PETITION NO. 757A - An application by Algonquin Gas Transmission, LLC submitted to the Federal Energy Regulatory Commission. Algonquin proposes to construct a Natural Gas Compressor Station at one of two locations in Oxford, Connecticut, and a Natural Gas Meter Station off High Meadow Road, Brookfield, Connecticut.	}	Connecticut Siting Council

June 27, 2006

FINDINGS OF FACT

INTRODUCTION

1. On February 15, 2006, Algonquin Gas Transmission, LLC (Algonquin), pursuant to provisions of Connecticut General Statutes (CGS) §§4-176(a) and 16-50k(d) and §16-50j-38 *et. seq.* of the Regulations of Connecticut State Agencies, filed a Petition with the Connecticut Siting Council (Council) for a declaratory ruling that the Council does not have jurisdiction over a new natural gas compressor station proposed for one of two sites in Oxford, Connecticut, and a new natural gas meter station proposed off High Meadow Road in Brookfield, Connecticut. (Council Administrative Notice 1)

2. At a public meeting held on February 22, 2006, the Council ruled that the Federal Energy Regulatory Commission (FERC) has exclusive jurisdiction over the proposed project under the Natural Gas Act, 15 U.S.C. § 717 *et. seq.* The Council further stated its intention to make recommendations to the FERC and Iroquois regarding siting, environmental mitigation measures and construction procedures. (Council Administrative Notice 1)

3. On March 1, 2006, Algonquin filed an application with the FERC for a Certificate Public Convenience and Necessity under the Natural Gas Act for natural gas pipeline modifications, known as the Ramapo Expansion Project, in New York, New Jersey and Connecticut. (Algonquin 2, p. 1)

4. The purpose of the Ramapo Expansion Project is to provide 125,000 dekatherms per day (Dth/d) of natural gas transportation capacity to Consolidated Edison of New York and 200,000 Dth/d of transportation capacity to KeySpan Energy Delivery. The Oxford Compressor Station and Brookfield Meter Station are two components of the multi-component Ramapo Expansion Project. (Algonquin 1, pp. 1-1, 1-2; Algonquin 2, p. 1)

5. Pursuant to Sections 16-50j-21 and 16-50j-40 of the Regulations of Connecticut State Agencies, the Council, after giving due notice thereof, held a public hearing on May 9, 2006, beginning at 6:30 p.m. in the Brookfield High School Auditorium, 45 Longmeadow Hill Road, Brookfield, Connecticut to allow for public comment on the Brookfield Meter Station portion of the project. The Council and its staff inspected the proposed meter station site on May 9, 2006. (Council's Hearing Notice dated April 18, 2006; Transcript 1- 05/09/06, 6:30 p.m. [Tr. 1], p. 3)

6. A public hearing for the Oxford Compressor Station portion of the project was held on May 11, at the S. B. Church Memorial Town Hall, 486 Oxford Road, Oxford, Connecticut. (Transcript 2- 05/11/06, 6:30 p.m. [Tr. 2], p. 3)

7. The evidentiary portion of the hearing was conducted on May 30, 2006 at the Central Connecticut State University, Institute of Technology and Business Development, 185 Main Street, New Britain, Connecticut. The Council and its staff inspected the proposed compressor station sites on May 11, 2006. (Council's Hearing Notice dated April 18, 2006; Transcript 3- 05/30/06, p. 3 [Tr. 3])

8. Parties to this proceeding include the applicant and the Town of Brookfield. (Tr. 1, pp. 8, 22; Tr. 2 p. 5)

MUNICIPAL INVOLVEMENT

9. Algonquin met with town officials and state legislative delegations of the affected communities prior to submission of the application to FERC. Algonquin notified all landowners within a half-mile of the compressor station sites of the proposed project. An Open House to describe the Oxford Compressor Station proposal at Site A, north of Airport Road, was held on December 14, 2005. A second Open House was conducted on March 15, 2006, for the Site F location in the Woodruff Hill Industrial Park. Town of Brookfield officials and property abutters were notified by mail of the proposed Brookfield Meter Station portion of the project. (Algonquin 4, Q. 25)

10. The Town of Oxford, represented by Mr. Herman Schuler, Director of Economic Development, made a limited appearance statement at the May 11 public comment hearing indicating the towns' preference for the Site F location due to the non-industrial zoning designation of the Site A parcel. (Council Administrative Notice 11; Tr. 2, pp. 13-14)

SITE SELECTION

11. Algonquin evaluated six sites for the compressor station, designated as Sites A though F, within an area extending east of where the pipeline crosses Route 67 in Southbury to an area west of the Waterbury-Oxford Airport. The site evaluation consisted of an numeric analysis of ten siting criteria balanced with potential impacts to the environment and the community. Site A scored the highest, followed by Site E and Site F. Site E is the Towantic Energy site and was not pursed due to the unknown status of that project. (Algonquin 2, pp. 85, 87)

12. Algonquin initially selected Site A as the preferred site. Site A is located on the north side of Airport Road in Oxford, approximately 0.5 miles west of Oxford Airport. Algonquin did not select any other locations for consideration. (Algonquin 2, pp. 76-77; Algonquin late file June 14, 2006)

13. FERC requested further information regarding Site F as a suitable location for the compressor station after the March 1, 2006 application filing with FERC. Algonquin submitted a Site A and F Alternative Comparison study to FERC on April 12, 2006. (Algonquin 2, p. 88, Appendix H, p. 2)

14. The owners of Site A, Pilots' Mall LLC, declined to sell the property to Algonquin since development of a compressor station would be inconsistent with their plans of development for the property and adjacent properties. To acquire the site, Algonquin would have to proceed with condemnation. (Algonquin 2, Appendix H, p. 11; Algonquin late file June 14, 2006)

