DIRECT TESTIMONY

OF

BRUCE C. HARRINGTON

On Behalf of

MISSISSIPPI POWER COMPANY

BEFORE THE MISSISSIPPI PUBLIC SERVICE COMMISSION

DOCKET NO. 2016-AD-0161

Q. Would you please state your name, position and business address?

A. My name is Bruce C. Harrington. I am the Plant Manager, Kemper County Integrated Gasification Combined Cycle (IGCC) Plant (Kemper Plant or the Plant[1]) for Mississippi Power Company (MPC or the Company). My business address is 5935 Highway 493 P.O. 369, DeKalb, MS.

Q. Please describe your education and professional experience.

A. I received my Bachelor of Science degree in Mechanical Engineering and my Masters of Business Administration from the University of Tennessee, Knoxville in 1989 and 1991, respectively. I obtained my Master of Science in Mechanical Engineering from Carnegie Mellon University in 1996. I have been an employee of Southern Company Services, Inc. (SCS) and MPC for a cumulative fifteen years and have served in a variety of positions of increasing responsibilities in the areas of plant engineering,

[1] The Kemper Project Plant is a lignite-fueled solid-fuel base load electric generating plant, comprised of a two-on-one integrated gasification combined cycle with a net summer capacity of 582 megawatts (Plant) and the environmental equipment for the reduction of various emissions from the facility, including but not limited to, equipment and facilities for the capture of approximately 65% of the carbon dioxide emissions from the Plant.

plant operations and maintenance, and plant management within SCS and MPC. From 1996 to 2002, I was a Senior Engineer - Design for Special Projects, Maintenance Coordinator and Relief Shift Operations Coordinator at SCS. From 2007 to 2009, I was a Project Engineer and Process Engineering Supervisor at SCS. In this role, I directed a team of Process Engineers that supported engineering for the Gasification Island at the Plant. From 2010 to 2011, I was a Project Manager and Process Engineering Manager at SCS, and was responsible for leading the detailed engineering and procurement of the non-combined cycle portion of the Kemper Plant. From 2011 to 2014, I continued to support the Kemper Plant and transitioned to the position of Operations & Maintenance (O&M) Manager within MPC, and was responsible for all O&M at the Plant and assisted in the development of the overall strategy and approach for the Plant organization including Process Safety Management (PSM). From 2014 to 2015, I was the Assistant Plant Manager and assumed my current Plant Manager position for Kemper County IGCC Plant in October 2015. In this role, I am responsible for all aspects of MPC Plant Operations, including lignite delivery, gasification, gas clean up, combined cycle, and associated balance of plant processes.

Q. Have you previously testified before the Mississippi Public Service Commission (MPSC or Commission)?

A. No, I have not testified before the Commission.

Q. What is the purpose of your testimony?

A. As stated in MPC's Compliance Filing, my testimony will address the underlined portion of the newly-established "initial disclosures" required by the Commission specifically in this Docket No. 2016-AD-0161 (2016 Kemper Discovery docket):

> 5. An overview of the Company's present expectations of plant performance for the first five years following the start of commercial operation using lignite fuel, relative to the conditions contained in the Final Order on Remand, including anticipated operation and maintenance expense, anticipated revenues from the sale of byproducts and from any other non-ratepayer revenue sources, and an overview of the Company's plans and procedures to comply with the Final Order on Remand.[2]

My testimony will provide an update of the Company's expectation of operational performance and a summary of the non-fuel O&M expense and maintenance capital estimates. Mr. Feagin will be addressing the remainder of number five above, noting the Company's plan for complying with the Final Order on Remand.

Q. Do you sponsor any exhibits with your testimony?

A. Yes. I am sponsoring three exhibits:

Exhibit____(BCH-1)	Kemper IGCC Plant Availability Ramp
Exhibit____(BCH-2)	Kemper IGCC Plant Chemical Product Revenue Projections
Exhibit____(BCH-3)	Kemper IGCC Plant Maintenance Capital Estimates and Non-Fuel O&M Estimates

Q. Were these exhibits prepared under your supervision and control?

A. Yes, they were.

[2] MPSC Docket No. 2016-AD-0161 Order dated August 17, 2016, p. 8.

