ORIGINAL

STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION OF NORTHERN INDIANA PUBLIC SERVICE COMPANY FOR THE ISSUANCE OF A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF CLEAN COAL TECHNOLOGY ("THE PROJECTS"), INCLUDING ONGOING REVIEW OF THE PROJECTS, PURSUANT TO IND. CODE CH. 8-1-8.7; FOR A FINDING THAT (1) SUCH PROPERTY CONSTITUTES QUALIFIED POLLUTION CONTROL PROPERTY AND IS ELIGIBLE FOR THE RATEMAKING TREATMENT PURSUANT TO IND. CODE § 8-1-2-6.8, (2) SUCH PROPERTY CONSTITUTES CLEAN COAL AND ENERGY PROJECTS AND IS ELIGIBLE FOR THE RATEMAKING AND FINANCIAL TREATMENT PURSUANT TO IND. CODE CH. 8-1-8.8, (3) THE PROJECTS ARE DEEMED TO BE UNDER CONSTRUCTION UNTIL SUCH TIME AS THE COMMISSION DETERMINES THAT THE PROJECTS ARE USED AND USEFUL, AND (4) THAT THE PROJECTS ARE ELIGIBLE FOR THE DEPRECIATION TREATMENT SET FORTH IN IND. CODE §8-1-2-6.7; FOR AUTHORIZATION TO (1) DEFER AND AMORTIZE ASSOCIATED DEPRECIATION AND OPERATION AND MAINTENANCE EXPENSES, (2) DEFER PRECONSTRUCTION COSTS INCURRED PRIOR TO THE ISSUANCE OF A FINAL ORDER HEREIN, (3) ACCRUE ALLOWANCE FOR FUNDS USED DURING CONSTRUCTION RELATED TO QUALIFIED POLLUTION CONTROL PROPERTY PRIOR TO CONSTRUCTION WORK IN PROGRESS RATEMAKING TREATMENT, (4) PERFORM CERTAIN DISPATCH OF PETITIONER'S GENERATION UNITS, AND (5) RECOVER THE COST OF CERTAIN RENEWABLE ENERGY CREDITS; AND FOR APPROVAL OF A REVISED COST ESTIMATE FOR CONSTRUCTION PROJECTS PREVIOUSLY APPROVED IN CAUSE NO. 43913.	)	CAUSE NO. 44012 APPROVED: SEP 05 2012

PHASE III ORDER OF THE COMMISSION

Presiding Officers:
David E. Ziegner, Commissioner
Aaron A. Schmoll, Senior Administrative Law Judge

On March 22, 2011, Northern Indiana Public Service Company ("Petitioner" or "NIPSCO") filed its Verified Petition in this Cause. On April 26, 2011, after conferring with the

Indiana Office of Utility Consumer Counselor ("OUCC"), NIPSCO filed a Motion for Procedural Schedule, which set forth an agreed procedural schedule. Said Motion was granted by Docket Entry dated May 11, 2011. On April 28, 2011, the NIPSCO Industrial Group ("Industrial Group") filed its petition to intervene, which was subsequently granted. On May 2, 2011, NIPSCO prefiled direct testimony of its witnesses Kelly R. Carmichael, Kurt W. Sangster, Ronald G. Plantz and Curt A. Westerhausen.

On June 27, 2011, the OUCC filed a Motion for Extension of Time and Request for Attorneys' Conference requesting an extension of time for it and the Industrial Group to file their cases-in-chief. The OUCC's request for an Attorneys' Conference was granted by Docket Entry dated June 29, 2011. In lieu of an Attorneys' Conference, the parties met informally on June 29, 2011 to discuss the procedural issues in this Cause. On July 1, 2011, NIPSCO, the OUCC and Industrial Group filed a Joint Motion to Modify Procedural Schedule ("Joint Motion") requesting the procedural schedule be modified and converted to a bifurcated proceeding to allow the Commission to address NIPSCO's request for relief in two phases and for certain accounting treatment for the projects to be addressed in the second phase of this Cause. An Attorneys' Conference was convened on July 13, 2011 to discuss the parties' request at which time the parties' request for a modified procedural schedule and bifurcated proceeding was granted. Phase I addressed and resolved the following three projects ("Phase I Projects"):

(1) Schahfer Unit 14 Flue Gas Desulphurization ("FGD") Facility Addition;
(2) Schahfer Unit 14/15 FGD Common; and
(3) Schahfer Unit 15 FGD Additions.

At that time, Phase II would have addressed and resolved the remaining projects that were the subject of NIPSCO's petition in this Cause:

(1) Michigan City Unit 12 FGD Facility Addition;
(2) Bailly Unit 7 Selective Catalytic Reduction ("SCR") Duct Burners;
(3) Bailly Unit 8 SCR Duct Burners;
(4) Michigan City Unit 12 SCR Duct Burners;
(5) Schahfer Unit 14 SCR Duct Burners;
(6) Schahfer Unit 15 Selective Non-Catalytic Reduction ("SNCR") Installation; and
(7) Continuous Particulate Monitors ("CPM") Addition for Units 7, 8, 12, 14, 15, 17 and 18.[1]

In accordance with the revised procedural schedule, NIPSCO prefiled Phase I supplemental direct testimony and exhibits of its witnesses Michael Hooper and Ronald G. Plantz on July 21, 2011. On July 26, 2011, NIPSCO filed a Notice of Order Approving Consent Decree. The OUCC prefiled Phase I direct testimony of its witnesses Ray L. Snyder, Cynthia M. Armstrong and Wes R. Blakley and the Industrial Group prefiled Phase I direct testimony of its witness James R. Dauphinais. NIPSCO prefiled the Phase I rebuttal testimony of Messrs. Carmichael, Hooper and Plantz. The Commission issued a Docket Entry on August 26, 2011, directing Petitioner to respond to questions, to which Petitioner responded on August 30, 2011.

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[1] In this Order, we will also refer to Schahfer Units 14 and 15 as "Units 14 and 15," Bailly Units 7 and 8 as "Units 7 and 8," and Michigan City Unit 12 as "Unit 12."

Pursuant to notice given as provided by law, proof of which was incorporated into the record, an evidentiary hearing to address Phase I was held in this matter on August 31, 2011, at 9:30 a.m., in Room 222, PNC Center, 101 West Washington Street, Indianapolis, Indiana. At the hearing, the Phase I prefiled evidence of NIPSCO, OUCC and Industrial Group were admitted into the record without objection. No members of the general public appeared or participated at the hearing. We subsequently issued an Order in this Cause with respect to the Phase I Projects on December 28, 2011.

While Phase I remained pending and awaiting Order, we proceeded with Phase II. On August 18, 2011, NIPSCO and the OUCC submitted an agreed procedural schedule for Phase II.[2] In accordance with that agreement, NIPSCO prefiled Phase II supplemental direct testimony and exhibits on August 18, 2011. On August 19, 2011, NIPSCO filed a motion for administrative notice of NIPSCO's redacted version of its Integrated Resource Plan ("IRP") admitted into the record in Cause No. 43643. On October 20, 2011, the OUCC prefiled its Phase II direct testimony and exhibits. On October 21, 2011, the Industrial Group also prefiled its Phase II direct testimony. The testimony of the OUCC and the Industrial Group generally supported or did not oppose NIPSCO's requested relief with respect to all Phase II Projects other than the FGD, CPM and SCR Duct Burners for Michigan City Unit 12. For the projects associated with Unit 12, both the OUCC and Industrial Group opposed the relief at that time on the basis that more analysis was needed of available alternatives to the proposed environmental controls. On November 9, 2011, NIPSCO, OUCC and Industrial Group filed a Stipulation and Settlement Agreement ("Settlement") and Motion for Modification of Procedural Schedule. In their Settlement and Motion, the joint movants requested the Commission to approve a settlement with respect to all projects that had been deferred to Phase II other than the projects associated with Michigan City Unit 12 (the "Stipulated Phase II Projects") and moved the Commission for entry of an agreed procedural schedule for a new Phase III to be established in this Cause with respect to the Michigan City Unit 12 projects. The Stipulated Phase II Projects included the following five projects:

(1) Unit 7 SCR Duct Burners;
(2) Unit 8 SCR Duct Burners;
(3) Unit 14 SCR Duct Burners;
(4) Unit 15 SNCR Installation; and
(5) CPM Addition for Units 7, 8, 14, 15, 17 and 18.

Phase III would then address and resolve the following Michigan City projects ("Phase III Projects"):

(1) Unit 12 FGD Facility Addition;
(2) Unit 12 SCR Duct Burners;[3]
(3) CPM Addition for Unit 12.

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[2] Although this proceeding has been trifurcated into three phases, all phases have proceeded in the same docket and under the same cause number. As a result, all evidence of record submitted during any of the evidentiary hearings conducted for any phase of this proceeding is part of one evidentiary record for the entire cause.

[3] The Phase III Projects now include Water Side Bypass technology instead of Duct Burners, as explained herein.

More specifically, Phase III would focus on an analysis of potential available alternatives to refitting Unit 12 with the Phase III Projects. This issue bears on whether the public convenience and necessity supports the issuance of the requested certificate, which is one of the statutory elements we are to consider.

Pursuant to notice given as provided by law, proof of which was incorporated into the record, an evidentiary hearing to address Phase II was held in this matter on December 14, 2011, at 9:30 a.m., local time, in Room 222 of the PNC Center, 101 West Washington Street, Indianapolis, Indiana. At the hearing, the Phase II prefiled evidence of NIPSCO, OUCC and Industrial Group, including the Settlement, and Petitioner's responses to the Commission's December 6, 2011 Docket Entry questions, were admitted into the record without objection. On the record at the evidentiary hearing, the Commission approved the request of the parties to establish Phase III and read into the record an agreed procedural schedule to govern Phase III. No members of the general public appeared or participated at the hearing. We subsequently issued an Order in this Cause with respect to Phase II on February 15, 2012.

While Phase II remained pending and awaiting Order, the parties proceeded with Phase III to address the remaining Phase III Projects. On February 16, 2012, NIPSCO prefiled Phase III supplemental direct testimony and exhibits. Petitions to Intervene were filed by New Covert Generating Company, LLC ("NCG"), BP Products North America Inc. ("BP") and St. Joseph Energy Center, LLP ("SJEC"), which were granted by Docket Entries dated February 28, 2012 (NCG and BP) and April 9, 2012 (SJEC).[4] On April 12, 2012, the OUCC, Industrial Group and SJEC each filed Phase III testimony and exhibits constituting their respective cases-in-chief, and on April 27, 2012, NIPSCO filed its Phase III rebuttal testimony and exhibits. Thereafter on May 7, 2012, NIPSCO responded to questions propounded by the Commission via Docket Entry.

Pursuant to notice given as provided by law, proof of which was incorporated into the record, an evidentiary hearing to address Phase III was held in this matter on May 10, 2012, at 9:30 a.m., local time, in Room 222 of the PNC Center, 101 West Washington Street, Indianapolis, Indiana. At the hearing, the Phase III prefiled evidence of NIPSCO, OUCC, and Industrial Group, SJEC, and Petitioner's responses to the Commission's Docket Entry questions were admitted into the record without objection. In addition, Petitioner's Exhibit CX-III-1 and Public's Exhibit CX-1-III were admitted into the record without objection. No members of the general public appeared or participated at the hearing.

Having considered the evidence and being duly advised, the Commission now finds:

1. <u>Notice and Jurisdiction</u>. Due, legal and timely notice of the hearing in this Cause was given as required by law. Petitioner is a "public utility" as defined in Ind. Code § 8-1-2-1(a) and Ind. Code § 8-1-8.7-2, a "utility" as that term is used in Ind. Code § 8-1-2-6.8(a) and 170 I.A.C. 4-6-1(n), and an "eligible business" as that term is defined in Ind. Code § 8-1-8.8-6. Petitioner is subject to the jurisdiction of this Commission, in the manner and to the extent provided by Indiana law. Accordingly, the Commission has jurisdiction over Petitioner and the subject matter of this proceeding.

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[4] BP was originally a member of the Industrial Group but withdrew from the Industrial Group shortly before filing its own petition to intervene.

