STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

Petition of Plainfield Renewable Energy LLC for a Declaratory Ruling that No Certificate of Environmental Compatibility and Public Need Is Required for the Construction, Maintenance, and Operation of a 37.5 MW Wood Biomass Staged Gasification Generating Project in Plainfield, Connecticut	)	Petition 784
	)	December 15, 2006

Proposed Findings of Fact

1. On August 14, 2006, pursuant to General Statutes § 16-50k and Section 16-50j-39 of the Regulations of Connecticut State Agencies, Plainfield Renewable Energy LLC ("Plainfield"), filed with the Connecticut Siting Council ("Council") a petition for declaratory ruling that the construction, maintenance and operation of a 37.5 MW wood biomass staged gasification generating project in Plainfield, Connecticut (the "Project") would not have a substantial adverse environmental effect, and that no Certificate of Environmental Compatibility and Public Need would be required. Plainfield Exhibit 1 at 7.

2. The party in this proceeding is Plainfield and the intervenor is The Connecticut Light and Power Company. 11/16/06 Tr. (afternoon) at 4-5; Plainfield Exhibit 1 at 9.

3. The Council notified the Town of Plainfield of the filing of the Petition on August 19, 2006. Record.

4. Notice of the petition and the Council's hearing was published in The Norwich Bulletin on November 8, 2006 and November 13, 2006. Plainfield Exhibit 7, ¶ 3.

5. On November 3 and 4, 2006 letters providing notice of the Petition and the Council's hearing, were provided via hand delivery or certified mail, return receipt requested, to property owners that abut the proposed site. Plainfield Exhibit 7, ¶ 4.

6. A sign, measuring four feet by six feet, was placed on the fence on Millbrook Road on November 6, 2006 providing a brief description of the Petition and notice of the Council's hearing. The sign also indicated that a

copy of Plainfield's petition and additional information is available at the Council's website or by calling the Council. Plainfield Exhibit 7, ¶ 5.

7. The Council conducted a public field review of the Site on November 16, 2006, at 1:00 pm. Plainfield flew balloons at the approximate location of the proposed stack. Although Plainfield laid out 156 feet of line, the balloons flew at an estimated height of 120 feet due to weather conditions. Plainfield Exhibit 10, Response to CSC-15; 11/16/06 Tr. (afternoon) at 97-98.

8. The Council held a public evidentiary hearing on November 16, 2006 at the Plainfield Town Hall, 8 Community Avenue, Plainfield, Connecticut at 2:00 p.m. and continuing in the evening after public comments. *See generally* 11/16/06 Tr. (afternoon).

9. Pursuant to Conn. Gen. Stats. §§ 16-50*l*(d) and 16-50m, the Council, after giving due notice thereof, held a public hearing for citizen comment on November 169, 2006 Plainfield Town Hall at 7:00 p.m. for the convenience of the public. *See generally* 11/16/06 Tr. (evening).

10. The Connecticut Department of Environmental Protection ("DEP") submitted comments on the proposed Site on November 13, 2006. Record.

Statutory Authority for Petition

11. Public Act 05-01 (June Special Session), An Act Concerning Energy Independence (the "Act"), amended Conn. Gen. Stat. § 16-50k to provide as follows:

> [T]he council shall, in the exercise of its jurisdiction over the siting of generating facilities, approve by declaratory ruling . . . (2) the construction or location of any fuel cell, unless the council finds a substantial adverse environmental effect, or of any customer-side distributed resources project or facility or grid-side distributed resources project or facility with a capacity of not more than sixty-five megawatts, so long as such project meets air quality standards of the Department of Environmental Protection.

Section 1 of the Act defines "grid-side distributed resources" as "the generation of electricity from a unit with a rating of not more than sixty-five megawatts that is connected to the transmission or distribution system, which units may include, but are not limited to, units used primarily to generate electricity to meet peak demand." Conn. Gen. Stat. § 16-1(a)(43).

12. The Project is a grid-side distributed resource, less than 65 MW, and connected to the transmission system.

Existing Site

13. The Site is an approximately 27 acre site located in an industrial-zoned area, with permitted uses that include the construction and operation of an electrical generation project, such as the Project. Plainfield Exhibit 1 at 92; 11/16/06 Tr. (afternoon) at 18, 33.

14. The Site is heavily disturbed, and was used as a quarry and subsequently as a repository for hazardous waste which was remediated in part by soil removal. Plainfield Exhibit 1 at 93.

