

ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF DUKE ENERGY INDIANA,)
INC. SEEKING (1) APPROVAL OF AN ONGOING)
REVIEW PROGRESS REPORT PURSUANT TO IND.)
CODE §§8-1-8.5 AND 8-1-8.7; (2) AUTHORITY TO)
REFLECT COSTS INCURRED FOR THE)
EDWARDSPORT INTEGRATED GASIFICATION)
COMBINED CYCLE GENERATING FACILITY)
("IGCC PROJECT") PROPERTY UNDER)
CONSTRUCTION IN ITS RATES AND AUTHORITY)
TO RECOVER APPLICABLE RELATED COSTS)
THROUGH ITS INTEGRATED COAL)
GASIFICATION COMBINED CYCLE GENERATING)
FACILITY COST RECOVERY ADJUSTMENT,)
STANDARD CONTRACT RIDER NO. 61 PURSUANT)
TO IND. CODE §§8-1-8.8-11 AND -12; AND (3))
ESTABLISHMENT OF A SUBDOCKET)
PROCEEDING TO REVIEW THE COST ESTIMATE)
FOR THE IGCC PROJECT)

CAUSE NO. 43114 IGCC-4

INTERIM ORDER

APPROVED: JUL 28 2010

BY THE COMMISSION:

David E. Ziegner, Commissioner
Scott R. Storms, Chief Administrative Law Judge

On November 24, 2009, Duke Energy Indiana, Inc. ("Duke Energy Indiana," "Petitioner" or "Company") filed its Verified Petition with the Indiana Utility Regulatory Commission ("Commission") in this Cause. In its Petition, Duke Energy Indiana requested: (1) the approval of an ongoing review progress report; (2) the authority to reflect costs incurred for the Edwardsport Integrated Gasification Combined Cycle Generating Facility ("IGCC Project" or "Project") property under construction in its rates and the authority to recover certain other applicable related costs through its Integrated Coal Gasification Combined Cycle Generating Facility Cost Recovery Adjustment, Standard Contract Rider No. 61 ("Rider 61" or "IGCC Rider"); and (3) establishment of a subdocket to review the cost estimate for the IGCC Project.

Pursuant to notice as required by law, proof of which was incorporated into the record by reference and placed in the official files of the Commission, an Evidentiary Hearing was held in this Cause on April 6, 2010, at 9:30 a.m. EST in Room 222 of the National City Center, 101 West Washington Street, Indianapolis, Indiana. The parties to this proceeding, other than Duke Energy Indiana, included the Indiana Office of Utility Consumer Counselor ("OUCC"), Citizens Action Coalition of Indiana, Inc., Save the Valley, Inc. ("STV"), Valley Watch, Inc. ("Valley Watch"), Steel Dynamics, Inc. ("SDI"), Indiana Wildlife Federation, and the Clean Air Task Force. Citizens Action Coalition of Indiana, Inc. ("Citizens Action Coalition"), STV, and Valley Watch are collectively referred to as "CAC." These parties, other than the OUCC, are collectively referred to as "Intervenors" throughout this Order.

At the Evidentiary Hearing, Petitioner presented the testimony and exhibits of Mr. W. Michael Womack, Vice President, Edwardsport IGCC Project (Pet. Ex. A, Pet. Ex. A-1, Confidential Ex. A-2, Redacted Ex. A-2, A-3, Confidential Ex. A-4, Redacted Ex. A-4, together with Pet. Confidential Ex. A-5, Redacted Ex. A-5 and A-6) and Ms. Diana L. Douglas, Director of Rates for Duke Energy Indiana (Pet. Ex. B, B-1, Confidential Ex. B-2, Redacted Ex. B-2, B-3, and B-4) for its case-in-chief. For its rebuttal case, Duke Energy Indiana presented the testimony and exhibits of Dr. Richard G. Stevie, Managing Director, Customer Market Analytics, (Pet. Reb. Ex. C, C-1, C-2, C-3 and C-4) and Ms. Diane L. Jenner, Director, Regulatory Strategy (Pet. Reb. Ex. D, D-1, D-2, D-3, D-4, and D-5). All testimony and exhibits offered by the Petitioner were admitted into evidence. The OUCC presented the testimony of Mr. Wes R. Blakley, Senior Utility Analyst. CAC presented the testimony of Mr. Grant S. Smith, Executive Director of Citizens Action Coalition. The Indiana Wildlife Federation, the Clean Air Task Force, and SDI did not present testimony in this matter. The pre-filed testimony and exhibits of the OUCC and CAC were admitted into evidence. No members of the general public appeared at the hearing in this matter.

On June 1, 2010, Duke Energy Indiana filed a *Verified Petition to Reopen the Record and Submit Late-Filed Exhibits* in which it requested that the Commission reopen the record in this proceeding for the purpose of entering into the record late-filed supplemental testimony and exhibits. The Presiding Officers granted the request and set an Evidentiary Hearing for this purpose on June 21, 2010, at 1:00 p.m. EDT, in Room 222 of the National City Center, Indianapolis, Indiana. At this Evidentiary Hearing the Petitioner submitted supplemental testimony of Ms. Diana Douglass, without objection from the OUCC or the CAC. No members of the general public appeared at the portion of the Evidentiary Hearing.

Based upon applicable law and the evidence presented herein, the Commission finds as follows:

1. Notice and Jurisdiction. Due, legal, and timely notice of the Evidentiary Hearing in this Cause was given and published by the Commission as required by law. Duke Energy Indiana is a public utility as defined by Ind. Code § 8-1-2-1, and is subject to regulation by the Commission to the extent provided for in the Public Service Commission Act, as amended. Accordingly, the Commission has jurisdiction over Duke Energy Indiana and the subject matter of this proceeding.

2. Petitioner's Characteristics. Duke Energy Indiana is an Indiana corporation with its principal office located at 1000 East Main Street, Plainfield, Indiana. Duke Energy Indiana is engaged in the business of supplying electric utility service to the public in the State of Indiana. The Company owns, operates, manages and controls plant, property and equipment used and useful for the production, transmission, distribution and furnishing of electric utility service to the public in the State of Indiana. Duke Energy Indiana directly supplies electric energy to approximately 775,000 customers located in 69 counties in the central, north central and southern parts of the State of Indiana. The Company also sells electric energy for resale to municipal utilities, Wabash Valley Power Association, Inc., Indiana Municipal Power Agency, and to other public utilities that in turn supply electric utility service to numerous customers in areas not served directly by Duke Energy Indiana.

3. **Relief Requested.** In its Verified Petition, Duke Energy Indiana requested: (1) the approval of an ongoing review progress report pursuant to Ind. Code § 8-1-8.5 and 8-1-8.7; and (2) the authority to add to the valuation of its utility property for ratemaking purposes the actual Project costs incurred through September 30, 2009, and approval of recovery of financing costs and other applicable related costs through its IGCC Rider. Duke Energy Indiana also presented a motion in its petition requesting the Commission to establish a subdocket to consider issues related to an increase in the Project cost estimate. The Commission granted this request in its Prehearing Conference Order issued on January 27, 2010.

4. **Prior Proceedings.** In its November 2007 Order in Cause Nos. 43114 and 43114-S1 (the “CPCN Order”), the Commission issued certificates of public convenience and necessity and clean coal technology (“CPCNs”) authorizing Petitioner to construct the 630 megawatt Edwardsport integrated gasification combined cycle plant in Knox County, Indiana near the location of the Company’s existing Edwardsport generation station. The CPCN Order approved Petitioner’s estimated construction cost for the IGCC Project of \$1.985 billion as well as Petitioner’s proposed IGCC Rider, which provides for the timely recovery of costs in connection with the IGCC Project. The Commission also approved the Petitioner’s request for ongoing review of the Project.

On May 1, 2008, Petitioner filed its first semi-annual IGCC Rider and ongoing review progress report proceeding related to the Project, designated as Cause No. 43114 IGCC-1. In addition to the ongoing review process approved by the Commission in its CPCN Order, the first semi-annual IGCC filing also included a request by the Company to revise the cost estimate of the Project from \$1.985 billion to \$2.350 billion, and a request for approval to undertake studies related to carbon capture at the IGCC Project and for cost recovery for such studies. On January 7, 2009, the Commission issued its order in Cause No. 43114 IGCC-1 (the “IGCC-1 Order”) in which it approved Petitioner’s revised construction cost estimate for the Project of \$2.350 billion and its ongoing review progress report, the timely recovery of construction and operating costs through the IGCC Rider reflecting actual expenditures through February 28, 2008, and studies related to carbon capture at the IGCC Project and cost recovery for such studies.

