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CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
EXPANDED ENVIRONMENTAL NOTIFICATION FORM

PROJECT NAME : Mid-Cape Main Replacement Project
PROJECT MUNICIPALITY : Yarmouth, Dennis, Harwich, and Brewster
PROJECT WATERSHED : Cape Cod
EEA NUMBER : 15445
PROJECT PROPONENT : Colonial Gas Company d/b/a National Grid
DATE NOTICED IN MONITOR : November 23, 2015

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62I) and Section 11.06 of the MEPA regulations (301 CMR 11.00), I hereby determine that this project **requires** an Environmental Impact Report (EIR). The Proponent submitted an Expanded Environmental Notification Form (EENF) with a request that I allow a Single EIR to be prepared in lieu of the usual two-stage Draft and Final EIR process pursuant to 301 CMR 11.06(8).

This project is proposed to address safety, reliability and resiliency of critical energy infrastructure. National Grid has identified this project as a priority to meet its obligation to provide safe, reliable, and least-cost gas service to its customers. Cape Cod communities and businesses support the project and the lifting of the temporary service moratorium on new natural gas connections and expanded service. The Cape Cod Commission (CCC) has indicated its support for expediting the permitting and construction of this critical infrastructure.

Project Description

National Grid provides natural gas to approximately 112,000 customers in 13 communities on Cape Cod. The Cape Cod natural gas distribution system consists of a total of 2,565 miles of gas main. The majority of the system is operated at low operating pressures (i.e.

60 pounds per square inch gauge (psi)). A relatively small portion of the system is operated at higher pressures (i.e. 35 miles at 270 psig and 53 miles at 200 psig). The communities of Yarmouth, Dennis, Harwich, Brewster, Chatham, Orleans and Eastham are served by the 200-psig system. The EENF indicates that demand for natural gas will grow by approximately 15 percent over the next five years at an average annual rate of three percent.

As described in the EENF, the project consists of the replacement of approximately 18.1 miles of the 200-psig system in Yarmouth, Dennis, Harwich, and Brewster. Approximately 17.9 miles of replacement pipe will consist of 12-inch diameter coated steel (CS) pipe. At the western limits of the project, which is the beginning of the 200-psig system in this region of Cape Cod, the project will replace the existing 12-inch diameter pipe, between Regulator Station #3920 at the South Yarmouth Liquid Natural Gas (LNG) facility and two parallel mains on Whites Path, with approximately 1,000 feet of 20-inch diameter CS pipe. This larger diameter main will allow increased flow into the existing 12-inch Middle Segment¹ main in Whites Path and the proposed parallel 12-inch replacement main.

The project will be designed and tested for 270 psig, with normal operation at 200 psig. The EENF indicates that testing the replacement main for this higher pressure will facilitate future capacity increases of the main, in the event an increase should be warranted, and will be less costly if performed at the time of project construction. The EENF indicates that the Proponent does not plan to use the increased capacity that the project will provide. It will continue to operate the main at 200 psig.

The uniform 12-inch pipe along the majority of the route will allow more efficient in-line inspections to maintain system integrity. The Proponent's policies require the replacement main to be "piggable" (i.e. designed for in-line inspections) and pipeline construction standards recommend consistent diameters along new mains. Upon project completion, the majority of the existing main will be decommissioned and abandoned in place; however, four short sections of the existing main (11,445 linear feet (lf)) will continue operation at a reduced pressure of 60 psig in order to eliminate existing high pressure services or "farm taps".²

The project will be installed along the same route as the existing main, with the majority under pavement and no portion greater than ten feet off the paved surface. The majority of the project will also be installed within three feet of the existing main; some sections will be installed across the street and parallel to the existing main. The proposed route will begin in Yarmouth and pass through Dennis and into Harwich before splitting and extending north into Brewster and further east across Harwich where the end of the route has a southern spur. The project includes the following segments:

1. Yarmouth-Dennis Segment (4.9 miles): replace 4.9 miles of ten-inch main with a combination of 20-inch and 12-inch main;

¹ The Middle Segment was previously reviewed by the MEPA Office as part of the KeySpan Sagamore Line Reinforcement Project (SLRP, EEA #13543).

² Farm taps are pipeline facilities which supply service lines to individual homes and businesses via high-pressure services on the 200-psig main rather than from a separate 60-psig distribution line (typical).

2. Harwich Segment (8.0-8.1 miles): replace 4.8 miles of eight-inch main, 1.6 miles of six-inch main, and 1.6 miles of six-inch and eight-inch main, with 12-inch main; and
3. Brewster Segment (5.2 miles): replace 5.2 miles of ten-inch main with 12-inch main.

The proposed route will include crossings of water bodies, culverts, and State roads. The project will cross water bodies and drainage features such as culverts on existing bridges or within the existing roadbed, and State roads using trenchless crossing techniques such as jack-and-bore or horizontal directional drilling (HDD) to avoid construction impacts on those roads. The project will require withdrawal of approximately 572,960 gallons of water from an undetermined municipal source for a hydrostatic test of the assembled pipeline. The project will be planned as three construction phases, which may run concurrently.

Land uses within and adjacent to the project right-of-way (ROW) include forested areas, wetlands, open space, roadways, electric transmission corridors, and a mix of residential and commercial/industrial areas. The route will pass over State roadways and several local roadways. The route crosses the Bass River, Herring Brook, and several other perennial and intermittent streams. The project corridor extends through areas identified by the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP) as *Priority* and *Estimated Habitat* for rare species. Historical and archaeological resources have been documented within or adjacent to the project ROW. The project corridor includes sites which are regulated under the Massachusetts Contingency Plan (MCP).

Project Background

The EENF indicates that the project is proposed to provide safe, reliable, and cost-efficient natural gas service to its customers. The Proponent discovered a substandard condition on a service connected to the existing 200-psig distribution main in early 2014. The Proponent initiated an investigation and inspection program to review construction of the 200-psig system in Yarmouth, Dennis, Brewster, and Harwich. The Proponent was required to reduce the pressure in the 200-psig system to an operating pressure of less than 125-psig in mid-2014 to ensure public safety. This lower operating pressure reduces the volume of natural gas that the Proponent can supply under high-demand conditions. Consequently, the Proponent instituted a moratorium on new and expanded gas services (including conversions) on portions of the mid-Cape and all of the lower Cape Cod regions. As a result of the inspections, the Proponent also determined that approximately 18.1 miles of the 200-psig system required replacement.

Jurisdiction and Permitting

The project is undergoing MEPA review and is subject to a mandatory EIR pursuant to 301 CMR 11.03(7)(a)(3) of the MEPA regulations because it requires State Agency Actions and involves construction of a new fuel pipeline ten or more miles in length. The project will require a Chapter 91 (c. 91) Minor Project Modification from the Massachusetts Department of Environmental Protection (MassDEP), an Access Permit from the Massachusetts Department of Transportation (MassDOT), and an Approval of Petition to Construct (M.G.L c. 164, s. 69J) from the Energy Facilities Siting Board (EFSB). The project is subject to review under the May 2010 MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol (GHG Policy).

The project also requires Negative Determinations of Applicability or Orders of Conditions from the Yarmouth, Dennis, Harwich, and Brewster Conservation Commissions (under local wetlands regulations only), a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the United States Environmental Protection Agency (EPA), review by the Massachusetts Historical Commission (MHC) pursuant to M.G.L. c.9, ss.26-27C (950 CMR 70-71) and Development of Regional Impact (DRI) review from the Cape Cod Commission (CCC).

The project is not receiving Financial Assistance from the Commonwealth. Therefore, MEPA jurisdiction is limited to those aspects of the project that are within the subject matter of required or potentially required State Agency Actions and that may cause Damage to the Environment, as defined in the MEPA regulations. Because the project requires review and approval by the EFSB, subject matter jurisdiction is functionally equivalent to broad scope jurisdiction, in accordance with 301 CMR 11.01(2)(a)(3). Therefore, MEPA jurisdiction for this project extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Environmental Impacts and Mitigation

Potential impacts are primarily associated with the construction period and include temporary impacts to 5,510 square feet (sf) of Riverfront Area, a one-time withdrawal of 572,960 gallons of water for hydrostatic testing of the pipeline, and traffic impacts. Measures to avoid, minimize, and mitigate project impacts include confining the project to the existing roadway layout to avoid alteration of new land and creation of new impervious area; avoidance of adjacent wetland resource areas; installation of erosion and stormwater best management practices (BMPs); GHG mitigation measures; and development of a Traffic Management Plan (TMP).

Single EIR Request

The Proponent requested that it be allowed to file a Single EIR in lieu of a Draft and Final EIR. The MEPA regulations indicate a Single EIR may be allowed, provided I find that the EENF: a) describes and analyzes all aspects of the project and all feasible alternatives, regardless of any jurisdictional or other limitation that may apply to the Scope; b) provides a detailed baseline in relation to which potential environmental impacts and mitigation measures can be assessed; and, c) demonstrates that the planning and design of the Project use all feasible means to avoid potential environmental impacts.

The Proponent submitted the EENF to support this request. The EENF was subject to an extended comment period pursuant to Section 11.06(1) of the MEPA regulations. Comments from MassDEP are limited to addressing jurisdictional issues and information necessary to support permitting. The Cape Cod Commission and the Cape Cod & Islands Association of Realtors, Inc identify the importance of the project to address critical infrastructure and support the Proponent's request for a Single EIR to streamline MEPA review. None of the comments

requested analysis of additional alternatives or identified issues that would warrant additional analysis through a Draft and a Final EIR.

Review of the EENF

The EENF provides a detailed description of the project, existing and proposed conditions plans, and a discussion of project alternatives, and identifies measures to avoid, minimize and mitigate the project's impacts. The EENF includes a GHG analysis and draft Section 61 Findings.

Alternatives Analysis

The project will restore system pressures to 200 psig to strengthen downstream pressure and provide adequate supply of natural gas. It will enable National Grid to reestablish new customer connections on the eastern portion of Cape Cod; lift restrictions on new services, expanded services, and conversions; and, reduce reliance on portable LNG. The EENF includes an analysis of alternatives within the context of this project purpose including the No-Build, energy conservation (demand-side management programs), alternative energy sources, and system alternatives. The No-Build alternative was dismissed because it would not meet the project need. According to the EENF, the Proponent has energy efficiency programs in place to encourage conservation; however, these programs alone would not address the operational needs on the distribution system. The DPU convened the Cape Assistance Group (CAP) in March 2015 to develop a strategy to meet demand during the moratorium. CAP reviewed heating and cooling alternatives to natural gas including renewable and other energy sources and the Proponent shared these results with customers. The EENF indicates that this has not significantly reduced demand for natural gas or reduced the need for reliable natural gas service.