15. Interstate highway I-395 runs within one mile of the Site. I-395 connects to State Route 12 which, in turn, runs adjacent to the Site. In 2004, Mill Brook Road and State Route 12 were improved to accommodate heavy truck traffic to the new large Lowes regional distribution warehouse. Plainfield Exhibit 1 at 4, 11, 32-33; 11/16/06 Tr. (afternoon) at 19.

16. The Site is located near the 115-kV CL&P Fry Brook Substation, with which the Project will electrically interconnect via a single-circuit overhead 115 kV transmission line that is approximately 1,500 feet long. The Project's 115-kV transmission line is along the existing CL&P right-of-way ("ROW") adjacent to an existing 23-kV CL&P overhead double-circuit pole line that runs through the Site's northern corner to the Fry Brook Substation. Plainfield Exhibit 1 at 60.

17. The Site abuts the Providence & Worcester railroad to the west and a CL&P distribution line, and the Fry Brook substation is located within 1,500 feet of the Site. Plainfield Exhibit 1 at 3-4, 11.

18. The Site is on a remediated portion of a Superfund site. The U.S. Environmental Protection Agency and the DEP classified the Site as a Superfund location thirty years ago, and active remediation is now complete, with only monitored natural attenuation continuing. Plainfield Exhibit 1 at 3, 92, 103-07; 11/16/06 Tr. (afternoon) at 18; 11/16/06 Tr. (evening) at 42-44.

Proposed Project

19. Plainfield is a joint venture between NuPower LLC and Decker Energy International, Inc. Plainfield Exhibit 1 at 9.

20. The Project is being funded in part by the Connecticut Clean Energy Fund ("CCEF") as a selected participant in the CCEF Pre-Development Program. Plainfield Exhibit 1 at 62-63

21. Plainfield proposes to construct a 37.5 MW (net) Class I wood biomass fueled gasification power plant ("Project") that will be located on an approximately 27-acre industrial zoned parcel of land. This parcel is bounded by Mill Brook Road and State Route 12 (the "Site"). Plainfield Exhibit 1 at 1, 11.

22. The Project will provide approximately 15% of Connecticut's Class I 2008 Renewable Portfolio Standards ("RPS"). Plainfield Exhibit 1 at 2; 11/16/06 Tr. (afternoon) at 17.

23. The Project will participate in "Project 100," the program under which Connecticut electric distribution companies are required to purchase power from Class I renewable sources. Renewable energy generators such as the Project can receive funding from the Connecticut Clean Energy Fund. Plainfield Exhibit 1 at 62-63; 11/16/06 Tr. (afternoon) at 17, 19.

24. The Project will not disturb the soil within the area governed by the environmental land use restriction and will have no environmental effect on the Superfund-regulated aspects of the Site. The Project likewise will not disturb the plume on the Site. 11/16/06 Tr. (afternoon) at 73-75; 11/16/06 Tr. (evening) at 44; Plainfield Exhibit 1 at 106; Plainfield Exhibit 4, Response to CSC-12; 11/16/06 Tr. (evening) at 44.

Fuel Supply

25. Eastern Connecticut has been identified by a study commissioned by the Connecticut Clean Energy Fund as one of two optimum locations within Connecticut for siting a biomass plant. Plainfield Exhibit 1 at 91, n.4.

26. The fuel supply for the Project will be a combination of biomass sources such as: (1) forest thinnings, land clearing and other silvicultural activities; (2) source separated urban waste wood; (3) primary wood waste; (4) wood fuel from pallets; (5) separated construction and demolition wood waste; and (6) mill residues. Plainfield Exhibit 1 at 3.

27. The Project will use B100, a 100% renewable biodiesel as its start-up fuel. This start-up fuel will represent less than one-tenth of one percent (0.1%) of the Project's annual fuel input. Plainfield Exhibit 4, Response to CSC-8; Plainfield Exhibit 6 at 2; 11/16/06 Tr. (afternoon) at 103-104.

28. Wood suppliers may include: (1) municipalities (from public works operations and residents); (2) regional/state agencies and authorities; (3) tree trimming/utility services; (4) land clearing contractors; (5) waste collectors, transfer station operators, and the like; (6) demolition contractors; (7) forestry management professionals; and (8) construction and demolition ("C&D") contractors and waste processors. Plainfield Exhibit 1 at 13.