15. Due to the property owner's unwillingness to sell the Site A property and the town's desire to develop Site F, Algonquin performed a detailed analysis of Site F in April and May of 2006. A final Site F report was issued to FERC on June 13, 2006. (Algonquin late file June 14, 2006)

16. On June 14, 2006, Algonquin stated Site F is now the preferred site. The preference was based on the favorable site selection criteria, the availability of Site F, and the town's preference for this location. Refer to Figure 1 for the locations of Site A and Site F. (Algonquin late file June 14, 2006)

17. The Brookfield Meter Station site was selected because this is the only location where the Iroquois and Algonquin pipelines intersect. (Algonquin 13, Q. 3)

PROPOSED NEED

18. The purpose of the compressor station is to recover lost pressure downstream of Algonquin's Southeast New York Compressor Station when additional volumes of natural gas are transported to customers of the Ramapo Expansion Project. The proposed Oxford Compressor Station would maintain flow and pressure downstream to the existing Cromwell, Connecticut Compressor Station and to existing shippers in New England, thus enhancing operational reliability and supply security. (Algonquin 2, p. 3; Algonquin late file June 13, 2006, p. 1)

19. Without the proposed Oxford Compressor Station, pressure and service could be impacted if the existing Southeast New York or Cromwell, Connecticut stations were out of service. (Algonquin late file June 13, 2006, p. 1)

20. Flow studies determined the optimum location for a compressor station is between Milepost 128.8 and Milepost 132.6 on the Algonquin mainline. The effectiveness and efficiency of compression would decrease outside of this area. Site A and Site F are located at milepost 130.8 and 132.5, respectively. (Algonquin 1, Vol. II, p. 10-8; Algonquin 2, p. 75; Appendix H, pp. 2, 4, 6; Tr. 2, p. 10)

PROPOSED PROJECT

Oxford Compressor Station

21. At either site, Algonquin would develop a natural gas compressor station consisting of the following: a compressor building, 80 feet by 150 feet with a ridge height of 33 feet; an office/warehouse building, 65 feet by 70 feet with a ridge height of 23 feet; a control auxiliary building, 40 feet by 80 feet with a ridge height of 23 feet; a garage/maintenance building, 40 feet by 60 feet with a ridge height of 23 feet; a domestic gas building, 10 feet by 12 feet; and a product storage building, 20 feet by 12 feet. Collectively, the buildings total approximately 22,510 square feet. (Algonquin 2, p. 2, Exhibit 2; Tr. 2, p. 10)

22. Additional equipment would include suction and discharge piping from the mainline to the compressor station, gas cooler units at the discharge piping, intake scrubbers, discharge silencers, and compressor unit air inlet and exhaust systems. (Algonquin 2, p. 2, Exhibit 2; Algonquin 6)

23. The Compressor Building would contain three new turbine-compressors: two Solar Mars 100 turbines generating 15,000 Horsepower (HP) each, and one Taurus 60 turbine generating 7,700 HP. Each turbine would have an associated exhaust stack of 38 to 40 feet in height. (Algonquin 2, p. 2; Tr. 2, p. 10)

24. Roads and parking areas would be installed within the station grounds to connect the buildings and provide access to the piping system. Security fencing would be installed around the perimeter of the station. A septic system would be installed to service the station. (Algonquin 2, p. 2)

25. A 1000 kW natural gas emergency generator would be installed at the site to allow for continued operation in the event of a power failure. The generator would be automatically activated. Backup battery systems would operate vital control systems until the generator is at operational power. When commercial power is restored, instrumentation automatically synchronizes the generator with commercial power, transfers back to commercial power, and deactivates the generator. (Algonquin 4, Q. 10)

26. Algonquin plans to construct the compressor station over a six-month period from June 2007 to November 2007, assuming six 10-hour days a week. (Algonquin 2, p. 26; Algonquin 4, Q 7f)

Site A Description

27. Site A consists of a 216-acre parcel located on the north side of Airport Road in Oxford. Route 188 is located west of the parcel. The Waterbury-Oxford Airport is approximately 0.25 miles to the east. (Algonquin 2, p. 3, Appendix C, p. 2-1)

28. The undeveloped parcel is zoned Prime Corporate Zone. Industrial uses, such as the proposed compressor station, are not acceptable zoning uses. (Algonquin 2, Appendix C, p. 2-1, Appendix H; Council Administrative Notice 11)

29. Algonquin maintains a 75-foot wide right-of-way corridor on the parcel that traverses the property from the southwest corner to the eastern boundary on Donovan Road. A 26-inch pipeline and 30-inch pipeline are located within the right-of-way. (Algonquin 2, p. 56, Appendix C, pp. 2-1, 2-2)

30. The parcel is mostly wooded, with seven different delineated wetland areas. Two surface water features are located on the parcel: Eightmile Brook comprises the north-south border of the western side of the parcel, and Six Foot Wide stream, located in the northern portion of the parcel. Overgrown field areas are located in the central portion of the parcel. The parcel ranges in elevation from 558 to 700 feet above mean seal level (amsl). (Algonquin 2, Appendix C, pp. 2-1, 2-2)

31. Algonquin would construct the station within a 17.8-acre development area in the south central portion of the parcel. The area is centered in the overgrown field area immediately north of the existing Algonquin right-of-way. Algonquin would construct a 700-foot paved road from Airport Road to access the development area (refer to Figure 2). A well would service the site. (Algonquin 2, pp. 2, 3, Exhibit 2)

32. The proposed station site is located on a level ridge at an elevation of 610 feet amsl. The maximum amount of grade cut is estimated at 5 feet. (Algonquin 2, Exhibit 2, Appendix H, p.3)

33. Land use in the immediate area consists of the following:
    a) East - a Yankee Gas facility, a concrete manufacturer and residences along Donovan Road;
    b) North - undeveloped land, commercial office in Middlebury, and residential parcels along Benson Road in Middlebury, approximately 0.75 miles to the northeast;
    c) South - undeveloped land; and,
    d) West - an abutting limousine service and undeveloped property along Route 188.

