## **ORIGINAL**

#### STATE OF INDIANA

#### INDIANA UTILITY REGULATORY COMMISSION

PETITION OF PSI ENERGY, INC., PURSUANT TO )	( lake
IND. CODE § 8-1-2-6.8 AND 170 I.A.C. 4-6-1 ET. SEQ. )	
REQUESTING THAT THE COMMISSION APPROVE )	CAUSE NO. 42622
THE USE OF CERTAIN QUALIFIED POLLUTION )	
CONTROL PROPERTY )	•
PETITION OF PSI ENERGY, INC., PURSUANT TO )	
INDIANA CODE §§ 8-1-2-6.1, 8-1-2-6.7, 8-1-2-6.8, 8-1-2- )	
23, 8-1-8.7, 8-1-8.8, 8-1-27, 8-1-2-42(a), 8-1-2.5, AND 170 )	)
I.A.C. 4-6-1 ET. SEQ. REQUESTING THAT THE )	)
COMMISSION: (1) APPROVE PSI'S "PHASE 1" PLAN )	<b>CAUSE NO. 42718</b>
FOR COMPLYING WITH PENDING SO <sub>2</sub> , NO <sub>X</sub> , AND )	• •
MERCURY EMISSIONS REDUCTION )	)
REQUIREMENTS; (2) APPROVE THE USE OF )	· · · · · · · · · · · · · · · · · · ·
CERTAIN QUALIFIED POLLUTION CONTROL )	
PROPERTY AND CLEAN COAL AND ENERGY )	
PROJECTS; (3) GRANT PSI CERTIFICATES OF )	
PUBLIC CONVENIENCE AND NECESSITY FOR )	APPROVED: MAY 2 4 2006
CLEAN COAL TECHNOLOGY; (4) APPROVE THE )	
USE OF CONSTRUCTION WORK IN PROGRESS )	) · ·
RATEMAKING TREATMENT; (5) APPROVE )	
CERTAIN FINANCIAL INCENTIVES IN )	
CONNECTION WITH PSI'S COMPLIANCE PLAN, )	·
INCLUDING THE TIMELY RECOVERY OF COSTS )	
INCURRED DURING THE CONSTRUCTION AND )	
OPERATION OF THE CLEAN COAL TECHNOLOGY )	•
PROJECTS, AND THE USE OF ACCELERATED )	
DEPRECIATION; (6) GRANT PSI AUTHORITY TO )	
<b>DEFER POST-IN-SERVICE CARRYING COSTS, )</b>	
DEPRECIATION COSTS, AND OPERATION AND )	
MAINTENANCE COSTS ON AN INTERIM BASIS )	
UNTIL THE APPLICABLE COSTS ARE REFLECTED )	
IN PSI'S RATES; (7) AUTHORIZE THE RECOVERY )	
OF OTHER RELATED COSTS; AND (8) CONDUCT )	)
ONGOING REVIEWS OF THE IMPLEMENTATION )	

### **BY THE COMMISSION:**

OF PSI'S COMPLIANCE PLAN

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



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On April 23, 2004, PSI Energy, Inc. ("PSI", "Petitioner" or "Company") filed its Verified Petition with the Indiana Utility Regulatory Commission ("Commission" or "IURC") in Cause No. 42622. Therein, PSI requested approval of the use of qualified pollution control property for its Gibson Generating Station Unit No. 3 ("Gibson Unit 3"), pursuant to Ind. Code § 8-1-2-6.8 and 170 I.A.C. § 4-6-1 et seq. On September 2, 2004, PSI filed a Verified Petition in Cause No. 42718 requesting that the Commission: (1) approve PSI's "Phase 1" plan for complying with pending sulfur dioxide ("SO<sub>2</sub>"), nitrogen oxide ("NO<sub>x</sub>"), and mercury emissions reduction requirements; (2) approve the use of certain qualified pollution control property and clean coal and energy projects; (3) grant PSI certificates of public convenience and necessity for clean coal technology; (4) approve the use of construction-work-in-progress ratemaking treatment; (5) approve certain financial incentives in connection with PSI's compliance plan, including the timely recovery of costs incurred during the construction and operation of the clean coal technology projects, and the use of accelerated depreciation; (6) grant PSI authority to defer post-in-service carrying costs, depreciation costs, and operation and maintenance costs on an interim basis until the applicable costs are reflected in PSI's rates; (7) authorize the recovery of other related costs; and (8) conduct ongoing reviews of the implementation of PSI's compliance plan.

In the September 2, 2004 Verified Petition, PSI requested that Cause No. 42718 be consolidated with Cause No. 42622. PSI's request for consolidation of Cause Nos. 42622 and 42718 was granted on September 23, 2004. The participants in these consolidated causes, in addition to PSI, are: the Indiana Office of the Utility Consumer Counselor ("OUCC"); the Citizens Action Coalition of Indiana, Inc. ("CAC"); a group of PSI industrial customers known as the PSI-Industrial Group ("PSI-IG"); Nucor Steel, a division of Nucor Corporation ("Nucor"); Steel Dynamics, Inc.-Pittsboro Division ("SDI"); and the Hoosier Environmental Council, Inc. ("HEC"). (CAC, PSI-IG, Nucor, SDI and HEC are collectively referred to as "Intervenors.")

After the prefiling of testimony by all parties, an Evidentiary Hearing in this consolidated proceeding occurred on May 9 and 10, 2005. On December 9, 2005, PSI, filed a Settlement Agreement between PSI, the OUCC and PSI-IG resolving all issues between those parties in this consolidated proceeding. The Settlement Agreement is attached hereto and incorporated into this Order. On January 10, 2006 PSI filed a Verified Petition to Reopen the Record For the Purpose of Taking Additional Evidence in support of the Settlement Agreement. The presiding officers granted that motion in a Docket Entry issued on January 13, 2006. An evidentiary hearing regarding the settlement testimony was held on March 9, 2006 and March 29, 2006. At the close of the record, the parties were authorized to file proposed orders and/or exceptions to proposed orders, in accordance with an agreed upon procedural schedule. A Presiding Commissioner and the Chief Administrative Law Judge have attended all of the Evidentiary Hearings in this consolidated proceeding, and have thus observed the demeanor and credibility of the witnesses. All proposed findings of the parties not specifically determined in this Order are hereby rejected. This Commission, having examined the evidence and being duly advised in the premises, now finds that:

1. <u>Notice and Jurisdiction</u>. Due, legal, and timely notice of the filing of each of the Verified Petitions initiating this consolidated proceeding was given and published by PSI, as required by law. Due, legal, and timely notice of the public hearings herein was given and published by this Commission. PSI is a public utility as defined in Ind. Code § 8-1-2-1 and is

subject to regulation by this Commission in the manner and to the extent provided for in the Public Service Commission Act, Ind. Code § 8-1-2. This Commission has jurisdiction over PSI and the subject matter of this consolidated proceeding.

2. <u>Petitioner's Characteristics</u>. PSI is an Indiana corporation with its principal office in the Town of Plainfield, Hendricks County, Indiana. PSI is engaged in the business of generating and supplying electric utility service to over 700,000 customers located in 69 counties in the central, north central, and southern parts of Indiana.

PSI's existing electric generating properties are capable of providing up to approximately 6,800 megawatts ("MW") of electric generating capacity (summer-rated) and consist of: (1) steam capacity located at five stations comprised of nineteen coal-fired generating units supplied by nineteen coal-fired boilers and one oil-fired boiler; (2) combined cycle capacity located at two stations comprised of one syngas-fired/natural gas-fired combustion turbine ("CT") with steam turbine-generator, and three natural gas-fired CTs and two steam turbine-generators; (3) a run-of-river hydroelectric generation facility comprised of three units; (4) peaking capacity consisting of seven oil-fired diesels located at two stations, eight oil-fired CT units located at two stations, and twelve natural gas-fired CTs, one of which has oil back-up; and (5) various pollution control facilities located at certain of these generating stations. All of PSI's generating facilities were found by this Commission in its May 18, 2004 Order in Cause No. 42359 to be used and useful and reasonably necessary for the convenience of the public. Pet. Ex. B-2, p. 2.

Relevant Indiana Statutes and Rules; Applicable Law. Various Indiana laws 3. and Commission rules provide for Commission approval of a utility's environmental compliance plan, or aspects thereof; for assurance of cost recovery; for timely recovery of financing, construction, and operating costs; for financial incentives in certain circumstances, including the use of accelerated depreciation; and for ongoing Commission review of the implementation of such a plan. For example, the Environmental Compliance Plan Approval Act, Ind. Code § 8-1-27, provides for the voluntary submittal by a utility to the Commission, for the Commission's review and approval, of a plan relating to compliance with the 1990 Clean Air Act Amendments. The Environmental Compliance Plan Approval Act also provides for assurance of cost recovery, consistent with approved cost estimates; ongoing review of a utility's compliance plan; and various ratemaking provisions. As another example, Ind. Code § 8-1-8.7, the Clean Coal Technology Certificate Statute, provides for the certification and associated assurance of cost recovery for certain clean coal technology projects. Ind. Code § 8-1-8.8, provides for Commission approval of a utility's proposal to use advanced technology to reduce regulated air emissions on existing generating units that are fueled by Illinois Basin coal. Ind. Code § 8-1-8.8 also provides for the authorization of financial incentives, including the timely recovery of construction and operating costs, an enhanced return on equity, and other financial incentives the Commission considers appropriate. Ind. Code § 8-1-2-6.8 (the "CWIP Statute"), along with 170 I.A.C. § 4-6-1 et seq., the Commission's construction work in progress ("CWIP") rule, provides for construction-work-in-progress ratemaking treatment for qualified pollution control property. Ind. Code § 8-1-2-6.7 authorizes the use of accelerated depreciation (from 10 to 20 years) for clean coal technology projects. Ind. Code § 8-1-2-23 generally provides that the Commission

<sup>&</sup>lt;sup>1</sup> This does not include PSI's new Wheatland Generating Station, consisting of four generating units and 448 MW (summer rating), for which PSI received a CPCN from the Commission on August 3, 2005.

shall keep itself informed of all new construction, extensions and additions to public utility property.

- 4. Initial Relief Requested. PSI initially requested in this consolidated proceeding that the Commission enter an order: (1) approving PSI's proposed Phase 1 plan for reducing SO<sub>2</sub>, NO<sub>x</sub>, and mercury emissions in light of the CAIR and CAMR emissions reduction requirements, including the construction and use of various emissions reduction equipment, the use of emission allowances, certain plan flexibility components, and certain coal and equipment testing programs; (2) granting PSI a Certificate of Public Convenience and Necessity ("CPCN") for the use of clean coal technology, to the extent required by Ind. Code § 8-1-8.7-1; (3) approving for use, pursuant to Ind. Code § 8-1-2-6.8 and 170 IAC 4-6-2, and pursuant to Ind. Code § 8-1-8.8, PSI's proposed Phase 1 emissions reduction equipment, as qualified pollution control property and clean coal and energy projects; (4) providing for ongoing review of PSI's implementation of its compliance plan; (5) providing, pursuant to Ind. Code §§ 8-1-2-6.8 and 8-1-8.8, for assurance of cost recovery of capital investments made pursuant to a Commissionapproved compliance plan; (6) providing for the timely recovery of financing, construction and operating costs associated with PSI's Phase 1 plan, including an initial overall rate of return of 8% (with periodic updates to PSI's cost of debt), via PSI's existing Standard Contract Riders Nos. 62 and 71; (7) providing for the timely recovery of emission allowance costs incurred in connection with compliance with the new SO<sub>2</sub>, NO<sub>x</sub>, and mercury emissions reduction requirements, via PSI's existing Standard Contract Rider No. 63; (8) authorizing the use of accelerated (i.e., 18-year) depreciation in connection with PSI's Environmental Compliance Plan projects; (9) authorizing the timely recovery of coal and equipment testing costs, and plan flexibility costs; (10) authorizing the timely recovery of Phase 1 plan development and presentation costs, and Phase 2 plan development, engineering and pre-construction costs; (11) granting PSI authority to defer post-in-service carrying costs, depreciation costs, and operation and maintenance costs on an interim basis, until the applicable costs are reflected in PSI's retail electric rates; and (12) granting PSI such other and further relief in the premises as may be appropriate and proper. Pet. Ex. B-2, pp. 8-9. As a result of a Settlement Agreement entered into with many of the parties to this Cause, some of PSI's requests for relief were modified, as discussed in more detail in this Order.
- 5. PSI's Case-in-Chief Evidence. For its case-in-chief, PSI presented testimony from 12 witnesses: Douglas F Esamann, Senior Vice President of Portfolio Strategy and Management, Cinergy Services, Inc. ("Cinergy Services"); Kay Pashos, President of PSI; John L. Stowell, Vice President, Federal Legislative Affairs, Environmental Strategies and Sustainability, Cinergy Services; Judah L. Rose, Managing Director, ICF Consulting; Robert D. Moreland, General Manager, Analytical and Investment Engineering, Cinergy Services; Diane L. Jenner, Manager, Asset Planning and Analysis, Cinergy Services; John J. Roebel, Vice President, Generation Resources Group, Cinergy Services; Richard G. Stevie, General Manager, Market Analysis, Cinergy Services; Daniel L. Rimstidt, Vice President, Fuel Logistics and Operations, Cinergy Services; Wendy L. Aumiller, Vice President and Treasurer, Cinergy; Steven M. Fetter, President of REGULATION UnFETTERED; and Stephen M. Farmer, Revenue Requirements Manager, Cinergy Services.

