STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

PETITION FOR A CERTIFICATE OF PUBLIC CONVENIENCE AND NECESSITY FOR THE CONSTRUCTION OF ADDITIONAL CLEAN COAL TECHNOLOGY PURSUANT TO I.C. 8-1-8.7, APPROVAL OF THE USE OF QUALIFIED POLLUTION CONTROL PROPERTY PURSUANT TO I.C. 8-1-2-6.6, AND AUTHORIZATION TO DEFER AND AMORTIZE ASSOCIATED DEPRECIATION AND OPERATION AND MAINTENANCE EXPENSES.	)	**CAUSE NO. 43913** **APPROVED:** DEC 29 2010

<u>BY THE COMMISSION</u>:
James D. Atterholt, Chairman
Aaron Schmoll, Senior Administrative Law Judge

On June 18, 2010, Northern Indiana Public Service Company ("NIPSCO" or "Petitioner") filed its *Verified Petition* in this Cause. On June 25, 2010, NIPSCO prefiled the verified direct testimony of its witnesses Kelly R. Carmichael, Philip W. Pack, Mitchell E. Hershberger and Curt A. Westerhausen. On July 7, 2010, NIPSCO prefiled revised verified testimony from Mr. Westerhausen.

Pursuant to notice duly published in accordance with Indiana law, a Prehearing Conference and Preliminary Hearing was convened on July 28, 2010 in Room 222 of the PNC Center, 101 West Washington Street, Indianapolis. Also appearing and participating was the Indiana Office of Utility Consumer Counselor ("OUCC"). The Commission approved its *Prehearing Conference Order* in this Cause on August 11, 2010.

On August 5, 2010, NIPSCO filed a *Motion to Amend* the caption in this proceeding, which amended caption was incorporated into the *Prehearing Conference Order*. On September 2, 2010, the OUCC filed its *Agreed Motion for Extension of Time to Prefile Testimony,* and on September 13, 2010, NIPSCO filed its *Second Motion to Amend* the caption in this proceeding. Both motions were granted by the Commission in a docket entry dated September 21, 2010.

On September 23, 2010, the OUCC prefiled its case-in-chief consisting of testimony from its witnesses Anthony A. Alvarez and Ray L. Snyder. On the same day, NIPSCO prefiled supplemental direct testimony from Mr. Pack. On September 28, 2010, NIPSCO filed an omitted exhibit from Mr. Pack's supplemental direct testimony. On October 5, 2010, NIPSCO prefiled verified rebuttal testimony from Mr. Pack. On October 12, 2010, the Presiding Officers issued a docket entry propounding a question to NIPSCO, and on October 13, 2010, NIPSCO filed its written response.

Pursuant to notice as provided for by law, a public Evidentiary Hearing was convened on October 13, 2010 at 1:30 p.m. in Room 222 of the PNC Center, 101 West Washington Street, Indianapolis. At the evidentiary hearing, the prefiled evidence of NIPSCO and the OUCC were admitted into the record without objection. On October 14, 2010, NIPSCO submitted late-filed testimony from Bradley Sweet providing additional detail in response to the October 13 docket entry, which testimony was admitted into the evidentiary record as provided for at the evidentiary hearing. No members of the rate paying public were present at the evidentiary hearing or otherwise sought to testify.

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

1. Notice and Jurisdiction. Due, legal and timely notice of the hearing in this Cause was given as required by law. Petitioner published notice of the filing of its Petition in newspapers of general circulation in each county in which Petitioner has retail electric customers. Petitioner is a "public utility" as defined in Ind. Code § 8-1-2-l(a) and an "eligible business" as defined in Ind. Code § 8-1-8.8-6 and 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 Cause.

2. Petitioner's Characteristics. Petitioner is a public utility incorporated under the laws of the State of Indiana, with its principal office and place of business in Merrillville, Indiana. Petitioner provides electric and gas utility service to the public in northern Indiana and owns, operates, manages and controls plant and equipment used to provide such services.

3. Relief Requested. By its *Verified Petition*, as amended, NIPSCO seeks approval of a certificate of public convenience and necessity ("CPCN") pursuant to Ind. Code § 8-1-8.7 for the construction of clean coal technology in the form of wet flue gas desulfurization ("FGD") facilities at its R.M. Schahfer facility on Unit 14, along with additional facilities to be used jointly with the adjacent Unit 15 upon approval and construction of similar facilities on that generating unit (the "Project"). NIPSCO also seeks a finding that the Project constitutes Qualified Pollution Control Property ("QPCP") pursuant to Ind. Code § 8-1-2-6.6, and Clean Coal and Energy Projects eligible for the statutory ratemaking and accounting treatment as provided for in Ind. Code § 8-1-8.8.