    (Algonquin 2, Exhibit 2, Appendix C, p. 2-3, 4-6, Figure 1)

34. Sixteen residences are located within 0.5 miles of Site A, the nearest of which is on Donovan Road approximately 1,400 feet east of the proposed compressor station. (Algonquin 2, Exhibit 2, Appendix H, pp. 2, 5)

Site F Description

35. Site F consists of a 70-acre parcel located in the proposed Woodruff Hill Industrial Park in Oxford. The site is immediately east of the proposed Towantic Energy site, a power plant approved by the Council in Docket 192. The Waterbury-Oxford Airport is approximately 0.8 miles to the west. Site A is approximately 1.5 miles to the west. (Algonquin 1, Vol. II., p. 10-18; Algonquin 2, Appendix H, pp. 6, 10; Algonquin late file June 14, 2006)

36. The undeveloped parcel is owned by the Town of Oxford and is part of the proposed 290-acre Woodruff Hill Industrial Park. Development of the 19-lot industrial park has not commenced. (Council Administrative Notice 10; Algonquin 2, Appendix H. p. 6)

37. The Algonquin gas pipeline right-of-way traverses the northern portion of the parcel in an east-west direction. The Middlebury town line comprises the northern boundary of the site. (Algonquin 6)

38. The parcel is wooded and ranges in elevation from 735 feet to 890 feet amsl. The parcel consists of two ridges oriented in a north-south direction, between which is an intermittent watercourse. A small wetland is located on the north side of the existing Algonquin right-of-way. (Algonquin 2, Appendix H, p. 7, Algonquin 6)

39. Algonquin would construct the station within a 16.8-acre development area in the west central portion of the property immediately south of the Algonquin right-of-way. East of the proposed station, the property contains a steep sloping ridge, an intermittent watercourse to the south, and a wooded area north of the Algonquin right-of-way. (Algonquin 2, Appendix H, pp. 3, 7, 12)

40. Algonquin would construct a 1,600-foot access road to the station site. The access road would extend from the proposed industrial park road in an east-west direction through an open field and across a ridge top, and then in a north-south direction along the western property boundary to the site (refer to Figure 3). (Council Administrative Notice 10; Algonquin 2, Appendix H, p. 7; Algonquin 6)

41. The proposed station site is located at an elevation of 820 feet amsl. The maximum amount of grade cut is estimated at 10 feet, although large areas of surface rock may affect grading operations and pipeline tie-in connections. Blasting would be required. (Algonquin 2, Exhibit 2, Appendix H, p. 7; Algonquin late file June 13, 2006, p. 2)

42. Property adjacent to the site is undeveloped. The Town of Middlebury owns the abutting property to the north; the Town of Oxford owns the abutting property to the south and west (Towantic Energy site). Two undeveloped parcels abut the site to the east. (Council Administrative Notice 10; Algonquin 6; Tr. 3, p. 81; Algonquin late file June 13, 2006, Appendix D, p. 2-1)

43. Approximately 45 residences are located within 0.5 miles of the station site, the closest of which is approximately 1,700 feet to the northwest on Elfin Place in Middlebury. A majority of the residences are 0.4 to 0.5 miles from the station site. (Algonquin 2, Appendix H, p. 6, Algonquin 6)

Brookfield Meter Station

44. Algonquin proposes to construct a meter station off High Meadow Road in Brookfield, Connecticut, on a 68.3-acre parcel owned by Iroquois Gas Transmission System L.P. (Iroquois). (Algonquin 1, pp. 1-8, 6-5, 8-11)

45. The site was previously used for agriculture, cement-mixing operations, and sand and gravel operations. A majority of the parcel is undeveloped and consists of mixed forest, old fields, wetlands and shrubby areas. A dilapidated building is in the central portion of the parcel. In addition to the Algonquin meter station, Iroquois proposes to construct a natural gas compressor station on the parcel. The compressor station proposal is the subject of FERC Docket PF06-6-000 (Council Petition 755A). Algonquin would still construct the meter station at the proposed site if Iroquois constructs the compressor station at an alternate site. (Council Administrative Notice 13, Q. 5; Algonquin 1, Vol. II, pp. 2-23; 8-11)

46. The southern area of the parcel is developed with an existing Iroquois Meter Station and existing pipeline right-of-way containing the Algonquin and Iroquois mainlines. The mainlines run parallel to each other on the south side of the parcel. Existing aboveground valves and regulators associated with Algonquin mainlines are in this location. (Council Administrative Notice 1, p. 3-10; Algonquin 1, pp. 8-7, 8-11; Algonquin 3)

47. The existing Iroquois Meter Station, owned and operated by Iroquois, is designed to measure and regulate natural gas delivered from the Iroquois mainline to the Algonquin mainline. (Algonquin 13, Q. 1)

48. The proposed Algonquin meter station is designed to measure and regulate natural gas delivered from the Algonquin mainline to the Iroquois mainline. (Tr. 3, pp. 22-24)

49. The proposed meter station would consist of three structures: the meter building; a data acquisition and control building; and a shelter over the control valves. The station would occupy approximately 0.8 acres, surrounded by a chain-link fence. Access would be provided by an existing driveway at the site. (Council Administrative Notice 14, Q. 3; Algonquin 1, pp. 1-8, 6-5, 8-11; Algonquin 3; Algonquin 4, Q. 26; Tr. 3, p. 9)

50. Due to gas pressure differences, the existing Iroquois Meter Station is not capable of measuring and regulating gas deliveries from the Algonquin system to the Iroquois system. The Iroquois mainline has a Maximum Allowable Operating Pressure (MAOP) of 1440 psig, which is higher than the MAOP for the two Algonquin mainlines. The 26-inch mainline has a pressure of 674 psig and the 30-inch mainline has a pressure of 750 psig. (Algonquin 13, Q. 2)