PLANT OPERATIONS UPDATE

Q. Please provide a brief description of the operational characteristics of the Kemper Plant.

A. The Plant is fueled with Mississippi lignite which is surface mined adjacent to the Plant. The lignite is delivered to the Plant over conveyors, through crushers, into silos, and then into dryers where the lignite is dried to approximately one-half of its original moisture content. The lignite is then sized and fed into the gasifier. Inside the gasifier, the lignite is heated in the absence of oxygen causing a chemical reaction that produces syngas.

After the syngas is cooled, it goes through additional processes necessary to remove particulates, sulfur, ammonia, carbon dioxide (CO_2), and mercury. During the process of cleaning the syngas, marketable sulfuric acid and ammonia are produced, and later transported and sold. The captured CO_2 is compressed, delivered, and sold to an off-taker for sequestration via an enhanced oil recovery process.

Clean syngas is then used to fuel a Combined Cycle (CC) generating plant similar to Plant Daniel Units 3 and 4. This CC configuration consists of two gas turbines (GTs) with associated generators, two heat recovery steam generators (HRSGs), and a single steam turbine with generator. The syngas powers the two GTs and the GT exhaust provides heat to the HRSGs to produce steam that is then supplemented with steam from the gasification systems to drive the steam turbine. The combined net output of the three electrical generators is delivered to the grid.

The Plant is a zero liquid discharge facility—no process water will be discharged into any rivers or streams. Process wastewater streams will be treated and recycled, and some water is lost to evaporation within the cooling towers. To replace water lost through evaporation, reclaimed treated municipal wastewater from two municipal treatment facilities in Meridian, Mississippi, will be used. This treated municipal wastewater is transported to the site via a pipeline from a dedicated pumping station located at one of the Meridian treatment facilities. Because the flow of the treated municipal wastewater from the Meridian facility varies based on seasonality and weather related events, MPC has constructed an approximately 1,500 acre-foot pond on the Plant site to manage the supply of makeup water.

Q. Please explain the portions of the Kemper Project that are currently under the operational responsibility of MPC Plant Operations.

A. Currently, MPC Plant Operations has full operational responsibility for four systems, including the two CC trains and natural gas pipeline, water treatment, and treated municipal wastewater pipeline. Before responsibility for each system, or subsystem, is turned over to MPC Plant Operations, the departments involved initiate and follow the Project's turnover process to formally transition operational responsibility.

The two CC systems, water treatment, and treated municipal wastewater pipeline were placed in-service on August 9, 2014. MPC Plant Operations has been maintaining all in-service systems since taking operational responsibility in 2014. The CC has been operating reliably and the year-to-date annual Equivalent Forced Outage Rate (EFOR) as of September 30, 2016 is 0.67%.

As with all MPC and Southern Company system facilities, MPC Plant Operations has embraced a Target Zero safety philosophy, which is a goal to achieve zero injuries for every job and for every day. To date, MPC Plant Operations has gone over 71 months with zero OSHA recordable incidents.

Q. As Commercial Operation Date (COD) approaches, how has MPC Plant Operations prepared for commercial operation?

A. As part of preparing for commercial operation for any new generating facility, there are numerous tasks that need to be completed. The preparations for commercial operation have been ongoing throughout engineering, construction, and startup activities. Operational procedures have been developed for all areas of the Plant with personnel trained and ready to receive the Plant upon completion of startup activities. MPC has also developed and implemented the maintenance strategy and awarded maintenance contracts, filed all permitting and licenses required to operate the Plant and assumed operational responsibility for all equipment that has completed startup testing and been turned over to MPC Plant Operations.