The Proponent considered a number of system alternatives including installation of a new LNG facility, in-kind replacement of the existing mains, and replacement of the existing Sagamore Line Reinforcement Project (SLRP, EEA#13543) Middle Segment parallel mains with a 20-inch main. The alternative consisting of a new LNG facility in the Harwich area would be designed to increase the maximum peak hourly flow capability, meet gas-supply requirements, and alleviate low-pressure problems. This option was rejected because it would take longer to permit and construct, and would have a much greater cost. The Proponent considered an in-kind replacement of pipelines, rather than a consistent 12-inch diameter pipeline, that would not support an increase in natural gas supply. In-kind replacement was rejected because it would not support effective and cost-efficient inspection and maintenance of the system. The ability to conduct remote in-ground internal inspections is a significant safety advantage of the Proponent's Preferred Alternative. The Middle Segment replacement alternative would replace the existing 12-inch reduced pressure 200-psig main installed as part of the SLRP³ and the existing ten-inch reduced pressure 200-psig main with a single 20-inch 200-psig main. This alternative was dismissed because it would reduce reliability and redundancy that would exist with two parallel 200-psig mains in this area, as well as cost more.

³ The Middle Segment of the SLRP was designed and installed for a maximum operating pressure of 270 psig with normal operations at 200 psig. This line segment has been reduced in pressure to less than 125 psig solely because it is connected to the older 200-psig system, which has been reduced in pressure to less than 125 psig.

The EENF also identifies and provides a tabular comparison of alternative routes for the project: Route 6, Old Colony Rail Trail and the Eversource Line 118-119 ROW. All of the alternative routes would have potentially greater impacts than the Preferred Alternative with respect to impacts to wetland resource areas, rare species, trees/vegetation, Article 97 land, archaeological resources, and conservation land.

Wetlands, Waterways, and Stormwater

The Yarmouth, Dennis, Harwich, and Brewster Conservation Commissions will review the project to determine its consistency with local wetlands bylaws, regulations, and codes. The EENF indicates that the proposed replacement project is exempt from WPA review as a minor activity pursuant to 310 CMR 10.02(2)(b)2(i). MassDEP will also review the project for consistency with the c. 91 Waterways Regulations (310 CMR 9.00).

Project construction will be limited to existing public roadway layouts, and will not permanently impact wetlands or waterways. Because the route extends adjacent to or over wetlands and waterways, the project will be sited within the 100-foot buffer zone to wetland resource areas, mapped floodplains, and the 200-foot Riverfront Area. The project will temporarily impact 5,510 sf of previously developed Riverfront Area and 21,653 sf of buffer zone. It will extend through approximately 250 lf of Land Subject to Coastal Storm Flowage (LSCSF), but will not alter this resource area. Six vernal pools are located within 300 feet of the project route. The project will include five water crossings, which would occur over culverts, with the exception of Bass River, where the replacement main will be installed within an existing utility bay beneath the Highbank Road Bridge. The stream crossings will be constructed through open-cut trench in the road bed above existing culverts.

The EENF claims that the minor activities exemption (310 CMR 10.02(2)(b)2(i)) also applies to certain construction within Riverfront Area pursuant to 310 CMR 10.58(6)(b). Therefore, under 310 CMR 10.02(2)(b)2(i) the work within Riverfront Area would not be subject to the performance standards in 310 CMR 10.58(5) because it involves installation of a natural gas main beneath existing paved roadways where trenches for construction will be closed at the end of each work day and it will be performed in accordance with the criteria in 310 CMR 10.02(2)(b)2(i).

The project will cross flowed tidelands of the Bass River which is subject to c. 91 jurisdiction. The project will also cross several other non-tidal rivers and streams. MassDEP comments note that two of these, Herring River and Stony Brook are jurisdictional waterways. MassDEP comments also indicate that these crossings could be authorized as Minor Project Modifications of existing c. 91 Licenses.

The project will not create new impervious area. Following construction, the project will not have any stormwater-related impacts and will not alter the existing stormwater drainage or management along the route. The project will install and maintain erosion and sedimentation BMPs to protect wetland resource areas and other sensitive areas. The project will prepare a

Stormwater Pollution Prevention Plan (SWPPP) in compliance with the NPDES CGP. The project will provide spill protection technology where needed.

Rare Species

The pipeline route includes areas mapped as *Priority* and *Estimated Habitat* for rare species under the Massachusetts Endangered Species Act (MESA). The EENF indicates that within these areas, work will be limited to paved roadway or shoulder within ten feet of pavement. Therefore, the project will be exempt from MESA review for projects in *Priority Habitat* pursuant to 321 CMR 10.14(10) for “installation, repair, replacement, and maintenance of utility lines (gas, water, sewer, phone, electrical) for which all associated work is within ten feet from the edge of existing paved roads.” NHESP has concurred with this determination and did not submit comments on the project.

Transportation

The project will require an Access Permit from MassDOT for proposed work within the State highway layout. The project will cross Route 28 (Main Street) and Depot Road along the Harwich segment and Route 6 and Depot Street along the Brewster segment. The pipeline will cross underneath Route 6 on Depot Street and, therefore, no work on Route 6 will be required.

The Proponent will work closely with MassDOT and municipalities to develop a Traffic Management Plan (TMP) to maintain safe and efficient access for all modes of travel along the project route. It will include: width and lane locations within the work zone; work schedule and duration of lane/road closures, or detours; traffic-control devices; locations where temporary provisions may be made to maintain access to homes/businesses; routing and protection of pedestrian/bicycle traffic; maintenance of school bus service; determination of the impact to roadway level of service (LOS) due to lane closures; communication with the public, municipal officials, and businesses; and coordination with police and fire departments. Review and approval of the TMP will occur during MassDOT permitting.

Greenhouse Gas Emissions

This project is subject to review under the May 5, 2010 MEPA GHG Policy. The GHG Policy is one element of a comprehensive effort to meet the Commonwealth’s obligations under the Global Warming Solutions Act (GWSA) which include reducing carbon emissions by between 10 percent and 25 percent below 1990 emissions levels by the year 2020, and by 80 percent below 1990 emissions levels by the year 2050. Consistent with MEPA’s overall purpose to evaluate alternatives that avoid, minimize and mitigate environmental impacts to the maximum extent practicable (301 CMR 11.01), the Policy requires that GHG impacts of projects have been carefully considered and that all feasible means and measures to reduce those impacts are adopted. The Policy requires that all projects that are subject to preparation of an EIR quantify GHG emissions, evaluate measures that could reduce GHG emissions and quantify potential reductions of mitigation measures. This is a case-by-case inquiry that allows project proponents to select mitigation measures that are determined to be feasible for the particular

project being proposed, thereby providing project proponents with maximum flexibility to design their projects.

The Proponent has provided a GHG analysis to address emissions associated with construction, decommissioning and operations of the pipeline. The Proponent has thoroughly addressed emission sources and measures to minimize GHG emissions and identified mitigation measures. I appreciate the Proponent's commitment to this effort. Specifically, the Single EIR includes an analysis of GHG emissions associated with the following:

1. Commissioning: emissions due to the one-time release of gas when the new pipeline is purged, after hydrostatic pressure testing, to provide 100 percent natural gas in the main (six regulator stations will be purged as well)
2. Tie-in: emissions due to the one-time release of gas when the new pipeline is connected to the existing 200-psig system
3. Decommissioning: emissions due to the one-time release of gas from the existing pipeline before it is deactivated and abandoned (six regulator stations will be decommissioned as well)
4. Construction: short-term emissions from diesel and gasoline construction equipment and vehicles and private vehicles driven by construction workers to the site
5. Normal operations: fugitive emissions from the pipeline
6. Non-routine operations: emissions that may occur during long-term maintenance procedures, such as inspections.

The EENF includes a baseline analysis of GHG emissions related to categories 1 through 4 and documents the GHG emissions from each source based on typical practices. Mitigation measures were compared to the baseline, and associated reductions were identified. The analysis did not quantify emissions associated with non-routine repairs. The analysis considered emissions of carbon dioxide (CO₂) and other GHGs presented as carbon dioxide equivalent (CO_{2e}) which accounts for the higher global warming potential (GWP) of methane. The following table summarizes GHG emissions associated with construction and compares baseline and proposed cases:

Activity	Baseline (tons CO₂)	Proposed (tons CO_{2e})	Difference (percent reduction)
Commissioning of Replacement Main	3.0	3.0	None
Commissioning of Regulator Stations	0.2	0.2	None
Tie-In Venting	0.16	0.16	None
Decommissioning of Existing Main	282	45	81
Decommissioning of Existing Regulator Stations	0.14	0.07	50
Total	285.5	48.43	

The baseline emissions from the commissioning process were estimated at 3.2 tons of CO_{2e}. Alternatives for minimizing emissions from purging small amounts of gas during commissioning include recompressing or flaring the gas. Flaring gas converts the CH₄ to CO₂, which has a GWP 25 times less than CH₄. These alternatives are identified as infeasible because

of the small amount of gas and short duration of its release, therefore, emissions from this source are based on the baseline estimate.

The baseline emissions for the tie-ins was estimated at 0.16 tons of CO₂e. Two alternatives were evaluated to minimize emissions from the tie-in procedure: drawing down the pressure in the pipeline before making the connection, and using the hot-tap method to make the connection without venting gas. The Proponent will evaluate the hot-tap method to make the tie-in based on the final connection logistics.

The baseline emissions from the decommissioning process were estimated at 282.14 tons of CO₂e. Alternatives for minimizing emissions during decommissioning include drawing down the pressure in the pipeline before venting the pipeline, use of an injection point, or flaring the gas. The Proponent will reduce pressure in the pipeline, inject gas into the 60-psig system, and perform flaring which will significantly reduce emissions from decommissioning by 237 tons of CO₂e, from 282 to 45 tons of CO₂e.

Emissions from normal operations of the pipeline include releases during routine and non-routine inspections and maintenance and leaks. The EENF identifies measures to minimize GHG emissions associated with operations of the pipeline, including:

- Cathodic protection to minimize pipeline corrosion;
- Periodic inspections;
- Use of a gas odorant to allow for rapid recognition of a leak; and
- Highly trained personnel and readily available leak repair equipment to minimize releases of gas.

The project will generate one-time emissions of CO₂e of approximately 48.43 tons associated with commissioning, tie-in venting, and decommissioning (of existing pipelines) procedures. The GHG analysis indicates that the net new replacement main will include approximately 11,445 lf and categorizes the remainder of the pipeline as a replacement project. The EENF includes calculations of the baseline for normal operations using emissions factors for fugitive emissions from pipelines and valves based on EPA default factors. Based on these assumptions, fugitive emissions from routine maintenance are expected to be 3.5 tpy of CO₂e based on the net new length of main. The EENF indicates that EPA has established default emission standards for pipelines and associated fittings; however, it does not identify these rates or compare fugitive emission rates of the new pipeline to the existing pipeline.