51. The existing Iroquois meter building is not large enough to accommodate Algonquin's meter equipment. A re-build of the existing station would cause service outages, restricting Algonquin's ability to receive gas from Iroquois to fulfill customer obligations. Constructing an addition on the existing meter building would be problematic due to the presence of underground piping associated with the existing Iroquois meter equipment. The proposed Algonquin meter station would be constructed approximately 50 feet from the existing Iroquois meter station. (Algonquin 13, Q. 2; Tr. 3, p. 18; Tr. 3, p. 15)

52. It would be possible to build a new station to allow for gas flow in either direction, then tear down the existing Iroquois meter station; however, Iroquois owns the existing meter station and would have to agree to such a proposal. (Tr. 3, pp. 21-22)

53. The proposed meter building would contain two 12-inch and one 4-inch ultrasonic meters, approximately 30 feet in length, and associated valves, piping, instrumentation and controls. The meter equipment includes a filter separator and associated liquid handling facilities (Algonquin 1, p. 1-8; Tr. 3, p. 26)

54. The filter separator would remove impurities from the gas supply, such as dust and moisture, which would collect inside a holding vessel capable of holding approximately 100 gallons of material. Approximately four to 12 gallons of waste would be generated per month. Waste from the filter separator would be removed from the site approximately two times per year. Disposal of the material would follow all applicable regulations. (Council Administrative Notice 13, Q. 2; Tr. 3, pp. 28-29)

55. If the filter separator malfunctions, or if the waste vessel leaks, a pressure differential would occur and send an electronic signal to a remote monitoring facility. A technician would be dispatched to the site. In addition, technicians perform routine maintenance on the equipment at the site approximately once a month. (Tr. 3, pp 10, 32-36)

56. Construction of the proposed meter station is estimated at eight to ten weeks, assuming six 10-hour workdays per week. (Algonquin 4, Q. 7f)

ENVIRONMENTAL ISSUES

Water Resources

Oxford Compressor Station – Site A

57. This site is not located within an Aquifer Protection Zone. (Algonquin 2, p. 5)

58. There are no known active public or private water supply wells within 150 feet of the site. If wells were discovered during the construction process, a monitoring program would be established to examine water quality and yield. (Algonquin 2, p. 5, Appendix H, p. 5)

59. Refueling of construction equipment and storage of fuel would be restricted to certain locations to minimize the potential for spills. Spills would be contained and cleaned following a Spill Prevention, Control and Countermeasure Plan. (Algonquin 2, p. 6)

60. There is no known contaminated water or sediment at the Site A location. (Algonquin 2, p. 7)

61. Construction of Site A would directly impact approximately 0.1 acres of wetlands. The proposed access road would traverse Wetland C near Airport Road and require the placement of a drainage culvert in a drainage ditch adjacent to Airport Road. The access road location was selected to provide the best possible sight-lines along Airport Road. Algonquin might be able to shift the location of the road to avoid or reduce wetland impacts. (Algonquin 2, pp. 10-11; Tr. 3, p. 69)

62. Wetland C is an elongated forested wetland that is oriented generally in a northwest to southeast direction in the south central portion of the parcel. Dominant vegetation includes red maple, yellow birch, and sensitive fern. The wetland drains to the south. (Algonquin 2, p. 14, Appendix D)

63. Construction activities on the west side of the development area would encroach upon a Town of Oxford designated 50-foot wetland buffer zone surrounding Wetland C. Algonquin might be able to relocate some of the site facilities to provide a greater buffer to the wetland. (Algonquin 2, pp. 10-11, Exhibit 2; Tr. 3, p. 70)

64. Eightmile Brook, a DEP Class A surface water, comprises a portion of the west property boundary of Site A. The compressor station would be approximately 850 feet east of the brook and buffered by woodland. No impacts to the brook are expected. (Algonquin 2, p. 16, Exhibit 2)

Oxford Compressor Station – Site F

65. There are no known active public or private water supply wells within 150 feet of the site. The general area is served by the Heritage Water System, which relies on five wells to meet the town's water supply. The wells are located five miles west of the site. Heritage Water would serve the proposed Woodruff Hill Industrial Park. (Algonquin late file June 13, 2006, p. 6)

66. The groundwater in the site area has the potential to supply untreated drinking water. The nearest DEP designated aquifer protection area is four miles to the east, in the Town of Southbury. (Algonquin late file June 13, 2006, Appendix D, p. 3-4)

67. Construction at Site F would impact 0.08 acres of an intermittent watercourse that runs through the central portion of the property. A majority of the impact would be from development of site access roads. The stream increases in width from two to three feet at the northern end to a maximum of 12 feet at the southern end. Vegetation such as skunk cabbage and spicebush occurs in and adjacent to the stream channel. (Algonquin 2, Appendix H, p. 8; Algonquin late file June 13, 2006, Appendix B, p. 3-1)

68. Lubricating oil pressure would be continuously monitored during unit operation. An excessive loss of oil pressure, which might indicate a leak, would cause the turbine unit to shut down. The compressor building would be designed to contain any fluids that may leak from the turbines. (Algonquin 4, Q. 1)

Brookfield Meter Station

69. The Brookfield Meter Station is located within a locally designated "Primary Recharge Zone of the Town of Brookfield Aquifer Protection District". The proposed meter station is a permitted use. (Council Administrative Notice 12, Q. 4)

70. Construction of the meter station would not impact any wetlands on the site parcel. (Council Administrative Notice 12, Q. 22)

