

PETITION NO. 548 - Yankee Gas Services Company petition for a declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, operation, and maintenance of a distribution line in Southington, Berlin, and Meriden, Connecticut.	} } } }	Connecticut Siting Council July 11, 2002
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FINDINGS OF FACT

Introduction

1. On March 11, 2002, Yankee Gas Services Company (Yankee) submitted a petition to the Connecticut Siting Council (Council) that no Certificate of Environmental Compatibility and Public Need (Certificate) would be required from the Council for the installation of a proposed natural gas pipeline through the towns of Southington, Berlin and Meriden, Connecticut, because the proposed pipeline would not be a transmission line and therefore would not be under Council jurisdiction. (Yankee 1, p. 1)
2. At a Council meeting held on April 25, 2002, the Council denied the petition of Yankee to classify the proposed pipeline as a distribution line, and decided to hold a public hearing on the project as a natural gas transmission line. (Council Meeting Minutes of April 25, 2002)
3. On May 13, 2002, Yankee sent notices of the scheduled May 20, 2002 hearing via certified mail, return receipt requested, to 38 owners of property along the proposed pipeline route. As of May 20, 2002, Yankee had received return receipts for 33 of the 38 notices. Two of the five notices for which return receipts were not received were for a single parcel; one of the other property owners from whom a receipt was not received is the owner of a parcel who has previously signed a letter of intent to convey an easement to Yankee if the proposed line is approved; one receipt was not received from a property owner whose property is not affected by the proposed route but was included on the mailing list following discussions with Yankee; and one receipt was not received from a property owner on Heritage Drive. (Tr. 1, p.10, pp.16-17; . Tr. 2, pp.49-61)
4. The purpose of the proposed gas line is to deliver natural gas to the Meriden Gas Turbines LLC (MGT) plant now under construction in Meriden. Yankee has entered into an agreement with MGT to deliver gas to the facility via a line connecting the existing Tennessee Gas transmission line and the Algonquin Gas transmission line pipelines. MGT would use approximately two-thirds of the line's capacity. Natural gas would be delivered to the MGT plant at approximately 500-600 psig. Yankee would also use the remaining one-third of its capacity to serve the Yankee distribution system in the City of Meriden. (Yankee 1, p. 3, Ex. 1, p.1; Tr. 1, p. 31, p. 59)
5. On April 19, 2002, Yankee amended its petition to the Council by adding an independent ground for a determination that the project would not have a substantial adverse environmental effect, and therefore would not require a Certificate from the Council pursuant to C.G.S. §§ 16-50k. (Yankee 2, p. 1)
6. On May 20, 2002, the Council, after giving due notice thereof, held a public hearing on this petition at the Berlin Community Center, 230 Kensington Road, Berlin, Connecticut, beginning at 3:00 p.m. and continued at 7:00 p.m. (Tr. 5/20/02, 3:00 p.m. (Tr. 1), p. 3; Tr. 5/20/02, 7:00 p.m., (Tr. 2) p. 3)

7. The party in this proceeding is the applicant. MGT is an intervenor. (Tr. 1, p. 5)
8. The Council and its staff made an inspection of the proposed pipeline route on May 20, 2002. (Yankee 4)

