

IN THE MATTER OF THE APPLICATION OF *
CP CRANE LLC FOR A CERTIFICATE OF *
PUBLIC CONVENIENCE AND NECESSITY *
AUTHORIZING THE MODIFICATION OF *
THE CHARLES P. CRANE GENERATING *
STATION IN BALTIMORE COUNTY, *
MARYLAND *

BEFORE THE
PUBLIC SERVICE COMMISSION
OF MARYLAND

CASE NO. 9482

May 22, 2019

PROPOSED ORDER OF PUBLIC UTILITY LAW JUDGE

Appearances:

Diana M. Krevor, Esquire, on behalf of CP Crane LLC

Steven M. Talson and Sondra S. McLemore, Assistant Attorneys General, on
behalf of the Department of Natural Resources, Power Plant Research Program

Anna K. Ryon, Assistant People's Counsel, on behalf of the Maryland Office of
People's Counsel

Lloyd J. Spivak, Deputy Staff Counsel, and Michael A. Dean, Assistant Staff
Counsel, on behalf of the Technical Staff of the Maryland Public Service
Commission

Daniel W. Hurson, Esquire, on behalf of Baltimore Gas and Electric Company

Patrick DeArmey, Esquire, on behalf of Blue Water, Baltimore, Gunpowder
RIVERKEEPER[®], and the Essex-Middle River Civic Council

I. Procedural History

On May 31, 2018, CP Crane LLC ("Company" or "Applicant") filed an application for a
Certificate of Public Convenience and Necessity (CPCN) authorizing a modification to its
existing Charles P. Crane Generating Station ("Crane Station") in Baltimore County, Maryland

(“Application”).¹ The Applicant seeks to modify the existing facility by repowering Crane Station through permanently retiring its existing coal-fired units, and installing and operating three combustion turbines fired primarily with natural gas (“Repowering Project”). The Repowering Project will re-purpose existing electrical and natural gas interconnections and other infrastructure at the site to provide electricity and related services during times of peak load or system outages. Accompanying the Application were the Environmental Review Document (ERD),² and the Direct Testimonies of Jeffrey L. Meling³ and David R. Dunbar.

On June 4, 2018, the Public Service Commission of Maryland (“Commission”) delegated this matter to the Public Utility Law Judge Division to conduct the proceedings.

On June 12, 2018, Applicant filed the Direct Testimony of Thomas Pritcher, and on June 21, 2018, Applicant supplemented the Application with revised ERD pages.⁴ On June 27, 2018, Applicant filed Errata to the Direct Testimony of Thomas Pritcher.

On July 2, 2018, a pre-hearing conference was held, at which time a procedural schedule was adopted.⁵ Petitions to intervene filed by Baltimore Gas and Electric Company (BGE) and Blue Water, Baltimore, Gunpowder RIVERKEEPER®, and the Essex-Middle River Civic Council (collectively, “Blue Water”) were granted.

¹ The Application and the Environmental Review Document were entered into the record as Applicant Ex. 5.

² See Applicant Ex. 5.

³ The Direct Testimony of Jeffrey L. Meling was entered into the record as Applicant Ex. 8.

⁴ Applicant Ex. 6.

⁵ Notice and Certificates of Publication for the Pre-hearing Conference were entered into the record as Applicant Ex. 1.

On July 18, 2018, Applicant submitted copies of the notices it provided to members of the General Assembly pursuant to Public Utilities Article, *Annotated Code of Maryland* (“PUA”), §7-207(c)(1)(iv)-(v).⁶

The Application was subsequently deemed deficient.⁷ On August 31, 2018, Applicant filed a second supplement to its Application and a revised ERD,⁸ along with Errata to Direct Testimony of David R. Dunbar,⁹ and Second Errata to Direct Testimony of Thomas O. Pritcher.¹⁰ On September 12, 2018, the Department of Natural Resources (DNR), Power Plant Research Program (PPRP) submitted an administrative completeness review indicating that the Application, as amended, was administratively complete,¹¹ and the procedural schedule was modified on October 5, 2018.¹²

On March 4, 2019, BGE filed public and confidential versions of Direct Testimony of David C. Smith;¹³ PPRP filed the following: State Secretarial Letter,¹⁴ Initial Recommended Licensing Conditions,¹⁵ Direct Testimony of Shawn Seaman,¹⁶ Direct Testimony of Peter D. Hall,¹⁷ Direct Testimony of William V. Paul,¹⁸ Direct Testimony of Michael F. Woodman,¹⁹ and

⁶ Applicant Ex. 2.

⁷ See Dkt Items Nos. 21 and 22.

⁸ Applicant Ex. 7. The Application as supplemented is hereafter referred to as the Application and the ERD as revised is hereafter referred to as the ERD.

⁹ Applicant Ex. 9.

¹⁰ Applicant Ex. 10.

¹¹ See Dkt Item No. 27.

¹² See Dkt Item No. 30.

¹³ BGE Ex. 1 and 2C, respectively.

¹⁴ PPRP Ex. 1.

¹⁵ PPRP Ex. 2.

¹⁶ PPRP Ex. 3.

¹⁷ PPRP Ex. 4.

¹⁸ PPRP Ex. 5.

¹⁹ PPRP Ex. 6.

a Draft Project Assessment Report for the Modification of the CP Crane Generating Station (“PAR”),²⁰ and the Technical Staff of the Commission (“Staff”) filed Direct Testimony of Kevin H. Zhong.²¹

On March 18, 2019, Applicant filed public and confidential versions of Rebuttal Testimony of Dennis Corn;²² and on March 20, 2019, PPRP filed a revised draft PAR,²³ revised Initial Recommended Licensing Conditions,²⁴ and Direct Supplemental Testimony of William V. Paul.²⁵

Pursuant to the modified procedural schedule, the Parties provided a settlement status update on March 22, 2019 at which time the Parties indicated that there were no contested issues between Applicant, PPRP, Staff, OPC, and/or Blue Water. Applicant indicated its agreement to and acceptance of the revised Initial Recommended Licensing Conditions filed by PPRP. Applicant further indicated that Staff would be making a revision to its recommended Staff Condition 2 and that once such revision was made, Applicant would be in agreement with all of Staff’s recommended conditions. On March 25, 2019, Staff filed Revised Direct Testimony of Kevin H. Zhong which incorporated a revision to Staff Condition 2.²⁶ Staff’s recommended conditions are hereafter referred to as “Staff Conditions.”²⁷

²⁰ PPRP Ex. 7. Appendix B to the PAR was entered into the record as PPRP Ex. 8.