71. A well is located on the parcel in proximity to the existing Iroquois meter station. The nearest off-parcel well is located approximately 325 feet north of the proposed meter station building. If a well were damaged during the construction process, Algonquin would provide a temporary water source. (Council Administrative Notice 12, Q. 8, Q. 9)

Wildlife

72. The United States Fish and Wildlife Service (USFWS) identified the bog turtle, a threatened species, as occurring in close proximity to both proposed sites. (Algonquin 2, p. 19, Appendix E)

73. The USFWS requested a bog turtle habitat assessment for both Oxford compressor station sites. The Site A and Site F assessments determined that no suitable bog turtle habitat is present on either site parcel. The USFWS concurred with the Site A and Site F assessment results. (Algonquin 2, p. 19, Appendix E; Algonquin late file June 13, 2006, p. 7; Algonquin late file June 23, 2006)

74. There are no known state endangered, threatened or special concern species at proposed Oxford Site A. Two state endangered species, the sharp-shinned hawk and the pied-billed grebe, occur in the vicinity of proposed Oxford Site F. (Council Administrative Notice 10; Algonquin 2, p. 20, Appendix E)

75. The sharp-shinned hawk listing is based on a single bird observation in 2001. There was no record of nesting or breeding for this species. (Council Administrative Notice 10)

76. The pied-billed grebe is a small, secretive wetland bird that requires quiet wetlands and ponds for nesting. Nesting occurs from April through June. The DEP recommends locating the facility on the northern portion of the Site F property, away from the steep slopes on the property and the wetlands that abut or may extend into the parcel to the south. In addition, the DEP recommends no construction or clearing operations during the nesting period. (Council Administrative Notice 10; Algonquin late file June 14, 2006)

77. The preliminary layout for the Site F compressor station mostly avoids the steep slopes on the southerly side of the site and the adjacent wetlands. Algonquin would consult with the DEP regarding impact-mitigation measures for the pied-billed grebe. (Algonquin 6; Algonquin late file June 13, 2006, p.8)

78. No federal or state listed species occur at the proposed Brookfield Meter Station site. (Algonquin 1, p. 3-22)

Vegetation

79. Development of Oxford Site A would require the clearing of 4.2 acres of forestland and 11.30 acres of shrub/scrub land. Most of the station would be constructed on areas previously used for agriculture. (Algonquin 2, p. 56, Exhibit 7, Appendix H, p. 12)

80. Development of Oxford Site F would require the clearing of 15.6 acres of forestland and 1.1 acres of shrub/scrub land. (Algonquin 2, Appendix H, p. 12)

81. Development of the Brookfield Meter Station would impact 0.4 acres of existing right-of-way and 0.4 acres of a previously disturbed field. (Council Administrative Notice 14, Q. 3)

Cultural Resources

82. Development of either Oxford site would have no effect on historic, architectural, or archaeological resources listed in or eligible for the National Register of Historic Places. Additionally, development of either site would have no effect on Connecticut's archaeological heritage. (Algonquin 2, p. 24; Appendix H, p. 10; Algonquin late file June 13, 2006, Appendix A)

83. Development of the proposed Brookfield Meter Station would have no effect upon Connecticut's archeological heritage. (Council Administrative Notice 6)

Visibility

84. The Oxford Site A facility is not expected to have a significant visual effect on the surrounding area, due to the size of the site parcel and the existing vegetative buffers between the proposed development area and Airport Road, as well as the residences along Donovan Road to the east. (Algonquin 2, p. 58)

85. At Oxford Site A, aboveground valve connections may be visible from Airport Road. Algonquin intends to install earthen berms to conceal the valves from the road. (Algonquin 2, p. 58; Tr. 3, p. 82)

86. Oxford Site F is located in a heavily wooded area with rolling topography. The nearest residence is approximately 1,700 feet to the northwest, and buffered by continuous woodland. The residence is located at an approximate elevation of 870 feet amsl, whereas the proposed compressor building is at an elevation of 820 amsl. Algonquin does not propose to use berms or other screening techniques at this site. (Algonquin 6; Tr. 3, p. 82)

87. The Brookfield Meter Station is expected to have a minimal visual effect on the surrounding area due to the developed nature of the site. The proposed meter station is located adjacent to the existing Iroquois Meter Station, an aboveground facility consisting of several buildings, valves and regulators. The height of the proposed meter station buildings is approximately 12 feet. (Algonquin 2, pp. 8-7, 8-19; Algonquin 3, Tr. 3, p. 83)

88. Algonquin will maintain the existing wooded buffer along High Meadow Road. The meter station site is approximately 30 feet lower in elevation than High Meadow Road, and the buffer should sufficiently screen the site. (Algonquin 1, p. 8-19)

Air Quality

89. The Clean Air Act of 1970 required the United States Environmental Protection Agency to establish National Ambient Air Quality Standards (NAAQS) for seven pollutants, and required states to delineate air quality control regions and associated action plans for each region to provide for attainment of the NAAQS. (Algonquin 2, pp. 60-63)

90. The Clean Air Act Amendments of 1977 required the classification of the air quality control regions as attainment areas or non-attainment areas. The designation of an area is made on a pollutant-by-pollutant basis. Each project adding emissions to an area is required to follow certain regulations and air permitting processes based on the attainment status of the project area. (Algonquin 2, pp. 60-63)

91. Two air permitting programs that regulate the construction of new stationary sources of air pollutants are referred to as major New Source Review (NSR) or minor NSR. Major NSR has two permitting programs: the Prevention of Significant Deterioration (PSD) program and the nonattainment NSR programs. Sources that emit less than the major NSR thresholds must obtain a minor NSR permit from the appropriate authority. (Algonquin 2, p. 62)

92. Equipment at the proposed compressor station that would generate air emissions includes two Solar Mars 100 turbines, one Solar Taurus 60 turbine, an emergency generator, and a new boiler. All of the units would be fueled with natural gas. (Algonquin 2, p. 65)