2. **Petitioner's Characteristics and Generating System.** Petitioner is a public utility organized and existing under the laws of the State of Indiana and having its principal office at 801 East 86th Avenue, Merrillville, Indiana. Petitioner provides electric public utility service 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, transmission, delivery and furnishing of electric power to the public. The NIPSCO generating facilities have a total capacity of 3,322 megawatts ("MWs") and consist of numerous separate generation sites, including Petitioner's R.M. Schahfer Generating Station ("Schahfer"), Michigan City Generating Station ("Michigan City"), Bailly Generating Station ("Bailly"), Sugar Creek Generating Station ("Sugar Creek") and two (2) hydroelectric generating sites near Monticello, Indiana. Of the total capacity, 77.5% is from coal-fired units, 22.2% is from natural gas-fired units and 0.3% is from hydroelectric units.

Michigan City is located on the shore of Lake Michigan in Michigan City, Indiana. Michigan City formerly had the two oldest generating units on NIPSCO's system, Units 2 and 3, which have been removed from service. Michigan City's newer Unit 12 remains in service and currently burns low sulfur coal.

3. **Background and Requested Relief.** On January 13, 2011, an agreement was entered into between the United States Environmental Protection Agency ("EPA"), Department of Justice, Indiana Department of Environmental Management and NIPSCO to settle a NIPSCO EPA New Source Review Notice of Violation that had been lodged with the United States District Court for the Northern District of Indiana Hammond Division ("Northern District") (the "Consent Decree"). The Consent Decree was placed on public notice in the Federal Register on January 20, 2011. On July 22, 2011, the Northern District issued an Order in Case No. 2:11-CV-16 JVB approving the Consent Decree. The Consent Decree requires that NIPSCO operate all existing pollution control equipment and install additional pollution control equipment.

In addition to the Consent Decree, NIPSCO will soon need to comply with new federal and state environmental regulations, including EPA's final Cross State Air Pollution Rule ("CSAPR") released on July 6, 2011[5] and the final National Emission Standards for Hazardous Air Pollutants for Coal- and Oil-fired Electric Utility Steam Generating Units and Standards of Performance for Fossil-Fuel-Fired Electric Utility, Industrial-Commercial-Institutional, and Small Industrial- Commercial-Institutional Steam Generating Units-Final Rule ("Utility MACT") released on February 16, 2012 that will require NIPSCO to further reduce its nitrogen oxides ("NOx"), sulfur dioxides ("SO_2") and other hazardous air pollutant emissions ("HAPs") over the next several years (collectively, the "EPA Regulations"). As NIPSCO explained in its Responses to our December 6, 2011 Docket Entry and during the stakeholder process, additional air emissions controls beyond what is being installed in Phase I and Phase II and sought in Phase III of this proceeding will likely be needed to fully comply with the Utility MACT rule. NIPSCO is currently evaluating what additional controls may be necessary to comply with the February 16, 2012 final rule. However, installation of the Unit 12 FGD provides significant

[5] On August 21, 2012, the D.C. Circuit Court of Appeals vacated CSAPR. *EME Homer Generation, L.P. v. EPA*, 11-1302 et al. (Aug. 21, 2012). However, the D.C. Circuit required EPA to continue to administer the Clean Air Interstate Rule ("CAIR"). *Id.* at 60.

progress towards meeting the Utility MACT requirements at the Michigan City Generating Station.

To meet the requirements of the Consent Decree and make progress towards meeting the EPA Regulations, NIPSCO has developed a Multi-Pollutant Compliance Plan set forth in Petitioner's Exhibit No. KWS-1. In order to control emissions of SO_2, the Multi-Pollutant Compliance Plan includes the installation of FGD systems on Michigan City Unit 12, among others. With respect to emissions of NOx, the Multi-Pollutant Compliance Plan originally included the installation of SCR Duct Burners on (among others) Michigan City Unit 12. NIPSCO has recently (during Phase III) revised its plan to install Duct Burners and now proposes to install in their place Water Side Bypass technology ("WSB") for Unit 12. Further study has revealed that the WSB can effectively remove NOx to acceptable levels at a substantial cost savings. The Multi-Pollutant Compliance Plan also includes the installation of CPMs on Unit 12 (among others). By its Petition in this Cause, NIPSCO requests, among other things, a certificate of public convenience and necessity ("CPCN") for each of the projects included in its Multi-Pollutant Compliance Plan pursuant to Ind. Code Ch. 8-1-8.7 and approval for these projects pursuant to Ind. Code Ch. 8-1-8.8. Our earlier two Orders in this Cause have granted NIPSCO's requested relief as to all projects except the Phase III Projects, which are the Michigan City Unit 12 FGD, WSB and CPM.

By its Petition, Petitioner requests the following relief with respect to the Phase III Projects:

(a) the issuance of a CPCN to Petitioner for the Phase III Projects to reduce SO_2 and NOx emissions pursuant to Ind. Code § 8-1-8.7-1 *et seq.*;

(b) approval of cost estimates for the Phase III Projects;

(c) ongoing review of the Phase III Projects pursuant to Ind. Code § 8-1-8.7-7;

(d) a finding that the Phase III Projects constitute "qualified pollution control property" and are eligible for the ratemaking treatment described in Ind. Code § 8-1-2-6.8;

(e) a finding that the Phase III Projects constitute "clean energy projects" under Ind. Code Ch. 8-1-8.8, and a finding that the Phase III Projects are reasonable and necessary and therefore eligible for the timely recovery of costs and expenses incurred during construction and operation as set forth in Ind. Code Ch. 8-1-8.8-11(a)(1);

(f) authorization to utilize for the Phase III projects construction work in progress ("CWIP") ratemaking treatment for clean coal technology ("CCT"), qualified pollution control property ("QPCP") and clean energy projects consistent with and through Petitioner's currently-effective Environmental Cost Recovery Mechanism ("ECRM");

(g) authorization to recover operating and maintenance ("O&M") expenses relating to the Phase III Projects, including depreciation expense, for CCT, QPCP and

clean energy projects consistent with and through Petitioner's currently-effective Environmental Expense Recovery Mechanism ("EERM");

(h) authorization to defer for recovery through rates pre-construction costs incurred prior to approval of a Final Order in this proceeding to the extent that such costs are reasonable and prudent and consistent with the scope of the Phase III Projects as further described in Petitioner's evidence through Petitioner's currently-effective ECRM and EERM;

(i) a finding that the Phase III Projects are eligible for the depreciation treatment set forth in Ind. Code § 8-1-2-6.7;

(j) authorization to accrue allowance for funds used during construction ("AFUDC") related to QPCP prior to CWIP ratemaking treatment or their reflection of such costs in NIPSCO's electric rates for the Phase III projects;

(k) a finding that the Phase III Projects are deemed to be under construction until such time the Commission determines that the Phase III Projects are used and useful in a proceeding that involves the establishment of new electric basic rates and charges for Petitioner;

(l) authorization to perform dispatch of its generation units in a manner necessary to comply with the requirements of the Consent Decree and declaring such procedures to be in compliance with current and future dispatch parameters relating to the recovery of fuel costs; and

(m) such other relief afforded and authorized by the applicable statutes, regulations, orders and tariffs.

4. Evidence Presented in Phases I and II related to Phase III Projects. In Phases I and II, Petitioner, the OUCC and Industrial Group filed direct testimony and exhibits and supplemental direct testimony and exhibits that addressed their respective positions on the Multi-Pollutant Compliance Plan, including the Phase III Projects. Evidence submitted in earlier phases and relating to the Phase III Projects is summarized as follows:

A. Petitioner's Direct Testimony.

i. Direct Testimony of Kelly R. Carmichael. NIPSCO Witness Carmichael described and summarized the settlement of the EPA New Source Review Notice of Violation which ultimately resulted in the Consent Decree. He addressed the status of existing and upcoming federal and state environmental requirements that will require NIPSCO to make capital investments to reduce air emissions. He further discussed various federal and state environmental air regulations impacting the continued operation of NIPSCO's electric generating units including the EPA Clean Air Interstate Rule ("CAIR"), the proposed EPA Clean Air Transport Rule ("CATR")[6] and the Utility MACT standards. He explained that these regulations

[6] On July 7, 2011, EPA approved CSAPR, which took the place of CATR.

will require NIPSCO to further reduce its NOx, SO_2, and other HAPs over the next several years. His testimony focused on the installation of pollution control systems to meet the requirements of both the Consent Decree and EPA's regulatory requirements.

NIPSCO Witness Sangster testified in support of NIPSCO's request for a CPCN for the Phase III Projects. He sponsored NIPSCO's Multi-Pollutant Compliance Plan (Petitioner's Exhibit No. KWS-1), described the pollution control technologies included in the Plan, and also provided the estimated project costs and O&M estimates.

NIPSCO Witness Westerhausen testified concerning NIPSCO's requested ratemaking treatment. He explained that NIPSCO proposes to utilize CWIP ratemaking treatment for CCT, QPCP and clean energy projects consistent with and through its existing ECRM. He testified that NIPSCO further proposes to recover O&M expenses related to the Phase III Projects, including depreciation expense for CCT, QPCP and clean energy projects consistent with and through NIPSCO's EERM. He further explained that NIPSCO proposes to recover through the ECRM the return on capital expenditures for each approved project beginning six months after the construction start date of the project and that NIPSCO proposes to recover through the EERM O&M and depreciation expenses associated with each approved project beginning when it is placed in service. Mr. Westerhausen also testified regarding NIPSCO's request to submit semi-annual progress reports as part of its ECRM filings.

NIPSCO Witness Plantz testified in support of NIPSCO's requested accounting treatment for investments in all Multi-Pollutant Compliance Plan QPCP and CCT projects.

NIPSCO Witness Hooper provided supplemental direct testimony to provide additional support for NIPSCO's request for a CPCN. He provided additional information relating to NIPSCO's enhanced project team, general project planning and cost estimation principles, and the relationship between Indiana's CPCN statutes and project planning and cost estimation. He further explained NIPSCO's processes to control costs and meet the project deadlines, and NIPSCO's recommendation for an ongoing reporting requirement to provide transparent information regarding the costs and progress of the Phase III Projects to stakeholders.

ii. <u>Phase II Supplemental Direct Testimony of Kelly R. Carmichael</u>. NIPSCO Witness Carmichael provided a status update regarding the Consent Decree. He explained that on July 22, 2011, the Northern District issued an Order in Case No. 2:11-CV-16 JVB approving the Consent Decree, which was not changed from the Consent Decree lodged on January 13, 2011. Mr. Carmichael provided a summary of the CSAPR. He also provided an update regarding the Michigan City Unit 12 FGD schedule.

Mr. Carmichael testified that NIPSCO believed the final Utility MACT rule would require NIPSCO to accelerate the schedule for the Unit 12 FGD and that engineering would need to begin as early as the first quarter of 2012 to meet the projected Utility MACT timeline. He explained that the Unit 12 FGD construction schedule initially proposed by NIPSCO was based on the Consent Decree deadline. He explained why Utility MACT would require the FGD to be in service prior to the Consent Decree and that if NIPSCO does not install control technology on Unit 12, it would exceed the expected emissions limits for SO_2, mercury, and particulate matter. Regarding the potential alternatives to installing FGD technology on Unit 12, Mr. Carmichael

testified that Unit 12 could be shutdown either permanently or for a period of time between the Utility MACT standards deadline and the Consent Decree deadline. He testified that temporary shutdown raises a host of potential problems including an EPA requirement to go through New Source Review prior to restart, loss of CSAPR allocations for Michigan City Unit 12, third-party legal challenges to prevent restart and exposure to the purchase power market as a result of Michigan City Unit 12 not being available.

iii. Phase II Supplemental Direct Testimony of Guy H. Ausmus. NIPSCO Witness Ausmus testified in support of his analysis that ultimately concluded the retrofit of Michigan City Unit 12 was the preferred option. He first testified that, although Unit 12 has the capability of operating on natural gas, switching Unit 12 from burning coal to burning natural gas was not an option because NIPSCO would not be permitted to switch to gas for fuel and later switch back to coal. He sponsored a spreadsheet analysis which compared the projected net present value of the Unit 12 retrofit to the construction of a hypothetical 500 MW combined cycle combust turbine unit ("CCGT").