On November 3, 2008, Petitioner filed its second semi-annual IGCC Rider and ongoing review progress report proceeding related to the Project, designated as Cause No. 43114 IGCC-2. On May 13, 2009, the Commission issued its order in Cause No. 43114 IGCC-2 (the “IGCC-2 Order”) in which it approved the Company’s request for recovery under the IGCC Rider of the additional actual costs of the Project through September 30, 2008, and for certain external costs, and of the Company’s updated ongoing progress report for the IGCC Project.

On May 1, 2009, Petitioner filed its third semi-annual IGCC Rider and ongoing review progress report proceeding related to the Project, designated as Cause No. 43114 IGCC-3. On December 2, 2009, the Commission issued its order in Cause No. 43114 IGCC-3 (the “IGCC-3 Order”) in which it approved the Company’s request for recovery under the IGCC Rider of the additional actual costs of the Project through March 31, 2009, and for certain external costs, and of the Company’s updated ongoing progress report for the IGCC Project.

In both the IGCC-1 Order and the IGCC-2 Order the Commission set forth specific information required to be filed by the Company in each update proceeding regarding the IGCC Project, including an integrated schedule.

5. Testimony Regarding Ongoing Review of the IGCC Project.

A. **Petitioner's Evidence.** Mr. Womack testified that as of the end of October 2009, the engineering work for the Project was nearly 84% complete, procurement progress (including delivery of equipment and materials) was approximately 53% complete, and construction was 28% complete. Taking all phases of the Project into account, the Project overall was approximately 44% complete. The concrete foundations were complete on most critical areas and as a whole, concrete work was 57% complete and progressing at a rate of 2% to 3% per week. Underground utility conduit and piping installation was approximately 90% complete and structural steel erection had begun. According to Mr. Womack, contracts had been awarded or were in the final stages of being awarded for all mechanical construction work and equipment erection as well as some electrical work. Mr. Womack described Pet. Ex. A-1 as photographs of the Project site as well as work and recent construction activities at the Project site. Pet. Ex. A, at 3-4 (Womack Direct).

During the Evidentiary Hearing, Mr. Womack updated his testimony regarding the Project schedule, stating that the in-service date is now projected to be August 27, 2012 (Mr. Womack's original pre-filed testimony stated that the Project master schedule was projecting an in-service date of July 8, 2012.) He explained that there were several known critical paths causing concern and affecting the schedule. At the time of Mr. Womack's prefiled direct testimony, the critical paths involved the following activities and developments: the erection of the heat recovery steam generator ("HRSG"); the steam turbine installation and interconnected piping in the Power Island; Gasification Tower installation; design development related quantity increases; and installation of Coal Handling Systems. In his testimony, Mr. Womack provided additional details on each of these issues and certain steps being taken to address them. *Id.* at 4-7.

(i) **Grey Water Issues.** With respect to the "grey water"¹ disposal issue, Mr. Womack testified that on December 1, 2009, the Company received a letter from the Environmental Protection Agency ("EPA") in which the EPA denied the Company's request to recognize the Project's grey water as a Resource Conservation and Recovery Act ("RCRA") Subtitle C-exempt Bevill Amendment² waste, thereby eliminating the possibility of allowing the Company to inject the wastewater into a deep saline aquifer pursuant to an underground injection control ("UIC") Class I injection well permit.

In anticipation of this determination by the EPA, earlier in 2009 the Company began to develop an alternative disposal system and entered into contracts for the engineering, design and equipment procurement to treat the grey water waste stream. Mr. Womack testified that the cost estimate for the new grey water disposal system was \$106 million, representing an increase of \$77 million over the original deep saline disposal method. However, Mr. Womack further cautioned that as the design of the system was only about 40% complete, a risk remains that costs may rise as the design is finalized. Mr. Womack further indicated that the work on the grey

¹ "Grey water" is the waste water stream generated by the gasification process of the plant after it has gone through initial processing to remove most of the suspended solids.

² The Bevill amendment exemption is codified in 40 CFR §261.4(b) (7)(ii)(G) with the categorical description: "Process wastewater from coal gasification."

water disposal system is progressing and (at the time of his testimony) the installation of the foundation piling was 65% complete and the foundation concrete was due to be placed in early 2010 with the installation of equipment to begin in early summer 2010. *Id.* at 7-8.

(ii) Engineering Progress. Mr. Womack next provided an update on the engineering progress for construction of the Project stating that engineering work was nearing completion in all areas of the Project. Bechtel's engineering work, which includes the majority of the engineering work for the Project, was 88% complete. Mr. Womack noted that at the end of October, Bechtel had approximately 230 engineers and 70 support staff assigned to the Project, but that the number dropped in November and December as Bechtel moved toward completion of its work. Mr. Womack stated that Sargent & Lundy's work, which addresses most of the areas not designed by Bechtel, was approximately 78% complete, with their focus being the completion of the water treatment design. According to Mr. Womack, Burns & McDonnell's work, addressing the design of the grey water disposal system and the rail spur, was approximately 50% complete. *Id.* at 8-9. With respect to the rail spur, Mr. Womack stated that engineering was progressing as planned and that permitting for water and street crossings was underway. Right-of-way acquisition was nearing completion, and bids for the construction will be received in the spring of 2010, with construction beginning in the summer of 2010. *Id.* at 13.

(iii) Procurement Progress. Mr. Womack continued his testimony by stating that over 90% of all the engineered equipment for the Project was on order and that the remaining items mainly involved the grey water disposal systems. Some of the large engineered equipment, such as the radiant syngas coolers, slag crushers, cooling towers, liquid nitrogen tanks, and transformers, have been delivered to the site. Mr. Womack also testified that the Company was in the final stages of ordering bulk materials, such as steel, piping, valves, and wire and cable. He said the major area of procurement focus has been the award of construction contracts for numerous scopes of work and only a handful of construction packages had yet to be awarded. Those remaining unawarded construction packages were generally in some stage of the bid and award cycle, and, with the exception of the railroad spur and the final site restoration and paving, all of the construction packages were scheduled to be awarded in the first quarter of 2010. *Id.* at 9-11.

(iv) Construction Progress. Mr. Womack next provided an update on the construction work portion of the Project, stating that construction was 32% complete. He stated that the raw water collector wells, the maintenance/warehouse building, administration/control building, underground utility corridor, underground circulating water pipe, and foundation piling work were all virtually complete. Further, approximately 57% of the concrete work was completed with all concrete foundations completed.

Mr. Womack continued his update by stating that in the gasification area, the solids settling tanks had been erected as well as other field tanks. According to Mr. Womack, structural steel erection was progressing, and construction of the gasification tower was underway with the first tier completed and the second tier nearing completion. Mr. Womack further testified that in the power block area, the erection of the HRSG has begun, and in the air separation unit area, the liquid nitrogen tanks have been set, and the contractors for both of these areas had mobilized in order to begin construction in January 2010. *Id.* at 11-12.

Mr. Womack also provided an update on the status of the transmission projects relating to the Project. He testified that the relocation of transmission lines has been completed, the relocation and expansion of the Edwardsport New Town substation was complete, and that construction of the new substation designed to connect the Project to the grid was nearly complete. A transmission system outage was scheduled for March 2010 to connect the substation to the transmission grid and become partially energized. Mr. Womack said the remaining sections of the substation will be completed by June 2010, after which construction power for the Project will be provided by the substation. *Id.* at 13.

(v) Environmental Permitting Issues. Mr. Womack commented on the status of the Project's air permit and the petition for review of the permit that was filed by the CAC. According to Mr. Womack, the CAC's petition remains pending and the Company has filed several motions in an effort to narrow the scope of review. Mr. Womack noted that no trial date has been scheduled on the CAC's petition. Mr. Womack also testified that the air permit modification application filed on November 23, 2009, was narrow in scope in that particulate matter emissions will not increase above the allowable rates from the original permit. Therefore, it is not anticipated that the modified air permit issues will impact the pending appeal issues. *Id.* At the Evidentiary Hearing, Mr. Womack updated this testimony to reflect that the permit modification was granted on March 1, 2010.

