

STATE OF IOWA
BEFORE THE IOWA UTILITIES BOARD

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| IN RE: INTERSTATE POWER AND LIGHT COMPANY | DOCKET NOS. GCU-2012-0001 RPU-2012-0003 |
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**SIXTH SEMI-ANNUAL STATUS REPORT
MARSHALLTOWN GENERATING STATION**

COMES NOW, Interstate Power and Light Company (IPL), and submits to the Iowa Utilities Board (Board) its Sixth Semi-Annual Status Report regarding construction, transmission, permitting, and other activities related to the Marshalltown Generating Station (MGS).

A. MGS PROJECT STATUS

1. On November 8, 2013, the Board issued its Proposed Decision and Order (November 8 Order), of which Order Clause No. 6 requires IPL to, among other things:

...file a status report on MGS on or before March 3, 2014, and every six months thereafter, with the final report due three months after all aspects of the project subject to the overall cost cap are completed. At a minimum, the report shall provide updates on the information identified in the body of this order.

The Board also addressed this requirement at page 29 of its November 8 Order:

IPL will be required to file semi-annual reports with construction progress, both for MGS and any necessary transmission upgrades. The reports are to include detailed information regarding completed transmission work, including interconnection details and Marshalltown area network modifications related to the project.

2. Attachment A to this filing is IPL's Sixth Semi-Annual Status Report,

which provides the requested information, and is hereby incorporated by reference.

3. Below is a brief summary of changes and updates since the prior Report filed March 3, 2016:

II. Permitting Status – MGS:

A. Construction Focus: Focus is permit compliance during remaining construction period.

B. Pre-Operational Focus: Addition of MGS project Environmental Compliance Manual (ECM) to support day-to-day environmental compliance.

III. Permitting Status – MGS Gas Pipeline: All reporting requirements for Docket No. P-0888 have been completed; no update.

IV. Transmission Status Update:

A. Work Complete / Interconnection Details: FERC accepted the MGS Conditional Generation Interconnection Agreement (GIA) and Midcontinent Independent System Operator, Inc. (MISO) filed an amended Conditional GIA that incorporates the FERC findings.

B. MGS Capacity Accreditation: MISO has approved MGS Transmission Service Requests for the MISO 2017-2018 Planning Year.

C. Transmission Costs: ITC-M is self-funding network upgrades; no update.

V. Construction Status Update – MGS:

A. Engineering: Engineering is substantially complete.

B. Procurement: Fully completed.

C. Construction: Construction Work progressed from 42% to 75% complete.

VI. Construction Status Update – MGS Gas Pipeline: IPL completed testing related to the Sutherland Generating Station (SGS) Combustion Turbines.

VII. MGS Project Cost: Updates the total project spend (plant, pipeline,

AFUDC) from \$507.5M to \$630.2M. No transmission costs have been incurred to date. IPL estimates the project will be completed under the Cost Cap of \$920 million.

WHEREFORE, Interstate Power and Light Company respectfully request that the Board accept this documentation as the Sixth Semi-Annual Status Report.

Dated this 2nd day of September, 2016.

Respectfully Submitted,

INTERSTATE POWER AND LIGHT COMPANY

By: /s/ Samantha C. Norris
Samantha C. Norris
Senior Attorney
Alliant Energy Corporate Services, Inc.
200 First Street S.E.
P.O. Box 351
Cedar Rapids, IA 52401
319-786-4236 (telephone)
SamanthaNorris@alliantenergy.com

Attachment A

Sixth Semi-Annual MGS Status Report

I. Regulatory Status – Marshalltown Generating Station (MGS)

On November 8, 2013, the Iowa Utilities Board (Board) issued its Proposed Order for the construction of MGS (November 8 Order). IPL's Board of Directors accepted the November 8 Order on November 19, 2013.

On November 12, 2013, the Large Energy Group (LEG) filed a request for clarification of the record. On December 9, 2013, the Board issued the Order Clarifying Decision. As no party sought either administrative or judicial review of the November 8 Order, the Order has been deemed final and un-appealable.

Ordering Clause 1 of the Board's November 8 Order provides:

Pursuant to Iowa Code chapter 476A (2013), Interstate Power and Light Company's application to construct and operate a generating facility is granted, subject to final pre-construction permits being issued. A certificate will be issued once IPL notifies the Board that final pre-construction permits have been issued.