93. The potential air emissions from the operation of the proposed compressor station include nitrogen oxides (NO_x) carbon monoxide (CO), particulates (PM), sulfur dioxide (SO_2) and volatile organic compounds (VOC). Potential annual air emissions are provided in the table below, and are based on 5062 hours/year for the turbines, 500 hours/year for the emergency generator, and 8,760 hours per year for the boiler. (Algonquin 2, pp. 60, 66)

Source	**Tons per year**					
	NO_x	**CO**	**SO_2**	**PM_{10}**	**PM_{25}**	**VOC**
Proposed Turbines	47.8	97.8	5.2	10.1	10.1	10.6
Emergency Generator	0.37	0.31	0.00	0.00	0.00	0.18
Boiler	0.81	0.82	0.01	0.17	0.17	0.12
Total	**48.9**	**98.9**	**5.2**	**10.2**	**10.2**	**10.9**
Major Source Thresholds (NNSR/PSD*)	**50/100**	**NA/100**	**NA/100**	**NA/100**	**100/NA**	**50/NA**

*NNSR - Nonattainment New Source Review [RSCA Section 22a-174-3a(k)]
PSD - Prevention of Significant Deterioration, CT threshold [RSCA Section 22a-174-3a(k)]
(Algonquin 2, p. 66; Algonquin late file June 22, 2006, p. 2-7)

94. Oxford is located in New Haven County, Connecticut, which is part of the Hartford, New Haven Springfield Interstate Air Quality Control Region. New Haven County is designated as "attainment" for all criteria pollutants other than ozone and fine particulate matter (PM-2.5). The proposed project area is designated as a "serious" ozone non-attainment area and a "moderate" PM-2.5 non-attainment area. (Algonquin 2, p. 61; Algonquin Air Permit late file p. 1-1)

95. The compressor station is located in a serious nonattainment area for ozone, a pollutant photo-chemically produced in the atmosphere from VOCs and $NO_{x,}$. Therefore, the major NSR threshold of 50 tons per year for VOC and NO_x would apply. The proposed project would use a federally enforceable cap on annual NO_x emissions for the turbines and emissions are not projected to exceed 45 tons per year. Annual VOC emissions would be below six tons per year. (Algonquin 2, pp. 63-64)

96. Air emissions associated with the proposed compressor station would comply with all applicable federal and state air quality regulations. Algonquin filed a Minor NSR air permit application with the DEP for the Oxford Site A facility on March 27, 2006 and, for the Site F facility, on June 9, 2006. The permit requires a state-level Best Available Control Technology (BACT) analysis. (Algonquin 2, pp. 60, 63, 66; Algonquin late file June 13, 2006, Appendix F)

97. As proposed, the compressor station would have carbon monoxide and NO_x emissions exceeding the DEP BACT standard of 15 tons per year. BACT would be required for the turbines to mitigate these emissions. Algonquin proposes to use dry premixed combustion technology to meet BACT NO_x emission requirements. The proposed use of the Solar turbines should meet the BACT CO emission requirements. Performance testing would be performed in accordance with the DEP Minor NSR permit. (Algonquin 2, p. 65; Algonquin late file June 13, 2006; Appendix F; Algonquin Air Permit late file, pp. 4-20, 5-5)

98. Construction activities at the site would cause short-term, temporary air emissions associated with exhaust from construction vehicles and fugitive dust. Dust suppression techniques, such as the application of water, calcium chloride, or other acceptable material, would be used as necessary. (Algonquin 2, p. 66)

Noise

99. FERC has a day-night sound level (L_{dn}) noise guideline of 55 dBA for the station at either location. The State of Connecticut noise standards require a "not-to-exceed" L_{dn} of 57.4 dBA for both sites. The Town of Oxford does not have a noise ordinance. (Algonquin 2, pp. 68-69)

100. The compressor station at either site would not exceed any state or federal noise standards if constructed using noise suppression techniques. (Algonquin 2, pp. 68-69)

101. The nearest noise-sensitive area (NSA) in proximity to the Site A compressor station is a residence approximately 1,400 feet to the east. The L_{dn} of the station at the residence is estimated at 51.0 dBA (Algonquin 2, pp. 67-68)

102. The nearest NSA to Site F is a residence approximately 1,700 feet to the northwest. The L_{dn} of the station at the residence is estimated at 50.0 dBA. (Algonquin late file June 13, 2006, p. 9)

103. Algonquin does not anticipate any perceptible increase in vibration from station operations at the nearest NSAs to each site. (Algonquin 2, p. 70; Algonquin late file June 13, 2006, Appendix E)

104. Noise from unit blow down venting would be designed to meet a sound level of 60 dBA at 300 feet using a silencer. This level corresponds to an L_{dn} of 52 dBA at the nearest NSA to Site A, and an L_{dn} of 50 dBA at the nearest NSA to Site F. Approximately two blow down events would occur each year lasting for a period of 1 to 5 minutes. (Algonquin 2, p. 70; Algonquin 4, Q. 7d; Algonquin late file June 13, 2006, Appendix E)

105. Some of the noise suppression controls that could be employed at either compressor station site include the following:
    a) building materials that minimize noise,
    b) building design that eliminates windows and louvers,
    c) turbine exhaust muffler systems,
    d) acoustical pipe insulation on aboveground piping,
    e) air intake silencers,
    f) blow down silencers, and
    g) electric motor low-noise fans for the gas cooler.
    (Algonquin 2, p. 71; Algonquin 4, Q. 18)

106. Construction activities generating the most noise are related to site work (site grading, clearing, grubbing). Nighttime construction of the station may occur on a limited basis. Construction noise would not exceed an L_{dn} of 52 dBA at the nearest NSA to Site A and not exceed an L_{dn} of 51 dBA at the nearest NSA to Site F. (Algonquin 2, p. 71, Appendix G, p. 6; Algonquin late file June 13, 2006, Appendix E)

