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STATE OF INDIANA

INDIANA UTILITY REGULATORY COMMISSION

VERIFIED PETITION OF INDIANAPOLIS POWER &)
LIGHT COMPANY ("IPL"), AN INDIANA)
CORPORATION, FOR (1) ISSUANCE OF)
CERTIFICATES OF PUBLIC CONVENIENCE AND)
NECESSITY AND APPROVAL OF PROJECTS TO)
COMPLY WITH FEDERALLY MANDATED)
REQUIREMENTS, INCLUDING THE)
CONSTRUCTION OF WATER TREATMENT)
TECHNOLOGIES, OPERATIONAL CHANGES AND)
USE OF MODIFIED STORMWATER)
MANAGEMENT PRACTICES AT PETERSBURG)
AND HARDING STREET GENERATING STATIONS,)
AND REFUELING OF HARDING STREET STATION)
UNIT 7 ("COMPLIANCE PROJECT"); (2) FOR)
ONGOING REVIEW; AND (3) APPROVAL OF)
ASSOCIATED RATEMAKING AND ACCOUNTING)
TREATMENT, INCLUDING COST RECOVERY IN)
ACCORDANCE WITH IND. CODE § 8-1-8.4-7 AND)
AUTHORITY TO DEFER COSTS UNTIL SUCH)
COSTS ARE REFLECTED IN RATES)

CAUSE NO. 44540

APPROVED:

JUL 29 2015

ORDER OF THE COMMISSION

Presiding Officers:
Carol A. Stephan, Commission Chair
Aaron A. Schmoll, Senior Administrative Law Judge

On October 3, 2014, Indianapolis Power & Light Company ("Petitioner", "IPL" or "Company") filed its Verified Petition and Request for Administrative Notice in this Cause. IPL prefiled its direct testimony and attachments on October 16, 2014.

Petitions to intervene were filed on October 27, 2014, by Citizens Action Coalition of Indiana, Inc. ("CAC"), on October 30, 2014, by Sierra Club, on December 12, 2014, by an ad hoc group of industrial customers ("IPL Industrial Group" or "IG"), and on March 31, 2015, by Indiana Rail Road Company. The Presiding Officers granted the petitions to intervene.

On December 3, 2014, the Commission issued a Prehearing Conference Order in this Cause which, among other things, established a procedural schedule.

On February 17, 2015, the Indiana Office of Utility Consumer Counselor ("OUCC") and the IPL Industrial Group prefiled their respective direct testimony and attachments. Also on February 17, 2015, IPL and Sierra Club filed a Joint Motion for Submission of Stipulation and Settlement Agreement ("Stipulation").

On March 27, 2015, IPL prefiled its rebuttal testimony and attachments and another request for administrative notice.

The Commission conducted a hearing in this Cause on April 14, 2015, at 9:30 a.m. in Room 222 of the PNC Center, 101 W. Washington Street, Indianapolis, IN. At the hearing, the parties presented their respective evidence, which was admitted into the record without objection. No members of the public appeared or participated at the hearing.

The Commission, based upon the applicable law and the evidence presented, now finds as follows:

1. **Notice and Jurisdiction.** Due, legal, and timely notice of the hearing in this Cause was given and published as required by law. Petitioner is a “public utility” as defined in Ind. Code § 8-1-2-1(a) and Ind. Code § 8-1-8.5-1 and an “energy utility” as defined in Ind. Code § 8-1-8.4-3. Petitioner is subject to the jurisdiction of this Commission in the manner and to the extent provided by Indiana law. Accordingly, the Commission has jurisdiction over Petitioner and the subject matter of this proceeding in the manner and to the extent provided by Indiana law.

2. **Petitioner’s Characteristics.** IPL is a public utility corporation organized and existing under the laws of the State of Indiana with its principal office and place of business at One Monument Circle, Indianapolis, Indiana. Petitioner is engaged in rendering electric utility service in the State of Indiana. IPL renders retail electric utility service to approximately 470,000 retail customers located principally in and near the City of Indianapolis, Indiana, and in portions of the following Indiana counties: Boone, Hamilton, Hancock, Hendricks, Johnson, Marion, Morgan, Owen, Putnam, and Shelby Counties. IPL owns, operates, manages, and controls electric generating, transmission and distribution plant, property, equipment, and related facilities, which are used and useful for the convenience of the public in the production, transmission, delivery, and furnishing of electricity.

3. **Requested Relief.** IPL requests the Commission issue certificates of public convenience and necessity (“CPCN”) and approve a project to comply with federally mandated requirements, including the National Pollutant Discharge Elimination System (“NPDES”) and the Mercury and Air Toxics Standards (“MATS”). IPL’s compliance plan includes the construction of wastewater treatment technologies, operational changes, and use of modified stormwater management practices at IPL’s Petersburg and Harding Street Generating Stations, and refueling of Harding Street Station (“HSS”) Unit 7 (“HS-7”) (collectively the “Compliance Project”). IPL also requests the Commission issue a CPCN for the refueling of HS-7. IPL requests ongoing review and Commission approval of associated ratemaking and accounting treatment, including cost recovery in accordance with Ind. Code § 8-1-8.4-7, and authority to defer costs until such costs are reflected in rates.

4. **IPL’s Evidence.**

A. **Compliance Project Overview.** Mr. Bradley D. Scott, IPL Senior Vice President, Power Supply, provided an overview of IPL’s generating units and other sources of supply and summarized the relief sought by IPL. Mr. Scott explained that the Compliance

Project stems from IPL's need to provide reasonably adequate electric service in compliance with environmental mandates.

Mr. Scott explained that as part of the proposed Compliance Project, IPL seeks to change the MATS compliance plan for HS-7 approved in Cause No. 44242. He added however, the NPDES compliance project does not impact the MATS compliance plan for the Petersburg Units authorized in Cause No. 44242, which is underway, on schedule and within the Commission approved cost estimate.

B. Environmental Mandates. Ms. Angelique Oligier, Director of Environmental Policy AES US Services, LLC, and Mr. Dennis H. Fink, Senior Project Manager CH2M HILL Engineers, Inc. ("CH2M HILL"), discussed the NPDES permits issued under Section 402 of the Clean Water Act and other existing or anticipated environmental mandates. Mr. Fink and Ms. Oligier explained that in addition to the current NPDES permit limits, anticipated regulatory drivers were considered in the context of choosing a NPDES compliance strategy that would be adaptable to future regulations. These regulations include but are not limited to: changes to the NPDES permit limits, update to the industry's Effluent Limitation Guidelines ("ELGs") under the Clean Water Act, and the Coal Combustion Residuals ("CCR") Rule.

Mr. Fink presented the CH2M HILL analysis and recommended plan to comply with the NPDES permit program. Mr. Fink presented the study approach, discussed compliance alternatives, presented the study results by station, described how the proposed compliance project allows IPL to comply with the NPDES requirements and position for future regulations, and estimated the cost of compliance. He testified that the recommended compliance projects are necessary for IPL to comply with the NPDES requirements imposed by EPA under the Clean Water Act.

Mr. Judah Rose, Managing Director ICF Resources, LLC ("ICF"), provided background and support for ICF's CO₂ price forecasts provided to IPL for use in the compliance analysis. Mr. Rose also supported the probabilities assigned to the CCR, Section 316(b) of the Clean Water Act, and ELG regulations for use in IPL's analysis.

C. HS-7. Mr. Scott, Mr. Michael L. Holtsclaw, IPL Director Transmission and Distribution Engineering, and Mr. Donald E. Martin, Executive Consultant with ABB Power Systems Consulting ("ABB") explained how HS-7 supports the IPL transmission system reliability and discussed the studies that were conducted to evaluate the impact of HS-7 retirement.

Mr. Holtsclaw explained that based on the IPL and ABB studies, if HS-7 were retired a number of transmission upgrades estimated to cost \$39 million will be needed by April 16, 2016 to meet reliability requirements and avoid potential load shedding events. Mr. Holtsclaw explained why the transmission upgrades could not be constructed by the April 2016 deadline. Mr. James M. Ayers, IPL Director of Corporate Planning and Analysis, explained that the analysis shows that even if the transmission upgrades could be completed, the results are not economical and the refueling of HS-7 is the economical solution. He stated that the transmission alternative is disadvantaged by both timing and costs.

Mr. Holtsclaw stated that these upgrades would not be needed if HS-7 is refueled. Mr. Holtsclaw testified that if HS-7 is refueled then it would be available to help support system reliability along with energy during the Gap Year¹ and beyond, much as it does today. Mr. Holtsclaw concluded that from a system operations and reliability standpoint, the best option is to refuel HS-7 as a natural gas unit making it available as a generation resource inside the 138 kV system. He said absent HS-7, Indianapolis may experience load shedding (brownouts) during periods when all systems around us are not shedding load. He added that refueling HS-7 also avoids additional transmission system upgrades that would be needed if the unit were retired.

D. Natural Gas Supply For Refueled HS-7. Mr. Dennis C. Dininger, IPL Director, Commercial Operations explained the need for firm natural gas transportation during the 2016-2017 MISO year and IPL's associated arrangements for gas supply. Mr. Dininger and IPL Witness James L. Cutshaw, IPL Revenue Requirements Manager, explained that natural gas transportation costs and fuel costs associated with the HS-7 Refueling will be recovered through the FAC mechanism.

E. System Dispatch and Fuel Mix. Mr. Dininger explained that all competing generators in the Midcontinent Independent System Operator ("MISO") are also subject to the NPDES requirements. Hence, IPL expects that these costs will be priced into offers from other market participants and, therefore, these costs should increase the overall price level in the market and have little impact on the generation of the Petersburg plant. Mr. Dininger testified that the HS-7 Refueling is expected to increase its dispatch cost due to the price level of delivered natural gas over coal. He said IPL anticipates that HS-7 will run more like a peaking unit than its current base load level, thereby increasing the amount of purchased power and decreasing the level of off-system sales.

Mr. Dininger testified that IPL anticipates that with the HSS Units 5, 6, and 7 fuel conversions to natural gas that natural gas will fuel ten percent and coal will fuel 82 percent of IPL customer needs in 2016. He said the fuel mix will move to 30 percent natural gas and 63 percent coal with the remaining from purchases of MISO, various solar projects, Hoosier Wind Project, and Lakefield Wind Project in 2017. Mr. Dininger explained that the increase in natural gas is primarily due to the addition of the EV CCGT to the fleet in April of that year.

F. Economic Analysis. IPL Witness Ayers presented the modeling and economic analysis undertaken to evaluate the decision whether to retrofit, retire or refuel IPL's coal-fired generating units in light of the cost of complying with the NPDES permit requirements, MATS and other environmental rules and requirements. Ms. Diane Crockett,

¹ The Gap Year is the 12-month period between when Eagle Valley Units 3 through 6 are retired in April 2016 and when the new Eagle Valley CCGT goes in service in April 2017. The Gap Year includes the Summer 2016 and the Winter 2016/2017 peak periods. The capacity position forecast reflected in IPL's filing shows IPL projected to be about 390 MW short of capacity in the Gap Year. As shown on page 12 of IPL's 2014 IRP, to mitigate the MISO Planning Resource Auction price volatility risk, IPL has bilaterally purchased 100 MWs of Zone 6 Zonal Resource Credits at a fixed and known price for the Planning Year ("PY") 2015-2016 resulting in a minimal net capacity requirement. For PY 2016-2017, IPL has purchased 100 MWs of Zone 6 Zonal Resource Credits at a fixed and known price and is nearing completion of an agreement for an additional 200 MW. This results in a net capacity requirement ranging from 50 to 100 MW.

Ventyx Lead Consultant, described the Ventyx model and Ventyx Power Reference Case and explained the modeling underlying the results discussed by Mr. Ayers.

IPL Witness Ayers explained that IPL conducted extensive economic modeling and decision tree analysis to assess the compliance options and costs, including the potential compliance costs that may result from pending or anticipated environmental mandates. Mr. Ayers discussed the methodology, assumptions, and scenarios and alternative resources. Mr. Ayers presented the economic analysis results and discussed other risk and strategic considerations.

Among other things, Mr. Ayers explained the Real option scenario analysis, Probabilistic decision tree and Simple payback analysis IPL used to evaluate the economics of NPDES compliance. He explained that the analysis employed a full life cycle production cost simulation to calculate how the retrofit and alternative resources performed against multiple risk scenarios. Mr. Ayers testified that this compounded risk scenario evaluation also used a real option overlay to incorporate future decision risk mitigation into the risk scenarios to create a real option decision tree. He explained that IPL also performed sensitivity analysis around the scenario results. Mr. Ayers stated that the probabilistic decision tree generated a comparative single expected value between the retrofit and resource alternatives. He said the simple payback evaluation was added to supplement the more detailed evaluations, by providing a direct and more transparent near term cost/benefit perspective.

Mr. Scott and Mr. Ayers explained that the Company has determined that, when the updated cost estimates for the necessary water treatment systems and other steps that would be required to comply with NPDES are taken into account, the HS-7 retrofit authorized in Cause No. 44242 is no longer the reasonable least cost method of compliance when considering the impact of the combination of the MATS Rule, NPDES requirements, and other pending rules that are influenced by the continued use of coal as a fuel at HSS. Mr. Scott and Mr. Ayers testified that due to this change in circumstances, IPL's Compliance Project includes the refueling of HS-7 to natural gas as well as the other actions discussed in IPL Witness Fink's testimony. Mr. Ayers stated that the proposed Compliance Project is the reasonable least cost plan to comply with the environmental mandates and to meet the future needs of IPL's customers.