B. OUCC's Phase II Direct Testimony.

i. Phase II Direct Testimony of Ray L. Snyder. In Phase II, Mr. Snyder testified about the overall costs of the proposed Phase III Projects and the prospects for cost increases. He expressed concerns about Mr. Ausmus' evaluation of alternatives and ultimately recommended that the Commission deny the requested relief with respect to all Michigan City Unit 12 projects.

ii. Phase II Direct Testimony of Brendon Baatz. Mr. Baatz testified in Phase II that the OUCC did not support the Unit 12 projects. He was concerned that there are additional environmental projects associated with the Unit 12 projects that are not included in the Petition in this Cause but which could have a material impact on the total cost of environmental compliance. He was also concerned that NIPSCO had not modeled the impacts of potential carbon legislation.

iii. Industrial Group Phase II Direct Testimony of James R. Dauphinais. Mr. Dauphinais testified in Phase II that the Commission should deny the requested relief for the Unit 12 Projects at that time. He recommended that NIPSCO further refine its cost estimates for the FGD and CCGT alternatives and also explore potential market options. Further, he had specific objections to the assumptions in Mr. Ausmus' economic analysis and requested that it be refined to bring it within reasonable bounds. He recognized that there are looming compliance deadlines upcoming, but he nevertheless urged that these steps be taken to strengthen the analysis before he could support the issuance of a CPCN.

5. **Phase III Evidence.** The evidence in Phase III was devoted to exploring the potential alternatives to refitting Unit 12 with the Phase III Projects, which bears upon whether the public convenience and necessity is supported by our issuance of the requested certificate for the Phase III Projects.

A. **Petitioner's Phase III Supplemental Direct Testimony.**

i. **Phase III Supplemental Direct Testimony of Cecelia Largura.** Cecelia Largura, Director of Strategic Execution for NIPSCO testified regarding the additional analysis conducted in Phase III and described how NIPSCO worked with the OUCC and the Industrial Group (collectively the "Stakeholders")[7] to develop a process for evaluating options for addressing the environmental needs associated with Michigan City Unit 12. She explained that after the OUCC and Industrial Group raised concerns in Phase II about the Michigan City Unit 12 retrofit, NIPSCO had undertaken additional analysis to respond to those concerns. On November 23, 2011, NIPSCO met with the Stakeholders to solicit their input on NIPSCO's 2011 Base/Intermediate Request for Proposals (the "RFP"). The RFP was then issued in December 2011. Thereafter, the Stakeholders met frequently and repeatedly to discuss an analytical approach to identify the best possible alternative. Ms. Largura testified that her purpose in relaying what transpired at these meetings was not intended to suggest that the Stakeholders had agreed to anything about the process or the results but rather to communicate the degree to which NIPSCO involved the Stakeholders to solicit their input. She testified that the study horizon used was NIPSCO's 2011 IRP (2012-2032), but at the suggestion of one of the Stakeholders, it was adjusted to include the cost of capital decisions beyond the study horizon known as "End Effects.". As a result of the Stakeholder process, NIPSCO analyzed alternatives including RFP responses, and both large and small self-build CCGT generator projects. Ms. Largura concluded that the economic analysis produced as a result of the Stakeholder process indicated to NIPSCO that refitting Michigan City Unit 12 with the Phase III Projects is the reasonable cost option with the least amount of risk.

ii. **Phase III Supplemental Direct Testimony of Charles F. Adkins.** Charles F. Adkins, Vice President in the consulting practice of Ventyx, LLC, was retained to conduct the RFP, to solicit market options to replace Michigan City Unit 12, and to examine thoroughly the retire and refit options for Michigan City Unit 12. He explained the analysis NIPSCO used to evaluate its various options to retire or refit Michigan City Unit 12 and ultimately concluded that refitting Michigan City Unit 12 with the Phase III Projects is the preferred option to meet the future energy needs in a cost effective manner.

Mr. Adkins testified that the viable options are (1) refit Michigan City Unit 12 with the Phase III Projects, (2) retire Michigan City Unit 12 and replace with Midwest Independent System Operator ("MISO") market capacity and energy, (3) retire Michigan City Unit 12 and replace with a large CCGT, (4) retire Michigan City Unit 12 and replace with a small CCGT and (5) retire Michigan City Unit 12 and replace with a market option solicited through the RFP. Mr. Adkins' analysis included recovery of capital investment, modification of fixed and variable

[7] BP, NCG and SJEC were bidders in response to the request for proposals that grew out of the Stakeholder process. BP withdrew from the Industrial Group and filed its independent petition to intervene, and SJEC and NCG both intervened following the receipt of responses to the RFP. As a result, these "bidder" intervening parties did not participate in the Stakeholder process.

operating and maintenance expenses, projects to comply with anticipated mercury and coal combustion residuals ("CCR") rules and Clean Water Act regulations. His analysis did not include the cost of duct burners (now WSB) or costs of depreciation and demolition of Michigan City Unit 12. Mr. Adkins explained that these costs were not included because the duct burners or WSB would be needed under both a refit or a retire option and under both refit and retire the cost of remaining depreciation and demolition of Unit 12 were assumed to be recovered. He testified that NIPSCO used the 2011 IRP as a starting point of its analysis and the associated sensitivities for base, high market, low market, and no carbon. He noted that all Stakeholders had different views but agreed that the 2011 IRP was a good starting point for analysis. Rather than running through a large number of potential alternate future and energy commodity markets, Mr. Adkins instead identified the break points that switch the decision from refit to retire. The same break point analysis could then be used with other key decision drivers such as carbon regulation, project over-run costs, etc. NIPSCO utilized the planning model Strategist® and then provided the Stakeholders spreadsheets on which they could perform individual analysis or extract data.

Mr. Adkins then explained how the results of the RFP were included in the analysis. First, Ventyx ensured that proposals were complete, received on time, and signed by a duly authorized officer or agent. Next, they underwent a threshold screen where various proposals failed for not offering a term with a sufficient minimum length or for offering a term starting sooner than requested. Obvious errors were corrected, and a debt equivalence adjustment was added. The debt equivalence adjustment represents the imputed revenue requirement for any additional common equity required to maintain NIPSCO's current debt/equity ratio given recently published guidelines that long term purchased power agreements are being viewed in the marketplace as additional debt. Finally a congestion adder was made to reflect the impact of MISO congestion and marginal losses between the location/delivery point and the NIPSCO load hub.

After these various adjustments were made, each proposal was individually compared to the market. Proposals that were "out of the money" were eliminated. Mr. Adkins used the 2011 IRP as the starting point for the definition of the "market." The refit of Michigan City Unit 12 option was then compared to replacing the capacity with the market, to replacing with a large CCGT, to replacing with a small CCGT, to replacing with each of the remaining ten RFP proposals that remained after the economic screening, and finally to replacing with combinations of the four smaller RFP proposals. Based upon the net present value of the revenue requirements and under the base case, high market and no carbon sensitivities, refitting Michigan City Unit 12 was the most cost effective option. Using the breakpoint analysis, Mr. Adkins then determined the breakpoints for the price of natural gas and escalation where the decision to refit Michigan City Unit 12 would flip. There was no breakpoint where a replacement with a large CCGT became preferred. It was only under the low market scenario with implementation of carbon constraints in 2020 that replacement with a small CCGT or any of the RFP responses became preferred.

Finally, Mr. Adkins conducted a risk assessment which was not utilized in his financial model. This was intended to show the levels of risk inherent with each of the options. He concluded that refitting Michigan City Unit 12 is the option with the lowest cost and the least amount of risk.

B. OUCC's Phase III Direct Testimony.

i. Phase III Direct Testimony of Ray L. Snyder. Mr. Snyder provided the OUCC's analysis of NIPSCO's request and commented on the RFP bids. He noted that the accuracy range of NIPSCO's cost estimates is now +/- 40%. He testified that while this was less than order of magnitude estimates described in earlier phases of this proceeding (+100%/-50%), it still provided a significant range of potential costs. With potential future projects for mercury, Clean Water Act, and CCRs and the range of cost of projects for which a CPCN is sought, Mr. Snyder computed NIPSCO's estimate to be $325 million and the high estimate to be $503 million. As a result, he testified that the OUCC believes alternatives should be considered. Mr. Snyder noted that there were two RFP bids meriting comment. One was a nuclear facility located out of state which was rejected because it proposed a start date before the term set forth in the RFP. The second was a bid submitted by Intervenor SJEC.

Mr. Snyder was appreciative of the collaborative Stakeholder process. He testified that the weekly meetings and exchange of information, ideas and concerns was extremely beneficial in identifying points of agreement or disagreement and working toward resolution where there were conflicting ideas or opinions.

ii. Phase III Direct Testimony of Brendon J. Baatz. Mr. Baatz testified that in Phase III NIPSCO has expanded the scope of analysis regarding options to retrofit of Michigan City Unit 12 to include further market options identified through the RFP, including purchase power agreements, market purchases of existing resources; and refined estimates for newly constructed combined cycle gas turbine units. He testified NIPSCO accommodated the Stakeholders using Microsoft Excel Worksheets to relay information computed through Strategist®, with each spreadsheet representing a different "case." Mr. Baatz also testified that the use of a more complex system wide modeling tool such as Strategist® is more suitable for the analysis necessary for this cause. NIPSCO included in its economic analysis the cost of the FGD system, compliance with an anticipated CCR rule based upon the assumption the final rule will regulate coal ash as a non-hazardous substance, compliance with an anticipated Clean Water Act cooling water intake rule, and an activated carbon injection system.

Mr. Baatz noted that the Stakeholders did not agree on all input assumptions utilized in the process. There was disagreement over forecasted prices of natural gas, inclusion or not of duct burners in the modeling, the adjustment for debt equivalence, and the modeling of carbon impacts. Mr. Baatz testified that NIPSCO's base case assumption from its 2011 IRP for forecasted prices of natural gas was above other market forecasts that he has reviewed and the low case assumptions were at or above other market forecasts. However, Mr. Baatz stated that although the stakeholders did not agree on all commodity assumptions, this concern would be alleviated after NIPSCO completed sensitivity analyses for all scenarios.

Mr. Baatz testified that he was not convinced that NIPSCO would have to install duct burners (or WSB) on Michigan City Unit 12 if it were to be retired. He noted that the 30-day rolling average for NOx might be very close to the levels required by the Consent Decree without the duct burners. He also questioned whether the debt equivalence adjustment was

appropriate but noted that the debt equivalence adjustment did not have an impact on the final results.

Mr. Baatz testified that of all the RFP responses, only two were economically competitive with the Phase III Projects. One was the nuclear option, which was rejected because it included a start-date which was earlier than the required start-date in the RFP. The second was SJEC's proposal, which would produce a lower net present value of revenue requirements under the 2011 IRP low case for natural gas price forecast. He was also critical of Mr. Adkins' analysis of risk. In Mr. Baatz's opinion, the construction and technology risk of SJEC should have been scored with less risk than the Michigan City Unit 12 retrofit. He also pointed out the risks and uncertainties associated with fuel price volatility and future fossil fuel regulations which would impact all alternatives in this cause. On cross-examination, however, Mr. Baatz testified that with the commitments now being made by NIPSCO concerning future cost increases (described later), he agrees that his concerns about risk associated with the Phase III Projects have been addressed.

C. Industrial Group's Phase III Direct Testimony of James R. Dauphinais. Mr. Dauphinais testified that the Industrial Group no longer opposes NIPSCO's proposed Michigan City Unit 12 Phase III Projects. He did recommend that the Commission condition any approval of the requested CPCN on NIPSCO adhering to the same Stakeholder reporting and meeting requirements that were imposed in the Phase I Order in this Cause. He testified that he agreed with the improvements in NIPSCO's economic analysis for the proposed Unit 12 investments, including further refinement of cost estimates, further exploration of market options, and a reasonable effort to update and revise its economic analysis. He was still concerned that NIPSCO's natural gas price assumptions were too high but that use of Strategist® allowed the Industrial Group to see results using more "reasonable" natural gas price assumptions in addition to results using NIPSCO's higher natural gas prices from its IRP Base Case commodity price assumptions. He testified that consensus on gas price assumptions is not needed because even under lower natural gas prices, none of the alternatives to the Michigan City Unit 12 refit were ultimately more attractive on a forecast basis than moving forward with the Unit 12 investments.