On April 17, 2014, IPL submitted to the Board the remaining pre-construction permits that could be obtained prior to commencement of construction. IPL concurrently requested that the Board issue an unconditional Generating Certificate in accordance with Ordering Clause 1.

On May 8, 2014, the Board issued a Certificate of Public Convenience, Use, and Necessity (Permit No. GCU-2012-001) (Certificate), granting IPL authority "to build, construct, maintain, and operate and to operate and maintain other apparatus and appurtenances necessary for generating electricity at its facility located at Marshalltown, Iowa."

Consistent with Iowa Code § 476.53(3)(f), IPL is "[p]roceeding with the construction ...

of the facility.”

The Board’s November 8 Order set a cost cap of \$920 million. As described more fully below, as of January 31, 2016, IPL anticipates that the project will be completed within the Cost Cap.

II. Permitting Status – MGS

Construction on the project began in the summer of 2014. IPL is complying with pre-construction permitting requirements. In addition, IPL is also supporting the project permitting in the following ways:

A. Construction Focus: IPL’s construction focus is ensuring MGS construction activities are complying with all required ongoing permitting requirements necessary for the work involved. This focus is implemented by participating in routine update meetings, interacting with site contractor environmental resources, reviewing construction reports and records, and ensuring the MGS environmental management plan covering construction is being implemented. Additionally, IPL’s contractor is obtaining other permits or approvals necessary during the construction process. During the next semi-annual period, IPL will be working with its contractor to perform air compliance emission tests for many of the emission units at MGS.

B. Pre-Operational Focus: IPL’s pre-operational focus is organizing, scheduling, and working on future permit program work associated with the MGS operations. A project schedule and listing of operations permits and environmental programs has been created and resources are being put towards these efforts. Examples of work items that fall into this category of permitting/environmental programs support include:

1. Creation of the MGS Spill Prevention Countermeasure Control (SPCC) Plan for operations;
2. Creation of the MGS Stormwater Pollution Prevention Plan for operations;
3. Development of the Title V Air Operating Permit Application for MGS. This permit application needs to be submitted to the IDNR shortly after MGS goes into operation; and
4. Creation of an overall MGS project Environmental Compliance Manual (ECM). The purpose of the ECM is to aid plant managers and operators in complying with myriad environmental regulations, serving as a day-to-day guide for understanding and meeting the plant's environmental requirements.

III. Permitting Status – MGS Gas Pipeline

On May 1, 2013, IPL submitted a Petition for Pipeline Permit to the Board, in Docket No. P-0888. A hearing was held on November 13, 2013, in Marshalltown, Iowa. On November 18, 2013, the Administrative Law Judge issued the Proposed Decision and Order Granting Permit. Since no notice of appeal of the Proposed Decision and Order Granting Permit was filed, the Proposed Decision and Order Granting Permit became a final decision of the Board on December 3, 2013. On May 7, 2014, Pipeline Permit No. 1292 filing was accepted by the Board, under Docket No. P-0888.

On September 29, 2015 IPL submitted to the IUB the Construction Completion Report and Final Pipeline route. With the submission of this documentation, all

reporting requirements ordered under Docket No. P-0888 have been completed.

IV. Transmission Status Update

IPL's obligations to secure transmission interconnection service for MGS are nearing completion. The Generation Interconnection Agreement (GIA) has been executed and construction of identified network upgrades and other contingent transmission facilities continues. IPL is also taking steps needed to allow it to accredit the capacity from MGS from the time the plant begins operation until construction of all network upgrades and other contingent transmission facilities identified in the interconnection agreement is complete.

In addition to its original application for interconnection service, and as described more fully below, IPL is pursuing incremental interconnection service for MGS for the anticipated higher output of the plant through a second generation interconnection service application that it submitted to MISO. IPL anticipates that the transmission-related costs associated with interconnection service will not result in the project exceeding the approved cost cap.

