. Ind. Code § 8-1-8.5-2 requires a public utility to obtain a CPCN from the Commission before beginning the construction, purchase, or lease of any facility for the generation of electricity. Therefore, the Commission has jurisdiction over Petitioner and the subject matter of this cause.

2. Petitioner's Characteristics and Business. Petitioner is a general district corporation formed pursuant to the Indiana REMC Act, Ind. Code § 8-1-13. Petitioner's principal place of business is located at 7398 State Road 37 North, Bloomington, Indiana. Petitioner is engaged in the generation and transmission of electricity in the State of Indiana, and owns, operates, manages and controls, among other things, plant and equipment within the State of Indiana used for the production and transmission of electric utility service for its member local district corporations and to certain public utilities at wholesale. Petitioner's members include seventeen (17) Rural Electric Membership Corporations ("REMCs") organized under Indiana's REMC Act and one (1) Illinois Cooperative. Petitioner represents by its original and amended petitions that its REMC members supply retail energy to more than 292,000 retail customers located in forty-eight (48) counties in central and southern Indiana and in 11 counties in southern Illinois.

3. Relief Requested. In its amended petition, Petitioner requests the Commission to issue a CPCN allowing it to construct, for the purpose of generating electricity, a new CBM gas facility of up to 30 MW in Sullivan County, Indiana.

All of the facilities to be constructed pursuant to the requested CPCN will be fueled by CBM gas, which is a biogenic product from the decomposition of organic materials in underground coal seams that would otherwise be naturally vented into the atmosphere over time.

4. Petitioner's Evidence. The Petitioner prefiled testimony of David Sandefur, Mike Mooney, and Heath Norrick, and supplemental testimony of Mr. Sandefur and Mr. Norrick.

Mr. Sandefur, Vice President of Power Supply, described the CBM baseload generation project for which Petitioner is seeking a CPCN. Mr. Sandefur indicated in his supplemental testimony that Petitioner is seeking a CPCN for up to 30MW of CBM generation. He estimated that the capital costs for each generating unit at \$393/kW, and for the entire facility approximately \$1,267/kW. This compares favorably to coal baseload costs of approximately \$2,500 to \$3,500/kW and natural gas combined cycle costs of between \$1,000 and \$1,200/kW.

Mr. Sandefur testified that when completed, the units will be operated by Petitioner's staff or a contract operator. He testified that the units are expected to operated at an annual capacity factor greater than 90%. At that capacity factor, operation and maintenance cost is expected to be between \$19/MWh and \$21/MWh. He stated that the project should be completed by October 2011.

Mr. Mooney, Manager of Corporate Planning, testified that the need for new resources is a function of Petitioner's supply obligations. He noted the need for additional resources must also consider current and future risk factors such as fuel diversity, renewable portfolio standards and emission requirements. Table 7 of Petitioner's 2009 Integrated Resource Plan (IRP) summarizes its capacity expansion plan, which considers these risk factors. The Merom CBM project is part of the increase in its renewable MW level to 43 MW in 2011. Construction of the

CBM facility is consistent with 540 MW needed for baseload capacity shown in the State Utility Forecasting Group's (SUF) 2009 forecast.

Mr. Mooney stated that it is appropriate for Hoosier to add additional capacity for the following reasons:

- The Merom CBM project will help meet the Hoosier Board of Director's goal of renewable energy being 2% of members' load requirements by 2012 and 5% growth thereafter.
- Hoosier anticipates a future State or Federal Renewable Portfolio Standard (RPS) requirement and this project is a cost effective way to meet such a requirement.
- Hoosier's IRP assumes its coal fired generation will continue to perform at current capacity levels. CO₂ legislation may significantly impact this assumption.
- Clean Air Interstate Rule (CAIR) and Clean Air Mercury Rule (CAMR) replacement legislation could, at a minimum, reduce the output of Hoosier's coal fired facilities.

Mr. Mooney noted that the Merom CBM will be interconnected to Hoosier Energy's 69 kV transmission system sited near the plant. At this level of interconnection, Hoosier Energy is not required to file a Midwest ISO generation interconnection request. Hoosier expects the plant will qualify as Behind the Meter Generation (BTMG) in the Midwest ISO and will offset the parasitic load of the Merom Plant, potentially increasing the plant's net output.