²¹ Staff Ex. 1.

²² Applicant Ex. 11 and 12 C, respectively.

²³ PPRP Ex. 9. The revised PAR is hereafter referred to as the PAR. A redlined version of the revised PAR was entered into the record as PPRP Ex. 11.

²⁴ PPRP Ex. 10. A redlined version of the revised Initial Licensing Conditions was entered into the record as PPRP Ex. 12.

²⁵ PPRP Ex. 13.

²⁶ Staff Ex. 2.

²⁷ Staff Conditions were filed as a one-page document on April 15, 2019, Dkt Item No. 50.

On April 1, 2019, Applicant filed a status report indicating that Applicant and BGE agreed to the proposed condition set forth therein,²⁸ resolving the only remaining dispute among any of the Parties. Also on April 1, 2019, an evening hearing for public comment was held in Bowleys Quarters, Baltimore County, Maryland.²⁹

On April 2, 2019, PPRP filed revised Initial Recommended Licensing Conditions which reflected a revised condition B-IV-4.³⁰

On April 4, 2019, a hearing for taking evidence was held, at which time pre-filed testimony and exhibits were entered into the record and witnesses were cross-examined by the Public Utility Law Judge.

On April 15, 2019, PPRP filed final Recommended Licensing Conditions, hereafter “Licensing Conditions.”³¹ On May 8, 2019, PPRP notified the Public Utility Law Judge Division that the State Implementation Plan with the US Environmental Protection Agency requires that the Maryland Department of the Environment (MDE) address particular comments that were filed with the Commission and that MDE needed additional time to coordinate and submit the responses. PPRP filed these responses on May 17, 2019.³²

²⁸ Applicant Ex. 13.

²⁹ The Certificate of Publication for Public Comment Hearing and the Affidavit of Posting Signage for Public Hearing were entered into the record as Applicant Exs. 3 and 4, respectively.

³⁰ PPRP Ex. 14.

³¹ Dkt Item 49. (Although filed as Final Licensing Conditions, the header on the document still reads “Initial Recommended Licensing Conditions,” however the footer reflects a date of 4/15/2019). Pursuant to Natural Resources Article, *Annotated Code of Maryland*, §3-306(c), final recommendations are due “[w]ithin 15 days from the conclusion of the hearing, and based on the evidence there presented.” Accordingly, PPRP had 15 days from the date of the evidentiary hearing in which to modify its initial recommendations and submit final recommended licensing conditions.

³² Dkt Item No. 54.

II. Overview of the Project

The Applicant seeks a CPCN for the modification of the existing facility at Crane Station through permanently retiring two existing coal-fired electric generating units, and installing and operating three combustion turbines (CTs) fired primarily with natural gas. The CTs are expected to serve as peaking units. Their design will allow them to start up and reach full load in 10 minutes or less and shut down quickly multiple times per day if necessary.³³ The CTs will also be capable of firing ultra-low sulfur diesel (ULSD) when natural gas is not available in sufficient quantities.³⁴ The Repowering Project's total nominal generating capacity will be approximately 150 megawatts (MW).³⁵ Upon completion of the Repowering Project, Crane Station's total nominal generating capacity, including an existing 14 MW CT, will be 164 MW, as compared to the 400 MW capacity of the retiring coal-fired units.³⁶ The electricity generated by the proposed CTs will be transmitted to the power grid via a new 115-kV substation which will connect to the existing electrical transmission lines present at Crane Station.³⁷

The Repowering Project will reduce emissions of air pollutants.³⁸ Although the total capacity of the Repowering Project will be less than the existing coal-fired plant, the Repowering Project generating units will provide PJM Interconnection, Inc. (PJM) with additional generating flexibility including faster startups and faster load changing capacity.³⁹

The ERD identified and assessed potential environmental, ecological, socioeconomic, and land use impacts associated with construction and operation of the Repowering Project,

³³ Application, p. 3.

³⁴ Application, p. 3.

³⁵ *Id.* at 3-4.

³⁶ *Id.* at 4.

³⁷ *Id.*

³⁸ *Id.*

³⁹ *Id.* at 5.

pursuant to Code of Maryland Regulations (COMAR) 20.79.01.01, and addressed the requirements of PUA §7-207(e).

III. Public Comments

Over one hundred people attended the public comment hearing held on April 1, 2019.⁴⁰ Thirty-four (34) members of the public spoke, 32 opposed and 1 in favor of the Repowering Project, and 1 person disagreeing with Sierra Club's comment regarding use of renewable energy alternatives. The concerns expressed were wide-ranging and comprehensive. Through counsel, Blue Water expressed numerous environmental concerns including, but not limited to, how ongoing remediation at the site would impact construction dewatering, impacts on air pollution, stormwater management, and use of the remainder of the site. Others expressed concerns about potential water pollution, maintenance of the facility, climate change, gas compression on site, storage of fuel on site, use of fracked gas, noise, impacts to wildlife, trespassing/security, pilings and cables in the water in a state of disrepair/boating safety, traffic, non-working lights/aviation hazard, and the zoning of the property. Some members of the public indicated that they had reviewed the PAR and recommended licensing conditions; in particular, there was concern about PPRP's recommended licensing condition for noise. A few people expressed concern that there was not sufficient time to provide written comments.