29. No fuel will be processed on the Site. 11/16/06 Tr. (afternoon) at 21.

30. The Project will utilize only the acceptable wood fraction of demolition debris and Plainfield has proposed a procedure that the DEP would use to regulate volume reduction facilities delivering wood to the Project, including a sampling regimen and laboratory testing. 11/16/06 Tr. (afternoon) at 45-48, 134.

31. The Project will require approximately 365,000 tons per year of wood fuel to produce approximately 37.5 MW net output. There are approximately 600,000 tons per year of clean wood indigenous to Connecticut which are available for fuel. Based on one of the studies (Antares Group) and U.S. Environmental Protection Agency, there are between 500,000 -700,000 tons of recoverable construction and demolition or waste wood fuel available in state. Plainfield Exhibit 1 at 46; Plainfield Exhibit 10, Response to CSC-16; *see also* Plainfield Exhibit 10, Response to CSC-17.

32. Wood from several major metropolitan areas within a 60-75 mile radius of the Project is available to the Project, if necessary. Plainfield Exhibit 1 at 47; 11/16/06 Tr. (afternoon) at 91.

33. The Site will include storage for forty-five days of fuel inventory, with sufficient buffer for the winter months when wood availability may temporarily decline. Plainfield Exhibit 1 at 47.

34. Plainfield has executed Memoranda of Understanding ("MOUs") and Letters of Interest ("LOIs") with seven wood suppliers. Plainfield expects these preliminary agreements ultimately to become formal contracts for delivery. These MOUs and LOIs cover a total of 245,450 tons per year, representing between eighty-one and eighty-four percent (81-84%) of the Project's annual fuel supply requirements. Plainfield expects to contract for the balance of the Project's requirements based on discussions with potential fuel suppliers. Plainfield Exhibit 1 at 46, 47, 72; 11/16/06 Tr. (afternoon) at 84-85, 135; 11/16/06 Tr. (evening) at 47 (clarifying 11/16/06 Tr. (afternoon) at 83-84); *see also* Plainfield Exhibit 4, Response to CSC-3.

Wetlands

35. Two delineated wetlands will be impacted by Site development activities (2,200 square feet of the red maple forested wetland on the north side of the Site and approximately 260 square feet of a single disturbed isolated wetland). Plainfield Exhibit 4, Response to CSC-14; *see also* Plainfield Exhibit 1 at 102-103, 11/16/06 Tr. (afternoon) at 70-71.

36. Plainfield will mitigate wetlands impact by (1) excavating a 2,200 square foot area adjacent to the filled area of the red maple forested wetland and planting wetland species, and (2) restoring wetlands in the undisturbed section of the isolated wetland and constructing a detention basin. Plainfield intends to construct buffer zones around other existing wetlands which are most susceptible to construction-related impacts and retaining walls at two wetlands and to use best management practices during construction to mitigate potential impacts. Plainfield Exhibit 4, Response to CSC-14; 11/16/06 Tr. (afternoon) at 71-72; Plainfield Exhibit 1 at 102-103.

37. Approximately three to six transmission poles will be placed in wetlands in order to avoid disturbing the environmental land use restriction area. One segment of the transmission line from the Project to the substation will be overhead to minimize impact to the wetland. 11/16/06 Tr. (afternoon) at 75-76.

38. Installation of the water pipes to the Quinebaug River is expected to temporarily disturb approximately 4,500 or fewer square feet of federal wetlands and approximately 8,000 square feet of state wetlands. 11/16/06 Tr. (afternoon) at 92-93, 97.

Visual Impacts

39. The upper sections of the stack will be visible from the surrounding area within a one mile radius. Plainfield Exhibit 10, Response to CSC-15.

40. Using the Seasonal/Annual Cooling Tower Impact model, Plainfield evaluated the Project's cooling tower for visible plumes, fogging, icing, and other potential effects; no adverse off-site environmental effects are expected. Plainfield Exhibit 1 at 99-101.

Traffic

41. The site traffic is comprised of employee traffic, fuel and materials supply deliveries, and a small number of vendors and visitors. Most of the traffic will access the Site by the following routes: (i) I-395 to exit 87; (ii) west

from exit on Lathrop Road (State Road 647) for approximately ¼ mile to Route 12; (iii) south on State Route 12 (a.k.a. Norwich Road) for approximately 1 mile to existing traffic signal at Mill Brook Road; (iv) west on Mill Brook Road less than ¼ mile to site drive, turn north into site drive. Plainfield Exhibit 1 at 32

Water

42. The Project will pump cooling water to the Site from the Quinebaug River in Canterbury through a three-mile pipeline west of the Site. Plainfield has executed a purchase agreement for a 14-acre parcel along the River on Packer Road in Canterbury; intake from and discharge to the River will occur on this property. The pipe route will extend within the public ROWs associated with public roads in Canterbury and Plainfield. Plainfield Exhibit 6 at 2 (updating Plainfield Exhibit 1 at 4, 49); Plainfield Exhibit 4, Response to CSC-5; 11/16/06 Tr. (afternoon) at 94-95.