Mr. Womack also commented on the December 15, 2009 EPA Order in Cash Creek Generation LLC, Title V/PSD Air Quality Permit³ ("EPA Order"), stating that at this time he did not believe that the EPA Order concerning Cash Creek (with respect to Clean Fuels as BACT) will affect the appeal of the IGCC Project air permit because: (1) the existing units at Edwardsport Station will be retired; (2) EPA is not concluding that the present limits in the Cash Creek permit do not represent BACT; and (3) because EPA states that the Order "should in no way be interpreted as EPA expressing a policy preference for construction of natural gas fired facilities over IGCC facilities."⁴ *Id.* at 13-15.

(vi) Additional Budget Issues. Mr. Womack reported that the Company has experienced design modifications and scope growth above what was anticipated, adding significant capital costs to the Project. At the time of the filing of the Verified Petition on November 24, 2009, the Company forecasted that the additional capital cost items would use the remaining contingency and escalation amounts in the currently approved \$2.35 billion Commission-approved estimate, and add approximately \$150 million to the estimated cost of the Project, bringing the total Project cost estimate to \$2.5 billion without consideration of additional contingency and escalation. Mr. Womack stated that the cost pressures have continued, adding more direct costs to the Project cost estimate and that the Company was in the process of determining how the increase in capital costs will impact the total Project cost estimate, including additional escalation and contingency amounts. Mr. Womack pointed out that the Company was not requesting that the Commission approve an updated cost estimate for the Project in this proceeding, but had proposed in the Verified Petition that the Commission

³ Permit #V-07-017, Pet. Nos. IV-2208-1 & IV-2008-2

⁴ EPA Order at 9.

establish a subdocket to fully address the issue of an updated cost estimate for the Project.⁵ *Id.* at 4-5.

Mr. Womack stated that the primary cause of the increase in the cost estimate, from the time of his testimony in Cause No. 43114 IGCC-3 and his testimony in this proceeding, consists of scope growth due to design development and the increased cost of support services that accompany such growth. As the engineering and design work has progressed, the required amount of concrete, steel, pipe, valves, and electrical wire has grown. Mr. Womack further testified that increases in each of these quantities causes increases in other related quantities (*i.e.*, an increase in piping causes increases in pipe hangers, pipe fittings, bolts, gaskets, heat tracing, insulation, painting, and labeling). These significant quantity increases for the Project drive an increase in the direct cost of the Project work – the bulk material purchase cost and the associated labor cost for installation. In addition, these quantity increases drive increases in indirect costs, such as freight, material storage and handling, material testing, surveying, scaffolding, crane rental, and temporary power. Mr. Womack concluded by stating that this trend may continue until the design is completed in early 2010. *Id.* at 15-16.

Mr. Womack reported that the projected cancellation costs for the Project as of October 31, 2009 totaled approximately \$1.554 billion. He sponsored Petitioner's Exhibit A-3, which is a graph of forecasted future cancellation costs (committed costs). *Id.* at 16.

Mr. Womack provided details on the Project information which the Commission directed the Company to provide in its IGCC-1 and IGCC-2 Orders. In addition to certain information set forth in his testimony, Mr. Womack provided the Commission requested information in Petitioner's Redacted Exhibit A-4, Petitioner's Confidential Exhibit A-4, and Petitioner's Confidential Exhibit A-5. *Id.* at 17-18. Mr. Womack described Petitioner's Confidential Exhibit A-5 as a copy of the integrated project schedule and various views of the schedule, which are used to monitor the Project's progress by system, through milestones and critical paths. Cost reports are also included, which are used to monitor and control costs, including analysis of contingencies. *Id.* at 19.

B. Evidence Presented by the Citizen's Action Coalition. Mr. Grant Smith testified on behalf of the CAC and indicated that the cost estimate for the Project had increased, electricity usage is declining, and that there have been recent developments in energy efficiency in the State of Indiana. In addition, Mr. Smith also testified that renewable energy generation has increased significantly in Indiana and that the pace of climate change legislation or EPA regulations addressing carbon dioxide emissions has slowed. According to Mr. Smith, each of these issues support the revocation of the CPCN based on the increased costs of a Project that is no longer needed.

In his testimony Mr. Smith referred to statements in the Company's petition in this proceeding in which it reported that the cost estimate for the IGCC Project had increased approximately \$150 million after taking account of all contingency and escalation amounts in the Commission approved Project cost estimate. In addition, Mr. Smith noted that the Company

⁵ The Commission approved the Company's request for a subdocket to address the cost estimate in its prehearing conference order issued January 27, 2010 and established the cause number for the subdocket proceeding as Cause No. 43114 IGCC 4 S-1.

requested a subdocket proceeding to address the higher cost estimate. Mr. Smith also discussed the impact on a typical residential customer of the rate increase proposed by Duke Energy Indiana in the current proceeding and indicated that if the request is approved residential customers would be paying \$54.60 per year for the Project.

Mr. Smith further testified regarding the need for a more comprehensive review of both the continuing need and true cost of the Edwardsport IGCC project in light of the escalating costs and the availability of better alternatives. CAC Ex. A, at 3 (Smith Direct). Mr. Smith stated that electricity usage has continued to decline and that net generation in the United States continues to decline. *Id.* at 5. In addition, Mr. Smith indicated that the use of coal-fired generation, retail sales, and total electric power generation, have declined and there has been an increase in the Midwest Independent Transmission System Operator's ("Midwest ISO") reserve margin. *Id.* at 5-6. Based on the decline in energy usage, Mr. Smith testified that the Indiana State Utility Forecast Group ("SUFUG") revised its growth projections to 1.55% per year over the 20 years of the forecast. *Id.* at 6-7.

Mr. Smith next commented on potential impacts to the Company of recent developments related to energy efficiency. Mr. Smith testified that renewable resources currently provide about 1% of the generation capacity serving Indiana consumers and that Indiana currently ranks 13th in the United States for installed wind generation capacity. In addition, electric generation from renewable sources continues to increase. *Id.* at 7. Mr. Smith also noted that the Commission's Phase II Order in Cause No. 42693, that established overall energy efficiency requirements throughout the State of Indiana, was not taken into account in previous estimates of demand growth used by Duke Energy Indiana or the SUFG. Mr. Smith opined that given the decline in energy usage the estimate of probable future growth that was initially used to support the Edwardsport project is now questionable. *Id.* at 8-9.

Mr. Smith also testified that although the pace of carbon legislation seems to have slowed, it is still the prevailing consensus that some carbon legislation will be enacted and that restriction on carbon will cause the cost of power from Edwardsport to increase. In addition the utilization of carbon capture and sequestration technology at Edwardsport will decrease the efficiency of the plant, further driving up the cost per megawatt hour. *Id.* at 9-10. Based on the foregoing, Mr. Smith concluded that a new comprehensive review of the need for the IGCC Project is necessary. *Id.* at 8-9.

C. Petitioner's Rebuttal Testimony. In Ms. Jenner's rebuttal testimony, the Company acknowledged (consistent with its Verified Petition) that the Project cost estimate had increased significantly and that the Company was in the process of reviewing how the increase in capital costs would impact the overall Project costs. Ms. Jenner pointed out that the petition specifically requested a subdocket proceeding in which the Company would present additional evidence and an updated Project cost estimate to allow for a comprehensive review of the Project. Accordingly, Ms. Jenner stated that the cost estimate increase should appropriately be addressed in the subdocket proceeding. Ms. Jenner pointed out that neither the CAC, nor any other party, alleged in this proceeding that the overall Project costs identified and discussed by the Company through September 30, 2009, were not incurred pursuant to and consistent with the prior orders of this Commission related to the IGCC Project. Therefore, the Company renewed its request for approval of the rate relief sought and approval of the Project status report. Pet. Reb. Ex. D, at 5 (Jenner Rebuttal)

Ms. Jenner also testified in response to Mr. Smith's assertion that, due to decreased sales, the IGCC Project is no longer needed. *Id.* at 5. Ms. Jenner pointed out that in the original CPCN case, Cause No. 43114/43114-S1, the Company presented its integrated resource plan ("IRP") showing the need for the IGCC plant to meet the Company's service requirements in 2011 and beyond. Petitioner's 2007 IRP also continued to show a need for the IGCC capacity as well as additional peaking and intermediate capacity in 2012 and beyond. Then, in IGCC-1, the Company performed updated modeling which affirmed the continuing need for baseload generation from the IGCC plant.