Proposed Pipeline Route

9. The proposed 16-inch diameter pipeline would tie into the existing 16-inch diameter Tennessee Gas pipeline (TGP) off of Pin Oak Drive in Southington, cross under the nearby existing six-inch diameter Algonquin pipeline, lead to a proposed TGP gate station, and proceed easterly north of Hamilton Avenue within an existing easement of the Connecticut Light and Power Company (CL&P) for approximately 3.1 miles of the 4.3-mile route. The route would proceed eastward along the northern limit of the CL&P corridor, cross East Street and the Southington YMCA property, and continue to approximately 200-300 feet west of the Metacomet Ridge, where horizontal directional drilling is proposed. (Yankee 2, Tab A, p. 2; Yankee 2 Route Map; Tr. 1, pp. 12-13; Tr. 2, p. 8)
10. The route would cross to the south side of the CL&P corridor after the horizontal drilling area, and external east across Edgewood Road in Berlin leading to a proposed Algonquin Gas gate station for metering and regulating north of Heritage Drive. A minor deviation is proposed along Heritage Drive to avoid CL&P guy wires. The route would then cross the Chamberlain Highway (Route 71) to Summitwood Drive. The line would leave the CL&P corridor approximately 800 feet beyond this area, and follow a southerly route along the MGT joint utility corridor for approximately 1.2 miles to the MGT power plant in Meriden. The pipeline would terminate near the fence of the MGT plant with a valve that would provide a future tie-in to Yankee's existing gas distribution system in Meriden. (Yankee 1, Ex.1, p.2; Yankee 2, Tab A, p. 2; Yankee 2 Route Map; Tr. 2, p. 9)

Pipeline Construction Procedures

11. All pipe joints would be coated externally with fusion bonded epoxy. Corrosion control would be achieved by a cathodic protection system. An electromagnetic mitigation system would be installed to limit high-voltage currents from entering the pipeline through induced currents or line-to-ground fault currents from CL&P electric transmission lines. (Yankee 2, Tab A, p. 2)
12. The proposed pipeline would be constructed in compliance with applicable federal and State regulations and guidelines, including 49 CFR Part 192 Transportation of Natural Gas and other Gas by Pipeline: Minimum Federal Safety Standards; and 18 CFR Part 269 - Guidelines to be Followed by Natural Gas Pipeline Companies on the Planning, Clearing, and Maintenance of Rights-of-Way. The Department of Public Utility Control would regulate safety and construction techniques of the proposed pipeline. (Yankee 1, Ex. 2, p.1; Yankee 2, Tab A, p. 6)
13. Using a two-lane workspace approximately 55 feet in width in upland areas outside the ROW, Yankee would string the pipe lengths, weld the pipe, pick up the pipe with side booms, and then lower it into the trench. A backhoe would be used for excavation.. There would be no restrictions on revegetating the construction ROW. (Tr. 1, p.. 55, p. 56; Tr. 2, pp. 31-32; Yankee 2, p.4)
14. Along the property of the Southington YMCA, approximately 25 feet of vegetative growth inside the existing ROW would be removed which, in addition to the 35 feet cleared for construction outside of the ROW, would total 60 feet. (Tr. 2, pp. 31-33)

15. In residential areas, Yankee would minimize construction impacts, by use of specialized techniques, such as stovepipe and drag section construction; minimizing open trenches for a distance of 100 feet on either side of a nearby residence; use of safety fencing; notifying homeowners and accommodating special concerns about ornamental shrubs, trees or structures to the extent practical in temporary workspace areas. (Yankee 2, Tab A, pp. 6-7)
16. Yankee identified one structure in Southington and five structures in Berlin which would be within 100 feet of the proposed pipeline. (Yankee 2, Tab A, p. 36, Table B-4)
17. Topsoil in landscaped areas would either be segregated or topsoil would be imported. After backfilling, residential areas would be restored and construction debris removed. Lawns would be raked, topsoil added as necessary and restored per landowner agreements. Whenever possible, ornamental shrubs would be replaced and fences, mailboxes and other structures removed would be restored as soon as practical. Sidewalks, driveways, and roads would be restored as soon as is practical. After completion, a Yankee representative would contact landowners to ensure all conditions of all agreements have been met. (Yankee 2, Tab A, p. 35)
18. Six roadways would be crossed by the proposed route. Before construction Yankee would contact the "Call Before You Dig" system and local departments of Public Works to identify utilities along the route. At least one lane of traffic would be kept open in constructing across residential streets. Traffic lanes and home access would be maintained except for periods essential for laying pipeline. (Yankee 2, Tab A, p. 7)
19. Boring may be required in crossing some roadways, such as the Chamberlain Highway. In boring, a hole is drilled below the road with a bore pit on one side of the road and a receiving pit on the other side. A boring machine would cut a shaft under the road. The pipeline would then be pushed through a casing, and the casing removed. (Yankee 2, Tab A, p. 7)
20. Areas of rock encountered during trenching would be removed by one of the following methods, depending on rock hardness, fracture susceptibility and anticipated volume of material: excavation by a backhoe; ripping with a dozer followed by use of a backhoe; hammering with a pointed backhoe attachment followed by a backhoe; blasting followed by backhoe, or blasting of surface rock prior to excavation. (Yankee 2, Tab A, p. 8)
21. Blasting may be necessary in areas of shallow bedrock and would be performed according to strict guidelines, with safeguards taken to protect people and property in the area. Charges would be kept to a minimum and mats of heavy steel mesh used to prevent scattering of rock and debris, posting warning signals, flags and barricades, and providing staff at adjacent pipeline valves for emergency response. Yankee would monitor and assess blasting within 150 feet of public or private water supply wells. (Yankee 2, Tab A, p. 8, pp.16-17)
22. Using conventional blasting, the closest residence would be approximately 300 feet from the blasting area. Most of the blasting would take place in the MGT joint utility corridor in Berlin and Meriden. Other blasting methods would be employed in close proximity to electric supports on the nearby CL&P transmission line, or for homes closer than 300 feet. These methods include the use of a chemical expanding agent to fracture the rock, or the use of a cryogenic agent such as liquid nitrogen. (Tr. 1, p. 33, p. 34, p. 39)