Mr. Dauphinais was also concerned with NIPSCO's updated and revised analysis because it focused on comparing the 20-year net present value benefit (with post-2032 end effects added) of the alternatives to the proposed Michigan City Unit 12 investments without consideration of how much time must pass before a cumulative net present value benefit from any of the other options would be realized. According to Mr. Dauphinais, the longer the period that must pass before a net present value benefit would be achieved, the greater the risk that the forecasted net present value benefit will not be realized. Mr. Dauphinais conducted a year-by-year analysis with a lower natural gas price assumption and which compared the Michigan City Unit 12 refit to (1) the best RFP bid received that was comparable in size to Michigan City Unit 12, (2) construction by NIPSCO of a CCGT comparable in size to Michigan City Unit 12, and (3) the best RFP bid received in response that was significantly larger in size than Michigan City Unit 12. He also stress-tested various assumptions by allowing up to a 40% cost overrun on the Michigan City Unit 12 FGD system and other changes in assumptions. He ultimately concluded (1) that the best RFP bid comparable in size to the Michigan City Unit 12 under reasonable assumptions did not produce a forecasted net present value benefit until after 2032; (2) that the

best RFP bid comparable in size to Michigan City Unit 12 under very favorable assumptions to the RFP bid did not produce a benefit until 2025 – nine years after the assumed retirement of Unit 12; (3) that construction of a CCGT comparable in size to Michigan City Unit 12 under reasonable assumptions would not produce a benefit until after 2032 (2026 under very favorable assumptions to the CCGT), (4) and the best RFP bid significantly larger in size did not produce a net present value benefit until 2022.

In Mr. Dauphinais' opinion, neither a PPA comparable in size to Michigan City Unit 12 nor NIPSCO construction of a new CCGT comparable in size to Michigan City Unit 12 are attractive alternatives to the Michigan City Unit 12 refit. The closest was the RFP bid significantly larger in size, which would require NIPSCO to take a significant long position in the market by purchasing an extra 160 MW capacity it does not presently need. In Mr. Dauphinais' opinion, taking a significant long position in the market is not consistent with providing reliable electric service to retail customers at the lowest reasonable cost, and it would have ratepayers taking on undue risk by effectively having them speculate in the wholesale power market.

D. <u>SJEC's Phase III Direct Testimony of William Ladd</u>. William Ladd testified on behalf of SJEC, one of the bidders in response to the RFP. He testified that SJEC's bid relates to a project which is in an advanced stage of redevelopment and has completed major milestones. He testified that NIPSCO had not properly evaluated the RFP responses because of flaws in assumptions and omission of significant factors. The first flaw in assumptions that he identified was the natural gas price forecast used, which Mr. Ladd testified were "dramatically inflated." The second flaw that he identified was the use of the currently estimated cost of the environmental projects because Mr. Ladd believed that these costs could double. The third flaw he identified was the exclusion of SCR duct burners and CPMs from the analysis. In his view the analysis should have been conducted on the assumption that Michigan City Unit 12 would be retired at the end of 2013 and using market purchases as a bridge until SJEC's project is completed in 2016. The last flaw that he identified was the failure to consider multiple variables moving at once.

The omissions that Mr. Ladd identified were (1) a risk that the Michigan City Unit 12 projects would not be able to comply with Utility MACT, (2) that no value was assigned to fuel diversity and (3) that no value was assigned to the construction of new power plants in Indiana. In Mr. Ladd's opinion, NIPSCO should be required to address these deficiencies and the request only approved based upon a comprehensive analysis with accurate inputs.

E. <u>Petitioner's Phase III Rebuttal Testimony</u>.

i. <u>Phase III Rebuttal Testimony of Frank A. Shambo</u>. Frank A. Shambo, Vice President of Regulatory and Legislative Affairs for NIPSCO, testified in rebuttal that the Unit 12 projects present the solution with the reasonable balance of cost, risk and policy. He testified that NIPSCO's natural gas assumptions and sensitivities are reasonable and the forecasts are based upon reasonable sources and conditions, especially given that natural gas prices are volatile and difficult to predict. Further he testified that low natural gas prices would only impact the analysis when combined with carbon constraints and that it is unlikely that natural gas prices would remain low when carbon constraints take effect. He testified that the

decision for the Commission is a binary one – whether NIPSCO should be granted a CPCN for the Phase III Projects. The decision is not whether NIPSCO should enter a power purchase agreement with any of the RFP bidders. He further testified that the decision on Unit 12 cannot be delayed beyond the third quarter of 2012 without risking the loss of Unit 12. He testified that if NIPSCO stops running Unit 12 on coal it is unlikely it will ever be able to return operations to coal regardless of the relative cost of coal or gas in the future. There is no time or need for further study because it would provide too much risk to the ability to maintain Unit 12 as an alternative.

With respect to natural gas price forecasts, Mr. Shambo testified that NIPSCO utilized a range of forecasts including base, low and high and that there is no need for further analysis. Further he testified that NIPSCO's commodity assumptions were not derived specifically for this case but were instead rooted in disciplined planning that is connected to the IRP process. Those commodity forecasts were prepared by PIRA Energy Group, again unconnected to this case.

Mr. Shambo testified that the economic analysis demonstrates that only one of the PPA options would ultimately provide ratepayer benefits and only then in later years out in time and only under the assumptions of both a carbon constraint and a low natural gas price forecast. He testified that natural gas price forecasts are inherently unreliable and a review of past forecasts shows that forecasting is fraught with uncertainty and frequently wrong in terms of direction and by large amounts. He testified that the industry has consistently erred in estimating future gas prices or production capabilities. In the face of this uncertainty, it is critical to focus on what we do know with some level of certainty. Mr. Shambo testified that even under the low gas cost assumption he agreed with the Industrial Group that it is more appropriate for customers to receive benefits in the early years rather than receive benefits many more years into the future.

Mr. Shambo also described uncertainties related to a purchased power agreement ("PPA") that is from an asset yet to be constructed. While some of the risks can be mitigated, it does not change the fact that construction could be halted and leave NIPSCO searching for adequate supplies to meet the needs of its customers.

With respect to diversification, Mr. Shambo testified that this issue must be considered as a part of the IRP and not in isolation. This is further complicated by the fact that the decision not to refit Unit 12 would be irreversible. Further, he noted that diversification must be considered from a viewpoint of customers, many of whom already use abundant natural gas for heat or manufacturing processes. Increasing the amount of generation that uses natural gas as a feed stock would actually intensify the customer's price exposure to natural gas.

Mr. Shambo testified that the decision to shut down Unit 12 would be irreversible and that efficient coal-fired generating stations are irreplaceable. Unit 12 is one of the largest and most efficient units within NIPSCO's fleet. If the public convenience and necessity does not support installation of FGD technology, it begs the question of what other unscrubbed coal units must also be eliminated in the state and region. Mr. Shambo testified that this would indicate that support for one of the critical resources the state has to offer – coal – is in jeopardy. In his view, the FGD technology would avoid a "preemptive surrender" of one of NIPSCO's efficient coal-fired facilities within Indiana while achieving emission reduction standards that benefit the

region. He stated this is consistent with the state's strategic energy plan, also known as Hoosier Home Grown Energy.

Finally, Mr. Shambo agreed with Witness Dauphinais' recommendation that the requested CPCN should be conditioned upon NIPSCO's adherence to the same Stakeholder reporting and meeting requirements that were imposed in the Commission's Phase I Order. He also indicated that NIPSCO agreed to use a 20-year depreciation rate with two caveats: (1) if the project is later deemed inoperable due to future environmental regulations or requirements, NIPSCO should preserve the right to request a shorter amortization schedule and (2) that if a CPCN is not granted for the FGD, NIPSCO would need a shorter depreciation schedule for the WSB and CPMs to accommodate the fact that these projects would not be in service for 20 years. Without the FGD, NIPSCO would be willing to accept a 3-year amortization period for the remaining projects. In conclusion, Mr. Shambo testified that the Unit 12 projects are the most appropriate path forward and are in the public interest. He opined that NIPSCO's requested relief should be granted.

ii. <u>Phase III Rebuttal Testimony of Michael Hooper</u>. Mr. Hooper testified on rebuttal that it is important a decision be made on the Unit 12 projects during the third quarter of 2012. One of the primary objectives of the Stakeholder process was to avoid the point of no return for any potential option. Receiving a decision on the request for a CPCN by the third quarter will ensure that the Unit 12 retrofit option is not lost due to passage of time. The assumptions underlying the economic analysis are premised upon receiving a Commission Order by that time. He explained that there is a point of no return at which NIPSCO will not have time or it would be cost prohibitive to build an FGD because the schedule would be too constrained. This fact was acknowledged during the Stakeholder process and understood by all.

Mr. Hooper responded to Mr. Ladd's suggestion that there was a risk Unit 12 could not comply with Utility MACT after installation of the environmental controls. Mr. Hooper testified that the dry FGD technology combined with a bag house has been installed on many coal units throughout the United States and is proven to reduce emissions of SO_2, mercury and particulate matter to a level in compliance with the upcoming environmental regulations.

Mr. Hooper also disagreed that there is a "significant" risk of cost increases. With the experience the project management team has achieved with Schafer Unit 14, the risk of cost increases for Unit 12 is significantly reduced. Mr. Hooper indicated that he is comfortable stating the cost estimate has an associated range of +/- 40% and that this is an appropriate range to use for purposes of analyzing whether a CPCN should be granted. While a significant amount of engineering work would still be required to move to a budgetary cost estimate, the valuable knowledge and experience that NIPSCO has already gained allows NIPSCO to significantly reduce uncertainty from the overall cost estimate. In discovery and on cross-examination, Mr. Hooper further refined the estimate and in fact committed to a 25% cap on cost overruns for the Phase III Projects, which we will describe in further detail later.

Mr. Hooper also testified concerning the risk associated with the St. Joseph project. He testified that the construction risk associated with a long term power purchased agreement for a yet-to-be-constructed facility could never be fully mitigated by a security bond, letter of credit,

or other performance security. He detailed some of the risks and unanswered questions associated with the SJEC project.

iii. **Phase III Rebuttal Testimony of Kurt W. Sangster.** Mr. Sangster also testified in rebuttal, specifically with regard to the change from SCR duct burners to WSB technology. He also testified regarding the need to install SCR reheat technology for NOx removal regardless of whether a CPCN is issued for the FGD facility. Mr. Sangster testified that the Consent Decree requires a cap on the 30-day rolling average emission rate for NOx and a progressively more stringent 360-day rolling emission rate. SCR facilities remove NOx but can only operate within certain minimum temperature ranges. This minimum range is not reached during periods of low load operation or start up or shut down. As a result, SCR reheat technology is required. According to Mr. Sangster even if a CPCN is not issued for the FGD, NIPSCO would still need to install reheat technology in order to ensure that it can comply with the more stringent 360-day rolling average emission limits that become effective December 31, 2013 under the Consent Decree. Under that scenario, Unit 12 could continue to operate until it is forced to retire under the Utility MACT timeline. The reheat technology is needed regardless of the decision on the FGD.

