

**UNITED STATES DEPARTMENT OF COMMERCE
NATIONAL OCEANIC AND ATMOSPHERIC ADMINISTRATION**

Federal Consistency Appeal by
Millennium Pipeline Company
From an Objection by the New
York Department of State

Amicus Brief of
The City of New York

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PRELIMINARY STATEMENT

The City of New York ("City") submits this amicus brief in support of the New York Department of State's determination that the Millennium Pipeline ("Pipeline"), as currently proposed, is inconsistent with the New York State Coastal Management Program. The City fully supports the New York Department of State's initial brief in this proceeding and will restrict its amicus brief to addressing the effects of the Millennium Pipeline on the City water supply system. In sum, the Pipeline poses an unacceptable risk to the City's Catskill Aqueduct and could have a catastrophic effect on the City's water supply. The City believes that reasonable alternatives to the crossing of the Aqueduct proposed by Millennium exist and pose far less risk to the Aqueduct.

STATEMENT OF FACTS

The Millennium Pipeline Company, L.P. ("Millennium") has proposed to build a major natural gas pipeline across the City's Catskill Aqueduct ("Aqueduct") in Yonkers, New York. This Aqueduct is one of City's three water supply delivery systems that provide high quality water to half the population of New York State, including the eight million people who live in New York City, approximately one million people in Westchester, Putnam, and Rockland Counties and the millions of workers and visitors who come to the City each day. With a capacity of 800 million gallons a day, the Aqueduct supplies 612 million gallons of water to the New York metropolitan area on a typical day, or approximately 40% of the City's water supply. Depending upon the availability of the City's other water supply systems, at times the Catskill can supply more than 50% of the City's water needs.

For most of its length, the Catskill Aqueduct is a horse-shoe shaped, concrete structure, built at the land surface, through which water flows from the foot of the Catskill Mountains to the City by gravity. Along this route, in Yonkers, New York, the land surface dips

suddenly. To bring Catskill water across this sudden change in grade, the Aqueduct becomes a siphon, consisting of three major steel pipes, each 10 feet, 11 inches in diameter, that are filled with water under pressure. This portion of the Aqueduct, known as the Bryn Mawr Siphon ("Siphon"), is approximately 2,000 feet long. For its entire length, the Siphon lies only three to five feet below the ground surface. Immediately south of the Siphon, the Aqueduct crosses under the New York State Thruway, where it plunges several hundred feet into the earth and continues as a tunnel most of the way to the City. Adjacent to the Siphon is the Consolidated Edison of New York, Inc. power line, which supplies the City with 40% of its electrical power. Millennium Pipeline Company, L.P., Interim Order, 97 F.E.R.C. ¶61,292 at 62,338 (December 19, 2001)

In 1998 Millennium proposed to build a major natural gas pipeline that would convey 700 million cubic feet of gas from Canada to the City. The Pipeline, as Millennium proposed, would cross the Catskill Aqueduct at the Bryn Mawr Siphon within two feet of the Aqueduct. Letter dated Nov. 6, 2001 from Michael A. Principe, Deputy Commissioner, New York City Department of Environmental Protection to the Federal Energy Regulatory Commission.

The Pipeline would also impact a second City water supply system, the Croton system, the City's oldest upstate water supply system. The Croton system, which captures water from three counties east of the Hudson River, provides an average of 10% of the City's water. Controlling the loading of pollutants into the City's reservoirs and the watercourses that feed the reservoirs is crucial to the City's continued ability to deliver high quality water. The City is spending more than \$200 million in projects to protect the Croton watershed. Watershed protection is increasingly difficult in the Croton watershed, however, because this watershed,

unlike the City watershed located west of the Hudson River, has been substantially developed. Millennium's proposal to built its pipeline across a 2.5-mile swath of the Croton watershed will require removal of trees and other vegetation across 20 to 25 acres of watershed lands. *Id.*, 97 F.E.R.C. at 62,333 (December 19, 2001). In addition to causing the one-time runoff of construction-related pollutants, this substantial loss of vegetation will permanently reduce the watershed's ability to absorb pollutants and prevent contaminants from reaching water bodies.