G. Estimated Cost of Compliance Project.

1. Total Cost Estimate. Mr. Scott testified that IPL expects the cost of the Compliance Project to total approximately \$257.99 million for the water treatment and control measures, which are referred to as the "Water Control Component". He said the HS-7 Refuel cost estimate is approximately \$74.0 million. As further discussed below, the compliance costs include the costs incurred to preserve the continued operation of HS-7. The total Compliance Project estimate is \$331.96 million.²

² These estimates do not include Allowance For Funds Used During Construction ("AFUDC") and as discussed below were updated in IPL's rebuttal.

Mr. Scott discussed how the cost estimates were developed and the steps taken by IPL to verify the HS-7 Refuel cost estimate. Mr. Scott explained Owner's Costs, described the Owner's Contingency and discussed the estimated O&M costs for the Compliance Project. Mr. Scott concluded that the estimated cost for the Compliance Project is reasonable.

Mr. Scott's testimony was supported by the testimony of Mr. Fink and Ms. Paula M. Guletsky, Sargent & Lundy, LLC ("S&L") Vice President and S&L's Senior Project Director for IPL. Mr. Fink addressed the cost estimate for the Water Control Component. He testified that the Engineering, Procurement, and Construction ("EPC") bid for the Water Control Component, while higher than the CH2M HILL estimates of the EPC scope, is well within the accuracy range of the CH2M HILL estimates. He explained that it is typical for cost estimates to differ as projects are more thoroughly defined, as was the case from when CH2M HILL conducted the Class 4 estimate of the Compliance Strategy Plan to when the EPC firm bid the project.

Ms. Guletsky presented S&L's cost estimate for IPL's HS-7 Refueling Project. She described the project, the conceptual design study and capital cost estimate, unit performance expectations and the capital costs that IPL would incur to comply with the MATS if HS-7 were to continue firing coal. Ms. Guletsky explained that S&L used the same process to develop the HS-7 Refueling cost estimate that S&L used to prepare the HSS Units 5 & 6 refueling cost estimate. She discussed the technical basis of the cost estimate, the input parameters and assumptions, transportation of natural gas, and demolition costs. Ms. Guletsky discussed the use of vendor quotes and explained the other costs included in the estimate. She explained the cost escalation and contingency. She concluded that HS-7 can be converted to natural gas firing and achieve full load. She testified that S&L's cost estimate is a reasonable determination of the cost of the refueling project. She concluded that the conversion will allow the unit to comply with all applicable environmental regulations, including emission limits required by the MATS Rule.

2. Cost Incurred To Preserve Ongoing Operation of HS-7. Mr. Scott and Ms. Oliger explained that per Agreed Orders the compliance date for the new water quality based effluent limits ("WQBELs") for Petersburg and Harding Street Generating Stations is September 29, 2017. Ms. Oliger and Mr. Fink explained that this schedule was granted by the Indiana Department of Environmental Management ("IDEM") based on IPL input and CH2M HILL experience with the time needed to select, permit, procure, construct and startup a wastewater treatment system of the magnitude and complexity needed to meet the limits.

Mr. Scott and Mr. Fink explained that the NPDES compliance analysis was complicated by the fact that approximately one year of testing and other work was necessary to gather information over the range of station operating conditions needed to determine the basis of design, to evaluate proven and unproven control technologies, to balance their costs and risks of compliance, to evaluate possible regulatory relief options with regulators (such as relocating the stations' outfalls to larger receiving bodies), and to conduct treatability testing. Mr. Scott added that the compliance analysis was further complicated by the fact that the new NPDES permit limits do not account for potential impacts associated with upcoming federal effluent guidelines as described by Ms. Oliger.

Mr. Scott explained that although the need for NPDES compliance was anticipated in IPL's MATS compliance case (Cause No. 44242), the costs and method of compliance was in the early phase of investigation at the time of that case. Mr. Scott and Mr. Fink explained that

IPL took a preliminary estimate of the cost of NPDES compliance into consideration in developing its MATS compliance plan in Cause No. 44242.

Mr. Scott and Mr. Fink explained that while the Company was able to move the NPDES compliance deadline to September 29, 2017, to allow for testing, the Company remained subject to the April 2016 deadline for compliance with the MATS Rule. Mr. Scott explained that following issuance of the Commission's order approving the MATS Plan, the Company continued its efforts to develop a NPDES compliance plan. He said this included the completion of the pilot test field work in November 2013 as well as the actions taken to preserve compliance options. Mr. Scott and Mr. Fink explained that as the compliance investigation continued, the estimated cost of compliance increased, particularly if HS-7 were to continue operating as a coal-fired unit. Mr. Scott said IPL assessed options to retire or refuel HS-7 and worked to firm up the cost of NPDES compliance through a competitive EPC solicitation and by obtaining two estimates of the cost to refuel HS-7.

Mr. Scott explained that as IPL further assessed NPDES compliance, IPL established a change order for the MATS construction project to delay the HS-7 MATS work as long as possible to still be able to comply with the MATS Rule but to reduce the amount of costs that would be incurred prior to determining whether the MATS and NPDES retrofits continued to be the reasonable least cost plan. He said this provided time to assess NPDES compliance options while maintaining the option to proceed with the MATS EPC Contract that was already in place. Mr. Scott also discussed the negotiations with IEP, the MATS EPC Contractor, to cancel the HS-7 portion of the MATS EPC Contract.

Mr. Scott also explained the steps taken by the Company to ensure timely compliance with the NPDES requirements at HSS if HS-7 remained a coal-fired unit. He testified that IPL began a project to convert to dry ash handling systems at HSS because these systems would have been necessary for HS-7 to comply with the NPDES as a coal-fired unit. He explained that this project was suspended, similar to the suspension of the MATS construction for HS-7, to allow the Commission to consider IPL's proposal to convert HS-7 to natural gas. He explained that IPL incurred these costs to assure that it would be in a position to timely comply with this Federal mandate and maintain the availability of the generation to meet customers' need for electricity and maintain transmission reliability.

Mr. Scott testified that this was a prudent strategy. He stated that IPL now knows with greater certainty what the costs would be for NPDES compliance if HSS were to continue to use coal as a fuel. He said the EPC contract for NPDES compliance was developed with both fuel options for HS-7 to give accuracy in the decision analysis. He explained that while there are still costs for NPDES compliance at HSS using natural gas as a fuel, many wastewater streams associated with using coal as a fuel will not be present, resulting in a far lower capital investment (approximately \$34M vs. \$174M) in wastewater treatment facilities and also saving the cost of the MATS investment in HS-7, less the cost incurred to preserve the coal option until the economics became clear.

3. Net Inventory Costs Incurred In Connection with HS-7 Refueling.

Mr. Cutshaw explained that IPL will likely incur expense for inventory which cannot be utilized in connection with the conversion of HS-7 from coal to natural gas component of the proposed Compliance Project. He explained that IPL is still analyzing inventories at HSS to determine

how to minimize the cost of inventory that will not be used for the refueled unit. He said IPL will endeavor to reduce the amount of such inventory by using it at Petersburg Generating Station or selling it to others. Mr. Cutshaw testified that once the amount and plan to address are determined, IPL will present this information to the Commission for recovery of these inventory costs incurred in connection with the federally mandated compliance project.

H. Compliance Project Management.

1. Water Control Component. Mr. Scott discussed the process used to select an EPC contractor for the Water Control Component of the Compliance Project. Mr. Scott provided a copy of the firm price EPC Contract and explained that the contractor's right to seek compensation over and above the firm price is limited. Mr. Scott explained that through the EPC contract, IPL will be authorizing the procurement of certain special equipment and specialty materials such as titanium needed for the Project. Mr. Scott explained that IPL will manage the construction of the Water Control Component using the EPC management practice that is currently in place for the projects approved in Cause Nos. 44339 and 44242.

2. Refueling. Mr. Scott explained that the scope of the HS-7 Refueling is similar to the HS-5 and HS-6 Refueling in which IPL is currently engaged. He explained that similar to the HS-5 and HS-6 Refueling Project, IPL will have a construction management team, supported by the Owner's Engineer, S&L, to ensure that the contractors live up to their contractual obligations.

I. Construction Schedule. Mr. Scott testified that the HS-7 Refueling work will follow the HS-5 and HS-6 Refueling approved in Cause No. 44339. He said the HS-7 Refueling construction is scheduled to begin in February 2016 to allow conversion from burning coal to burning natural gas before summer 2016.

Mr. Scott explained that the installation of the new wastewater treatment technology and operational changes at the Harding Street and Petersburg Generating Stations is scheduled to be completed no later than the compliance deadline of September 29, 2017. He said IPL has made financial commitments for limited notices to proceed, which are necessary to attain the scheduling and compliance deadlines. He stated that the monthly contractual commitment increases significantly after June 30, 2015. Mr. Scott concluded that completion of the regulatory process by July 31, 2015, would support timely compliance and minimize risk.

J. Public Convenience and Necessity. Mr. Scott explained that the Compliance Project will enable IPL to achieve reasonable and cost-effective compliance with environmental regulations and allow the Company to continue providing adequate and reliable electric service. He testified that the Water Control Component of the proposed Compliance Project furthers the public policy objectives underlying the Federal environmental regulation of water quality. He explained that the HS-7 Refueling fits with IPL's capacity needs. Because HS-7 will be fueled by clean natural gas, the Project will further diversify IPL's resource mix and benefit the environment by providing a new source of clean energy in Indiana. He stated that because HSS has long been used for the generation of electricity, refueling HS-7 will not require the development of a greenfield site. He added that the HS-7 Refueling permits use of existing infrastructure, such as land, available water, an existing natural gas pipeline, and transmission and interconnection infrastructure. IPL Witness Holtsclaw explained that HSS is directly

connected to the IPL load zone. As a result, the HS-7 Refueling would provide an important component in meeting transmission system reliability needs of IPL's service area. Mr. Scott concluded therefore, the public convenience and necessity and the public interest require that IPL be granted a certificate authorizing it to complete the HS-7 Refueling and Water Control Components of the Compliance Project. Mr. Fink also testified that the public convenience and necessity will be served by the proposed environmental compliance. Based on his analysis, Mr. Ayers also testified that the proposed Compliance Project serves the public interest.

K. Ongoing Review. Mr. Scott explained that IPL is currently engaged in an ongoing review process in accordance with the Commission's Orders in Cause Nos. 44339 and 44242. He stated that IPL proposes ongoing review also be conducted for the proposed Compliance Project. He explained that IPL proposes to submit progress reports and any revisions to the cost estimates. He said the report will be similar to the reports provided in the existing ongoing review process. Mr. Scott explained that while it is his understanding that the federally mandated requirements statute does not expressly address ongoing review, IPL proposes to keep the Commission informed of the Water Control Component status by including the progress reports and any revisions to the cost estimates with the Company's ongoing cost recovery filing.

L. Accounting and Ratemaking. Mr. Cutshaw explained IPL's request for: authority to timely recover 80 percent of the capital, operating, maintenance, depreciation, tax and financing costs (revenue requirement) incurred as a result of the Compliance Project in accordance with Ind. Code § 8-1-8.4-7(c)(1) through IPL's Environmental Compliance Cost Recovery Adjustment ("ECCRA"); authority to create a regulatory asset for the remaining 20 percent of the capital, operating, maintenance, depreciation, tax and financing costs (revenue requirement) for the Compliance Project not timely recovered through the ECCRA, with carrying costs pursuant to Ind. Code § 8-1-8.4-7(c)(2), until such costs are reflected in IPL's retail electric rates; and authority to create regulatory assets to record post-in-service AFUDC, both debt and equity, and deferred depreciation associated with the Compliance Project until such costs are reflected in IPL's retail electric rates or the ECCRA. Mr. Cutshaw also explained IPL's request for authority to create a regulatory asset for compliance costs incurred for the HSS MATS compliance authorized in Cause No. 44242 and compliance costs incurred to ensure timely compliance with the NPDES requirements at HSS if HS-7 remained a coal-fired unit. Mr. Cutshaw proposed the regulatory asset would be amortized over a period of ten years and included in the recoverable Compliance Project costs in this Cause as discussed above. In the alternative, Mr. Cutshaw said IPL requests that the above-referenced MATS compliance costs be recoverable as part of the MATS Compliance Project costs approved in Cause No. 44242.

Mr. Cutshaw stated that while the Compliance Project is not a Clean Coal Technology ("CCT") Project, cost recovery in the ECCRA mechanism is extremely similar to that allowed by Ind. Code ch. 8-1-8.4, and using this existing vehicle avoids the need to create a new tracking mechanism. He said after the Compliance Project has been under construction for at least six months, and approximately every six months thereafter, IPL will certify its costs, inclusive of AFUDC, to the Commission and request approval of appropriate rate treatment in its ECCRA filings.

Mr. Cutshaw explained IPL's proposal regarding depreciation on the Compliance Project (at 12), IPL's proposed treatment of O&M expenses for the Compliance Project and discussed how the Compliance Project will be incorporated into the ECCRA. Mr. Cutshaw testified that

demolition costs included in the CPCN estimate of Compliance Project construction costs have been specifically identified and excluded in the cost recovery schedules. He explained that consistent with what was approved in Cause Nos. 43403 and 44242, demolition costs will not be reflected in the construction costs upon which IPL will earn a return in the ECCRA.