Mr. Sangster also described the change from duct burners to WSB. NIPSCO originally selected duct burners as the preferred technology for the Bailly Units but has continued to evaluate operating characteristics in associated NOx emission levels for the remainder of its generation fleet. The Bailly Units are different because of their very long start up durations and therefore had the most immediate need for SCR technology. With Schafer Unit 14 and Michigan City Unit 12, NIPSCO studied the number and duration of startups and determined that uncontrolled NOx emissions pose a less significant problem for these units than for Bailly. NIPSCO retained Black & Veatch in July 2011 to conduct preliminary engineering regarding options. WSB was identified as a possible option, which NIPSCO has continued to study. Further review and analysis were conducted to the point where NIPSCO is now comfortable that the WSB technology is appropriate and will allow the project to be completed at a lower cost. The estimated cost for WSB technology at Unit 12 is $7,017,700 and the estimated operating and maintenance cost is $20,000 per year. NIPSCO is modifying its request in this case such that the requested CPCN and all other associated requested relief relating to duct burners for Unit 12 now relate to the more cost effective WSB technology for Unit 12. According to Mr. Sangster, WSB technology indirectly reduces NOx emissions and will allow NIPSCO to continue operating Unit 12 longer than if WSB were not installed. There is a high likelihood of success for the proposed technology and the cost and feasibility of retiring Unit 12 has been studied in depth. He stated that WSB is an advanced technology designed to maintain the temperature of the flue gas to 617 degrees F going into the Unit 12 SCR, which will allow the Unit 12 SCR to operate and reduce NOx emissions during periods of low load operation when otherwise the temperature in the SCR catalyst would be too low for the SCR to operate. He also stated the WSB technology was not in general commercial use at the same or greater scale in newer existing facilities as of January 1, 1989 and it increases the fuel flexibility allowing Michigan City 12 a blend of approximately 30% Illinois basin coal. According to Mr. Sangster the request for a CPCN for WSB technology is in the public interest and public convenience and necessity will be served by the WSB technology.

iv. **Phase III Rebuttal Testimony of Cecelia Largura.** Ms. Largura testified on rebuttal regarding NIPSCO's planning process as related to the economic analysis in the Stakeholder process, the reasonableness of commodity price assumptions, fuel diversity and SCR reheat technology. She explained the overall goal of long term planning. NIPSCO's planning process attempts to bind the uncertainties through sensitivity analysis. This planning process culminated in the 2011 IRP which addresses the most likely contingencies. The 2011 IRP was then used as the starting point for the Stakeholder analysis. She explained that a range of natural gas price forecasts was used in the IRP, the basis for which was provided by PIRA Energy Group. This included a low market sensitivity, a high market sensitivity and a base case which is deemed to be the most likely to occur. The IRP also assumed a future with a carbon cap and trade program commencing in 2020.

Ms. Largura compared the issues over gas price forecasting in this case to the evidence the Commission heard in *Indiana Finance Authority and Indiana Gasification, LLC*, Cause No. 43976 (IURC Nov. 22, 2011) ("SNG Order"). The Commission heard considerable evidence about price forecasts, shale gas reserves, shale gas economics, and the market for natural gas. Ms. Largura indicated that the Commission ultimately concluded gas price forecasts are inherently unpredictable and volatile. She testified that the same arguments and evidence are present here. That is why the 2011 IRP includes a low market and a high market sensitivity around the base case.

Ms. Largura also explained the impact of carbon regulation on gas forecasts. The implementation of a carbon cap and trade program will affect coal units greater than gas units. The result will be more natural gas generation displacing coal generation, resulting in higher demand for natural gas and applying upward price pressure on natural gas. None of the forecasts can reliably predict the magnitude of this impact. She noted that for the SJEC bid to ever generate a benefit we must assume both a carbon cap and trade program and the low price forecast. She also outlined the other factors that impact commodities forecasts.

With respect to fuel diversity, she indicated that NIPSCO's IRP already considers the benefits of diversity. NIPSCO seeks to identify a plan that is not only the least cost solution for customers but a plan that minimizes customers' exposure to market and economic certainties. She noted that it is ironic that SJEC would argue their bid should receive value based upon diversity. The decision to stop burning coal at Unit 12 is irreversible and existing coal fire plants are irreplaceable. Coal fire plants will be retired and replaced with natural gas plants. Indeed, the 2011 IRP calls for the retirement of Bailly during the IRP horizon and replacement of its capacity with capacity from a CCGT unit. The SJEC facility could be an alternative in this regard when it is time to make a decision regarding Bailly. Gas plants will be built when generation is needed, and so "preemptive surrender" of a coal plant before it is necessary actually serves to decrease diversity. Finally, she responded to Witness Ladd's criticism that duct burners were not included in the refit economic analysis. She noted first that the magnitude of this issue has been greatly reduced by the switch to WSB technology, which is lower in cost. She also noted that not installing this equipment would mean that Unit 12 would need to be replaced as early as December 31, 2013 in order to comply with the Consent Decree. NIPSCO would have to rely on the market which would put customers at too great a risk.

v. **Phase III Rebuttal Testimony of Charles A. Adkins.** Mr. Adkins also testified on rebuttal that there is no need for further study because all of the additional analysis Witness Ladd has requested has already been completed as a part of the Stakeholder process. Only under the low case scenario and with a carbon future commencing in 2020 does the SJEC bid for a PPA, which is significantly larger in size than Michigan City 12, produce a net present value benefit in terms of revenue requirements. That benefit only commences in the outlier years of the analysis and is due to carbon constraints. He noted this is revealed by the year-by-year analysis. Until 2019, a PPA with a large configuration is a net cost to NIPSCO customers every year. Then in the period 2020 to 2032, after the implementation of a carbon cap and trade program, those losses begin to offset. It is only in 2022 that the benefits would actually begin to exceed the earlier years of costs, and these benefits are primarily due to increased dispatching and off-system sales. Not only is there inherent unpredictability and volatility in the market for natural gas, Mr. Adkins testified there is too much political and economic uncertainties surrounding carbon emissions. He testified that these are very large bets that to ask NIPSCO customers to place, bets that Witness Dauphinais on behalf of the Industrial Group does not want to place. If carbon regulation is delayed or not forthcoming, the SJEC bid would never generate the net present value benefit even under the assumption of low gas prices for the indefinite future.

6. **Commission Discussion and Findings.**

A. **Clean Coal Technology, Qualified Pollution Control Technology, Clean Energy Projects.** Petitioner has requested relief under the following Indiana statutes: Ind. Code Chapter 8-1-8.7, Ind. Code Chapter 8-1-8.8, Ind. Code § 8-1-2-6.7, and Ind. Code § 8-1-2-6.8. As an initial matter, we must determine whether the Phase III Projects constitute "clean coal technology" under Ind. Code Chapter 8-1-8.7, Ind. Code § 8-1-2-6.7, Ind. Code § 8-1-2-6.8 and Ind. Code § 8-1-8.8-3, "qualified pollution control technology" under Ind. Code § 8-1-2-6.8, and "clean energy projects" under Ind. Code ch. 8-1-8.8.

i. **Clean Coal Technology under Ind. Code § 8-1-8.7-1, Ind. Code § 8-1-2-6.7, Ind. Code § 8-1-2-6.8, and Ind. Code § 8-1-8.8-3.** The term "clean coal technology" or CCT is defined slightly differently by the various statutes, but all are generally consistent. Pursuant to Ind. Code § 8-1-8.7-1, CCT means:

> [A] technology (including precombustion treatment of coal): (1) that is used in a new or existing electric generating facility and directly or indirectly reduces airborne emissions of sulfur or nitrogen based pollutants associated with the combustion or use of coal; and (2) that either: (A) is not in general commercial use at the same or greater scale in new or existing facilities in the United States as of January 1, 1989; or (B) has been selected by the United States Department of Energy for funding under its Innovative Clean Coal Technology program and is finally approved for such funding on or after January 1, 1989.

Ind. Code § 8-1-8.7-1.[8]

[8] Under Ind. Code § 8-1-2-6.8, CCT also includes technology that "directly or indirectly reduces airborne emissions of mercury . . . or other regulated air emissions associated with the combustion or use of coal". For the purpose of

NIPSCO Witnesses Sangster and Carmichael testified that the Phase III Projects will be installed at NIPSCO's Michigan City Unit 12 generating facility and will directly or indirectly reduce the emissions of SO_2 and NOx from flue gas created during the combustion of coal. Mr. Sangster testified that none of the Multi-Pollutant Compliance Plan projects were commercially available prior to January 1, 1989, and that the projects will reduce sulfur- and nitrogen-based pollutants in a more efficient manner than conventional technologies in general use as of January 1, 1989. No party disputed this testimony.

Based on our review of the record evidence, we find that the Phase III Projects constitute "clean coal technology" as defined in Ind. Code § 8-1-8.7-1, Ind. Code § 8-1-2-6.7, Ind. Code § 8-1-2-6.8 and Ind. Code § 8-1-8.8-3.

ii. Qualified Pollution Control Property under Ind. Code § 8-1-2-6.8. Ind. Code § 8-1-2-6.8 defines "qualified pollution control property" ("QPCP") as "an air pollution control device on a coal burning energy generating facility or any equipment that constitutes clean coal technology that has been approved for use by the commission and that meets applicable state or federal requirements."

Mr. Sangster testified that NIPSCO could not achieve compliance with the Consent Decree or with the various requirements of several federal environmental regulations using conventional technologies in general use on January 1, 1989. NIPSCO Witnesses Carmichael and Sangster testified that NIPSCO must install FGD and WSB technology and CPMs on Michigan City Unit 12 to comply with the requirements of the Consent Decree and Utility MACT. No party disputed this testimony.

Based on our review of the record evidence, we find that the Phase III Projects are CCT designed to meet applicable federal and state environmental laws and regulations. We find that the proposed Phase III Projects will allow for the continued burning of coal in Petitioner's generating units by enhancing their ability to cost-effectively comply with applicable state and federal environmental regulations. Accordingly, we find that the Phase III Projects constitute "qualified pollution control property" as defined in Ind. Code § 8-1-2-6.8.

Ind. Code Chapter 8-1-8.8, CCT is defined as "a technology (including precombustion treatment of coal): (1) that is used in a new or existing energy production or generating facility and directly or indirectly reduces or avoids airborne emissions of sulfur, mercury, or nitrogen oxides or other regulated air emissions associated with the combustion or use of coal; and (2) that either: (A) was not in general commercial use at the same or greater scale in new or existing facilities in the United States at the time of enactment of the federal Clean Air Act Amendments of 1990 (P.L.101-549); or (B) has been selected by the United States Department of Energy for funding or loan guaranty under an Innovative Clean Coal Technology or loan guaranty program under the Energy Policy Act of 2005, or any successor program, and is finally approved for such funding or loan guaranty on or after the date of enactment of the federal Clean Air Act Amendments of 1990 (P.L.101-549).

iii. **Clean Energy Projects under Ind. Code Chapter 8-1-8.8.** The term "clean energy projects" include, among others, "[p]rojects to provide advanced technologies that reduce regulated air emissions from existing energy production or generating plants that are fueled primarily by coal or gases from coal from the geological formation known as the Illinois Basin. . . . ." Ind. Code § 8-1-8.8-2(1)(B).[9]

We have already concluded that the Phase III Projects constitute CCT as defined by Ind. Code § 8-1-8.8-3. Mr. Sangster testified that the Phase III Projects will be installed on NIPSCO's Michigan City Unit 12 electric generating facility and will reduce SO_2 and NOx emissions created during the combustion of coal. He testified that the Multi-Pollutant Compliance Plan projects will reduce sulfur and nitrogen based pollutants in a more efficient manner than conventional technologies in general use as of January 1, 1989. Further, Mr. Sangster testified that the FGD and WSB projects in combination will increase fuel flexibility for Michigan City Unit 12. We find that the Phase III Projects constitute advanced technologies that reduce regulated air emissions from existing energy generating plants and therefore find the Phase III Projects constitute "Clean Energy Projects" as defined in Ind. Code § 8-1-8.8-2.

B. **CPCN for use of CCT under Ind. Code Ch. 8-1-8.7.** Petitioner requests the issuance of a CPCN for each of the Phase III Projects pursuant to Ind. Code ch. 8-1-8.7. Indiana Code § 8-1-8.7-3(b) states: "The commission shall issue a certificate of public convenience and necessity under subsection (a) if the commission finds that a clean coal technology project offers substantial potential of reducing sulfur or nitrogen based pollutants in a more efficient manner than conventional technologies in general use as of January 1, 1989." In order to grant Petitioner's request for a CPCN, we must make a finding on each of the factors described in Ind. Code § 8-1-8.7-3(b), including the dispatching priority of the facility to the utility. Ind. Code § 8-1-8.7-4(b).

i. **CPCN Factors.**

(1) The costs for constructing, implementing, and using clean coal technology compared to the costs for conventional emission reduction facilities.

