

**Bucksheet No.** E58947  
**Case No.** 9318  
**Maillog Nos.** 216448, 216670, 216671,  
217148, 217162, 217204,  
217435, 217580  
**Date** November 15, 2017

**To:** W. Kevin Hughes, Chairman  
Michael T. Richard, Commissioner  
Anthony J. O'Donnell, Commissioner  
Odogwu Obi Linton, Commissioner  
Mindy L. Herman, Commissioner

**FROM:** Anthony Myers, Executive Director

**RE:** Case No. 9318 – Dominion Energy Cove Point LNG, LP Motion to Amend Certain Conditions of its Certificate of Public Convenience and Necessity

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**Description of Application:**

Dominion Energy Cove Point LNG, LP (“DECP”) filed a motion to amend Condition A-IX-3, Condition A-III-4, and Condition A-I-3(g) of Order No. 86372 which set forth parameters DECP was required to meet when it was issued a Certificate of Public Convenience and Necessity (“CPCN”) authorizing construction of a 130 MW generating station to serve its liquefied natural gas export facility (“LNG Facility”).

**Groups which should receive a copy of Staff Recommendation:**

Dominion Energy Cove Point LNG, LP  
Service List Case No. 9318

**Comments of the Engineering Division**  
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**Recommended Actions (Including Conditions):**

Staff recommends that the Commission accept the recommendations of the Maryland Department of the Environment Air and Radiation Administration (“MDE-ARA”) and the Maryland Department of Natural Resources Power Plant Research Program (“PPRP”) to:

- Approve DECP’s request to amend Condition A-IX-3 but with added stipulations.
- Amend Condition A-III-4 but deny DECP’s proposed amendment.
- Amend Condition A-1-3(g) per DECP’s proposal.
- Amend Condition A-I-2 to reflect the amount of volatile organic compounds (“VOC”) emissions offsets DECP is required to purchase.

\_\_\_\_\_  
John Borkoski, P.E.  
Chief Engineer/  
Director – Emergency Management

\_\_\_\_\_  
Leslie Romine  
Staff Counsel

**Commission Action on** \_\_\_\_\_:

**Approved** \_\_\_\_\_ **Disapproved** \_\_\_\_\_ **Accept for Filing** \_\_\_\_\_

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**Summary**

MDE-ARA and PPRP (together “the State Agencies”) have examined DECP’s proposals to amend certain CPCN conditions and have filed their analyses and recommendations with the Commission.<sup>1</sup> The State Agencies have utilized the most current technical guidance available, reviewed recent similar permitted projects in the United States, and consulted with the US Environmental Protection Agency (“EPA”) in performing their evaluations, addressing the concerns of the public, working with DECP, and making their recommendations. Additionally, the State Agencies have concluded that the Project will not adversely impact public health and will not cause or contribute to the violation of national air quality standards.

**Applicable Law**

Under Public Utilities Article (“PUA”) § 7-207, a CPCN is required before the construction of a generating station is permitted. PUA § 7-207(e)(2) requires that the Commission consider the environmental and socio-economic impacts associated with the construction and operation of the proposed generating station, including, among other factors, the effect that the generating station will have on the air and water pollution.

PUA § 7-208(g)(1) requires that each CPCN granted by the Commission is required to include (i) “the requirements of federal and state environmental laws and standards identified by the Department of the Environment and (ii) the methods and conditions that the Commission determines are appropriate to comply with those environmental laws and standards.”

PUA § 7-208(g)(2) provides that “[t]he Commission may not adopt any method or condition under paragraph (1)(ii) of this subsection that the Department of the Environment determines is inconsistent with federal and State environmental laws and standards.

**Background**

On May 30, 2014, by Order No 86372 issued in Case 9318,<sup>2</sup> the Commission granted a CPCN to DECP to construct a 130 MW generating station to serve its liquefied natural gas export facility (“LNG Facility”). The CPCN conditions included all of the air and

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<sup>1</sup> Please refer to ML #217580; Attachment A – State Agencies Evaluation and Recommendations.

<sup>2</sup> *Re Dominion Cove Point LNG, LP*, 105 MD PSC 228 (2014).

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water pollution conditions recommended by PPRP. The Commission’s order noted that DECP had accepted all of PPRP’s conditions.<sup>3</sup>

Condition A-IX-3 of the CPCN specifies the VOC emissions limits from component leaks and steps to be taken to ensure compliance with these emission limits.

CPCN Case 9318 Condition A-IX-3 states:

VOC emissions from component leaks shall not exceed 2.53 tons per year from all components associated with the project on a 12-month rolling basis through the implementation of the VOC LDAR Monitoring Plan and Program.

Condition A-III-4 of the CPCN specifies project-wide emissions limits for all types of pollutants that are expected from the DECP Project.