4. Evidence Presented.

a. Petitioner's Case-In-Chief.

i. Testimony of Kelly R. Carmichael. Kelly R. Carmichael, Director of Environmental Permitting and Regulatory Services, prefiled direct testimony that discussed the federal and state environmental requirements driving further reductions in Oxides of Nitrogen ("NO_x") and Sulfur Dioxide ("SO_2") and Hazardous Air Pollutant ("HAPs") emissions and how those requirements impact the timing and location of the FGD for which approval is requested. Mr. Carmichael testified about the history of the Clean Air Interstate Rule ("CAIR") and its current status. He explained that the CAIR program had been added by the U.S. Environmental Protection Agency ("EPA") to other Clean Air Act programs to further reduce NO_x and SO_2 emissions, and that Indiana adopted final rules to implement CAIR effective February 25, 2007. He explained that the U.S. Court of Appeals for the D.C. Circuit vacated the federal rule in its entirety, and remanded it to the EPA without vacatur in December of 2008; the rule thus remains in effect pending further rulemaking or legislative action to correct the underlying issues the court identified in its opinion.

Mr. Carmichael testified that the EPA's Clean Air Mercury Rule ("CAMR") was promulgated to reduce HAPs from coal-fired power plants. He testified that the first phase of CAMR compliance had been due to begin on January 1, 2010, but that the underlying EPA Rule was vacated by the D.C. Circuit on February 8, 2008. He explained that EPA is in the process of pursuing a new National Emission Standard for Hazardous Air Pollutants ("NESHAPS") to establish maximum achievable control technology ("MACT") standard for emissions from electric utilities, and that under the heightened MACT standard, EPA is required to develop control technology requirements for all HAPs, in addition to those for mercury.

Mr. Carmichael testified that on July 2, 2009, the EPA opened a comment period to obtain industry information to be used to develop the NESHAP for coal and oil-fired generating stations. The data thus collected will impact implementation and timing of control installation regarding emission reduction obligations for mercury and other HAPS. Mr. Carmichael stated that the installation, certification, and operation of continuous emissions monitors ("CEMs") to demonstrate compliance with its mercury reduction requirements under CAMR was required a year prior to the effective date of the rule, and that market conditions for the purchase of that equipment had required a commitment by NIPSCO to purchase the CEMs before the rule had been vacated.

Mr. Carmichael explained that the regulatory landscape governing emissions remains unsettled as the EPA continues to address the rules overturned by the D.C. Circuit. He explained that NIPSCO has developed its compliance plans for NO_x, SO_2 and mercury based on the best information available. Mr. Carmichael testified about the development of recommendations by the Midwest state air regulatory directors through the Lake Michigan Air Directors Consortium ("LADCO") in the wake of the D.C. Circuit opinions concerning CAIR and CAMR. He attached copies of the letters submitted from LADCO to the EPA containing specific recommendations about CAIR replacement programs, including those for electric generating units. Mr. Carmichael explained that the Indiana Department of Environmental Management ("IDEM") was a member of LADCO and had provided technical input into the recommendations and that their technical assumptions would require installation of FGD systems on NIPSCO's remaining unscrubbed generating units. He noted that even with the publication of a replacement CAIR rule, the new rule would not be effective until 2011, is likely to be more stringent than the original CAIR rule, and thus will not provide certainty in the short run.[1] He also explained that the timing and development of the utility MACT requirements are relevant to consideration of the emissions control technology chosen

[1] On August 2, 2010, the EPA published a Notice of Proposed Rulemaking for a successor rule to CAIR. 75 FR 45209-45465.

because the new rule is expected to become effective between 2014 and 2017, and thus co-benefits to controls installed for CAIR can be gained to assist in compliance with MACT.

Mr. Carmichael testified that Unit 14 is the best location for the installation of the next FGD because the permitting of a wet FGD at the Schahfer Generating Station would be less problematic than that at NIPSCO's Michigan City Unit 12 because of complications associated with its location. He explained that proceeding with Unit 14 first would provide NIPSCO with additional flexibility in the planning process while achieving necessary emissions reductions on schedule, and that an upcoming rulemaking may reduce the permitting challenges at Michigan City in the future.

Mr. Carmichael also explained NIPSCO's decision to employ wet FGD technology on Unit 14 rather than the dry FGD technology previously under consideration. He testified that wet FGD technology provides enhanced flexibility for operations and environmental compliance. He noted that wet FGD meets expected carbon capture technology design criteria through lower SO_2 emissions and thereby provides a greater compliance margin. He noted that the large size of NIPSCO's generating units may dictate that wet FGD technology would be the technology of choice from an economic perspective. He supported Mr. Pack's conclusion that the FGD market is favorable in terms of cost and schedule, because of the reduced demand following the CAIR I compliance deadline. He explained that a new period of high demand for FGD units will likely occur as CAIR and CAMR replacement rules progress, so the procurement and construction of an FGD in the current market represents a significant opportunity for NIPSCO.