The deadline to submit written comments was extended thirty (30) days to May 3, 2019. Numerous written comments were received; all of the comments were reviewed. The written comments covered many of the same areas of concern as were expressed at the public comment hearing including, but not limited to, air quality/pollution, respiratory illness rates in proximity to

⁴⁰ A meeting was held at the same location prior to the public comment hearing at which time the Applicant made a presentation on the Repowering Project to members of the community.

fuel-fired plants, water pollution, noise, and safety of stored fuel. Four members of the Maryland General Assembly requested denial of the CPCN citing the need to reduce greenhouse gas emissions to address climate change, and to provide an opportunity for battery storage to address the need for peak electricity demand in Maryland. The Maryland Senator for the Legislative district in which Crane Station is located, as well as a Baltimore County Councilwoman for the County district in which Crane Station is located, wrote in support of the Repowering Project. Sierra Club supplemented prior comments, discussing climate change and renewable energy alternatives, and requesting a denial of the CPCN for the Repowering Project; attached were comments from numerous individuals opposed to the Repowering Project due to air quality and climate change concerns, as well as the use of fracked gas and other issues. One comment in support of the Repowering Project cited the need for peaker plants.

IV. Applicable Law

The Application seeks authorization for a modification of a power plant pursuant to PUA §7-205. A modification is a physical alteration of, replacement of, or other change to the facilities at a power plant, or a change in fuel used by the plant, that could result in a change of the air emissions from the plant or from a generating unit of the plant. PUA §7-205(a)(1).⁴¹ PUA §7-205(b) provides that a person may not commence a modification without the prior approval of the Commission under Title 7 of the PUA.⁴²

⁴¹ Under PUA §7-205(a)(2)(ii), a modification does not include a change that the Commission determines will not result in an increase in air emissions from the plant or from a generating unit of the plant. Although, as set forth in the ERD and PAR, the Repowering Project will result in an overall decrease in air emissions, since new generating units are being installed there will now be air emissions from these new generating units, rendering PUA §7-205(a)(2)(ii) inapplicable; thus, the Repowering Project is a modification under PUA §7-205(a)(1).

⁴² Although PUA §7-205(d) requires a decision within 150 days after the day the application is filed, once the Application was deemed administratively complete, the Parties proposed a procedural schedule for the filing of testimony and an evidentiary hearing that waived operation of PUA §7-205(d).

PUA §§7-207 and 7-208 govern construction of generating stations and associated transmissions lines, and contain the requirements for CPCNs. Construction is defined under PUA §7-207(a)(1)(i) as any physical change at a site, including fabrication, erection, installation, or demolition. The Repowering Project involves construction as defined under the PUA, and thus requires a CPCN.

PUA §7-207(e) in effect as of the date the Application was filed⁴³ mandates the Commission to take final action on a CPCN application only after due consideration of the following:

- (1) the recommendation of the governing body of each county or municipal corporation in which any portion of the construction of the generating station, overhead transmission line, or qualified generator lead line is proposed to be located;
- (2) the effect of the generating station, overhead transmission line, or qualified generator lead line on:
 - (i) the stability and reliability of the electric system;
 - (ii) economics;
 - (iii) esthetics;
 - (iv) historic sites;
 - (v) aviation safety as determined by the Maryland Aviation Administration and the administrator of the Federal Aviation Administration;
 - (vi) when applicable, air and water pollution; and
 - (vii) the availability of means for the required timely disposal of wastes produced by any generating station; and

⁴³ PUA §7-207(e) was amended effective October 1, 2018; the Application was filed May 31, 2018.

(3) for a generating station:

(i) the consistency of the application with the comprehensive plan and zoning of each county or municipal corporation where any portion of the generating station is proposed to be located; and

(ii) the efforts to resolve any issues presented by a county or municipal corporation where any portion of the generating station is proposed to be located.

V. Analysis and Findings

The Applicant has accepted the licensing conditions as recommended by PPRP and Staff (Attachments A and B, respectively), and PPRP, Staff, and OPC have all recommended that the CPCN be granted, as long as it is subject to the recommended licensing conditions from PPRP and Staff. Notwithstanding the agreement among the parties that a CPCN, subject to the recommended licensing conditions, should be granted, the Commission still must give due consideration to the factors in PUA §7-207(e). Accordingly, each of the PUA §7-207(e) factors, as well as the additional factors identified by the Applicant, PPRP, and Staff in their analyses, are considered below.

A. Consideration of PUA § 7-207(e) Factors

1. Recommendations of Baltimore County

Baltimore County did not intervene as a party to this matter. PPRP's Licensing Conditions A-5, D-1, E-1, and H-1 require Applicant to afford access to, and obtain necessary permits from, applicable Baltimore County agencies and to comply with applicable County ordinances and laws. In response to PPRP Data Request No. 2, Applicant supplied a Request for Spirit and Intent Verification letter dated May 24, 2018, reviewed and accepted by W. Carl Richards, Jr., Supervisor of the Baltimore County Zoning Review Office of the Department of

Permits, Approvals and Inspection, indicating that no additional zoning relief will be required.⁴⁴ At the evidentiary hearing on April 4, 2019, PPRP Witness Seaman testified regarding his correspondence with a representative of Baltimore County Department of Planning and his understanding that Baltimore County has no issues with the Repowering Project.⁴⁵

I find that, given Baltimore County's review and acceptance of Applicant's May 24, 2018 Request for Spirit and Intent Verification letter, and the special zoning exception previously granted with respect to the property, the Application is not inconsistent with the comprehensive plan and zoning of Baltimore County. Baltimore County made no recommendations with regard to the Repowering Project, and Applicant's adherence to PPRP's recommended Licensing Conditions addresses concerns germane to Baltimore County.