CPCN Case 9318 Condition A-III-4 states:

Emissions for all sources identified as part of the DECP Project, including emissions during periods of startup and shutdown, shall be limited to the following, in tons per year, in any consecutive 12-month rolling period:

<b>Pollutant</b>	<b>Project-Wide Emission Limit (tons per year)</b>
Particulate Matter (PM) – Filterable	55.7
Particulate Matter less than 10 microns (PM10) – Filterable and Condensable	124.2
Particulate Matter less than 2.5 microns (PM2.5) – Filterable and Condensable	124.2
Nitrogen Oxides (NOx)	279.3
Carbon Monoxide (CO)	146.6
Volatile Organic Compounds (VOCs)	33.3
Greenhouse Gas (GHG) as Carbon Dioxide Equivalent (CO <sub>2</sub> e)	2,030,988
Formaldehyde	6.2

<sup>3</sup> Id. at 259.

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Condition A-I-3 of the CPCN identifies the air pollution sources at the DECP Project.

CPCN Case 9318 Condition A-I-3(g) states:

For air permitting purposes, the DECP Project shall be defined as the following:

- (g) Two existing GE MS5001 Frame 5 combustion turbines providing a total maximum of 25 MW on a continuous basis

Condition A-I-2 of the CPCN identifies the amount of emission reduction (offsets) DECP is required to purchase since it was determined that project-wide potential VOC emissions would exceed the 25 tons per year (“tpy”) threshold for the project location.

CPCN Case 9318 Condition A-I-2 states:

The CPCN serves as the Prevention of Significant Deterioration (PSD) approval, Nonattainment New Source Review (NA-NSR) approval, and air quality construction permit for the DCP Project and does not constitute the permit to construct or approvals until such time as DCP has provided documentation demonstrating that nitrogen oxides (NO<sub>x</sub>) emission offsets totaling at least 375 tons and volatile organic compound (VOC) emission offsets totaling at least 45 tons, each based on an offset ratio of 1.3 to 1.0, have been obtained and approved by MDE-ARMA and are federally enforceable.

The DECP LNG Facility is located in southern Calvert County, Maryland, on the western shore of the Chesapeake Bay within the Maryland Coastal Zone. The LNG Facility property consists of 1,017 acres, of which 131 acres are developed for onshore terminal operations. Offshore operations occur on a marine terminal pier located approximately one mile off of the shoreline in water approximately 40 feet deep.

In its original application for a CPCN, DECP estimated that the 130 MW generating station to be built to serve its LNG Facility would comprise 15,000 piping and equipment components.<sup>4</sup> DECP agreed to Condition A-IX-3 of the CPCN granted to by this Commission to implement a leak detection and repair (“LDAR”) monitoring program for controlling piping and equipment component VOC leaks. Upon the delivery of equipment to the construction site, DECP discovered that by the definition of piping

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<sup>4</sup> See CPCN Application – Appendix B-57.

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component, many larger equipment skids contained thousands of components that were not accounted for in its original application. As such, the current projection of piping and equipment components based on actual equipment delivered and installed is estimated to be approximately 162,700. DECP claims that due to the significant increase in the number of identified components in the Project, it would be technically and economically impractical to measure emissions leaks at each component. DECP is therefore requesting that the VOC emissions limit by component be eliminated.

Condition A-III-4 sets project-wide emissions for all pollutants identified as part of the Project, including emissions during periods of startup and shutdown, in tons per year (“tpy”), in any consecutive 12-month rolling period. DECP is proposing that the project-wide emission limit for VOCs be reduced from 33.3 tpy to 30.8 tpy. However, DECP is also requesting that the project-wide VOC tpy limit exclude fugitive emissions from new piping and equipment components associated with this project, including valves, connectors, flanges, pump seals, pressure relief valves, and others within the facility boundary.

For air permitting purposes, Condition A-I-3 identifies the major air emissions units of the Project that will contribute to air pollution. Condition A-I-3(g) identifies two existing GE Frame 5 combustion turbines which will be used as sources of backup power for the Project as emission units. In addition to these two combustion turbines, DECP desires to be able to use three existing GE Frame 3 combustion turbines and an existing Solar Titan combustion turbine as sources of backup power on an as needed basis. DECP requests that Condition A-I-3(g) be revised to include these four additional combustion turbines as air emissions units.

By letter order dated August 23, 2017, the Commission determined that the proposed revisions to the CPCN constituted a modification to the CPCN and that a public comment hearing was therefore required, limited to the revisions requested by DECP in its motion. The Commission delegated the matter of conducting the public hearing to the Public Utility Law Judge Division. Accordingly a public hearing was held on October 2, 2017 at Patuxent High School. This hearing was continued on October 19, 2017 in order to accommodate persons who wished to speak at the October 2<sup>nd</sup> hearing but who were not able to be accommodated due to the venue’s closing time. Additionally written public comments were filed. A list of the maillogs of public comments received as of November 6, 2017 is included as Attachment A.