- Existing Emissions Reduction Requirements. Existing federal and state emission reduction mandates have already required significant SO<sub>2</sub> and NO<sub>x</sub> reductions. For example, the federal 1990 Clean Air Act Amendments required certain electric utilities to substantially reduce SO<sub>2</sub> emissions from affected generating units in two phases: Phase 1, effective in 1995; and Phase 2, effective in 2000. As another example, the federal NO<sub>x</sub> State Implementation Plan ("SIP") Call, and the related Indiana NO<sub>x</sub> SIP Call, require that the State of Indiana reduce its NO<sub>x</sub> emissions during the ozone season of May 1 through September 30 to a level of 0.15 pound per million British Thermal Units ("lb/mmBtu") by May 31, 2004. As a result of the NO<sub>x</sub> SIP Call, PSI has reduced the amount of NO<sub>x</sub> emitted from its Indiana power plants during the ozone season by approximately 63%. In 2003, PSI emitted approximately 330,690 tons of SO<sub>2</sub>, 67,100 tons of NO<sub>x</sub>, and 0.69 tons of mercury as a result of its electric power plant operations. This compares to approximately 515,180 tons of SO<sub>2</sub> and 115,350 tons of NO<sub>x</sub> emitted in 1990. Thus, while customer demands and megawatt-hours generated have increased, PSI reduced SO<sub>2</sub> emissions by over 35% and NO<sub>x</sub> emissions by over 41% from 1990 to 2003. Pet. Ex. A, p. 7.
- B. New SO<sub>2</sub>, NO<sub>x</sub> and Mercury Emissions Reduction Requirements. In January 2004, the U.S. Environmental Protection Agency ("EPA") published two new significant proposed emission reduction requirements: (1) the interstate air quality rule (later renamed the Clean Air Interstate Rule, or "CAIR"); and (2) the utility mercury reductions rule (later renamed the Clean Air Mercury Rule, or "CAMR"). According to the EPA, the two rules, which are separate but closely related, will trigger the largest investment in air quality improvement in the history of the United States. EPA finalized the CAIR rule on May 12, 2005 (70 Fed. Reg. 25162) and the CAMR rule on March 29, and May 18, 2005 (70 Fed. Reg. 15994 and 70 Fed. Reg. 28606).

The new CAIR and CAMR rules will require Indiana's electric generating utilities to achieve reductions in SO<sub>2</sub>, NO<sub>x</sub> and mercury emissions that are in addition to SO<sub>2</sub> and NO<sub>x</sub> reductions implemented in the 1990s and early 2000s. The CAIR rule will require 29 states (plus the District of Columbia, and including Indiana) to adopt plans to reduce SO<sub>2</sub> and NO<sub>x</sub> emissions from power plants and other sources, to facilitate compliance with the 8-hour ozone and PM 2.5 national ambient air quality standard ("NAAQS"). The CAMR rule will regulate mercury emissions from power plants for the first time for all states. In its proposed CAMR rule, the EPA proposed two alternative approaches: (1) a maximum achievable control technology ("MACT")/"command and control" approach; and (2) a "cap and trade" approach.

The final CAIR rule issued in May 2005 requires SO<sub>2</sub> and NO<sub>x</sub> reductions in two stages: (1) a cap of 3.6 million SO<sub>2</sub> tons by 2010, and a cap of 2.5 million SO<sub>2</sub> tons by 2015 (for a total SO<sub>2</sub> decrease of approximately 65%); and (2) a cap of 1.5 million NO<sub>x</sub> tons by 2009, and a cap of 1.3 millions tons of NO<sub>x</sub> by 2015 (for a total NO<sub>x</sub> reduction of approximately 70%). The CAIR rule also establishes both an annual NO<sub>x</sub> trading program and a seasonal NO<sub>x</sub> trading program (similar to and replacing the NO<sub>x</sub> SIP Call requirements), effective in 2009. The CAIR rule also prescribes that, instead of SO<sub>2</sub> emission allowances continuing to allow the holder to emit one ton of SO<sub>2</sub>, post-2010 vintage SO<sub>2</sub> emission allowances will only allow the holders to emit one-half to one-third as much per emission allowance. The CAIR rule encourages states to adopt cap and trade programs.

The final CAMR rule issued by EPA in March and May 2005 provides regulatory authority for a mercury cap and trade program, instead of a MACT/"command and control" program. The mercury cap for 2010 was set at 38 tons, and 15 tons in 2018. One significant change from the proposed CAMR rule is that the final rule does not include a "safety valve" (a ceiling) for mercury allowance prices. As a result, mercury emission allowance prices are expected to be higher than initially anticipated.

States (including Indiana) have 18 months to develop state rules to implement the federal CAIR and CAMR rules, and to submit their proposed state rules to the EPA for approval. Accordingly, Indiana has until approximately September 2006 to develop and submit its proposed implementation rules. Legal challenges to both the CAIR and CAMR rules are expected.

C. PSI's Compliance Planning Process. Due to the anticipated compliance deadlines, the long construction lead times necessary for the installation of major pollution control equipment, and the need to time installation outages during non-peak months, PSI began its compliance planning process well before the CAIR and CAMR rules were finalized in March and May 2005. Pet. Ex. B., p. 12. In addition to uncertainties around the substance and deadlines of the final rules, PSI also faced a number of other uncertainties in its compliance planning, such as: equipment and technology uncertainties vis a vis mercury removal equipment; uncertainties concerning the mercury content of various coals; uncertainties concerning various market prices (for power, emission allowances, and fuel). Pet. Ex. A, p. 5.

PSI's compliance planning goal was to develop a "least cost" achievable, reliable, robust plan for complying with the then-uncertain SO<sub>2</sub>, NO<sub>x</sub> and mercury emissions reduction requirements. In order to fulfill this goal, PSI engaged in a multiple-stage, highly analytical planning process. This planning process included the following major steps: (1) development of key price forecasts (emission allowance, power, fuel) by ICF Consulting ("ICF") using ICF's Integrated Planning Model; (2) ranking of various compliance alternatives, by asset value, using Cinergy Corp.'s ("Cinergy") Engineering/Screening Model; (3) optimal integrated resource and environmental compliance plans, ranked by present value revenue requirements ("PVRR") using the STRATEGIST® Model; (4) analysis of resulting compliance with the rules, overall economics, consideration of various levels of risk and uncertainties, financing implications, and rate impacts. Pet. Ex. B, pp. 7-8.

The primary pollution control equipment options considered by PSI in its planning process were: (1) flue gas desulfurization ("wet scrubbers") and "dry scrubbers" for SO<sub>2</sub> removal; (2) selective catalytic reduction equipment ("SCRs") for NO<sub>x</sub> removal; (3) scrubber/SCR combinations, and activated carbon injection ("ACI") and ACI-baghouse equipment for mercury removal. Other options considered included: fuel switching; market hedging (e.g., forward purchases of emission allowances); unit retirements; and other resource options such as combustion turbine units, combined cycle units, integrated gasification combined cycle units, renewable energy projects, and demand-side management ("DSM") impacts. Pet. Ex. B., pp. 10-12.

**D.** PSI's Proposed Compliance Plan. PSI's proposed Phase 1 compliance plan, outlined below, will result in all of PSI's large coal-fired units (at Gibson Generating and Cayuga Generating Stations - "Gibson" or "Gibson Station", and "Cayuga" or "Cayuga Station", respectively) being equipped with scrubbers, and most with scrubber/SCR combinations, resulting in significant reductions of SO<sub>2</sub>, NO<sub>x</sub> and mercury. In addition, PSI's Phase 1 plan initially included the proposed installation of ACI-baghouse equipment at PSI's Gallagher Generating Station ("Gallagher" or "Gallagher Station"), which would achieve significant mercury reductions, and would also allow PSI to more aggressively control NO<sub>x</sub> emissions and to burn lower-sulfur coal at Gallagher, thus achieving lower SO<sub>2</sub> emissions as well. PSI's Phase 1 proposals for its Gallagher Station were modified as a result of the Settlement Agreement, as discussed further in this Order. The SCR at Cayuga and the remainder of PSI's coal-fired units (at Wabash River and Edwardsport Generating Stations) will be addressed in Phase 2 of PSI's planning process. Pet. Ex. B, p. 11.

PSI's Proposed Phase 1 Compliance Plan (as proposed in its case-in-chief)

Generating	Compliance Plan	In-Service Date
Station		·
Gibson Station	Unit 1 – wet scrubber / high-sulfur fuel	Fall 2007
Note: As of the	Unit 2 – wet scrubber / high-sulfur fuel	Spring 2007
spring of 2005 all	Unit 3 – wet scrubber / high-sulfur fuel	Fall 2006
units have retrofit	Unit 4 – scrubber upgrade	Fall 2005
SCRs installed	Unit 5 – scrubber upgrade	Spring 2008
Cayuga Station	Unit 1 – wet scrubber / high-sulfur fuel	Fall 2008
	Unit 2 – wet scrubber / high-sulfur fuel	Spring 2008
Gallagher Station	Units 1 & 2 – common ACI-baghouse	Fall 2006
(modified by	Units 3 & 4 – common ACI-baghouse /	
Settlement	lower-sulfur fuel on Units 1-4	Spring 2007
Agreement)		

The major drivers of PSI's Phase 1 plan turned out to be more SO<sub>2</sub>-related than mercury-related. For instance, the proposed plan was affected most significantly by current and forecasted SO<sub>2</sub> emission allowance prices, PSI's short SO<sub>2</sub> emission allowance position, the ability to achieve co-benefit reductions of SO<sub>2</sub>, NO<sub>x</sub> and mercury through the use of scrubber/SCR combinations, and the fuel price differential between high-sulfur coal and medium-sulfur coal. Pet. Ex. B., p. 13.

The major benefits associated with PSI's Phase 1 plan include: substantial reductions of SO<sub>2</sub>, NO<sub>x</sub> and mercury emissions; compliance with the CAIR and CAMR rules; additional air quality benefits (reduced particulates and ozone); the continued ability to provide adequate and reliable electric service to Indiana customers; the continued ability to use PSI's existing coal-fired generation and Illinois Basin coal; the creation of over 1,000 construction jobs in Indiana; the creation of approximately 60 permanent jobs in Indiana; and the potential enhancement of economic development via assistance with local attainment of air quality standards. Pet. Ex. B, pp. 23-24.

- E. Robustness of PSI's Phase 1 Plan. PSI subjected its proposed compliance plan to a series of alternative scenarios and sensitivities, in order to determine whether the proposed plan was robust enough to withstand changes in rules (e.g., a cap and trade versus a MACT mercury rule); changes in various prices (of emission allowances, power, and fuels); changes in loads and/or increased DSM or renewable impacts; and changes in capital equipment costs. Significantly, none of the alternative scenarios or sensitivities studied produced any major changes in PSI's Phase 1 plan at Gibson or Cayuga and only minor changes at Gallagher. From this, PSI concluded that the compliance strategy for its Phase 1 units is very likely to be cost-effective under a range of scenarios and outcomes. Pet. Ex. B, pp. 16-18; See also generally, Pet. Ex. D; Pet. Ex. F.
- Financing Requirements and Implications; Rate Impacts. PSI's Phase 1 plan will require approximately \$1 billion in capital. PSI estimates that this Phase 1 plan will result in average retail electric rate increases of approximately 3% per year over the next five years. Pet. Ex. L, pp. 15-16. PSI anticipates having overall financing requirements of over \$2.5 billion during the 2005–2009 timeframe, for environmental compliance, new generation, and transmission and distribution system improvements. Pet. Ex. J, pp. 16. At the same time, PSI faces debt maturities during the 2006–2009 timeframe of \$865 million. Id. In the midst of these huge capital expenditure needs, PSI is focused on certain financial objectives, such as achieving and maintaining at least a 50% common equity ratio, maintaining at least an "A-" credit rating for its senior secured debt and at least a "BBB+" credit rating for its senior unsecured debt, and ultimately improving PSI's senior secured debt and senior unsecured debt to "A" and "A-" ratings, respectively. Both customers and the Company will benefit from achievement of these objectives, through lower overall financing costs and greater assurance of access to capital markets. Id. at 10-11.

All three major credit rating agencies have expressed concerns with respect to the high level of PSI's capital expenditures needed to comply with these environmental regulations. It is important to note, however, that the rating agencies' concerns are partially mitigated by what they view as a constructive regulatory environment in Indiana, and Indiana laws that allow utilities such as PSI to obtain timely cost recovery of environmental compliance costs. Pet. Ex. K, pp. 21-24.

G. <u>Proposed Ratemaking Treatment</u>. In addition to requesting Commission approval of its proposed Phase 1 plan, and various other approvals, PSI is requesting authority to recover financing, accelerated depreciation, operation and maintenance ("O&M") and emission allowance costs on a timely basis via PSI's existing emission allowance cost tracking mechanisms, consistent with the CWIP statute and rules and Ind. Code § 8-1-8.8. PSI also initially requested authority to earn an enhanced return on equity on its Environmental Compliance Plan projects under Ind. Code § 8-1-8.8-11, but effectively withdrew this request as a result of entering into the Settlement Agreement. Pet. Ex. B, pp. 19-20.

PSI supported its request for timely cost recovery by emphasizing that it continues to face significant environmental compliance costs, and timely recovery of costs is important from a credit quality perspective. PSI also noted that timely recovery of costs is reasonable from a

ratemaking perspective, in that a basic tenet of regulation is that the utility should have the opportunity to recover its prudently-incurred costs of providing service. Pet. Ex. B, pp. 21-22.

Testimony. The OUCC and Intervenors in this Cause sponsored testimony from several witnesses. The OUCC sponsored the testimony of Peter M. Boerger, Director of the OUCC Electric Division; Giriraj Sharma, OUCC Utility Analyst; and Darcie L. Murphy, OUCC Electric Division Utility Analyst. PSI-IG sponsored the testimony of Nicholas Phillips, Jr., utility regulation consultant with the firm of Brubaker & Assoc., Inc.; James T. Selecky, utility regulation consultant with the firm of Brubaker and Assoc., Inc.; and Michael Gorman, energy advisor and consultant in the field of utility regulation with the firm of Brubaker and Assoc., Inc. Finally, the CAC sponsored the testimony of its Executive Director, Grant Smith; and CAC/HEC sponsored the testimony of Bruce Biewald, President and owner of Synapse Energy Economics, Inc., a consulting company specializing in economic and policy analysis of the electric industry. While there were areas of agreement with PSI's proposal, each of these parties' witnesses expressed areas of disagreement or concern with certain aspects of PSI's proposal.

PSI presented rebuttal testimony from 10 witnesses: Kay Pashos; John Stowell; Judah Rose; Robert Moreland; John Roebel; Diane Jenner; Richard Stevie; Steven Fetter; Wendy Aumiller; and Stephen Farmer.