Emissions from non-routine operations include releases from periodic in-line inspections and maintenance. In-line inspections are expected to occur once every several years. The EENF indicates that most, if not all, scheduled maintenance and inspection activities do not require a venting or purging operation because the system will be designed as a closed system with no relief valves. The project is estimated to generate approximately one ton of CO₂e based on emissions associated with in-line inspections using three launchers/receivers. Because these inspections are not planned operations, this estimate was not included in the project's overall GHG emissions estimates.

Historic and Archaeological Resources

The project will require review by MHC pursuant to M.G.L. c.9, ss.26-27C (950 CMR 70-71). The project route contains numerous historic and archaeological resources which are either listed in the State and/or National Register of Historic Places, Inventory of Historic and Archaeological Assets of the Commonwealth (Inventory), or within local historic districts. Specifically:

- Yarmouth-Dennis Segment
 - Historic resources: one listed in local historic district and State Register; eight listed in State Register; one listed as an Inventory Area; and four listed in the Inventory;
 - Archaeological resources: six previously recorded sites; and approximately eight percent of the segment is rated as having high archaeological sensitivity;

- Harwich Segment
 - Historic resources: one listed as an Inventory district; and seven listed in the Inventory;
 - Archaeological resources: one previously recorded sites; and has low archaeological sensitivity;

- Brewster Segment
 - Historic resources: one listed in local historic district and State Register; two listed in the State and National Register; 23 listed in State Register; two listed as an Inventory Area; and eight listed in the Inventory;
 - Archaeological resources: seven previously recorded sites.

The project is proposed within existing roadway layout beneath pavement and within ten feet of that pavement that is located within previously-disturbed roadbeds. The project is not expected to impact identified historic and archaeological resources. The project will not impact previously-undisturbed areas.

Construction

The Proponent will consult with local agencies and its contractor to develop an Environmental Construction Plan (ECP) that will address in detail the implementation of environmental protection measures during construction staging, materials delivery, and installation of the replacement main. The ECP will be adaptive and subject to revision to allow for changes in construction sequencing. The Proponent will engage the services of a qualified Environmental Inspector to manage the environmental inspection program, ensure that the contractor complies with the ECP, and ensure that construction activities will comply with conditions of all permits and approvals.

The EENF includes a discussion of construction period impacts, including erosion and sedimentation, air quality, solid waste disposal, water quality and water supply protection, and construction management and traffic. The project will implement measures to eliminate or

minimize these impacts. The Proponent will develop a SWPPP as part of its NPDES CGP which will include provisions for erosion and sedimentation control. The Proponent requires contractors to use Ultra Low Sulfur Diesel (ULSD) fuel in all off-road construction equipment. The project will include recycling of existing asphalt, concrete, and packing crates. The EENF indicates that the ECP will require all construction to comply with the MassDEP Air Pollution Control Regulations at 310 CMR 7.02 (Plan Approval and Emission Limitations) and 310 CMR 7.09 (Dust, Odor, Construction, and Demolition), and with the Massachusetts Idling regulation at 310 CMR 7.11. The project will include a detailed TMP as described elsewhere in this Certificate.

The EENF includes a noise analysis and proposes noise mitigation such as minimizing work outside of typical construction hours, equipment mufflers, maintenance of construction equipment, and shielding or buffering distance to mitigate impact of noisy equipment in sensitive locations.

Conclusion

Based on a review of the EENF, consultation with State Agencies, and a review of comment letters, I have determined that the Proponent may file a Single EIR, rather than a Draft and Final EIR. National Grid has provided a comprehensive EENF that provides an alternatives analysis, identifies baseline environmental conditions, and identifies potential environmental impacts and associated mitigation. The replacement of this critical energy infrastructure is a high priority for National Grid and the affected communities. The EENF demonstrates that potential environmental impacts associated with the project are limited and the Proponent has adopted appropriate measures to avoid, minimize and mitigate impacts. This limited Scope requires additional information regarding traffic, GHG emissions, and a Response to Comments.

The EENF does not address potential environmental impacts associated with the potential increase in capacity that would be supported by the project. The EENF indicates National Grid will operate the system at 200 psig and does not have plans to increase supply. As noted previously, prior to any increase in the project's operating pressure to increase supply of natural gas, the Proponent would be required to develop a formal up-rating plan for review by DPU. The Scope does not address potential impacts associated with increasing supply. If the Proponent proposes to increase supply, it should consult with the MEPA Office to determine if further MEPA review would be warranted in the form of a Notice of Project Change (NPC).

SCOPE

General

The Single EIR should follow Section 11.07 of the MEPA regulations for outline and content, as modified by this Scope. It should respond to comments received on the EENF and, as appropriate, identify and commit to specific environmental mitigation measures, and provide revised draft Section 61 Findings.

The Single EIR should identify any changes to the project since filing the EENF. The Single EIR should include existing conditions and site plans at a legible scale to provide context for the limited Scope and Response to Comments. The Single EIR should provide a brief description and analysis of applicable statutory and regulatory standards and requirements, and a description of how the project will meet those standards. The Single EIR should include a list of required State Agency Permits, Financial Assistance, or other State approvals, as well as any local or federal permitting.

Wetlands and Waterways

The Proponent should consult with MassDEP regarding applicability of exemptions to the WPA. To facilitate subsequent licensing, I encourage the Proponent to file a Request for Determination of Applicability (RDA) pursuant to 310 CMR 9.06 with MassDEP to determine whether Herring River and Stony Brook are jurisdictional waterways. The Single EIR should provide an update on the RDA and MassDEP's determination. MassDEP comments indicate that the work at each of the river crossings could be authorized pursuant to a Minor Project Modification (310 CMR 9.22(3)). I encourage the Proponent to submit a formal request for a Minor Project Modification with accompanying construction plans so that MassDEP can confirm this determination. This application could be submitted in conjunction with the Single EIR.

Public Benefits Determination

Consistent with the provisions of *An Act Relative to Licensing Requirements for Certain Tidelands* (2007 Mass. Acts c. 168, sec.8) (the Act), which was enacted on November 15, 2007, I *must* conduct a Public Benefit Review for projects in tidelands that are required to file an EIR. The project exceeds EIR thresholds at 301 CMR 11.03 and the project site contains waterways or tidelands subject to c. 91. Therefore, the Single EIR should clearly identify elements of the project located within tidelands, whether the uses are water-dependent, and provide information, as necessary, to support a Public Benefits Determination (PBD) including standards for a water-dependent or non-water-dependent use project (301 CMR 13.04). If I determine that it does require a PBD, I will issue one in accordance with the regulations at 301 CMR 13.00. The PBD must be issued within 30 days of the issuance of the Certificate on the Single EIR.

Traffic and Transportation

The Single EIR should include a locus map that clearly identifies existing or proposed State highway intersections that will be impacted by the project. It should fully describe the impacts to State-controlled highways and confirm the construction methodology at each intersection under MassDOT jurisdiction. The Single EIR should provide an update on consultation with MassDOT.

Greenhouse Gas Emissions

The Proponent should present a revised GHG analysis that provides a baseline and proposed condition for the entire length of the proposed pipeline, including the section of existing pipeline that will remain in service. The Single EIR should address how the pipeline is designed to avoid and minimize natural gas leakage of the distribution system. The Single EIR should compare fugitive emission rates for the existing and proposed pipeline. It may identify rates based on EPA standards or other industry standards but should include an analysis that clearly demonstrates the GHG benefits of a new pipeline constructed to modern standards. The Single EIR should discuss natural gas leak classification standards and requirements and address proposed leak detection, measurement and repair programs. In addition, the Single EIR should indicate whether National Grid participates or will participate in the EPA Natural Gas STAR program and evaluate applicable technologies and practices that were not evaluated in the EENF. The Proponent should consult with the MEPA Office and DOER regarding the GHG analysis prior to filing the Single EIR.

Construction Period Impacts

The Single EIR should provide information on the emission controls that will be used for all on-site construction vehicles. It should evaluate use of construction equipment with engines manufactured to Tier 4 federal emission standards or best available control technology (BACT) and indicate whether it will incorporate additional measures to minimize construction-period emissions, including limits on idling.

The Single EIR should provide more information regarding the project's generation, handling, recycling, and disposal of construction and demolition debris. The Single EIR should quantify and characterize the material to be generated and define waste management and diversion goals for contractors. I encourage the Proponent to identify specific and aggressive construction recycling goals.

Mitigation and Draft Section 61 Findings

The Single EIR should include an updated section that summarizes proposed mitigation measures and provide draft Section 61 Findings for each State Agency Action. The Single EIR should contain clear commitments to implement these mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

In order to ensure that all GHG emissions reduction measures adopted by the Proponent as the Preferred Alternative are actually constructed or performed by the Proponent, the Secretary requires proponents to provide a self-certification to the MEPA Office indicating that all of the required mitigation measures, or their equivalent, have been completed. The commitment to provide this self-certification in the manner outlined above should be incorporated into the draft Section 61 Findings included in the Single EIR.

Responses to Comments

The Single EIR should contain a copy of this Certificate and a copy of each comment letter received. In order to ensure that the issues raised by commenters are addressed, the Single EIR should include direct responses to comments to the extent that they are within MEPA jurisdiction. This directive is not intended, and shall not be construed, to enlarge the scope of the Single EIR beyond what has been expressly identified in this certificate.

Circulation

The Proponent should circulate the Single EIR to those parties who commented on the EENF, to any State Agencies from which the Proponent will seek permits or approvals, and to any parties specified in section 11.16 of the MEPA regulations. A copy of the Single EIR should be made available for review at the Yarmouth, Dennis, Harwich, and Brewster public libraries.

December 30, 2015

Date


Matthew A. Beaton

Comments received:

12/11/2015	Massachusetts Department of Environmental Protection (MassDEP) / Southeast Regional Office (SERO)
12/22/2015	Massachusetts Division of Marine Fisheries (DMF)
12/23/2015	Cape Cod Commission (CCC)
12/23/2015	Cape Cod & Islands Association of Realtors, Inc.
12/30/2015	Massachusetts Department of Energy Resources (DOER)

MAB/PPP/ppp



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
Governor

Karyn E. Polito
Lieutenant Governor

Matthew A. Beaton
Secretary

Martin Suuberg
Commissioner

December 11, 2015

Mathew A. Beaton,
Secretary of Environment and Energy
Executive Office of Environmental Affairs
ATTN: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: YARMOUTH, DENNIS, HARWICH,
BREWSTER – ENF Review
EOEEA #15445 ENF Mid-Cape Main
Replacement Project, in 18.1 miles
Yarmouth, Dennis, Harwich, Brewster

Dear Secretary Beaton,

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the Environmental Notification Form (ENF) for the proposed Mid-Cape Main Replacement Project, 18.1 miles in Yarmouth, Dennis, Harwich, Brewster, Massachusetts (EOEEA # 15445 ENF). The project proponent provides the following information for the project:

The company proposes to replace approximately 18.1 miles of its existing 200-psig natural gas distribution system in the Towns of Yarmouth, Dennis, Harwich, and Brewster. Approximately 17.9 miles of the replacement main will be new 12-inch-diameter CS pipe.