Mr. Carmichael testified that because of regulatory uncertainty, three scenarios had been modeled in the study prepared by James Marchetti, J. Edward Cichanowicz, and Michael Hein, which is being sponsored by Mr. Pack in his testimony. Mr. Carmichael explained that each of the scenarios were based on the best information then-currently available on the expected successor rules, in an effort to reflect the potential levels of stringency in upcoming regulation. He explained that the plans set out in the Marchetti study include the use of emissions allowance trading to comply with the projected emission reduction requirements, and noted that the elimination of SO_2 allowances would accelerate the need for FGD installation. Mr. Carmichael testified that the scenarios embodied in the Marchetti study were considered in formulating a longer-term compliance plan for NIPSCO, but that the primary focus was completion of the Unit 14 project and joint facilities with Unit 15 because they are the first step in the process of installing emissions controls to meet the expected final rules.

ii. Testimony of Mitchell Hershberger. Mitchell Hershberger, Controller for Northern Indiana Energy, submitted testimony that explained NIPSCO's proposed accounting treatment for QPCP. He testified that NIPSCO proposes to adjust its rates periodically to reflect the addition of construction work in progress ("CWIP") for the Project in NIPSCO's rate base. Specifically, he explained that NIPSCO seeks authority to (a) implement CWIP ratemaking treatment for QPCP Project costs; (b) record an allowance for funds used during construction ("AFUDC") on the QPCP Project's construction costs until the costs receive either CWIP ratemaking treatment or are otherwise reflected in base electric rates or are placed in service; (c) depreciate the Project, once the assets are in service, over an

18-year period; and (d) defer and record as a regulatory asset, the associated depreciation and operation and maintenance ("O&M") expense, until such time these costs receive ratemaking treatment or are otherwise reflected in base electric rates. He testified that NIPSCO intends to certify its QPCP project costs to the Commission at six month intervals using its existing Environmental Cost Recovery Mechanism ("ECRM"), and proposed to continue recording AFUDC until the costs are given CWIP ratemaking treatment or otherwise reflected in base rates. Mr. Hershberger proposed that the Project be depreciated over a useful life of eighteen (18) years once in service, and that depreciation and O&M expenses be deferred until they receive appropriate ratemaking treatment or are otherwise reflected in base rates. Mr. Hershberger testified that NIPSCO would use its book capital structure balances as of each filing date to calculate the weighted cost of capital associated with the ratemaking treatment of its QPCP Projects, in accordance with the existing practice in the ECRM.

iii. Testimony of Philip W. Pack. Philip W. Pack, NIPSCO's Director of Generation Support Services and Major Projects, presented direct testimony focused on the scope and cost of the proposed Project. Mr. Pack testified that NIPSCO currently has a total of 3,322 MW of generating capacity located at seven separate sites, of which the four coal-fired and two gas peaking units at the R.M. Schahfer Generating Station in Jasper County are the largest. He also provided details about NIPSCO's other generating stations. Mr. Pack testified that NIPSCO completed two studies to update its NO_x Compliance Plan in 2009. He sponsored the Marchetti Study (also referenced by Mr. Carmichael) and a second study performed by Burns and McDonnell that was intended to update NIPSCO's 2006 Multi-Pollutant Study, offered as support for its filing in Cause No. 43188. Mr. Pack explained that the Marchetti Study was focused on the implementation of FGD technology on Michigan City Unit 12 and Schahfer Units 14 and 15, which are NIPSCO's last remaining unscrubbed coal-fired generating units. He further explained that the Burns and McDonnell technology and cost estimates were used in the Marchetti study to model the FGD deployment schedule.

Mr. Pack sponsored a detailed description of NIPSCO's current NO_x Compliance Plan, including a discussion of the FGD upgrades performed on Schafer Units 17 and 18 that installed many internal FGD components, and the replacement of the existing low NO_x burners with enhanced low NO_x burners and LNB/SOFA on Unit 15. He explained that the third component of NIPSCO's Compliance Plan was the installation of the wet FGD system on Unit 14. Mr. Pack sponsored a detailed description of the process by which wet FGD systems remove matter from flue gas, requiring the installation of major equipment including booster fans, absorbers, stack mist eliminators, reaction tank, limestone slurry preparation system, reagent slurry storage and feed system, byproduct slurry dewatering system, reclaim water system, and a wastewater treatment system. He testified that the proposed FGD is projected to have 97% removal efficiency, and would take 42 months to design, procure, construct and commission.

Mr. Pack testified that based on the environmental regulatory uncertainty described by Mr. Carmichael, NIPSCO was only proposing the installation of the wet FGD facilities on Unit 14, with the common facilities with Unit 15, in lieu of the installation of FGD technology on all of its unscrubbed plants. Mr. Pack also explained that the 2006 Burns and

McDonnell study had previously indicated that FGD would not be required for Unit 14 until 2018, but that (1) installation of wet FGD on Unit 14 first provides maximum flexibility for future system wide compliance planning; (2) wet FGD provides fuel flexibility and increased emissions reductions over dry FGD; and (3) while FGD technology is primarily installed to control emissions of SO_2, it is also effective at removing Hazardous Air Pollutants ("HAPs"), including mercury, thus providing a co-benefit in an environment of regulatory uncertainty. He testified that the 2006 Study had not contemplated the need to control HAPs (including mercury) at the time it was commissioned, and that it had also contemplated the use of banked SO_2 allowances, the use of which now appears unlikely. Finally, he indicated that the LADCO report had advocated the installation of FGD on all unscrubbed generating units in excess of 100 MW by 2017, and that the installation on Unit 14 would have to have been staged in any event.