The following provides an overview of the issues addressed by the parties in this matter:

A. Gallagher Station ACI-baghouses. Inclusion of the Gallagher ACI-baghouse projects in PSI's Phase 1 compliance plan was an issue raised by the OUCC. The OUCC did not oppose PSI's proposed Phase 1 SO<sub>2</sub> and NO<sub>x</sub> reduction initiatives, but recommended that the Commission not approve the proposed ACI-baghouses at this time. Dr. Boerger asserted that those facilities will not be needed to meet mercury reduction targets for some time. Thus, in his opinion, the denial of PSI's request in this Cause would provide additional time for other mercury-specific control technologies to be further developed. Pub. Ex. No. 1, pp. 3-4. Mr. Sharma testified that, based on his analysis, no mercury emission control specific additions, *i.e.*, ACI-baghouses, are needed until at least the year 2018. Mr. Sharma described 12 emerging mercury emission control technologies under development that he indicated "may turn out to be more economical/efficient." Pub. Ex. No. 2, pp. 10-15.

Mr. Moreland and Mr. Roebel responded on rebuttal to this position of the OUCC. However, because PSI has modified its Phase 1 compliance plan for its Gallagher Station as a result of the Settlement Agreement – specifically, by proposing to install baghouses at Gallagher rather than ACI-baghouse technology – we will not address PSI's rebuttal on this issue in detail. However, two points made by PSI's rebuttal witnesses are relevant nevertheless.

First, according to PSI's witnesses, Mr. Sharma did not recognize in his testimony how short PSI's SO<sub>2</sub> emission allowance ("EA") position would be in 2010, and concluded that PSI could easily comply on system in that year (after installation of Phase 1 scrubber projects) with a scrubber project at Wabash River Unit 6 and some use of low sulfur coal. In their rebuttal testimony, PSI concluded that as a result of this analysis, Mr. Sharma ignored the immediate

benefits of being able to use low sulfur coal at the Gallagher Station as described by Mr. Rimstidt and Mr. Roebel in PSI's case-in-chief. *Id.* at 5-6.

Second, Mr. Roebel pointed out that Mr. Sharma's proposal to switch to low sulfur coal at Gallagher units 1-4 in 2015 to reduce SO<sub>2</sub> emissions and install aggressive NO<sub>x</sub> controls on those units suffers from several problems. First, Mr. Sharma's approach ignores the value of earlier reductions in mercury, NO<sub>x</sub>, and SO<sub>2</sub> emissions. Additionally, in Mr. Roebel's opinion, PSI cannot wait ten years to make these capital investments. The current electrostatic precipitators ("ESP"), retrofitted in 1968, are inefficient, by today's standards, and over 35 years old. These ESPs will not last until Mr. Sharma's proposed 2015 date. To utilize lower sulfur coals at Gallagher and to maximize NO<sub>x</sub> reductions, the ESPs would have to be upgraded or replaced with baghouses. PSI would need to spend several million dollars over the next few years for maintenance on the existing ESPs and associated equipment, costs that PSI can avoid by replacing the particulate controls at that station. The current small ESPs were retrofitted to the roof of the station. There is very little room and there are serious structural questions about upgrading and replacing these old ESPs. Further, the baghouse project will control more unburned carbon and fine particulates-better than even upgrading ESPs. According to PSI, the project will provide an opportunity for the Company to learn from this technology that has not been commonly applied to Illinois Basin bituminous coal on a utility scale. The ability to lower SO<sub>2</sub> emissions and aggressively control and lower NO<sub>x</sub> emissions will help local air quality. (Floyd and Clark Counties have been declared nonattainment for ozone and fine particulates.) Finally, if challenges to the CAMR prevail and station by station or unit by unit mercury controls are mandated, upgraded ESPs would likely have to be replaced by baghouses anyway. Id. at 7-8.

**B.** <u>Cost Estimates.</u> Mr. Biewald testified that the cost estimates used in the Company's analyses were inconsistent, and that, since the estimates used by ICF for Cinergy units were much higher than the cost of control technologies for non-Cinergy units, the analyses could produce uneconomic results. He stated that the cost estimates for which PSI is seeking approval in this consolidated proceeding are different from the initial cost estimates used in the Company's analyses, and concluded that the estimates were misleading. CAC/HEC Ex. B, pp. 4-5 and 24.

A number of PSI's witnesses responded to Mr. Biewald's testimony. Mr. Moreland explained that Cinergy's compliance planning efforts have been on-going for quite some time and that it would be surprising if cost estimates did not change as additional information became available. He also testified that to use only definitive cost estimates for compliance analyses, as Mr. Biewald suggested, would have been unworkable since the Company analyzed nearly one hundred separate compliance projects for PSI alone. Pet. Ex. P, pp. 2-3. Mr. Moreland also described the progression and refinement of the cost estimates used by the Company and demonstrated that many of the estimates Mr. Biewald claimed were inconsistent were actually not nearly as divergent as Mr. Biewald would have the Commission believe, when placed on a consistent dollar basis including comparable equipment. Pet. Ex. P, pp. 5-7. Mr. Moreland also compared the estimates used by the Company with more generic estimates referred to by Mr. Biewald, stating his belief that more specific estimates should be used when available, as they were.

Ms. Jenner testified that Mr. Biewald's testimony, in which he indicated that Cinergy used cost estimates that were higher than estimates used by others and will result in an uneconomical compliance plan, was misplaced. Ms. Jenner explained that for the final STRATEGIST® analysis the Company deliberately used cost estimates for the scrubbers that were 25% higher than the cost estimates used in the Engineering Screening Model to bias against installing scrubbers, so that there could be no reasonable disagreement that these projects were economic. Pet. Ex. R, p. 2. Similarly, Mr. Rose explained that using higher cost estimates for compliance technologies on Cinergy units while using generic cost estimates on all other units in the ICF analysis was extremely conservative, reducing the likelihood that the proposed investments could be deemed uneconomic compared to alternative analytical approaches. Pet. Ex. O, pp. 4-9.

C. Climate Policy and Carbon Prices. Mr. Biewald also testified regarding PSI's consideration of CO<sub>2</sub> emissions in its compliance program. Mr. Biewald indicated that the Company's planning almost entirely ignored CO<sub>2</sub>, treating it merely as one sensitivity analysis of the IPM Model. He contended that PSI failed to figure into the specifics of the compliance plan technology selection; the projected capacity factors of existing units; the evaluation of efficiency and renewable resource options; and the "unit retirement evaluations." CAC/HEC Ex. B pp. 5-6. He contended PSI did not use the "expected" carbon price forecast developed by its own consultant, ICF; ICF failed to adequately consider any high carbon price sensitivity analysis; and ICF's expected carbon price was too low. Mr. Biewald offered three specific carbon price forecasts to be considered in compliance planning, a low, mid, and high price forecast. Mr. Biewald stated that "the Company's approach supposedly recognizing climate change and carbon policy in its compliance filing in this case is pitiful and the conclusion it reaches is absurd." Id. at 34. Mr. Biewald recommended that the Company should be required to conduct its compliance planning analysis with a more reasonable carbon price forecast, and then do sensitivity analysis with low and high case forecasts. Id. at 40-44.

PSI witness Mr. Rose responded to Mr. Biewald's criticisms and explained the CO<sub>2</sub> analysis performed in the Company's case-in-chief. Mr. Rose testified that he believed that the scenarios proposed by Mr. Biewald were unlikely, because the consequences of such policies on areas like the Midwest which rely heavily on coal generation are so large. Nevertheless, in his rebuttal testimony, Mr. Rose analyzed the CO<sub>2</sub> control scenarios proposed by Mr. Biewald. Pet. Ex. O, pp. 43-44.

After analysis, Mr. Rose determined that in the Low Biewald CO<sub>2</sub> case and the Medium Biewald CO<sub>2</sub> case, all Gibson and Cayuga scrubbers would still be economic by 2008. Even in the Biewald High CO<sub>2</sub> case, SO<sub>2</sub> scrubbers would be economic at all three Gibson units and one Cayuga unit. Thus, even at the high fringe, only one SO<sub>2</sub> scrubber became uneconomic. Even then, that SO<sub>2</sub> scrubber could be economic under the High Biewald CO<sub>2</sub> case if natural gas prices rise more than indicated in the ICF forecast, which has natural gas prices well below current levels. From this analysis, Mr. Rose concluded that the SO<sub>2</sub> scrubbers in Phase 1 are remarkably robust and are economic even in extremely unlikely cases proposed by Mr. Biewald. *Id.* at 44-45.

Mr. Rose also testified that the Biewald High case CO<sub>2</sub> valuation is unlikely because its overall impact would result in the U.S. coal generation sector being economically devastated and

coal generation falling by 35% from its current 51% share. Under this scenario, 11.5 million acres of land<sup>2</sup> would have to be devoted to wind generation to begin to make up for the loss of the coal fired generation. Huge additional investment in gas generation would also be required placing additional strains on the natural gas industry. Accordingly, Mr. Rose concluded that CO<sub>2</sub> controls, if they occur, will not be as stringent as envisioned by Mr. Biewald. *Id.* at 45-46.

The rebuttal testimony of Mr. Stowell also addressed the likelihood of Mr. Biewald's High CO<sub>2</sub> case from a policy perspective. Mr. Stowell discussed Cinergy's recent Air Issues Report to Stakeholders, which analyzed various carbon scenarios and the potential impacts on Cinergy utilities and their customers. Mr. Stowell indicated that Mr. Biewald's high end range price of \$50/ton of CO<sub>2</sub> had the potential to increase electric rates by approximately 100%. Mr. Stowell believes that it is extremely unlikely that a carbon regulation program with such a large impact on electric rates, and therefore the economy, would be approved by regulators or legislators. Pet. Ex. N, pp. 14-16.

**D.** Energy Efficiency. Mr. Biewald also testified regarding PSI's consideration of energy efficiency options, and indicated that PSI's compliance analysis does not appropriately consider energy efficiency as a compliance option; the value of marginal air emissions reductions should be incorporated in valuing investment in energy efficiency; there are additional DSM opportunities beyond PSI's current DSM programs that PSI should pursue; and the Company should conduct a DSM potential study and then implement a full set of cost-effective DSM programs incorporating the value of air emissions reduction. CAC/HEC Ex. B, pp. 6-7.

Ms. Jenner, Dr. Stevie and Mr. Rose all addressed these criticisms in their respective rebuttal testimony. Ms. Jenner explained that the Company did not model additional DSM as an "option" for compliance; rather, PSI incorporated very aggressive DSM impacts as a *given* in all STRATEGIST® runs in acknowledgement that higher emission allowance costs would probably make more DSM programs economical. In addition, by modeling an additional sensitivity (Lower Load Forecast/Higher DSM Impacts) PSI analyzed whether the Company's compliance equipment choices would still be economic if PSI did even more DSM programs. This analysis demonstrated that even higher levels of DSM would not change PSI's equipment choices. Pet. Ex. R, pp. 2-3.

Dr. Stevie explained that PSI had a DSM proceeding pending before this Commission at the time of the hearing (Cause No. 42612). To account for the possibility that PSI would be significantly expanding its DSM efforts, Dr. Stevie explained that PSI used a "placeholder" in its environmental analysis and IRP analysis for these expanded programs—the aggressive DSM case that was hard-wired into Ms. Jenner's STRATEGIST® runs. In addition, the low load forecast sensitivity analysis described by Ms. Jenner represented a proxy for DSM programs *in addition to* those for which the Company was seeking approval. Dr. Stevie described this as a doubling of the DSM that was included in the STRATEGIST® runs. Pet. Ex. S, pp. 5-8.

Dr. Stevie also explained that the Company has used projected market prices for power that include higher emission allowance prices and that the Company has conducted a market potential study that evaluated over 100 individual measures. He also pointed out that, while Mr.

<sup>&</sup>lt;sup>2</sup> This is the equivalent of 75% of the state of West Virginia.

Biewald identified ten states with DSM program funding higher than PSI, all of those states have higher electrical retail prices, in some cases twice as high, as Indiana, making DSM more cost effective in those states. *Id.* at 5-8.

In response to the CAC/HEC criticism that more DSM and energy efficiency should be included, Mr. Rose, in his rebuttal testimony, noted that the original analysis provided for the potential for DSM by lowering load growth to below historical levels for most U.S. regions. Additionally, in his rebuttal testimony, Mr. Rose analyzed a severe scenario with no electric load growth anywhere in the U.S. through 2020—as a proxy for more DSM and energy efficiency. Even under the severe no load growth scenario, PSI's Phase 1 scrubber projects remain economic. Pet. Ex. O, pp. 33-34.

Mr. Biewald also testified regarding PSI's E. Renewable Generation. consideration of renewable generation in its compliance plan. He contended that PSI's compliance analysis did not appropriately consider renewable generation as a compliance option. Mr. Biewald indicated that the compliance plan does not recognize the ability of renewable generation to lower air emissions and to contribute to a lower cost compliance plan. Mr. Biewald also contended that PSI rejected wind and biomass from consideration as promising resource options, with insufficient or inappropriate justification of its decision. He argued PSI should be required to conduct a complete, detailed, and up to date analysis of the potential, performance, and cost of available, renewable generation options, with consideration of the air emissions reduction value (including carbon dioxide emissions) in order to identify, design, and then implement a full set of renewable generating projects as part of a cost-effective environmental compliance plan. CAC/HEC Ex. B, p. 7.

Ms. Jenner responded to Mr. Biewald's concerns in her rebuttal testimony. First, she pointed out that, in screening renewable generation, PSI used the cost estimates from the *Repowering the Midwest* study authored by Mr. Biewald, which were lower (*i.e.*, more favorable to renewables) than another common source for such information, the EPRI TAG® estimates. Second, PSI extensively analyzed purchasing about 100 MW from two run-of-river hydro facilities located on the Ohio River (as discussed in PSI's 2003 IRP), but a MISO study of transmission capability found that the power from these facilities could not be reliably delivered to the PSI system without transmission improvements. Third, the lower load level in the Lower Load Forecast/Higher DSM Impacts sensitivity performed in PSI's analysis serves as an excellent proxy for a higher level of renewables on PSI's system. The least cost equipment choices did not change in this sensitivity. Pet. Ex. R, pp. 3-4.