2. Stability and Reliability of the Electric System

Applicant reported that the Repowering Project will allow Crane Station to continue to support electrical system stability and reliability.⁴⁶ The Repowering Project will provide replacement electric generating capacity and voltage control at the same injection point the coal facility served.⁴⁷ PPRP Witness Seaman confirmed that the existing natural gas supply pipeline, the 115-kV transmission line, and the water supply system will not require modification.⁴⁸ Although the total generating capacity will be less than the coal-fired plant, the generating units will provide PJM with additional generating flexibility, including faster startups and faster load

⁴⁴ PPRP Ex. 8.

⁴⁵ Transcript of April 4, 2019 Hearing ("Tr."), p. 50-51, 53-54.

⁴⁶ ERD at 3-29.

⁴⁷ ERD at 3-29.

⁴⁸ PPRP Ex. 3, p. 7.

changing capacity.⁴⁹ The Repowering Project will deliver electricity into existing BGE 115-kV transmission lines that cross portions of the site, interconnected through a new substation, with the ability to interconnect to either or both existing lines.⁵⁰ Applicant initiated the PJM interconnection process.⁵¹

Staff Witness Zhong described the process by which generators are connected to the regional transmission system, explaining that the studies performed by PJM to determine the system enhancements necessary to accommodate the interconnecting generation and maintain the reliability and stability of the transmission system are a feasibility study, impact study, and facilities study.⁵² Mr. Zhong testified that the PJM System Feasibility Study was completed in July 2018, and that the System Impact Studies were expected at the end of March 2019.⁵³ According to Mr. Zhong, the Feasibility Study identified no need for any new transmission system reinforcements or transmission network upgrades.⁵⁴

Mr. Zhong further explained that upon completion of the PJM studies, an Interconnection Service Agreement (ISA) will be tendered among the project owner, PJM, and the transmission owner, and filed with the Federal Energy Regulatory Commission (FERC).⁵⁵ In addition, if a project is to be connected to transmission facilities, PJM executes a Construction Services Agreement (CSA) between the project owner and the transmission owner, in this case BGE.⁵⁶

⁴⁹ ERD at 3-29.

⁵⁰ ERD at 3-30 - 3-31.

⁵¹ ERD at 3-30.

⁵² Staff Ex. 2, p. 8.

⁵³ *Id.* at 10.

⁵⁴ *Id.*

⁵⁵ *Id.* at 11.

⁵⁶ *Id.*

Staff believes that the System Impact Study must be completed in order to determine the effects of the Project on the reliability and stability of the electric system.⁵⁷ Staff Witness Zhong testified that Applicant's compliance with the ISA will ensure no adverse impact to the reliability and stability of the electric transmission system.⁵⁸ Staff recommended six (6) Staff Conditions including that the fully executed ISA and CSA be filed with the Commission prior to the commencement of construction.⁵⁹

I find that, subject to Applicant's compliance with the ISA and CSA and applicable PJM tariffs, the Repowering Project will have no adverse impact on the stability and reliability of the electric transmission system.

3. Economics

The Applicant described the economic benefits of the Project as creating jobs and the redevelopment of electrical generating capacity to economically meet existing demand and support further economic growth.⁶⁰ The Company noted that it would employ approximately 75 construction workers at the peak of construction, with a preference for skilled local workers.⁶¹ The Company stated that Project construction will generate tax revenues including income taxes, retail sales tax on materials, supplies and selected construction services, retail sales tax on expenditures by workers, and corporate income taxes paid by local contractors working on the Project.⁶²

⁵⁷ *Id.* at 12.

⁵⁸ *Id.*

⁵⁹ *Id.* at 14-15. *See also*, Attachment B.

⁶⁰ ERD at 3-29.

⁶¹ *Id.*

⁶² *Id.* at 4-9.

PPRP evaluated the economic, demographic, and fiscal impacts associated with the Project, which evaluation is summarized in the Project's PAR. PPRP Witness Hall testified that construction would generate a mild fiscal benefit for the State and Baltimore County from taxes on direct and indirect income, personal consumption expenditures, and sales of goods and services by Maryland firms.⁶³ According to Dr. Hall, existing roads are capable of handling the modest increase in traffic generated during construction.⁶⁴

Post-construction, Dr. Hall noted that traffic will be limited to an estimated four employee vehicles and periodic contractor visits.⁶⁵ He stated that ULSD fuel oil will be delivered via truck, although only when natural gas is not available in sufficient quantities.⁶⁶

Noting that no State or county expenditures will be required for infrastructure improvements, and that the Repowering Project will have no effect on public services or facilities, Dr. Hall found that the net economic benefit to the State and Baltimore County will be positive.⁶⁷ This was PPRP's finding even though plant staffing will be significantly less than when the facility was operated as a coal-fired generator.⁶⁸ PPRP concluded that no population, housing, fiscal, or traffic impacts are anticipated from operation of the Repowering Project.⁶⁹

At the evidentiary hearing, Applicant responded to questions regarding how often and for how long it might use alternative ULSD fuel. Applicant will be under an obligation to PJM to supply power for 72 hours, which might require that ULSD be burned for that long, at which

⁶³ PPRP Ex. 4 at 2.

⁶⁴ PPRP Ex. 4 at 3.

⁶⁵ PPRP Ex. 4 at 3.

⁶⁶ PPRP Ex. 4 at 3.

⁶⁷ PPRP Ex. 4 at 2.

⁶⁸ PAR at 5-16.

⁶⁹ PPRP Ex. 4 at 2-3; PAR at 5-16.

time the storage tanks would need to be refilled.⁷⁰ However, Applicant's obligation to PJM does not extend beyond the 72 hours for which it will have stored fuel and ULSD is more expensive for Applicant to use than natural gas.⁷¹

Although the precise economic benefit to Baltimore County and the State cannot be determined, the evidence reflects that there will be creation of jobs associated with the construction of the Project that will produce economic benefits in the form of tax revenues. I find that frequent delivery of ULSD via tanker trucks is unlikely. The record reflects there will be no adverse socioeconomic impacts. On this record, I conclude that the Repowering Project will be of net economic benefit to Baltimore County and the State.