Mr. Pack testified that the wet FGD would afford NIPSCO enhanced fuel flexibility because it would allow the combustion of higher sulfur fuels in addition to the current fuel mix at Unit 14. He added that the current market for the installation of FGD systems is favorable, having experienced a lull between the peak in 2007 driven by the requirements of CAIR I, and the anticipated surge in orders associated with the implementation of successor regulations by 2014. He testified that prices for FGD units has in the past been driven largely by increases in many of the materials used in their construction including chromium, nickel, and molybdenum used in the corrosion-resistant alloys and steels used in the scrubbers.

Mr. Pack explained that the clean coal technology ("CCT") proposed was not commercially available prior to January 1, 1989 and that NIPSCO could not have achieved compliance with the standards with the conventional technologies available at that time. He also testified that the CCT will extend the useful life of NIPSCO's existing generating facilities because without the technology, the plants could not continue in service and be in compliance with CAIR rules. He testified that the proposed CCT would also enable NIPSCO to achieve required SO_2 and mercury reductions, and would allow NIPSCO to re-dispatch its units to maintain compliance with SO_2 requirements. Finally, Mr. Pack testified that the proposed Project was in the public interest because it will allow NIPSCO to continue to meet demands made upon it for electric power, while doing so in an environmentally compliant manner, and at the lowest, reasonably achievable cost.

Mr. Pack testified that the current estimate for the construction and implementation of the proposed CCT is $153,560,417, with an additional $9,454,916 projected for annual O&M, resulting in a total control cost of $1,352/ton of SO_2 removed. He concluded that the use of CCT as proposed by NIPSCO would be in the public convenience and necessity.

In his supplemental direct testimony filed with the Commission on September 21, 2010, Mr. Pack provided additional evidence relevant to discussions between Petitioner and the OUCC. Specifically, he sponsored a study performed by the EPA describing a methodology for developing capital costs for a wet FGD. Using inputs from the Sargent and Lundy study, he applied the analysis from the EPA study to derive a projected capital cost of $205,642,092, a demonstration that the projected cost supported by NIPSCO of $153,560,417 is well within the parameters of comparable installations. Mr. Pack also indicated NIPSCO's willingness to accept a twenty (20) year depreciation period for the Project.

iv. *Testimony of Curt A. Westerhausen.* NIPSCO Director of Rates and Contracts Curt A. Westerhausen submitted revised direct testimony that addressed the ratemaking treatment requested for the proposed Project. He testified that NIPSCO proposed to add all CWIP earnings to its authorized NOI for earnings test purposes of the FAC earnings tests under Ind. Code § 8-1-2-42(d)(2) and (d)(3) in accordance with 170 I.A.C. 4-6-21. He explained that NIPSCO's existing ECRM is used to track capital costs associated with environmental compliance projects such as that proposed here, and that its Environmental Expense Recovery Mechanism ("EERM") is used for the recovery of operational expenses associated with such projects. Mr. Westerhausen explained that capital costs for QPCP projects under construction for more than 6 months, net of accumulated depreciation are shown on Schedule 1A of each ECRM filing, and carries over to Schedule 4 for the calculation of the annual revenue requirement resulting in the factor calculated on Schedule 7.

Mr. Westerhausen also described how O&M expenses associated with the Project would be recovered through the EERM. He testified that Schedule 1, page 1 of 2 shows total operating, maintenance and depreciation expenses associated with the ownership and operation of QPCP facilities, and would include such expenses for this Project once approved. He testified that the EERM charge per kWh is calculated by multiplying the percentage of production plant allocated to each rate schedule by the amount of QPCP-related depreciation expense proposed for recovery, plus an allocation of O&M expense based on the composite percentage of production allocation used for fixed O&M expenses and an energy allocation for the percentage of variable O&M expenses. These calculations are based on NIPSCO's most recently approved Cost of Service Study as adjusted for certain customer migrations, and divided by the forecasted kWh sales for the upcoming twelve months.

v. *Testimony of Bradley K. Sweet.* In late-filed direct testimony, NIPSCO Vice President of Strategic Planning and Operations Support Bradley K. Sweet testified that the cost of closing Unit 14 to comply with applicable environmental regulations must necessarily consider the cost of replacing its capacity, as without Unit 14's demonstrated capacity of 431MW, NIPSCO would be rendered capacity-short. He testified that regardless of the cost associated with the closure of Unit 14, the confidential exhibits presented in support of NIPSCO's 2009 IRP demonstrate that the cost of constructing a replacement unit of similar size exceeded the cost of the proposed FGD project by a factor of more than two.

b. OUCC Case-In-Chief.

i. Testimony of Anthony A. Alvarez. OUCC Witness Anthony A. Alvarez described the wet FGD System as a type of flue gas desulfurization or "scrubber" equipment that is custom-engineered to remove SO_2 from flue gas exhaust of coal-burning generating plants. He explained that the most commonly used wet FGD process is the wet limestone process, where limestone is turned into slurry and sprayed downwards by an array of spray nozzles, while flue gas flows upward in a counter flow tower or absorber. Through sorption and reaction with the slurry, SO_2 is removed from the flue gas in the absorber.