Regarding Mr. Biewald's testimony that PSI inappropriately rejected wind and biomass from consideration as promising resource options, Ms. Jenner testified that PSI has considered the economics of wind and biomass in each of its IRPs starting in 1995, and will continue to do so in future IRPs. With regard to wind resources, the main reasons why wind is not economical on a utility scale in Indiana is that the wind speeds here are generally low and the wind, especially in the summer, is intermittent. The SUFG in its 2004 Indiana Renewable Energy Resources Study prepared for the IURC and the Regulatory Flexibility Committee of the Indiana Legislature, dated September 2004, stated on page 11: "In the Midwest, average wind power is the highest in the winter and spring, while it is lowest in the summer." *Id.* at 4.

Ms. Jenner also responded to Mr. Biewald's contention that PSI's compliance analysis does not recognize the ability of renewable generation to lower air emissions. As she stated, PSI has never disputed that renewable generation has the potential to reduce emissions. In a large regional market, such as that in which PSI's units operate, the addition of renewables on PSI's system may displace generation but it may be on some other utility's system, rather than displacing generation from PSI's own units. There are a number of factors that can affect whether and to what extent emission reductions occur. These factors include load level, fuel prices, power market prices, emission allowance prices, and transmission constraints, which affect generation commitment and dispatch, and, thus, the source of the generation, if any, displaced by the renewable generation. For example, if the renewables displace coal-fired generation, then there could be reductions in SO<sub>2</sub> emissions. However, if the renewables displace higher cost natural gas-fired generation, there would be no reductions in SO<sub>2</sub> emissions. If the generation that would have been dispatched without the renewables is still economic and can be sold into the wholesale market, there would be no reductions in emissions on the utility's system that produced the power, but there could be reductions on the system that purchased the power, depending on the generation displaced on that system. Therefore, Ms. Jenner concluded that adding renewable generation on PSI's system does not automatically decrease the need for the equipment additions at issue in this consolidated proceeding. Id. at 6.

Mr. Roebel also responded to Mr. Biewald's statement, purportedly based on a Burns & McDonnell study for Cinergy that, "In addition, co-firing with biomass can reduce  $SO_2$  and  $NO_x$  emissions." Mr. Roebel pointed out that there is not a lot of experience with utility scale biomass co-firing. While biomass  $SO_2$  emissions may be lower,  $NO_x$  emissions, as pointed out in the report, have varied greatly at demonstration projects as those emissions are very much a function of the temperature of the combustion process. There are also unresolved issues with respect to the delivered cost of biomass fuel and the added capital cost associated with handling and using such fuel. Pet. Ex. Q, pp. 1-2.

Finally, Mr. Rose also discussed Mr. Biewald's issues with PSI's analysis of renewable generation. Mr. Rose described a sensitivity analysis he had performed where he assumed that Indiana adopted a Renewable Portfolio Standard ("RPS") along with 18 other states that already have such standards, thus forcing a higher level of renewable generation. The results of this analysis did not change the economics of the Gibson and Cayuga scrubbers at issue in this case. Pet. Ex. O, pp. 4-9.

F. Plant Retirement Analysis. Mr. Biewald took issue with PSI's generating plant retirement analysis. He testified that he believes that several of PSI's older, smaller, less efficient units are candidates for retirement, including the Edwardsport, Gallagher, and Wabash River Units. He stated that unit retirement analysis should be considered in a compliance plan in order to make sure that the investments and controls are cost-effective and are not installed on units that should instead be retired. Mr. Biewald contended that the modeling done by PSI's consultant, ICF, shows that up to 10 PSI units are not economical to continue operating over the long term, and should be retired. He proposed that PSI should be required to conduct rigorous studies of continued operation compared with retirement of its older, smaller, less efficient units. The study should include the cost of environmental compliance in the cases where the units are operated, and the cost of carbon emissions should be included in an appropriate manner. CAC/HEC Ex. B, pp. 7-8 and 61-64.

Ms. Jenner responded to Mr. Biewald's testimony and pointed out that Petitioner's Exhibit F-1 in her case-in-chief testimony clearly shows the retirement of Edwardsport, Gallagher, and Wabash River Units 2-5 were considered as specific alternatives in PSI's STRATEGIST® Modeling. The results showed that the retirement of Edwardsport was an economic possibility and needed further study before committing to add mercury control equipment. At Gallagher and Wabash River, it was more economical to continue to operate the units than retire them since those units are required to meet reliability constraints, since any capacity retired must be replaced to maintain reliability. Given PSI was 500 MW short of capacity for the summer of 2005 and will need additional capacity in the future, retiring Edwardsport, Wabash River, and Gallagher would add 1,070 MW to this deficiency. Ms. Jenner noted that this would be a substantial amount of capacity to replace reliably, especially using Mr. Biewald's preferred choices of DSM and renewable generation. Pet. Ex. R, pp. 8-9.

Mr. Rose also responded that Mr. Biewald's claim that ICF's analysis retired several PSI units (Edwardsport, Gallagher, and some Wabash River Units) was incorrect. He stated that ICF's analysis kept these units, except for Edwardsport 6, available for reliability purposes; that even under stringent CO<sub>2</sub> cases, only the Edwardsport Units would retire; and that PSI's Phase 1 investments are still economic and the plants do not retire. Pet. Ex. O, pp. 49-50.

G. Continued Use of Coal Generation. CAC witness Mr. Smith testified that PSI's Environmental Compliance Plan is one dimensional and underscores the fundamental flaw with Indiana energy policy; it continues a policy of over-reliance on coal instead of investing in the future by investing in clean, affordable, renewable, and energy efficiency resources. CAC Ex. A, p. 5. He contended that PSI over-relies on trying to clean up "cheap coal" central power plants. He testified that a more sound policy would be to close older, dirtier, less efficient coal plants and replace them with investments in newer, cleaner, more efficient renewable energy and energy efficiency. *Id.* at 7-8. Both Mr. Smith and Mr. Biewald contended that PSI should focus on energy efficiency and renewable generation rather than continuing to rely on coal as a fuel source. Mr. Smith contended that PSI's plan is too costly and will have a negative effect on Indiana's economic well-being. *Id.* at 5.

PSI witness Ms. Pashos responded to Mr. Smith's testimony on this issue. She agreed that PSI should continue to pursue a diverse portfolio of supply-side and demand-side resources, including energy efficiency and renewable options, when such options are economic and reliable. However, she disagreed that those efforts can replace coal-fired generation in an economic manner over the foreseeable planning horizon. PSI has spent considerable time and resources analyzing the least cost and most reliable way to meet these new federal and state environmental requirements. As other PSI witnesses explained, PSI considered both renewable generation and energy efficiency, as well as the retirement of coal-fired generating plants, as options. However, in every scenario studied, PSI's proposed pollution control equipment was a lower cost method of compliance. Ms. Pashos testified that PSI takes very seriously its duty to provide reliable and efficient electric utility service at reasonable prices. PSI's proposed Phase 1 Environmental Compliance Plan is entirely consistent with its obligation to serve. Pet. Ex. M, pp. 7-8.

Ms. Pashos testified PSI continues to believe that, for the foreseeable planning horizon, coal is an essential part of the future of electric generation in the Midwest, just as it has been an essential part in the past. Ms. Pashos testified that Indiana is notably below the national average

(5.50 cents/kWh compared to an average of 7.22 cents/kWh), due in part to the amount of coal-fired generation used in the State (95%). Coal is an abundant source of relatively low-cost energy. PSI's compliance plan allows for the continued use of coal, in an economic manner, while significantly reducing its negative environmental impacts. *Id.* at 7-8.

Ms. Pashos also recommended continued research into new technologies and cleaner ways to use coal, like the development of IGCC technologies. In fact, Ms. Pashos noted that PSI does not believe there is a sustainable energy future for the State of Indiana that does not include the use of coal. However, she stated that she believes that the collective challenge is to find efficient and environmentally-friendly ways to use this abundant resource. *Id.* at 7-8.

Ms. Pashos disagreed with Mr. Smith's contention that PSI's plan is too costly and will have a negative effect on economic development in the State of Indiana. She testified that PSI's analyses prove that PSI's plan is the *least* cost method of complying with *mandatory* environmental rules. Consequently, PSI believes that the plan is consistent with continued economic development in the State. *Id.* at 8-9.

Ms. Pashos described some of the economic benefits of PSI's Environmental Compliance Plan. She pointed out that the PSI proposal invests in the future of its coal-fired generating plants, ensuring that these plants will be available to supply a low-cost and cleaner source of energy going forward. In the absence of pollution control devices, PSI might be required to derate, mothball, or retire these assets, eliminating jobs and eliminating a highly reliable, cost-effective supply of energy. Furthermore, PSI's plan allows for the continued use of coal, providing economic development benefits to the State of Indiana coal industry, which is estimated to provide about 2,000 jobs in the State. PSI's large construction effort associated with its Environmental Compliance Plan will also create about 1000 construction jobs and an estimated 60 permanent jobs in operating and maintaining the completed facilities. *Id.* at 9.

- H. <u>Incremental Incentive Return on Equity</u>. The Intervenors and the OUCC took exception to PSI's request for a 200 basis point incentive return on equity in accordance with Ind. Code § 8-1-8.8-11. Rather than addressing the parties' positions on this issue, however, we simply note that with the Settlement Agreement, PSI has essentially withdrawn this request for an incentive return.
- I. <u>Accelerated Depreciation</u>. PSI-IG witness Mr. Selecky testified that PSI should not use accelerated depreciation of 18 years but rather should use 20 years. Mr. Selecky pointed out that Ind. Code § 8-1-2-6.7 provides that clean coal technology shall be depreciated over a period not less than 10 years nor more than 20 years. He contended that weighting the Phase 1 compliance plan investment against the projected remaining lives of the affected generating units produces an average remaining life of over 25 years. Thus, utilizing a recovery period of 20 years would provide PSI with accelerated recovery. PSI-IG Ex.1, pp. 3-4.

Mr. Farmer responded on behalf of PSI. Again, however, rather than addressing the details of PSI's rebuttal, we simply note that the Settlement Agreement provides for 20-year, rather than 18-year, accelerated depreciation.

J. <u>Depreciation Net Salvage Value</u>. PSI-IG witness Mr. Selecky contended that PSI should use a net negative salvage factor of 5%, as opposed to the 20% factor PSI proposes, when calculating the depreciation rate to be used for the environmental compliance plan equipment. Mr. Selecky contended that PSI's proposed net salvage factor is based the testimony of PSI witness Mr. Spanos in PSI's last retail electric rate case, Cause No. 42359, wherein PSI also filed specific final dismantling studies for its steam generating plants. Mr. Selecky excluded the net salvage costs associated with Account 311 contending that investments associated with Phase 1 compliance plan should largely be reflected in accounts 312-316. PSI-IG Ex. 1, pp. 5-6.

We note that the Settlement Agreement provides for a compromise on this issue, as well, in that it calls for a 10% negative net salvage factor.

K. Rate Design. PSI-IG witness Mr. Phillips testified that, in past practice, the design of Rider 62 and Rider 71 allocated revenue responsibility on the basis of proportionate shares of the 12-monthly coincident peak demands. After the revenue responsibility is allocated to classes on the basis of demand, the actual surcharge is derived by dividing the revenue responsibility by the kWh for each class. This changes a demand-based charge to an energy charge as applied to customers' bills. If the revenue collected through the riders is relatively short or of short duration, there is no significant concern. However, here revenue collected through the riders and the amount of time the surcharge will be in place is of sufficient magnitude and duration to warrant a more precise rate design. Accordingly, Mr. Phillips proposed that the revenue responsibility within Rate HLF be implemented on a demand or per kilowatt surcharge basis for Riders 62 and 71. The revenue adjustment factor for the class should be calculated by dividing by kilowatts instead of kilowatt-hours. The cost will be charged through rates on the basis of demand instead of being converted to an energy-based surcharge. PSI-IG Ex. 3, pp. 7-8.

Mr. Farmer responded for PSI. He testified Mr. Phillips' proposal only relates to the allocation of costs within the rate HLF class. Mr. Farmer stated that the proposal is a departure from PSI's normal billing procedures. However, PSI believes that it can implement the changes in billing procedures and software needed to accommodate Mr. Phillips' request as to HLF customers. But it would be more onerous to make a similar change for any other rate class due to the manual nature of the calculations required. Mr. Farmer pointed out that HLF customers that have higher load factors will benefit from the change while industrial customers with lower load factors will be adversely affected. However, the Company did not oppose Mr. Phillips' proposal as described above. Pet. Ex. V, p. 7.

L. Off-System Sales and Allocation of Compliance Plan Fixed Costs. PSI-IG witness Mr. Phillips asserts that, "All power sold off-system must contain all associated pollution control costs in the cost basis established for the price of the power sold. Profit from sales is the margin above cost including all pollution control costs associated with the generation of power. All off-system sales should contribute a proportionate share of the cost recovery of the pollution control cost associated with power generated." PSI-IG Ex. 3, p. 8. Mr. Philips also indicated that, "Pollution control cost recovery from off-system sales should be credited to the pollution control costs charged to retail ratepayers." *Id.* at 3.

Mr. Farmer testified that Mr. Phillips' proposal does not adhere to the concept of cost causation applied in standard cost of service ratemaking. Additionally, Mr. Phillips does not define whether the pollution control costs he would allocate to off-system sales are variable costs only, or a combination of both variable and fixed or demand-related costs. This distinction is important because variable costs (e.g., emission allowance costs) incurred to support off-system sales are allocated to off-system sales and not charged to retail customers. Mr. Farmer also pointed out that Mr. Phillips does not explain the basis upon which pollution control costs would be allocated to off-system sales other than to say that, "All off-system sales should contribute a proportionate share" of the pollution control costs associated with power generated. Thus, it is not clear if Mr. Phillips proposes allocation of fixed costs, such as return on investment, depreciation expense, and fixed O&M expense allocated to off-system sales, based on the relationship of kilowatt-hours sold, or if Mr. Phillips would have these costs allocated on the basis of the relative demand placed on the system. Mr. Farmer indicated that, taken literally, Mr. Phillips apparently suggests that a fixed portion of costs be allocated to off-system sales presumably in a manner consistent with the methodology used to allocate fixed costs to firm power sales (e.g., retail jurisdictional customers), and that the allocation of fixed costs to offsystem sales be treated as a reduction or off-set to fixed pollution control costs recovery from retail jurisdictional customers via the proposed cost recovery mechanisms. Pet. Ex. V, pp. 2-4.