4. Esthetics

The PAR describes the visual impacts of the Repowering Project during construction and post-construction. Dr. Hall testified that cranes may be visible from some perspectives during construction; post-construction, views will not be changed significantly.⁷² The new CTs will have a low visual profile, as will other Repowering Project components; the tallest newly proposed structure will be the three CT stacks, which will be 160 feet above ground level.⁷³ However, available views toward the site from accessible vantage points are industrial, characterized by boiler buildings and tall stacks.⁷⁴ PPRP concluded that the Repowering Project will have a minimal adverse effect on views from surrounding areas.⁷⁵

⁷⁰ Tr. at 34-35.

⁷¹ Tr. at 35.

⁷² PPRP Ex. 4 at 4.

⁷³ PPRP Ex. 4 at 5.

⁷⁴ PAR at 5-18.

⁷⁵ PAR at 5-18.

At the evidentiary hearing, Applicant answered questions regarding ongoing maintenance of the facility. Mr. Dunbar testified that Applicant intends to make some needed repairs.⁷⁶ With regard to the concern expressed by members of the public about the possibility of the plant being abandoned at some point in the future, Dr. Hall testified that Baltimore County did not have a decommissioning condition associated with the special exception that was granted, and there is no applicable decommissioning requirement in its code.⁷⁷

PPRP treated the Application as a modification and conducted its analysis of visual impacts on that basis.⁷⁸ I find that the Repowering Project, as a modification of an existing generating station with attendant facilities, will not have a significant adverse visual impact on the surrounding areas.

5. Historic Sites

Applicant reported that all historical structures and archeological sites are 0.5 mile or more from the plant site.⁷⁹ PPRP confirmed that the two properties listed in the Maryland Inventory of Historic Places (MIHP) within one mile of Crane Station are visually buffered by intervening forested lands.⁸⁰

PPRP recommended Licensing Condition I-1 in the event that relics from unforeseen archeological sites are revealed and identified during construction. Pursuant to Licensing

⁷⁶ Tr. at 26.

⁷⁷ Tr. at 57-59.

⁷⁸ Tr. at 41-42, 56-57.

⁷⁹ ERD at 2-39.

⁸⁰ PAR at 5-18.

Condition I-1, the Applicant must consult with MHT to develop a plan for avoidance and protection, data recovery, or destruction without recovery of such relics or sites.⁸¹

PPRP also assessed the Repowering Project's impact on cultural resources. Dr. Hall noted that Crane Station is located in Baltimore County's Coastal Rural Legacy Area, and two Rural Legacy easements are adjacent to the site.⁸² However, Dr. Hall further noted that neither easement parcel is proximate to project components, and both easement parcels are separated from the nearest project structures by woodlands.⁸³

Accordingly, subject to Licensing Condition I-1, I find that the Repowering Project will have no adverse effect on historic properties or cultural resources within one mile.

6. Aviation Safety

The Repowering Project will not affect aviation safety. At the evidentiary hearing, PPRP Witness Hall testified that the three new 160-foot stacks do not require lighting for aviation safety purposes.⁸⁴ As a modification, PPRP assumed the existing facilities were fully functional.⁸⁵ Company Witness Dunbar testified that Applicant was in the process of investigating the necessary repair to the lighting on the existing 400-foot stack.⁸⁶

I find that the Repowering Project, as a modification of an existing generating station with attendant facilities, will have no adverse effect on aviation safety.

⁸¹ PAR at 5-19.

⁸² PPRP Ex. 4 at 5.

⁸³ PPRP Ex. 4 at 5.

⁸⁴ Tr. at 56.

⁸⁵ Tr. at 56.

⁸⁶ Tr. at 25.

7. Air and Water Pollution

a. Air Quality

Applicant conducted analyses to calculate the potential air quality impacts of emissions from the Repowering Project. Applicant asserts that the results of its analyses demonstrate that operation of the Repowering Project will not cause or contribute to a violation of any applicable National Ambient Air Quality Standard (NAAQS).⁸⁷

The Maryland Department of the Environment Air and Radiation Administration (MDE-ARA) conducted an air quality evaluation of the proposed Repowering Project to confirm that projected maximum potential air emissions would meet applicable regulatory thresholds and limits. MDE-ARA assessed the effects on current ambient air quality by performing air dispersion modeling analyses to predict the future ambient air concentrations resulting from emissions from the proposed Repowering Project. In the PAR, PPRP stated that the projected emissions associated with the Repowering Project will not result in a significant net emissions increase for any New Source Review (NSR) regulated pollutant; consequently, the Repowering Project is not subject to NSR.⁸⁸ As set forth in the PAR, the air quality modeling analyses conducted by Applicant were independently verified by MDE-ARA.⁸⁹ PPRP concluded that the proposed Repowering Project demonstrates compliance with all applicable NAAQS, and that the proposed Repowering Project will not adversely impact air quality in the region.⁹⁰

MDE responded to specific public comments on air quality and indicated that it does not believe any revised recommended licensing conditions are warranted.⁹¹ PPRP's recommended

⁸⁷ ERD at 31-32.

⁸⁸ PAR at 4-12; *see also* PPRP Ex. 6 at 4.

⁸⁹ PAR, Section 4.4.2; *see also* PPRP Ex. 5 at 10.

⁹⁰ PAR at 4-29.

⁹¹ *See* Dkt Item No. 54.