MPC Plant Operations has implemented PSM procedures for all fourteen elements of the PSM program. These include: Process Safety Information (PSI); Process Hazard Analysis (PHA); Employee Participation; Emergency, Planning, and Response; Training; Hot Work Permit; Operating Procedures; Contractors; Compliance Audits; Trade Secrets; Mechanical Integrity (MI); Pre-Startup Safety Review (PSSR); Management of Change; and Incident Investigation.

A key element of the PSM program, PHA, has been completed. The PHA is a systematic evaluation of the potential hazards of the Plant and determines action items needed to mitigate any potentially hazardous scenarios. MPC Plant Operations has completed all required PHAs. Another element of the PSM program that MPC Plant Operations is working to complete is the PSSRs. Currently, 13 of the 15 PSSRs have been completed.

To assist in the development of best practices, and provide oversight and guidance to the PSM Program, MPC established a PSM Leadership Committee which consists of twelve team members from the Plant, MPC and SCS.

Plant personnel training has also been a high priority for MPC. In addition to the over 34,500 man-hours of classroom training, including 7,900 man-hours of training specifically dedicated to the CC, MPC Plant Operations has been utilizing a training simulator that provides operational simulation of all major pieces of equipment in the Plant to aid in the training and qualification of operating personnel. On-the-job training and experience with Plant systems has been provided through observation and participation in the startup and commissioning process. In addition to the valuable on-the-job training, early onboarding allowed the permanent staff members to develop procedures and fully embrace the Target Zero philosophy, which is to achieve zero injuries for every day and for every job. As previously mentioned, to date, the Plant has had over 71 months of zero OSHA recordables.

Additionally, MPC has been working with the Southern Company system's Fleet Operations and Trading group to begin coordination of unit operation on

syngas. All outages are reported utilizing the Generation Availability Data System (GADS) for the North American Electric Reliability Corporation (NERC). All generation, for retail and station service purposes, is measured with calibrated watt-hour meters.

CURRENT PERFORMANCE PROJECTIONS

Q. What are the four operational parameters in the Final Order on Remand?

A. As required by the Commission's Order, this section of my testimony will present the Company's current expectations for the four operational parameters listed in the Final Order on Remand; availability, heat rate, lignite heat content and byproduct revenues (chemical products revenues)[3].

It is important to note that all of the figures presented herein are still estimates based upon theoretical analyses because the Kemper Plant has not generated syngas for a sufficient amount of time to provide enough actual operational data.

I. Availability

Q. What is the present expectation of the availability ramp of the Kemper Plant and how does that compare to the certificate estimate for availability ramp?

A. Please reference Exhibit____(BCH-1) for the certificate estimate and the currently projected availability ramps.

Q. Has the Plant availability ramp changed from the certificate estimate to the present expectation?

[3] In the MPSC Docket No. 2009-UA-0014, Kemper Certificate, these revenues were referred to as by-product revenues.

A. Yes, it has. The certificate estimate availability ramp was based on the initial design that was available at that time. Much of the Plant's equipment specifications were unknown and detailed design was in the early stages. In 2014, the Plant availability ramp was updated based upon a near complete Plant detailed design and known equipment specifications. The Company also continued to research and consider actual operating experience of several other commercial gasification electricity producing plants when developing the updated availability ramp. The 2014 availability ramp remains the Company's present expectation, because sufficient actual operating data has yet to be experienced. Both ramps achieve similar maximum projected availability (89% in the certificate estimate ramp and 85% in the present expectation ramp in year seven), although the ramp up period for the present expectation ramp has a slower escalation rate.

Q. Why do both availability ramps increase year over year?

A. The Company's experience with large complex power plants, along with the information gathered from published gasification data, is that availability improves over the initial years of operation. The present expectation for availability of the Plant is expected to increase from 35% in year one to 75% in year five.

II. Heat Rate

Q. What is the present expectation for the Plant's heat rate and how does that compare to the certificate estimate for heat rate?