23. Conventional blasting methods would include the use of timed or staged blasts, and the use of triple matting over the blast area to prevent debris from hitting the electric transmission lines. Seismographs would be set at each electric support and at any residences in the area. Yankee would obtain blasting permits from the local fire departments. (Tr. 1, p. 35, pp. 38-39)
24. Yankee has a claims and insurance department which would investigate disputes and claims of property owners during construction. (Tr. 1, pp. 36-38)
25. The proposed line would cross 21 wetlands during construction and an additional four wetlands would be temporarily impacted for use as workspace. A total of 1925 linear feet of wetlands would be crossed, with approximately 3.57 acres of temporary impacts to wetlands and the permanent conversion of approximately 0.76 acres of palustrine-forested wetlands to palustrine scrub-shrub wetlands. (Yankee 2, Tab A, p. 25, p. 27, Table B-2)
26. The proposed corridor through the wetlands would be reduced from 75 feet within uplands to a 65-foot temporary workspace construction ROW, consisting of 20 feet of existing permanent ROW and 45 feet of temporary workspace. The post-construction ROW would consist of maintenance of the existing 20-foot permanent easement of which 10 feet would be permanently maintained within regulated wetlands. Within the MGT joint utility corridor the permanent easement would be 30 feet in width. (Yankee 1, Ex. 1, p.1; Yankee 2, Tab A, p. 27)
27. Yankee would minimize potential adverse wetlands impacts by expediting construction in and around wetlands, limiting the type and use of equipment within wetlands and by restoring wetlands to their original configurations and contours, permanently stabilizing upland areas new wetlands as soon as possible after backfilling and inspecting the ROW during and after construction and repairing erosion control measures. (Yankee 2, Tab A, pp. 27-28)
28. Unless the soils are saturated, the top 12 inches of wetland soil over the trenchline would be segregated, with trench spoil temporarily piled in a ridge along the pipeline trench. After the pipeline is lowered into the trench, wide track bulldozers or backhoes on swamp mats would be used for backfill, final clean up and grading. (Yankee 2, Tab A, p. 8)
29. Construction materials or fuels would not be stored within wetlands or within 100 feet of any stream or wetland system, except under limited, highly controlled circumstances. Construction equipment would not be washed in any wetland or watercourse. No refueling or construction equipment would take place within wetlands or within 100 feet of any stream or wetland system except under limited highly controlled circumstances. (Yankee 2, Tab A, p. 9)
30. The proposed route would cross a total of eight streams, of which five are unnamed intermittent streams, and one unnamed drainage ditch. The other stream crossings are John Hall Brook (approximately 15 feet in width at crossing) and Stocking Brook (approximately 25 feet in width at crossing). Both streams are in Berlin. (Yankee 2, Tab A, pp. 21-22, Table B-1)
31. Yankee would minimize potential adverse impacts to streams by expediting construction and limiting the amount of equipment and activities in water bodies, leaving as many trees as possible on stream banks, constructing waterbody crossings as perpendicular to the axis of waterbody channels as possible, removing all construction material and structures from the waterbody after construction,