A. Work Completed/Interconnection Details: IPL submitted a request to Midcontinent Independent System Operator, Inc. (MISO) on July 1, 2013 to include MGS in the August 2013 Definitive Planning Phase (DPP) study cycle for 635 MW of interconnection service. The DPP includes a System Impact Study and a Facilities Study which identify the transmission network upgrades required for the interconnection of MGS to the transmission system. MISO issued the original DPP Study results in January, 2014 (MISO August 2013 West Area DPP Group Study, dated January 8, 2014). MISO subsequently announced and conducted a restudy of

the August 2013 West Area DPP Group (DPP Restudy). MISO posted the final DPP Restudy results on May 27, 2015. MGS was studied at a maximum output of 635 MW (based upon an approximately 104° F outside temperature, summer conditions).

On May 14, 2015, IPL, ITC Midwest LLC (ITC-M) and MISO entered into a Provisional GIA to enable ITC-M to move forward with the construction of the Interconnection Facilities to meet IPL's construction schedule for MGS. MISO filed the executed Provisional GIA with the Federal Energy Regulatory Commission (FERC) with an effective date of May 15, 2015. FERC accepted the Provisional GIA via delegated letter order on July 6, 2015.

In October 2015, Facility Studies for the ITC-M transmission system network upgrades and for the MidAmerican Energy Affected System¹ network upgrade, which were identified in the DPP Restudy, were completed and were filed with the Board in December 2015.

On January 20, 2016, after completion of the GIA negotiation process, IPL signed a Conditional GIA (between IPL, ITC-M, and MISO) for MGS. ITC-M elected not to execute the Conditional GIA because of a disagreement with MISO on the payment structure for Shared Network Upgrades.² The unexecuted Conditional GIA was submitted to FERC on March 4, 2016. FERC accepted the MGS GIA, effective March 5, 2016, and ordered MISO to submit a compliance filing, instituting the payment structure for Shared Network Upgrades proposed by MidAmerican Energy, ITC-M, and IPL. MISO filed an amended Conditional GIA that incorporates the FERC

¹ An electric transmission or distribution system other than the transmission owner's system that is affected by the interconnection request.

² Network upgrade that is funded by an interconnection customer(s) and also benefits other interconnection customer(s) that are later identified as beneficiaries and assigned a portion of the cost of the upgrade.

findings on June 2, 2016 (attached as Confidential Exhibit 1). The MGS Conditional GIA includes total estimated costs of \$18.4 million for ITC-M system network upgrades and Transmission Owner Interconnection Facilities, and \$2.6 million for allocation of the cost of certain Shared Network Upgrades to the MGS project.

IPL has also entered into a Multi-Party Facility Construction Agreement (MPFCA) among IPL, MidAmerican Energy and MISO for the MidAmerican Affected System network upgrade for which IPL's estimated cost allocation is an additional \$0.4 million. The cost estimates above are exclusive of IPL's distribution upgrades and interconnection facilities.³ IPL filed the MPFCA with the IUB when it filed the unexecuted Conditional GIA.

The final outstanding contract related to the MGS GIA is the Facilities Service Agreement (FSA) that provides details on project payment schedules between IPL and ITC-M for all ITC-M system Network Upgrades identified in the GIA. Negotiations for this contract are substantially complete and it is expected to be filed with FERC by September 2, 2016 and will be filed with Board upon acceptance at FERC. ITC-M is self-funding all of the Network Upgrades related to the interconnection of MGS, as identified in the MGS GIA.

Additionally, as previewed in IPL's Third Supplemental Information Regarding Transmission Studies, filed June 10, 2015, IPL has submitted a request to MISO to include MGS in the February 2016 DPP Study for incremental interconnection service in the amount of 30 MW during the summer, and 65 MW during the winter. When completed, this will allow MGS to be accredited for capacity of 665 MW and would

³ IPL will be responsible for the actual costs incurred, which may vary from the Facility Studies estimates.

allow for energy injection up to 700 MW, subject to operating conditions. This request for additional transmission interconnection service accommodates anticipated plant output that will be available from MGS, consistent with updated plant output curves developed after the original interconnection service request was submitted to MISO. There is no incremental plant construction cost required to achieve this output from the plant. The February 2016 DPP Study is anticipated to be completed in 2017, after commercial operation of MGS commences. IPL expects that any additional transmission network upgrade costs (above the currently known cost figures above) for the increased plant output will not result in the project costs exceeding the approved Cost Cap of \$920 million.