Mr. Cutshaw explained that IPL proposes to use the computation of the weighted cost of capital for the Project using the same cost rate of book equity as IPL agreed and the Commission authorized in Cause No. 43403 (12.10%) for the inclusion in future ECCRA filings of the computation of the weighted cost of capital. He said this computation is also utilized for purposes of determining the return component and the Revenue Conversion Factor for the Petersburg Unit 4 FGD Enhancements and the MATS Compliance Project in ECCRA filings. Mr. Cutshaw said this weighted cost of capital would be applied to the timely recovery through the ECCRA of 80 percent of the revenue requirement of the Compliance Project and would also be used for the carrying costs on the remaining 20 percent of the revenue requirement for the Compliance Project not timely recovered through the ECCRA.

Mr. Cutshaw explained that consistent with the approvals granted in Cause Nos. 42170, 42700, 43403 and 44242, and consistent with Ind. Code § 8-1-8.4-7(c)(1), IPL will reflect the authorized return on property from the most recent ECCRA orders (which would now include the Compliance Project) in determining the total authorized net operating income level to be utilized in the Ind. Code § 8-1-2-42(d)(3) test.

Mr. Cutshaw explained that IPL anticipates that the impact from recovery of 80 percent in the ECCRA will be a compound annual growth rate of 0.4% per year over the period 2015 to 2017 for the typical residential customer using 1,000 kWh per month. Mr. Cutshaw also prepared an estimate of the anticipated rate impact related to the deferral of the remaining 20 percent of the revenue requirement for the Compliance Project and recovery in a future rate proceeding. He projected that the future rate order would include a regulatory asset of \$6.1 million with an annual revenue requirement of \$2.7 million, and would result in an impact of \$0.20 per month for a typical residential customer using 1,000 kWh per month beginning in 2018.

Mr. Cutshaw also prepared an estimate of the financial effect if the timely recovery proposed by IPL were not approved by the Commission.

5. Stipulation Between IPL and Sierra Club. As explained by Mr. Scott, the Stipulation between IPL and the Sierra Club sets forth the Sierra Club's agreement not to challenge IPL's request for a CPCN and the associated accounting and ratemaking treatment sought by IPL in this proceeding, and sets forth IPL's agreement to provide certain information about ongoing compliance analysis. He said IPL agreed to submit an Environmental Compliance Progress Report concerning IPL's plans to comply with the 2010 sulfur dioxide non-attainment state implementation plan ("SIP") and the CCR. He said these potential requirements were evaluated and the analysis shows the Compliance Plan presented in this proceeding is a reasonable least cost plan that should be approved. Mr. Scott explained the Stipulation provides a path to facilitate the Parties' communications and understanding of future compliance requirements and options. He said the Stipulation provides that the progress report will be submitted to the Commission by December 31, 2015, and disclosed to the OUCC and the intervenors in this proceeding, subject to the protection of confidential information.

He said the Stipulation provides that IPL will not oppose Sierra Club's intervention in any subsequent CPCN docket(s) that address the compliance plan associated with the Environmental Compliance Progress Report, and will disclose its environmental compliance plan, cost projections, and net present value analyses to Sierra Club and CAC in those dockets. He said the Stipulation provides that the Environmental Compliance Progress Report is only an information report and by requiring such a report the Commission is not authorizing any cost recovery to comply with the aforementioned environmental compliance plan.

Mr. Scott testified the Stipulation is in the public interest. He said from IPL's perspective, the Sierra Club's willingness to enter into the Stipulation underscores the reasonableness of IPL's proposals in this Cause. He said the Sierra Club participated in Cause Nos. 44242 and 44339 and has been a vocal opponent of IPL's use of coal to fuel the generating units needed to meet IPL's customers' need for electricity. He said the Stipulation was reached after good faith efforts and arms' length discussions and provides a resolution that avoids the time and expense of litigation and narrows the contested issues in this proceeding. Mr. Scott recommended the Commission find the Stipulation to be reasonable and in the public interest and approve it.

6. OUCC's Evidence.

A. Recommendations. Anthony A. Alvarez, Utility Analyst for the OUCC's Resource Planning and Communications Division ("RPC"), discussed IPL's generating capacity requirements, provided an overview of Petersburg Station and HS-7 and discussed the proposed Compliance Project including the gas-fired conversion and environmental control equipment. Mr. Alvarez presented the OUCC's recommendations that the Commission:

- (1) approve IPL's proposed NPDES compliance projects specific to Petersburg, Harding Street, and Eagle Valley Generating Station;
- (2) approve IPL's request for a CPCN for its proposed NPDES compliance projects including new wastewater treatment technology, operational changes, and stormwater management practices specific to the Petersburg, Harding Street, and Eagle Valley Generating Stations;
- (3) approve IPL's request for a CPCN for its proposed conversion of the HS-7 boiler from coal-fired to gas-fired contingent on the recommendations in his testimony;
- (4) approve IPL's project cost estimate of \$73.98 million (excluding AFUDC) not to exceed \$92.475 million (or 25%, excluding AFUDC) for its proposed HS-7 gas conversion project; and
- (5) approve IPL's request for ongoing review and require IPL to provide semi-annual reports as discussed above.

B. Environmental Regulation. Ms. Susann Brown, Utility Analyst in the OUCC RPC Division, evaluated, from an environmental compliance perspective, IPL's proposal to refuel HS-7 to natural gas; assessed IPL's proposed plan to comply with NPDES permit requirements through new wastewater treatment technology, operational changes, and

stormwater management practices at HSS and at Petersburg Generating Station; discussed current and future environmental regulations and requirements; and presented recommendations.

She explained that the HSS NPDES compliance project costs are approximately \$34 million if HS-7 is a natural gas-fired generator and approximately \$174 million if HS-7 is a coal-fired generator. She said the conversion of HS-7 to natural gas will result in fewer wastewater streams. She added that coal-fired generation wastewater streams such as Flue Gas Desulfurization (“FGD”) wastewater, fly ash wastewater, and bottom ash wastewater streams are all eliminated by converting HS-7 to natural gas. She stated that fewer wastewater streams results in lower costs to treat wastewater and therefore lower overall NPDES compliance costs.

Ms. Brown discussed why IPL could not obtain a fifth year MATS compliance extension for HS-7 from the EPA and explained how U.S. Supreme Court review of the MATS Rule could affect IPL’s environmental compliance plans. She said the OUCC strongly encourages IPL to review its environmental compliance plans whenever a change in environmental regulation occurs.

Ms. Brown said IPL knew when it filed Cause No. 44242 that NPDES compliance projects would be required at HSS and Petersburg but noted Mr. Scott’s testimony that the cost and method of compliance was not yet determined. Ms. Brown discussed the main environmental impacts of HS-7 conversion to natural gas and said the OUCC agrees with IPL’s proposal. She said the wastewater treatment costs to comply with the new NPDES permits are significantly lower for a natural gas-fired generator than the wastewater treatment costs for a coal-fired generator.

Ms. Brown agreed that the NPDES compliance projects are required to comply with IPL’s NPDES permit renewals at HSS and Petersburg and noted the estimated costs and compliance deadline. Ms. Brown discussed the type of information in NPDES permits and summarized how NPDES permit limits are established. Ms. Brown discussed how the wastewater management compliance strategy alternatives were evaluated and described IPL’s proposed compliance plan and associated risks. She testified that the proposed operational, stormwater, and wastewater compliance strategies will allow IPL to meet the new limits in its NPDES permits at both HSS and Petersburg. She added that the wastewater strategies chosen may help mitigate future wastewater limits and other wastewater-related regulation.

Ms. Brown discussed current and future environmental regulations and stated that IPL has included estimated costs associated with those regulations in its economic analysis. Ms. Brown described the EPA’s Clean Power Plan, its effect on the viability of Petersburg and HSS, and the OUCC’s agreement with ICF’s CO₂ price forecast and probabilities for 316(b), CCR, and ELG regulations. Brown, at 20-22.

Ms. Brown concluded that the Commission should approve the conversion of HS-7 to natural gas. Ms. Brown also concluded that the Commission should approve IPL’s proposed new wastewater treatment technology, operational changes, and stormwater management practices for Petersburg and HSS to comply with new NPDES permit limits. Finally, she said the OUCC’s recommendations are based on the best environmental compliance information the OUCC has at this time and on their best estimates of future compliance obligations.

C. **HS-7 Refueling.** Mr. Ray L. Snyder, Analyst in the OUCC RPC Division, addressed the engineering and design of the HS-7 Refueling, including without limitation the expected boiler performance, modifications required in the refueling, and the impact of the refueling on efficiency.

Mr. Alvarez testified that the OUCC supports and recommends the approval of IPL's proposed conversion of the HS-7 unit contingent upon the issues discussed in the OUCC's testimony. Mr. Alvarez discussed Cause No. 44242 and stated the OUCC recommends the Commission approve a modification to the CPCN subsequent to any approval of the proposed HS-7 Refueling, and contingent upon the issues discussed in his testimony. Mr. Alvarez explained that the OUCC supports IPL's determination that the proposed HS-7 Refueling project is the best viable option because of (1) the stated capacity issue; (2) the environmental compliance requirements outlined by OUCC witness Brown; and (3) the economic scenarios outlined by OUCC witness Edward T. Rutter, Utility Analyst in the OUCC RPC Division.

D. **Cost Estimates.** Mr. Snyder also addressed IPL's Compliance Project cost estimates. He testified that the Request for Proposal ("RFP") for a firm price EPC contract for the Water Control Component, bid evaluations and selection of EPC contractor were adequately performed. He testified that based on his review of the engineering detail and the comparative pricing contained in the two independent estimates the basis for the overall HS-7 Refueling project estimates appears to be adequate. Mr. Snyder also discussed Ms. Guletsky's testimony, the conversion study and related costs. Mr. Snyder stated that IPL has provided sufficient documentation of engineering and design detail to support its claim of a Class 4 estimate for the HS-7 fuel conversion project with a range of accuracy of +25%/-15%. Mr. Snyder recommended the Commission approve IPL's proposed NPDES compliance projects; approve IPL's proposed gas conversion of HS-7; approve IPL's project cost estimate of \$257.99 million for its proposed NPDES compliance plan projects; and approve IPL's project cost estimate of \$73.98 million for its proposed HS-7 gas conversion project.

Mr. Alvarez stated that to mitigate the impact of IPL's proposed HS-7 gas conversion project, the OUCC recommends that IPL's cost recovery for the proposed HS-7 gas conversion project not exceed 25% above \$73.98 million (or \$92.475 million, excluding AFUDC). He said this coincides with the statutory limit. He said any amounts over the 25% limit shall require justification by IPL and approval by the Commission before being authorized in the next general rate case filed by IPL with the Commission, as set forth in Ind. Code § 8-1-8.4-7(c)(1). He stated that the OUCC recommends that the Commission allow IPL to recover 80% of the total project cost through IPL's ECCRA, and the remaining 20% deferred to its next general rate case.

E. **Economic Analysis.** Mr. Rutter addressed the reasonableness of the modeling process employed by IPL. He said he has no concerns with the validity of the modeling, the selection of modeling scenarios nor the course of action selected. Mr. Rutter testified that he is comfortable that the modeling scenarios have captured and addressed reasonable alternatives to the selected retrofit and refuel plan. He said the plan proposed here is consistent with IPL's 2014 Integrated Resource Plan ("IRP") recently filed with the Commission. He added that the IRP addressed the issues of demand-side management ("DSM") and renewables as a source of generation and modeled the scenarios accordingly. He stated that the retrofit of Petersburg Units 1-4 and the re-fuel of HS-7 were the reasonable least cost plans. Mr. Rutter testified that the IRP modeling was robust and encompassed more than just NPDES

compliance including potential Greenhouse Gas Regulation. He added that the results still suggested the retrofit/refuel scenario was the appropriate course of action. Mr. Rutter stated that both the IRP and NPDES modeling included high, low and base natural gas forecasts and that when he compared these forecasts to publicly available estimates of both government agency and private enterprise, he found the modeled costs were within the range of reasonableness. Mr. Rutter also discussed the various cost estimates utilized in the modeling process and whether the results support IPL's actions taken to timely meet the environmental requirements and address IPL's near-term capacity needs. He also addressed whether there are viable alternatives to the plan adopted by IPL.

F. OUCC Proposed Retroactive Recapture of Depreciation Expense. Mr. Rutter testified that IPL should not be allowed to recover depreciation expense on the capital costs to date for the HS-7 MATS Compliance approved in Cause No. 44242 and any continued recovery of the return on that capital investment should be disallowed. He explained that ratepayers alone should not bear the burden of IPL's attempt at flexibility. He testified that IPL's management is responsible for its decisions on how to meet the present and future needs of its ratepayers in the delivery of safe, adequate and reliable electric service. He testified that simply because those decisions are difficult, IPL should not be able to make flexible, interim decisions without sharing the financial risks associated with those decisions.

G. OUCC Proposed Future Claw back. Mr. Rutter recommended that if the refueling of HS-7 is abandoned prior to 2022, IPL should refund, with interest, to ratepayers any depreciation, amortization or O&M expense as well as any return on the investment already paid by ratepayers.