Mr. Sangster provided evidence that the CCT included in the Multi-Pollutant Compliance Plan will reduce sulfur and nitrogen based pollutants in a more efficient manner than conventional technologies in general use as of January 1, 1989 and that NIPSCO could not achieve compliance with the Consent Decree or with the various requirements of CAIR, CATR and Utility MACT using conventional technologies in general use on January 1, 1989. Moreover, Mr. Carmichael and Mr. Sangster presented evidence that the Unit 12 FGD and CPM

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[9] The provisions of the state environmental statutes providing favorable regulatory treatment to projects using Indiana coal have been held to be an unconstitutional interference with interstate commerce, but severable from the rest of the statutes which remain valid. *General Motors Corp.* v. *Indianapolis Power & Light Co.,* 654 N.E.2d 752, 763 (Ind. Ct. App. 1995); *Alliance For Clean Coal* v. *Bayh,* 72 F.3d 556 (7th Cir. 1995), *See also S. Ind Gas and Electric Co.,* Cause No. 41864, at 7 (Aug. 29, 2001); *N Ind Pub. Servo Co.,* Cause No. 42150, at 5 n. 3 (Jan. 26, 2002); *Indianapolis Power and Light Co.,* Cause No. 42170, at 5 n.1 (Jan. 14, 2002). We will accordingly not rely upon such statutory provisions as a prerequisite for approval of a certificate of clean coal technology, to obtain QPCP status or to receive any other authority.

are necessary to comply with the Consent Decree and Utility MACT. The Unit 12 WSB is a cost-effective means to reduce regulated emissions. We find that conventional emission reduction facilities are not an option for NIPSCO to achieve the emissions reductions required by the EPA Regulations. As a result, we find that NIPSCO's choice to construct, install, and use the Phase III Projects over conventional emission reduction technology is reasonable.

(2) Whether a clean coal technology project will also extend the useful life of an existing electric generating facility and the value of that extension.

Mr. Sangster testified that the projects included in the Multi-Pollutant Compliance Plan will extend the useful life of NIPSCO's existing generating facilities because, without these technologies, NIPSCO could not operate the facilities and achieve compliance with the Consent Decree or with the various requirements of CAIR, CATR and Utility MACT. Specifically, the record evidence demonstrates that without the Unit 12 FGD and CPM, NIPSCO could not comply with the Consent Decree or Utility MACT. Although SJEC's Witness Ladd questioned whether the Unit 12 FGD will allow NIPSCO to continue operating in compliance with EPA's final Utility MACT rule, NIPSCO provided evidence that Dry FGD technology combined with a baghouse (which NIPSCO's proposed project includes) has been installed on many coal units throughout the United States and is proven to reduce emissions of SO_2, mercury, and particulate matter. Therefore, we find that the Phase III Projects will extend the useful economic life of NIPSCO's generating facilities.

(3) The potential reduction of sulfur and nitrogen based pollutants achieved by the proposed clean coal technology system.

(4) The reduction of sulfur and nitrogen based pollutants that can be achieved by conventional pollution control equipment.

Mr. Sangster testified that the installation of FGD, WSB and CPM technology on Michigan City Unit 12 will remove SO_2 and NOx from flue gas created during the combustion of coal that is formed when the sulfur that is a minor constituent of coal is oxidized during the combustion of coal with air. Mr. Sangster also testified that the FGD system will be required to achieve the SO_2 removal efficiency of 97%. No party disputed NIPSCO's evidence that the Phase III Projects are necessary to allow NIPSCO to reduce its air emissions sufficiently to comply with the EPA Regulations, including EPA's final Utility MACT. Accordingly, we find the Phase III Projects will provide significant reduction in SO_2 and NOx emissions.

(5) Federal sulfur and nitrogen based pollutant emission standards.

Based on the extensive evidence presented by NIPSCO and the OUCC regarding the applicable federal sulfur- and nitrogen-based pollutant emissions standards (including EPA's final Utility MACT), we find that the Phase III Projects are a reasonable and necessary means to enable NIPSCO to comply with federal sulfur- and nitrogen-based pollutant emission standards.

(6) The likelihood of success of the proposed project.

Mr. Sangster testified that without the Unit 12 FGD and CPM, NIPSCO could not comply with the Consent Decree and Utility MACT. NIPSCO witness Hooper provided testimony regarding the measures NIPSCO has taken to ensure that the Phase III Projects are managed prudently. Further Mr. Hooper provided testimony regarding what NIPSCO is doing and will do to control costs, remain on time and on budget and hold its contractors accountable as the Phase III Projects progress. Substantial record evidence supports our finding that the measures described by Mr. Hooper should work to manage properly the Phase III Projects to successful completion. Based on the record evidence, we find the Phase III Projects will allow NIPSCO to achieve compliance with the EPA Regulations and the likelihood of success in the implementation and utilization of the Phase III Projects is high.

(7) The cost and feasibility of the retirement of an existing electric generating facility.

Phase III dealt extensively with the cost and feasibility of retiring Michigan City Unit 12. We will address this particular finding in conjunction with our discussion and finding on the public convenience and necessity. For the reasons we describe therein, we ultimately find that the cost and feasibility of retiring Michigan City Unit 12 and constructing or purchasing equivalent capacity is not a cost-effective alternative to installation of the proposed Phase III Projects under the reasonable assumptions used in the decision-making analysis presented.

(8) The dispatching priority for the facility utilizing clean coal technology, considering direct fuel costs, revenues and expenses of the utility, and environmental factors associated with byproducts resulting from the utilization of the clean coal technology.

By its Verified Petition, NIPSCO requested authority to perform dispatch of its generation units in a manner necessary to comply with the requirements of the Consent Decree or other environmental regulations or requirements and that the Commission declare such procedures to be in compliance with current and future dispatch parameters relating to the recovery of fuel costs.

Mr. Carmichael testified that the projects included in NIPSCO's Multi-Pollutant Compliance Plan are designed to achieve the emission limitations set forth in the Consent Decree as well as provide for a base level of additional reductions that will be required under existing phased in and projected future EPA regulations and requirements but that during certain situations it may be necessary for the NIPSCO units to change priority of dispatch, short term generation levels, or take an outage to maintain compliance with emission limitations. Mr. Carmichael testified that if a piece of pollution control equipment malfunctions, an outage may be needed to repair the malfunction. Mr. Sangster testified that at times it may be necessary for NIPSCO to re-dispatch unit operations in order to achieve compliance with environmental requirements and that if necessary, NIPSCO will dispatch accordingly. However, there is no evidence to suggest that the Phase III Projects will significantly alter the normal dispatching priority for Michigan City Unit 12.

NIPSCO's request is consistent with the Commission's recognition that Indiana utilities may sometimes need to change their priority of dispatch or short term generation levels for environmental purposes such as environmental derates. *See* April 23, 2008 Order in Cause No. 43414 (Joint Petition of Indianapolis Power & Light Company, Southern Indiana Gas and Electric Co. d/b/a/ Vectren Energy Delivery of Indiana, Inc., and the Indiana Office of Utility Consumer Counselor for Approval of Settlement Establishing a Mechanism for the Recovery of Purchased Power Costs); March 23, 2005 Order in Cause No. 42770 (Joint Petition of Indianapolis Power & Light Company, Southern Indiana Gas and Electric Co. d/b/a/ Vectren Energy Delivery of Indiana, Inc., and the Indiana Office of Utility Consumer Counselor for Approval of Settlement Establishing a Mechanism for the Recovery of Purchased Power Costs); May 26, 2004 Order in Cause No. 42616 (Joint Petition of Indianapolis Power & Light Company and the Indiana Office of Utility Consumer Counselor for Approval of Settlement Establishing a Mechanism for the Recovery of Purchased Power Costs); and May 26, 2004 Order in Cause No. 42605 (Joint Petition of Southern Indiana Gas and Electric Co. d/b/a/ Vectren Energy Delivery of Indiana, Inc., and the Indiana Office of Utility Consumer Counselor for Approval of Settlement Establishing a Mechanism for the Recovery of Purchased Power Costs).

Based on the record evidence, we find it is possible that the dispatch order of NIPSCO's generation units may change as a result of installation of the Multi-Pollutant Compliance Plan projects due to potential changes in operating expenses, but the evidence does not show that the Phase III Projects will significantly impact the normal dispatch priority of Michigan City Unit 12. NIPSCO, as a responsible generating plant operator, must comply and should be supported in its pursuit to comply with the state and federal environmental regulations. Therefore, we find that NIPSCO's request to perform dispatch of its generation units in a manner necessary to comply with the requirements of the Consent Decree, environmental regulations, or other requirements is reasonable.

(9) Any other factors the commission considers relevant, including whether the construction, implementation, and use of clean coal technology is in the public's interest.

This factor will be discussed in conjunction with our finding on public convenience and necessity.

ii. <u>CPCN Findings</u>. In addition to the above findings on the nine factors described in Ind. Code § 8-1-8.7-3(b), as required by Ind. Code § 8-1-8.7-4(b)(4), we must address the three remaining required findings set forth in Ind. Code § 8-1-8.7-4(b)(1)-(b)(3). We note that a finding that a project is in the public convenience and necessity (*see* IC 8-1-8.7-4(b)(1)) and the approval of the estimated costs for that project (*see* IC 8-1-8.7-4(b)(2)) are separate and distinct components of an approved CPCN. With respect to public convenience and necessity, it is appropriate to consider the project cost with its inherent range of accuracy used to determine a project's viability, which differs from our review of the present cost estimate for which a utility seeks approval.

(1) A finding that the public convenience and necessity will be served by the construction, implementation, and use of clean coal technology.

Phase III was dedicated to the question of whether refitting Unit 12 with the Phase III Projects serves the public convenience and necessity. The evidence we heard analyzed whether there exists a better alternative to compliance with the Consent Decree and EPA Regulations than the Phase III Projects. Our decision rests upon our analysis of multiple factors, including: (1) uncertainty of natural gas price forecasts; (2) the relative importance of maintaining coal in the Indiana generation fleet for as long as possible; and (3) risk and uncertainty between the two alternatives. As we will explain, we ultimately find that refitting Unit 12 with the Phase III Projects serves the public convenience and necessity.

The Unit 12 Projects will allow for continued use of coal to generate electricity at Unit 12. Further, the decision to retire Unit 12 would be an irreversible decision. As Industrial Group witness Dauphinais points out, Unit 12 and other large, efficient coal-fired generating stations are "somewhat irreplaceable." The evidence supports that Unit 12 is an efficient generation resource and we are not inclined, as Mr. Shambo described, to implement a "pre-emptive surrender" of one of Indiana's efficient coal-fired facilities simply because other alternatives may be cost effective under certain future scenarios. In this case, based on the analyses provided, we believe that faced with uncertainty regarding the future market prices of commodities, it is better to maintain the option to run Unit 12 on coal rather than to permanently foreclose this option; refitting Unit 12 with the Phase III Projects is the only way to maintain coal as an option for this unit.

In this case we have also reviewed the extensive consideration of the relative risk of refitting Unit 12 with the Phase III Projects versus replacing Unit 12. When the construction cost price cap on the Phase III Projects is considered, we find the relative risk favors the Phase III Projects under both the Base Case and even the Low Case scenarios. We recognize that a range of reasonableness exists for the inputs into any decision-making analysis and the range vetted by the parties to this proceeding is wide. As noted by Mr. Adkins, the SJEC bid only produces a net benefit if there is carbon regulation and if natural gas prices remain low. Even then, the benefit is only in the outlier years, and it is a much smaller benefit for the customers than the costs they would bear should either the carbon regulation or low gas price assumptions trend the other direction.