In her testimony Ms. Jenner again referred to the Commission's January 7, 2009 Order in Cause No. 43114 IGCC-1, where we stated:

[e]ven with the revised cost estimate and the change of the completion date to June 2012, the project remains reasonable and necessary and that the Company's overall need for baseload capacity has not changed. Even with an updated lower load forecast and additional IRP analysis, the Company has a need for approximately 590 MWs in summer of 2012 and beyond. As Ms. Jenner testified, this significant need will remain even with the addition of increased energy efficiency programs and/or increased wind resources to Petitioner's resource portfolio.

Cause No. 43114 IGCC-1, at 12 (*Ind. Util. Reg. Comm'n*, January 7, 2009).

Ms. Jenner also discussed her rebuttal testimony in Cause No. 43114 IGCC-2 concerning the continued need for the IGCC plant. At that time, Ms. Jenner used the December 2008 load forecast and demand response impacts reflecting the economic downturn. According to her analysis Duke Energy Indiana would need to purchase or acquire additional capacity beginning in 2013 to meet its required Reserve Margin. Ms. Jenner concluded that there was still a need for the Edwardsport IGCC's baseload capacity, even with the lower load forecast. *Pet. Reb. Ex. D*, at 6-7.

In addition, Ms. Jenner pointed to the Commission's finding that the IGCC plant was still needed in its IGCC-2 Order. *Id.* at 7.

[The Commission] recognize[s] that planning and constructing new generation capacity must appropriately look to long term trends and projections to ensure that capacity is planned and constructed in a manner that will result in its timely availability to meet future demand. To stop construction of the IGCC Project in response to an economic downturn, without clear projections of a long term corresponding overall decline in electricity demand as suggested by the CAC, would be inconsistent with this approach. In addition, we also note that Ms. Jenner provided evidence in this proceeding that the Company's overall need for baseload capacity, that will be provided by the Edwardsport Project, has not changed even with an updated lower load forecast and lower Reserve Margin. We find Ms. Jenner's assessment on this issue to be reasonable.

Based on the evidence presented in this matter, we conclude that the Petitioner has demonstrated the IGCC Project is still needed by the Company for baseload capacity, despite the current downturn in the economy, and that public convenience and necessity continues to require the construction and completion of the IGCC Project.

Order in Cause No. 43114 IGCC-2, at 13 (*Ind. Util. Reg. Comm'n*, May 13, 2009).

Ms. Jenner also recounted her discussion that the IGCC Project is still needed in her testimony in IGCC-3. In that proceeding, she relied on the spring 2009 load forecast and demand response impacts provided by Dr. Stevie that reflected the economic downturn. Ms. Jenner's analysis showed that the IGCC Project was still needed to serve customers. Pet. Reb. Ex. D, at 7-8. In the IGCC-3 Order, the Commission made findings on the issue of the continuing need for the Project similar to those in the IGCC-2 proceeding. *Id.* at 8.

Ms. Jenner further testified that on May 29, 2009, the Court issued its remedy order in the New Source Review ("NSR") litigation. Among other rulings, the Court ordered the shutdown of Wabash River Units 2, 3, and 5 by September 30, 2009. The Company complied with that order and those units have been shut down and Unit 4 remains operational. Ms. Jenner stated that the Company has appealed this decision and such appeal is pending before the Seventh Circuit Federal Court of Appeals. *Id.* at 8-9. Ms. Jenner noted that there is a possibility that the Wabash River Units could be brought back on-line after shutdown if the remedy order is reversed on appeal. However, she also observed that these units date back to the 1950s and that environmental regulations continue to tighten and at some point in the foreseeable future it will no longer be economic to run these units due to new compliance requirements. *Id.* at 9.

Ms. Jenner also testified regarding the settlement that Duke Energy concluded with the plaintiffs in the NSR litigation related to Gallagher Units 1 and 3 and noted at the Evidentiary Hearing that the judge signed the consent decree on March 18, 2010.⁶ The settlement provides for the conversion of Gallagher Units 1 and 3 from coal-fired units to gas-fired units by December 31, 2012; alternatively, those units must be retired by February 1, 2012. Currently, the Company plans to convert the units to natural gas. In addition, the Company is planning to upgrade its Markland hydro electric plant on the Ohio River, whereby the Company will gain about 17 MW of additional hydro power. *Id.* at 9-10.

Ms. Jenner sponsored Petitioner's Rebuttal Exhibits D-1 through D-4, consisting of an update to her analyses provided in Cause No. 43114 IGCC-3, which show the supply versus demand balance for Duke Energy Indiana for 2010-2019 using the Fall 2009 load forecast reflecting the impact of the recent economic downturn. These analyses also reflect the shutdown of Wabash River Units 2, 3 and 5, as well as the derate of Gallagher Units 1 and 3 due to the gas conversion, and the addition of capacity at the Company's Markland hydro generating plant. Ms. Jenner pointed out that these exhibits were based on the Company's 2009 IRP. *Id.* at 10-11.

Ms. Jenner also explained the resource adequacy requirement assumptions used in her updated analyses stating that the Midwest ISO made changes to its tariff to include a long-term resource adequacy requirement such that the Loss of Load Expectation ("LOLE") due to

⁶ *U.S. v. Cinergy Corp. et al.*, No. IP 99-1693-C-M/S, (S.D. Ind. March 18, 2010).

resource inadequacy cannot exceed one day in ten years. Beginning with planning year June 2009-May 2010, the LOLE standard became enforceable under the Midwest ISO's Tariff and there are financial consequences for failure to meet this standard. Mr. Jenner further explained that for the 2009/2010 planning year, Petitioner is required to meet a Planning Reserve Margin ("PRM") on an Unforced Capacity basis of 5.35% and that the Midwest ISO will be performing studies every year to determine the required PRM for the upcoming planning year, which will define the minimum reserve margin ("RM") requirement for the Company. For longer planning purposes, the Company believes that the result for the 2010/2011 planning year is indicative of what will be required in the future. *Id.* at 11. For this year, Ms. Jenner stated that the 5.35% PRM requirement is equivalent to an installed capacity reserve margin requirement (*i.e.*, the historical method used by the Company) of 13.9%, which she used in her updated analyses. *Id.* at 11-12.

Ms. Jenner testified that Petitioner's Rebuttal Exhibit D-1, which relies on the updated load forecast information supplied by Dr. Stevie and includes the energy efficiency targets used in the Company's 2009 IRP and the Commission's Order in Cause No. 43374, demonstrates that the IGCC Plant continues to be needed to meet its customers' electricity needs in 2012. Petitioner's Rebuttal Exhibit D-2 shows that without the addition of the Edwardsport IGCC Plant, the Company will be about 400 MW short in 2012 and that the need continues to grow in the future. *Id.* at 12.

Ms. Jenner explained that Petitioner's Rebuttal Exhibits D-3 and D-4 include the projected impacts of the Commission's Phase II Order in Cause No. 42693 with energy efficiency amounts increasing annually up to an incremental 2% by 2019. Ms. Jenner indicated that without the Edwardsport IGCC plant the Company would be about 375 MW short of meeting its reserve requirements in 2012 and such need would continue to grow. She concluded that Petitioner's Rebuttal Exhibits D-1 through D-4 demonstrate that the Company continues to have a need for the IGCC plant's baseload capacity, notwithstanding the projected effects of the energy efficiency cases. Ms. Jenner recognized that such need is not at the same level as shown in other proceedings. However, Ms. Jenner noted that it is possible that the economic recovery will be stronger than expected and in that event, electricity sales would also be more robust, giving rise to additional capacity requirements. *Id.* at 13-14.