43. The 7-day, 10-year low flow rate of the Quinebaug River is calculated at 65.4 million gallons per day ("MGD"). The annual mean daily flow of the River is more than ten times higher, 667.5 MGD. The quantity of water that the Project is expected to divert from the Quinebaug River (between 656,000 and 994,000 gallons per day ("GPD") depending on final equipment specifications and weather conditions), represents a little less than approximately one and a half percent (1.5%) of the 7-day, 10-year low flow of the River at the proposed diversion location. Plainfield Exhibit 1 at 25, 53-54, 56, 57, as revised by 11/16/06 Tr. (afternoon) at 108.

44. The cooling water tower system will return to the Quinebaug River approximately twenty percent (20%) of the intake water (between 126,000 and 194,000 GPD). The net withdrawal of water from the River therefore is 530,000 to 800,000 GPD. Plainfield Exhibit 1 at 4, 57.

45. The non-contact cooling water system currently is designed to re-circulate the water five times and to use boiler blowdown in part in the spray dryer system (for approximately 35% of the system's needs). Plainfield Exhibit 1 at 53.

46. The Project will use a wet cooling technique. Upon consideration of both wet and dry cooling, Plainfield concluded that wet cooling is more efficient, economical, and quieter and that it has fewer environmental impacts than dry cooling. Plainfield Exhibit 1 at 53; *see also* 11/16/06 Tr. (afternoon) at 127.

47. The Project will discharge (1) effluent sanitary waste to the local wastewater treatment plant (approximately 875 GPD), (2) equipment service water to the wastewater treatment plant (approximately 1,000

GPD), and (3) non-contact cooling water to the River (approximately 126,000-194,000 GPD). Plainfield Exhibit 1 at 25.

48. The Project will re-circulate the effluent backwash from the river water clarifier system and reuse it in the cooling tower/spray dryer make-up system, resulting in no discharge from the clarifier to the River or the wastewater treatment system. Similarly, the Project will not discharge boiler blowdown water due to its reuse in the spray dryer system. Plainfield Exhibit 1 at 26, 54, 56-57.

Noise

49. The noise levels as a result of the Project will comply with the Connecticut Noise Regulations. Modeled noise levels generated from the Project (36-50 dBA) should be less than the background noise levels at the identified receptors (50-55 dBA). Plainfield will consider additional noise control measures during the Project's final design to achieve compliance with the Connecticut Noise Regulations at the property lines. Plainfield Exhibit 1 at 31, 99; 11/16/06 Tr. (afternoon) at 34-35.

50. Plainfield intends to use a pre-engineered "Butler-type" building for the power generation facility. Plainfield expects this building to reduce the noise generated inside of it to a compliant level for the nearest receptors without any additional acoustical tiles or other noise mitigation. Plainfield may also implement acoustical treatment for the exterior fans to reduce their noise level by approximately 10 dBA. Plainfield Exhibit 4, Response to CSC-6.

Air Quality

51. The Project will use an advanced Fluidized Bed Staged Gasifier process to produce a gas stream derived from biomass; this will generate steam to drive a conventional steam turbine generator. Fluidized bed staged gasification of solid fuels will result in lower air pollutant emissions than alternative grate or spreader-stoker type combustion systems. Plainfield Exhibit 1 at 26.

52. The Project's air permit application was submitted to the DEP on August 8, 2006 and the DEP issued its Notice of Administrative Sufficiency on September 13, 2006. The results of the air impact quality analysis demonstrate compliance with all applicable Ambient Air Quality Standards and Prevention of Significant Deterioration Increments, including the effects of nearby interacting sources. Plainfield Exhibit 6 at 4; Plainfield Exhibit 1 at 94.

53. The uncontrolled and proposed controlled potential emissions of regulated pollutants are summarized in Table 1 and Table 2, respectively.