At the westernmost end, beginning location of the Project, which is the very beginning of the 200-psig system on this part of the Cape. Approximately 1,000 feet of 20-inch-diameter CS pipe will be used to replace the existing single 12-inch-diameter pipe between the Company's Regulator Station #3920 at the South Yarmouth LNG facility and two parallel mains on White's Path. Use of this short segment of larger-diameter main will allow increased flow into the existing 12-inch "Middle Segment" main in White's Path and the parallel 12-inch replacement main (to be constructed).

The project consists of the following segments: (1) Yarmouth-Dennis Segment (4.9 miles) of 10-inch CS (200 psig) with a combination of 20 and 12-inch mains; (2) Harwich Segment (~8.0-8.1 miles) and (3) Brewster Segment (5.2 miles). The proposed route will have a number of "special crossings" of features such as water bodies, culverts, and state roads. Crossings of water bodies and drainage features (e.g. culverts) will be accomplished on existing bridges or within the existing roadbed. Crossings of state roads will be accomplished using trenchless crossing techniques such as jack-and-bore or horizontal directional drilling ("HDD") to avoid construction impacts on those roads.

Wetlands & Waterways Program Comments

The project proponent states that the proposed Replacement Project is exempt from regulation under MGL c. 131, § 40 and 310 CMR 10.00 as a “minor exempt activity” pursuant to 310 CMR 10.02(2)(b)2. However, in Section 4.4.1.2 of the Project Narrative on page 4-7, the proponent states that approximately 250 linear feet of the proposed main replacement project is located within Land Subject to Coastal Storm Flowage. In order for the activity to be considered a “minor exempt activity”, the activity must be located outside any area specified in 310 CMR 10.02(1)(a) through (e). Land Subject to Coastal Storm Flowage is listed in 310 CMR 10.02(1)(e). Therefore, the activity in that location does not appear to qualify as a “minor exempt activity.”

The Public Waterfront Act, M.G.L. c.91 and its regulations at 310 CMR 9.00 regulates activities within waterways, including certain non-tidal rivers and streams. The project will cross flowed tidelands of the Bass River which is clearly a jurisdictional waterway. The proposed replacement gas main will also cross several other non-tidal rivers and streams. Based on a review of USGS maps, aerial photographs and plans accompanying the ENF, it appears that proposed crossings at Herring River and Stony Brook are Chapter 91 jurisdictional waterways pursuant to the Waterways Regulations at 310 CMR 9.04. The Proponent may proceed with permitting under the assumption that crossings at Bass River, Herring River and Stony Brook are within Chapter 91 jurisdiction. In order to make a conclusive determination as to whether these waterways are jurisdictional, the Proponent should file a Request for Determination of Applicability pursuant to the Waterways Regulations at 9.06.

Based on a review of the information contained in the ENF, it appears that the work at each of the river crossings could be authorized under a “Minor Project Modification” pursuant to the Waterways Regulation at 9.22(3) and will not require the submittal of a Chapter 91 License Application. The Waterways Program recommends that the Proponent submit, as soon as possible, a formal request for a Minor Project Modification with accompanying construction plans so that this initial determination can be made.

Construction Stormwater Permit

The project construction activities are scheduled to disturb 3.97 acres of land and therefore, may require a NPDES Stormwater Permit for Construction Activities. The proponent can access information regarding the NPDES Stormwater requirements and an application for the Construction General Permit at the EPA website:

<http://cfpub.epa.gov/npdes/stormwater/cgp.cfm>

Air Quality Comments

Air Quality Construction Impacts

Construction and operation activities shall not cause or contribute to a condition of air pollution due to dust, odor or noise. To determine the appropriate requirements please refer to:

- 310 CMR 7.09 Dust, Odor, Construction, and Demolition
- 310 CMR 7.10 Noise

Bureau of Waste Site Cleanup

Based upon the information provided, the Bureau of Waste Site Cleanup (BWSC) searched its databases for disposal sites and release notifications that have occurred at or might impact the proposed project area. A disposal site is a location where there has been a release to the environment of oil and/or hazardous material that is regulated under M.G.L. c. 21E, and the Massachusetts Contingency Plan [MCP – 310 CMR 40.0000].

The proposed project involves replacement of approximately eighteen miles of gas pipeline. Please be advised that there are many listed BWSC disposal sites located within the proposed project area. Many of the sites have closed under the MCP, but many other disposal sites are open and require continued response actions under the MCP. A listing and discussion of each MCP site will not be presented here.

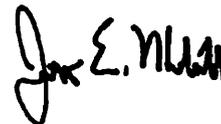
Interested parties are encouraged to view a map showing the location of BWSC disposal sites using the MassGIS data viewer (Oliver) at: http://maps.massgis.state.ma.us/map_ol/oliver.php Under “Available Data Layers” select “Regulated Areas”, and then “DEP Tier Classified 21E Sites”. The compliance status and report submittals for specific MCP disposal sites may be viewed using the BWSC Waste Sites/Reportable Release Lookup at: <http://public.dep.state.ma.us/SearchableSites2/Search.aspx>

The Project Proponent is advised that if oil and/or hazardous materials are identified during the implementation of this project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) may be necessary. A Licensed Site Professional (LSP) should be retained to determine if notification is required, and render appropriate opinions as necessary. The LSP may evaluate whether risk reduction measures are necessary if contamination is present. Please contact BWSC for guidance if questions arise regarding assessment and cleanup under the MCP.

Proposed s.61 Findings

The “Certificate of the Secretary of Energy and Environmental Affairs on the Environmental Notification Form” may indicate that this project requires further MEPA review and the preparation of an Environmental Impact Report. Pursuant to MEPA Regulations 301 CMR 11.12(5)(d), the Proponent will prepare Proposed Section 61 Findings to be included in the EIR in a separate chapter updating and summarizing proposed mitigation measures. In accordance with 301 CMR 11.07(6)(k), this chapter should also include separate updated draft Section 61 Findings for each State agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

Very truly yours,



Jonathan E. Hobill,
Regional Engineer,
Bureau of Water Resources

JH/GZ

Cc: DEP/SERO

ATTN: Millie Garcia-Serrano, Regional Director
David Johnston, Deputy Regional Director, BRP
Maria Pinaud, Deputy Regional Director, BWP
Gerard Martin, Acting Deputy Regional Director, BWSC
Jennifer Viveiros, Deputy Regional Director, ADMIN
Jim Mahala, Acting Chief, Wetlands and Waterways
Dan Gilmore, Wetlands and Waterways
David Hill, Wetlands and Waterways
Allen Hemberger, Site Management

Patel, Purvi (EEA)

From: Petitpas, Christian (FWE)
Sent: Tuesday, December 22, 2015 4:11 PM
To: Patel, Purvi (EEA)
Cc: 'hcarlson@epsilonassociates.com'; 'Dennis Conservation Commission'; 'Harwich Conservation Commission'; 'Harwich Conservation Commission'; 'Brewster Conservation Commission'; 'Muldoon, Kerry'; Ford, Kathryn (FWE); Lehan, Richard (FWE)
Subject: EEA No. 15445, Colonial Gas Company

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Purvi Patel, EEA No. 15445
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Beaton:

The Division of Marine Fisheries (*Marine Fisheries*) has reviewed the Expanded Environmental Notification Form by Colonial Gas Company for the proposed multi-stage Mid-Cape Main Replacement Project involving the replacement of 18.1 miles of existing 200-psig natural gas distribution main system in the Towns of Yarmouth, Dennis, Harwich, and Brewster. The project was reviewed with respect to potential impacts to marine fisheries resources and habitat.

Based on the information provided, *Marine Fisheries* has no recommendations for sequencing, timing, or methods that would avoid or minimize impact at this time.

Questions regarding this review may be directed to John Logan in our New Bedford office at 508-990-2860 ext. 141.

Sent on behalf of John Logan



COMMONWEALTH OF MASSACHUSETTS
EXECUTIVE OFFICE OF
ENERGY AND ENVIRONMENTAL AFFAIRS
DEPARTMENT OF ENERGY RESOURCES
100 CAMBRIDGE ST., SUITE 1020
BOSTON, MA 02114
Telephone: 617-626-7300
Facsimile: 617-727-0030

Charles D. Baker
Governor

Matthew A. Beaton
Secretary

Karyn E. Polito
Lt. Governor

Judith F. Judson
Commissioner

December 29, 2015
Purvi Patel, MEPA Analyst

Subject: Mid Cape Gas Main Replacement – Stationary GHG Sources DOER Comments

The DOER commends the project for the quality and detail of the information submitted in the GHG section and Appendix.

It is the intent of this review to both ensure that the analysis submitted conforms to the application of the MEPA GHG Policy and Protocol (the Policy) as have been agreed upon for this project, and to point out areas and aspects of the design and proposed mitigation as described in the content related to the GHG emissions from stationary sources that may present opportunities for further reductions in both the consumption of fuels and GHG emissions. Where these opportunities appear to exist, these comments also suggest measures and/or approaches that the DOER offers for consideration for adoption.

Project Description:

The DOER commends the proponent on the generally high level of detail provided.

While the DOER recognizes the significant projected reduction in overall net projected emissions resulting in the operation of the as-proposed pipeline, under the Policy this information is extraneous to both the quantification of the base case GHG emissions and for the mitigated as-proposed GHG emissions which are directly attributable to the pipeline project.

Establishment of the Base Case and As-proposed Case:

It appears that because all but 11,445 LF will be a replacement on a LF per LF basis, due to this, the Base Case would only apply to this additional length. The DOER questions this approach and suggests that in order to fully understand and compare the base case and as-mitigated case

December 29, 2015
 Mid Cape Gas Line Replacement- EENF
 DOER Comments

emissions, the GHG emissions of the entire 18.9 miles of the as-proposed project should be included for both cases.

As is stated in the GHG section, the base case should be what is required by the projected flow and pressure and by compliance with all of the applicable laws, ordinances and regulations (LORS), whereas the as-proposed project should include any measures beyond what is included in the base case which would have the effect of further reducing the GHG emissions.

This table should be included any subsequent submittal:

Description	Base	As Proposed	% reduction in GHG emissions

Quantification of GHG Emissions from Stationary Sources

Operations:

As stated in the comments above both the base and as-mitigated cases should be based on the entire length and design of the as-proposed project.

Mitigation:

The DOER assumes that the leakage rates included in Table W-7 to Subpart W of Part 98 are based on the standards of construction and operation consistent with all applicable LORS. The DOER suggests that any measures that would exceed these standards and regulations which could be demonstrated to reduce the quantity of fugitive emissions should be evaluated by the proponent and included in the subsequent submittal as either adopted, under further study or eliminated. A description of each measure and reasons for further study or elimination should be included with sufficient detail to permit a thorough review.