Mr. Norrick, Manager of Renewable Projects, explained the CBM Facility will be supplied coal bed methane gas through an underground collection system that links all the CBM wells on the 6,000 acres of Merom property. He testified that while landfill gas is typically 50% methane, the methane content of the gas from their property contains between 95% and 97% methane, which compares favorably with natural gas which typically has a methane content of 95%. After some initial studies, Petitioner hired Burns & McDonnell and Schlumberger to thoroughly study and plan the CBM project. He noted that Petitioner has five test wells planned to help finalize total cost estimates for construction of the well field and generating station. The test wells should be completed in May and June 2010.

Mr. Norrick stated that current plans also call for a 50 acre greenhouse to be on the CBM project site, with the exhaust gas from the internal combustion engines passing through two catalyst beds to reduce the NO_x and CO in the exhaust. This creates a usable stream of CO₂ which will enhance plant growth in the greenhouse and improve the economics through better crop yields.

5. OUC's Evidence. Ronald L. Keen, Senior Utility Analyst in the OUC's Resource Planning and Communications Division, recommended approval of the proposed CBM Facility as consistent with applicable statutory requirements and as a cost-effective capital project that would further the public interest in meeting future Indiana energy needs, promoting the further use of renewable sources of energy to generate electricity, improving mining safety by removing potentially deadly methane gas for use in the electric generation process, reducing

the amount of carbon dioxide (“CO₂”) emitted in the electric generation process, improving crop output at a new greenhouse facility that will be connected to Petitioner’s new CBM Facility, and strengthening the local economy by encouraging the construction and operation of new greenhouse facilities in Merom, Indiana. Mr. Keen noted that the capital costs associated with the construction of the proposed CBM Facility compared favorably with capital costs to construct other types of generation facilities. Mr. Keen testified that, since the proposed CBM-fueled plant is considered a base-load resource, it is more likely to have higher up-front capital costs and lower operating and maintenance costs, making it well-suited to meet high load factor requirements. Mr. Keen testified that the project, including the greenhouse connection, appeared to be technically feasible and economical. He indicated that the use of indigenous CBM gas from property already owned by Hoosier ensures a known reasonable price for CBM gas on a going-forward basis. Further, since generation at this site will be interconnected to Petitioner’s existing transmission facilities, no new interconnection facilities are needed and no MISO approval is required. Mr. Keen noted that Hoosier Energy’s long-term plan is to increase its use of renewable generation from 8 MW to 43 MW by the end of 2011. The additional 30 MW of generating capacity associated with the proposed CBM Facility will make it possible for Hoosier to meet that goal. Anticipated new federal air quality requirements are prompting utilities, like Petitioner, that typically use coal-fired generation, to increase their use of alternative sources of energy to help reduce CO₂ and other emissions. Finally, Mr. Keen recommended certain basic reporting requirements to allow the Commission and the OUCC to monitor the construction, cost and in-service date of Petitioner’s proposed CBM generation facility.

6. Commission Findings and Conclusions.

A. Certificate of Public Convenience and Necessity. Ind. Code § 8-1-8.5-4 provides that in acting upon a CPCN petition, the Commission shall take into account the petitioning public utility’s current and potential arrangements with other electric utilities for the interchange of power, the pooling of facilities, the purchase of power, and the joint ownership of facilities. In addition, the Commission must take into account other methods for providing reliable, efficient and economical electric service, including the refurbishing of existing facilities, conservation, load management, co-generation and renewable energy sources.

1. Petitioner’s Existing Resources. Petitioner’s witness Mike Mooney presented testimony that Petitioner presently owns or controls and operates the 1,000 MW coal-fired Merom Generating Station and the 242 MW Ratts Generating Station. Both are base-load, coal-fired resources. Additionally, Petitioner owns and operates the 174 MW gas-fired Worthington Generating Station and the 172 MW gas-fired Lawrence Generating Facility. The Lawrence Generating Facility is jointly owned with Wabash Valley Power Association and Petitioner’s entitlement is 172 MW. Both Worthington and Lawrence are gas-fired peaking facilities. Petitioner owns a 50% interest (approximately 314 MW) in the Holland facility, which is a natural gas-fired, intermediate resource located at Beecher City, Illinois. Petitioner also owns the 3.6 MW Clark-Floyd Landfill Gas plant and has entered into a purchased power agreement for up to 25 MW from the Story County Wind project.