Mr. Farmer opposed Mr. Phillips' proposal for several reasons. First, the pollution control facilities are required in order to have the applicable generating capacity available to generate power for native load customer needs. These facilities will be an integral part of the generating units to which they are attached and should be allocated in a manner similar to the turbine, boilers, and other equipment comprising the units. The allocation of demand and energy related costs applicable to these facilities should be pursuant to the same allocation methodologies used for pollution control facilities such as scrubbers and SCRs in PSI's last retail electric rate case. These principles have been consistently applied in past PSI retail electric rate cases, have not been challenged, and have been approved by the Commission. *Id.* at 4-6.

Second, Mr. Farmer stated that it would be improper to allocate fixed or demand-related pollution control costs to PSI's off-system sales because the off-system sales currently made by PSI are non-firm in nature.<sup>3</sup> PSI has built and acquired generating capacity to meet the firm load requirements of native load customers on an as-needed, first-call basis. The generating capacity has not been built or acquired with the specific intent of serving non-firm off-system sales. Therefore, like other non-firm sales, demand-related costs should not be allocated to them. Power from PSI's own generating units will only be sold into the market on an as-available basis. Allocating fixed power production costs to sales that are variable in nature from generating units that may not be available to support off-system sales violates the basic principles of cost causation. Mr. Farmer pointed out that, if one were to accept Mr. Phillips' contention that fixed costs should be allocated to sales on a volume or energy use basis, one would have to reject Mr. Phillips' proposal that cost should be allocated to individual customers within the rate HLF customer class on a bill demand basis because the two methodologies are

<sup>&</sup>lt;sup>3</sup> It is important to note that the off-system sales being referred to herein are non-firm in nature. Any firm off-system sales, (*i.e.*, wholesale native load sales,) are allocated a portion of the fixed costs associated with generation and pollution control equipment, via the jurisdictional separation study approved in the last retail electric base rate case, Cause No. 42359. *See, e.g.*, PSI Rider 71, p. 1; and PSI Rider 62, p. 1.

inconsistent. If one were to accept Mr. Phillips' proposal, the logical result would be that all fixed costs should be allocated to retail customers on a kilowatt-hours sold basis, thereby increasing the cost responsibility for Mr. Phillips' large industrial customer clients. *Id.* at 4-6.

Mr. Farmer stated that, if one accepted Mr. Phillips' proposal, one would also have to consider whether the same logic and methodology should be applied, not only to off-system sales, but also to other sales of power that have characteristics similar to off-system sales. For example, special contracts with industrial customers which have interruptible provisions and other terms that result in power being delivered at less than a firm/full requirements basis should, under Mr. Phillips' logic, have the fixed pollution control costs allocated to these "special contract" industrial customers. *Id.* at 4-6.

Mr. Farmer posed another reason for rejection of Mr. Phillips' proposal. PSI's most recently approved base retail electric rates include a credit for net off-system sales profits of \$14.7 million with a 50/50 sharing of off-system sale profits above and below that base amount through PSI's Standard Contract Rider No. 70 ("Rider 70"). The sharing of off-system sales is structured in a manner that ensures customers will receive a credit of no less than \$7.4 million with the potential to receive more than the \$14.5 million built into base rates. By tracking profits from off-system sales through Rider 70, retail customers are credited with their proportionate share of the actual recovery of fixed costs realized by PSI which is not limited to the recovery of pollution control fixed costs and which will likely vary over time. *Id.* at 6-7.

M. <u>Updating of Jurisdictional Percentages</u>. PSI-IG witness Mr. Phillips opposed PSI's proposal to change the Riders 62 and 71 retail electric jurisdictional allocation percentages to reflect the termination of full requirement service to both Jackson County REMC and IMPA. He contended that it would be unfair for Indiana retail jurisdictional percentages to be increased to compensate PSI for a loss of non-jurisdictional load in between base retail rate cases. PSI-IG Ex. 3, pp. 9-10.

Mr. Farmer responded to this issue for PSI. However, the Settlement Agreement provides that the jurisdictional allocation percentages should not be updated.

N. <u>O&M Expense Forecast/True Up.</u> PSI-IG witness Mr. Phillips testified that pollution control costs recovered through Rider 71 should not be recovered on a forecasted basis, but rather should be recovered on an after-the-fact actual basis. Mr. Phillips stated it is preferable to use actual quantities in establishing charges to ratepayers. He also testified that cost control incentives should be better when only actual prudently incurred costs can be recovered as opposed to the recovery of forecasted costs with a true up later. PSI-IG Ex. 3, p. 10.

Mr. Farmer responded for PSI. He testified that Mr. Phillips seems to imply that, because the proposed projects are new and innovative technology, it will somehow be more difficult for PSI to predict costs with an acceptable degree of accuracy. Mr. Farmer disagreed with this contention. He pointed out that PSI Phase 1 Environmental Compliance Plan consists of similar equipment across many units. As PSI gains more experience operating this equipment, any deviation in actual versus forecasted O&M levels should not be driven by the innovative nature of the technology. Pet. Ex. V, pp. 10-12.

As for Mr. Phillips' second contention that PSI will somehow be incentivized to control costs if "only actual prudently incurred costs can be recovered as opposed to recovery of forecasted costs with a true-up later," Mr. Farmer testified that, in essence, Mr. Phillips is indicating that regulatory lag will somehow enter into the Company's decision-making process and that prudence can be driven by timing of rate recovery. Mr. Farmer disagreed with this principle. Mr. Farmer pointed out that the current administration of Rider 71 already results in a period of regulatory lag. Riders 71, and Rider 62, the CWIP Rider, are filed together on a semi-annual basis. The CWIP rules direct that a CWIP application may not be filed any more often than every six months. Mr. Farmer explained in detail, that if the Commission were to accept Mr. Phillips' recommendation that costs only be recovered on an after the fact basis, then costs incurred for the period June through December 2004 would not have begun until 4-5 months after the last costs were incurred, or approximately 10 months after the first costs were incurred. Such an expansion of regulatory lag would increase regulated utilities' financing costs and will result in higher costs to serve customers. *Id.* at 10-12.

O. <u>Continuation of AFUDC</u>. PSI-IG witness Mr. Gorman opposed PSI's proposal to continue accrual of AFUDC after the in-service dates of compliance plan projects, until such projects are reflected in retail rates, through CWIP ratemaking or in base rates. Mr. Gorman contended that continuation of AFUDC is unnecessary to provide the opportunity to earn a fair return and removes ratepayer protection. Mr. Gorman contended that additions to plant may be offset by ongoing depreciation expense and possible increase in sales. He argued that PSI's proposal would allow continued AFUDC accrual with no examination of whether there is an increased cost of service or whether there is increased revenue due to load growth. PSI-IG Ex. 2, pp. 12-14.

Mr. Farmer responded on behalf of PSI. He testified that Mr. Gorman's argument hinges on whether depreciation accruals pay for increases in plant investment. He testified that PSI has considered the offsetting effects of depreciation accruals. While Mr. Gorman may not be aware, the incremental investment in qualifying pollution control plant that is included in each of PSI's semi-annual CWIP filings includes an offset, or reduction, for depreciation expenses/accrual on qualifying pollution control products. Thus, the Company avoids the very situation pointed out by Mr. Gorman by only earning a return on the net incremental investment in plant subject to the CWIP Rider. Pet. Ex. V, pp. 12-13.

Mr. Farmer also explained that contrary to Mr. Gorman's position, plant retirements do not reduce net plant in-service either from an accounting standpoint or from a rate standpoint. Basic accounting and ratemaking principals dictate that reduction to plant in-service accounts be offset by reduction in the depreciation accrual account so that there is no reduction in overall net plant in-service. *Id.* at 12-13. Mr. Farmer pointed out that this Commission has previously addressed the claim that sales and related revenue growth can be used to pay for additions to plant. For example, in Cause No. 42200, this Commission found that it is not necessarily a direct and linear relationship between cost and revenue increases. If, as Mr. Gorman opines, revenue growth will pay for increases in plant, then utilities would theoretically never need to file for increases in base rates. Absent the continuation of AFUDC accruals, PSI will experience a permanent loss of revenue needed to cover financing costs of qualifying pollution control projects and will be unable to earn a reasonable and fair return on its total invested capital. *Id.* at 12-14.

- 7. <u>Settlement Agreement Testimony</u>. A copy of the Settlement Agreement entered into by PSI, the OUCC, and PSI-IG is incorporated into and attached to this Order. In support of the Settlement Agreement, PSI offered the Settlement Support testimony of Ms. Pashos, Ms. Jenner and Mr. Moreland. The CAC offered testimony of Mr. Grant Smith in opposition to the Settlement Agreement and, PSI offered the Settlement Support Rebuttal Testimony of Ms. Pashos, Mr. Keith Pike, and Ms. Jenner. The Settlement Agreement and testimony in support of and in opposition to the Settlement Agreement are discussed below.
- A. PSI Testimony in Support of the Settlement Agreement. The Settlement Agreement provides for Commission approval of PSI's Phase 1 Environmental Compliance Plan, as modified for several changes related to the Gallagher Baghouse Projects, as discussed below. It also provides for the use of emission allowances for SO<sub>2</sub>, NO<sub>x</sub>, and mercury ("Hg"), and for this Commission's ongoing review of PSI's Phase 1 Environmental Compliance Plan. Pet. Ex. 1, p. 4.

Ms. Pashos explained the accounting and ratemaking treatment addressed in the Settlement Agreement, which provides for assurance of cost recovery of the capital investments, and timely recovery of financing, construction, O&M, and depreciation costs associated with the Phase 1 Environmental Compliance Plan via PSI's Standard Contract Rider Nos. 62 and 71. She explained that PSI had agreed to forgo its original request for an incremental increase in its return on equity associated with the Phase 1 equipment. Other items of note include: (1) PSI's agreement to use 20-year accelerated depreciation rate in connection with its Phase 1 projects, as opposed to its originally requested 18-year depreciation rate; (2) PSI's agreement to use a 10% net negative salvage value for the Phase 1 projects, as opposed to the originally requested 20%; (3) the allocation of Riders 62 and 71 to HLF customers based on demand; and (4) there will be no update to PSI's jurisdictional allocators for the loss of certain wholesale customers load. Ms. Pashos explained that the Settlement Agreement provides that PSI is to receive timely recovery of its Phase 1 development and presentation costs, Phase 2 plan development, engineering and pre-construction costs, and coal and equipment testing costs. PSI has the authority to defer postin-service AFUDC, depreciation costs and O&M costs on an interim basis until such costs are reflected in retail rates. Pet. Ex. 1, pp. 4-6.

Regarding the Gallagher Baghouse Projects, the Settlement Agreement approves the construction of full baghouses at Gallagher, but without the ACI component and subject to certain caps. PSI is authorized to recover the capital costs of the Baghouse Projects up to a cap of \$98 million for all four generating units, and PSI may defer for recovery in its next base retail rate case those costs in excess of \$98 million up to \$102 million. The Settlement Agreement also provides that PSI will credit customers through Rider 71 with \$120,000 annually to reflect the anticipated reduction in O&M costs associated with removing the electrostatic precipitators at Gallagher, once they are removed. Ms. Pashos explained that these projects will allow for the use of lower-sulfur coal at the station, which reduces SO<sub>2</sub> emissions, requiring the purchase of fewer SO<sub>2</sub> emission allowances. She also indicated that the Baghouse Projects may allow the station to be operated to achieve reduced NO<sub>x</sub> emissions. Pet. Ex. 1, pp. 7-8.

Ms. Diane Jenner explained the additional analysis performed by PSI concerning the Gallagher Baghouse Projects, which compared the costs of full baghouses without ACI versus spending additional capital to repair the existing ESPs to maintain their current level of

operation, which is the other near term option for Gallagher. The most economic plan (based on PVRR over the planning period) chose the full baghouse option, and the full baghouses were more economical than repairing the ESPs by \$41.4 million. Ms. Jenner's analysis also showed that the expected payback period for the Gallagher Baghouse Projects, using very conservative assumptions, was 5 to 6 years, with immediate annual savings to customers as soon as the projects went in-service due to the ability to use lower-sulfur coal. Pet. Ex. 2, pp. 3-4.

Finally, the testimony of Mr. John Roebel described the differences between full-scale and polishing baghouses and the other options considered for Gallagher Station. Mr. Roebel explained that PSI agreed to drop the ACI component of the projects because the issuance of a cap and trade mercury rule, as opposed to a command and control rule, allowed PSI to forego the ACI construction at this time and purchase emission allowances if needed to fully comply with the new mercury rule. He noted that the option to add ACI is preserved for the future if the economics change or if command and control regulations are issued in the future. Mr. Roebel explained the Settlement Agreement provision calling for a performance standard for the Gallagher Baghouse Projects explaining that the 0.05 lb/mmbtu particulate limit will be tested as part of the acceptance testing for the projects. Mr. Roebel explained the potential SO<sub>2</sub> benefits associated with the Gallagher Baghouse Projects, and indicated that PSI is not required to use lower-sulfur coal, but rather will use the most economic source of fuel when comparing variables such as fuel, EA, and transportation costs. Pet. Ex. 3, pp. 4-6.

- B. CAC Testimony in Opposition to the Settlement Agreement. The CAC filed the testimony of Mr. Grant Smith in opposition to the Settlement Agreement. Mr. Smith indicated that the Settlement Agreement, in his opinion, did not address any of the critical flaws with the compliance plan including using inconsistent and high cost estimates, not evaluating a sufficiently broad range of alternatives such as renewables and energy efficiency, and not testing the robustness of the plan against a realistic range of alternative carbon policy outcomes. Mr. Smith complains that "bolting-on" post combustion controls is not enough and PSI should have considered the likelihood that Gallagher Station may retire, and should be required to include more energy efficiency and renewables in its proposal. CAC Ex C.
- C. <u>PSI Settlement Support Rebuttal Testimony</u>. In settlement support rebuttal testimony, Mr. Pike testified that under almost any set of reasonable assumptions, the economic effect of the operation of the Gallagher Baghouse Projects will be an immediate cost reduction to PSI's customers due to the SO<sub>2</sub> emission reduction benefits that are made possible by the projects. Using very conservative assumptions, such as a 50% capacity factor, he estimated that SO<sub>2</sub> emission allowance savings would be about \$4 million more than the revenue requirements associated with the projects, as proposed. Pet. Ex. 4, pp. 2-3.

