

Dunkirk Gas Corporation

Dunkirk Natural Gas Pipeline Project

Exhibit 3

Alternatives

EXHIBIT 3: ALTERNATIVES

This section has been prepared in accordance with 16 NYCRR §86.4.

3.1 PURPOSE AND NEED

The Dunkirk Natural Gas Pipeline Project (the “Project”) represents a critical improvement to the regional and local electricity infrastructure. The proposed pipeline will transport natural gas to the Dunkirk Generating Station and is therefore an essential element of the Dunkirk Generating Station natural gas addition plan which will help maintain safe and reliable power generation in the Region. The June 13, 2014 New York State Public Service Commission (“NYSPSC”) Order regarding the contract between National Grid and Dunkirk Power LLC relative to the Dunkirk Generating Station (NYSPSC Case Docket No. 12-E-0577) determined that the addition of natural gas fuel at the Dunkirk Generating Station will help meet reliability needs, reduce emissions, relieve Western New York congestion, reduce costs for consumers, retain local jobs, create temporary construction jobs, stabilize the local property tax base, and improve the local economy.

3.2 PROPOSED ROUTE

Dunkirk Gas Corporation undertook an extensive siting process to determine the optimum pipeline route. Initial potential routes were evaluated via a desktop analysis, aerial photographs, County and municipal planning documents, windshield surveys and onsite walkovers. Factors considered in siting the route were proximity to residences, potential impacts to vineyards and wetland areas; number and extent of road and waterway crossings, proximity to existing utilities and utility rights-of-way, compatibility with existing land uses and constructability. Additionally, the proposed route was refined as a result of numerous and ongoing discussions with regulatory agency representatives from the NYSPSC, New York State Department of Agriculture and Markets (“NYSDA&M”) and U.S. Army Corps of Engineers (“USACE”).

The proposed route for the natural gas pipeline is described in detail in Exhibit 2 and illustrated on Figure 2-1 (Sheets 1 through 2) and Figure 2-3 (Sheets 1 through 12). This route was selected because it satisfied the purpose and need; minimized impacts to vineyards, residences and businesses; more than half of the route (approximately 7.4 of the 11.3 mile route) was able to be located adjacent to and parallel to existing railroad corridors and existing National Grid electric transmission line easements and/or rights-of-way; and, did not present unacceptable engineering

or cost limitations. Further, for the proposed route's crossings of the vineyard it would be located adjacent to and parallel to an existing electric transmission line corridor, minimizing impacts to the extent practicable.

The Applicant has worked extensively with representatives of the New York State Department of Public Service ("NYSDPS") Staff, NYSDA&M and USACE in developing this route to minimize impacts on sensitive environmental resources to the extent practical.

Alternatives to the proposed route that were considered during Project development but eliminated from further consideration are discussed below.

3.3 ALTERNATE ROUTES

In addition to the proposed route the Applicant considered two alternative routes that met the Project objectives of providing the required supply of natural gas to support the addition of natural gas fuel to the Dunkirk Generating Station. The following criteria were applied in identifying and screening the route alternatives:

1. To meet the purpose and need, the pipeline must terminate at the Dunkirk Generating Station.
2. The existing Tennessee Gas Transmission Mainline Pipeline is the closest transmission natural gas source to the Dunkirk Generating Station. Because the existing Tennessee Gas Transmission Mainline Pipeline is located south of the Dunkirk Generating Station and runs in a southwest to northeast direction, the only viable alternative pipeline route is running from the Tennessee Gas Transmission Mainline in a northerly direction to the Dunkirk Generating Station.
3. The route should maximize the use of existing utility corridors (i.e., railroads and overhead electric transmission lines) to minimize the impact to landowners and potential environmental impacts.
4. The route must avoid residential structures and sensitive environmental features to the maximum extent practicable.
5. The selected route needed to avoid and/or minimize impacts to the maximum extent practicable, operating vineyards.

The two alternative pipeline routes to the proposed route that were considered, are described below, and are illustrated in Figure 3-1. Table 3-1 presents a comparison of the proposed route and alternatives features.

Route	Length (mi)	Adjacent to Existing Linear Corridor (mi)	Buildings Within 200 ft ¹	Vineyards Distance (mi)	Wetlands ² Distance (ft)	Stream ² Crossings (#)
Proposed	11.3	7.4	23	1	654	5
Alternative A	9.5	1.5	29	2.6	237	10
Alternative B	12.2	4.1	13	2.2	1,817	9
Notes:	¹ Includes residences, occupied structures other than residences, and other building structures (e.g., out buildings, barns, detached garages etc.) ² Based on NWI and DEC wetland mapping.					

3.3.1 Alternative Route A

Alternative A is located approximately two miles east of the proposed route. Alternative A is approximately 9.5 miles in length and was considered as the shortest practical route between the Tennessee Gas Transmission Mainline Pipeline and the Dunkirk Generating Station. However, Alternative A was removed from consideration during the route selection process based on the following factors:

- Alternative A would impact more areas of vineyards and agricultural lands than the proposed route.
- There were few opportunities to locate this alternative easement within or adjacent to existing linear corridors.
- Alternative A was closer to population centers, with greater potential conflicts with existing buildings and associated infrastructure.

3.3.2 Alternative Route B

Alternative B is approximately 12.2 miles in length and tracks west of the proposed route for most of its length. Alternative B overlaps or is generally adjacent to segments of the proposed route for approximately 2.53 miles of its total length. During the route selection process the Applicant’s assessment of this route identified significant impacts to vineyards and current

population centers, substantially greater than the proposed route. In view of this assessment and consideration of the following factors, Alternative B was eliminated:

- Alternative B is longer in length than the proposed route.
- Alternative B would cross more vineyard than the proposed route.
- There were few opportunities to locate this alternative easement within or adjacent to existing linear corridors.
- Alternative B would cross more than twice the length of wetlands compared to the Proposed Route.
- Alternative B would cross slightly less dense populated areas than the proposed route. However, this marginal positive aspect would not offset the large additional overall acreage impacts compared to the proposed route.

3.4 Energy Alternatives

As determined by the NYSPSC in the issued June 13, 2014 Order in Case No. 12-E-0577, the Dunkirk Generating Station is the best option to ensure continued reliability of the regional electric grid. The addition of natural gas will enable continued operation of the Station for ten years while reducing the Stations' environmental impacts of generating up to 435 megawatts ("MW") of electricity using natural gas rather than the coal fuel, currently utilized at the Dunkirk Generating Station.

No alternatives to the natural gas pipeline proposed in this Article VII application were identified that could provide gas at comparable costs to the Dunkirk Generating Station.

No other reliable source of natural gas that could satisfy the Project's purpose and need was identified within a reasonable distance of the Dunkirk Generating Station.

Figure 3-1. Alternative Routes Location Map