2. Need for Additional Resources. Mr. Mooney testified that Petitioner has an obligation to supply all requirements power to 18 electric cooperative member

systems located in Indiana and Illinois. This Commission has previously granted to Petitioner a CPCN to operate as a public utility, including the authority to, among other things, serve as a power supplier to its members and to construct, own and operate generation, transmission and related utility plant and facilities. Petitioner has entered into individual contracts with its members to serve their full electric power and energy requirements to the year 2040. Mr. Mooney referenced Petitioner's 2009 Integrated Resource Plan ("IRP") previously filed with the Commission. Mr. Mooney testified that although the Capacity Expansion Plan of the 2009 IRP does not identify a specific need for capacity, the proposed facility is appropriate since it uses a renewable resource to generate electricity in a cost-effective manner.

3. Analysis of Alternatives. Mr. Mooney testified that CBM generation was considered in the IRP as an alternative to provide reliable, efficient and economical electric service to its members. He testified that the CBM generating facilities are consistent with Petitioner's need for additional power supply resources, as expressed in the IRP. He also testified that the CBM generating facilities provide other benefits to Petitioner and its member systems besides a long-term reliable resource to meet base-load power requirements. First, the addition of CBM generation units is consistent with Petitioner's portfolio approach of power supply resources. Petitioner has developed its power resource plan on a portfolio approach by using owned and purchased resources, with varying term lengths and diversity of fuels. The second benefit is that Hoosier Energy may be subject to either (or both) State or Federal renewable power supply ("RPS") requirements in the future, so it makes sense to pursue cost-effective options in anticipation of this potential requirement. Also, the Capacity Expansion Plan assumes that Hoosier Energy's existing coal-fired generation will continue to perform at current capacity levels throughout the planning horizon, which may be a tenuous assumption, given the fact that CO₂ legislation that will significantly impact coal-fired generation passed the United States House of Representatives in 2009. Mr. Mooney further testified that CAIR and CAMR replacement regulations are currently being developed by EPA and these new regulations could, at minimum, reduce the output of Hoosier Energy's coal-fired facilities. Finally, he testified that the State Utility Forecast Group's (SUFG) "Indiana Electricity Projections: The 2009 Forecast" (issued December 2009) indicates that the State will need 1,320 MW of additional capacity, including 540 MW of base-load capacity, by 2015. Hoosier Energy's construction of the Merom CBM Facility is consistent with the conclusions of the SUFG regarding the need for new capacity.

B. Findings under Ind. Code § 8-1-8.5-5. Ind. Code §8-1-8.5-5 sets forth specific findings the Commission must make in order to approve and grant the requested CPCN. First, the Commission must make a finding, based on the evidence of the record, as to the best estimate of construction costs. Second, the Commission must find that either (a) construction will be consistent with the Commission's plan, if any, for the expansion of electric generation facility, or (b) the proposed construction is consistent with that utility-specific proposal as to the future needs of consumers in the State of Indiana or in the petitioning public utility's service area. Third, the Commission must find that the public convenience and necessity require the facilities for which the CPCN is requested. If a facility for which the CPCN is requested is a coal-consuming facility, the Commission must find that the facility uses Indiana coal or the use of non-Indiana coal is justified by economic considerations or governmental regulations. This last finding is not applicable to this proceeding, since the CBM units are fueled by methane gas.

1. Cost Estimate. With respect to construction of the CBM generation facility in Sullivan County, Indiana, Petitioner's witness David Sandefur testified that the capital cost for up to eight (8) units is estimated to be \$11,800,000. He further testified that the estimate for the overall costs of up to 30 MW of total new generation, including the cost of CBM wells, a collection system, interconnection and the generation plant estimated project cost ("EPC") would be \$38,000,000. He testified that he believes the estimates are reasonable based on developer experience and corporate research. Additionally, Mr. Sandefur estimated the total cost of operations and maintenance at the expected 90% capacity factor to be between \$19 and \$21 per MWh generated.