Ms. Jenner explained that in none of PSI's analysis did Gallagher Station appear to be a likely candidate for retirement. In fact, Gallagher Station did not retire even under the CAC's own high CO<sub>2</sub> price scenario, and under CAC's medium CO<sub>2</sub> price scenario, Gallagher Station would have continued to operate at a 50% capacity factor into 2020 – well after the 5 to 6 year period in which the costs of the Gallagher Baghouse Projects are expected to breakeven with the benefits provided. Ms. Jenner also explained that if Gallagher did retire, it would need to be replaced with additional capacity that would take approximately 2500 MW of wind turbines (using CAC's preferred approach) to replicate. Ms. Jenner responded to the CAC's testimony

regarding PSI's incorporation of DSM into its planning. She testified that even with four times the actual level of DSM included in the plan, PSI's least cost environmental compliance plan would not have changed. Ms. Jenner indicated that PSI's plan included renewable options, but that they were simply not the most cost effective means of meeting the environmental requirements. She indicated that PSI is pursuing renewable generation through the issuance of an RFP, the re-vamping of its green power rider, and a new purchase power contract for 4 to 10 MW of power generated from coal mine methane. Pet. Ex. 5, pp. 1-4.

Finally, Ms. Pashos responded that PSI's analyses have demonstrated that emission reduction requirements are so stringent that they cannot be met with increased energy efficiency and renewable generation. Ms. Pashos testified that PSI ranks first in Indiana and in ECAR in terms of peak load and energy reductions from energy efficiency programs, fourth in the ECAR/MAIN region, and in the top 6% of electric utilities in the nation in terms of energy reductions. Ms. Pashos explained that PSI recognizes that costs are increasing due to environmental compliance requirements, increased fuel, purchased power, emission allowance and RTO costs. She stated that PSI does not have a choice as to whether or not to reduce emissions, but that PSI must comply with the new rules. This is why it was critically important to PSI for its compliance plans to be cost-effective and robust, and PSI's plan is both. On cross examination by the CAC, Ms. Pashos indicated that PSI's Phase 1 Environmental Compliance Plan would allow PSI to continue to use its existing low cost generating capacity. Pet. Ex. 5, pp. 2-4.

#### 8. Commission Analysis and Findings.

A. Approval of the Settlement Agreement and PSI's Phase 1 Environmental Compliance Plan. "It is the policy of the Commission to review and accept appropriate settlements." 170 IAC 1-1.1-17(a). The Commission may approve a settlement agreement if it is supported by substantial evidence, and the Commission finds it to be in the public interest. In this case, the Commission is reviewing a Settlement Agreement entered into by PSI, the OUCC (the statutory representative of the PSI's customers and the public generally), and PSI-IG (representing a consortium of PSI's industrial customers). It is a settlement of fewer than all the parties to these proceedings. Settlement agreements by less than all the parties may be submitted to the Commission pursuant to 170 IAC 1-1.1-17(b). The Commission may reject, in whole or in part, any proposed settlement if we determine the settlement is not in the public interest. 170 IAC 1-1.1-17(c).

Settlements in regulatory matters will often not be agreed to by all the parties. However, if, on examination, a settlement agreement is found equitable by the Commission, then the settlement agreement should be approved and its terms form the substance of a binding Commission order. *Pennsylvania Gas & Water Co. v. Federal Power Comm'n*, 463 F.2d 1242, 1246 (D.C. Cir. 1972), quoted with approval in *Re Public Serv. Co. of Ind., Inc.*, 74 PUR4th 660, 683 (Ind. Pub. Serv. Comm'n 1986), 1986 Ind. PUC LEXIS 419 at \*55. Furthermore, in the public utilities field, as in other contexts, the law favors settlements precisely because they help advance matters with far greater speed and certainty, and far less drain on public and private resources, than litigation or other adversarial proceedings.

Settlements presented to this Commission are not ordinary contracts between private parties. *United States Gypsum, Inc. v. Indiana Gas Co.*, 735 N.E.2d 790, 803 (Ind. 2000). When this Commission approves a settlement, that settlement "loses its status as a strictly private contract and takes on a public interest gloss." *Id.* (quoting *Citizens Action Coalition v. IPL Energy*, 664 N.E.2d 401, 406 (Ind. Ct. App. 1996)). Thus, this Commission "may not accept a settlement merely because the private parties are satisfied; rather [the Commission] must consider whether the public interest will be served by accepting the settlement." *Citizens Action Coalition*, 664 N.E.2d at 406.

Furthermore, any Commission decision, ruling, or order – including the approval of a settlement – must be supported by specific findings of fact and sufficient evidence. *United States Gypsum*, 735 N.E.2d at 795 (citing *Citizens Action Coalition v. Public Service Co.*, 582 N.E.2d 330, 331 (Ind. 1991)). This Commission's own procedural rules require that settlements be supported by probative evidence. 170 IAC 1-1.1-17(d). Therefore, before this Commission can approve the Settlement Agreement, we must determine whether the evidence in this proceeding sufficiently supports the conclusion that the Settlement Agreement serves the public interest and the customer rate credit is reasonable, just and not inconsistent with the purpose of the Indiana Public Service Commission Act, Ind. Code 8-1-2.

Based upon all of the evidence presented at the evidentiary hearings in this proceeding, we find that the Settlement Agreement in its entirety constitutes an integrated and comprehensive resolution of the relevant issues before us in this proceeding. The Settlement Agreement reflects several compromises by the Settling Parties which have the result of enabling PSI to comply with new emission reduction requirements in a least cost manner, and at the same time reducing the impact of the required expenditures on PSI's electric rates. The Settlement Agreement recognizes the need for additional pollution control equipment and represents a fair compromise on the key ratemaking issues raised by the parties to this case.

Based on the evidence of record, it is clear that PSI's proposed Phase 1 Environmental Compliance Plan, as modified by the Settlement Agreement, is reasonable and necessary and should be approved. No party contested the specific requirements as identified by PSI or that PSI has to meet significantly more stringent emission limits in the near future. Only the CAC/HEC recommended disapproval of the plan, indicating that the flaws in the analysis rendered the plan inadequate.<sup>4</sup>

The evidence demonstrates that the Phase 1 plan is the most cost-effective method of complying with the new stringent emission reduction requirements. PSI adequately considered all compliance options, including increased energy efficiency and renewable generation. We find that PSI's proposed Phase 1 plan for reducing SO<sub>2</sub>, NO<sub>x</sub>, and mercury emissions in compliance with the CAIR and CAMR emissions reduction requirements, including the construction and use of various emissions reduction equipment, the use of emission allowances, the plan flexibility components, and certain coal and equipment testing programs, all as described in the testimony of PSI, should be, and hereby is, approved in accordance with Ind. Code § 8-1-2-23, and the other statutes and rules as detailed below.

<sup>&</sup>lt;sup>4</sup> Even CAC agreed that the Gibson Scrubber projects should be approved, although at only a fraction of their cost.

Because the mercury cap and trade approach was approved by the EPA, PSI shall be authorized to amend Rider 63 as set out in Petitioner's Exhibit L-3, which adds mercury emission allowances to the rider. As such, PSI shall be provided timely recovery of emission allowance costs incurred in connection with compliance with the new SO<sub>2</sub>, NO<sub>x</sub>, and mercury emissions reduction requirements, via PSI's Rider 63.

B. Clean Coal Technology and Clean Coal and Energy Project Approval. There was little, if any, disagreement among most of the parties that PSI's proposed projects constitute clean coal and energy projects as the term is defined in Ind. Code § 8-1-8.8-2. However, CAC/HEC witness Mr. Biewald contended that PSI's projects did not necessarily constitute clean coal technology as defined in Ind. Code § 8-1-8.8-3, and therefore were not entitled to incentives. He claimed that scrubbers and baghouses have been in existence since before 1990, and therefore do not meet that component of the clean coal technology definition. CAC/HEC Ex. B, pp. 67-68. And, even if the design is more advanced today and therefore would constitute clean coal technology, only the costs associated with improvements should qualify. *Id.* at 67-68.

Ms. Pashos rebutted Mr. Biewald's claims that PSI's proposed projects are not eligible for incentives because they do not qualify as clean coal technology. She indicated Mr. Biewald confused the statutes at issue. Ms. Pashos explained that the statute that defines whether projects are eligible for the financial incentives listed in Ind. Code § 8-1-8.8-11 is not the section 3, which defines "clean coal technology", but rather section 2, which defines "clean coal and energy projects". In order to qualify for timely cost recovery and to qualify for other financial incentives, as provided for in Ind. Code § 8-1-8.8-11, a project must meet the definition of "clean coal and energy projects" and be found to be reasonable and necessary. Pet. Ex. M, pp. 12-13.

"Clean coal and energy projects" is defined by Ind. Code § 8-1-8.8-2(2)(B) as including: "Projects 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 geological formation known as the Illinois Basin, such as flue gas desulfurization and selective catalytic reduction equipment." Flue gas desulfurization equipment – scrubbers – are thus explicitly within the definition of "clean coal and energy projects." In fact, as Mr. Roebel's initial testimony makes clear, all of the equipment that PSI proposes to install as part of its compliance plan meets the definition of "clean coal and energy projects", and therefore qualifies for incentives under IC 8-1-8.8-11. Furthermore, PSI's case-in-chief and rebuttal testimony demonstrates the necessity and reasonableness of the projects. *Id.* at 12-13.

Additionally, Mr. Roebel's direct testimony also establishes that the Phase 1 projects constitute clean coal technology. Pet. Ex. G, p. 11. Clean coal technology, as defined in Ind. Code § 8-1-8.8-3, means a technology (including precombustion treatment of coal):

- (1) that is used in a new or existing energy generating facility and directly or indirectly reduces 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 under its Innovative Clean Coal Technology program and is finally approved for such funding on or after the date of enactment of the federal Clean Air Act Amendments of 1990 (P.L.101-549).

Mr. Roebel testified that, while baghouse technology has been used in the past, it has been on western coal, not bituminous coals, and that both baghouse projects and the Babcock & Wilcox mercury enhancement to scrubbers have received DOE funding. Pet. Ex. G, pp. 11-12.

We find that PSI's proposed equipment meets both applicable definitions of clean coal and energy projects, and clean coal technology. We note that we have recently approved scrubber projects as clean coal and energy projects, and clean coal technology in the Indianapolis Power & Light Company environmental case. *In re IP&L*, Cause No. 42700 (*Ind. Util. Reg. Comm'n*, Nov. 30, 2004). We agree that the proposed scrubber and baghouse projects, constitute clean coal and energy projects, and clean coal technology.

We further find that PSI should be authorized for certain financial incentives as provided for in Ind. Code 8-1-8.8-11, in connection with PSI's compliance plan, including the timely recovery of costs incurred during the construction and operation of the clean coal technology projects; the timely recovery of coal and equipment testing costs, and plan flexibility costs; the timely recovery of Phase 1 plan development and presentation costs, and Phase 2 plan development, engineering and pre-construction costs; the use of accelerated depreciation; and the authority to defer post-in-service carrying costs, depreciation costs, and operation and maintenance costs on an interim basis until the applicable costs are reflected in PSI's rates.

As such, PSI's proposed Rider 71 is approved for the recovery of depreciation and O&M costs associated with its Phase 1 Environmental Compliance Plan, and for costs as described above and in Petitioner's Exhibit L, page 4.

- C. <u>Certificate of Public Convenience and Necessity for Clean Coal Technology</u>. PSI has requested that the Commission issue a CPCN for clean coal technology for the scrubber projects and baghouse projects. In order to issue a CPCN, we must make the findings set forth by the legislature in Ind. Code § 8-1-8.7-4(b) ("Section 4(b)"). Section 4(b) requires that we:
  - (1) Find that the public convenience and necessity will be served by the construction, implementation, and use of clean coal technology;
  - (2) Approve the estimated costs;
  - (3) Find 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; and

(4) Make a finding on each of the factors described in Ind. Code § 8-1-8.7-3(b).

Ind. Code § 8-1-8.7-3(b) ("Section 3(b)") sets forth nine factors, each of which we will consider.

- 1. The cost for the clean coal technology compared to conventional emission reduction facilities. Mr. Roebel explained that there are no conventional technologies for removal of mercury, and NO<sub>x</sub> was not an issue before the Clean Air Act Amendments of 1990. PSI performed analyses showing that these projects were the most cost-effective option for compliance. Consequently, we find PSI's choice of the clean coal technology projects is reasonable.
- 2. Whether the clean coal technology projects will extend the useful life of existing generating facilities. Mr. Roebel testified that, while installation of the projects will not increase the physical useful lives of the generating units, they will nevertheless increase their operational lives because failure to implement the projects would result in non-compliance with the new environmental requirements and could force the shutdown of generation units. Therefore, we find that the proposed clean coal technology projects will extend the useful economic life of PSI's generating facilities.
- 3. and 4. The potential reduction in pollutants achieved by the proposed clean coal technology projects versus conventional equipment. As previously discussed, the evidence demonstrates that the clean coal technology projects will allow PSI to reduce its air emissions sufficiently to comply with the CAIR and CAMR. Reduction of air emissions by conventional technology would be insufficient to bring PSI into compliance with those rules or would be more expensive.
- 5. Federal and state standards. The evidence demonstrates that these projects will enable PSI to comply with the new federal CAIR and CAMR rules, and the State of Indiana's implementation of those rules.
- 6. Likelihood of success. PSI's analysis demonstrates that these projects will allow PSI to achieve compliance with the CAIR and CAMR rules. Consequently, we find the likelihood of success of the proposed clean coal technology projects is high, especially in light of the cobenefits of these projects, as discussed above.
- 7. Retirement of existing units. PSI considered retirement of existing generating units in its analyses, and the evidence shows that the retirement of existing electric generating facilities is currently not a feasible or cost-effective way of complying with the CAIR or CAMR rules.
- 8. Dispatching priority. Mr. Roebel testified that the dispatching priority of PSI's generating units would not be significantly affected by the proposed projects.