B. MGS Capacity Accreditation: Based on the results of the DPP Studies, a number of Multi Value Projects (MVPs), as well as other transmission system network upgrades and transmission projects will need to be completed prior to MGS receiving unconditional transmission access (see Table 1). In the MGS Conditional GIA, MISO provided IPL with a comprehensive listing of contingent facilities associated with MGS that include required transmission system network upgrades, MVPs, other transmission projects within and outside of MISO, and other generators that requested to interconnect prior to the MGS interconnection request. In the second quarter of 2014, MISO indicated to IPL that it could not unconditionally accredit capacity from MGS to meet MISO resource adequacy requirements until construction of the transmission-related contingent facilities is complete. All of these transmission-related contingent facilities will likely not be complete and in-service until after MGS has completed its initial two to four years of operation. A comprehensive

listing of the transmission-related contingent facilities, updated to include current status, is shown in Table 1.

Table 1: MGS Contingent Transmission Upgrades and Projects

| Network Upgrades | Projected In-Service Date |
|--|----------------------------------|
| Marshalltown Substation | Complete |
| Marshalltown – Blairstown Line | Complete |
| Fernald Transformer | 11/30/2016 |
| Jasper Transformer | Complete |
| Newton Transformer | Complete |
| Newton – Prairie City Line | 3/31/2017 |
| Jasper – Newtown Line | 12/31/2016 |
| Jasper – Laurel Line | 12/31/2016 |
| Wellsburg Transformer | Complete |
| Jasper – Aurora Line | 12/31/2016 |
| Black Hawk Capacitor | 1/31/2017 |
| | |
| Contingent Facilities | Projected In-Service Date |
| SE Twin Cities – Lacrosse 345 kV Line | 9/30/2016 |
| Marshalltown Plaza Substation | 12/31/2020 |
| Marshalltown Fletcher Substation | 12/31/2019 |
| Winco – Hazleton 345 kV Line (MVP 4) | 12/31/2018 |
| Morgan Valley Substation | 5/1/2021 |
| N LaCrosse – N Madison 345 kV Line (Section of MVP 5) | 12/31/2018 |
| Nebraska City – Sibley 345 kV Line (SPP Project) | 12/31/2016 |

Source: Appendix A, Exhibits A10 and A12 of MGS GIA filed at FERC on March 4, 2016 with updated estimated completion dates as of July 1, 2016 and August 3, 2016 based upon information in the MISO MTEP16 Project list and SPP 2016 Transmission Expansion Project List, respectively.

IPL will manage MGS capacity accreditation during this conditional period without transmission-related contingent facility construction complete; however, IPL has identified two options that provide a means to accredit MGS capacity during this period. IPL expects to be able to accredit a substantial, if not the full amount, of MGS capacity using one or both of these options during this period. The option that IPL currently prefers uses short-term transmission service requests to deliver the capacity to the Alliant West area. The other option uses MISO annual interim studies, part of a

newly implemented process that MISO initiated, to determine how much of the MGS capacity can be accredited. IPL can use one of these options on a year-by-year basis until all transmission-related contingent facilities are complete. At that point, IPL will be able to accredit the MGS capacity based upon the status of the underlying GIA without needing to take additional steps such as those associated with these two options.

IPL is taking steps needed to implement each of these options. IPL can pursue each option concurrently and then choose the option that provides the best outcome. IPL submitted short-term transmission service requests to MISO in order to deliver capacity from MGS to the Alliant West area and MISO approved the requests in August 2016. This approval, in conjunction with the executed Conditional GIA, allows IPL to be able to accredit the full amount of MGS capacity for a twelve-month period beginning in June 2017 (the start of the MISO 2017-2018 Planning Year). IPL is also eligible to pursue the other option for accrediting MGS capacity that uses MISO annual interim studies. MISO will provide the results from the annual interim studies that determine the amount of capacity that MGS could be accredited for in the MISO 2017-2018 Planning Year by October 31, 2016. After annual interim studies are complete, IPL will evaluate whether this option for MGS capacity accreditation would be preferable to using the short-term transmission service request-based option that IPL currently prefers.

IPL also continues to actively participate in discussions with MISO and numerous other stakeholders about solutions to capacity accreditation; however, these discussions have currently subsided as MISO's priority has shifted toward making more targeted changes to the process for managing the generation interconnection

queue. IPL remains committed to pursuing long-term, comprehensive solutions to capacity accreditation; however, these solutions will not be used for MGS but can benefit future interconnecting generators that face similar issues.

