EASTERN MARKET ACCESS (EMA)

Charles Station
MDE Air Permit Application Informational Meeting
March 1, 2017
Project Overview

All of the project will be on Dominion's existing property, or on Dominion’s existing natural gas pipeline

New Facilities:
- 1 new compressor station, ~24,000 hp
- 2 new taps on existing pipelines for WGL

Modification to Existing Facilities:
- Additional compression at the Loudoun Compressor Station
- Optimizing single unit at the Pleasant Valley Compressor Station

EMA would provide 294,000 dekatherms per day of firm transportation service

In service: September 2018

Estimated Cost: $145 million
Improving Energy Reliability

• Meet increasing demand for natural gas in Maryland and throughout Mid-Atlantic Region (Annual demand in MD has increased by 7% since 2013*)

• Offset Maryland electric power capacity scheduled to retire (Over 1,000 megawatts in MD by 2020**)

• From 2015-2020, PJM will have lost more than 13,000 MW of generation capacity (~10,000 MW of which is coal generation***)

• Provide gas supply to approved new power-generation facility

*Source: U.S. Energy Information Administration Data on Maryland Natural Gas Consumption
***Source: PJM State of the Market 2015
Accommodate Gas Distribution Needs

• Distribution supply is needed to maintain Washington Gas system reliability and accommodate growth

• Natural gas demand continues to rise in Maryland
  • Over 1.1 million residential gas customers in the state of Maryland*
  • 44% of all Maryland households use natural gas for home heating**
  • More than 211,000 natural gas distribution customers in Southern Maryland***

*Source: U.S. Energy Information Administration Data on Maryland Natural Gas Consumption
**Source: U.S. Energy Information Administration Data on Maryland Natural Gas Consumption
***Source: 2015 Towson University Regional Economic Studies Institute Report
Truescape is a worldwide leader in technical simulations. The images provide representational views, developed using state-of-the-art GIS modeling. Engineering details and final design are subject to change.
Charles Station Air Permit

• Dominion has applied for a Permit to Construct with MDE for the Charles Station.

• Dominion is requesting authorization for the following air emission sources at the Station:
  
  o Install a new Solar Mars 90 compressor unit with oxidation catalyst and selective catalytic reduction (SCR) emissions control;

  o Install a new Solar Taurus 70 compressor unit with oxidation catalyst and SCR emissions control;

  o Install a new 5.25 million Btu per hour heating boiler; and

  o Install a new natural gas-fired emergency generator.
Environmental Controls

• “Best in Class” features include a fugitive emissions reduction initiative – this will include equipment and procedures to significantly reduce greenhouse gas emissions

• Selective Catalytic Reduction (SCR) System designed and installed to significantly reduce nitrogen oxide emissions

• Oxidation Catalyst designed and installed to significantly reduce carbon monoxide and volatile organic compound emissions

• Vent gas recovery system will minimize fugitive GHG emissions
# Charles Station Facility Air Emissions

<table>
<thead>
<tr>
<th>Pollutant</th>
<th>Proposed Compressor Station *</th>
<th>Surrounding Area **</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon Monoxide (CO)</td>
<td>36.8</td>
<td>18,985</td>
</tr>
<tr>
<td>Nitrogen Oxides (NO(_x))</td>
<td>17.0</td>
<td>3,804</td>
</tr>
<tr>
<td>Volatile Organic Compounds (VOCs)</td>
<td>13.7</td>
<td>12,186</td>
</tr>
<tr>
<td>Particulate Matter (&lt;10 microns) (PM(_{10}))</td>
<td>14.8</td>
<td>3,002</td>
</tr>
<tr>
<td>Particulate Matter (&lt;2.5 microns) (PM(_{2.5}))</td>
<td>14.8</td>
<td>1,480</td>
</tr>
<tr>
<td>Sulfur Dioxide (SO(_2))</td>
<td>5.6</td>
<td>3,474</td>
</tr>
<tr>
<td>Greenhouse Gases (GHGs) as Carbon Dioxide Equivalent</td>
<td>140,935</td>
<td>6,659,454***</td>
</tr>
<tr>
<td>Total Hazardous Air Pollutants (HAPs)</td>
<td>1.4</td>
<td>1,444</td>
</tr>
</tbody>
</table>

* The potential to emit (PTE) for the proposed compressor station emissions are from Dominion’s application (11/2016).

** The surrounding area includes the emissions from Charles County, MD. Data presented are actual emissions from USEPA’s National Emissions Inventory (NEI) database which reports 2014 data as most recent data year.

*** Charles County 2014 emissions, USEPA Facility Level Information on Greenhouse Gases Tool and 2014 USEPA NEI Database
Charles Station

Proposed Project Milestones Status

Open House
Submit MDE Minor Source Air Permit Application
Submit FERC Application
Air Permit Information Meeting
Air Permit Public Hearing (MDE)
MDE Air Permit and FERC Order Issuances
Projected Start of Facility Construction
Project Completion and In-service

<table>
<thead>
<tr>
<th>Event</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Open House</td>
<td>October 25, 2016</td>
</tr>
<tr>
<td>Submit MDE Minor Source Air Permit Application</td>
<td>November 9, 2016</td>
</tr>
<tr>
<td>Submit FERC Application</td>
<td>November 15, 2016</td>
</tr>
<tr>
<td>Air Permit Information Meeting</td>
<td>March 1, 2017</td>
</tr>
<tr>
<td>Air Permit Public Hearing (MDE)</td>
<td>Fall 2017</td>
</tr>
<tr>
<td>MDE Air Permit and FERC Order Issuances</td>
<td>Fall 2017</td>
</tr>
<tr>
<td>Projected Start of Facility Construction</td>
<td>Late 2017</td>
</tr>
<tr>
<td>Project Completion and In-service</td>
<td>September 2018</td>
</tr>
</tbody>
</table>
Economic Benefits of Project

• Increased energy reliability for Southern Maryland and Washington Gas distribution system

• Continued reliable energy supply to major regional employers

• Construction — Approximately 75 contractors generating economic activity

• More than $1 million in additional, annual local property tax revenues to Charles County ($2.9 million annual total)
Project Contact Information

- General Inquiries: easternmarket@dom.com
- General Inquiries: 844-319-2065
- Website: www.dom.com/easternmarket