Perhaps the most significant risk that we have heard repeated throughout all three phases of this proceeding is the risk of construction cost increases. The cap on cost that NIPSCO offered during the cross-examination of Mr. Hooper greatly reduces and addresses this risk. Except upon the occurrence of a Force Majeure Event,[10] NIPSCO has agreed not to seek recovery of

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[10] For purposes of this commitment, NIPSCO has defined the term "Force Majeure Event" as including, but not limited to, the following: acts of God; acts of war or terrorism; extended labor dispute resulting in a work stoppage; orders by a government official, government agency, other regulatory authority, or a regional transmission organization, acting under and authorized by applicable law, that directs NIPSCO to halt work on the Project or materially change the scope of the Project; failure of a permitting authority to issue a necessary permit in a timely fashion where the failure of the permitting authority to act is beyond the control of NIPSCO and NIPSCO has taken all steps available to it to obtain the necessary permit, including, but not limited to: submitting a complete permit

Unit 12 Projects capital costs in excess of $307,990,875 not including AFUDC (i.e., 25% over initial cost estimate of $246,392,700). If any Force Majeure Event occurs that may cause NIPSCO to incur extra cost to complete the engineering and construction of the Unit 12 Projects despite NIPSCO's best efforts to control the costs as to which NIPSCO intends to assert a claim of Force Majeure, NIPSCO has committed to (i) provide notice to the OUCC and other interested stakeholders if it anticipates that it might incur extra cost as a result of a Force Majeure Event and (ii) file a Notice of Force Majeure Event with the Commission under this Cause as soon as practicable following the date NIPSCO first knew, or by the exercise of due diligence should have known, but in no event more than 30 calendar days following, that the event caused or may cause such extra costs. In this notice, NIPSCO has committed to describe the anticipated extra costs, the cause or causes of the extra costs, all measures taken or to be taken by NIPSCO to prevent or minimize the extra costs, the schedule by which NIPSCO proposes to implement those measures, and NIPSCO's rationale for attributing such extra costs to a Force Majeure Event. Mr. Baatz testified on behalf of the OUCC that, with this commitment being made, he now agrees the public convenience and necessity supports the issuance of the requested CPCN for the Phase III Projects.

We agree with Mr. Baatz that NIPSCO's commitment, coupled with the balance of the other risk factors under consideration, favors deployment of the Phase III Projects. However, we note that under our public interest review of the Phase III Projects, it is appropriate for the Commission to tie a finding of public convenience and necessity, whether implicitly or explicitly, to the cost estimate (with an appropriate range of accuracy) and underlying analysis provided by the petitioning utility in order to determine the viability of the proposed project. This is especially true in this case, in which other options were comparable in cost at the upper ranges of Phase III cost estimates and lower ranges of natural gas pricing.

As we explained in our Phase I Order in this Cause, "the initial granting of a CPCN depends in large part upon the economic efficacy of a proposed project, and as such, the initial cost estimates are a significant factor in the Commission's decision making process." *NIPSCO*, Cause No. 44012 Phase I Order, at 18 (IURC Dec. 28, 2011). NIPSCO's commitment to cap the Phase III recovery to a 25 percent allowance over its cost estimate for which it seeks approval herein (excluding AFUDC) is consistent with this Commission's authority to determine appropriate cost recovery under our public interest review. We find that public convenience and necessity is met so long as the final cost of the Phase III Projects does not exceed $307,990,875 (excluding AFUDC), subject to our ongoing review under Ind. Code ch. 8-1-8.7. As noted in subsection (2) below, through this Order we are only approving the recovery of NIPSCO's estimated cost of $246,392,700.

Based on the record evidence and our analysis of the factors set forth in Ind. Code § 8-1-8.7-3(b), we find that the public convenience and necessity will be served by NIPSCO's

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application; responding to requests for additional information by the permitting authority in a timely fashion; and accepting lawful permit terms and conditions after expeditiously exhausting any legal rights to appeal terms and conditions imposed by the permitting authority; issuance of a Phase III Order in Cause No. 44012 after September 30, 2012 granting NIPSCO's request for a CPCN which results in a cost increase for the Unit 12 Projects in excess of the cap; or any causes which are not within the control of NIPSCO, and which by the exercise of reasonable diligence, NIPSCO is unable to prevent.

construction, implementation and use of the Phase III Projects based on the estimated cost, and range of accuracy and the associated analysis, and cap provided by NIPSCO.

(2) Approval of the Estimated Costs.

Petitioner requests approval of the cost estimates for the Phase III Projects set forth in Response to IURC Request 3-1 (Petitioner's Exhibit No. III-1). Those costs, excluding AFUDC, are Unit 12 FGD ($239,000,000), Unit 12 WSB SCR Reheat Project ($7,017,700) and Unit 12 Continuous Particulate Monitors ($375,000). The details of these cost estimates are set forth in Petitioner's Exhibits Nos. KWS-1, KWS-3 and KWS-R2-III.

Indiana Code § 8-1-8.7-4(a) states: "As a condition for receiving the certificate required under section 3 of this chapter, an applicant must file an estimate of the cost of constructing, implementing, and using clean coal technology and supportive technical information in as much detail as the commission requires." In addition, before we may grant Petitioner a CPCN for the Phase III Projects, we must approve the estimated costs. Ind. Code § 8-1-8.7-4(b).

The referenced exhibits to Mr. Sangster's testimony, supplemental testimony, and rebuttal testimony provide the details of the cost estimates for the Phase III Projects. NIPSCO also provided evidence regarding the anticipated O&M expenditures to support the QPCP and CCT projects included in the Multi-Pollutant Compliance Plan once they are in service on Petitioner's Exhibits Nos. KWS-3 as revised by Petitioner's Exhibit No. KWS-R. Mr. Sangster testified that the estimates were developed after completion of the preliminary engineering by Sargent & Lundy and are based on the defined scope determined by preliminary engineering and numerous actual project costs for similar scope.

Although some of the parties questioned the range of accuracy associated with these cost estimates, Mr. Hooper clarified that NIPSCO believes a +/- 40% range of accuracy is the appropriate range to use for the purpose of analyzing whether a CPCN for the Unit 12 FGD project should be granted. He testified that NIPSCO is comfortable with this +/- 40% range notwithstanding the fact that the amount of engineering that has been completed for the Unit 12 FGD project technically yields only an "order of magnitude" cost estimate with an associated +100/-50%. Finally, Mr. Hooper testified that NIPSCO is comfortable with this +/- 40% range based upon prior experience, independent order of magnitude cost estimates from two sources, and commodity pricing experience gained during the current FGD project at Schahfer Units 14 and 15. Furthermore, except upon the occurrence of a Force Majeure Event, NIPSCO has agreed not to seek recovery of Unit 12 Projects capital costs in excess of $307,990,875 not including AFUDC (i.e., 25% over initial cost estimate of $246,392,700). Based upon our approval herein, NIPSCO must seek a modification of its CPCN for any increase above $246,392,700 (excluding AFUDC), pursuant to Ind. Code ch. 8-1-8.7.

We note that while NIPSCO has committed that it will not seek recovery of capital costs above a certain cap, NIPSCO is not requesting approval at this time of anything other than $246,392,700 for the Phase III Projects plus appropriate AFUDC. We find that substantial record evidence demonstrates that NIPSCO's cost estimates for the Phase III Projects of Unit 12 FGD ($239,000,000), Unit 12 WSB SCR Reheat Project ($7,017,700), and Unit 12 CPMs ($375,000) (all excluding AFUDC) are reasonable and should be approved.

> **(3) A finding that the facility where the clean coal technology is employed: (A) utilizes and will continue to utilize Indiana coal as its primary fuel source; or (B) is justified, because of economic considerations or governmental requirements, in utilizing non-Indiana coal; after the technology is in place.**

As discussed in footnote 7 above, we will not use the Indiana coal requirement as a prerequisite for approval of a certificate of CCT, to obtain QPCP status, or to receive any other authority.

Based on our review of the record evidence, we find that the Phase III Projects offer substantial potential of cost effectively reducing sulfur or nitrogen based pollutants in a more efficient manner than conventional technologies in general use as of January 1, 1989. We have also considered the other enumerated factors set forth in Ind. Code § 8-1-8.7-3 and made the required findings under Ind. Code § 8-1-8.7-4(b). Accordingly, we find that Petitioner's request for a CPCN for the Phase III Projects, at the proposed estimated costs of $239,000,000 for the FGD, $7,017,700 for the WSB, and $375,000 for the CPM for which it can rely upon for cost recovery, should be granted.

C. <u>Approval of Clean Energy Projects under Ind. Code Ch. 8-1-8.8</u>. Indiana Code § 8-1-8.8-11 provides that "[a]n eligible business must file an application to the commission for approval of a clean energy project" and that "[t]he commission shall encourage clean energy projects by creating [certain] financial incentives for clean energy projects, if the projects are found to be reasonable and necessary."

Mr. Sangster testified that installation and use of the projects proposed in the Multi-Pollutant Compliance Plan will allow NIPSCO to continue to meet demands made upon it for electric power, while doing so in an environmentally compliant and cost effective manner. Mr. Sangster and Mr. Carmichael testified that the Unit 12 FGD and CPM are necessary to comply with the Consent Decree and Utility MACT.

As we discussed above, the Phase III Projects constitute "clean energy projects" under Ind. Code § 8-1-8.8-2. Based on our review of the evidence, we find that the Phase III Projects are a reasonable and necessary cost-effective means to reduce SO_2 and NOx emissions from NIPSCO's Michigan City Unit 12. We therefore approve of the Phase III Projects and find that they are eligible for the financial incentives set forth in Ind. Code Ch. 8-1-8.8.

As a result of being eligible for the financial incentives under Ind. Code Ch. 8-1-8.8, Petitioner requests among other things authorization to utilize CWIP ratemaking treatment for clean energy projects (and CCT and QPCP) and to recover O&M expenses relating to the Phase III Projects, including depreciation expense, for clean energy projects (and its CCT and QPCP) consistent with and through Petitioner's currently-effective ECRM and EERM. Indiana Code 8-1-8.8-11(a)(1) provides:

> (a) The commission shall encourage clean energy projects by creating the following financial incentives for clean energy projects, if the projects are

found to be reasonable and necessary:

> 1. The timely recovery of costs and expenses incurred during construction and operation of projects described in section 2(1) or 2(2) of this chapter.

* * * * *

Having found that the Phase III Projects constitute clean energy projects that are reasonable and necessary and therefore eligible for the financial incentive set forth in Ind. Code Ch. 8-1-8.8-11(a)(1), we therefore approve NIPSCO's request for timely recovery of costs and expenses incurred during construction and operation of the Phase III Projects consistent with and through Petitioner's ECRM and EERM.

D. Ratemaking Treatment and Depreciation.

i. Ratemaking Treatment - Ind. Code § 8-1-2-6.8 and 170 IAC 4-6. Petitioner requests a finding that the Phase III Projects constitute "qualified pollution control property" and are eligible for the ratemaking treatment described in Ind. Code § 8-1-2-6.8. Specifically Petitioner requests authorization to utilize CWIP ratemaking treatment for CCT and QPCP (and clean energy projects) consistent with and through Petitioner's ECRM. Petitioner also requests authorization to accrue AFUDC related to QPCP prior to CWIP ratemaking treatment or their reflection of such costs in NIPSCO's electric rates and a finding that the Projects are deemed to be under construction until such time the Commission determines that the Projects are used and useful in a proceeding that involves the establishment of new electric basic rates and charges for Petitioner. Petitioner also requests authorization to recover through rates pre-construction costs incurred prior to approval of a Final Order in this proceeding through Petitioner's ECRM.

Indiana Code § 8-1-2-6.8(e) provides: "Upon the request of a utility that begins construction after March 31, 2002, of qualified pollution control property that is to be used and useful for the public convenience, the commission shall for ratemaking purposes add to the value of that utility's property the value of the qualified pollution control property under construction." The Commission's regulations relating to the ratemaking treatment of QPCP under construction further define the ratemaking treatment the Commission may grant for QPCP. *See* 170 IAC 4-6.

Mr. Westerhausen testified that NIPSCO's proposed ratemaking treatment is consistent with that previously approved for NIPSCO's existing NOx Compliance Plan (approved and modified by the Commission in Cause Nos. 42150, 42515, 42737, 42935, 43144, 43371, 43593, 43840, 42150 ECR 17, and 42150 ECR 19) and CAIR/CAMR Compliance Plan (approved and modified by the Commission in Cause Nos. 43188, 43371, 43593, 43840, 42150 ECR 17, and 42150 ECR 19), both of which consisted of CCT and QPCP. Mr. Westerhausen provided evidence that the proposed ratemaking treatment can be readily incorporated into the existing ECRM and EERM filings made periodically with the Commission. Mr. Plantz testified that NIPSCO proposes to commence CWIP ratemaking treatment for the costs of each project once the project has been under construction for at least six months and that this is consistent with past practice using the ECRM. Mr. Plantz testified that NIPSCO proposes to continue recording

AFUDC until such costs are given CWIP ratemaking treatment or are otherwise reflected in base electric rates or the Projects are placed in service, whichever occurs first.