Environmental Training

107. Algonquin would train all personnel involved with construction of the proposed facilities prior to site construction and as needed throughout the project. The training would include the FERC Plan and Procedures, Algonquin's Erosion and Sediment Control Plan, permitting, cultural resource procedures, threatened and endangered species, National Pollution Discharge Elimination System, and the Storm Water Pollution Prevention Plan. (Algonquin 2, p. 4)

SAFETY

108. Algonquin would construct the station in accordance with all applicable safety standards, including the Federal Department of Transportation Minimum Federal Safety Standards specified in 49 CFR Part 192. (Algonquin 2, p. 88)

109. The compressor station would be manned by personnel living within a 30-mile radius of the facility. (Tr. 3, p. 13)

110. The station would be equipped with a Supervisory Control and Data Acquisition (SCADA) system that would transmit information to a control center in Houston, Texas. The system would monitor and control the following station parameters:
    a) turbine operating characteristics;
    b) suction pressure;
    c) discharge pressure;
    d) temperature levels; and
    e) oil pressures.
    (Tr. 3, pp. 9-13)

111. Algonquin would develop a site specific Emergency Plan (EP) once the station is designed. The EP will be included in Algonquin's Cromwell Area Security and Emergency Procedures Manual. The manual includes responses to hypothetical emergency scenarios universal to all compressor stations. (Algonquin 4, Q. 3)

112. Algonquin would equip the compressor station with an Emergency Shut Down (ESD) System. An ESD shuts down all units, closes all ESD valves, and blows down all gas within the compressor station. The ESD can be activated from any of the following:
    a) electrical controls such as an automatic gas low pressure switch;
    b) manual pneumatic station;
    c) individual gas detector registering 50% of the lower explosive limit (LEL) for a pre-determined time; and
    d) individual gas detector registering 75% of the LEL.

    (Algonquin 4, Q. 2, Q. 8)

113. If a fire is of gas origin, ESD would eliminate the gas source and the fire would extinguish itself. Station building materials would consist of low-combustible materials. Algonquin personnel would first attempt to extinguish any small residual fires. Fire-fighting equipment to be maintained at the site would include hand-held and wheeled dry chemical fire extinguishers. Local fire personnel would be directed into the station if the fire could not be extinguished by ESD controls or Algonquin personnel. (Algonquin 2, p. 89; Algonquin 4, Q. 9)

114. Algonquin would provide emergency responder training to local emergency response teams at a minimum of every three years. In the event of a fire, local fire personnel would be requested to meet at the station entrance gate to coordinate with Algonquin personnel. (Algonquin 4, Q. 9)

115. Algonquin's 26-inch diameter mainline is approximately 54 years old, and the 30-inch diameter mainline is approximately 40 years old. Inspections of the pipelines are required at least every seven years in accordance with the Gas Pipeline Integrity Management Program. The 26-inch mainline was last inspected in 2005. The 30-inch mainline is scheduled for inspection in 2008. (Algonquin 4, Q. 19, Q. 20)

116. Compressor station piping would be protected from over-pressurization by the installation of relief valves and venting systems for the safe blowdown of gas. (Algonquin 2, p. 89)

117. The Brookfield Meter Station would be an unmanned facility. Pipeline pressures and flows would be monitored continuously through a SCADA system. Monitors detecting abnormal conditions would warrant an investigation at the control center. Personnel would be dispatched from the Oxford Compressor Station or a station in southeast New York to respond to any ongoing problem. (Tr. 3, pp. 9-13)

118. The SCADA system at the Brookfield Meter Station would monitor pipeline pressures and temperature levels and control different valves and other operations. (Tr. 1, p. 11)