Despite repeated requests by the New York City Department of Environmental Protection ("DEP"), which operates and manages the City's water supply system, to the Federal Energy Regulatory Commission ("FERC") and Millennium that an alternate crossing be found, Millennium has not explored alternatives. It persists in its original proposal to cross at Bryn Mawr within two feet of the Aqueduct, even though Millennium has never shown, through an engineering study of the effects of a pipeline accident, that its proposed crossing would not pose a substantial risk to this vital City water supply. Recently, FERC granted Millennium authority to construct its pipeline, including conditional authority to cross the Bryn Mawr Siphon as Millennium proposed. *Millennium Pipeline Company, L.P.*, Order, 100 F.E.R.C. ¶61,277 (September 19, 2002).

DEP has contracted with the United States Army Corps of Engineers ("Corps") to analyze Millennium's proposed crossing. In a preliminary review, the Corps determined that building the pipeline within two feet of the Aqueduct poses an inherent security risk to the Catskill Aqueduct that cannot be completely eliminated through design modifications. The Corps is continuing to analyze the impact of a crossing at Bryn Mawr, under its contract with DEP, and will document the impact of a gas pipeline rupture or explosion on the Bryn Mawr

Siphon. It will also evaluate the Catskill Aqueduct for the most suitable crossing location near the Bryn Mawr Siphon. The City anticipates receiving the Corps' study in 2002.

ARGUMENT

POINT I

**THE NEW YORK DEPARTMENT OF STATE
PROPERLY CONSIDERED MILLENNIUM'S
PROPOSAL TO CROSS THE CATSKILL
AQUEDUCT AT THE BRYN MAWR SIPHON.**

In May 2002, the New York Department of State ("DOS") determined that Millennium's proposed pipeline was inconsistent with New York's Coastal Management Program ("CMP"). A pipeline construction accident or failure, or terrorist act aimed at the Aqueduct, the Millennium Pipeline or the adjacent Con Edison power line, could rupture the Catskill Aqueduct, depleting the water resources of New York City by as much as 40%. DOS found that Millennium's proposal to cross the Catskill Aqueduct at Bryn Mawr violated Policies 18 and 38¹ of New York's CMP. The City urges that the Secretary uphold DOS' determination.

Contrary to Millennium's assertion in its initial brief, Millennium's proposed crossing of the Aqueduct at Bryn Mawr was properly reviewed by DOS in its determination of the project's consistency with New York's CMP. Although the Bryn Mawr Siphon is located beyond New York's coastal zone, an accident there could affect water supplies in the City, which is in the coastal zone, and thus the Aqueduct's vulnerability is germane to a consideration of the Pipeline's consistency with New York's CMP. Statutory language makes clear that a project's impact outside the coastal zone that affects resources within the coastal zone is a relevant consideration in assessing a project's consistency with the Coastal Zone Management Act. 16

U.S.C. § 1451 *et seq.* Specifically, the CZMA authorizes a state to review an action “in or outside the coastal zone” affecting resources of the coastal zone for consistency with its federally approved coastal management plan. 16 U.S.C. § 1456(c)(3). The Siphon is an integral part of the 92-mile long Aqueduct that runs from the Catskills all the way to the City. A rupture at Bryn Mawr would close the entire lower section of the Aqueduct and would deprive the City and Westchester County communities of water. The City is in the coastal zone. The impacts here cannot be separated from an evaluation of the Pipeline as Millennium proposes. DOS was correct to include Millennium’s impact on the Catskill Aqueduct at Bryn Mawr as a basis for its determination that the Pipeline is inconsistent with New York’s CMP.

POINT II

THE MILLENNIUM PIPELINE WILL CAUSE ADVERSE EFFECTS TO COASTAL RESOURCES.