9. Other factors. Other factors supporting approval of the proposed clean coal technology projects are discussed elsewhere in this Order.

In conclusion, we find that we are able to make each finding required by Section 3(b). As previously stated, and based upon the evidence presented, the Commission finds that the proposed clean coal technology projects will allow PSI to continue to utilize its coal-fired generating assets. Therefore, we find that there will be significant benefits from the projects. As a result, the public convenience and necessity will be served by the construction, implementation and use of the proposed clean coal technology projects. Based upon the record evidence we find that the estimated costs of the proposed clean coal technology projects should be approved. We find that the facilities where PSI proposes to employ the clean coal technology utilize and will continue to utilize Indiana coal as their primary fuel source (although as discussed below we do not treat this factor as a prerequisite for a CPCN). We further find that the factors identified in Section 3(b) support approval of the proposed clean coal technology projects. Therefore, we find that PSI should be granted a CPCN for the use of the clean coal technology projects and the clean coal technology involved therein.

Additionally, PSI has requested that the Commission approve ongoing review of PSI's implementation of its Environmental Compliance Plan. We find that PSI should report on its progress at least annually, and may do so in conjunction with its semi-annual Rider 71 and 62 filings.

**D.** <u>CWIP/QPCP Approvals.</u> PSI has requested that the Commission approve for use, pursuant to Ind. Code § 8-1-2-6.8 and 170 I.A.C. § 4-6-2, PSI's proposed Phase 1 emissions reduction equipment as qualified pollution control property. Qualified pollution control property ("QPCP") means 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. Ind. Code § 8-1-2-6.8.

We find that the proposed projects constitute QPCP as defined in Ind. Code § 8-1-2-6.8 because they represent clean coal technology projects that meet applicable state and federal requirements and are designed to accommodate the burning of coal from the Illinois Basin. We recognize that in *General Motors Corp. v. Indianapolis Power & Light Co.*, 654 N.E.2d 752 (Ind. Ct. App. 1995), the Court of Appeals ("Court") declared that a portion of Ind. Code § 8-1-2-6.6 relating to Indiana coal violates the Commerce Clause of the United States Constitution. The Court severed the unconstitutional provision from the remainder of the statute which was held to be valid and effective. The Court stated that if a plan "is found by the Commission to be the option best fitting the non-protectionist criteria in the statute, no bar exists to its approval on the basis that it includes the use of Indiana coal. . . ." Although, we find that the proposed projects will allow PSI to continue the use of Indiana and Illinois Basin coal, in accordance with the *General Motors* case, we do not treat this factor as a prerequisite for PSI to receive a CPCN as discussed above.

We further find that each proposed project constitutes an air pollution control device, and meets the applicable requirements of 170 I.A.C. § 4-6-1 et seq., as described in the testimony of Mr. Roebel. Pet. Ex. G, pp. 16-18.

As such, PSI's proposed Rider 62, the CWIP Rider, is approved for use and for the recovery of its Phase 1 Environmental Compliance Plan projects and costs as set out in Petitioner's Revised Confidential Exhibit G-1 and for the types of costs as described in Petitioner's Exhibit L, page 4.

- **JGDA Findings.** The Joint Generation Dispatch Agreement ("JGDA") requires E. that environmental compliance planning should be performed on a coordinated and integrated basis, including all of Cinergy's generating units that are subject to the JGDA. However, it also requires PSI to develop a Stand-Alone compliance plan and an Environmental Compliance Cost Allocation Plan so that the Commission can be assured that PSI customers will not pay more under the Joint Compliance Plan than they would have under a PSI Stand-Alone Plan. The testimony of Ms. Jenner demonstrated the steps PSI took to comply with these JGDA requirements. Pet. Ex. F, pp. 21–23. PSI has proposed the compliance cost allocation methodology that is specified in Section 3.01.a. of the JGDA, i.e., the costs will be assigned to the Operating Company that owns the affected generating unit. PSI has shown that the Joint Compliance Plan is identical to a PSI Stand-Alone compliance plan. No party to the case presented any evidence to the contrary. We, therefore find that in compliance with the JGDA, PSI has demonstrated that the Joint Compliance Plan meets the least cost standard; that the PSI Stand-Alone Plan meets the operating company least cost standard; that the allocation of cost to PSI is less than or equal to the cost to PSI on a Stand-Alone basis; and that the allocation of cost to PSI is an equitable allocation of costs, benefits, and risks.<sup>5</sup>
- Confidentiality Findings. PSI filed a Motion for Protection of Confidential and Proprietary Information, along with the Affidavits of Mr. Douglas F Esamann and Mr. Judah L. Rose, on October 8, 2004. In its Motion and attached Affidavits, PSI indicated that it believed that confidential treatment should be provided by the Commission for information related to financial, power, fuel, and emission allowance forecasts, detailed compliance plan project costs and estimates, confidential IRP information, production and delivery cost information, and power purchase and sales information, which PSI may file in its case-in-chief, update and rebuttal filings. Additionally, PSI sought confidential treatment related to PSI's use of ICF Consulting's wholesale power price, fuel price and emission allowance price forecasts, which ICF deems confidential and highly proprietary. PSI and ICF indicated that the confidential information provides actual or potential economic value from not being generally available, and would provide competitors an unfair advantage if revealed. PSI and ICF indicated that they take reasonable steps to maintain the confidential information including requiring confidentiality agreements prior to sharing the information outside of the companies, and restricting such information internally on a need to know basis. In an October 28, 2004 Docket Entry, the Presiding Officers made a preliminarily determination that such information should be subject to confidential procedures.

Additionally, on April 14, 2005 and April 27, 2005, respectively, the OUCC and CAC/HEC filed a Notice of Filing of Confidential Information and Motion for Temporary Protective Order, including the attached Affidavits of Mr. Esamann and Mr. Rose attesting to the confidential nature of the OUCC's and CAC/HEC's filings. On April 24, 2005 and May 5, 2005,

<sup>&</sup>lt;sup>5</sup> The Commission notes that PSI has terminated the JGDA and such termination was not contested.

respectively, the Commission granted preliminary confidential treatment of the requested information to the OUCC and CAC/HEC.

We note that the Settlement Agreement itself contains an attachment with confidential individual cost estimates; as a result, the redacted public version of that attachment is attached.

There has been no disagreement among the parties as to the confidential and proprietary nature of the information submitted under seal to the Commission in this consolidated proceeding. The Commission now finds that the confidential information submitted by PSI, the OUCC, and CAC/HEC should continue to be held as confidential by the Commission.

G. Approval of Settlement Agreement. Based on the foregoing, we find that the Settlement Agreement in its entirety is just and reasonable, in the public interest, and not inconsistent with the purpose of the Indiana Public Service Commission Act. Accordingly, we find that the Settlement Agreement should be approved. With regard to future use, citation, or precedent of the Settlement Agreement, we find that our approval of the terms of the Settlement Agreement should be construed in a manner consistent with our finding in *In Re Richmond Power & Light*, Cause No. 40434 (*Ind. Util. Reg. Comm'n*, March 19, 1997).

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

- 1. The Commission finds that the Settlement Agreement is in the public interest and is hereby approved.
- 2. PSI's Phase 1 Environmental Compliance Plan as provided for in the Settlement Agreement is hereby approved, including the construction and use of various emissions reduction equipment, the use of emission allowances, and certain coal and equipment testing programs.
- 3. The proposed scrubber, scrubber upgrade, and baghouse projects are determined to constitute clean coal technology, clean coal and energy projects and qualified pollution control property.
- 4. PSI is hereby issued a Certificate of Public Convenience and Necessity for the proposed clean coal technology projects as described in the above Findings. This Order constitutes the Certificate.
- 5. PSI's request for ongoing review of its proposed clean coal technology is hereby approved. PSI shall update the Commission at least annually and may do so as part of its semi-annual Rider 71 and 62 filings.
- 6. Pursuant to Ind. Code § 8-1-2-6.8, the Commission approves the use of the proposed clean coal technology as qualified pollution control property.
- 7. Pursuant to Ind. Code § 8-1-8.7-4(b), the Commission approves PSI's cost estimates as described in this Order.

- 8. The Settlement Agreement provision for accelerated (20-year) depreciation for the Environmental Compliance Plan projects is approved.
- 9. PSI's request for financial incentives in connection with PSI's compliance plan are approved as described in Finding 8.B above, specifically the timely recovery of costs incurred during the construction and operation of the clean coal technology projects; the timely recovery of coal and equipment testing costs, the timely recovery of Phase 1 plan development and presentation costs, and Phase 2 plan development, engineering and pre-construction costs; and the authority to defer post-in-service carrying costs, depreciation costs, and operation and maintenance costs on an interim basis until the applicable costs are reflected in PSI's rates.
- 10. PSI's request for approval of specific ratemaking treatment is approved as described in the above Findings, including the approval of PSI's Standard Contract Rider Nos. 62, 71, and 63.
- 11. The confidential information presented in this proceeding will continue to be treated as confidential by the Commission and excepted from public access.
  - 12. This Order shall be effective on and after the date of its approval.

HARDY, HADLEY, LANDIS, SERVER, AND ZIEGNER CONCUR:

**APPROVED:** 

MAY 2 4 2006

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

Paula L. Barnett, Acting

Secretary to the Commission

#### STATE OF INDIANA

#### INDIANA UTILITY REGULATORY COMMISSION

PETITION OF PSI ENERGY, INC., PURSUANT TO IND. CODE §8-1-2-6.8 AND 170 I.A.C. 4-6-1 <i>ET SEQ</i> ., REQUESTING THAT THE COMMISSION APPROVE THE USE OF CERTAIN QUALIFIED POLLUTION CONTROL PROPERTY	) ) ) CAUSE NO. 42622 ) )
PETITION OF PSI ENERGY, INC., PURSUANT TO INDIANA CODE §§ 8-1-2-6.1, 8-1-2-6.7, 8-1-2-6.8, 8-1-2-23, 8-1-8.7, 8-1-8.8, 8-1-27, 8-1-2-42(a), 8-1-2.5, AND 170 LA.C. 4-6-1 et seq. REQUESTING THAT THE COMMISSION: (1) APPROVE PSI'S "PHASE 1" PLAN FOR COMPLYING WITH PENDING SO <sub>2</sub> , NO <sub>X</sub> , AND MERCURY EMISSIONS REDUCTION REQUIREMENTS; (2) APPROVE THE USE OF CERTAIN QUALIFIED POLLUTION CONTROL PROPERTY AND CLEAN COAL AND ENERGY PROJECTS; (3) GRANT PSI CERTIFICATES OF PUBLIC CONVENIENCE AND NECESSITY FOR CLEAN COAL TECHNOLOGY; (4) APPROVE THE USE OF CONSTRUCTION WORK IN PROGRESS RATEMAKING TREATMENT; (5) APPROVE CERTAIN FINANCIAL INCENTIVES IN CONNECTION WITH PSI'S COMPLIANCE PLAN, INCLUDING THE TIMELY RECOVERY OF COSTS INCURRED DURING CONSTRUCTION AND OPERATION OF THE CLEAN COAL TECHNOLOGY PROJECTS, AND THE USE OF ACCELERATED DEPRECIATION; (6) GRANT PSI AUTHORITY TO DEFER POST-IN-SERVICE CARRYING COSTS, DEPRECIATION COSTS, AND OPERATION AND MAINTENANCE COSTS ON AN INTERIM BASIS UNTIL THE APPLICABLE COSTS ARE REFLECTED IN PSI'S RATES; (7) AUTHORIZE THE RECOVERY OF OTHER RELATED COSTS; AND (8) CONDUCT ONGOING REVIEWS OF THE IMPLEMENTATION OF PSI'S COMPLIANCE PLAN	) ) ) ) ) ) ) ) CAUSE NO. 42718 ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) ) )

SETTLEMENT AGREEMENT, AMONG PSI ENERGY, INC., THE INDIANA OFFICE OF UTILITY CONSUMER COUNSELOR, AND THE PSI-INDUSTRIAL GROUP

### INDIANA UTILITY REGULATORY COMMISSION CAUSE NOS. 42622/42718, PSI ENVIRONMENTAL COMPLIANCE PLAN

This Settlement Agreement is entered into by and between PSI Energy, Inc. ("PSI"), the Indiana Office of Utility Consumer Counselor ("OUCC"), and the PSI-Industrial Group ("PSI-IG"), (collectively "Settling Parties"), this \_\_\_\_\_\_day of December, 2005, in compromise and

settlement of the all of the issues in pending Cause Nos. 42622/42718 before the Indiana Utility Regulatory Commission ("Commission").

Whereas, in consolidated Cause Nos. 42622/42718 PSI has filed for various approvals related to its Phase 1 Environmental Compliance Plan to comply with the federal and state Clean Air Interstate Rules ("CAIR") and the Clean Air Mercury Rules ("CAMR");

Whereas, the Settling Parties have met and conferred and exchanged information related to PSI's Phase 1 Environmental Compliance Plan and ratemaking requests generally, and the Gallagher Generating Station ACI-Baghouse Projects, specifically;

Now therefore, in consideration of the premises and the representations and agreements contained herein, the Settling Parties agree as follows:

- 1. <u>Representations of PSI</u>. PSI makes the following representations to the other Settling Parties:
  - (a) PSI's Phase 1 Plan represents a reasonable and cost-effective approach to complying with the CAIR and CAMR Rules.
  - (b) The construction of the Baghouse component of the Gallagher Generating Station ACI-Baghouse Projects (hereinafter "Gallagher Baghouse Projects") will allow for the use of lower-sulfur content coal at the Gallagher Generating Station, which will in turn reduce the sulfur dioxide (SO<sub>2</sub>) emission rate at such station, and the enhanced particulate control provided by the construction of the Gallagher Baghouse Projects will allow the Gallagher Generating Station units to be operated to achieve reduced nitrogen oxide (NO<sub>x</sub>) emissions.
  - (c) The installation of the Gallagher Baghouse Projects in the 2007 2008 timeframe is cost-effective, primarily due to the avoidance of SO<sub>2</sub> emission allowance costs.
  - (d) The estimated payback period of the capital costs associated with the Gallagher Baghouse Projects ranges from 4 years to 14 years, and PSI expects that the Gallagher Generating Station units will remain used and useful for at least that period of time.
  - (e) The Gallagher Baghouse Projects also provide flexibility for the adoption of future mercury (Hg) emission control equipment, should that become necessary.