Some possible measures for consideration:

- a. Incorporation of valves and fittings with lower leakage rates than the minimum required by LORS
- b. Adoption of enhanced testing and inspection procedures and protocols
- c. Incorporation of an in-situ leak detection system.

Self Certification (Section 61):

Include at a minimum the following information:

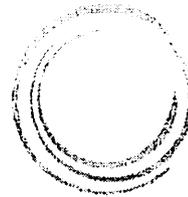
1. The projected scf/yr of fugitive emissions and the associated tons/yr of GHG emissions.
2. The reductions in both fugitive scf and GHG emissions to be achieved by the as-proposed project.
3. A list of all significant related mitigation measures included in the as-proposed project.
4. Provide the MEPA office with the project milestone at which, prior to issuance of the For Bid design, the MEPA office will be informed of decisions made regarding any measures designated for further evaluation.

John Ballam

John Ballam
Engineering Manager
CHP Program Manager
MA Dept. of Energy Resources

cc: Arah Schuur
Ian Finlayson

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630



CAPE COD
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

By Electronic Mail

December 23, 2015

Matthew A. Beaton, Secretary
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office, Purvi Patel, Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: *Expanded Environmental Notification Form - EEA No. 15445*
NGRID- Mid Cape Main Replacement Project
Towns of Harwich, Brewster, Dennis, Yarmouth
(CCC Project No. 15022)

Dear Secretary Beaton:

The Cape Cod Commission supports the natural gas main replacement project outlined in National Grid's Expanded Environmental Notification Form, and further, supports expediting the permitting and construction of the project as it constitutes critical infrastructure to the Cape Cod region.

For the reasons that follow, the Commission suggests that any long term, regional land use impacts and concerns under its jurisdiction occasioned by the project have been sufficiently addressed in the EENF, and, accordingly, would support a determination under MEPA that the EENF is adequate and no EIR need be prepared. Alternatively, the Commission would support a determination that a Single EIR be prepared, which would be sufficient to address any issues raised in the EENF that you deem outstanding.

The EENF responds in large measure to the service moratorium on the mid and lower Cape announced by National Grid in 2014. Since that time, the Commission has participated in and hosted regular meetings between the company and municipal and business stakeholders to collaboratively develop an infrastructure plan that meets the needs of the region and minimizes harm to the environment. Lifting the service moratorium as soon as practicable was a clearly articulated priority in these meetings. The replacement project will provide safe and more reliable gas service to the region.

National Grid intends to replace 18.1 miles of existing gas main primarily with new, 12-in. diameter main within the towns of Yarmouth, Dennis, Brewster and Harwich, to operate at 200 psig. As proposed, impacts to natural resource areas have been minimized or avoided. The work will occur in previously disturbed or existing paved areas. The proposed project route is

confined to existing roadway layouts, with main placement directly beneath or within several feet of existing road pavement, and does not involve tree clearing or removal. The existing main would largely be abandoned in place. Where work is proposed adjacent to wetlands, the work will occur within existing bridges or culverts. Work proposed in mapped rare species habitat is again located within existing paved roadways or within 10 ft of the roadway, and as such is an exempt activity under the MESA regulations. The project area does not pass through coastal resource areas.

Though the proposed pipeline route traverses several marine water recharge areas, many of which drain to nitrogen impaired embayments, and through several Freshwater Recharge Areas, including recharge areas to impaired ponds (e.g. Lower Mill Pond and Walkers Pond), the proposed pipeline will not withdraw water, generate wastewater, entail subsurface disposal, or contribute additional nitrogen loading. As such, the Commission suggests that the project will have negligible long-term nutrient impacts on water resources.

Stormwater runoff during construction will be contained with best management practices including the use of hay bales, silt fences, and the placement of silt sacks for existing catch basins. Additionally, stormwater impacts will be minimized by compliance with the project's NPDES General Permit. Once the pipeline is complete, disturbed vegetated areas will be loamed and seeded to match pre-existing vegetation. As such, the Commission suggests that the project will not have long-term impacts to stormwater quality or permanently and detrimentally alter existing drainage.

The Commission does note that there may be some short term land use impacts caused by construction-related operations, which the Commission suggests could adequately be addressed in the applicant's construction plans. The Commission would be happy to continue to work with the company and municipalities as construction plans are developed:

- The Commission encourages continued dialogue between NGRID and municipalities in the development of the Traffic Management Plan and coordination with local transportation projects;
- Mitigation efforts to control spills, trench de-watering, stormwater, and erosion and sedimentation are imperative to ensuring compliance with water resources goals during construction;
 - Groundwater will likely be encountered in some areas during construction-period trenching. De-watering plans submitted by the applicant include many best practices to ensure minimal impact to water resources: hoses will be elevated to prevent sediment intake, pumps will have secondary containment, and trench water will be discharged through filter bags when the discharge occurs within 100 feet from a wetland or water body. Once the pipeline is complete, 572,960 gallons of water (likely municipal water) will be used for leak testing the pipeline. After testing, the water will be directed to tanks and transported to an approved wastewater treatment facility;
 - The proposed pipeline passes through several Wellhead Protection Areas (WPAs) and runs adjacent to Potential Public Water Supply Areas. Though the project does not anticipate using, handling, or generating any hazardous materials, refueling and equipment servicing operations within WPAs may pose a threat to drinking water quality. Protocols for refueling construction equipment should be

- established by the applicant, consistent with the project's location in the above-referenced water resource areas;
- Though no water quality impacts on groundwater are anticipated during project construction, the applicant should provide the location of parcels containing and potentially containing private wells within 400 feet of construction-related activities to ensure compliance with General Aquifer Protection goals and Drinking Water Quality goals;
 - Erosion and sedimentation control measures and other environmental protection issues associated with construction will be outlined in an Environmental Construction Plan (ECP) to be prepared by the applicant.

Thank you for the opportunity to provide comments on the above-referenced Expanded Environmental Notification Form (EENF). Cape Cod Commission staff is available and happy to answer any questions about these comments.

Sincerely,



Kristy Senatori
Deputy Director

Cc: Project File
Applicant's agent Epsilon Associates Inc. via email
Yarmouth, Dennis, Harwich and Brewster CCC Representatives via email
Yarmouth, Dennis, Harwich and Brewster Town Administrators/ Managers via USPS



December 14, 2015

Secretary, Matthew A. Beaton
Attn: MEPA Office
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston MA 02114

RE: Mid-Cape Main Replacement Project

Dear Secretary Beaton:

On behalf of our 1,350 members and Board of Directors, I am writing to express our support of National Grid's, Mid-Cape Gas Main Replacement Project.

National Grid provides natural gas service to over 100,000 homes and businesses on Cape Cod. Because features of the system no longer meet current safety standards, National Grid has reduced pressure on a large section of the system. As a result, the company is no longer connecting new customers in several communities on Cape Cod. This in turn has become a significant economic issue for local residents and businesses.

We have met with National Grid representatives to urge them to make improvements to the system as soon as possible. We have outlined to them the additional financial burden this has placed on consumers and businesses. We have also reviewed National Grid's construction plans to replace 18 miles of gas mains, find them to be reasonable, and have worked with County officials in efforts to expedite the project and minimize adverse effects from the moratoriums. It is important to note that these plans are being coordinated with local towns, police and public works officials.

Our organization is supportive of this project and lifting the current moratorium on new gas service as soon as possible. We urge your support and approval.

Thank you.

Wendy K. Northcross
CEO



December 21, 2016

Mr. Matthew Beaton, Secretary
Executive Office of Energy and Environmental Affairs
ATTN – MEPA unit
100 Cambridge Street, Suite 900
Boston MA 02114
Re: The Mid-Cape Gas Main Replacement Project

Dear Secretary Beaton,

The Cape Cod & Islands Association of REALTORS® lifting the natural gas moratorium on Cape Cod for the National Grid is important.

As you know, National Grid is a major provider of natural gas service to thousands of homes and businesses all throughout Cape Cod. Earlier this year, representatives from Grid announced that the company is no longer going to connect new customers in many communities on the Cape until it replaces a significant section of its system.

Realtors throughout Cape Cod are certainly supportive of Grid's plans to upgrade the system and improve public safety - but we are very concerned about the impact that the current moratorium on gas connections is having on our economy. The purchase, sale and redevelopment of real estate is a major source of employment on the Cape. While we can't quantify the impact, the supply of natural gas is certainly a factor in many sales decisions.

We meet with National Grid representatives on a regular basis and are kept updated as to their plans and work through any questions we have on the project. We are glad that the project will have a minimal impact to the environment, be done primarily in existing right of way limiting its impact on property owners, and most trees will be spared along our most scenic roads.

We support lifting the moratorium as soon as possible and hope you will do all you can to make this project a reality.

Thank you.

Sincerely,

Ryan Castle
Chief Executive Officer



The Commonwealth of Massachusetts
Executive Office of Energy and Environmental Affairs
100 Cambridge Street, Suite 900
Boston, MA 02114

Charles D. Baker
GOVERNOR

Karyn E. Polito
LIEUTENANT GOVERNOR

Matthew A. Beaton
SECRETARY

Tel: (617) 626-1000
Fax: (617) 626-1181
<http://www.mass.gov/envir>

April 15, 2016

CERTIFICATE OF THE SECRETARY OF ENERGY AND ENVIRONMENTAL AFFAIRS
ON THE
SINGLE ENVIRONMENTAL IMPACT REPORT

PROJECT NAME : Mid-Cape Main Replacement Project
PROJECT MUNICIPALITY : Yarmouth, Dennis, Harwich, and Brewster
PROJECT WATERSHED : Cape Cod
EEA NUMBER : 15445
PROJECT PROPONENT : Colonial Gas Company d/b/a National Grid
DATE NOTICED IN MONITOR : March 9, 2016

Pursuant to the Massachusetts Environmental Policy Act (MEPA; M.G.L. c. 30, ss. 61-62I) and Section 11.08 of the MEPA regulations (301 CMR 11.00), I have reviewed the Single Environmental Impact Report (Single EIR) and hereby determine that it **adequately and properly complies** with MEPA and its implementing regulations.

This project is proposed to address safety, reliability and resiliency of critical energy infrastructure. National Grid has identified this project as a priority to meet its obligation to provide safe, reliable, and least-cost gas service to its customers. Cape Cod communities and businesses support the project and the lifting of the temporary service moratorium on new natural gas connections and expanded service. In addition, the Cape Cod Commission (CCC) has indicated its support for expediting the permitting and construction of this critical infrastructure.

