

Response of C.P. Crane LLC ("CP Crane") to BGE Data Request No. 1
CP Crane Repowering Project
PSC Case No. 9482
Response Date: September 28, 2018

- 1-1. Please provide the maximum hourly natural gas flow rate, in therms, of the existing electric generating equipment located at the Charles P. Crane Generating Station ("Crane Station").

Response:

As of June 1, 2018, the existing electric generating equipment located at Crane Station has been shut down and decommissioned. The existing electric generating equipment will not be re-started. Therefore, there is no maximum hourly natural gas flow rate for electric generating equipment located at Crane Station.

In the past, the Crane Station has included three primary natural gas uses: (1) Natural gas ignitors for each of the two coal burning units, (2) Auxiliary boiler to provide steam for startup and emergency conditions, and (3) Re-burn burners in each of the coal burning units to reduce NOx emissions. Assuming 1,000 Btu/scf, the re-burn burners were the largest users of natural gas at approximately 4,750 therms per hour per boiler. The auxiliary boiler used approximately 220 therms per hour and the ignitors for each boiler used approximately 1,170 therms per hour.

Response provided by: David Dunbar, Vice President – Operations & Development, C.P. Crane LLC

Response of C.P. Crane LLC ("CP Crane") to Environmental Groups Data Request No.1
CP Crane Repowering Project
PSC Case No. 9482
Response Date: January 2, 2019

Water Impacts

- 1-4. The ERD does not provide adequate details regarding the removal of coal ash, coal, and the coal storage pile from the facility. C.P. Crane was asked to provide a plan for the decommissioning of these areas in PPRP Data Request 1-7. C.P. Crane stated that decommissioning began after June 1, 2018 but did not provide any further documentation or plan. Please provide detailed information and plans related to the proper disposal of all coal, coal ash, and coal storage pile(s) at the facility. Please also provide any information related any investigation into possible groundwater and soil contamination at the site of any coal and coal ash storage areas.

Objection:

The Applicant objects to this request as irrelevant because it is not reasonably calculated to lead to the discovery of admissible evidence. Information on decommissioning activities has no bearing on the environmental impacts that may result from construction and operation of the combustion turbines. Without waiving this objection, the Applicant will endeavor to provide information responsive to this request.

Response:

As stated in response to PPRP DR 1-7, decommissioning of the CP Crane coal-fired facility will include removal of the coal storage pile to ground level, removal of coal and coal ash in the facility, removal of liquids stored in tanks, and closing off of the cooling water intake.

As of December 2018, most of the coal storage pile has been removed and it is currently planned that activity will continue until the pile is completely removed, likely in the first quarter of 2019. Coal and coal ash in the facility have been removed and disposed of properly. Most liquids have been drained from tanks and that activity will continue. Closing off of the cooling water intake has been completed by removing the pump motors. Also, all motor operated valves from the intake side of the piping, to prevent flow through the system, are closed. There is no water intake or discharge for cooling purposes.

Decommissioning activities at CP Crane have included the following:

- Removal and disposal of all bags from baghouses and cleaning of coal combustion byproduct area.
- Removal of approximately 2,207 tons of coal ash in June and July 2018.
- All residual bottom and fly ash has been removed from the site.

- The closed-loop bottom ash system has been cleaned and decommissioned. Note that the facility no longer generates bottom ash or bottom ash transport water.
- There are no discharges of metal cleaning wastes, boiler blowdown, or demineralizer regeneration.
- Emptied and cleaned the coal handling system.
- Almost all coal recovered from the coal storage pile has been removed from the facility.
- Electrical and mechanical systems no longer in use are being isolated and locked out.

CP Crane continues to meet the requirements of its existing NPDES Permit, including the administering and maintaining of a Stormwater Pollution Prevention Plan. All runoff from what remains of the coal storage pile is treated by CP Crane's wastewater treatment facility prior to discharge.

CP Crane does not have any information related to groundwater and soil contamination at the site of any prior coal and coal ash storage areas.

Response provided by: Kenneth McGreevy, Plant General Manager, C.P. Crane Station

Response of C.P. Crane LLC (“CP Crane”) to Staff Data Request No. 1
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PSC Case No. 9482
Response Date: September 6, 2018

1-6 What PJM queue studies have been performed for the Project? Please provide study reports?

Response:

CP Crane submitted two PJM queue requests for this project, one to reactivate the existing ultra-low sulfur diesel (“ULSD”) combustion turbine (AD2-103) and the second for the three new natural gas (“NG”) fired units (AD2-104). PJM completed the Feasibility Study Reports in July 2018. Those reports are attached as Staff DR 1-6 Attachment 1 and Staff DR 1-6 Attachment 2. PJM is now in the process of performing Impact Studies for these queue requests. PJM expects to complete the Impact Studies in February 2019.

Response provided by: Jennifer Phillips, Vice President Asset Management – East, Middle River Power, LLC

Response of C.P. Crane LLC ("CP Crane") to Staff Data Request No. 2
CP Crane Repowering Project
PSC Case No. 9482
Response Date: February 26, 2019

- 2- 6. Following up on Staff Data Request No. 1-6, please provide the Impact Studies Reports for AD2-103 and AD2-104 when available.

Response:

PJM expects to deliver the Impact Studies Reports by March 31, 2019. CP Crane will provide the Impact Studies Reports for AD2-103 and AD2-104 as soon as they are available.

Response provided by: Jennifer Phillips, Vice President Asset Management – East, Middle River Power, LLC

Response of C.P. Crane LLC ("CP Crane") to Staff Data Request No. 2
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Response Date: February 26, 2019

- 2- 7. The Direct Testimony of Mr. Dunbar discussed "International Organization for Standardization conditions". Please describe these conditions.

Response:

Efficiency and electric power output of combustion turbines ("CTs") vary according to the ambient air conditions. The three major factors that contribute to CT performance are:

- (1) ambient air temperature into the CT's compressor section,
- (2) relative humidity of the air entering the CT's compressor section, and
- (3) ambient air pressure.

To provide a basis for comparison of CT performance the International Organization for Standardization, an international standard-setting body composed of representatives from various national standards organizations, set the following conditions as the "ISO" base conditions:

- (1) ambient air temperature of 59°F (15°C),
- (2) relative humidity of air of 60%, and
- (3) air pressure of 14.7 psia (1.015 bar) which equates to an elevation of sea level.

Response provided by: David Dunbar, Senior Advisor, Middle River Power, LLC