A. The heat rate for the Plant expected at the time of the original certification was 11,708 BTU/kWh on syngas. This was based on the conceptual design of the Plant and

contained engineering estimates for equipment efficiencies and process designs. The current estimated heat rate for the Plant, on syngas, is 12,160 BTU/kWh. This heat rate reflects changes in assumptions resulting from known vendor performance data and updates to the Plant's detailed design. This estimate is still a theoretical number as the Plant's performance testing to measure actual values for equipment and systems will not occur until after COD.

III. Lignite Heat Content

Q. What is the present expectation for the Plant's lignite heat content and how does that compare to the certificate estimate for lignite heat content?

A. The present expected heat content of the lignite fuel supply is 5,416 BTU/lb. This is an average expected over the first five years the Plant is in-service. Analysis of the heat content was performed on drill cores of the lignite and fed into a geologic model that interpolates lignite quality for the area to be mined. Comparatively, the certificate estimate for lignite heat content is 5,290 BTU/lb.

IV. Chemical Product Sales

Q. Please describe the current status of the chemical product sales agreements.

MPC executed the Carbon Dioxide Off-Take Agreements with Denbury Onshore, LLC, and Treetop Midstream Services, LLC, on March 4, 2011, and May 19, 2011, respectively. MPC received Commission approval in Docket No. 2011-UA-0290 to own and construct the CO_2 pipeline to be used to transport the captured CO_2 from the

Plant to the off-takers for use in enhanced oil recovery activities in Mississippi. At this time, the CO_2 pipeline is available and ready for operation.

On June 3, 2016, MPC exercised its right to terminate its Carbon Dioxide Off-Take Agreement with Treetop Midstream Services, LLC. Subsequently, but also on June 3, 2016, MPC and Denbury entered into a First Amended and Restated Carbon Dioxide Off-Take Agreement whereby Denbury has agreed to accept all CO_2 captured at the Plant.

On April 26, 2012, MPC and Martin Product Sales, LLC (MPS) entered into a contract in which MPS will market and sell the sulfuric acid produced at the Plant. On July 23, 2012, the same parties entered into a contract in which MPS will market and sell the ammonia captured at the Plant.

Q. What are the present expectations for the chemical product revenues as compared to the certificate estimate?

A. MPC's current and certificate estimates for total chemical revenues are presented in Exhibit____(BCH-2). Because chemical product revenues are a function of several variables beyond MPC's control including coal quality and commodity markets (i.e. oil and natural gas), these factors should be taken into consideration when comparing total chemical product revenue projections.

MAINTENANCE CAPITAL AND NON-FUEL O&M EXPENSE

Q. What are the Company's present expectations and estimates for the Kemper Project maintenance capital and non-fuel O&M expense?

A. Exhibit____(BCH-3) sets forth the present expectation for maintenance capital and non-fuel O&M expenses directly associated with the Kemper Plant after it is placed in service. Other post-COD costs, such as fuel expenses and taxes, are not included in my exhibit. This exhibit also provides the certificate estimates for maintenance capital and non-fuel O&M expense. As with the operational parameters, the maintenance capital and non-fuel O&M expense figures presented herein are estimates based largely upon theoretical analysis because the Kemper Project has not generated syngas for a sufficient amount of time to provide enough actual operational data.

Q. What are the primary drivers of the changes in maintenance capital and non-fuel O&M expense estimates for the Kemper Project?

A. The original maintenance capital and non-fuel O&M expense estimates used in the certificate case were based upon the initial "screening level" design for the Kemper Project. At that stage, detailed information concerning equipment maintenance requirements, spare part needs, and other factors that impact operational costs were largely unknown. Thus, the certificate estimates were based upon comparisons to other Southern Company plants and "factored" calculations as this was the only information available to the Company at the time.