restoring stream channels and bottoms to their original configuration and contours, permanently stabilizing stream banks after construction, and inspecting the ROW during and after construction and repairing erosion controls in a timely manner. (Yankee 2, Tab A, pp. 22-23)

32. Forested areas in the permanent ROW would be cleared and standard erosion control species planted after the completion of construction. Bulldozers would not be used for clearing. Trees and brush would be cut at ground level by hydroaxes, tree shears, grinders or chain saws. Stumps would be left in place, except on the trenchline or to ensure worker safety. Grading would be limited to areas directly over the trenchline, except where topography requires additional grading for safety reasons. In areas where grading takes place, topsoil would be segregated. After segregation, the remainder of the ditch would be excavated so that the pipe would have a minimum of 36 inches of cover unless otherwise specified. The trench would then be backfilled with subsoil, and after the subsoil is rough graded, topsoil would be replaced in an even layer. Spoil material from off the ROW would be approved by an Environmental Inspector. Yankee has employed the firm of Coler and Colantonio as its Environmental Inspector. Where rock was part of the surface prior to construction, rock would be returned in approximately the same configuration as pre-construction. (Yankee 2, Tab A, p. 29; Tr. 1, p. 13)
33. All construction debris would be removed following backfilling of the line. The line would be buried to a depth of two feet in rock and three feet in depth in other areas. After backfilling, Yankee would restore the original contours and flow regimes, except for unnatural features and unstable grades. The ROW would be seeded with annual rye grass to stabilize the area until indigenous species can become re-established. No fertilizer or lime would be used in wetlands unless specified by the Natural Resources Conservation Service (NRCS). (Yankee 2, Tab A, pp. 29-30; Tr. 1, pp. 42-43)
34. Yankee would monitor revegetation progress annually. Revegetation would be considered successful if at least 80 percent of the total cover consists of native species and the level of diversity of native species after construction is at least 50 percent of the level originally present in wetlands. If the area has not shown adequate re-establishment of native wetland vegetation during the first growing season following construction, Yankee would consult a professional wetland ecologist to develop and implement a site-specific plan to revegetate wetlands with native species. (Yankee 2, Tab A, p. 30)
35. Horizontal Direction Drill (HDD) technology would be used to install the line underneath Metacomet Ridge at the Southington-Berlin boundary. In this process, a pilot hole is drilled with bentonite drilling fluid delivered to the cutting head of the drill for hydraulic cutting action. The bentonite is processed to remove the cuttings and recycled for use in continued drilling. With HDD open cut trenching is avoided and adverse environmental impacts minimized. (Yankee 2, Tab A, pp. 10-11)
36. For HDD, a minimum workspace area of 105 feet by 100 feet is required on each side of the ridge. Equipment required would include the drilling rig, control cab, drill string pipe storage, site offices and tool storage trailers, power generators, bentonite storage, bentonite slurry mixing equipment, slurry pump, cuttings separation equipment, cuttings return/settlement pit, and heavy construction support equipment. (Yankee 2, Tab A, pp. 10-11)
37. In areas of rugged topography permanent trench breakers consisting of sand bags, gravel, cement or cement-filled sacks would be installed in the ditch over and around the pipe in areas of slope and erosion potential. Trench plugs, composed of composted earth or low-permeable material, would be used to minimize the channeling of groundwater along the ditch line. (Yankee 2, Tab A, p. 6)