Mr. Alvarez explained that the wet FGD technology is characterized by high capital and operating costs due to the handling of reagent and waste, and the need for a wastewater treatment system for compliance. Nevertheless, he noted that this is the preferred process by electric utility power plants due to the high SO_2 control efficiencies (90% – 98%) and the low cost of limestone. Mr. Alvarez pointed out that NIPSCO was still in the process of awarding the preliminary engineering, and has not selected the FGD supplier, the specific process, or the reagent.

Among other scrubber technology, Mr. Alvarez stated that the wet scrubber has the highest SO_2 removal efficiency, in the order of 98%, and allows Unit 14 to burn the widest range of sulfur-content coal Mr. Alvarez stated that wet systems comprised approximately 85% of FGD systems in the U.S., compared to 12% for spray dry, and 3% for dry systems. He described the dominance of the wet FGD in the industry lowers NIPSCO's technology risk, and its ratepayers will not be saddled by a costly experimental technology.

Mr. Alvarez stated that gypsum ("FGD gypsum" or "synthetic gypsum") is a re-saleable by product of the wet FGD that has uses in the agriculture and cement industries. He noted that the wallboard industry recovers 63% of the gypsum produced in the U.S., which will provide an economical disposal option for the gypsum byproduct. Mr. Alvarez recommended that NIPSCO provide both the Commission and the OUCC updates on the disposal process of the waste product. Mr. Alvarez also added that a "co-benefit" of increased mercury emission control and compliance will result when the proposed wet FGD is operated with the existing selective catalytic reduction ("SCR") system on Unit 14, which will help with compliance in the future.

Mr. Alvarez stated that $153,560,417 is NIPSCO's current project cost estimate, and $9,454,916 is the annual O&M cost, resulting in $1,352 total control cost per ton of SO_2 removed. In the absence of a detailed cost breakdown, Mr. Alvarez explained that the OUCC proceeded with a comparative analysis with publicly known and available information from authoritative sources such as the Department of Energy-National Energy Technology Laboratory ("DOE-NETL"), the EPA, and the U.S. Energy Information Administration ("EIA") through their websites, publications, and databases.

Mr. Alvarez explained the importance of using units of measurement such as dollars per mmBTU/hr ("$/mmBtu/hr") and dollars per kW ("$/kW"), which are typically used in comparing different large-scale utility-size environmental control technologies of power plants. Taken together, he said, these costs-per-unit measures provide a meaningful high-level technical specification comparison of large scale custom-engineered systems such as a utility scale wet FGD system. Alvarez Direct at 8. Mr. Alvarez explained that given the net rating capacities of the R.M. Schahfer Unit 14 of 431 MW and 3,080 mmBtu/hr, the resulting costs per unit are $356.38/MW and $49,630/mmBtu/hr, respectively.

Using EPA data, Mr. Alvarez showed that the per-unit cost of $49,630/mmBtu/hr falls in the lower end of the installed capital cost range of units with sizes less than 4,000 mmBtu/hr, which is the characteristic of the proposed wet FGD for Unit 14. Using EIA data, Mr. Alvarez also provided a list of installed capital cost information of FGDs that were operational and placed in-service in 2008 across the U.S., and compared their cost per kW against that proposed for Unit 14. Mr. Alvarez testified that the project cost estimate is lower than the median and average installed capital cost of the other FGDs pooled, and he also noted that this result is expected due to the smaller size of Unit 14 compared to the average and median sizes of those in the pool. He stated that the project's cost per unit also turned out to be lower than both the average and median costs per unit. Mr. Alvarez testified that this is opposite of what is expected as larger units have lower per unit costs, but nevertheless, it is a favorable result for the ratepayers.

Mr. Alvarez testified that based on the results of his comparative analysis, the OUCC supports and finds the proposed project cost estimate reasonable at the $153.6 million level, however, once the cost breakdown in the preliminary and detailed engineering plans are completed and copies are submitted to the Commission and the OUCC, the OUCC will review the information carefully to insure that the cost estimate continues to be reasonable.

Mr. Alvarez recommended a twenty (20) year depreciation period in this Cause to lessen the cost impact of this project on NIPSCO ratepayers. He testified that by adopting a twenty year depreciation period, instead of eighteen years, the annual depreciation charge is lowered by approximately $853,113.43. Mr. Alvarez testified that it was his understanding that NIPSCO had agreed to the longer period, a position confirmed in Mr. Pack's supplemental direct testimony.