Project Description

National Grid provides natural gas to approximately 112,000 customers in 13 communities on Cape Cod. The Cape Cod natural gas distribution system consists of a total of 2,565 miles of gas main. The majority of the system is operated at low operating pressures (i.e. 60 pounds per square inch gauge (psig)). A relatively small portion of the system is operated at

higher pressures (i.e. 35 miles at 270 psig and 53 miles at 200 psig). The communities of Yarmouth, Dennis, Harwich, Brewster, Chatham, Orleans and Eastham are served by the 200-psig system. National Grid has indicated demand for natural gas will grow by approximately 15 percent over the next five years at an average annual rate of three percent.

As described in the Expanded Environmental Notification Form (EENF), the project consists of the replacement of approximately 18.1 miles of the 200-psig system in Yarmouth, Dennis, Harwich, and Brewster. Approximately 17.9 miles of replacement pipe will consist of 12-inch diameter coated steel (CS) pipe. At the western limits of the project, which is the beginning of the 200-psig system in this region of Cape Cod, the project will replace the existing 12-inch diameter pipe, between Regulator Station #3920 at the South Yarmouth Liquid Natural Gas (LNG) facility and two parallel mains on Whites Path, with approximately 1,000 feet of 20-inch diameter CS pipe. This larger diameter main will allow increased flow into the existing 12-inch Middle Segment¹ main in Whites Path and the proposed parallel 12-inch replacement main.

The project will be designed and tested for 270 psig, with normal operation at 200 psig. The EENF indicates that testing the replacement main for this higher pressure will facilitate future capacity increases of the main, in the event an increase should be warranted, and will be less costly if performed at the time of project construction. The EENF indicates that National Grid does not plan to use the increased capacity that the project will provide. It will continue to operate the main at 200 psig.

The uniform 12-inch pipe along the majority of the route will allow more efficient in-line inspections to maintain system integrity. National Grid's policies require the replacement main to be "piggable" (i.e. designed for in-line inspections) and pipeline construction standards recommend consistent diameters along new mains. Upon project completion, the majority of the existing main will be decommissioned and abandoned in place; however, four short sections of the existing main (11,445 linear feet (lf)) will continue operation at a reduced pressure of 60 psig in order to eliminate existing high pressure services or "farm taps".²

The project will be installed along the same route as the existing main, with the majority under pavement and no portion greater than ten feet off the paved surface. The majority of the project will also be installed within three feet of the existing main; some sections will be installed across the street and parallel to the existing main. The proposed route will begin in Yarmouth and pass through Dennis and into Harwich before splitting and extending north into Brewster and further east across Harwich where the end of the route has a southern spur. The project includes the following segments:

1. Yarmouth-Dennis Segment (4.9 miles): replace 4.9 miles of ten-inch main with a combination of 20-inch and 12-inch main;
2. Harwich Segment (8.0-8.1 miles): replace 4.8 miles of eight-inch main, 1.6 miles of six-inch main, and 1.6 miles of six-inch and eight-inch main, with 12-inch main; and

¹ The Middle Segment was previously reviewed by the MEPA Office as part of the KeySpan Sagamore Line Reinforcement Project (SLRP, EEA #13543).

² Farm taps are pipeline facilities which supply service lines to individual homes and businesses via high-pressure services on the 200-psig main rather than from a separate 60-psig distribution line (typical).

3. Brewster Segment (5.2 miles): replace 5.2 miles of ten-inch main with 12-inch main.

The proposed route will include crossings of water bodies, culverts, and State roads. The project will cross water bodies and drainage features such as culverts on existing bridges or within the existing roadbed, and State roads using trenchless crossing techniques such as jack-and-bore or horizontal directional drilling (HDD) to avoid construction impacts on those roads. The project will require withdrawal of approximately 572,960 gallons of water from an undetermined municipal source for a hydrostatic test of the assembled pipeline. The project will include three construction phases, which may run concurrently.

Land uses within and adjacent to the project right-of-way (ROW) include forested areas, wetlands, open space, roadways, electric transmission corridors, and a mix of residential and commercial/industrial areas. The route will pass over State roadways and several local roadways. The route crosses the Bass River, Herring Brook, and several other perennial and intermittent streams. The project corridor extends through areas identified by the Division of Fisheries and Wildlife Natural Heritage and Endangered Species Program (NHESP) as *Priority* and *Estimated Habitat* for rare species. Historical and archaeological resources have been documented within or adjacent to the project ROW. The project corridor includes sites which are regulated under the Massachusetts Contingency Plan (MCP).

Project Background

The EENF indicates that the project is proposed to provide safe, reliable, and cost-efficient natural gas service to its customers. National Grid discovered a substandard condition on a service connected to the existing 200-psig distribution main in early 2014 and initiated an investigation and inspection program to review construction of the 200-psig system in Yarmouth, Dennis, Brewster, and Harwich. National Grid was required to reduce the pressure in the 200-psig system to an operating pressure of less than 125-psig in mid-2014 to ensure public safety. This lower operating pressure reduces the volume of natural gas that National Grid can supply under high-demand conditions. Consequently, National Grid instituted a moratorium on new and expanded gas services (including conversions) on portions of the mid-Cape and all of the lower Cape Cod regions. As a result of the inspections, National Grid also determined that approximately 18.1 miles of the 200-psig system required replacement.

Jurisdiction and Permitting

The project is undergoing MEPA review and is subject to a mandatory EIR pursuant to 301 CMR 11.03(7)(a)(3) of the MEPA regulations because it requires State Agency Actions and involves construction of a new fuel pipeline ten or more miles in length. The project will require a Chapter 91 (c. 91) Minor Project Modification from the Massachusetts Department of Environmental Protection (MassDEP), an Access Permit from the Massachusetts Department of Transportation (MassDOT), and an Approval of Petition to Construct (M.G.L c. 164, s. 69J) from the Energy Facilities Siting Board (EFSB). The project is subject to review under the May 2010 MEPA Greenhouse Gas (GHG) Emissions Policy and Protocol (GHG Policy).

The project also requires Negative Determinations of Applicability or Orders of Conditions from the Yarmouth, Dennis, Harwich, and Brewster Conservation Commissions (under local wetlands regulations only), a National Pollutant Discharge Elimination System (NPDES) Construction General Permit (CGP) from the United States Environmental Protection Agency (EPA), review by the Massachusetts Historical Commission (MHC) pursuant to M.G.L. c.9, ss.26-27C (950 CMR 70-71) and Development of Regional Impact (DRI) review from the Cape Cod Commission (CCC).

The project is not receiving Financial Assistance from the Commonwealth. Therefore, MEPA jurisdiction is limited to those aspects of the project that are within the subject matter of required or potentially required State Agency Actions and that may cause Damage to the Environment, as defined in the MEPA regulations. Because the project requires review and approval by the EFSB, subject matter jurisdiction is functionally equivalent to broad scope jurisdiction, in accordance with 301 CMR 11.01(2)(a)(3). Therefore, MEPA jurisdiction for this project extends to all aspects of the project that are likely, directly or indirectly, to cause Damage to the Environment as defined in the MEPA regulations.

Environmental Impacts and Mitigation

Potential impacts are primarily associated with the construction period and include temporary impacts to 5,510 square feet (sf) of Riverfront Area, a one-time withdrawal of 572,960 gallons of water for hydrostatic testing of the pipeline, and traffic impacts. The project will not affect properties listed on the State and National Register, nor will it affect historic districts or properties/areas listed on the Inventory of Historic and Archaeological Assets of the Commonwealth. Measures to avoid, minimize, and mitigate project impacts include confining the project to the existing roadway layout to avoid alteration of new land and creation of new impervious area; avoidance of adjacent wetland resource areas; installation of erosion and stormwater best management practices (BMPs); GHG mitigation measures; and development of a Traffic Management Plan (TMP).

Review of the Single EIR

The Single EIR includes a description of the project and updated plans. It identifies minor changes to the project since filing the EENF. The Single EIR provides a description and analysis of applicable statutory and regulatory standards and requirements, and a description of how the project will meet those standards. It includes a list of required State Agency Permits as well as local and federal permitting. It responds to comments received on the EENF, provides additional information on traffic and GHG emissions, identifies and commits to specific environmental mitigation measures, and provides revised draft Section 61 Findings.

Proposed changes to the project since filing the EENF include:

- National Grid will consult with MassDOT to determine whether open cut trenching may have less impacts than the proposed trenchless crossing technique at the intersection of Depot Road/Route 28 in Harwich;

- Subsequent to consultation with the Town of Dennis, the project will eliminate trenchless crossing at the intersection of Upper County Road/Great Western Way;
- A maximum of four remotely-controlled isolation valves will be installed within the roadway layout within 10 feet of pavement.

Wetlands, Waterways, and Stormwater

The Yarmouth, Dennis, Harwich, and Brewster Conservation Commissions will review the project to determine its consistency with local wetlands bylaws, regulations, and codes. MassDEP will also review the project for consistency with the c. 91 Waterways Regulations (310 CMR 9.00). The EENF indicated that the proposed replacement project is exempt from WPA review as a minor activity pursuant to 310 CMR 10.02(2)(b)2(i). The Proponent consulted with MassDEP regarding applicability of exemptions to the WPA. Comments from MassDEP indicate that the Single EIR addresses its concerns related to work within Land Subject to Coastal Storm Flowage (LSCSF) and the minor exempt activity status of the project.

Project construction will be limited to existing public roadway layouts, and will not permanently impact wetlands or waterways. Because the route extends adjacent to or over wetlands and waterways, the project will be sited within the 100-foot buffer zone to wetland resource areas, mapped floodplains, and the 200-foot Riverfront Area. The project will temporarily impact 5,510 sf of previously developed Riverfront Area and 21,653 sf of buffer zone. It will extend through approximately 250 lf of LSCSF, but will not alter this resource area. Six vernal pools are located within 300 feet of the project route. The project will include five water crossings, which would occur over culverts, with the exception of Bass River, where the replacement main will be installed within an existing utility bay beneath the Highbank Road Bridge. The stream crossings will be constructed through open-cut trench in the road bed above existing culverts.

National Grid has indicated that the minor activities exemption (310 CMR 10.02(2)(b)2(i)) also applies to certain construction within Riverfront Area pursuant to 310 CMR 10.58(6)(b). Therefore, under 310 CMR 10.02(2)(b)2(i) the work within Riverfront Area would not be subject to the performance standards in 310 CMR 10.58(5) because it involves installation of a natural gas main beneath existing paved roadways where trenches for construction will be closed at the end of each work day and it will be performed in accordance with the criteria in 310 CMR 10.02(2)(b)2(i).

The project will cross flowed and filled tidelands of the Bass River which is subject to c. 91 jurisdiction. The project will also cross several other non-tidal rivers and streams. MassDEP comments on the EENF noted that two of these, Herring River and Stony Brook are jurisdictional waterways. MassDEP comments on the EENF also indicated that these crossings could be authorized as Minor Project Modifications of existing c. 91 Licenses. National Grid consulted MassDEP regarding the Herring River and Stony Brook crossings and provided additional information to assist MassDEP in determining if c. 91 authorizations would be required.