As discussed by Mr. Owen, since certification the Kemper Project has experienced growth in terms of equipment and material. For example, there are more pumps, motors, valves, and piping, than initially estimated. As equipment and material increases, the cost to operate and maintain them also increases. More

operators, maintenance workers, and management personnel are required, increasing staffing for the Plant. More spare parts, tools, and maintenance equipment are needed. Another driver is the increase in third-party contractors. As MPC Plant Operations began developing the overall operations and maintenance strategy for the Plant, a decision was made to outsource certain functions of the Plant, such as nitrogen generation and wastewater treatment. Now that final design is complete and several systems have begun to operate, MPC has a better estimate of the amount and cost of various catalysts and consumables necessary for daily operation. Finally, MPC Plant Operations now has available specific maintenance recommendations by the original equipment manufacturer for much of the Plant's equipment. All of this information and more was considered by the Company when developing the Plant's current overall maintenance strategy and budget.

Q. How was MPC's overall maintenance capital and non-fuel O&M strategy for the Kemper Plant on which Exhibit____(BCH-3) developed?

A. MPC and Southern Company Generation have extensive experience in operating, maintaining and optimizing electric generating facilities. MPC has leveraged this experience and knowledge in developing the overall O&M strategy for the Plant. Given a significant portion of the Plant consists of chemical processes and equipment, existing and well-developed best practices from the chemical industry have also been integrated into the development of the overall Plant O&M strategy.

Southern Company Generation has a set of standards designed to provide consistent management for all aspects of power plant safety, operations, maintenance,

engineering, compliance, and support. All applicable Southern Company Generation O&M guidelines are integrated into the Plant strategy to ensure consistency with current Southern Company Generation standards and to take advantage of economies of scale efficiencies. The scope of the O&M strategy includes operations, maintenance, staffing, and outsourcing of key MPC Plant Operations activities. The MPC Plant Operations' O&M strategy was supplemented by visiting and discussing this strategy with several petro-chemical facilities, three operating IGCC plants, the Southern Company Power Systems Development Facility where the TRIG™ technology was initially developed and demonstrated, Southern Company Gasification Technology personnel, outside chemical consultants and several Southern Company system and MPC combined cycle and fossil plants.

MPC continues to complete activities to refine the maintenance capital and non-fuel O&M expense estimates. Most recently, MPC worked with a maintenance planning consultant to review the maintenance strategy. This work has provided additional insight into the overall Plant operations, and have been incorporated into the cost estimates presented in my testimony.

Q. Do you anticipate any changes to the Plant's maintenance capital and non-fuel O&M expense estimates in the future?

A. Yes. While the efforts discussed above provide additional insight into the Plant's operation and maintenance, as previously stated, actual operational cost data is only available for the assets already in-service. Additional costs associated with the gasifier and gas cleanup systems, including temporary labor and equipment rental

may be required to support early Plant operations. MPC will continue to periodically evaluate and revise our maintenance capital and non-fuel O&M expense estimates as more information is known and additional operational experience is gained.

During the start-up and commissioning process, MPC is also identifying potential improvement projects that ultimately may be completed subsequent to placing the remainder of the Kemper Project in-service. If completed, such improvement projects would be expected to enhance plant performance, safety and/or operations. The related potential costs have yet to be fully evaluated and may be subject to the $2.88 billion cost cap.

CONCLUSION

Q. Please summarize your testimony.

A. MPC Plant Operations has been operating the Kemper CC for over 25 months and continues to achieve its Target Zero safety goal, while operating well above the industry standard for a CC. MPC Plant Operations is completely staffed, between full time and contract personnel, and has implemented all procedures and controls to accept operational responsibility for the remainder of the Plant. In response to the Commission's request, I have provided the Company's present expectations for the Plant's performance and for maintenance capital and non-fuel O&M cost for the first five years of operations. These estimates will continue to be refined as more data, experience, and information is gained from actual operation of the Plant.