Mr. Alvarez testified that the OUCC had certain concerns: (1) the Petitioner's obligation to provide a project cost estimate as part of this proceeding as stated in Ind. Code § 8-1-8.7-4 (a); (2) the Petitioner's monitoring and reporting of emissions on the shared smokestack configuration; (3) the Petitioner's proper identification, allocation, and documentation of the cost of common facilities, structures and system for future reference in succeeding projects; (4) the reasonableness of the Petitioner's twenty percent (20%) contingency funds included in the project cost estimate; and (5) rate impact of this project on NIPSCO ratepayers. Mr. Alvarez reiterated the advantages of having NIPSCO provide preliminary and detailed engineering plans to the Commission and the OUCC, noting that it would allow the review of any technical concerns about the use of shared infrastructure between Unit 14 and Unit 15, as well as the viability of the cost estimates. He also noted that such follow-up information would allow the OUCC to allay its concern about the 20% contingency built into its current cost projections. Mr. Alvarez recommended approval of NIPSCO's request in this Cause conditioned on its adoption the OUCC's recommendations.

ii. *Testimony of Ray Snyder.* OUCC witness Ray L. Snyder provided the results of the OUCC's review, and made a recommendation regarding NIPSCO's request for a CPCN for installation of a FGD unit on NIPSCO's R.M. Schahfer Generating Station Unit 14 as part of its overall environmental compliance plan.

Mr. Snyder summarized the progression of EPA's environmental regulations and NIPSCO's strategic plan of installing CCT as necessary at each of its generating stations in order to comply with increasingly stringent emissions regulations. Mr. Snyder described the EPA's proposed "Transport Rule" and the limitations that would be placed on Indiana's annual emissions of SO_2 and NO_x. Using EPA data, Mr. Snyder calculated an allowable SO_2 emissions rate for Indiana of 0.717 lbs. SO_2/mmBTU in 2012 and 2013, and 0.361 lbs. SO_2/mmBTU beginning in 2014.

Quoting EPA data, Mr. Snyder stated that for 2009, NIPSCO Unit 14's SO_2 emissions rate were between 0.8 and 1.0 lbs. SO_2/mmBTU. The estimated SO_2 removal efficiency for the proposed wet FGD is 97%. The installation of a wet FGD would result in a reduction in the SO_2 emissions rate down to 0.08 lbs. SO_2/mmBTU, which is well below the proposed state-wide requirement of 0.25 lbs. SO_2/mmBTU. Mr. Snyder also stated that a co-benefit is expected to be a reduction in mercury emissions, necessary to meet anticipated MACT requirements beginning January 1, 2015.

In conclusion, Mr. Snyder stated that his analysis of EPA data regarding historical emission rates supports NIPSCO's plans for the proposed wet FGD on R.M. Schahfer Unit 14. Therefore, the OUCC recommends that the Commission approve Petitioner's request.

c. **Petitioner's Rebuttal.** Mr. Pack responded to the concerns expressed by Mr. Alvarez and clarified why NIPSCO is seeking a CPCN now rather than waiting for completion of the final engineering. Mr. Pack testified that NIPSCO and the OUCC had no disagreements in this proceeding. He explained that NIPSCO was willing to provide additional information to the OUCC in the form of updated cost estimates as further engineering studies are completed, including those related to the technical solution for the shared smokestack configuration, and allocation of common facilities, structures and systems. He also indicated NIPSCO's willingness to provide updated data related to the 20% contingency included in its estimated costs, but noted that ratepayers will be responsible for payment only of actual costs incurred. Finally, Mr. Pack explained that the technology award for the proposed FGD must be made in early 2011 for the Project to be completed in 2013, so approval of a CPCN at this time is both necessary and appropriate.

5. **<u>Commission Discussion and Findings</u>.** Pursuant to its Petition, NIPSCO requests: (a) the issuance of a certificate of public convenience and necessity to Petitioner for the Project to reduce $S0_2$ and NOx emissions pursuant to Indiana Code § 8-1-8.7-1 *et* seq.; (b) the approval of cost estimates for the Project; (c) the initiation of ongoing review of the Project pursuant to Ind. Code § 8-1-8.7-7; (d) a finding that the Project constitutes "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 Project constitutes "clean coal and energy projects" under Indiana Code § 8-1 -8.8-1 *et seq.,* and a finding that the Project is reasonable and necessary and therefore eligible for the financial incentives set forth in Indiana Code § 8-1-8.8-11; (f) authorization for Petitioner to utilize construction work in progress ratemaking treatment for clean coal technology, qualified pollution control property and clean coal and energy projects consistent with and through Petitioner's currently-effective Environmental Cost Recovery Mechanism; (g) authorization for Petitioner to recover operating and maintenance expenses relating to the project, including depreciation expense, for clean coal technology, qualified pollution control property and clean coal and energy projects consistent with and through Petitioner's currently effective Environmental Expense Recovery Mechanism; (h) authorization for Petitioner to defer for recovery through rates preconstruction 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 project described in Petitioner's evidence Petitioner's currently-effective Environmental Cost Recovery Mechanism and Environmental Expense Recovery Mechanism; (i) a finding that the Phase I Construction projects are eligible for the depreciation treatment set forth in Indiana Code § 8-1-2-6.7; (j) authorization for Petitioner to accrue allowance for funds used during construction related to qualified pollution control property prior to construction work in progress ratemaking treatment or their reflection of such costs in NIPSCO's electric rates; (k) a finding that the Project is 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; and (l) a finding for such other relief afforded and authorized by the applicable statutes, regulations, order and tariffs.