On August 29, 2017, in accordance with the Chief Public Utility Law Judge’s directive dated August 24, 2017, the Applicants filed a Certificate of Compliance stating that DECP has notified the interested persons required to be notified by PUA § 7-207(c)(1) of

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its filing.<sup>5</sup> Notice was also sent to all parties and interested persons on the service list in Case 9318.

On October 30, 2017, PPRP and MDE-ARA (the “State Agencies”) submitted the results and conclusions of the independent evaluation that the State Agencies conducted in response to DECP’s motion to amend the licensing conditions contained in Order No. 86372.<sup>6</sup> The State Agencies’ review was limited to the air quality related conditions which DECP seeks to modify.

**Discussion**

On the matter of amending Condition A-IX-3 to remove the VOC numeric emission limit for piping and equipment components, the State Agencies have determined that the removal of the VOC numeric emission limit will not alter the operation of the Project, nor will it impact the surrounding environment. The State Agencies recommend removing the VOC numeric emission limit for piping and equipment components from Condition A-IX-3, requiring DECP submit its site-specific VOC monitoring plan to MDE-ARA for review and approval within 30 days of the Commission issuing an Order to amend the Condition, requiring DECP to submit annual notices to MDE-ARA detailing any updates to, or deviations from its site-specific VOC monitoring plan, and specifying that VOC emissions from piping and equipment components, calculated per Condition A-IX-5 of the CPCN, be included in the project-wide VOC 12-month rolling emission limit. A detailed discussion of the State Agencies’ analysis can be found on pages 3-9 of ML #217580; Attachment A – State Agencies Evaluation and Recommendations.

On the matter of amending Condition A-III-4 to decrease the project-wide VOC 12-month rolling emission limit but exclude fugitive emissions from new piping and equipment components, the State Agencies do not believe that the requested exclusion is justified. The State Agencies recommend increasing the project-wide VOC emission limit in Condition A-III-4 from 33.3 tpy to 50.9 tpy but including the potential emissions from the increased number of piping and equipment components in the Project’s as-built design. A detailed discussion of the State Agencies’ analysis can be found on page 10 of ML #217580; Attachment A – State Agencies Evaluation and Recommendations.

On the matter of amending Condition A-I-3(g) to add three existing GE Frame 3 combustion turbines and an existing Solar Titan combustion turbine to the already identified two existing GE Frame 5 combustion turbines that may be used as sources of back up power on an as needed basis, the State Agencies have determined that there will be no adverse impacts associated with DECP having this operational flexibility and

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<sup>5</sup> ML # 216671.

<sup>6</sup> See ML# 217580.

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recommend that Condition A-I-3(g) be revised to reflect the ability to use the existing six CTs to provide up to 25 MW of power to the Project. A detailed discussion of the State Agencies' analysis can be found on pages 10-13 of ML #217580; Attachment A – State Agencies Evaluation and Recommendations.

Finally, since the project-wide potential VOC emissions which were originally estimated to be 33.3 tpy are now estimated to be 50.9 tpy, the State Agencies have determined that DECP will be required to obtain 66 tpy of VOC emissions reduction credits and this change will need to be reflected in Condition A-I-2 of the CPCN. A detailed discussion of the State Agencies' determination for the need to amend Condition A-I-2 can be found on pages 9-10 of ML #217580; Attachment A – State Agencies Evaluation and Recommendations.

**Recommendations**

Staff recommends that the Commission accept the recommendations of the Maryland Department of the Environment Air and Radiation Administration (“MDE-ARA”) and the Maryland Department of Natural Resources Power Plant Research Program (“PPRP”) to:<sup>7</sup>

- Approve DECP's request to amend Condition A-IX-3 but with added stipulations.
- Amend Condition A-III-4 but deny DECP's proposed amendment.
- Amend Condition A-1-3(g) per DECP's proposal.
- Amend Condition A-I-2 to reflect the amount of volatile organic compounds (“VOC”) emissions offsets DECP is required to purchase.

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Roger Austin  
Engineer

cc: David J. Collins, Executive Secretary  
Terry J. Romine, Chief Public Utility Law Judge  
H. Robert Erwin, General Counsel  
Office of External Relations  
Tori Leonard, Communications Director

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<sup>7</sup> Please refer to ML #217580; Attachment B – Recommended Licensing Condition Amendments to Order No. 86372 Redline Version and to ML #217580; Attachment C – Recommended Licensing Condition Amendments to Order No. 86372 Clean Version

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**Attachment A**

**List of Maillogs of Public Comments:**

216670	217398
217199	217400
217201	217545
217202	217415
217148	217417
217177	217658
217197	217483
217183	217608
217184	217546
217178	217543
217196	217484
217193	217479
217192	217478
217191	217476
217190	217475
217189	217449
217188	217605
217185	217606
217195	217613
217203	217616
217231	217541
217232	217610
217244	217611
217334	217583
217330	217580
217337	217674
217339	217696
217340	217691
217385	217646
217386	217162
217387	
217395	
217388	
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