Q. Does this conclude your testimony?

A. Yes, it does.

BEFORE THE MISSISSIPPI PUBLIC SERVICE COMMISSION

MISSISSIPPI POWER COMPANY **DOCKET NO. 2016-AD-0161**
EC-120-0097-00

IN RE: CREATION OF DISCOVERY DOCKET TO MANAGE ALL FILINGS RELATED TO THE PRUDENCE OF THE KEMPER COUNTY INTEGRATED GASIFICATION COMBINED CYCLE GENERATING FACILITY

AFFIDAVIT OF BRUCE C. HARRINGTON

PERSONALLY appeared before the undersigned officer authorized to administer oaths, Bruce C. Harrington, who being duly sworn, deposes and says; that the foregoing direct testimony was prepared by him or under his supervision; that said testimony was prepared for use as direct testimony on behalf of Mississippi Power Company in the captioned proceeding; that the facts stated therein are true to the best of his knowledge, information and belief; and that if asked the questions appearing therein, his answers, under oath, would be the same.

This the 3rd day of October, 2016.

BRUCE C. HARRINGTON

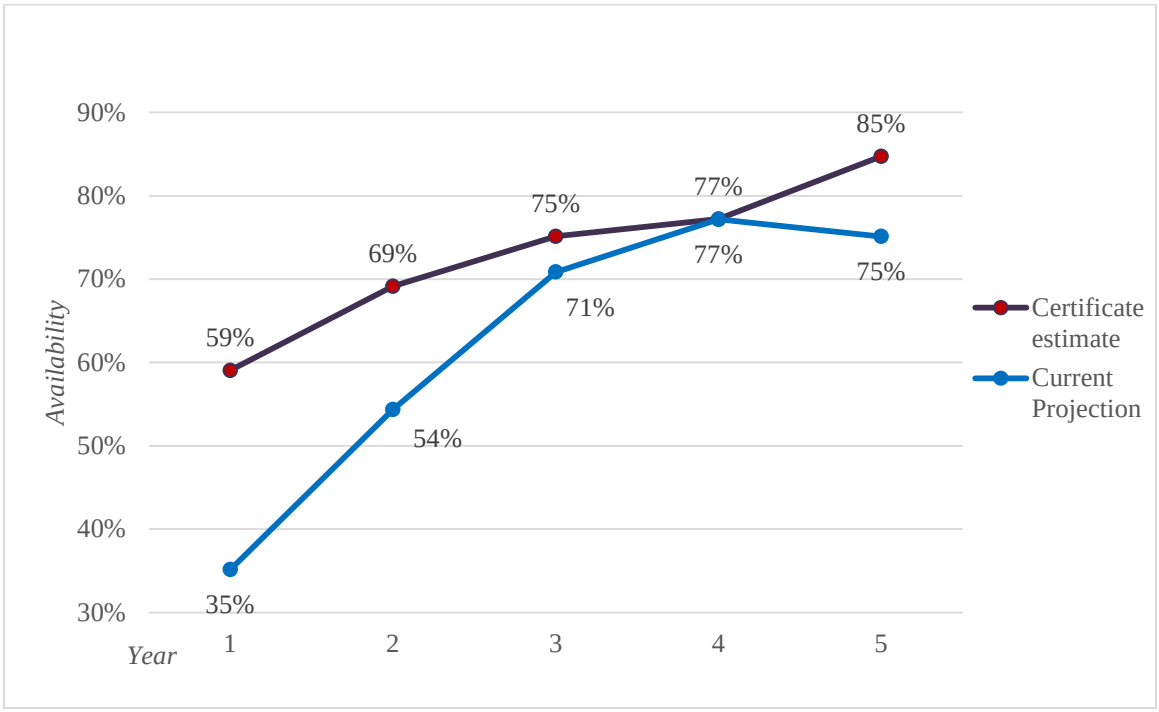
Sworn to and subscribed before me this 3rd day of October, 2016.