H. Ongoing Review. With regard to ongoing review, Mr. Alvarez testified that the OUCC recommends IPL also include in its reports updated information of each line item as shown in Table 1 Compliance Project Cost Summary (\$Millions) of Mr. Scott's testimony. He added that IPL should also provide these reports on a semi-annual basis to the Commission and the OUCC.

I. Accounting and Ratemaking. Mr. Wes R. Blakley, Senior Utility Analyst for the OUCC, testified regarding IPL's proposed accounting and ratemaking treatment for the Compliance Project. He described IPL's proposal to recover 80% of the costs of the Compliance Project through the ECCRA, and to defer the remaining 20% of the Compliance Project investment until these costs are rolled into base rates. He said that based on Mr. Cutshaw's testimony, the ECCRA tracker portion related to the Compliance Project will end in 2018. He said the OUCC had no concerns with the tracker mechanism being included in the ECCRA tracker. He testified the next base rate case is estimated to occur in 2018 and will capture these deferrals in base rates.

7. IPL Industrial Group Evidence.

A. Methodology for Determining Return Component. Mr. Nicholas Phillips, Jr., Managing Principal of Brubaker & Associates, Inc. discussed the return on equity ("ROE") reflected in IPL's proposed weighted average cost of capital. He said the Company's proposed ROE of 12.1% is substantially overstated and does not reflect the current market and regulatory environment. In support, Mr. Phillips provided a table demonstrating that the average

authorized return for electric utilities over the last 20 years has been trending downward, noting that regulators appropriately have captured the industry and capital market trends in authorized lower ROE. He said in 2014, the authorized returns have been approximately 9.92%. He stated that the AFUDC rate used by IPL contains an equity component and a debt component and the equity component should use a 10.2% ROE in compliance with the Order in Cause No. 44339.

B. Cost to Preserve HS-7 Continued Operation. Mr. Phillips summarized IPL's request for authority to create a regulatory asset for both the costs approved in Cause No. 44242 as well as other costs incurred for the NPDES requirements at HS-7 if it had remained a coal fired unit. He noted that IPL is seeking to recover a return on and return of those expenditures. He recommended that IPL not be allowed to receive a return of or on these costs because the expenditures did not and will not result in the completion of a project that will be used and useful in the provision of electric service.

8. IPL Rebuttal.

A. Cause No. 44242 Cost Estimate Update. Mr. Scott explained that IPL's actions to obtain approval of a MATS Compliance Plan in Cause No. 44242 preserved the continued operation of HS-7 in compliance with the MATS Rule effective with its April 2016 compliance deadline. He explained that IPL pursued the change in the HS-7 compliance plan as part of the instant docket because the change is driven largely by the NPDES compliance. He said IPL must comply with the NPDES requirements at Petersburg and HSS. Therefore, IPL considered it efficient to file one proceeding about NPDES requirements. He added that the ongoing review of the Projects approved in Cause No. 44242 is being conducted with IPL's ECCRA filings docketed as Cause No. 42170 ECR X and the addition of the NPDES issues to the ECR proceeding would not have been efficient. He viewed Mr. Alvarez's testimony not as a complaint about the approach taken by IPL, but as a request to understand the process for updating the cost estimate in Cause No. 44242 if the HS-7 Refueling is approved.

Mr. Scott explained that IPL agrees that if approved, the proposal to refuel HS-7 to operate on natural gas will provide for the continued operation of HS-7 and will render it unnecessary for IPL to proceed further with the HS-7 retrofit authorized in Cause No. 44242. He said IPL also agrees that it is reasonable to update the cost estimate approved for the Cause No. 44242 projects as part of the ongoing review process underway in Cause No. 42170 ECR X. Mr. Scott also stated that IPL agreed with Mr. Alvarez's request that IPL keep the OUCC and the Commission apprised of negotiations with the MATS EPC Contractor and provided information on the reduction in the firm price of the EPC contract for that project. He also explained that this information is being provided as part of the ongoing review process underway in Cause No. 42170 ECR X.

B. Estimated Cost of HS-7 Refuel.

1. Accuracy Range. Mr. Scott clarified the confidence level and accuracy range discussed by Mr. Alvarez. Mr. Scott agreed with Mr. Alvarez that it is reasonable to require the Company to justify increases beyond the upper end of the range. He said the Company remains confident in the cost estimate and associated range presented in this Cause. Mr. Scott explained that since filing his direct testimony, IPL revisited the plan to self-manage the entire refueling project. He said that through a competitive RFP process, IPL has selected

IWP as an EPC Contractor with a scope of work that includes construction of the boiler modifications and other work needed to refuel HS-7 as well as HS-5 and HS-6. He said that when the three refueling projects are considered together the total cost estimate has increased approximately 1% and remains well within the +25% accuracy range. He stated that IPL proposes the Commission approve the HS-7 cost estimate presented herein. He said the ongoing review process will allow the Commission to review all three refueling projects. He said IPL will update the Commission as part of the ongoing review process on how the EPC contract costs are spread across the three units as part of its next ongoing review report for the HSS Units 5 & 6, which is scheduled to be filed in May 2015.

Mr. Scott explained that IPL has had good experience using the EPC method of contracting. He stated that although unforeseen conditions and events can arise, there is less price risk. He said the refueling of the three units at HSS will be done consecutively and in a short time frame. He testified that a high degree of coordination is necessary and consolidating this work with one contractor will be more efficient and will result in less conflicts between contractors that otherwise would be working in a congested site.

2. Net Inventory Costs Incurred in Connection with HS-7 Refueling.

Mr. Scott added that after the refueling projects are completed, IPL will incur the costs associated with materials and supplies that are not necessary for the operation of the refueled unit. He said these costs are primarily the inventory costs of spare parts and equipment necessary to have on hand while the plant uses coal. He said an inventory of spare parts is necessary and prudent to be able to make timely repairs for the reliable and continuous operation of the plant. He stated that examples of the spare parts needed include SO₂ components, soot blower parts, coal handling and pulverizing and ash handling parts and equipment. He said the importance of HS-7 to the ongoing operation of IPL's system rendered it particularly appropriate for IPL to maintain this inventory while the unit is operated on coal. Mr. Scott explained that where applicable, some of these parts and equipment will be transferred to the Petersburg Generating Station. He said the remainder will be scrapped or sold. He said a preliminary estimate of the net cost is approximately \$4.8 million but the exact amount will not be known until after the HSS is refueled.

Mr. Cutshaw said that IPL will take steps to minimize the net inventory costs which cannot be transferred or sold and must be expensed in connection with the conversion to meet Federal mandates. He said IPL proposes to reflect these incurred expenses in future periodic ECCRA filings, noting that the amount is less than the O&M expense savings discussed in Mr. Scott's direct testimony.

3. IG Proposed Cost Disallowance.

Mr. Scott explained that HS-7 is currently in service operating as a coal-fired unit. IPL proposes to continue to operate this unit on natural gas because doing so permits IPL to economically comply with environmental mandates. He explained that HS-7 is particularly important to IPL's provision of retail electric service and the costs challenged by Mr. Phillips were incurred as part of the overall compliance project analysis and actions undertaken to assure the continued availability of this critical unit.

Mr. Scott explained that IPL did not and does not have the option to comply with either the MATS Rule deadline (April 2016) or the NPDES requirements deadline (September 2017) by retiring HS-7 and replacing it with another generating unit, a transmission system solution or

a market purchase. He stated that while IPL proceeded prudently to analyze proposed and final regulations, assess options and develop cost estimates, given the short compliance windows imposed by the environmental mandates it was important for IPL to take the steps it did to assure the continued operation of HS-7.

Mr. Scott discussed the costs IPL incurred to continue to operate HS-7 for the benefit of customers and explained why these costs were necessarily incurred to continue the operation of HS-7.

Mr. Craig Jackson, IPL's Chief Financial Officer and Director, Vice President, and Chief Financial Officer of AES US Services, LLC, testified that the purpose of the prior approval process is to give IPL the "green light" for the retrofit project and ensure cost recovery with no hind-sight look back. He said any change in this strong and consistent regulatory process, including a disallowance of costs that were incurred in reliance on the Commission's Order in Cause No. 44242 to assure the continued and reasonable least cost operation of HS-7, could have negative ramifications on the Company's credit ratings and on other utilities within the State of Indiana if the rating agencies perceive this action as a change in the regulatory framework of this Commission.

Mr. John Reed, Chairman and Chief Executive Officer of Concentric Energy Advisors, Inc. and CE Capital Advisors, Inc. responded to Mr. Phillips' proposed cost disallowance from a regulatory policy perspective. Mr. Reed explained that Mr. Phillips' proposal is based on an overly narrow and incomplete interpretation of the used and useful standard and would, if adopted, lead to a perverse and uneconomic set of incentives under which utilities would be penalized for pursuing prudent courses of action that benefit customers.

Mr. Reed stated the treatment requested in this case by IPL for its environmental costs is consistent with the treatment accorded for similar environmental compliance costs incurred by Indiana Michigan Power Company and approved by the Commission in Cause No. 44331 in November 2013.

Mr. Reed explained that Mr. Phillips does not take the position that the costs associated with the MATS Rule requirements on HS-7 were imprudently incurred by IPL, but rather recommends the Commission determine cost recovery eligibility strictly on the basis of whether or not the costs resulted in a used and useful asset.

Mr. Reed reviewed Indiana's used and useful standard. He explained how the circumstances and facts specific to this case support full recovery on and of the HS-7 costs incurred by IPL. In particular, he noted that in Cause No. 44242 the Commission found that IPL's plan to retrofit HS-7 to permit the unit to continue to operate in compliance with the MATS Rule was reasonable and necessary. He said that IPL ultimately determined based on continued analysis that the HS-7 retrofit was not the best method of compliance when considering the impact of the combination of the MATS Rule, NPDES requirements and other pending rules that impact the continued use of coal at HS-7, and that IPL decided to pursue a natural gas refueling of HS-7. He said these circumstances were largely beyond IPL's control, as environmental mandates and the options available to comply with these mandates are highly uncertain and variable, as discussed by Ms. Brown. He said IPL responded appropriately to new information and compliance costs and altered its approved course of action in favor of a lower-

cost compliance option. He noted that if these new circumstances had not intervened and IPL had continued with the Commission-approved project to retrofit HS-7, IPL would unquestionably have realized a return of and on the investment via IPL's ECCRA and later through basic rates.

Mr. Reed testified it would be completely inappropriate regulatory policy to disincent utilities from responding to changed circumstances and acting in the best interests of their customers. He said putting a utility at risk for cost recovery if it prudently changes course creates a counterproductive bias against pursuing the most economical alternative and would inevitably lead to higher costs for consumers. He also discussed the unintended consequences that can arise from such departures from the regulatory compact as it applies in each state.

Mr. Reed concluded that based on the facts of this case it is appropriate that IPL be allowed full recovery on and of its prudently-incurred compliance costs for HS-7. He said the disallowances recommended by Mr. Phillips are inconsistent with sound regulatory policy, would lead to higher costs for utility customers, and should be rejected.

Mr. Cutshaw responded to Mr. Phillips' suggestion that there may be additional expenditures for fly ash conversion and contractual issues related to the preservation of the MATS option at HS-7. He explained that the estimate of HS-7 preservation costs in Mr. Scott's Table 1 in his direct testimony included the appropriate amounts for fly ash conversion and contractual issues. He explained that the \$3.10 million estimate does not include \$1.245 million of project development, testing, and engineering expenditures and \$0.190 million of AFUDC which have been reflected in the rate base in recent ECCRA filings in accordance with the Order in Cause No. 44242. He said these costs were prudently incurred and return of and on these costs through the ECR in accordance with the Order in Cause No. 44242 is appropriate. He provided an attachment showing the amounts included in ECR 22, 23, and 24 and the related AFUDC for a revised total regulatory asset of \$4.743 million, which tied to Table 1 in Mr. Scott's rebuttal testimony. He explained that the project development, testing and engineering expenditures, and related AFUDC, were not included in the estimate of the regulatory asset in IPL's direct testimony because at the time of filing the testimony in this case these costs were appropriately reflected in the ECCRA. Mr. Cutshaw summarized how the clarification to include these costs currently reflected in the ECCRA would impact the amount of cumulative construction costs and discussed why double recovery would not occur.

4. OUC Proposed Retroactive Recapture of Depreciation Expense.

Mr. Reed responded to Mr. Rutter's recommendation that IPL be denied the recovery of depreciation expenses to date for the HS-7 MATS Rule compliance and the disallowance of any continued recovery of the return on this capital investment. He said Mr. Rutter's suggestion that utilities should be penalized for acting in a prudent manner is simply improper; the uncertainty of complying with environmental regulations requires that utilities simultaneously preserve reliability while responding to market developments. He said this strategy necessarily involves incurring costs for alternatives that may ultimately not be pursued, and this risk-mitigation based approach to resource planning should be encouraged, not discouraged. He said denying the recovery of costs associated with a strategy that is responsive to changing conditions would penalize utilities who delay or forego a strategy that is no longer the best option.