a. Ind. Code § 8-1-8.7. Indiana Code § 8-1-8.7-3 generally requires that before a utility may use CCT at its generating plants, it must obtain from the Commission a certificate stating that the public convenience and necessity will be served by the use of such CCT. Clean coal technology is defined in Ind. Code § 8-1-8.7-1 as technology that reduces airborne emissions of sulfur or nitrogen based pollutants associated with the combustion of coal that either: (a) was not in general 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 for funding by the U.S. Department of Energy under its Innovative Clean Coal Technology program and was finally approved for such funding on or after January 1, 1989. Indiana Code § 8-1-8.7-7 provides that an applicant for a CCT certificate may elect to undergo ongoing review of its construction and construction costs, in which case the utility must periodically submit progress reports and cost estimate revisions to the Commission. NIPSCO's witnesses provided evidence that NIPSCO's installation and use of the Project will comply with these statutory requirements. Accordingly, based on the testimony presented in this Cause, we find that the Project proposed constitutes CCT projects as defined in Ind. Code § 8-1-8.7-1.

b. Ind. Code § 8-1-8.7-4. Indiana Code § 8-1-8.7-4 requires that as a condition of receiving the certificate required under Ind. Code § 8-1-8.7-3, an applicant must file an estimate of the cost of constructing, implementing, and using CCT, along with appropriate supporting technical information. Based on the information provided, the Commission must determine whether the public convenience and necessity will be served by the construction, implementation, and use of CCT; and if the estimated costs should be approved.[2]

i. Public Convenience and Necessity of the Construction, Implementation and Use of Clean Coal Technology. NIPSCO has adequately demonstrated the need for its proposed wet FGD facilities on Unit 14. Various federal and state environmental requirements require NIPSCO to reduce the emissions of NO_x and SO_2 at its generating plants, and likely will require additional reductions in HAPS under other proposed rules. NIPSCO's evidence shows that its proposed approach, the timing of this Project, and its election to proceed with this Project in lieu of other potential emissions reduction choices at this point in time are reasonable and necessary in order for NIPSCO to fully comply with federal and state law. The record reflects that NIPSCO considered all reasonable options for emission reduction. In addition to other environmental control options, NIPSCO's late-filed testimony documented that the cost of shutting down Unit 14 and substituting for it a different source of capacity would be economically disadvantageous. NIPSCO demonstrated that the Project is necessary for it to comply with environmental requirements.

We note that the continuing uncertainty surrounding future standards under (and replacing) CAIR, CAMR and NESHAP render the evaluation of compliance options a less than certain endeavor, and the choice to proceed with this Project offers NIPSCO the most flexibility from environmental compliance, economic, and fuels perspectives. We find that NIPSCO has demonstrated that its proposed Project is a reasonable and necessary means of meeting required federal and state environmental mandates.

ii. Reasonableness of Estimated Costs. Mr. Pack testified that the current estimated cost of the Project is approximately $153.6 million dollars, based upon the best and most current information available to NIPSCO and the utilities industry, representing NIPSCO's best estimate for the cost of implementing the Project. The OUCC also provided an analysis that demonstrated that the estimated costs were within normal range for such projects. Based on our review of the evidence, we find that the NIPSCO has adequately demonstrated the reasonableness of the estimated costs.

iii. Ind. Code § 8-1-8.7-3(b). NIPSCO's witnesses Messrs. Pack and Carmichael provided evidence addressing the factors found in Ind. Code § 8-1-8.7-3(b). Based upon the foregoing evidence and consideration of these factors, we find that the public convenience and necessity will be served by the construction, implementation and use of NIPSCO's proposed CCT and the installation of its proposed wet FGD. We find the

[2] Ind. Code § 8-1-8.7-4 and 170 I.A.C. 4-6-4 indicate that the utility must show it will continue to use Indiana coal as its primary fuel, or is justified in not doing so. The provisions of the state environmental compliance plan statutes restricting 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. Serv. 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.

estimated costs of the Project should be approved and NIPSCO should be granted a certificate of public convenience and necessity for the construction and operation of the Project.

c. **Ongoing Review Under Ind. Code § 8-1-8.7-7.** NIPSCO has requested ongoing review of the construction of its Project. Under Ind. Code § 8-1-8.7-7, the utility is to submit a progress report and any revisions in the cost estimates or the planned construction at least annually, unless the utility and the Commission agree otherwise. 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 CCT. If the Commission approves the construction and the costs of the part of the CCT system under review, 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. We note that NIPSCO has regularly submitted annual updates of its estimated costs for QPCP projects for approval by the Commission. Further, the ECRM semi-annual proceedings are filed with the Commission, and the Commission must hold a hearing prior to approving or denying a proposed increase in the cost estimate for the implementation, construction, or use of the CCT. Based on the evidence presented in this Cause, we hereby find that the NIPSCO's request for ongoing review of the construction of its CCT projects under Ind. Code § 8-1-8.7-7, should be granted.

d. **Ratemaking Treatment in Ind. Code § 8-1-2-6.8.** Under Ind. Code § 8-1-2-6.8 and 170 I.A.C. 4-6-5, if an air pollution control device is found to be QPCP, the utility may add the value of the QPCP under construction to the value of the utility's property for ratemaking purposes. NIPSCO requests that we find that the proposed Project at issue in this Cause is QPCP.