- 2. Approval of PSI's Phase 1 CAIR/CAMR Environmental Compliance Plan. The Settling Parties agree that capital equipment portion of PSI's Phase 1 CAIR/CAMR Environmental Compliance Plan reflected on Revised Confidential Exhibit G-1, attached hereto as Attachment 1 and incorporated herein by this reference, which shows the capital equipment portion of the Phase 1 Environmental Compliance Plan agreed to by the Settling Parties, including the specific pollution control equipment to be installed at various PSI generating units, the associated estimated costs, and the anticipated timing of such installations, should be approved, except as described in section 5 below relative to the Gallagher Baghouse Projects. In addition to the construction and use of various emissions reduction equipment as outlined on Attachment 1, PSI's Phase 1 Compliance Plan includes the use of emission allowances (SO<sub>2</sub>, NO<sub>x</sub> and Hg), which should be approved. The Settling Parties also agree that PSI's request for ongoing Commission review of PSI's implementation of its Phase 1 Environmental Compliance Plan should be granted.
- 3. <u>Legal Status of PSI's Phase 1 Environmental Compliance Plan and Associated Projects</u>. The Settling Parties agree that PSI's Phase 1 Environmental Compliance Plan should be approved pursuant to Ind. Code §§ 8-1-27, 8-1-8.7, and 8-1-8.8, 8-1-2-6.8, 8-1-2-6.7, and 8-1-2-23, as well as 170 IAC 4-6-1. The Settling Parties further agree that the Phase 1 Environmental Compliance Projects qualify as "clean coal and energy projects" pursuant to Ind. Code 8-1-8.8-2 and -11, "clean coal technology" pursuant to Ind. Code 8-1-8.7-1 and 8-1-2-6.8, "qualified pollution control property" pursuant to Ind. Code 8-1-2-6.8, and should be granted "certificates of public convenience and necessity for clean coal technology" pursuant to Ind. Code 8-1-8.7-3.
- 4. Accounting and Ratemaking Treatment for PSI's Phase 1 Environmental Compliance
  Plan. The Settling Parties agree that PSI's Phase 1 Environmental Compliance Plan
  should be afforded the following accounting and ratemaking treatment:
  - (a) Assurance of cost recovery of capital investments made pursuant to the Phase 1 Environmental Compliance Plan (except as limited in section 5 below relating to the Gallagher Baghouse Projects);
  - (b) Timely recovery of financing, construction, operation and maintenance ("O&M") costs, and depreciation costs associated with PSI's Phase 1 Environmental Compliance Plan, via PSI's Standard Contract Riders Nos. 62 and 71 (utilizing a rate of return equal to PSI's overall weighted cost of capital, as updated from time to time in accordance with the Commission's construction work in progress ("CWIP") rules (PSI will not receive an incremental return on equity incentive on the Projects); and utilizing forecasted O&M costs);
  - (c) Timely recovery of emission allowance costs incurred in connection with compliance with the new SO<sub>2</sub>, NO<sub>x</sub> and Hg emissions reduction requirements, via PSI's Standard Contract Rider No. 63; provided,

- however that costs of allowances used in off-system sales should be allocated appropriately to off-system sales.
- (d) Accelerated (20-year) depreciation in connection with PSI's Phase 1 Environmental Compliance Plan Projects, using a 10% negative net salvage value for the Phase 1 Environmental Compliance Plan Projects;
- (e) Timely recovery of PSI's Phase 1 plan development and presentation costs, Phase 2 plan development, engineering, and pre-construction costs, and coal and equipment testing costs; and
- (f) Authority to defer post-in-service AFUDC, depreciation costs, and operation and maintenance costs on an interim basis, until the applicable costs are reflected in PSI's retail electric rates. For future CWIP and general ratemaking purposes, post-in-service allowance for funds used during construction ("AFUDC") shall be added to the cost of plant and recovered over a 20-year period.
- (g) Allocation of Standard Contract Rider Nos. 62 and 71 to Rate HLF customers will be based on demand. This allocation will have no impact on customer classes other than Rate HLF.
- (h) There will be no allocation of fixed costs to off-system sales, nor will any modifications be made to PSI's Standard Contract Rider No. 70 in this Cause. Variable costs, including emission allowance costs, associated with off-system sales, should be allocated appropriately to off-system sales.
- (i) PSI will not update its jurisdictional allocators for Standard Contract Riders 62 and 71 in this Cause, notwithstanding the fact that PSI has experienced the loss of a wholesale native load customer in July 2005 (Jackson County REMC).

#### 5. Gallagher Baghouse Projects.

- (a) Withdrawal of ACI Proposal. PSI agrees to withdraw its proposal to install the ACI (activated carbon injection) component of the proposed Gallagher Baghouse Projects as part of this case. If PSI wishes to install the ACI component in the future, PSI will file a new petition with the Commission for approval thereof.
- (b) <u>Capital Cost Cap for Gallagher Baghouse Projects</u>. PSI agrees to limit its rate recovery of capital costs applicable to the Gallagher Baghouse Projects in this Proceeding to no more than \$98 million for all four units. PSI shall be authorized to defer for recovery in its next base rate case all reasonably incurred capital costs in excess of \$98 million up to \$102 million for these projects.

- (c) Credit for O&M Expense Reduction. Beginning with the date that the Gallagher Baghouse Projects are completed and in service (currently estimated as May, 2008) and the current Gallagher Generating Station electrostatic precipitators ("ESPs") are removed from service, PSI agrees to credit retail electric customers, via its Standard Contract Rider No. 71, with \$120,000 annually until the effective date of PSI's next retail base rate case, to reflect the anticipated reduction of operation and maintenance ("O&M") expense associated with the current ESPs on the Gallagher Generating Station units.
- (d) Use of Lower-Sulfur Coal at Gallagher Generating Station. In order to achieve SO<sub>2</sub> reductions at Gallagher Generating Station, PSI intends to burn lower-sulfur coal at these units once the Gallagher Baghouse Projects are completed and in-service. Once all of the scrubber projects at Gibson Generating Station are completed and in-service, PSI will be able to switch to higher-sulfur coal at Gibson Generating Station, thus freeing up the lower-sulfur coal contract tonnage currently going to Gibson Generating Station. PSI agrees to use the lower sulfur coal currently delivered to Gibson Generating Station pursuant to contracts with Hazelton Mine, LLC (effective January 1, 2005) and Gibson County Coal, LLC, (dated June 21, 1999) exclusively for PSI-owned generating units for the duration of these existing agreements. Provided, however, that if PSI has an opportunity to benefit customers by amending or terminating one or both of these contracts, or by selling the coal from these contracts, PSI will present and explain such opportunity to the OUCC, either prior to executing any transaction, if practical, and/or through written testimony in PSI's next retail FAC proceeding. PSI agrees to credit retail customers, through the FAC process, with the retail jurisdictional portion of any such benefits realized.

Further, PSI agrees to use the contract cost of coal (as opposed to market cost, or other cost) for PSI generating units using the Gibson County and Hazelton coal described above for purposes of allocating generation between native load and off-system sales customers (i.e., for purposes of after-the-fact stacking of generating units). If in the future PSI believes that something other than expected contract cost should be used for such allocations, PSI may petition the Commission for approval to modify this commitment in an FAC proceeding.

- (e) <u>Emissions Rate Reduction Capability at Gallagher Generating Station</u>. PSI represents as follows:
  - (1) the Gallagher Baghouse Projects will limit particulate emissions to approximately 0.05 lb/mmbtu, as measured and

- proven by acceptance testing during equipment commissioning;
- (2) the Gallagher Baghouse Projects do not directly reduce SO<sub>2</sub> emissions. However, the Gallagher Baghouse Projects will give PSI the ability to materially reduce the rate of SO<sub>2</sub> emissions at the Gallagher Generating Station by allowing it to burn lower-sulfur coal in the Gallagher Generating Station units. Once the Gallagher Baghouse Projects are completed and in-service, PSI expects to burn lower-sulfur coal, resulting in a lower rate of SO<sub>2</sub> emissions and SO<sub>2</sub> emission allowance savings.
- (3) the Gallagher Baghouse Projects do not directly reduce NO<sub>x</sub> emissions. However, the enhanced particulate control provided by the Gallagher Baghouse Projects will allow broader operating flexibility for the low-NO<sub>x</sub> burners at Gallagher Generating Station, subject to economic considerations for heat rate, boiler maintenance activities, forced outages, *etc*. The Gallagher Baghouse Projects will enable the Gallagher Generating Station units to be operated to achieve NO<sub>x</sub> reduction from current emission rates, subject to economic optimization.
- (4) the Gallagher Baghouse Projects do not directly reduce Hg emissions. Based on limited testing of baghouses in the electric utility industry with respect to mercury removal, PSI expects that the Gallagher Baghouse Projects will remove at least as much oxidized mercury as the existing ESPs at the Gallagher Generating Station. Actual rates of mercury emissions will depend on not only operation of the Gallagher Baghouse Projects, but also the mercury content in the coal burned at the units. Without ACI (or other sorbent injection), the exact level of total mercury removal is unpredictable.
- (5) In addition to particulate reductions, PSI will strive to achieve SO<sub>2</sub>, NO<sub>x</sub> and Hg emission rate reductions at the Gallagher Generating Station with the use of the Gallagher Baghouse Projects, subject to the overall cost-effectiveness of achieving such emission rate reductions.
- (6) PSI will periodically update the Commission Staff, the OUCC, and other interested parties concerning the actual SO<sub>2</sub>, NO<sub>x</sub>, Hg and particulate emission rates that occur as a result of PSI's Phase 1 Environmental Compliance Plan, including the installation of the Gallagher Baghouse Projects.

#### 6. Procedural Terms

(a) The Parties will request Commission acceptance and approval of this Settlement Agreement in its entirety, without any change or condition

that is unacceptable to any Party to this Settlement Agreement.

- (b) PSI will provide the OUCC and the PSI-IG a draft of PSI's testimony and a reasonable opportunity to review such testimony prior to filing. PSI will introduce into evidence in these Causes testimony and exhibits specifically addressing and supporting the terms of this Settlement Agreement.
- (c) OUCC and PSI-IG will not offer testimony or exhibits into evidence in these settlement proceedings, and agree to waive cross-examination of all witnesses in these settlement proceedings, provided PSI's testimony accurately describes and supports the terms of this Settlement Agreement.
- (d) The Parties will work together to finalize and file an agreed upon proposed order in these Causes with the Commission as soon as possible. The Parties will support or not oppose the proposed order in the settlement proceeding and will request that the Commission issue an order promptly accepting and approving this Settlement Agreement in accordance with its terms.
- (e) The Parties will either support or not oppose on rehearing, reconsideration and/or appeal, any Commission Order accepting and approving this Settlement Agreement in accordance with its terms, including the submission of any applicable briefs and pleadings.

Agreed To and Accepted this \_\_\_\_\_\_Day of December, 2005:

PSI Energy, Inc.

By: Killey + Kar Attorney for PSI Energy, Inc.

Office of the Utility Consumer Counselor

By: Sisc Week Points Indiana Consumer Counselor

**PSI Industrial Group** 

Attorney for ISI Industrial Group

# PSI's Environmental Compliance Plan Case-in-Chief Filing

Revision 1-14-2005

Cinergy Share Dollars in Thousands

Capital Projects	Estimated Cost of Completed Projects	Estimated Construction Commencement Date	Actual Construction Commencement Date	Estimated In-Service Date
	* * * * * * * * * * * * * * * * * * *			
Cayuga Station				
Unit 1 FGD		03 / 2005		12 / 2008
Unit 2 FGD		03 / 2005		06 / 2008
FGD Landfill Phase I		05 / 2007		06 / 2008
FGD Landfill Phase II		05 / 2009		12 / 2013
Gallagher Station				
Unit 1 Baghouse		04 / 2006		11 / 2007
Unit 2 Baghouse		04 / 2006		11 / <b>2007</b>
Unit 3 Baghouse		05 / 2006		05 / 2008
Unit 4 Baghouse	+	05 / 2006		05 / 2008
Landfill Development		06 / 2007		12 / 2008
Landfill Land Purchase		08 / 2005		06 / 2005
Gibson Station				
Unit 1 FGD		11 / 2004		12 / 2007
Unit 2 FGD		11 / 2004		06 / 2007
Unit 3 FGD		05 / 2004	05 / 2004	12 / 2006
Unit 4 FGD Upgrades		09 / 2005		12 / 2005
Unit 5 FGD Upgrades		10 / 2006		06 / 2008
Program				
Compliance Engineering		01 / 2005		12 / 2007
Mercury Removal Study		11 / 2005		12 / 2006

Cav	uga Station		
-	Unit 2 SCR	05 / 2007	06 / 2010
Edw	vardsport Station		
-	ACI Baghouse	10 / 2007	12 / 2008
Wat	oash River Station		
	Unit 2 ACI Baghouse Unit 3 ACI Baghouse Unit 4 ACI Baghouse Unit 5 ACI Baghouse Unit 6 ACI Baghouse Unit 6 Dry FGD Landfill Development	10 / 2005 10 / 2005 10 / 2005 10 / 2005 06 / 2007 06 / 2011 05 / 2007	11 / 2007 11 / 2007 11 / 2007 11 / 2007 07 / 2008 12 / 2012 05 / 2008

#### **CERTIFICATE OF SERVICE**

The undersigned hereby certifies that copies of PSI Energy, Inc.'s Proposed Order were delivered or mailed, postage prepaid, in the United States Mail, this 16th day of March, 2006 to the following:

Office of the Utility Consumer Counselor Indiana Government Center North 100 North Senate Avenue, Room N501 Indianapolis, IN 46204-2208

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Robert K. Johnson Attorney-at-Law 350 Canal Walk Suite A Indianapolis, IN 46202

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Tim Maloney
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