Notary Public

SUSAN V. CARSON
NOTARY PUBLIC
ID No 106812
My Comm Expires
Sep 29, 2017
HARRISON COUNTY
STATE OF MISSISSIPPI

My Commission Expires:
9-29-2017

Kemper IGCC Plant
Availability Ramp

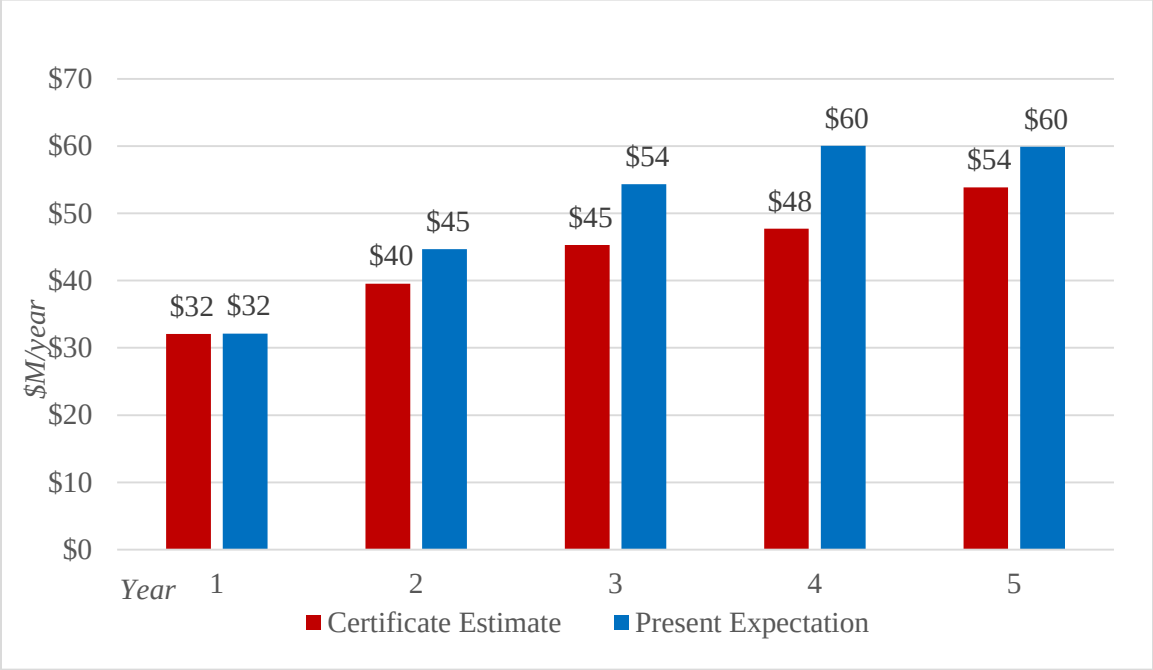


(i) *Availability is defined as the total number of operation hours on syngas divided by 8,760 hours.*

(ii) *Year 1 of the certificate estimate for the availability ramp is based on 7 months of operation. All other years are based on 12 months of operation.*

(iii) *The certificate estimate for the availability ramp is sourced from Exhibit____(TOA-1) Appendix M filed in Docket No. 2009-UA-0014.*

Kemper IGCC Plant Chemical Product Revenues Projections



(i) *Based on a full calendar year (12 months)*
(ii) *Year 1 certificate estimate was $22.6 for a 7 month period, but for purpose of comparison was grossed up to a 12 month period.*
(iii) *Present expectation includes transportation which was not contemplated in the certificate estimate.*
(iv) *Total Project dollars (100%).*
(v) *The certificate estimate for chemical product revenues is sourced from Exhibit____(FT-13) (based upon MOD$10 scenario) filed in Docket No. 2009-UA-0014.*