Ms. Jenner agreed with Mr. Smith that several wind farms have been developed in Indiana. She observed that the Company has not ignored this development in its consideration of need for the Edwardsport IGCC plant and pointed out that the Company's 2009 IRP and Petitioner's Rebuttal Exhibits D-1 through D-4 include additional wind resources through 2019. However, Ms. Jenner explained that wind is an intermittent resource which cannot be depended upon to produce power much of the time. Petitioner's Rebuttal Exhibit D-5 shows the utilization of wind resources within the Midwest ISO footprint for August 2009 and Ms. Jenner said this exhibit shows the extreme variability of the output from wind turbine resources. Due to this variability, other resources must be available to serve customer load reliably at times when wind resources are not able to produce power. Ms. Jenner testified that for planning year 2010/11, the Midwest ISO has determined that the capacity credit for wind resources will be only 8% compared to the 20% for the 2009/10 planning year. According to Ms. Jenner, using the 8% capacity credit for wind resources for planning year 2010/11, the Company would need to have over 7,300 MW of installed wind resources to have as much capacity at the time of the summer peak as the IGCC plant. *Id.* at 14-15.

Ms. Jenner also responded to CAC's contention that the IGCC Project fails to take into account the potential impact of carbon legislation and/or regulations. She explained that the CAC raised this same issue in the original CPCN case, Cause No. 43114, again in the first update case, Cause No. 43114 IGCC-1, and again in each of the two subsequent update cases, Cause Nos. 43114 IGCC-2 and 43114 IGCC-3. Ms. Jenner agreed with Mr. Smith's assessment that the pace of carbon emissions legislation has slowed. Nevertheless, the Company continues to consistently evaluate the IGCC Project in light of potential carbon restrictions. She testified that extensive analyses were performed in both the CPCN case and IGCC-1 which showed that the IGCC plant was a reasonable and robust option for baseload generation for the Company under alternative scenarios, including scenarios which assumed Congress would pass climate legislation that would result in prices/costs for the emission of CO₂. In the CPCN case, the Commission found these analyses reasonable and issued the CPCNs for the IGCC Project. In its first update case, Cause No. 43114 IGCC-1, the Commission stated "[e]ven with higher CO₂ prices assumed (as suggested by the CAC), the economics of the IGCC Project remain reasonable." 43114 IGCC-1 at 12 (*Ind. Util. Reg. Comm'n*, January 7, 2009).

In addition, Ms. Jenner quoted the IGCC-2 Order, related to the same issue raised by the CAC as follows:

No party disputed the fact that carbon restrictions, in some form, will likely become law in the not too distant future. The anticipated regulation of CO₂ is not a new issue as it has been considered by the Commission in its underlying CPCN Order and in the initial filing in these ongoing review proceedings in Cause No. 43114 IGCC 1. While the CAC again discusses the anticipated regulation of CO₂ in its testimony in this proceeding, it does not offer additional information that has not previously been considered by the Commission in prior proceedings involving the IGCC Project.

The evidence presented by the CAC with respect to expected carbon legislation or regulations does not justify conducting a full review of the underlying CPCN for the Project. The Petitioner has previously adequately evaluated the possibility of carbon emission restrictions and the Project remains reasonable for meeting the Company's baseload capacity needs.

IGCC-2 Order, at 13. (*Ind. Util. Reg. Comm'n*, December 2, 2009).

Ms. Jenner stated that just as the CAC did not present any new information in Cause No. 43114 IGCC-3 about the likely content of carbon emission restrictions, Mr. Smith did not do so in this case. Pet. Reb. Ex. D, at 16-17.

Ms. Jenner observed that Mr. Smith simply stated that restrictions on carbon emissions will cause the cost of power from the IGCC Project to increase and that any carbon capture and sequestration would decrease the efficiency of the plant. *Id.* at 18. After quoting from the Order in IGCC-3, where the Commission noted that the CAC did not present evidence concerning carbon emission restrictions justifying a full review of the underlying CPCN for the Project, Ms.

Jenner testified that she did not do any additional modeling based on different assumptions for carbon prices for purposes of this proceeding because there was no reason to do so.

Dr. Stevie responded to Mr. Smith's testimony regarding recent declines in electricity usage. Pet. Reb. Ex. C, at 5 (Stevie Rebuttal). Dr. Stevie disagreed with Mr. Smith's contention that the Commission should review the need for the IGCC Project based on the recent changes in electricity load. He noted that although Mr. Smith did not mention the word recession, the declines in electricity usage cited by Mr. Smith and the decline in the rate of growth of electricity usage going forward are all attributable to the recession generally experienced in the United States, including Indiana, beginning in December 2007. Although Dr. Stevie generally agreed with Mr. Smith that industrial production weakened during the period of October 2008 through October 2009, and that electricity usage was reduced during that period, he cautioned that one must be careful in citing statistics on changes in raw energy usage from one year to the next. Dr. Stevie testified that electricity use on a weather normal basis has been lower when one looks at current levels on a year-over-year basis, but this does not mean that sales growth will not return as the economy rebounds. Dr. Stevie further stated that any such inference by Mr. Smith is not realistic and not borne out by any historical data on the nature of business cycles or the impact of business cycles on energy use, and is not consistent with changes in electricity usage based on annual variations in weather conditions. *Id.* at 5-6.

Dr. Stevie further testified that the Company relies on projections of the economy from Moody's Economy.com and, as he indicated in his rebuttal testimony in Cause No. 43114 IGCC-3, Moody's, at that time, forecast a rebound beginning mid-2009. All indications are that the forecast was accurate as over the last 6 to 9 months a number of factors indicate the U.S. economy has stopped its decline and has begun an upswing. In addition, Dr. Stevie included Petitioner's Rebuttal Exhibit C-1, a table from the National Bureau of Economic Research, which provides information on past business cycles back to 1854. This table shows the average length of a contraction across all business cycles, which is in line with the projection of the rebound for the current economic downturn. In addition, Dr. Stevie noted that following the strong growth posted in the 4th quarter 2009, the rate of expansion is expected to slow as inventories rebuild and employment growth returns, which is now expected in the next several months. *Id.* at 7-8.

Dr. Stevie also discussed Petitioner's Rebuttal Exhibit C-2, which provides data on how Duke Energy Indiana's weather normal retail sales have changed during the past business cycles. This exhibit demonstrates that in each of the past business cycles, declines in sales are eventually followed by increases. In fact, Dr. Stevie stated that the change in retail sales relative to the prior year has flattened out, which is a strong sign that the bottom has been reached. He also pointed out that most of the decline in sales during the economic downturn occurred in the industrial sector, but now, the year-over-year change in industrial sales is up and the increases in industrial sales have essentially offset weakness in the residential and commercial sectors. He further observed that expansion in the industrial sector will lead to a return to growth in the residential and commercial sectors in later months and that while the current pace of industrial sales growth has been rapid, he expects this to slow as inventories are rebuilt and as a steady pace of expansion resumes. *Id.* at 7-9.

Dr. Stevie also testified regarding Petitioner's Rebuttal Exhibit C-3, which provides information comparing the Company's energy and peak forecasts prepared in 2007, Fall 2008,

Spring 2009, and Fall 2009, the latter of which reflects a contemporary outlook on the economy prepared by Moody's Economy.com. This table shows the differences in the Company's energy and peak load forecasts relative to each of the prior forecasts. The fall 2009 forecast is lower than the previous forecasts by a range of approximately 2.5% to 10%, depending upon the vintage of the prior forecast, but the difference between the spring 2009 and fall 2009 forecast is minimal. Dr. Stevie stated the latest load forecast was provided to Ms. Jenner for use in her analysis of the need for the IGCC Project, along with estimates of conservation and demand response. Dr. Stevie also provided Ms. Jenner with estimates of conservation impacts based on a high energy efficiency case resulting from the assumed achievement of the energy efficiency objectives established by the Commission in the Phase II Order issued in Cause No. 42693 on December 9, 2009. *Id.* at 9-10.

Dr. Stevie concluded his testimony with an overview of current economic trends as depicted on Petitioner's Rebuttal Exhibit C-4. This exhibit consists of seven charts showing the current trends for light vehicle sales, housing starts, retail sales, the Institute of Supply Management's National Association of Purchasing Managers Index, the national index of industrial production, initial claims for unemployment insurance, and the Economic Cycle Research Institutes weekly index of leading indicators ("ECRIW"). According to Dr. Stevie, the trend of these seven macroeconomic current and leading indicators support the view that the economy is rebounding. Dr. Stevie testified that the ECRIW, an overall leading indicator of the economy, reflects an overall expectation of continuing improvement in the economy with its upward trend. Dr. Stevie said these trends bolster the point that the economy is on a growth path which is leading to growth in the use of energy. *Id.* at 10-12.