38. After the line is installed, hydrostatic testing of the pipe would be performed. Potential adverse environmental impacts would be minimized by locating testing areas outside of wetlands; discharging to water sources in compliance with applicable agency requirements and consideration of fisheries protection; complying with all applicable permits; avoiding use of chemicals in test water; anchoring the discharge pipe for safety; discharging test water against a splash plate or energy-dissipating device; and controlling the rate of discharge to prevent flooding or erosion. (Yankee 2, Tab A, p. 23)
39. Water for hydrostatic testing would be from a public water supply. All necessary permits would be obtained from towns prior to testing. (Yankee 2, Tab A, p. 23)
40. Property owners and residents along the proposed route have been provided a telephone number to call in response to any concerns or problems during construction of the proposed pipeline. (Tr. 1, p. 14)

Aboveground Facilities

41. Yankee would construct gate stations at the interconnections with the existing Tennessee and Algonquin lines in the towns of Southington and Berlin, respectively. The gate stations would be located within a 10,000 square foot site. The Southington building would be approximately 14 feet in width and 64 feet in length. The Berlin building would be 24 feet in width and 64 feet in length. Each building would be approximately 10 feet in height. The gate stations would be cathodically protected by the installation of sacrificial anode beds. (Yankee 2, Tab A, p. 3)
42. The proposed Algonquin Gate Station in Berlin would be located approximately 500 feet north of Heritage Drive, on the southern border of the existing CL&P transmission ROW, and immediately north of the Algonquin Gas transmission line. (Yankee 2, map)
43. The proposed Tennessee Gate Station in Southington would be located approximately 700 feet east of Pin Oak Drive and approximately 700 feet west of Hamilton Avenue. (Yankee 2, map)

Operation and Maintenance

44. The proposed line would be operated and maintained by Yankee, in accordance with the requirements of the Federal Department of Transportation and the Connecticut Department of Public Utility Control. The line would be routinely patrolled, to detect possible leaks, construction activities, exposed pipe encroachment, and other safety and operational problems. (Yankee 2, Tab A, p. 12)
45. Maintenance would include periodic seasonal mowing of the ROW; backfill replacement, and drain tile repair; inspection of water crossings; and maintenance of repair equipment including emergency pipe, leak repair clamps and sleeves. (Yankee 2, Tab A, p. 12)
46. Within wetlands, seasonal mowing would be limited to a 10-foot wide area centered over the line to minimize impacts to wetland vegetation. Cathodic protection units would be regularly monitored. (Yankee 2, Tab A, p. 12)
47. Routine vegetation maintenance would occur on the ROW no more than once every three years. A corridor no more than 10 feet wide would be maintained in an herbaceous state to facilitate leak and

corrosion detection. Routine maintenance would not occur between April 15 and August 1st. The average width of the maintained ROW would be 20 feet. (Yankee 2, Tab A, p. 28)