C. Transmission Costs: As part of the Conditional and Provisional GIA, ITC-M selected an option under the terms of the MISO Generator Interconnection Procedures which enables ITC-M to self-fund the transmission system network upgrades. IPL reviewed ITC-M's decision to self-fund the upgrades, deemed it prudent and accepted it in the GIA. Note, however, that IPL will directly incur the costs for Affected System network upgrades. Because ITC-M is self-funding the network upgrades, ITC-M will retain the assets on its books and levy a recurring direct charge on IPL, as the owner of MGS, for the costs specific to these network upgrades. IPL anticipates that ITC-M will begin levying charges in the fourth quarter of 2016 when the FSA becomes effective regardless of whether or not each specific network upgrade is in-service at that time. For the purposes of evaluating the project relative to the approved Cost Cap, IPL intends to include the ITC-M capital costs for self-funded network upgrades as part of the Cost Cap calculation, consistent with how these costs would have been included if IPL had directly funded the upgrades.

V. Construction Status Update – MGS

A. Engineering: IPL entered into an Engineering, Procurement, and Construction (EPC) Contract with Kellogg Brown & Root LLC (KBR) on June 1, 2014. Overall engineering progress is substantially complete with the landscaping, testing, and commissioning procedures remaining. Engineering will continue to address construction related questions and prepare final as-built drawings.

B. Procurement: KBR selected Siemens as the major equipment supplier for the Combustion Turbine Generators (CTGs) and Steam Turbine Generator (STG) and Nooter Eriksen as the Heat Recovery System Generators (HRSGs) supplier. All major equipment has been delivered to the site. Procurement of equipment and materials is 100% complete. Subcontracts for system testing and landscaping remain to be completed.

C. Construction: KBR and their subcontractors have substantially completed the underground mechanical and electrical work. Erection of power train 1, 2, STG and building structural steel are progressing. Construction efforts in the coming months will continue to focus on completing building siding and installation of mechanical and electrical systems in all areas. Construction and start-up progress is approximately 75% complete and continues tracking to most of the major milestones.⁴ Currently the project is experiencing craft labor turn-over, partially due to competing skilled craft labor demand, as well as obtaining quality craft labor which is affecting productivity and some of the intermediate milestone dates in the schedule. IPL is actively monitoring the schedule and site progress. IPL is working with KBR to identify opportunities to minimize impact to schedule float. IPL continues to anticipate that MGS will be in-service by the second quarter of 2017.

VI. Construction Status Update – MGS Gas Pipeline

IPL issued a Change Order to KBR on September 29, 2014 for the inclusion of the MGS Natural Gas Pipeline in the EPC contract. IPL submitted the Commencement of Construction notice to the Board on January 28, 2015. As

⁴ Total project including engineering, procurement, construction and start-up are 75% complete.

contained in Docket No. P-0888, IPL began submitting weekly reports on February 18, 2015. The final weekly report was submitted on September 29, 2015. On September 29, 2015, IPL also submitted to the IUB the Construction Completion Report and Final Pipeline route. With the submission of this documentation, all reporting requirements ordered under Docket No. P-0888 has been completed.

Construction was completed on the pipeline with gas being delivered to the City of Marshalltown on January 22, 2016. The Sutherland Generating Station (SGS) and MGS gas yards will be commissioned when gas is needed for these services. Right-of-way and easement restoration is complete and land owner crop damage payments are being finalized. IPL also completed testing on the gas regulators and dew point heater related to the SGS Combustion Turbines.

VII. MGS Project Cost

The Cost Cap as identified in the November 8th Order is \$920 million. As of July 31, 2016, the capitalized project costs consisted of capital expenditures of \$581.9 million and AFUDC of \$48.3 million.

| Total Project Costs – As of July 31, 2016 | |
|--|----------------|
| Plant and Pipeline | \$581.9 |
| Transmission | \$0 |
| AFUDC | \$48.3 |
| Cost to Date | \$630.2 |
| IUB Cost Cap | |
| | \$920 |

(\$ shown in millions)

The estimated cost of the transmission upgrades, interconnection costs, and distribution upgrades is approximately \$25 million. IPL anticipates that the project will be completed within the Cost Cap.