The project will not create new impervious area. Following construction, the project will not have any stormwater-related impacts and will not alter the existing stormwater drainage or management along the route. The project will install and maintain erosion and sedimentation BMPs to protect wetland resource areas and other sensitive areas. The project will prepare a Stormwater Pollution Prevention Plan (SWPPP) in compliance with the NPDES CGP. The project will provide spill protection technology where needed.

Public Benefits Determination

Consistent with the provisions of *An Act Relative to Licensing Requirements for Certain Tidelands* (2007 Mass. Acts c. 168, sec.8) (the Act), which was enacted on November 15, 2007, I *must* conduct a Public Benefit Review for projects in tidelands that are required to file an EIR. The project exceeds EIR thresholds at 301 CMR 11.03 and the project site contains waterways or tidelands subject to c. 91. The Single EIR identifies elements of the project located within flowed and filled tidelands associated with the Bass River, Herring River, and Stony Brook. The Single EIR indicates that the project is an “Infrastructure Crossing Facility”, defined in the Waterways Regulations at 310 CMR 9.02, and because it cannot be located away from tidelands to meet the project purpose, it is classified as a water-dependent use pursuant to 310 CMR 9.12(2)(d). The Single EIR also provides a public benefits analysis of the project consistent with the provisions of the Act. I concur that the project is a water-dependent use. Pursuant to the Public Benefit Determination (PBD) regulations at 301 CMR 13.04(1), the project is presumed to provide adequate public benefit because it is a water-dependent use. Therefore, I am declining to issue a separate PBD for this project.

Traffic and Transportation

The project will require an Access Permit from MassDOT for proposed work within the State highway layout. The project will cross Route 28 (Main Street) and Depot Road along the Harwich segment and Route 6 and Depot Street along the Brewster segment. The pipeline will cross underneath Route 6 on Depot Street and, therefore, no work on Route 6 will be required.

The Proponent will work closely with MassDOT and municipalities to develop a Traffic Management Plan (TMP) to maintain safe and efficient access for all modes of travel along the project route. It will include: width and lane locations within the work zone; work schedule and duration of lane/road closures, or detours; traffic-control devices; locations where temporary provisions may be made to maintain access to homes/businesses; routing and protection of pedestrian/bicycle traffic; maintenance of school bus service; determination of the impact to roadway level of service (LOS) due to lane closures; communication with the public, municipal officials, and businesses; and coordination with police and fire departments. Review and approval of the TMP will occur during MassDOT permitting.

The Single EIR includes a map that identifies the locations of six at-grade crossings at State highway intersections that will be impacted by the project. The only State-controlled route with an at-grade crossing is at the intersection of Route 28/Depot Street in Harwich. The Proponent is considering a trenchless crossing technique at this intersection; however, due to

space constraints in this area, National Grid is working with MassDOT to determine whether open cut trenching could reduce impacts.

Greenhouse Gas Emissions

This project is subject to review under the May 5, 2010 MEPA GHG Policy. The GHG Policy is one element of a comprehensive effort to meet the Commonwealth's obligations under the Global Warming Solutions Act (GWSA) which include reducing carbon emissions by between 10 percent and 25 percent below 1990 emissions levels by the year 2020, and by 80 percent below 1990 emissions levels by the year 2050. Consistent with MEPA's overall purpose to evaluate alternatives that avoid, minimize and mitigate environmental impacts to the maximum extent practicable (301 CMR 11.01), the Policy requires that GHG impacts of projects have been carefully considered and that all feasible means and measures to reduce those impacts are adopted. The Policy requires that all projects that are subject to preparation of an EIR quantify GHG emissions, evaluate measures that could reduce GHG emissions and quantify potential reductions of mitigation measures. This is a case-by-case inquiry that allows project proponents to select mitigation measures that are determined to be feasible for the particular project being proposed, thereby providing project proponents with maximum flexibility to design their projects. The Proponent consulted with the MEPA Office and DOER regarding the GHG analysis on January 25, 2016.

Independent of the GHG Policy, National Grid has a corporate Environmental Policy, which states that it will reduce the impact of its business on global climate change by targeting a decrease in emissions of GHG by 45 percent by 2020 and 80 percent by 2050 from 1990 baselines emission levels. It includes consideration of mitigation and adaptation measures to reduce the impact of climate change on its business by implementing. The Single EIR supplemented the GHG analysis from the EENF through inclusion of revised calculations and additional description and analysis of the GHG impacts associated with operation of the pipeline.

The Single EIR addresses how the pipeline is designed to avoid and minimize natural gas leakage of the distribution system. The pipeline will have 100 percent welded connections, with no mechanical connections that would allow the potential for leaks. All of the welds will be visually detected and non-destructively tested. The line will be hydrostatically tested to establish the maximum allowable operating pressure (MAOP) and ensure its integrity. External coatings systems on the pipe and a galvanic anode cathodic protection system will provide protection from corrosion. The Single EIR indicates that there have been three leaks on the existing 200-psig Mid-Cape System in the past 16 years (excluding leaks caused by third party damage).

The Scope directed the Proponent to compare fugitive emission rates for the existing and proposed pipeline. The Single EIR indicates that there would be no significant difference between the existing system and the proposed system with respect to GHG emissions. The proposed pipe and fittings, material properties, manufacturing process, coating process, and cathodic protection system would be consistent with the existing system. EPA emission factors are employed to estimate fugitive emissions from the project; calculated emissions would be the same for the existing and proposed systems because the design will remain the same for all relevant parameters. The EPA emission factor for CS pipe and associated fittings is 0.35 standard

cubic feet (scf) per hour per mile. The projected natural gas leak emissions rate for the 18.1 miles of main will be 55.5 thousand cubic feet (mcf) per year, which is equivalent to 29.1 tons per year (tpy) of carbon dioxide equivalent (CO₂e). This emission rate calculation is the same for the existing system and the proposed system. The additional length of existing main that will be continued in use at 60 psig will have an estimated emission rate of 6.65 mcf/year, which is equivalent to 3.5 tpy of CO₂e.

The Single EIR provides a discussion on federal and State natural gas leak classification standards and requirements. It also describes National Grid's leak classification procedures which is consistent with industry standards and is based on distance from structure, surface strata, and amount of gas readings. National Grid has an existing procedure for leakage survey and patrolling. The project will require the main to be patrolled four times annually. A mobile leak survey must be performed at least once per calendar year.

The Single EIR indicates that National Grid collaborated with EPA to develop the EPA Natural Gas STAR program through the American Gas Association, Downstream Initiative, and ONE Future. The Methane Challenge has not yet been finalized; however, National Grid will participate in the program and is committed to leading industry efforts to reduce methane emissions.

Construction Period Impacts

The Proponent will consult with local agencies and its contractor to develop an Environmental Construction Plan (ECP) that will address in detail the implementation of environmental protection measures during construction staging, materials delivery, and installation of the replacement main. The ECP will be adaptive and subject to revision to allow for changes in construction sequencing. The Proponent will engage the services of a qualified Environmental Inspector to manage the environmental inspection program, ensure that the contractor complies with the ECP, and ensure that construction activities will comply with conditions of all permits and approvals.

National Grid will comply with the requirements of MassDEP's Diesel Retrofit Program. All diesel-powered non-road construction equipment with engine horsepower ratings of 50 and above (used for more than 30 days) will either be EPA Tier 4-compliant or will have EPA-verified (or equivalent) emission control devices such as oxidation catalysts or other comparable technologies installed on the exhaust system. National Grid will limit idling time to five minutes.

The Single EIR provides additional information regarding the project's generation, handling, recycling, and disposal of construction and demolition debris. It identifies specific materials and the management strategy (recycling and reuse) for each in accordance with National Grid's Environmental Policy.

Mitigation and Section 61 Findings

The Single EIR listed the Proponent's mitigation commitments and provided draft Section 61 Findings for each State Agency that will issue permits for the project. In order to

ensure that all GHG emissions reduction measures adopted by the Proponent or the developer as the Preferred Alternative are effectuated, the Single EIR includes a commitment to submit a self-certification to the MEPA Office at the completion and commissioning of each building that will be signed by an appropriate professional (e.g. engineer, architect, transportation planner, general contractor) indicating that all of the required GHG mitigation measures, or equivalent measures that are designed to collectively achieve identified reductions in stationary source GHG emission, as well as transportation-related measures have been incorporated into the project.

GHG Emissions

- Minimize tie-in venting natural gas releases through design and planning with strategic placement of valves to minimize the length of pipe required to vent to facilitate a connection.
- Minimize decommissioning natural gas releases by: using a drawdown compressor to bleed down and evacuate natural gas from the 200-psig main after it is sectioned off/isolated from the rest of the system; injecting gas from the existing main into the adjacent 60-psig distribution system; and flaring to further draw down pressure in the main to atmospheric pressure.
- Reduce replacement main valve pressure when possible prior to performing maintenance activities to minimize venting of gas to the atmosphere.
- Minimize extent of fugitive emissions through pipe integrity including: cathodic protection to minimize corrosion; periodic inspections; use of a gas odorant for rapid recognition of a leak; and maintenance of readily available leak equipment.

Wetlands

- Avoid and minimize impacts to wetland resource areas from erosion and sedimentation through the preparation of a SWPPP that will include use of an Environmental Monitor to ensure compliance with all environmental permits; placement of erosion and sedimentation controls; and closing trenches at the end of each work day.

Construction

- Environmental Monitor will manage the environmental inspection program.
- Comply with MassDEP's Diesel Retrofit Program and use of the ULSD in off-road engines.
- Work with municipalities to develop a comprehensive TMP.
- Adherence to air quality mitigation measures such as limiting engine idling times to five minutes except when delivering materials or operating accessories such as power lifts, minimizing stockpiling, and mechanical street sweeping.
- Adherence to noise mitigation measures such as working during typical construction hours, use of appropriate mufflers, and use of shielding/buffering distance.

Conclusion

The Single EIR has provided sufficient information for the purpose of MEPA review and includes commitments to avoid, minimize, and mitigate environmental impacts. Any outstanding issues can be addressed during State, federal, and local permitting and review. Based on a review of the Single EIR, comment letters and consultation with State Agencies, I find that the Single EIR adequately and properly complies with MEPA and its implementing regulations. The project may proceed to permitting. The Proponent and State Agencies should forward copies of the final Section 61 Findings to the MEPA Office for publication in accordance with 301 CMR 11.12.

The Single EIR does not address environmental impacts associated with the potential increase in capacity that would be supported by the project. National Grid will operate the system at 200 psig and has indicated that it does not intend to increase supply. As noted previously, prior to any increase in the project's operating pressure to increase supply of natural gas, National Grid would be required to develop a formal up-rating plan for review by DPU. If National Grid proposes to increase supply, it should consult with the MEPA Office to determine if further MEPA review would be warranted in the form of a Notice of Project Change (NPC).