Environmental Considerations

48. Approximately 0.3 miles of the proposed route in Southington lies within a Preliminary (Level B) Aquifer Protection Area, which includes Well 7 and 8 Wellfield as identified by the Southington Water Department. No U.S. Environmental Protection Agency designated sole source aquifers are located along the proposed route. No part of the proposed route is within a final Aquifer Protection Area. (Yankee 2, Tab A, p. 20)
49. There are no public or private water supply wells within 150 feet of the proposed construction area in Southington or Meriden. There is one identified water supply well within 150 feet of the proposed workspace in Berlin. Yankee would identify and test all wells within 250 feet of the pipeline. (Tr. 1, p. 35; Yankee 2, Tab A, pp. 20-21)
50. The CT DEP Division of Fisheries and Wildlife and the U.S. Fish and Wildlife Service indicate no fisheries of special concern are within the proposed route, and there are no known populations of rare or endangered fish species within streams crossed by the proposed line. (Yankee 2, Tab A, p. 24)
51. Trenching would be employed at all minor stream crossings. Yankee would minimize potential impacts to fish habitat by expediting and limiting the amount of equipment and activity in streams; avoiding high flow and spawning periods; installing erosion and sediment controls; crossing streams perpendicular to the axis of the channel; maintaining downstream flow rates; removing all construction material and structures after construction; restoring stream channels and bottoms to original configurations and contours; stabilizing streambanks; periodic inspections of erosion and sediment controls; and leaving as many trees in place as possible on stream banks. (Yankee 2, Tab A, pp. 24-25.)
52. Yankee consulted the U.S. Fish and Wildlife Service (USFWS) regarding the proposed project and the USFWS identified one federally-listed mammal which may occur in the area, the Indiana bat (Myotis sodalis), which has a remote possibility of roosting in trees within the construction corridor. For this reason, Yankee has agreed to avoid the clearing of those trees greater than six inches in diameter between May 1 and August 15 to minimize impacts to potential roosting habitat of this species. (Yankee 2, Tab A, p. 32)
53. Yankee consulted the Connecticut DEP Natural Diversity Database regarding the presence of threatened and endangered species in the area, and determined four state-listed plant species of concern were potentially located within the joint utility corridor near Cathole Mountain in Meriden. Field surveys were conducted in this area but none of the state-listed species were encountered. One additional State species of special concern, Desmodium glabellum (tick trefoil), was encountered in the area. Yankee would protect identified populations of this species by avoidance were possible. Erosion and sediment controls would be installed around the species prior to the commencement of clearing and an environmental inspector would monitor the populations daily. (Yankee 2, Tab A, p. 32)
54. If avoidance of a plant species of special concern is not possible, Yankee would consult with a certified plant biologist to determine a method to remove the plants, house them at a facility approved

by the Natural Diversity Database, and replace and monitor the species after construction. (Yankee 2, Tab A, p. 32)

55. A Phase I archaeological field survey was completed for the proposed route and no archaeological sites were encountered. A report was then submitted to the Connecticut State Historic Preservation Office (SHPO), and based on its review of this report, the SHPO has determined the proposed pipeline would have no effect on historic, architectural, or archaeological resources listed on or eligible for the National Register of Historic Places. (Yankee 2, Tab A, p. 38)
56. The Connecticut Department of Transportation (DOT) has designated a Recommended State Bikeway Route on Edgewood Road in Berlin. Yankee has provided a copy of its pipeline plans and a schedule of proposed construction to the DOT. (Tr. 1, pp 14-15; DOT Comments of 5/13/02)
57. Yankee would obtain all necessary permits and licenses for placing the proposed pipeline across roads, drainage facilities, waterbodies, and wetlands. Yankee has identified the necessary federal, State and local permits as shown in the chart below:

Permit and Approval Status

Permit	Issuing Agency	Status
FEDERAL PERMITS		
Section 404 permit	Army Corps of Engineers - New England District	Permit Issued to TGP Transferred to Yankee
Section 10 permit	Army Corps of Engineers - New England District	Permit Issued to TGP In Transfer Process
Clearance	U.S. Fish and Wildlife Service	In Review
CONNECTICUT STATE PERMITS		
401 Water Quality Certification	CT Department of Environmental Protection	Permit Issued to TGP In Transfer Process
GP - Stormwater Discharge	CT Department of Environmental Protection	To be filed May 2002
GP Hydrotest Water Discharge	CT Department of Environmental Protection	To be filed May 2002
Clearance	CT Historical Commission (SHPO)	In Review
Clearance	CT Natural Diversity Database	In Review
LOCAL PERMITS		
Environmental Permit	Local Inland Wetland and Watercourse Commissions	Not required (C.G.S. § 16-235) However, Yankee will submit plans for review and recommendation to Commissions in each affected municipality.
Road Crossing Permits	CT Highway Department and Local Departments of Public Works	To be applied for in 2002
Blasting Permits	Local Departments of Public Works or Fire Department	To be applied for in 2002

(Tr. 1, pp. 18-19 , p.50; Yankee 2, Tab A, p. 5)