Licensing Conditions (Section B) incorporate Air Quality Requirements including facility-wide conditions, conditions for the CTs, and conditions for the diesel-fired black-start generator. Subject to compliance with the conditions in Section B of PPRP's recommended Licensing Conditions, I find that the Repowering Project will not have an adverse impact on air pollution or air quality in the region.

b. Water Quality

Applicant explained that water for the new facility will be drawn from the existing plant's raw water system, treated to provide demineralized water for use in the CTs for emissions control and power augmentation.⁹² Water will also be used for washing the turbine compressor, with drainage streams collected and sent to the existing plant's wastewater system.⁹³

Applicant stated that the Repowering Project will incorporate a comprehensive stormwater management (SWM) system to manage onsite drainage and stormwater flows from within its footprint.⁹⁴ The existing site SWM system will be modified and stormwater will be managed by a proposed bioretention pond.⁹⁵

PPRP listed four potential sources of impacts to onsite or nearby surface waters during operation of the Repowering Project: direct disturbance of existing wetlands or surface waters; direct discharge of process effluents; significant changes in stormwater quantities and/or qualities discharged offsite; and accidental spills of onsite chemicals, lubricants, or other potential contaminants.⁹⁶

⁹² ERD at 3-20.

⁹³ ERD at 3-20.

⁹⁴ *Id.*

⁹⁵ *Id.*

⁹⁶ PAR at 5-6 – 5-7.

Mr. Seaman indicated that although wetlands are present on the site, none are wetlands of special State concern.⁹⁷ Moreover, PPRP noted that the new CTs will be located in an existing developed area of the site and that Applicant is proposing no disturbance to the wetlands that do exist on the site.⁹⁸

PPRP Witness Seaman testified that the biological resources that may be affected by the proposed redevelopment are located within an area bounded by the Seneca and Saltpeter Creeks, draining into the Gunpowder River estuary and the Chesapeake Bay.⁹⁹ However, since no construction activity will take place within Seneca Creek or its buffer areas, no direct impacts will result from construction.¹⁰⁰ With regard to direct discharge of process effluents, PPRP stated that process wastewater generated by operations will be discharged to a new oil water separator (OWS) and ultimately the municipal waste water system.¹⁰¹ Since there will be no direct discharge of process wastewater to any surrounding surface waters, there will be no surface water impacts associated with the Repowering Project.¹⁰²

PPRP noted that shutting down the coal-fired units' cooling system has eliminated impingement and entrainment from the previous facility's cooling water intake as well as the thermal load from its discharge.¹⁰³ Mr. Seaman concluded that there will be no significant impacts to the creek or its aquatic habitats because of construction or operation.¹⁰⁴ PPRP concluded that with the installation of a sound SWM system and proper operations and

⁹⁷ PPRP Ex. 3 at 8.

⁹⁸ PAR at 5-6.

⁹⁹ PPRP Ex. 3 at 7-8.

¹⁰⁰ PPRP Ex. 3 at 8.

¹⁰¹ PAR at 5-6.

¹⁰² PPRP Ex. 3 at 8.

¹⁰³ PAR at 5-6 – 5-7.

¹⁰⁴ PPRP Ex. 3 at 8.

maintenance of those facilities, no significant impacts to any surrounding surface waters are expected to result from project operations.¹⁰⁵ Conditions related to SWM and erosion and sediment control are contained in Section E of the PPRP's recommended Licensing Conditions.

With respect to groundwater, Mr. Seaman noted that there are two areas of potential impact, construction dewatering and fuel oil/ hazardous liquids, both of which are expected to be minimal.¹⁰⁶ Mr. Seaman indicated that excavations for concrete foundations may require pumping to remove groundwater and allow for proper placement of foundation materials.¹⁰⁷ He stated that based on an independent analysis conducted by PPRP in coordination with MDE Water Supply Program, dewatering will not exceed 5,000 gallons per day as an annual average, and the Repowering Project is therefore expected to be exempt from obtaining an appropriate permit for dewatering.¹⁰⁸ Mr. Seaman testified that drawdown that may occur due to dewatering will not be significant enough to alter the direction of groundwater flow, and drawdown effects will be temporary and reversible after dewatering is complete.¹⁰⁹

The recommended Licensing Conditions require the Applicant to coordinate with MDE to ensure that pumped groundwater is managed and discharged in compliance with all applicable regulations.¹¹⁰ Mr. Seaman testified that construction dewatering is not expected to affect the ongoing remediation activities.¹¹¹ PPRP recommended Licensing Condition C-2 further requires

¹⁰⁵ PAR at 5-7.

¹⁰⁶ PPRP Ex. 3 at 10.

¹⁰⁷ PPRP Ex. 3 at 10.

¹⁰⁸ *Id.*

¹⁰⁹ *Id.*

¹¹⁰ *Id.* at 11; PPRP Ex. 10 at 14 (Licensing Condition C-2).

¹¹¹ PPRP Ex. 3 at 10.

the Applicant to coordinate with MDE's Oil Control Program as appropriate regarding impacts of construction activities on the ongoing hydrocarbon remediation.¹¹²

Any spills or leaks of oil or hazardous liquids used at the site could adversely impact groundwater resources. To ensure that an accidental oil spill will not impact the Gunpowder River, PPRP recommended a Licensing Condition, Condition F-1, requiring Applicant to implement secondary containment.¹¹³ Mr. Seaman concluded that if Applicant utilizes best practices and complies with regulatory requirements for secondary containment and spill control, the risk of groundwater impacts will be small.¹¹⁴

The record reflects no anticipated surface water impacts associated with the Repowering Project, and no significant impacts to adjacent Seneca Creek. In fact, the modification is of some benefit because of the elimination of the thermal load from discharge from the prior coal operation, and of benefit to aquatic ecology because of the elimination of impingement and entrainment. PPRP has recommended licensing conditions to prevent impacts from construction dewatering, including any impacts to the ongoing hydrocarbon remediation at the site. Subject to Licensing Conditions C-1, C-2, D-1, D-2, D-4, D-5, E-1, E-2, E-3, F-1, and F-2, the Repowering Project should not adversely impact wetlands, surface water, or groundwater. Accordingly, I find that the record reflects some benefit to water quality as a result of the Repowering Project, and no likely future adverse impacts to water quality due to the Repowering Project.

¹¹² PPRP Ex. 10 at 14.