Mr. Cutshaw also responded to Mr. Rutter's recommendation that IPL not be allowed to recover depreciation expense on the capital costs to date for the HS-7 MATS Compliance, and

Mr. Rutter's recommended disallowance of any continued recovery of the return on that capital investment. He said these costs were prudently incurred under the authority of Cause No. 44242 and IPL should receive recovery of and a return on the capital investment. He said that if the Commission were to determine that a return on that capital investment should not occur, the change should be prospective effective with the date of the Order, not retroactive.

Mr. Cutshaw explained that IPL has not recovered any depreciation expense or a "return of" the capital costs to date for the HS-7 MATS Compliance Project, as shown on Attachment CF-2 MATS filed in ECR 22, 23 and 24. He said that the rates approved in ECR 22, 23 and 24 did include a return on the capital costs incurred as of the rate base cut-off date for those proceedings. He said the most recent filing, ECR-24, reflected \$2.120 million of construction costs and \$0.190 million of AFUDC for the HS-7 project in the ECR rate base for which a "return on" was included in the determination of the revenue requirement of the rates effective with the first billing cycle in March 2015. He said IPL will have another ECR filing before the issuance of an order in this proceeding, and IPL anticipates that HS-7 MATS capital costs of \$4.044 million and AFUDC of \$0.190 million would be reflected in the ECR rate base, but no depreciation or O&M expenses.

Mr. Cutshaw explained that if the Commission approves IPL's proposal to include the HS-7 MATS / NPDES Preservation Costs as a regulatory asset recovered with the Compliance Project in this proceeding, no double recovery would occur because the same recovery mechanism (the ECCRA) would be used. He said that assuming an order is issued in this proceeding this summer, the first ECR proceeding in which the NPDES and HS-7 Conversion costs would be reflected is ECR-26, which would be filed in December 2015 with rates effective in March 2016. He said IPL would remove the HS-7 MATS costs from Attachment CF-2 MATS and include them on a new Attachment CF-2 reflecting the NPDES and HS-7 Conversion costs.

5. OUCG Proposed Future Claw back. Mr. Ayers rebutted the OUCG recommendation that a refund be required if the refueling of HS-7 is abandoned prior to 2022. He explained that this recommendation rests on a flawed premise.

He said the OUCG's testimony implies that the desire for flexibility underlies IPL's proposal to refuel HS-7 to operate on natural gas instead of retrofitting the unit to continue to operate on coal. Mr. Ayers explained that premise is not correct. He stated that the reason IPL is making the proposal is 1) because HS-7 is necessary for the continued operation of the IPL system; and 2) information received after Cause No. 44242 was closed shows that refueling the unit to operate on natural gas is a lower cost compliance option. He stated that HS-7 either needs to be retrofitted for MATS compliance as authorized in Cause No. 44242 or refueled to bridge the critical 2016-2017 reliability constrained Gap Year. He said there are no other viable alternatives.

Mr. Ayers explained that his analysis identified the refuel as the low cost Gap Year solution both as a short term solution and as the most likely long term solution. He stated that from a long term perspective (i.e., through HS-7's 2033 planning life) the analysis showed that the refuel is the reasonable least cost long term solution under most future scenarios and on a probabilistic expected value basis. He said he discussed flexibility only because it is a side benefit. Stated another way, for the sake of argument, if the refuel is retired in 2022 and replaced by a CCGT or other resources, it will still have served as the reasonable least cost

resource, and this cost-effective refuel is in the best interest of IPL customers to fill the critical 2016-2017 reliability gap and provide a bridge to a new resource. Mr. Ayers concluded that the OUCC's recommendation should be rejected because the analysis shows there is no viable solution, short or long term, economically superior to the HS-7 refuel. He said the other parties have not challenged that this is a prudent resource decision and it is not appropriate to subject this decision to hindsight analysis. Finally, Mr. Ayers explained that notwithstanding the discussion above, there is no reason to expect that a cost effective gas-fired resource with additional load serving reliability benefits located within IPL's transmission system would need to be replaced over the course of the next 7 years.

Mr. Reed also rebutted Mr. Rutter's recommendation that if the refueling of HS-7 as proposed is abandoned prior to 2022 IPL should refund, with interest, any depreciation, amortization or O&M expense as well as any return on the investment earned as a result of these costs being reflected in the ratemaking process. He said Mr. Rutter's "wait and see" approach to determining prudence and cost recovery is a clear violation of sound regulatory policy and should be rejected in its entirety. He further rejected Mr. Rutter's position that the Commission's Order in Cause No. 44242 requires this disallowance of cost recovery or "risk sharing". He said the 44242 Order does not direct prudently-incurred costs should be disallowed under these circumstances. Further, he said the kind of after-the-fact risk sharing that Mr. Rutter is proposing creates such asymmetrical risk for investors, and abandons all sense of fairness, that the risk premium that would be required to compensate investors for bearing this risk would be quite high. Finally, he explained Mr. Rutter's recommendation ignores the circumstances that led to the modification of the project, and therefore his proposal should be rejected.

C. Accounting and Ratemaking.

1. Methodology for Determining Return Component. Mr. Cutshaw disagreed with Mr. Phillips' assertion that he ignored recent Commission rulings regarding the appropriate ROE for IPL. He explained that he did not identify any Commission findings in Cause Nos. 44242 and 44339 regarding the cost of equity for return and AFUDC which would apply to this proceeding. Further, Mr. Cutshaw specifically identified Commission findings and statements in both of these cases which supported his position that the findings in those dockets are limited to those dockets. Finally, he specifically identified Commission findings and statements in Cause No. 42170 ECR-23 which affirmed IPL's interpretation that the Order in Cause No. 44339 is limited to the construction approved in that docket.

Mr. Cutshaw stated that no party has submitted a detailed cost of equity analysis in this Cause to determine the appropriate cost of equity of IPL, and Mr. Phillips' testimony provided nothing specific to IPL. He noted that IPL has submitted a detailed cost of equity analysis in its pending rate case supporting a 10.93% return on equity, however, the testimony and exhibits of the OUCC and intervenors is not due until July 27, 2015. He stated that Mr. Phillips references an ROE finding in Cause No. 44478, but explained the Commission did not make an ROE determination in that case. Rather, he said the Cause No. 44478 Order addressed terms of a proposed settlement agreement including an agreed upon ROE. Mr. Cutshaw stated that in Cause No. 44242, the Commission noted that on average, Indiana's investor-owned electric utilities, excluding IPL, have a Commission-approved equity return of 10.325%.

Mr. Cutshaw stated that IPL is complying with the Commission's Order in Cause No. 44339. He said IPL is using an AFUDC rate based upon a 10.2% ROE for the Eagle Valley CCGT and the HS 5&6 Conversion, which are the construction projects approved in that order. He said for the remainder of its construction projects IPL is using an AFUDC rate based upon the 12.10% ROE discussed in his direct testimony per the method prescribed by the FERC Uniform System of Accounts. Mr. Cutshaw stated based on the timeline of this proceeding and the pending rate case proceeding, he did not believe a specific cost of equity finding in this Cause will impact retail rates before a cost of equity finding in the rate case proceeding supersedes it. He said if the Commission approved a specific cost of equity for the AFUDC calculation for the projects in this Cause, it would impact retail rates, but the impact on AFUDC would only occur prospectively for the short period between the issuance of an order in this proceeding and the issuance of the order in the rate case.

2. Other Accounting and Ratemaking. Mr. Cutshaw clarified Mr. Blakley's statement that the portion of the ECCRA related to the Compliance Project will end in 2018. He stated that to the extent the Compliance Project does roll from the ECCRA mechanism to basic rates receiving timely recovery of 100% effective January 1, 2018 as he assumed, the collection of 80% (and deferral of 20%) of the forecasted revenue requirement through the ECCRA would cease on January 1, 2018. However, he said the established process of reconciling estimates to actual would result in charges or credits through the ECCRA during 2018 and into 2019. He explained it is not certain that all of the Compliance Project would roll into basic rates as he assumed, because the projected September 2017 completion date for the NPDES projects is beyond the expected final hearing date in the basic rate case including the Eagle Valley CCGT for which a CPCN was authorized in Cause No. 44339. He said the parties in that case and the Commission could provide for the NPDES projects to be included in that case, since the projects will be in-service before the effective date of the new base rates. He stated if that does not occur, the NPDES projects would remain in the ECCRA until the following rate case.

D. Ongoing Review. Mr. Scott said IPL agrees with Mr. Alvarez's recommendation regarding the semi-annual reports. Mr. Scott explained that IPL already provides this level of detail on the MATS projects approved in Cause No. 44242 and those reports are provided in Cause No. 42170 ECR X. Mr. Scott said IPL proposes to provide the semi-annual reports to the Commission and OUCC for the Compliance Project addressed in this Cause as part of that same docket.

9. **Commission Discussion and Findings.** In this proceeding, IPL seeks approval to: 1) refuel HS-7 to natural gas; 2) construct, install and operate new wastewater treatment technology and undertake operational changes to IPL's Petersburg and Harding Street Generating Stations; and 3) proceed with modified stormwater management practices at these facilities (collectively, the "Compliance Project"). IPL seeks a CPCN for its Compliance Project and related accounting and ratemaking treatment under the federally mandated requirements statute (Ind. Code ch. 8-1-8.4). IPL also seeks a CPCN under the Utility Powerplant Construction Act (Ind. Code ch. 8-1-8.5) for the HS-7 Refueling component of the Compliance Project.

A. Stipulation Between IPL and Sierra Club. The Stipulation between IPL and the Sierra Club (Petitioner's Attachment BDS-2R) sets forth the Sierra Club's agreement not to challenge IPL's request for a CPCN and the associated accounting and ratemaking treatment

sought by IPL in this proceeding, and sets forth IPL's agreement to provide certain information about ongoing compliance analysis. As explained by Mr. Scott, the Stipulation provides a path to facilitate the Parties' communications and understanding of future compliance requirements and options. No party opposed Commission approval.

We note that settlements presented to the Commission are not ordinary contracts between private parties. *U.S. Gypsum, Inc. v. Ind. Gas Co.*, 735 N.E.2d 790, 803 (Ind. 2000). When the 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. PSI Energy*, 664 N.E.2d 401, 406 (Ind. Ct. App. 1996)). Thus, the 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. *U.S. Gypsum*, 735 N.E.2d at 795 (citing *Citizens Action Coalition v. Pub. Serv. Co.*, 582 N.E.2d 330, 331 (Ind. 1991)). The Commission's own procedural rules require that settlements be supported by probative evidence. 170 IAC 1-1.1-17(d). Therefore, before the Commission can approve the Settlement Agreement, we must determine whether the evidence in this Cause sufficiently supports the relief requested and the conclusions that the Settlement Agreement is reasonable, just, and consistent with the purpose of Indiana Code ch. 8-1-2, and that such agreement serves the public interest.

The relief requested by IPL in Cause No. 44242 and Cause No. 44339 was strongly contested by the Sierra Club in those proceedings. In this Cause, due to the NPDES permit requirements, IPL has requested a CPCN to refuel HS-7, which is consistent with the Sierra Club's position in Cause No. 44242. Sierra Club has been a consistent participant in utility planning matters, and we view the Stipulation of increased communication between IPL and Sierra Club as a positive development. Accordingly, we approve the Stipulation.

B. Ind. Code ch. 8-1-8.4 ("Chapter 8.4").

1. Federally Mandated Requirements (Ind. Code §§ 8-1-8.4-5 and 8-1-8.4-6(b)(1)(A) and 8-1-8.4-7(b)(3)). IPL's proposed Compliance Project is a comprehensive plan to ensure compliance with NPDES permit requirements, which regulate and authorize specific industrial wastewater and stormwater discharges to the waters of the United States under Section 402 of the Clean Water Act, 33 U.S.C. 1251. The refueling of HS-7 to natural gas will also allow the unit to continue to operate without additional controls which would be needed to meet requirements of the EPA's MATS Rule. The NPDES compliance projects are required to comply with IPL's NPDES permit requirements.

We find that the NPDES permit requirements and the MATS Rule represent federally mandated requirements as that term is defined in Ind. Code § 8-1-8.4-5. We find that the construction of wastewater treatment technologies, operational changes, and use of modified stormwater management practices at IPL's Petersburg and Harding Street Generating Stations and refueling of HS-7 constitute a "Compliance Project" as defined in Ind. Code § 8-1-8.4-2.

Finally, pursuant to Ind. Code § 8-1-8.4-7(b)(3), we find that IPL's request satisfied Ind. Code § 8-1-8.4-6(b)(1)(A).