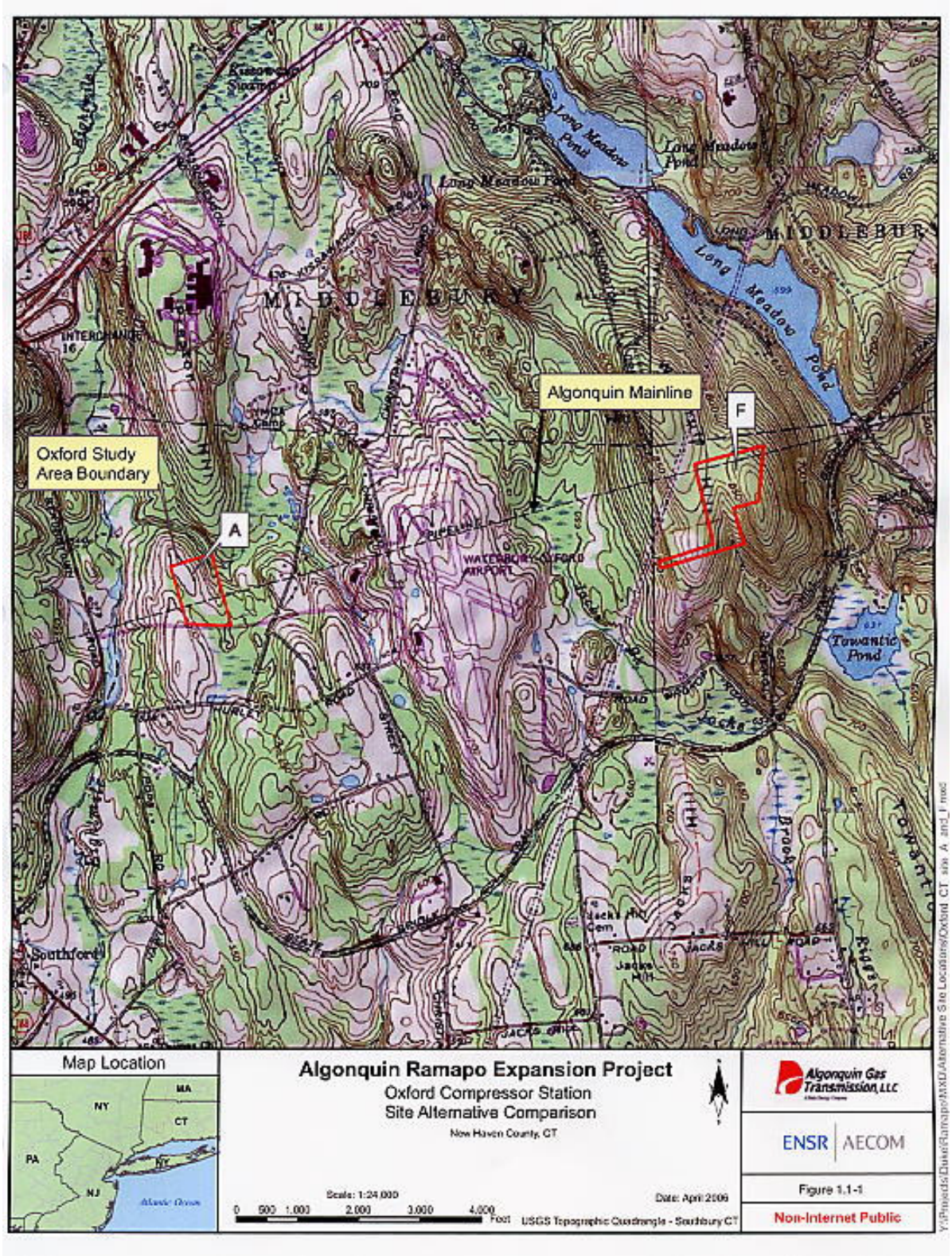

Figure 1 – Site Locations

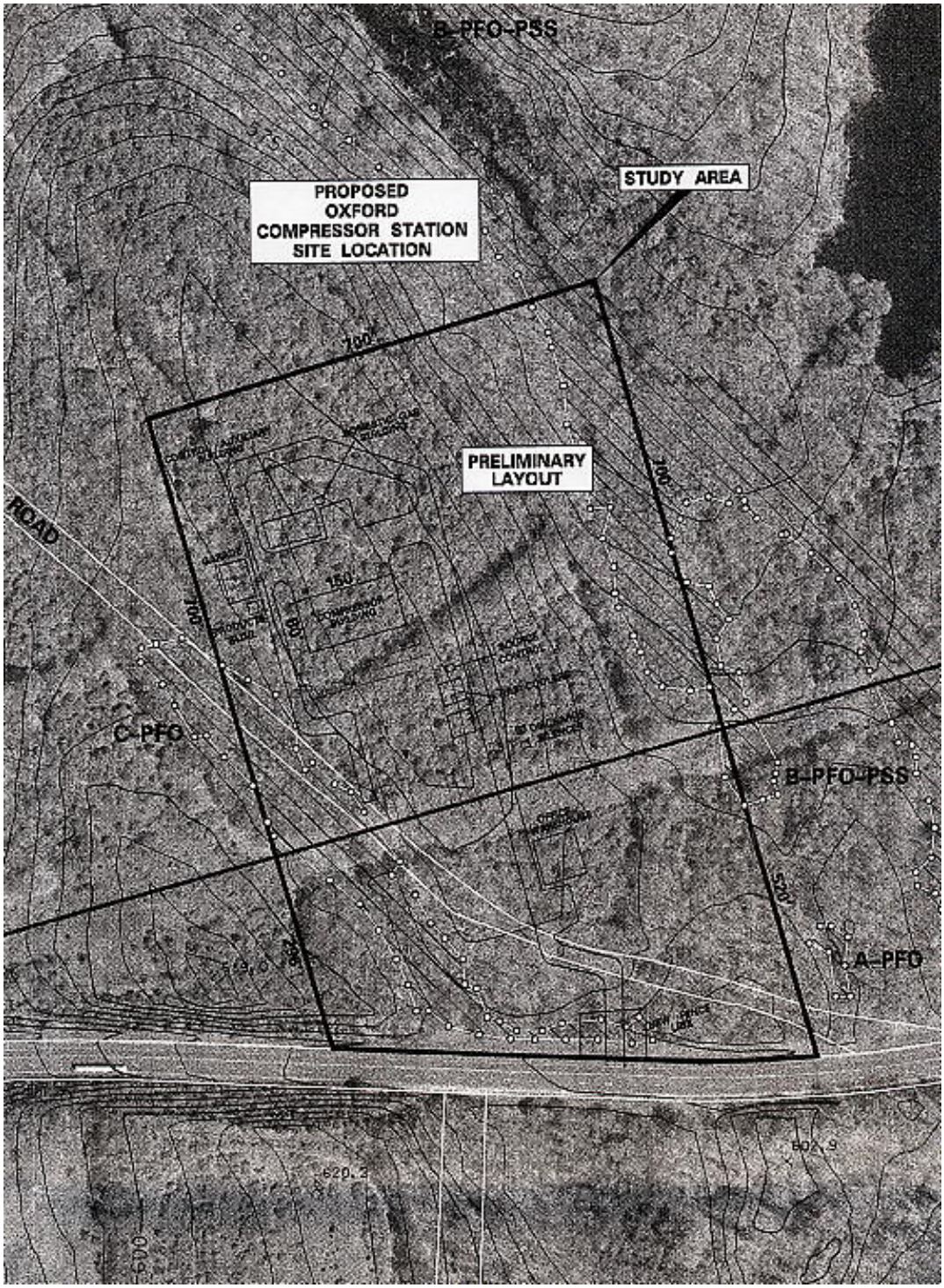

Figure 2 – Preliminary layout of Site A.

Figure 3 – Preliminary layout of Site F.