D. Testimony of Mr. Womack at the Evidentiary Hearing. At the Evidentiary Hearing, Mr. Womack responded to questions from the Presiding Officers regarding the status of the air permit. Mr. Womack explained that the original air permit was granted in January 2008 and there were subsequent appeals from Intervenors, principally the Sierra Club, and that the Company is still waiting on rulings on various motions, but no schedule has been set. Mr. Womack stated that this air permit proceeding doesn't impact the Project schedule or construction because the permit that has been issued is fully implementable. The Company has received all the required permissions under the permit to fully complete the Project and the Company plans to move forward with the Project unless there is an order to the contrary.

Mr. Womack was also questioned about the significant quantity increases for various commodities, such as concrete, valves, cable, structural steel, piping, and explained that the IGCC Project represents a unique technology that was not taken fully into account in the original FEED Study. Mr. Womack stated the even Bechtel was surprised by the increase in quantities. Mr. Womack explained that the original FEED Study was made up of two parts. One part was to design the chemical and physical processes and that portion of the FEED Study continues to be extremely useful and necessary. The second part of the FEED Study was to take the process design and assess the various components (*e.g.* type of pumps, kind of pump, and size of pump) in light of the preliminary design. In hindsight, Mr. Womack stated that this part of the FEED Study was not as thorough as one would prefer, primarily due to the newness of the technology.

Mr. Womack also responded to questions regarding the status of the engineering for the Project, stating that getting the last 20% of the engineering done has been more complicated than what was planned, due to the need to integrate the work between the GE and Bechtel engineers.

In addition, Mr. Womack testified regarding the new forecasted in-service date of the Project of August 27, 2010, explaining that the delay in schedule is being primarily driven by the increased quantities for various commodities. He also testified that the Company plans to begin working with the Midwest ISO to try to provide power during the peak summer months as the Company tests and tunes the plant.

E. Discussion and Findings of the Commission Regarding the Continuing Need for the IGCC Plant; the Potential Impact of Anticipated Carbon Legislation; and the Ongoing Progress Report.

1. Increase in the Cost Estimate. Duke Energy Indiana indicated in the Verified Petition for this proceeding and in Mr. Womack's direct testimony that the Project cost estimate had significantly increased, although the extent of the increase was not yet known. Because of this significant increase, the Company requested a subdocket to address all issues related to the increase which was granted in this matter. As such all issues related to the cost estimate will be addressed in the subdocket proceeding.

2. Continuing Need for the IGCC Plant. The CAC again questioned the continuing need for the IGCC Plant due to the current economic recession citing Ind. Code § 8-1-8.5-5.5, which states:

When, in the opinion of the commission, changes in the estimate of the probable future growth of the use of electricity so indicate, the commission shall commence a review of any certificate granted under this chapter to determine whether the public convenience and necessity continues to require the facility under construction. If the commission finds that completion of the facility under construction is no longer in the public interest, the commission may modify or revoke the certificate.

The Commission has previously addressed this issue and finds that the testimony presented in this matter does not support modification of our prior findings on this issue.

3. Expected Carbon Legislation. In its testimony, the CAC also suggested that separate review of the Project by the Commission is warranted pursuant to Ind. Code § 8-1-8.7-5 as the cost estimate represented by the Company is not the true cost to ratepayers of completing the IGCC Project in light of impending carbon legislation. Ind. Code § 8-1-8.7-5 states that:

When, in the opinion of the Commission, changes in the estimate of the cost or the need for clean coal technology occur, the Commission shall immediately commence a review of the certificate granted under this chapter to determine if public convenience and necessity will be served by the implementation of the technology. If the Commission finds that implementation of the technology will not serve the public convenience and necessity, the Commission may modify or revoke the certificate.

As discussed further herein, we decline to take such action based on the testimony presented in this matter. No party disputed the fact that carbon restrictions, in some form, will likely become law in the future. While the timing of such restrictions is uncertain the anticipated regulation of CO₂ is not a new issue; it was considered by the Commission in the underlying CPCN Order and in the ongoing review proceedings in Cause Nos. 43114 IGCC-1, 43114 IGCC-2, and 43114 IGCC-3. While the CAC again briefly mentions the anticipated regulation of CO₂ in its testimony in this proceeding, it did not offer additional information that has not previously been considered by the Commission in prior proceedings involving the IGCC Project.

In response to CAC's testimony about upcoming carbon legislation, Duke Energy Indiana presented the testimony of Ms. Jenner who agreed with the CAC that the pace of potential legislation has slowed, but that the Company has consistently evaluated the IGCC Project in light of potential carbon restrictions. Ms. Jenner also reviewed the history of the Commission's consideration of this issue in past proceedings.

Accordingly, the comments presented by CAC with respect to expected carbon legislation or regulations do not justify conducting a full review of the underlying CPCN for the Project. The Petitioner has previously evaluated the possibility of carbon emission restrictions on the Project and the Project remains reasonable for meeting the Company's baseload capacity needs in light of potential carbon restrictions. Therefore, consistent with our findings in the CPCN Order, the IGCC-1 Order, the IGCC-2 Order, the IGCC-3 Order and our review of the testimony on this issue in this Cause, we find that the IGCC Project continues to represent a viable baseload generating unit and it is in the public interest.

4. Ongoing Review Progress Report. No party presented evidence contrary to the specific information presented by Mr. Womack in his ongoing review progress report for the IGCC Project, including his testimony regarding the Project cost pressures. At the hearing, Mr. Womack responded to a number of questions regarding the increasing costs for the IGCC Project and the updated schedule for the Project. The Company will address issues related to the increase in the cost estimate for the Project in the subdocket proceeding (Cause No. 43114 IGCC 4 S-1). We find that the Company has adequately addressed the reporting requirements to the Commission for purposes of this proceeding as specified in our Orders in Cause Nos. 43114 IGCC-1 and 43114 IGCC-2. We also find and conclude that the Company's ongoing review progress report of the IGCC Project should be approved. However, as additional issues identified for consideration in the Petition are to be addressed in a subdocket to this proceeding, we hereby make the findings herein on an interim basis pending the outcome of 43114 IGCC 4 S-1.

6. Ratemaking Issues Presented in this Matter.

A. Petitioner's Testimony on this Issue. In her testimony in this proceeding Ms. Diana Douglas requested that the Commission approve the following: (1) the value of the IGCC Project; (2) authorization for the Company to earn a return on such value; (3) the amount and recovery of Duke Energy Indiana's expenditures for the IGCC Project incurred through September 30, 2009; (4) recovery of amortized regulatory filing expenses (related to the IGCC CPCN proceeding) and fees and expenses of Black & Veatch (the Commission's independent engineering firm for the Project); (5) recovery of actual depreciation expense incurred through September 30, 2009 and estimated depreciation from April 2010 through September 2010 on the

portion of the Project that has been placed in service (certain transmission facilities); (6) reconciliation of revenue requirements for operating expenses approved for collection in Cause Nos. 43114 IGCC-1 and IGCC-2 to actual collections through September 2009; and (7) adjustment of Petitioner's retail electric rates, via the IGCC Rider (Rider 61), to include the revenue effect of such investment and cost recovery. Pet. Ex. B, at 3 (Douglas Direct). The Company specifically requested approval of Petitioner's Exhibit B-1, consisting of its updated Rider 61, which Ms. Douglas noted includes changes approved by the Commission in Cause No. 43114 IGCC-3. *Id.* at 4.

Ms. Douglas testified regarding Petitioner's Exhibit B-1, identifying changes to the Company's Rider 61 resulting from the IGCC-3 Order. Petitioner's Exhibit B-4 highlights the changes to the language approved by the Commission's IGCC-3 Order that have been incorporated into the tariff, including language to clarify that recovery of the costs for Black & Veatch's oversight of the Project was approved by the Commission in its IGCC-1 Order. Language was also added regarding the timing of implementation of rate changes under the rider to provide flexibility in cases where the rider is not updated exactly every six months. *Id.* at 3-4. Ms. Douglas also provided an overview explanation of Petitioner's Rider 61.