2. Projected Federally Mandated Costs. (Ind. Code §§ 8-1-8.4-4, 8-1-8.4-6(b)(1)(B), 8-1-8.4-7(b)(2), and 8-1-8.4-7(b)(3)).

a. Estimated Cost. Mr. Scott explained that the total Compliance Project estimate is \$331.96 million (excluding AFUDC). Scott Direct pp. 17-18. This total is comprised of approximately \$257.99 million for the water treatment and control measures at Harding Street and Petersburg Stations, which are referred to as the "Water Control Component" and approximately \$74 million for the HS-7 Refuel. In his direct testimony, for cost recovery purposes Mr. Cutshaw segregated the Water Control Component into \$223.721 million for Petersburg NPDES, \$33.774 million for HSS NPDES (for a total of \$257.495 NPDES excluding AFUDC) and \$0.5 million for the NPDES Regulatory Asset. For the HS-7 Refuel, Mr. Cutshaw segregated the \$3.1 million for the HS-7 MATS Regulatory Asset leaving \$70.88 million. He then deducted the \$2.68 million of demolition costs resulting in \$68.188 million for the HS-7 Refuel for cost recovery purposes. While the demolition costs are necessarily incurred, IPL does not propose to reflect demolition costs in the construction costs upon which it will earn a return in the ECCRA. In his rebuttal testimony, Mr. Cutshaw provided a table which updated the Compliance Project cost estimate to reflect the total costs to preserve the ongoing operation of HS-7 (\$4.743 million), including amounts already reflected in the ECR through March 2015.

i. Water Control Component. IPL's consultant, CH2M HILL, provided the initial NPDES compliance cost estimates for both the HS plant and the Petersburg plant. Subsequently, IPL conducted a competitive solicitation for a firm price EPC contract, which resulted in a proposed project cost for this component of \$257.99 million. The OUCC recommended the Commission approve IPL's project cost estimate of \$257.99 million for the Water Control component. As noted above, for cost recovery purposes, Mr. Cutshaw segregated the \$0.5 million for the NPDES Regulatory Asset resulting in a total for the Water Control component of \$257.495 million. No witnesses challenged the cost estimate.

We find the estimated cost of the Water Control component of \$257.495 million is reasonable and should be approved. Pursuant to Ind. Code § 8-1-8.4-7(b)(3), we further find that IPL's request for the Water Control component satisfied Ind. Code § 8-1-8.4-6(b)(1)(B).

ii. HS-7 Refuel Component. IPL obtained two estimates for the HS-7 Refuel component. First, IPL contracted with the firm of Burns & McDonnell to determine the feasibility of converting HS-7 to natural gas fuel, estimate a cost and perform a condition assessment for unit performance over the ensuing fifteen years of operation on gas. Thereafter, IPL hired S&L to independently estimate the cost of the refueling project. Mr. Cutshaw explained that the calculation of the \$68.188 million cost excluded \$2.68 million in demolition costs that would not be reflected in the ECCRA. OUCC witness Snyder reviewed the engineering detail and comparative pricing and concluded the overall project estimate appears adequate. Mr. Scott explained that IPL has selected IWP as the EPC contractor with a scope of work that includes construction of the boiler modifications and other work needed to refuel HS-7 as well as HS-5 and HS-6. He said that when the three refueling projects are considered together the total cost estimate has increased approximately 1% and remains well within the +25% accuracy range.

We find the estimated cost of the HS-7 Refuel component of \$70.88 is reasonable and should be approved. Pursuant to Ind. Code § 8-1-8.4-7(b)(3), we further find that IPL's request for the HS-7 Refuel component satisfied Ind. Code § 8-1-8.4-6(b)(1)(B).

b. Issues Related to Costs Incurred to Preserve Ongoing Operation of HS-7. In response to the MATS Rule, IPL proposed to retrofit HS-7 with new environmental controls to permit the unit to continue to operate on coal. In the August 14, 2013 Order in Cause No. 44242, the Commission found that IPL's plan to retrofit HS-7 to permit the unit to continue to operate in compliance with the MATS Rule was a reasonable and necessary project and authorized certain ratemaking and accounting treatment in accordance with Ind. Code § 8-1-8.8-11. Although the need for NPDES compliance was anticipated in Cause No. 44242, the cost and method of compliance was in the early phase of investigation at that time. After receiving approval in that Cause, IPL continued to analyze its environmental compliance requirements and costs, including the potential compliance costs that could result from the NPDES requirements and pending or anticipated environmental mandates. Ultimately, IPL determined that when the necessary water treatment systems and other steps that were required to comply with NPDES were taken into account, the HS-7 retrofit authorized in Cause No. 44242 was not the best method of compliance when considering the impact of the combination of the MATS Rule, NPDES requirements, and other pending rules that impact the continued use of coal at HS-7. Due to these changes in circumstances, IPL decided to pursue a natural gas refueling of HS-7 as opposed to the environmental retrofits.

IPL requests the Commission approve the HS-7 Refuel and grant IPL a CPCN to convert HS-7 to natural gas. As part of this request, IPL seeks authority to create a regulatory asset for compliance costs incurred for the HS-7 MATS compliance authorized in Cause No. 44242 and compliance costs incurred to ensure timely compliance with the NPDES requirements at HSS if HS-7 remained a coal-fired unit. The regulatory asset would be amortized over a period of ten years and included in the recoverable Compliance Project costs in this Cause. In the alternative, IPL proposes the above referenced MATS compliance costs be recovered as part of the MATS Compliance Project costs approved in Cause No. 44242.

IPL witnesses Scott and Cutshaw explained that IPL incurred \$4.743 million to assure the continued operation of HS-7 either as coal fired or natural gas in compliance with the MATS Rule and NPDES requirements. Mr. Scott explained that these costs include:

- \$1.434 million (including AFUDC) of project development, testing and engineering undertaken to develop a compliance plan at HS-7 under both coal and gas (refuel) scenarios. Scott Rebuttal at 8-9. Mr. Scott explained that to only incur costs for investigating the alternative that is ultimately built means one must start with the answer. This is neither practical nor reasonable.
- \$2.8 million incurred to preserve the ability to retrofit HS-7 to continue its operation on coal and comply with the April 2016 MATS Rule deadline. The record reflects that IPL successfully negotiated with the MATS EPC Contractor to hold the retrofit project in abeyance while the NPDES requirements at HSS were being analyzed. This "off-ramp" recognized engineering and other work the EPC contractor had performed relative to HS-7 and amounted to \$2.8 million. Mr. Scott explained that this contract provision was instrumental in positioning the Company to be able to continue to

operate HS-7 on coal or to switch to natural gas if the overall economics dictated that changing the approved Compliance Plan would bring the overall plan to its best state of efficiency.

- \$0.509 million for engineering and design work to assess converting to a dry ash handling system that would be required by the NPDES requirement if HS-7 continued to operate on coal. Mr. Scott explained that in order to assess the economics of the continued operation of HS-7 in compliance with the environmental mandates, it was necessary to understand what costs would be incurred on a going forward basis if the unit were to be operated on coal or gas. He said this required IPL to incur engineering and design work costs. He stated that this conversion is a long-lead time item and the estimated cost of such a system would have been in excess of \$30 million. Mr. Scott stated that IPL prudently began work on the air permitting and system design necessary for this project to ensure that the conversion could be completed by the compliance deadline and in doing so preserve the option to continue to operate HS-7 on coal. IPL terminated the ash conversion project, before completion, at a cost of approximately \$509,000.

With the exception of the dry ash conversion costs incurred in connection with the NPDES compliance plan, these costs were part of the clean energy project approved in Cause No. 44242.

i. IG Proposed Cost Disallowance. Witness Phillips recommended that IPL not be allowed to earn a return on or of any of the costs to preserve HS-7 as a coal-fired facility that did not result in a used and useful asset in the provision of electric service. Witness Phillips testified that as part of the rider treatment associated with environmental costs, IPL is allowed to adjust its rates for electric service to reflect costs associated with MATS Rule compliance prior to the investment being used and useful in the provision of electric service. However, he stated that a problem occurs in that the costs incurred to preserve HS-7 operations using coal will never be used and useful in the provision of electric service to IPL ratepayers, stating that “[a]llowing a utility to earn a return on plant that is not used and useful is inappropriate.” Phillips, at 8. Witness Phillips concluded that in this instance, “it is highly unlikely that the expenditures in question result in used and useful plant for the provision of electric service to IPL ratepayers.” *Id.* As a result, Witness Phillips disagreed with IPL’s request to earn a return on and also receive a return of the costs incurred to preserve the continued operation of HS-7 in compliance with the MATS Rule and the NPDES requirements.

In this case, IPL is seeking to recover \$4.743 million in costs incurred for the halted HS-7 MATS Compliance Project, including the dry ash costs (which were not previously approved as part of the MATS Compliance Project). Unlike the costs associated with the proposed federally mandated projects for which IPL is seeking a CPCN under Chapter 8.4, the costs here have already been incurred, and relate to either the previously approved clean energy project for the HS-7 retrofit, or planning costs for the HS-7 retrofit that were not previously approved in Cause No. 44242.

With respect to the pre-approved costs incurred pursuant to the cost estimate in Cause No. 44242, we note that IPL has not formally requested a modification of the approval the Commission granted in that Cause. We believe it is a better approach to distinguish the prior plan

of retrofitting HS-7 from the current plan to refuel HS-7. Accordingly, IPL should formally seek a modification of its approval in a future ECCRA filing, and this issue can be addressed at that time.

With respect to the \$509,000 associated with engineering and design work associated with the HS-7 retrofit, IPL has not received preapproval for this cost component, and since the plans to retrofit HS-7 have changed to refuel HS-7, the costs do not fall under the cost estimate for the Compliance Projects proposed in this Cause. Thus, these costs are not appropriate for consideration in a future ECCRA filing.

ii. OUCC Proposed Retroactive Recapture of Depreciation Expense. OUCC Witness Rutter stated that IPL should not be allowed to recover depreciation expense on the capital costs to date for the HS-7 MATS retrofit approved in Cause No. 44242, based on the Order's statement that IPL should not "continue" to collect depreciation expense for the HS-7 retrofit project approved in Cause No. 44242 if HS-7 is shut down. 44242 Order, at 36.

While the Commission's Order in Cause No. 44242 did limit depreciation expense if HS-7 were shut down prematurely, IPL's proposal to refuel HS-7 cannot be considered shutting the unit down. The Commission's concern in Cause No. 44242 was the risk related to future carbon legislation for coal-fired units, not gas-fired units. Accordingly, we decline to adopt the OUCC's proposal.

iii. Net Inventory Costs Incurred In Connection with HS-7 Refueling. Mr. Cutshaw and Mr. Scott stated that IPL will likely incur expense for inventory which cannot be utilized in connection with the HS-7 refueling. They explained that IPL is still analyzing inventories at HSS and will take steps to minimize the net inventory that cannot be transferred or sold and must be expensed in connection with this compliance project.

Mr. Cutshaw proposed that once the amount of net inventory cost is determined, IPL will present this information to the Commission for recovery of the inventory costs required to be expensed in connection with the refueling of HS-7. IPL proposes to reflect these incurred expenses in future periodic ECCRA filings. While the exact amount will not be known until after HS-7 is refueled, Mr. Scott estimated the net cost is approximately \$4.8 million.

As previously noted, IPL has not formally requested a modification of the approval granted in Cause No. 44242 related to the MATS Compliance Project approved as a "clean energy project" in that Cause. Further, the net inventory costs have not been finalized. Accordingly, we direct IPL to present such costs in a future ECCRA filing when it seeks modification of the approval granted in Cause No. 44242.

c. OUCC Proposed Future Claw back. OUCC Witness Rutter recommended that if the refueling of HS-7 is abandoned prior to 2022, IPL should refund to ratepayers, with interest, any depreciation, amortization or O&M expense as well as any return on the investment already reflected in rates. Essentially, Mr. Rutter proposes that ultimate cost recovery for IPL's refueling project for HS-7 should be determined after the fact, based on how this project turns out. Notably, the governing statutory framework provides for pre-approval.

As was true with Witness Phillips, Witness Rutter does not take any issue with the prudence of IPL's HS-7 Refueling costs, nor does any other OUCC witness. Rather he contends that customers alone should not bear the burden of IPL's "attempt at flexibility." Rutter, at 9. Mr. Ayers explained that the flexibility premise underlying Mr. Rutter's proposal is fundamentally flawed. IPL argues that it has not proposed to refuel HS-7 to provide flexibility, and that the economic analysis shows that there is no viable solution, short or long term, economically superior to the HS-7 Refuel.

As discussed above, the concerns that were addressed in Cause No. 44242 were related to potential future carbon legislation that would accelerate closure of HS-7 as a coal-fired unit. No party has raised similar concerns with respect to a refueled HS-7. The transition from retrofitting to refueling HS-7 helps to mitigate any future carbon regulation that may occur. Accordingly, we decline to adopt the OUCC's proposal on this issue.

3. Compliance with Federally Mandated Requirements. (Ind. Code §§ 8-1-8.4-6(b)(1)(C) and 8-1-8.4-7(b)(3)). In order to comply with NPDES permit requirements, IPL will require new wastewater treatment technology, operational changes, and modified stormwater management practices at Harding Street and Petersburg Generating Stations. In addition, the HS-7 Refueling will result in environmental benefits and reduce the cost of complying with the NPDES permit requirements, the MATS Rule, and other environmental mandates.

The proposed operational, stormwater, and wastewater compliance strategies will allow IPL to meet the new limits in its NPDES permits at both Harding Street and Petersburg Stations. The wastewater strategies chosen may help mitigate future wastewater limits and other wastewater related regulation. By converting HS-7 to natural gas, costs for NPDES compliance will be much lower because many wastewater streams associated with using coal as a fuel will be eliminated. No party opposed IPL's proposal.

Pursuant to Ind. Code § 8-1-8.4-7(b)(3), we find that IPL's request satisfies Ind. Code § 8-1-8.4-6(b)(1)(C).