Kemper IGCC Plant Maintenance Capital and Non-Fuel O&M Estimates

Table 1-A: Present Expectation for Maintenance Capital

MAINTENANCE CAPITAL					
Category	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Staffing/SCS Design Labor	$ 7,035,388	$ 7,246,450	$ 7,463,843	$ 7,687,758	$ 3,959,196
Third Party Agreements	$ 13,713,080	$ 4,908,034	$ 4,953,106	$ 30,652,107	$ 5,047,565
Major Equipment Maintenance	$ 15,413,470	$ 33,704,594	$ 44,605,536	$ 46,268,596	$ 18,295,978
Ash Equipment	$ 314,791	$ 1,902,524	$ -	$ -	$ -
Catalyst Replacement	$ -	$ -	$ 9,169,560	$ 105,630	$ 305,793
Environmental, Health & Safety	$ 2,175,000	$ 2,000,000	$ 1,750,000	$ 1,500,000	$ 1,500,000
TOTAL CAPITAL	**$ 38,651,729**	**$ 49,761,602**	**$ 67,942,045**	**$ 86,214,091**	**$ 29,108,532**

Table 1-B: Present Expectation for Non-Fuel O&M Expense

NON-FUEL O&M EXPENSE					
Category	**Year 1**	**Year 2**	**Year 3**	**Year 4**	**Year 5**
Staffing	$ 42,304,526	$ 43,366,747	$ 44,625,650	$ 46,037,895	$ 47,132,877
SCS Gas Tech and Demand Services Support	$ 6,285,232	$ 6,331,707	$ 6,486,906	$ 6,655,501	$ 6,378,140
Contract Labor/Outage Support	$ 15,402,926	$ 15,788,000	$ 16,182,700	$ 16,587,267	$ 16,919,012
Training/Licensing	$ 830,506	$ 851,269	$ 872,550	$ 894,364	$ 916,723
Third Party Agreements	$ 33,684,496	$ 33,566,307	$ 34,453,173	$ 38,130,404	$ 36,287,339
Major Equipment Maintenance	$ 18,950,000	$ 18,800,000	$ 18,840,000	$ 20,010,000	$ 19,311,000
Environmental, Health & Safety	$ 6,347,724	$ 6,506,417	$ 6,669,078	$ 6,835,804	$ 7,006,700
Rolling Stock	$ 428,459	$ 439,171	$ 450,150	$ 461,404	$ 472,939
Consumables	$ 837,744	$ 858,688	$ 880,155	$ 902,159	$ 924,713
Utilities/Chemicals	$ 3,262,664	$ 3,344,231	$ 3,427,836	$ 3,513,532	$ 3,601,370
Miscellaneous Contract Services	$ 4,868,263	$ 4,989,969	$ 5,114,719	$ 5,242,586	$ 5,298,306
Security, Insurance and Other	$ 6,386,036	$ 6,748,450	$ 6,881,120	$ 7,113,409	$ 7,262,458
TOTAL NON-FUEL O&M	**$ 139,588,577**	**$ 141,590,954**	**$ 144,884,036**	**$ 152,384,326**	**$ 151,511,578**

(i) Present expectation is based on a full calendar year starting in 2017.
(ii) Process Development Allowance is excluded from all estimates.

Table 2-A: Certificate Estimates for Maintenance Capital

MAINTENANCE CAPITAL					
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
TOTAL PLANT CAPITAL	**$ 5,471,000**	**$ 9,914,000**	**$ 14,963,000**	**$ 15,149,000**	**$ 6,881,000**

Table 2-B: Certificate Estimates for Non-Fuel O&M Expense

NON-FUEL O&M EXPENSE					
	Year 1	**Year 2**	**Year 3**	**Year 4**	**Year 5**
TOTAL PLANT NON-FUEL O&M	**$ 39,192,000**	**$ 39,229,000**	**$ 43,894,000**	**$ 39,773,000**	**$ 43,219,000**

(i) Process Development Allowance is excluded from all estimates.
(ii) Table 2 figures are sourced from Appendix N Exhibit____(TOA-1) in Docket No. 2009-UA-0014.