We have already determined that the Phase III Projects constitute "qualified pollution control property" as defined in Ind. Code § 8-1-2-6.8. As a result, we find the Phase III Projects are eligible for the ratemaking treatment described in Ind. Code § 8-1-2-6.8. We find that Petitioner's requests with respect to the ratemaking treatment of its QPCP are consistent with 170 IAC 4-6. We therefore authorize NIPSCO to utilize CWIP ratemaking treatment (including preconstruction costs) and AFUDC treatment for the Phase III Projects consistent with and through Petitioner's ECRM, and we hereby deem the Phase III Projects to be under construction until such time the Commission determines that the Projects are used and useful in a proceeding that involves the establishment of new electric basic rates and charges for Petitioner. We find that NIPSCO should be and hereby is authorized to accrue AFUDC on Phase III Projects costs up to the approved amount, which we have determined to be $246,392,700 for the Phase III Projects. We specifically note that to the extent the Phase III Projects costs exceed the approved amounts, these increased costs and incremental AFUDC associated with project costs above the approved amounts are not approved at this time and would need to be addressed following a public hearing as a part of our ongoing review pursuant to Ind. Code § 8-1-8.7-7.

ii. Depreciation Treatment - Ind. Code § 8-1-2-6.7. Petitioner requests a finding that the Phase III Projects are eligible for the depreciation treatment set forth in Ind. Code § 8-1-2-6.7. Indiana Code 8-1-2-6.7(b) provides:

> The commission shall allow a public or municipally owned electric utility that incorporates clean coal technology to depreciate that technology over a period of not less than ten (10) years or the useful economic life of the technology, whichever is less and not more than twenty (20) years if it finds that the facility where the clean coal technology is employed: (1) utilizes and will continue to utilize (as its primary fuel source) Indiana coal; or (2) is justified, because of economic considerations or governmental requirements, in utilizing non-Indiana coal; after the technology is in place.[11]

We have already found that the Phase III Projects constitute "clean coal technology" as defined in Ind. Code § 8-1-2-6.7. The OUCC recommended that the Phase III Projects be depreciated over a period of twenty (20) years. NIPSCO testified that it would accept the proposed change related to the depreciable life of Phase III Projects, subject to the caveat described by Mr. Shambo in the event future regulations require the premature retirement of Unit 12. Therefore, we find that NIPSCO should be permitted to depreciate each of the Phase III Projects over a period twenty (20) years.

E. Ongoing Review, Semi-Annual Progress Reports and Reporting and Meeting Requirements. As noted previously, Petitioner requests ongoing review of the Phase III Projects pursuant to Ind. Code § 8-1-8.7-7. Petitioner also requests authority to file a semi-

[11] As discussed above in footnote 7, we will not use the Indiana coal requirement as a prerequisite for determination of NIPSCO's eligibility for the depreciation treatment under Ind. Code § 8-1-2-6.7.

annual progress report (as compared to its current practice of filing an annual progress report) on the status of QPCP in the ECRM as part of every ECRM filing (Cause No. 42150 ECR X).

In accordance with Ind. Code § 8-1-8.7-7, the utility is to submit each year during construction, or at other times as the Commission and the public utility mutually agree, a progress report detailing any revisions in the cost estimates or the planned construction. The Commission must hold a hearing before it may approve or deny a proposed increase in the cost estimate for the implementation, construction or use of the clean coal technology. If the Commission approves the construction and the costs, that approval forecloses subsequent challenges to the inclusion of those costs in the utility's rate base on the basis of excessive cost, inadequate quality control, or inability to employ the technology.

In addition to the statutory ongoing review requirements and the semi-annual progress reporting, the OUCC and Industrial Group provided evidence to support various other reporting and meeting requirements. We find that NIPSCO should comply with the following ongoing reporting and meeting requirements with respect to the Phase III Projects:

(a) Provide to the OUCC, Industrial Group and other interested stakeholders subject to a fully executed non-disclosure agreement or protective order on a monthly basis:

(i) Weekly project status report (Petitioner's Exhibit Nos. MH-S10 (Confidential)),

(ii) Monthly project report (Petitioner's Exhibit Nos. MH-S11 (Confidential)), and

(iii) Senior executive project report (Petitioner's Exhibit Nos. MH-S12 (Confidential));

(b) Provide to the OUCC, Industrial Group and other interested stakeholders subject to a fully executed non-disclosure agreement or protective order on a semi-annual basis a document referred to as the risk register and risk assessment;

(c) Provide as part of its semi-annual progress report filed in Cause No. 42150-ECR-X reports of the cost breakdown as detailed engineering plans progress;

(d) Meet with the OUCC, Industrial Group and other interested stakeholders that have executed a non-disclosure agreement on a quarterly basis or as otherwise needed or mutually agreed on an ad hoc basis to discuss the Multi-Pollutant Compliance Plan projects until the last of the projects goes into service, subject to the understanding that some NIPSCO personnel may need to conduct some of the meetings via conference call, video conference, or other remote means to reduce travel time and accommodate project management staff schedules; and

(e) Permit the OUCC, Industrial Group and other interested stakeholders that have executed a non-disclosure agreement to attend monthly on-site executive Unit 12 FGD Project review meetings or six-month Unit 12 FGD Project risk review meetings

subject to attendees providing NIPSCO with advanced notice so that NIPSCO may make the proper security and safety arrangements.

We note that NIPSCO has regularly reported to the Commission on the progress of its approved CCT, QPCP, and clean energy projects by its annual progress reports in Cause Nos. 42515, 42737, 42935, 43144, 43371, 43593, 43840, 42150 ECR 17, and most recently as part of Cause No. 42150 ECR 19. In addition, the ECRM semi-annual proceedings are filed with the Commission, and the Commission must hold a hearing before it may approve or deny a proposed increase in the cost estimates for the implementation, construction or use of the CCT projects. Accordingly, based on the evidence presented in this Cause, we hereby find that the Petitioner's request for ongoing review of the construction of its CCT projects under Ind. Code § 8-1-8.7-7 should be granted and that Petitioner's proposal to file semi-annual progress reports as part of that ongoing review is reasonable and should be approved. Consistent with our August 25, 2010 Order in Cause No. 43526, NIPSCO should continue to file the progress reports as part of its ECRM filings (Cause No. 42150 ECR X). We also find that NIPSCO should comply with the ongoing reporting and meeting requirements enumerated in this section.

F. The Stakeholder Process. Faced with the fact that NIPSCO's Michigan City Unit 12 must either be refit with certain environmental controls or replaced to meet the requirements of the Consent Decree and various federal environmental regulations, NIPSCO worked with Stakeholders to evaluate options for meeting the future resource needs of NIPSCO's customers. This process assisted all interested parties, including the Commission, in establishing the reasonable path forward for customers while balancing costs, risks and policy goals.

NIPSCO and the Stakeholders have expressed their belief that the process was valuable and meaningful, and can be a good model for NIPSCO and other Indiana utilities facing high capital cost investment decisions. However, any endorsement of this collaborative effort should not be interpreted to diminish NIPSCO's sole and exclusive responsibility as the Petitioner to demonstrate that public convenience and necessity requires the proposed retrofit of Michigan City 12, or to otherwise carry the burden of proof as the petitioning utility. The inclusion of Stakeholders in any utility's economic analysis process can be costly to non-utility participants, who do not necessarily have staff or resources that can be dedicated to such an undertaking. Not all Stakeholders will have the ability to engage in such a process, and their participation should not be expected or assumed in any instance. Likewise, the failure of Stakeholders to participate in such processes in the future should not be interpreted as a waiver of their right to assert any objection or raise any issue at a later date. The process should not be used as a replacement for the utility's own careful consideration of appropriate options, and we will still expect to see sufficiently detailed CPCN petitions presented for us to make informed judgments.

Nonetheless, we take note of the Stakeholder process in this instance because the end result in this case is enhanced due to the effort of the Parties. In conclusion, the Stakeholder process utilized in this proceeding is valuable to all and is meaningful for the Commission due to the close collaboration and evaluation by the Stakeholders.

G. Confidentiality. In Phase III of this proceeding, Petitioner filed two motions for protective order and St. Joseph filed one motion, all of which were supported by

affidavit showing documents to be submitted to the Commission were trade secret information within the scope of Ind. Code §§ 5-14-3-4(a)(4) and (9) and Ind. Code § 24-2-3-2. The Presiding Officers issued Docket Entries on April 17, 2012 and May 2, 2012, respectively, finding such information to be preliminarily confidential, after which such information was submitted under seal. We find all such information is confidential pursuant to Ind. Code § 5-14-3-4 and Ind. Code § 24-2-3-2, is exempt from public access and disclosure by Indiana law and shall be held confidential and protected from public access and disclosure by the Commission.

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

1. The Phase III Projects shall be and hereby are determined to constitute "clean coal technology" as defined in Ind. Code § 8-1-8.7-1, Ind. Code § 8-1-2-6.7, Ind. Code § 8-1-2-6.8 and Ind. Code § 8-1-8.8-3.

2. Petitioner shall be and is hereby issued a Certificate of Public Convenience and Necessity for the Phase III Projects pursuant to Ind. Code Ch. 8-1-8.7, as set forth herein. This Order constitutes the Certificate.

3. The cost estimates provided by Petitioner in this Cause for the Phase III Projects ($239,000,000 for the Unit 12 FGD, $7,017,700 for the Unit 12 WSB Reheat Project, and $375,000 for the Unit 12 Continuous Particulate Monitor) shall be and are hereby approved.

4. Petitioner's request for ongoing review of the Phase III Projects pursuant to Ind. Code § 8-1-8.7-7 and to file semi-annual progress reports as part of that ongoing review shall be and is hereby approved.

5. The Phase III Projects shall be and are hereby determined to constitute "qualified pollution control property" and are eligible for the ratemaking treatment described in Ind. Code § 8-1-2-6.8.

6. The Phase III Projects shall be and are hereby determined to constitute "clean energy projects" under Ind. Code Ch. 8-1-8.8 that are hereby approved as reasonable and necessary and therefore eligible for the timely recovery of costs and expenses set forth in Ind. Code § 8-1-8.8-11(a)(1).

7. Petitioner shall be and is hereby authorized to utilize CWIP ratemaking treatment, including preconstruction costs incurred prior to the issuance of this Order, for the Phase III Projects consistent with and through Petitioner's Environmental Cost Recovery Mechanism and the Phase III Projects are deemed to be under construction until such time as the Commission determines that the Projects are used and useful in a proceeding that involves the establishment of new electric basic rates and charges for Petitioner.

8. Petitioner shall be and is hereby authorized to depreciate each of the Phase III Projects approved herein over a period of twenty (20) years pursuant to Ind. Code § 8-1-2-6.7.

9. Petitioner shall be and is hereby authorized to accrue AFUDC related to the Phase III Projects prior to CWIP ratemaking treatment or their reflection of such costs in NIPSCO's

electric rates.

10. Petitioner shall be and is hereby authorized to recover O&M expenses and depreciation expenses relating to the Phase III Projects consistent with and through Petitioner's Environmental Expense Recovery Mechanism.

11. Petitioner shall be and is hereby authorized to perform dispatch of its generation units in a manner necessary to comply with the requirements of the Consent Decree or other environmental regulations.

12. Petitioner shall comply with the ongoing reporting and meeting requirements enumerated in Finding Paragraph 6, Section E.

13. The information filed by the Parties in this Cause pursuant to its Motions for Protective Order is deemed confidential pursuant to Ind. Code § 5-14-3-4 and Ind. Code § 24-2-3-2, is exempt from public access and disclosure by Indiana law, and shall be held confidential and protected from public access and disclosure by the Commission.

14. This Order shall be effective on and after the date of its approval.

ATTERHOLT, BENNETT, LANDIS, MAYS AND ZIEGNER CONCUR:

APPROVED: SEP 05 2012

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

Brenda A. Howe

Brenda A. Howe
Secretary to the Commission