4. Alternative Plans for Compliance. (Ind. Code §§ 8-1-8.4-6(b)(1)(D) and 8-1-8.4-7(b)(3)). Mr. Fink and Mr. Ayers presented analyses showing the Compliance Project is a reasonable and cost-effective means to comply with the NPDES requirements and the MATS Rule. Mr. Ayers' analyses set forth the relative cost and feasibility of unit retirement options and demonstrated that the cost thereof would likely exceed that of the proposed Compliance Project.

The evaluation of the NPDES compliance at IPL's two coal-fired generating plants involved identifying the full life cycle costs of the coal-fired units and comparing those costs to alternative resources. This included stress testing resource options to future unknown but plausible risks by way of scenario analysis to evaluate the future performance and robustness of the retrofit plan compared to alternative solutions. This was accomplished through a Present Value Revenue Requirements ("PVRR") evaluation to identify an overall reasonable least cost plan.

For the Petersburg evaluation, the near term unit-specific NPDES costs are relatively low on a per unit basis and the future risks are uncertain and possibly high. The modeling worked to match these real world risks by adding another layer of modeling refinement—a real option decision analysis overlay—to the scenario evaluation. Mr. Ayers explained that this modeling better mimics the real world by allowing for a future change in direction either to mitigate the risk of an adverse scenario or preserve opportunities from positive scenarios. The results of the real option scenario analysis identified the Petersburg NPDES retrofit, inclusive of all four Petersburg units, as the lowest PVRR under all future risk scenarios except the Low Gas scenario for Petersburg Unit 1, which was approximately break-even.

In addition, a probabilistic decision tree was created by assigning probabilities to specific risk scenarios to calculate a single expected value for each resource option. This provided another decision framework beyond the individual risk scenario results to aggregate the multiple risk perspectives into a single expected value for direct comparison of resource alternatives. The results of the probabilistic scenario analysis identified the Petersburg NPDES retrofit, inclusive of all four Petersburg units, to have the lowest PVRR. A simple payback methodology was included to more transparently reveal the key economics of the NPDES decision around the Petersburg units and supplement the more detailed evaluations above. The results of the simple payback analysis further support the conclusion and recommended Compliance Project. In sum, the evaluation supports the Compliance Project for IPL's coal fired plant at Petersburg with all four units remaining coal-fired.

For HSS, the evaluation was similar to the Petersburg units. However, unlike the Petersburg units, the incremental NPDES capital costs for HS-7 operating as a coal unit are relatively high. The NPDES compliance project costs at HSS are approximately \$34 million if HS-7 is a natural gas-fired generator and approximately \$174 million if HS-7 is a coal-fired generator. The high NPDES costs plus avoidable MATS and other future risks do not economically justify continuing the HS-7 unit on coal. The conversion of HS-7 to gas-fired generation is the reasonable least cost plan to bridge the Gap Year and provides an economic longer term resource solution. Its lower capital costs also provide some future flexibility to economically supplement or change course as future conditions warrant. The evaluation supports the Compliance Project for HSS with HS-7 converted to natural gas. Mr. Holtsclaw and Mr. Martin established the importance of HS-7 to the reliability of the IPL system and Mr. Ayers showed that the HS-7 refueling option is the reasonable least cost choice.

We find that IPL reasonably considered alternative plans for compliance with the federally mandated requirements. The evidence demonstrates that the Compliance Project is a cost-effective method to achieve compliance with the NPDES requirements and the MATS Rule. Pursuant to Ind. Code § 8-1-8.4-7(b)(3), we find that IPL's request satisfies Ind. Code § 8-1-8.4-6(b)(1)(D).

5. Useful Life of the Facility. (Ind. Code §§ 8-1-8.4-6(b)(1)(E) and 8-1-8.4-7(b)(3)). The proposed Compliance Project will allow IPL to comply with the NPDES requirements and the MATS Rule, and represents the reasonable least cost option. Absent compliance with the MATS Rule, HS-7 would need to be retired by April 2016. Both Harding Street and Petersburg Stations could not operate beyond September 2017 without complying with the NPDES permit requirements. Thus, the Compliance Project will extend the useful life of

the Petersburg and HSS units and provide a cost-effective, reliable resource to IPL and its customers.

The NPDES wastewater projects are centrally designed systems to treat the wastewater and stormwater from each generating plant. These are not unit-specific installed controls. The cost to treat the wastewater from HS-7 is much higher than the cost for Petersburg Station Units 1 through 4 on a unit capacity cost (\$/kW) basis due to the plant coal capacities of 405 MW and 1697 MW respectively. The incremental capital cost investment at Petersburg Station ranges from \$0-\$50/kW. The incremental capital cost investment for the HS-7 Refuel and NPDES compliance is approximately \$184/kW. This is substantially less than the \$360/kW capital cost of NPDES compliance if HS-7 continued to operate using coal. The \$360/kW would be higher if the cost of the HS-7 retrofit authorized in Cause No. 44242 were incurred. While the \$184/kW includes the cost incurred to preserve the ongoing operation of the unit, it is significantly less than the compliance cost that would be necessary if HS-7 remained a coal-fired generator.

Pursuant to Ind. Code § 8-1-8.4-7(b)(3), we find that IPL's request satisfies Ind. Code § 8-1-8.4-6(b)(1)(E).

6. Conclusion. IPL has examined other alternatives and determined that the proposed Compliance Project constitutes the reasonable, least cost option available to IPL to comply with the federally mandated requirements. The economic analysis showed that each of the four Petersburg Units should be included in the Petersburg plant retrofit project for NPDES compliance. The probabilistic decision tree identifies this, all scenarios including all CO₂ scenarios, support this, and the simple payback evaluation further supports this conclusion. The economic analysis also showed that HS-7 continuing as a coal-fired unit should not be included in the HSS NPDES compliance plan. The probabilistic decision tree evaluation identifies this, and all scenarios except the high gas case support this conclusion. The record shows that the refuel of HS-7 provides the reasonable least cost plan that maintains IPL system reliability.

The record shows that the construction, installation and use of the Compliance Project will enable IPL to ensure the future use of the Petersburg and HSS to provide clean, safe, and reliable electric service while complying with environmental regulations. The proposed Compliance Project is compatible with IPL's provision of reliable electric service and the projects fit appropriately from an operational standpoint within IPL's electric generating portfolio. No party objected to the grant of a CPCN for the Compliance Project.

We find that the public convenience and necessity will be served by the Compliance Project. Accordingly, the Commission grants a CPCN for the Compliance Project under Chapter 8.4. As part of our reasonable and necessary finding under Chapter 8.4, we limit our approval of the Compliance Project to the cost estimate approved in this Order, subject to Ind. Code § 8-1-8.4-7(c)(3) and the accounting and ratemaking treatment approved below.

C. Accounting and Ratemaking for HS-7 Refuel.

1. Ratemaking Proposal. Ind. Code § 8-1-8.4-7(c) sets forth the accounting and ratemaking treatment for approved federally mandated costs associated with an approved Compliance Project. The statute provides the utility's authorized net operating income

shall be adjusted to reflect any approved earnings for purposes of Ind. Code § 8-1-2-42(d)(3). The statute further provides that actual costs that exceed the projected federally mandated costs of the approved Compliance Project by more than 25% shall require specific justification by the utility and specific approval by the Commission before being authorized in the next general rate case filed by the utility.

Mr. Cutshaw explained IPL's proposed accounting and ratemaking under this statutory provision. OUCC witness Blakley raised no concerns with Mr. Cutshaw's proposal. Mr. Blakley explained that the 80 percent portion of the project cost will be recovered similar to the CCT projects that are already included in the ECCRA tracker. The other 20 percent will be deferred until IPL's next base rate case with carrying charges. He said the next base rate case is estimated to occur in 2018 and will capture these deferrals in base rates. Mr. Blakley added that the short time frame between the creation of the deferral and its inclusion in base rates is good because it will limit the size of the overall deferral.

2. Methodology for Determining Return Component. Mr. Cutshaw proposed that its equity rate should be 12.1% as authorized in Cause No. 43403. Mr. Cutshaw noted that the formula for computing the weighted cost of capital for ratemaking treatment of qualified pollution control property ("QPCP") utilizes the cost rate for common equity that was established in the last proceeding involving the utility's basic rates and charges. Mr. Cutshaw stated that IPL's last general rate case, which culminated in a Commission order approving a settlement agreement, was silent as to rate of return with no specific findings regarding cost of common equity. IPL has utilized the same rate for the cost rate of book equity for its calculation of its AFUDC rate and its Cogeneration and Small Power Production rate.

Nicholas Phillips, on behalf of the IPL Industrial Group, testified that the equity rate IPL be permitted to use in its AFUDC calculation should be 10.2%. He recommended that IPL should comply with the Commission Order in Cause No. 44339, which authorized the 10.2%, the same rate Mr. Phillips recommended in this docket. Mr. Phillips testified that IPL's proposed equity rate ignores recent Commission rulings regarding what is the appropriate return on equity rate for IPL. In particular, Mr. Phillips noted the Order in Cause No. 44339, wherein we stated:

We are not convinced that continued use of the previously imputed ROE is appropriate. As we noted in Cause No. 44242, the Commission most recently determined that the ROE for Indiana Michigan Power Company was 10.2%, with the average of all investor-owned ROEs (excluding IPL) being 10.325%. The argument that the USOA provides that the ROE should be that determined in the last rate proceeding is of no assistance to IPL because no ROE was determined in its last rate case. As IPL and Mr. Cutshaw acknowledged, that case was resolved with a "black box" settlement and there was no finding by this Commission of the allowed ROE.

IPL, Cause No. 44339, 2014 WL 2091348 at *33 (IURC May 14, 2014).

As we previously stated in Cause No. 44339, and first addressed in Cause No. 44242, IPL's proposed ROE is not based on an actual finding from its 1995 rate proceeding, because

that order was silent on the ROE. We note that the Commission's Order in Cause No. 44242 was an approval and modification of a settlement agreement presented by the parties, and therefore, pursuant to the terms of the settlement, has no precedential effect on the parties. Further, while the Commission did not alter the settlement's proposed ROE, the Commission did modify the settlement by increasing the depreciation credit, which has the functional effect of reducing the return on the applicable investment. As stated above, the Commission does not agree with IPL that continued use of the previously imputed ROE is appropriate. Return on IPL's equity investment should reflect a fair market return to the best extent practical. While the conditions in this case are not identical to those presented in Cause No. 44339, we find that IPL shall use 10.2% as the equity rate for the Compliance Project.

3. Conclusion. We find and conclude that accounting and ratemaking should be approved consistent with the findings herein. The cumulative construction costs approved for cost recovery in this proceeding are \$325.683 million (excluding AFUDC).

D. Ind. Code § 8-1-8.5-1 et seq. ("Chapter 8.5").

1. Considerations under Ind. Code § 8-1-8.5-4. Section 4 of Chapter 8.5 requires the Commission, prior to acting on any petition for a CPCN, to take into account:

(1) the applicant's current and potential arrangement with other electric utilities for:

- (A) the interchange of power;
- (B) the pooling of facilities;
- (C) the purchase of power; and
- (D) joint ownership of facilities; and

(2) other methods for providing reliable, efficient, and economical electric service, including the refurbishment of existing facilities, conservation, load management, cogeneration and renewable energy sources.

The evidence regarding the alternatives enumerated at Ind. Code § 8-1-8.5-4 permits the Commission to make an informed decision as to whether a pending proposal is in the public interest. As we noted in *PSI Energy, Inc.*, Cause Nos. 41924 and 42145, "the statute does not require a utility to exhaust all statutory alternatives before it may request a CPCN for new capacity." *PSI Energy, Inc.*, Cause No. 42145, at 14 (IURC Dec. 19, 2002). "Rather, what is important is that the Commission be given enough information so that the Commission can take into account all of the enumerated alternatives in making its determination." *Id.* "The statute does not limit the Commission's discretion to weigh the importance of each alternative in determining the public interest." *Id.*

In conformance with the statute, we consider the following:

(1) Current and Potential Arrangements with other Electric Utilities for:

(A) and (B) The Interchange of Power and Pooling of Facilities. With regard to the interchange of power, the evidence indicates that IPL has relied on the MISO market to meet short-term system needs. The record reflects that the current MISO market is very effective at

fully utilizing the existing capacity resources in the region. However, it does not eliminate the need for the refueled HS-7. As discussed above, HS-7 is of particular importance to the reliability of the IPL system due to its location. While supplying energy to serve IPL's retail load, it also serves as an important component in meeting system reliability needs. HS-7 offsets the need for import capability and provides critical voltage and dynamic reactive power support to the IPL transmission system under normal conditions and during system disturbances. Because of its generator characteristics and electrical interconnection it helps the IPL system recover to a stable position following a transmission level fault event. If HS-7 were retired, transmission upgrades would be needed to improve both import capability and dynamic voltage support. It is not possible for the transmission upgrades that would be associated with the retirement of HS-7 to be completed in time to meet the April 16, 2016, compliance deadline. These transmission system upgrades likely will not qualify for cost sharing with the other MISO transmission owners as these upgrades are considered to be local reliability projects. The economic analysis shows that even if the transmission upgrades could be completed, the results are not economical and the refueling of HS-7 is the economical solution.

(C) The Purchase of Power. The Company's use of market capacity purchases is addressed in the Company's 2011 and 2014 IRPs. For the reasons discussed above, purchased power cannot serve as an alternative to the HS-7 Refueling because it cannot address the critical reliability needs associated with the unit's location inside the 138 kV system.