In addition, Ms. Douglas testified regarding Petitioner's Exhibit B-2, indicating that this exhibit sets forth data for the IGCC Project, including: (1) the estimated cost of completing the Project; (2) the construction start date; (3) the current stage of completion; (4) the estimated or actual in-service date; (5) total expenditures for the Project as of September 30, 2009; (6) Project expenditures applicable to wholesale jurisdiction; (7) retail IGCC facility investment as of September 30, 2009; and, (8) the amount of retail allowance for funds used during construction ("AFUDC") included in the cost of the Project as of September 30, 2009.

Ms. Douglas further stated that the jurisdictional balance of the Company's investment in the IGCC Project subject to CWIP ratemaking treatment is \$886,995,000 as of September 30, 2009. *Id.* at 5. The net jurisdictional investment of \$886,915,000 multiplied by the Company's overall weighted average cost of capital of 7.60% as of September 30, 2009, results in a six-month after tax return in the amount of \$33,703,000. She further explained that the after tax return is converted to the revenue requirement by using the applicable revenue conversion factors applied to the debt and equity components of the after tax return. *Id.* at 7. The jurisdictional revenue requirement requested for this 6-month filing, based on the qualified investment at September 30, 2009, is \$48,419,000. *Id.* at 8-9.

Ms. Douglas also provided an update on the costs of several transmission projects, which are included in the \$2.35 billion Commission-approved Project estimate and listed on Petitioner's Exhibit B-2, page 1. Ms. Douglas explained that for the transmission projects that qualify as part of the Midwest ISO transmission expansion plan and are recognized by the Midwest ISO as Regional Expansion and Criteria Benefit ("RECB") projects, the Company will first seek cost recovery for such projects pursuant to its Rider No. 68 and the Midwest ISO's Schedule 26. Page 1 of Petitioner's Exhibit B-2 shows the reduction in IGCC Project expenses by the value of the RECB transmission project expenditures as of September 30, 2009. To the extent that costs for an IGCC related transmission project are not eligible for recovery through Rider No. 68 and Schedule 26, then the Company will seek cost recovery for such project (or portion of a project) through the IGCC Rider. *Id.* at 6-7.

Ms. Douglas also explained the calculation of the jurisdictional revenue requirement applicable to operating expenses. External costs associated with the IGCC CPCN retail regulatory filing, excluding employee expenses, through December 31, 2007, totaled \$632,571. Six months' worth of amortization of this amount over the amortization period of 48 months totals \$79,074. The fees and expenses incurred by the Company during April 2009 through September 2009, for services by Black & Veatch for Project oversight totaled \$483,370. The amount, when netted with a \$1,209 correction of the amount included in IGCC-3, yields a net cost included for recovery of \$482,161. Actual depreciation of the transmission line relocation projects related to the IGCC Project as of September 30, 2009 totaled \$28,095. The estimated depreciation expense for the April 2010 through September 2010 six-month forecast period is \$29,993⁷. The total of all these operating expense items, \$610,890, was included in the calculation of the total revenue to be recovered from retail customers. After application of the revenue conversion factor, the total to be recovered for operating expenses in this filing is \$623,908. *Id.* at 7, 9-10.

Ms. Douglas explained that page 7 of Petitioner's Exhibit B-2 supports the reconciliation of the retail jurisdictional revenue requirements approved for recovery in IGCC-1 and IGCC-2 applicable to operating expenses to actual collections received through September 30, 2009. This reconciliation resulted in an under collection of \$48,012, which is included in the development of the IGCC rider factors proposed in the current proceeding. The Company will reconcile the approved IGCC-3 revenue requirements for operating expenses for the period October 2009 through March 2010 compared to actual collection in the next proceeding (IGCC-5). *Id.* at 11.

After briefly explaining the IGCC Cost Recovery Adjustment Factors, by jurisdictional rate group set forth on page 8 of Petitioner's Exhibit B-2, Ms. Douglas discussed the derivation of the Company's weighted average cost of capital as of September 30, 2009, as provided on Petitioner's Exhibit B-2, page 9. Ms. Douglas stated that the weighted average cost of capital has been calculated consistent with the Commission's administrative rules, the Commission's CPCN Order, and the Commission's IGCC-1 Order. Based on the Commission's CPCN Order and its Order in Cause No. 43114 IGCC-1, because the Project expenditures as of September 30, 2009, do not exceed \$1.985 billion, deferred taxes have been excluded from the capital structure for purposes of the IGCC revenue requirements calculation. *Id.* at 12.

Ms. Douglas also discussed AFUDC related to the Project and included for recovery in this proceeding for the period April 2009 through September 2009, as shown on page 10 of Petitioner's Exhibit B-2. *Id.* at 12-13. Ms. Douglas said that AFUDC is accrued on the IGCC Project expenditures, including previously computed AFUDC amounts, until such expenditures and AFUDC amounts begin earning a return through Rider 61 or through base rates. Ms. Douglas also opined that the Company's AFUDC rates were computed in compliance with FERC guidance. *Id.* at 13-14.

⁷ Ms. Douglas also noted in her testimony, that while preparing her exhibits, the Company became aware that an incorrect depreciation rate has been used causing more depreciation to be reflected than was appropriate. Accordingly, an adjustment was made to correct the retail jurisdictional depreciation amount for December 2007 through March 2009 for which actual depreciation was reported in IGCC-3.

Ms. Douglas commented that consistent with 170 IAC 4-6-22 and in accordance with the Commission's CPCN Order, the IGCC Project will be deemed to be under construction, and Duke Energy Indiana will continue to receive revenues through Rider 61, until the Commission determines that this Project is used and useful in a proceeding that involves the establishment or investigation of Duke Energy Indiana's base rates and charges. *Id.* at 14. Ms. Douglas also sponsored and discussed Petitioner's Exhibit B-3, which shows the impact of the proposed IGCC Project ratemaking treatment on the monthly bill of a typical residential customer using 1,000 kilowatt-hours. The monthly bill of a residential customer using 1,000 kilowatt-hours will increase by \$2.54 or approximately 3.3%, if this factor is approved. *Id.*

B. OUCC's Testimony on this Issue. OUCC witness Mr. Wes Blakely testified that the OUCC concurs with Petitioner's calculations for the IGCC Rider. Pub. Ex. 1, at 4 (Blakely Direct). Mr. Blakely sponsored Exhibit WRB-1 and stated that the amount of retail jurisdictional investment that Petitioner is seeking to earn a return on is \$886,915,000, net of depreciation with a rate of return of 7.60%. *Id.* at 2-3. Mr. Blakely reported that the Company excluded zero cost deferred income taxes from its capital structure on the IGCC investment under the \$1.985 billion original estimate consistent with the Commission's IGCC-1 order. *Id.* at 3-4. Mr. Blakely explained that Attachment WRB-1 calculates three different capital structures and capital structure III of that exhibit shows a premium equity return of 12.67% to achieve the same overall rate of return under traditional ratemaking. According to Mr. Blakely the effective "incentive" return on equity is 217 basis points on top of the cost of equity approved in the Company's last rate case, which was 10.5%. *Id.* at 4. Mr. Blakely stated that the revenue requirement impact using a 7.60% rate of return after adjustment for income taxes was \$48,419,000. He stated the calculated rate of return using zero cost deferred income taxes of \$820 million produced a rate of return of 6.68%, which amounts to \$42,557,530 after adjustment for taxes. Mr. Blakely testified that ratepayers will pay \$5,861,470 more in this six month period than they would if the rate of return was calculated using the \$820 million zero cost deferred income taxes in the capital structure. *Id.* at 4-5.

Mr. Smith presented testimony on behalf of the CAC on this issue and indicated that the typical customer using on average 1,000 kWh of electricity per month would pay \$75.20 based on rates approved in Duke Energy Indiana's last rate case and that the current IGCC cost recovery adjustment is \$2.01 per month. Mr. Smith stated that with the present filing, the Company is requesting an additional increase of \$2.54, or more than double its current IGCC cost recovery to \$4.55, which would represent an increase of more than 6% over base rates. CAC Ex. A, at 4-5.