The proposed CBM fueled plant is considered a base-load resource. Base-load resources usually have high upfront capital costs and low operating and maintenance costs and thus are suited to meet high load factor requirements. OUCC Witness Keen testified that the project appeared to be technically feasible and economical. He testified that the use of indigenous CBM gas from property already owned by Hoosier ensures a known reasonable price for the CBM gas as a fuel source. Further, since generation at this site will be interconnected to the 69kV Merom transmission facility, Hoosier is not required to file a MISO interconnection request. The generation qualifies as behind-the-meter generation. The project utilizes CBM gas, a renewable energy source, which would otherwise be released into the atmosphere naturally over time. Accordingly, the Commission finds, based on the evidence of record, that Petitioner's estimates of the purchase and construction costs for its proposed CBM generation facilities are best estimates and reasonable purchase and construction cost estimations.

2. Consistency of CBM Generation Facilities with Petitioner's IRP. The Commission finds from the evidence of record that Petitioner's proposed purchase, construction, and ownership of up to 30 MW of CBM generation facilities is consistent with its IRP submitted pursuant to Ind. Code § 8-1-8.5-3(e), as modified in part in this Cause by Petitioner's testimony and exhibits.

3. Public Convenience and Necessity. Based on the evidence submitted in this Cause, the Commission finds that Petitioner has taken into account its current and potential arrangements with other electric utilities for the interchange of power, pooling of facilities, and purchase of power, and has also taken into account other methods for providing reliable, efficient and economic electric service, including the construction of new facilities, conservation, load management, co-generation and renewable energy sources. The record evidence demonstrates the Petitioner has considered options available to it to meet increasing demand for electricity and the need for reliable energy, and has reasonably determined that a reliable, efficient and economic means of meeting this need includes the purchase, construction and ownership of up to 30 MW of additional CBM base-load generation facilities, as proposed.

The Commission notes its statutory mandate under Ind. Code Section 8-1-2.4-3 and commends Petitioner for its development and use of CBM gas as a means of generating electricity. The Commission recognizes that the use of this alternative fuel source conserves valuable natural resources and provides a useful option to the natural venting of methane gas into the atmosphere.

C. Reporting and Notification Requirements. We find it appropriate that the Petitioner notify the Commission, under this Cause, upon starting and finishing construction of the proposed CBM units approved herein. The initial reports shall include information regarding the name, title, address and telephone number of the primary contact person at the facility, engineering and/or construction timelines and critical milestones for the facility, manufacturer, model number and operational characteristics of the engines, the anticipated total output of the facility, the connecting utility, and the expected in-service date or date of commencement of commercial operation. We further find that Petitioner shall report the project status and performance of the generation facilities at such time that any of the referenced information changes, with such reports to be filed within thirty (30) days of such changes. Finally, once the units are operational, Petitioner shall report on a yearly basis the quantity of CBM used and the Btu content of the CBM.

In the event ownership of the units is transferred, a new Cause shall be initiated seeking approval from the Commission under Indiana Code Section 8-1-2-83 and any other relevant statutes.

IT IS THEREFORE ORDERED BY THE INDIANA UTILITY REGULATORY COMMISSION that:

1. Petitioner is hereby issued a Certificate of Public Convenience and Necessity, evidenced solely by this Order, to construct up to 30 MW of CBM gas generating facilities in Sullivan County, Indiana.
2. Petitioner shall submit written notification, under this Cause, to the Commission's Electricity Division within thirty (30) days after it begins and also after it completes the construction of the CBM units approved in this Order.
3. Petitioner shall file updated reports within thirty (30) days of any changes to the information previously reported to the Commission.
4. This Order shall be effective on and after the date of its approval.

ATTERHOLT, LANDIS, MAYS, AND ZIEGNER CONCUR:

APPROVED: OCT 14 2010

I hereby certify that the above is a true and correct copy of the Order as approved.



Brenda A. Howe
Secretary to the Commission