In order to overcome a state’s determination that a project is inconsistent with the enforceable policies of its coastal management plan, the sponsor must show, and the U.S. Secretary of Commerce must find that the project is consistent with the objectives and purposes of the Coastal Zone Management Act (“Act”). A project sponsor must make three showings to demonstrate consistency with the Act. First, a sponsor must demonstrate that the project furthers the national interest, as defined in sections 302 and 303 of the Act, in a significant or substantial way. 15 C.F.R. § 930.121(a). Second, the sponsor must show that a project’s national interest outweighs its adverse coastal effects. 15 C.F.R. § 930.121(b). And third, the sponsor must show

¹ These policies direct state and federal authorities to protect the water resources of New York’s coastal zone particularly where, as here, the waters serve as sole source drinking water supplies.

that there is no reasonable alternative available which would render the project consistent with a state's CMP. 15 C.F.R. § 930.121(c)

The Department of State, in its initial brief, persuasively demonstrates that Millennium cannot show that the Pipeline is consistent with Act. In its amicus brief, the City will limit its comments to the second and third requirements: the Pipeline's adverse coastal effects and the existence of a reasonable alternative route to crossing the Catskill Aqueduct at the Bryn Mawr Siphon.

A. The Millennium Pipeline Will Have Severe Adverse Coastal Effects.

Building a major gas pipeline, as Millennium proposes, within two feet of the Catskill Aqueduct poses a severe risk to a vital City water supply system, thereby threatening severe effects on coastal resources. A two-foot separation between the Siphon and the Pipeline, poses too great a risk that a pipeline construction accident, a pipeline failure or a terrorist act could damage the Aqueduct, possibly causing the siphon pipes to rupture. The siphon pipes are made of steel ½ inch in thickness. Constructed in 191 the pipes consist of two halves, top and bottom, which are jointed together with one inch rivets. Due to the age of the Catskill system, the present structural integrity of the pipes and rivet connections is unknown.

Even if it did not directly rupture the Siphon pipes, a blast could displace soil around the siphon pipes and fracture the rivets holding the pipes together. Soil displacement from construction or a blast could create a crater around the pipes, leaving the siphon suspended and unsupported. Since the siphon was not designed to be self supporting, the pipe sections could pull apart, resulting in complete failure. Such an event would trigger a violent release of an enormous volume of water. Because the Bryn Mawr Siphon is located at a low point in the Aqueduct between the upstream and downstream reservoirs, a breach at Bryn Mawr would be fed by forward flow from the upstream reservoir and backflow from the downstream reservoir.

The pressure of the cascading water would be sufficient to blast cars off the nearby Sprain Brook Parkway. Depending upon how fast DEP crews could shut sluice gates at the upstream and downstream reservoirs and stop the flow of water, as much as 120 million gallons of water could burst through the gash at Bryn Mawr in the first three hours after the breach.

Further, a rupture at Bryn Mawr would affect other critical, non-water infrastructure. The City could face a loss of electrical power because a flood at Yonkers could weaken the footings of Consolidated Edison of New York, Inc. electrical towers, which support a major power line, that parallels the Siphon. This power line, which is adjacent to the Bryn Mawr Siphon, supplies 40% of the City's electricity. A loss of water at Bryn Mawr would also flood the nearby Sprain Brook Parkway and possibly the New York State Thruway

If the lower Aqueduct were cut off from the Catskill source waters, the City would be without 40 percent of its water supply. Thirteen municipal water systems in Westchester County,² which draw water from this section of the Catskill Aqueduct, would face even greater water losses. Such an unprecedented loss of water would create a public health emergency in the City and Westchester County, panic the public and depress the region's economy. This unprecedented water crisis in the nation's largest city would last for months until contractors could repair the ruptured siphon.