C. Petitioner's Supplemental Testimony. In her supplemental testimony filed with the Commission on June 1, 2010, and submitted at the Evidentiary Hearing conducted on June 21, 2010, Ms. Douglas testified regarding the correction of certain errors in accrual of AFUDC on the IGCC Project investment and sponsored a revised tariff under Standard Contract Rider No. 61 – Integrated Coal Gasification Combined Cycle Generating Facility Revenue Adjustment ("IGCC Adjustment"). The IGCC Adjustment reflects a revised calculation of revenue requirements and billing factors, and a revised monthly bill impact for the typical residential customer which reflects the correction of the errors. Pet. Ex. E at 1-2 (Douglas Supplemental).

According to Ms. Douglas, the Company recently identified errors in the calculation of AFUDC accrued on the IGCC Project from January 2009 through April 2010, which will reduce

the May 31, 2010, cumulative net Project balance by \$6.5 million. Ms. Douglass testified that as the proposed billing factors in IGCC-4 were developed using a Project balance that was higher than it should have been due to the errors and the billing factors have not yet been approved by the commission in this proceeding, the Company found it necessary to revise the proposed billing factors consistent with the corrected Project balance (i.e., to reflect the corrections to the amount of AFUDC accrued on the net Project through September 30, 2009, in developing the IGCC-4 billing factors). Ms. Douglass indicated that the January 2009 through September 30, 2009, portion of the accounting correction will reduce the retail IGCC investment as of September 30, 2009, on which a return is calculated in this proceeding, from \$886,915,000 to \$886,339,000, or a reduction of \$576,000. *Id.* at 2.

In her testimony, Ms. Douglas indicated that the amount of AFUDC accrued on the Project was incorrect due to two errors in calculation. The first error impacted several work orders established to accumulate costs for reporting and management. According to Ms. Douglas, the asset accounting system was designed with a system control which prevents the accrual of AFUDC on work orders which appear to have stopped receiving new charges and therefore may be in-service.⁸ Ms. Douglass indicated that this system control prevented AFUDC from being properly accrued on IGCC Project work orders with no recent charges. The cumulative retail jurisdictional amount of this error through the September 30, 2009, cut-off for the inclusion of the net Project balance in IGCC-4, was about \$4.463 million. *Id.* at 2-3.

Ms. Douglas further testified that the second error involved the continuing accrual of AFUDC on Project costs which were already receiving CWIP treatment, as a result of the Commission's Orders in IGCC-2 and IGCC-3. The cumulative retail jurisdictional amount of this error through the September 30, 2009, cut-off for inclusion of the net Project balance in IGCC-4 was approximately \$5.039 million. As stated previously, Ms Douglas indicated that the net impact to the Project balance as of September 30, 2009, was an over-statement of the balance (i.e., too much AFUDC was accrued as of that date) by approximately \$576,000. *Id.* at 3.

Ms. Douglas sponsored Petitioner's Exhibits E-1 and E-2 to support its revised request for cost recovery under the IGCC Adjustment. Ms. Douglas indicated that Petitioner's Exhibit E-1 is a four-page exhibit containing highlighted revised versions of previously filed exhibits denoting new or changed numbers. Petitioner's Exhibit E-2 is a clean copy, without highlighting, of the same four revised exhibits. *Id.* at 4-5.

Ms. Douglas stated that page 1 is the revised proposed update of the tariff under Standard Contract Rider No. 61, which was filed as Petitioner's Exhibit B-1, page 3 of 5, of her pre-filed direct testimony. Page 2 is a revised version of the exhibit which develops the revenue requirements applicable to return on the retail IGCC investment incurred as of September 30, 2009, which was filed previously as Petitioner's Exhibit B-2, page 3 of 10. Line 4 shows the reduction in investment of \$576,000 that is needed to reflect the proper amount of AFUDC in the Project as of September 30, 2009. A correction will be made on the accounting books and records in May 2010 business for the amount of this reduction. Ms. Douglas testified that the impact of this change on the revenue requirements requested in this is proceedings is a reduction in semi-annual revenue requirements of \$32,000 (\$48,387,000 as shown on line 10 of this exhibit

⁸ AFUDC accrual properly ceases, absent a Commission Order to the contrary, when projects are put into service.

less the originally requested amount of \$48,419,000 as shown on line 8 of Petitioner's Exhibit B-2, Page 3 of 10 filed with my direct prefiled testimony). Page 3 is a revised version of the exhibit which develops the cost recovery adjustment factors by rate schedule, which was previously filed as Petitioner's Exhibit B-2, page 8 of 10. Page 4 is a revised version of the exhibit which shows the impact of the revised proposed IGCC cost adjustment factor on the monthly bill of a typical residential customer using 1,000 kilowatt-hours (excluding the effect of various "tracking mechanisms") which was previously filed as Petitioner's Exhibit B-3. According to Ms. Douglas, although the revision changed the IGCC cost adjustment factor, when rounded to cents, the monthly bill impact remained unchanged at an increase of \$2.54 or approximately 3.3%, when compared to the last approved factor (approved in IGCC-3). *Id.*

D. Commission Discussion and Findings on Ratemaking Issues. None of the parties to this proceeding specifically took issue with the Company's proposed implementation of the updated IGCC Rider (Standard Contract Rider 61) or with the associated calculations contained in that Rider. Based on our review of the evidence presented on this issue, we find that Duke Energy Indiana's IGCC Rider, as sponsored by the testimony of Duke Energy Indiana witness Ms. Douglas, reflects the actual Project costs incurred through September 30, 2009, are approved by the Commission on an interim basis, pending the outcome in Cause No. 43114 IGCC 4 S-1.

7. Petitioner's Request for Confidential Treatment. On December 22, 2009, Petitioner filed a Motion for Protection of Confidential and Proprietary Information ("Motion"), supported by the affidavits of Mr. W. Michael Womack, Vice President Edwardsport IGCC Project, Mr. Timothy R. Huskey, Operations Manager for General Electric Company ("GE") through its GE Energy business and Mr. Dennis Lear, Project Manager IGCC for Bechtel. The affidavits of Messrs. Womack, Huskey, and Lear indicate that such confidential information ("Confidential Information") constitutes a trade secret and that Petitioner, GE and Bechtel have taken all reasonable steps to protect the confidential information from disclosure. On January 12, 2010, the Presiding Officers issued a Docket Entry granting confidential treatment to the Confidential Information on a preliminary basis.

Based on the foregoing, pursuant to Ind. Code § 5-14-3-4(a)(4), we find that the IGCC Project cost and cost estimate information set forth in Petitioner's Confidential Exhibit A-2 and Petitioner's Confidential Exhibit B-2 presented in this proceeding constitute a "trade secret" and should be afforded confidential treatment. In addition, we find that the cost estimate and budget information, together with the detailed scheduling and procurement information and certain information related to start-up and operational characteristics of the Project set forth in Petitioner's Confidential Exhibits A-4 and A-5 constitute "trade secrets" and should be afforded confidential treatment. Accordingly, this information is exempted from public disclosure and will be held as confidential by the Commission.

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

1. The ongoing review progress report for the IGCC Project is hereby approved by the Commission on an interim basis pending the outcome of 43114 IGCC 4 S-1.

2. Duke Energy Indiana's IGCC Rider (Standard Contract Rider No. 61) as reflected in the exhibits and testimony of Duke Energy Indiana witness Ms. Douglas and consistent with our findings above, including the actual Project costs incurred through September 30, 2009, is hereby approved. The new Rider 61 shall go into immediate effect for all bills rendered upon the filing of the final Rider 61 with the Commission's Electricity Division.

3. Petitioner's Confidential Exhibit A-2, Petitioner's Confidential Exhibit A-4, Petitioner's Confidential Exhibit A-5, and Petitioner's Confidential Exhibit B-2, p. 1, 2, 5 and 6 presented in this proceeding are found to be confidential and a trade secret, excepted from public access, and will continue to be held as confidential by the Commission.

4. This Order shall be effective on an after the date of its approval.

HARDY, ATTERHOLT, LANDIS, MAYS AND ZIEGNER CONCUR:

APPROVED: JUL 28 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