¹¹³ PAR at 5-7.

¹¹⁴ PPRP Ex. 3 at 10.

8. Timely Disposal of Wastes Produced

Applicant indicated that during operation, nonhazardous solid wastes will generally be limited to small quantities of mixed office waste and general plant refuse that will be disposed of at an offsite, licensed landfill.¹¹⁵ Applicant described how the maintenance and other wastes typical of power generation operations will be disposed of, and stated that the minimal quantities of hazardous wastes and universal wastes that might occasionally be produced will be managed in accordance with applicable federal and State requirements.¹¹⁶ Washdown wastes will be collected in the water wash tank prior to disposal to the OWS or at a licensed offsite disposal facility.¹¹⁷ PRRP confirmed solid and hazardous waste will be managed and disposed of in accordance with regulatory requirements including use of properly licensed transport and disposal services.¹¹⁸

I find that Applicant has appropriate means to timely dispose of the waste materials produced during operation of the Repowering Project.

9. Consistency With County's Comprehensive Plan and Zoning – Efforts to Resolve Any Issues

Since development activities will be confined to previously developed areas, no adverse effects on land use are anticipated during the construction period, and post-construction, use of the land will not be significantly different from prior use.¹¹⁹ Dr. Hall testified that Applicant consulted with Baltimore County to confirm that the improvements planned and the intended use

¹¹⁵ ERD at 3-25.

¹¹⁶ ERD at 3-26.

¹¹⁷ *Id.*

¹¹⁸ PAR at 5-24.

¹¹⁹ PAR at 5-16 - 5-17.

of the property are in conformance with the county's special exception conditions.¹²⁰ As such, the PAR indicates that no additional zoning relief is required.¹²¹ The site is located within the intensely developed area of the Chesapeake Bay Critical Area, and, as such, the Repowering Project is subject to those portions of the Baltimore County Code pertaining to Critical Area development requirements (Licensing Conditions D-1(g), D-5, and E-1).¹²²

I find that, given Baltimore County's review and acceptance of Applicant's May 24, 2018 Request for Spirit and Intent Verification letter, and the special zoning exception granted with respect to the property, the Application is not inconsistent with the comprehensive plan and zoning of Baltimore County. No issues were presented by Baltimore County which required Applicant to undertake efforts to resolve. Accordingly, I find that, subject to the Licensing Conditions, the construction and operation of the Repowering Project is not inconsistent with Baltimore County's comprehensive plan or zoning.

B. Other Considerations

1. Terrestrial Ecology

Mr. Seaman testified that there are no expected adverse impacts to vegetation and land cover due to construction or operation of the Repowering Project.¹²³ He stated that there may be minimal short-term human disturbance-related construction impacts to wildlife due to human presence and noise during construction, however no long-term impacts from construction are expected, and there are no anticipated operational impacts to wildlife.¹²⁴

¹²⁰ PPRP Ex. 4 at 4.

¹²¹ PAR at 5-17.

¹²² ERD at 4-11; PPRP Ex. 10 at 14-15.

¹²³ PPRP Ex. 3 at 8.

¹²⁴ PPRP Ex. 5 at 8-9.

Subject to Licensing Conditions D-1 through and including D-5, I find that there will be no significant impact on the terrestrial (or aquatic) ecology on or near the site of the Repowering Project.

2. Noise

In the ERD, Applicant described the existing acoustical environment surrounding the site, noting numerous sources including one of the existing coal-fired units at Crane Station.¹²⁵ The results of Applicant's ambient sound survey are contained in Table 2.2-6 on page 2-36 of the ERD.

During construction, noise will be generated from various types of equipment.¹²⁶ Construction is expected to take 10 to 12 months and will consist of the overlapping tasks of site clearing, excavation, foundation work, steel erection, installation of equipment, and finishing work.¹²⁷ If it is determined that pile driving is required, such work would be limited to the daytime working hours of 8 am to 5 pm, during which pile driving is exempt from noise limits under COMAR 26.02.03.02.C.¹²⁸ Table 4.5-1 presents the results of Applicant's calculations of noise at the nearest residential receptor based on average sound levels for typical construction phases of industrial facilities.¹²⁹ According to the ERD, only low-noise construction activities will be scheduled after 10 pm and before 7 am, to comply with the 55-dBA nighttime limits in Maryland's noise regulations.¹³⁰

¹²⁵ ERD at 2-34 – 2-37.

¹²⁶ ERD at 4-7.

¹²⁷ ERD at 4-7.

¹²⁸ ERD at 4-7.

¹²⁹ ERD at 4-8.

¹³⁰ ERD at 4-8.

PPRP stated that the loudest phase of construction is excavation, which is estimated at 89 decibels at a distance of 50 feet from the source.¹³¹ PPRP noted that the nearest residence is approximately 1,200 feet from the proposed turbines and approximately 1,100 feet away from the nearest planned construction activity.¹³² PPRP confirmed that daytime construction is not expected to exceed the 90-dBA limit.¹³³ PPRP noted that construction activities are likely to generate higher noise levels compared with operations of the Repowering Project.¹³⁴

Applicant stated in the ERD that, according to the noise modeling results, noise levels during operation of the Repowering Project will remain within the State noise regulation.¹³⁵ Applicant explained that MDE has established a State noise regulation in COMAR 26.02.03 that, with certain exceptions for noise sources and noise generating activities, sets maximum allowable sound levels from a source at industrial property lines of 75 dBA (day and night), at commercial property lines of 67 dBA (day) and 62 dBA (night), and at residential property lines of 65 dBA (day) and 55 dBA (night).¹³⁶

The predominant sources of noise from the Repowering Project will be the CTs themselves. During normal operation, the newly installed black-start generator will not be in operation and is considered insignificant. Noise emanating from the CTs during normal operation will be steady, with little fluctuations in noise levels.¹³⁷ PPRP noted that the CTs

¹³¹ PAR at 5-20.