In a preliminary assessment, the Army Corps of Engineers has determined that building the Millennium Pipeline within two feet of the Aqueduct poses an inherent security risk

² Communities with connections to this section of the Catskill Aqueduct are: New Rochelle, Scarsdale, Elmsford, Yonkers, Mt. Vernon, Greenburgh/Hartsdale, Westchester County Water District 3, Valhalla/Mt. Pleasant, Hawthorne, Cedar Knoll School, Tarrytown and N. Tarrytown.

to the Aqueduct that could not be entirely eliminated through design modifications. The threat to the City's water supply would constitute a severe adverse effect on coastal resources.

1. The Army Corps of Engineers Is Currently Analyzing the Bryn Mawr Siphon.

Because Millennium has failed to analyze the impact of its pipeline on the Catskill Aqueduct, the City has contracted with the U.S. Army Corps of Engineers to analyze the proposed Bryn Mawr crossing. The Corps study will determine the impact of a gas pipeline rupture or explosion on the City's water supply system. It will also evaluate the Catskill Aqueduct to identify suitable crossing locations in the vicinity of the Bryn Mawr Siphon and possibly alternative crossing locations that may exist at a greater distance from the Siphon.

City anticipates receiving the Corps' study in 2002.

B. Reasonable Alternatives Exist to Building the Millennium Pipeline Within Two Feet Of The Catskill Aqueduct.

A project sponsor can overcome a state's determination that a project is inconsistent with a coastal management plan by demonstrating that no reasonable alternative that would make a project consistent with a CMP exists. 15 C.F.R. § 930.121(c). Here, an alternate route that either crosses the Aqueduct at locations other than the Bryn Mawr Siphon, or crosses at the Siphon, but at a distance far greater than two feet, are available to Millennium.

Millennium cannot show the Pipeline is consistent with the Act's objectives by contending that there are no reasonable route alternatives to the Bryn Mawr crossing.

Millennium has not looked seriously for alternatives to its proposed Bryn Mawr crossing. DEP has made repeated requests, both to FERC and Millennium, that Millennium be required to identify another route across this major City water supply aqueduct, but Millennium

has not undertaken a careful study of the crossing issue.³ If it had, Millennium would find that a feasible crossing exists immediately south of the Bryn Mawr Siphon along the New York State Thruway right-of-way. See DOS Initial Brief at 103-04, Map Ex. 2. The City concurs with DOS that the Thruway route is a more reasonable route because the separation between the Pipeline and Aqueduct would be approximately 100 feet.

Millennium has not adequately explored whether it can construct its pipeline near the Bryn Mawr Siphon but at a far greater separation distance from the Aqueduct than two feet. DEP anticipates the Corps, in its review of Millennium's proposal, will assess the feasibility of such a pipeline route.

Millennium has not, and cannot, show that there is no reasonable alternative to crossing the Catskill Aqueduct at the Bryn Mawr Siphon. To the contrary, reasonable crossing alternatives exist that would allow Millennium to build its pipeline across the Aqueduct, without jeopardizing the nation's largest municipal water supply. Because Millennium has failed to consider a reasonable alternative to crossing at the Bryn Mawr Siphon, the Secretary cannot find the pipeline is consistent with the objectives and purposes of the Act. 15 C.F.R. §930.121(c). For this reason, the Secretary should uphold DOS's determination that the Pipeline as proposed to cross at the Bryn Mawr Siphon cannot be approved under the Act.

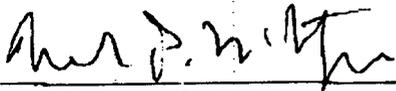
³ Millennium has never given a reason for its failure to consider alternatives. A careful consideration of alternatives is eminently reasonable, given the importance of risk to the Aqueduct, concerns about security in a post September 11 environment, and the fact that at least one potential alternative has already been identified (and others may be identified by the Corps.) Further, a careful consideration of alternatives would be fully consistent with the goals of the Act, that is to ensure a project's adverse coastal impacts are minimized to the maximum extent practicable.

CONCLUSION

For the foregoing reasons, the City respectfully requests that the Secretary uphold DOS' determination that the Millennium Pipeline, as proposed, is inconsistent with New York's Coastal Management Plan.

Dated: New York, New York
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