NIPSCO has adequately demonstrated through evidence that its proposed wet FGD is CCT designed to meet applicable federal and state environmental laws and regulations. The evidence presented by the OUCC also supports that conclusion. The proposed Project will allow for the continued burning of coal in NIPSCO's generating units by allowing them to comply with applicable state and federal environmental regulations. As previously discussed, we have also approved the estimated costs of constructing and installing the proposed Project. We accordingly find that NIPSCO's proposed wet FGD constitutes QPCP and is eligible for the ratemaking treatment described in Ind. Code § 8-1-2-6.8.

e. **Clean Coal and Energy Projects under Ind. Code § 8-1-8.8-1 *et seq.*, and Eligibility for Financial Incentives in Ind. Code § 8-1-8.8-11.** Under Ind. Code § 8-1-8.8-2, a clean coal and energy project includes:

> [p]rojects to provide advanced technologies that reduce regulated air emissions from existing energy generating plants that are fueled primarily by coal or gases from coal from the geologic formation known as the Illinois Basin, such as flue gas desulfurization and selective catalytic reduction equipment.

For the reasons discussed above in note 2, we will not use the Illinois Basin requirement as a prerequisite for determination of whether NIPSCO's Projects constitute a clean coal and energy project. Mr. Pack testified that the installation of the proposed wet FGD will enable Unit 14 to make use of its existing fuel mix and incorporate higher sulfur fuels. Based on the evidence provided by NIPSCO, we find that the Project constitutes advanced technologies that reduce regulated air emissions from existing energy generating plants. In addition, OUCC witness Snyder projected that the completion of the Project will lead to significant reductions in SO_2 from Unit 14, along with the co-benefit of reduced mercury emissions. As a result, we find the Project constitutes clean coal and energy projects and are therefore eligible for the financial incentives set forth in Ind. Code § 8-1-8.8-11.

f. Depreciation Treatment under Ind. Code § 8-1-2-6.7. Ind. Code § 8-1-2-6.7 provides:

> [t]he 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) [u]tilizes and will continue to utilize (as its primary fuel source) Indiana coal; or (2) [i]s justified, because of economic considerations or governmental requirements, in utilizing non-Indiana coal; after the technology is in place.

As discussed above in note 2, 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. The evidence of record demonstrates that upon completion of the proposed Project, Unit 14 will have enhanced flexibility to burn a more diverse blend of fuels including higher sulfur coal. NIPSCO presented evidence in its case-in-chief proposing to depreciate the Project utilizing a schedule of eighteen (18) years. NIPSCO agreed in its rebuttal testimony to modify its proposal to incorporate the twenty (20) year depreciation schedule for the Project recommended by the OUCC. Therefore, we find that NIPSCO should be permitted to depreciate the Project over a period of 20 years.

g. Accounting, Ratemaking Treatment, Cost Recovery and Other Relief. NIPSCO has proposed various accounting, ratemaking treatment, cost recovery and other relief in connection with the Project as described in testimony by Mr. Hershberger and Mr. Westerhausen. Under Ind. Code §§ 8-1-2-6.8, 8-1-2-12, 8-1-2-14, 8-1-2-42(a), and 8-1-8.8-11, and 170 I.A.C. 4-6, we are provided the authority to grant the requested relief. As discussed above, we have found the necessary determinations that the Project constitutes clean coal technology, qualified pollution control property and clean coal and energy projects. Based upon these determinations and the evidence presented by NIPSCO, we find that NIPSCO should be permitted to implement the accounting, ratemaking treatment, and cost recovery described in its case-in-chief.

In response to Mr. Alvarez's concerns, Mr. Pack indicated that NIPSCO would provide the information requested by Mr. Alvarez. Accordingly, NIPSCO shall file, under this Cause, the updated cost estimate breakdowns and other documentation upon completion of the Project.

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

1. NIPSCO's proposed wet FGD facility on Unit 14 at the Schahfer Generating Station along with the joint facilities to be shared with Unit 15 are determined to be clean coal technology, qualified pollution control property, and clean coal and energy projects.

2. NIPSCO is hereby issued a certificate of public convenience and necessity for the wet FGD facility on Unit 14 at the Schahfer Generating Station along with the joint facilities to be shared with Unit 15. This Order shall constitute evidence of such certificate.

3. The cost estimates for the Project approved herein are hereby approved. NIPSCO shall provide the Commission and the OUCC with updated cost estimates by filing in this Cause such estimates upon completion of preliminary and final design engineering consistent with the findings herein.

4. Petitioner is hereby authorized to depreciate the Project approved herein over a period of twenty (20) years.

5. NIPSCO's proposed ratemaking treatment and cost recovery relating to the Project approved herein are hereby approved. NIPSCO shall file, under this Cause, the cost estimate information and other documentation requested by the OUCC upon completion of the Project.

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

ATTERHOLT, MAYS AND ZIEGNER CONCUR; LANDIS ABSENT:

APPROVED: DEC 2 9 2010

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