¹³² PAR at 5-20.

¹³³ PAR at 5-20.

¹³⁴ PAR at 5-20.

¹³⁵ ERD at 5-6.

¹³⁶ ERD at 5-7.

¹³⁷ ERD at 5-7.

would be equipped with exhaust stack silencers that will limit turbine noise levels to 60 dBA at 400 feet.¹³⁸

PPRP verified the results Applicant presented in its Application. Aggregating the three proposed CTs into one sound pressure level, assuming full operation of all three turbines at the same time, PPRP estimated the sound pressure level at 400 feet would be 64.8 dBA.¹³⁹ At the nearest residential receptor, located 1,200 feet to the southwest of the proposed turbine locations, PPRP estimated the sound pressure level at the residential receptor is not expected to exceed 56 dBA.¹⁴⁰

PPRP stated that the above projections are conservatively high because they do not take into account the atmospheric absorption of sound energy, or any effect of barriers such as trees or other vegetation between the noise sources and the receptors.¹⁴¹ Because vegetative cover between plant components and the receptor locations may have some noise reduction benefits, actual sound pressure levels are expected to be lower.¹⁴² Mr. Meling testified that the vegetative buffer to the west of the power block provides sound attenuation,¹⁴³ and Mr. Dunbar testified that Applicant has no plans for that area of the site which would involve removal of trees.¹⁴⁴

PPRP concluded that its analysis suggests that the closest residents will not experience noise levels exceeding Maryland regulatory standards when the Repowering Project is in full operation.¹⁴⁵ Licensing Condition G-1 requires Applicant to monitor noise levels at the

¹³⁸ PAR at 5-21.

¹³⁹ PAR at 5-22.

¹⁴⁰ PAR at 5-22.

¹⁴¹ PAR at 5-22.

¹⁴² PAR at 5-22.

¹⁴³ Tr. at 37.

¹⁴⁴ Tr. at 36-37.

¹⁴⁵ PAR at 5-23.

boundaries of the site after the facility is operational, to verify the results of the predictive analysis.¹⁴⁶ Licensing Condition G-2 provides that operation (and construction) shall comply with the Maryland noise regulations in COMAR 26.02.03, and that if post-construction noise monitoring reflects non-compliance, Applicant must work with PPRP and the Commission to incorporate appropriate noise mitigation to ensure regulatory compliance.¹⁴⁷ At the hearing, PPRP Witness Seaman explained that in addition to the proposed stack silencers, there are other technologies that can be used to mitigate noise, and that noise walls could be constructed if necessary to ensure regulatory compliance.¹⁴⁸

Subject to Licensing Conditions G-1 and G-2, I find that construction and operation of the Repowering Project will have no significant impact on nearby residences from noise associated with the Repowering Project.

3. Safety and Security

Witness Dunbar testified that the Applicant has undertaken a number of steps to enhance security of the site including completely fencing the site and adding more security cameras.¹⁴⁹ In addition, he testified that Applicant was made aware at the public comment hearing of a cable across the water that is held up by pylons that Applicant will be fixing.¹⁵⁰

Provided Applicant continues to maintain the site, including the fencing around the perimeter, and is diligent in monitoring its security cameras, I do not find that the Repowering Project presents an enhanced security risk to the public.

¹⁴⁶ PPRP Ex. 10 at 16.

¹⁴⁷ PPRP Ex. 10 at 16.

¹⁴⁸ Tr. at 48.

¹⁴⁹ Tr. at 23.

¹⁵⁰ Tr. at 26.

4. Delivery of Natural Gas by BGE

On behalf of BGE, in written testimony, Mr. Smith testified that Applicant would need to adhere to certain operating conditions and protocols to ensure that BGE could handle the additional load from the Repowering Project; BGE initially recommended that the CPCN be conditioned upon inclusion of a confidential agreement between Applicant and BGE. Applicant filed rebuttal testimony arguing that inclusion of customer-specific information and protocols as a condition to the CPCN was inappropriate and unnecessary. Applicant and BGE were able to resolve the dispute, recommending an appropriate condition: prior to commencement of operations, Applicant will enter into a written agreement with BGE regarding the delivery by BGE of natural gas to the Repowering Project in a manner to ensure the safety and reliability of the BGE natural gas distribution system. The condition (Attachment C) provides more detail as to what that agreement must include and will be made a part of the CPCN.

VI. Conclusion

I find that, subject to PPRP's Licensing Conditions, Staff Conditions, and the condition between Applicant and BGE, (collectively, "Final Licensing Conditions"), a grant of a CPCN to construct the Repowering Project is in the public interest. The Applicant's compliance with the Final Licensing Conditions will result in the Repowering Project satisfying the federal and State environmental laws and local permitting regulations and ordinances. Accordingly, I hereby grant CP Crane LLC a CPCN, subject to the Final Licensing Conditions attached hereto and incorporated hereby, to modify the existing facility by repowering Crane Station through permanently retiring its existing coal-fired units, and installing and operating three combustion turbines fired primarily with natural gas.

IT IS, THEREFORE, this 22nd day of May, in the year Two Thousand Nineteen,

ORDERED (1) That the application of CP Crane LLC is hereby granted.

(2) That a Certificate of Public Convenience and Necessity, subject to the Final Licensing Conditions attached hereto collectively as Attachments A, B, and C, and incorporated herein, is hereby granted.

(3) That any party wishing to appeal this Proposed Order pursuant to Section 3-113(d)(2) of the Public Utilities Article shall file a notice of appeal and associated memorandum by May 29, 2019, with reply memoranda due by June 5, 2019.

(4) That if the Commission does not modify or reverse the Proposed Order or initiate further proceedings as provided in Section 3-114(c)(2)(ii) of the Public Utilities Article, this Proposed Order will become a final order of the Commission on June 21, 2019.

/s/ Kristin Case Lawrence
Kristin Case Lawrence
Public Utility Law Judge
Public Service Commission of Maryland