April 15, 2016

Date

Matthew A. Beaton

Comments received:

- 03/11/2016 Massachusetts Department of Environmental Protection (MassDEP)/
Southeast Regional Office (SERO)
- 04/01/2016 Massachusetts Division of Marine Fisheries (DMF)
- 04/07/2016 Cape Cod Commission (CCC)

MAB/PPP/ppp



Commonwealth of Massachusetts
Executive Office of Energy & Environmental Affairs

Department of Environmental Protection

Southeast Regional Office • 20 Riverside Drive, Lakeville MA 02347 • 508-946-2700

Charles D. Baker
Governor

Matthew A. Beaton
Secretary

Karyn E. Polito
Lieutenant Governor

Martin Suuberg
Commissioner

March 11, 2015

Mathew A. Beaton,
Secretary of Environment and Energy
Executive Office of Environmental Affairs
ATTN: MEPA Office
100 Cambridge Street, Suite 900
Boston, MA 02114

RE: SEIR Review EOEEA # 15445 -
YARMOUTH, DENNIS, HARWICH,
BREWSTER. Mid-Cape Main Replacement
Project, 18.1 miles in Yarmouth Dennis
Harwich Brewster

Dear Secretary Beaton,

The Southeast Regional Office of the Department of Environmental Protection (MassDEP) has reviewed the Supplemental Environmental Impact Report (SEIR) for the proposed Mid-Cape Main Replacement Project, 18.1 miles in Yarmouth Dennis Harwich Brewster (EOEEA # 15445). The project proponent provides the following information for the project:

The company proposes to replace approximately 18.1 miles of its existing 200-psig natural gas distribution system in the Towns of Yarmouth, Dennis, Harwich, and Brewster. Approximately 17.9 miles of the replacement main will be new 12-inch-diameter CS pipe.

At the westernmost end, beginning location of the Project, which is the very beginning of the 200-psig system on this part of the Cape. Approximately 1,000 feet of 20-inch-diameter CS pipe will be used to replace the existing single 12-inch-diameter pipe between the Company's Regulator Station #3920 at the South Yarmouth LNG facility and two parallel mains on White's Path. Use of this short segment of larger-diameter main will allow increased flow into the existing 12-inch "Middle Segment" main in White's Path and the parallel 12-inch replacement main (to be constructed).

The project consists of the following segments: (1) Yarmouth-Dennis Segment (4.9 miles) of 10-inch CS (200 psig) with a combination of 20 and 12-inch mains; (2) Harwich Segment (~8.0-8.1 miles) and (3) Brewster Segment (5.2 miles). The proposed route will have a number of "special crossings" of features such as water bodies, culverts, and state roads. Crossings of water bodies and drainage features (e.g. culverts) will be accomplished on existing bridges or within the existing roadbed. Crossings of state roads will be accomplished using trenchless crossing techniques such as jack-and-bore or horizontal directional drilling ("HDD") to avoid construction impacts on those roads.

Wetlands and Waterways

The Wetlands Program has reviewed the SEIR and finds that the project proponent, on Pages 4-11 & 4-12 of the response to comments (DEP-01), has satisfactorily addressed the Program's concerns

related to the work within Land Subject to Coastal Storm Flowage and the minor exempt activity status of the project.

Bureau of Waste Site Cleanup

Based upon the information provided, the Bureau of Waste Site Cleanup (BWSC) searched its databases for disposal sites and release notifications that have occurred at or might impact the proposed project area. A disposal site is a location where there has been a release to the environment of oil and/or hazardous material that is regulated under M.G.L. c. 21E, and the Massachusetts Contingency Plan [MCP – 310 CMR 40.0000].

The proposed project involves replacement of approximately eighteen miles of gas pipeline. Please be advised that there are many listed BWSC disposal sites located within the proposed project area. Many of the sites have closed under the MCP, but many other disposal sites are open and require continued response actions under the MCP. A listing and discussion of each MCP site will not be presented here.

Interested parties are encouraged to view a map showing the location of BWSC disposal sites using the MassGIS data viewer (Oliver) at: http://maps.massgis.state.ma.us/map_ol/oliver.php Under “Available Data Layers” select “Regulated Areas”, and then “DEP Tier Classified 21E Sites”. The compliance status and report submittals for specific MCP disposal sites may be viewed using the BWSC Waste Sites/Reportable Release Lookup at: <http://public.dep.state.ma.us/SearchableSites2/Search.aspx>

The Project Proponent is advised that if oil and/or hazardous materials are identified during the implementation of this project, notification pursuant to the Massachusetts Contingency Plan (310 CMR 40.0000) may be necessary. A Licensed Site Professional (LSP) should be retained to determine if notification is required, and render appropriate opinions as necessary. The LSP may evaluate whether risk reduction measures are necessary if contamination is present. Please contact BWSC for guidance if questions arise regarding assessment and cleanup under the MCP.

Construction Stormwater Permit

The project construction activities are scheduled to disturb 2.98 acres of land and therefore, may require a NPDES Stormwater Permit for Construction Activities. The proponent can access information regarding the NPDES Stormwater requirements and an application for the Construction General Permit at the EPA website: <http://cfpub.epa.gov/npdes/stormwater/cgp.cfm>

Air Quality

Construction and operation activities shall not cause or contribute to a condition of air pollution due to dust, odor or noise. To determine the appropriate requirements please refer to:

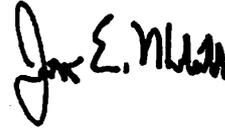
- 310 CMR 7.09 Dust, Odor, Construction, and Demolition
- 310 CMR 7.10 Noise

Proposed s.61 Findings

The “Certificate of the Secretary of Energy and Environmental Affairs on the Environmental Notification Form” may indicate that this project requires further MEPA review and the preparation of an Environmental Impact Report. Pursuant to MEPA Regulations 301 CMR 11.12(5)(d), the Proponent will prepare Proposed Section 61 Findings to be included in the EIR in a separate chapter updating and summarizing proposed mitigation measures. In accordance with 301 CMR

11.07(6)(k), this chapter should also include separate updated draft Section 61 Findings for each State agency that will issue permits for the project. The draft Section 61 Findings should contain clear commitments to implement mitigation measures, estimate the individual costs of each proposed measure, identify the parties responsible for implementation, and contain a schedule for implementation.

Very truly yours,



Jonathan E. Hobill,
Regional Engineer,
Bureau of Water Resources

JH/GZ

Cc: DEP/SERO

ATTN: Millie Garcia-Serrano, Regional Director
David Johnston, Deputy Regional Director, BWR
Maria Pinaud, Deputy Regional Director, BAW
Gerard Martin, Acting Deputy Regional Director, BWSC
Jennifer Viveiros, Deputy Regional Director, ADMIN
Jim Mahala, Chief, Wetlands and Waterways
Dan Gilmore, Wetlands Program
Allen Hemberger, Site Management

Patel, Purvi (EEA)

From: Petitpas, Christian (FWE)
Sent: Friday, April 01, 2016 1:49 PM
To: Patel, Purvi (EEA)
Cc: 'hcarlson@epsilonassociates.com'; 'Erin Burnham'; 'Harwich Conservation Commission'; 'Harwich Conservation Commission'; 'Brewster Conservation Commission'; 'Grant, Kelly'; Ford, Kathryn (FWE); Lehan, Richard (FWE)
Subject: EEA# 15445 SEIR, Colonial Gas Company

Secretary Matthew A. Beaton
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office
Purvi Patel, EEA No. 15445
100 Cambridge Street, Suite 900
Boston, MA 02114

Dear Secretary Beaton:

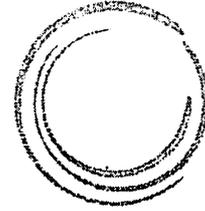
The Division of Marine Fisheries (*MarineFisheries*) has reviewed the Single Environmental Impact Report (SEIR) by Colonial Gas Company for the proposed multi-stage Mid-Cape Main Replacement Project involving the replacement of 18.1 miles of existing 200-psig natural gas distribution main system in the Towns of Yarmouth, Dennis, Harwich, and Brewster. The project SEIR was reviewed with respect to potential impacts to marine fisheries resources and habitat.

Based on the scope of work as currently proposed, *MarineFisheries* has no recommendations for sequencing, timing, or methods that would avoid or minimize impact at this time.

Questions regarding this review may be directed to John Logan in our New Bedford office at 508-990-2860 ext. 141.

Sent on behalf of John Logan

3225 MAIN STREET • P.O. BOX 226
BARNSTABLE, MASSACHUSETTS 02630



CAPE COD
COMMISSION

(508) 362-3828 • Fax (508) 362-3136 • www.capecodcommission.org

By Electronic Mail

April 8, 2016

Matthew A. Beaton, Secretary
Executive Office of Energy and Environmental Affairs (EEA)
Attn: MEPA Office, Purvi Patel, Analyst
100 Cambridge Street, Suite 900
Boston, MA 02114

Re: *Single Environmental Impact Report (SEIR)- EEA No. 15445*
NGRID- Mid Cape Main Replacement Project
Towns of Harwich, Brewster, Dennis, Yarmouth
(CCC Project No. 15022)

Dear Secretary Beaton:

The Cape Cod Commission re-iterates its support for the Project articulated in its letter on the EENF, and supports the issuance of a Certificate on the SEIR that the SEIR is adequate and the Project properly complies with MEPA, subject to Section 61 findings on the Project to be included in the Certificate.

The Commission suggests that the SEIR adequately responds to and addresses general issues raised in the Commission's EENF comment letter.

In addition to other commitments by the applicant articulated in the SEIR and the EENF, when the Project moves forward to direct regulatory review by the Commission, the applicant should have prepared a construction equipment re-fueling protocol. This protocol should, among other things, recognize special water resource areas in which the Project is to occur (such as Zone 1's; Wellhead Protection Areas/ Zone 2's; proximate waterbodies, wetlands and buffer zones thereto; Potential Public Water Supply Areas identified in Barnstable County's Regional Policy Plan; and properties likely served by private wells as identified in the SEIR); corresponding safeguards to prevent releases, including within and to these special water resource areas; inclusion of a map identifying properties likely served by private wells; and emergency spill response provisions in the event that there is a release, including within and to these special water resource areas.

The applicant should also further detail in its application to the Commission erosion and sedimentation control and other environmental protection measures associated with construction, including for properties likely served by private wells as identified in the SEIR.

Thank you for the opportunity to provide comments on the above-referenced SEIR. Cape Cod Commission staff is available and happy to answer any questions about these comments.

Sincerely,



Kristy Senatori
Deputy Director

Cc: Project File
Applicant's agent Epsilon Associates Inc. via email
Yarmouth, Dennis, Harwich and Brewster CCC Representatives via email
Yarmouth, Dennis, Harwich and Brewster Town Administrators/ Managers via USPS