(D) Joint Ownership of Facilities. IPL typically evaluates the economics of a retrofit project against the least cost replacement resource, which has been identified as a CCGT, and explores joint ownership where appropriate. The record shows that a new CCGT could not be constructed in time to address summer 2016 reliability and other needs.

(2) Other Methods for Providing Electrical Service. IPL considered adding import capability (via a series of transmission upgrades), supplemented by capacity purchases until a replacement CCGT could be constructed. Due to the deadlines imposed by the EPA mandates, there was not sufficient lead time for this alternative and as noted above, the economic analysis showed that the transmission solution was more expensive even if it could be constructed within the compliance period imposed by the federal mandates.

While IPL studied the refurbishment of other existing facilities in its IRP, as discussed above, this is not an alternative to the HS-7 Refueling because it could not address the critical reliability needs associated with that unit's location. The record also shows that IPL is already working to achieve all reasonable cost-effective DSM and continues on this path with its 2015-2016 DSM plan approved in Cause No. 44497. IPL's DSM forecast is reflected in the load and energy forecast as part of the IRP process. Additional DSM of the magnitude needed to replace HS-7 to address 2016 Gap Year reliability is not reasonably achievable.

Further, wind and solar cannot replace the reliability attributes provided by HS-7. Unlike HS-7, wind and solar are both intermittent non-dispatchable resources. Wind is further disadvantaged in comparison with the retrofitted or refueled HS-7 Unit in that it could not reasonably be located in close proximity to IPL load to address Gap Year reliability.

Finally, OUCC witness Rutter testified that the compliance plan proposed here is consistent with IPL's 2014 IRP. He explained that the IRP addressed the issues of DSM and

renewables as a source of generation and modeled the scenarios accordingly. He said the retrofit of Petersburg Units 1-4 and the re-fuel of HS-7 were the reasonable least cost plans using a simple payback analysis.

2. Findings under Ind. Code § 8-1-8.5-5.³

a. Best Estimate of Construction, Purchase or Lease Costs Based on the Evidence of Record. We previously discussed the proposed costs of the HS-7 Refueling above under our Chapter 8.4 discussion. We find that IPL's estimated cost of the HS-7 Refueling (\$70.88 million, not including AFUDC) represents the best estimate of the Refueling Project cost and is approved.

b. Consistency of HS-7 Refueling with IPL's IRP and the State's Expansion Plan. The record reflects that IPL meets its customers' need for electricity through a combination of: (a) existing generation; (b) wholesale market purchases; (c) load management and distributed generation; (d) conservation, including DSM/EE; and (e) wind and solar resources. IPL's existing portfolio of generating assets provides the bulk of the supply necessary to meet customer demands. As plants are retired due to age and environmental regulation and customer peak demand grows over time, the need for new resources grows. IPL uses an integrated resource planning process to determine the optimal mix of supply or demand resources to provide electricity to IPL's customers. This portfolio approach focuses on the deployment of the most economic and reliable combination of resources from a wide variety of options and on the reduction of risk through diversification. IPL's IRP is filed with the Commission biennially. Because the IRP is affected by many factors, such as environmental regulations, the economy, and the economics of new technologies and fuel supply, the IRP is re-examined as circumstances change.

The record reflects that IPL considered its 2011 and 2014 IRPs in its analysis. While the refueling of HS-7 is a fuel change since the 2011 IRP, it is consistent with the 2014 IRP.

The State Utility Forecasting Group ("SUFG") was established pursuant to Ind. Code § 8-1-8.5-3.5 to forecast the probable future growth of the use of electricity within Indiana and within this region of the nation. The Commission uses the SUFG forecast to assess and plan for the long range needs for expansion of facilities for the generation of electricity, consistent with Ind. Code § 8-1-8.5-3.5(c). *PSI Energy, Inc.*, Cause No. 42145, at 1 (IURC Dec. 19, 2002).

From a regional capacity perspective, SUFG's December 2013 forecast for Indiana, which included the 2009 IURC DSM order in Cause No. 42693, shows projected annual demand growth rate of 0.9% (2012-2031), and projected resource requirement of about 1.3 GW by 2020, rising to 4.7 GW by 2030. Regionally, the June 2014 update of the 2014 OMS-MISO Survey projected a need for new capacity beginning in 2016 and this need increases to 12.3 GW by 2023 for the MISO North/Central region. IPL's refueling of HS-7 effectively substitutes gas-fired for coal-fired generation at that plant, and adds little net new capacity to the region. Maintaining HSS capacity and specifically HS-7 capacity is consistent with the future capacity needs in the

³ A finding relating to coal-consuming facilities, pursuant to Ind. Code § 8-1-8.5-5(b)(4), does not apply to the proposed natural gas refueling.

MISO region. From an IPL capacity need perspective, IPL, with HS-7 refueled, would be projected to be about 240 MW long MISO capacity in 2017. Without a refueled HS-7, IPL would be about 150 MW short of capacity. From an economic perspective, the long position would appear to be the least cost market position, relative to the low capital cost for the HS-7 refuel (less than \$200/kW) and the ongoing projected market peaking capacity value provided. Considering the possible regional and IPL impacts of CO₂ regulation and other environmental rules on existing coal-fired generation, a long capacity position supported by a gas-fired HS-7 would offer more risk mitigation both in terms of fuel diversification and capacity benefits. From a local reliability perspective, as identified by IPL Witness Holtsclaw, a refueled HS-7 would continue to provide reliability load support and dynamic reactive support to IPL's 138 kV transmission system in 2017 and beyond.

Therefore, substantial evidence shows that from a system operations and reliability standpoint, the best option is to refuel HS-7 as a natural gas unit making it available as a generation resource inside the 138 kV system. Accordingly, we find that IPL has established the need for the HS-7 Refueling and the project is consistent with IPL's 2014 IRP and the SUFG Forecast.

c. Public Convenience and Necessity. We have previously determined that IPL has a need for the HS-7 energy, capacity and system reliability support. We have considered the statutory factors set forth at Ind. Code §§ 8-1-8.5-4 and 5 and found that IPL's planning process is consistent with its IRP and the SUFG forecast. We have previously found that the HS-7 Refueling is a prudent, reliable and cost effective means of meeting the future needs of IPL's retail customers. This project will satisfy reliability, energy and capacity needs and, because the unit will be fueled by natural gas, it will further diversify IPL's resource mix. Because HSS is electrically directly connected to the IPL load zone, the HS-7 Refueling project provides an important capacity resource close to the center of IPL's service area. This reduces transmission cost and interruption risk.

Substantial evidence demonstrates and we find that IPL has evaluated the projects against other reasonable generation alternatives, including sensitivities, and also included reasonable DSM/EE levels. The analyses conclude that the HS-7 Refueling is the least cost reliable resource alternative to meet IPL's customers' resource needs. Based on the evidence of record, the Commission finds the public convenience and necessity requires, or will require, IPL's proposed HS-7 Refueling.

3. Conclusion. Based on the evidence presented and our discussion herein, the Commission finds a CPCN under Chapter 8.5 shall be granted to IPL for the HS-7 Refueling. IPL shall comply with the reporting requirements set forth below.

E. Ongoing Review. IPL is currently engaged in an ongoing review process in accordance with the Commission's Orders in Cause Nos. 44339 and 44242. IPL proposes that ongoing review also be conducted for the proposed HS-7 Refueling Project.

Indiana Code § 8-1-8.5-6(a) provides:

In addition to the review of the continuing need for the facility under construction ... the commission shall, at the request of the public utility, maintain an ongoing

review of such construction as it proceeds. The applicant shall submit each year during construction, or at such other periods as the commission and the public utility mutually agree, a progress report and any revisions in the cost estimates for the construction.

IPL proposes to submit progress reports and any revisions to the cost estimates for the Project. The report will be similar to the reports provided in the ongoing review process referenced above and will include safety, scope, schedule, and Owner's Cost contingency. The final project report will contain the following information: a) the actual total cost of construction; and b) the actual in-service (commercial operation) date for the refueled facility.

IPL also proposes to keep the Commission informed of the status of the Water Control Component of the Compliance Project by including the progress reports and any revisions to the cost estimates with the Company's ongoing cost recovery filings conducted to provide for timely recovery of 80% of the Federally mandated costs and deferral of the remaining portion of these costs.

OUCG witness Alvarez recommended that IPL file semi-annual reports and include therein updated information relative to each line contained in Table 1 on page 18 of Mr. Scott's direct testimony. Mr. Scott accepted this recommendation, noting that IPL already provides this level of detail on the MATS projects subject to ongoing review in Cause No. 42170.

We find that IPL shall report semi-annually to the Commission and the OUCG the summary information noted above. The semi-annual reports shall be filed in Cause No. 42170 ECR [X]. As proposed by Mr. Scott, the Commission will review how the EPC contract costs are spread across the three units as part of the ongoing review process.

10. Confidentiality. IPL filed motions for Protection and Nondisclosure of Confidential and Proprietary Information on October 16, 2014 and March 3, 2015, both of which were supported by affidavits showing documents to be submitted to the Commission were trade secret information within the scope of Ind. Code §§ 5-14-3-4(a)(4), (9), and 24-2-3-2. The Presiding Officers issued Docket Entries on October 27, 2014 and March 18, 2015, respectively, finding such information to be preliminarily confidential, after which such information was submitted under seal. No party objected to the confidential and proprietary nature of the information submitted under seal in this proceeding. IPL subsequently waived the confidentiality of the information that was included with IG Witness Phillips' prefiled testimony as Confidential Exhibit NP-1. With that exception, we find all the information is confidential pursuant to Ind. Code § 5-14-3-4 and Ind. Code § 24-2-3-2, is exempt from public access and disclosure by Indiana law and shall continue to be held confidential and protected from public access and disclosure by the Commission.

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

1. The Stipulation between IPL and the Sierra Club is approved.

2. IPL shall be and hereby is issued a CPCN under Chapter 8.4 for the Compliance Project and a CPCN under Chapter 8.5 for the HS-7 Refueling component. This Order constitutes the Certificates.

3. For purposes of Ind. Code § 8-1-8.4-7(c), IPL's estimated total cost of the Compliance Project in the total amount of \$325.683 million (excluding AFUDC) is approved.

4. For purposes of Ind. Code § 8-1-8.5-5(b)(1), IPL's best estimate of the HS-7 Refueling including the \$70.88 million construction costs is approved.

5. IPL shall seek modification of its clean energy projects and update the cost estimate approved under Cause No. 44242, as part of the ongoing review process in Cause No. 42170 ECR X.

6. IPL's requests for authority to create a regulatory asset for \$4.234 million in compliance costs incurred for the HS-7 MATS compliance authorized in Cause No. 44242, and to include the net inventory costs incurred as part of the HS-7 Refueling in its ECCRA filings once such costs have been finally determined, are not yet ripe for consideration. IPL's request for authority to create a regulatory asset for \$.509 million in compliance costs incurred to ensure timely compliance with the NPDES requirements at HSS if HS-7 remained a coal-fired unit is denied.

7. IPL's cost recovery in accordance with § 8-1-8.4-7(c) is approved and IPL's request for accounting authority to implement this cost recovery is approved, as set forth in this Order.

8. IPL is authorized to timely recover eighty percent (80%) of the capital, operating, maintenance, depreciation, tax and financing costs (revenue requirement) incurred as result of the Compliance Project in accordance with Ind. Code § 8-1-8.4-7(c)(1) through its ECCRA.

9. IPL is authorized to create a regulatory asset for the remaining twenty percent (20%) of the capital, operating, maintenance, depreciation, tax and financing costs (revenue requirement) for the Compliance Project not timely recovered through the ECCRA, with carrying costs pursuant to Ind. Code § 8-1-8.4-7(c)(2), until such costs are reflected in the Company's retail electric rates.

10. IPL is authorized to create regulatory assets to record post-in-service AFUDC, both debt and equity, and deferred depreciation associated with the Compliance Project until such costs are reflected in IPL's retail electric rates or the ECCRA is approved.

11. IPL is authorized to record such post-in-service AFUDC (both debt and equity) and deferred depreciation as regulatory assets in Account 182.3 Other Regulatory Assets.

12. IPL is authorized to use a 10.2% return on equity for determining the return component that will be used in the accounting and ratemaking treatment of the Compliance Project.

13. IPL shall reflect the authorized return on property from the most recent ECCRA orders (which would now include the Compliance Project) in determining the total authorized net operating income level to be utilized pursuant to Ind. Code § 8-1-2-42(d)(3).

14. IPL's request for ongoing review of the Compliance Project is approved. IPL shall file the ongoing reports in Cause No. 42170 ECR X as set forth in Paragraph 9.E.

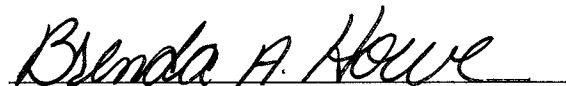
15. As clarified in Paragraph 10, the Confidential Information filed under seal in this Cause shall continue to be treated by the Commission as confidential and not subject to public disclosure.

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

**STEPHAN, MAYS-MEDLEY, AND ZIEGNER CONCUR; HUSTON AND WEBER
ABSENT:**

APPROVED: JUL 29 2015

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



**Brenda A. Howe
Secretary to the Commission**