Table 1 – Estimated Uncontrolled Potential Emissions

Pollutant	Biomass FBG Uncontrolled Emission Factor (lb/MMBtu)	Biomass FBG Uncontrolled Potential Emissions (lb/hr)	Biomass FBG Uncontrolled Potential Emissions (TPY)	DEP Major Stationary Source Threshold (TPY)	PSD Significant Emission Rate (TPY)
PM/PM_{10}	21.04	11008.00	48215.0	100	25/15
NO_X	0.355	185.62	813.0	50	40
SO_X	0.505	264.31	1157.7	100	40
CO	0.105	54.67	239.5	100	100
VOC	0.012	6.07	26.6	50	25
Pb	3.16E-02	16.52	72.4	10	0.6
HCl	1.89E-01	99.12	434.1	10	
H_2SO_4	0.040	21.14	92.6	100	7
Hg	2.53E-05	0.01	0.1	100	0.1

Table 2 – Proposed Controlled Potential Emissions

Pollutant	Biomass FBG Controlled Emission Factor (lb/MMBtu)	Biomass FBG Controlled Potential Emissions (lb/hr)	Biomass FBG Controlled Potential Emissions (TPY)	Diesel Engine Emergency Generator (TPY)	Cooling Tower (TPY)	Total Premise Controlled Potential Emissions (TPY)	DEP Major Stationary Source Threshold (TPY)	PSD Significant Emission Rate (TPY)
PM/PM_{10}	0.02	10.46	45.82	0.07	0.65	46.55	100	25/15
NO_X	0.075	39.23	171.84	2.41		174.25	50	40
SO_X	0.035	18.56	81.29	0.0012		81.29	100	40
CO	0.105	54.67	239.47	0.55		240.02	100	100
VOC	0.012	6.07	26.59	0.07		26.66	50	25
Pb	1.4E-04	0.07	0.32	7.0E-06		0.32	10	0.6
HCl	1.3E-02	6.94	30.38			30.38		
H_2SO_4	2.8E-03	1.48	6.50			6.50	100	7
Hg	2.53E-06	0.0013	0.006			0.006	100	0.1

54. The modeling analysis demonstrates that a 155 foot stack height meets all air quality impact criteria. Plainfield Exhibit 6 at 4 (updating Plainfield Exhibit 1 at 94).

55. PRE will require approximately 210 tons of NO_X Emission Reduction Credits (ERCs) to offset the potential NO_X emissions from the Project by a ratio of at least 1.2:1. PRE is currently in the process of securing options for these ERCs and will have them in place before DEP issuance of the Permit to Construct and Operate. Plainfield Exhibit 1 at 39.

56. The Project's staged gasification system minimizes the formation of nitrogen oxides ("NOx"), while the fluidized bed design minimizes the formation of carbon monoxide and unburned hydrocarbons or volatile organic compounds. The addition of alkaline materials into the fluidized bed also controls sulfur and other acid gas constituents. Plainfield Exhibit 1 at 21, 26; *see also* 11/16/06 Tr. (afternoon) at 18, 39.

57. The selective non-catalytic reduction system and a spray dryer absorber (scrubber) control NOx, sulfur dioxide, hydrogen chloride, and volatile metals and other condensable particulate matter. Plainfield Exhibit 1 at 22; 11/16/06 Tr. (afternoon) at 22. The fabric filter (baghouse) system functions as the final particulate and acid gas control system. The scrubber and baghouse are also effective in removing lead. Plainfield Exhibit 1 at 23; see 11/16/06 Tr. (evening) at 41; 11/16/06 Tr. (afternoon) at 134.

58. The Project's use of wood fuel results in lower emissions of NO_x and carbon dioxide compared to conventional coal- and oil-fired steam electric power plants. Plainfield Exhibit 1 at 22.

Odor

59. The Project's operation will not generate any noticeable odors. The Project's safeguards against an unlikely odor problem include "first in, first out" inventory control and a thirty-day inventory lifespan. 11/16/06 Tr. (afternoon) at 36-37, 43-44.

Electric and Magnetic Fields

60. Projected EMF levels attributable to the Project are within the acceptable range for these types of facilities. The Project will result in relatively minimal EMF impacts along the Site boundaries and the boundaries of the ROW. Plainfield Exhibit 1 at 107, 111.

Fire

61. The Project will utilize automatic and manual fire protection systems, with targeted systems and emergency procedures for the power block (containing the fluidized bed staged gasifier system) and the biomass

storage and handling systems. Plainfield will design the power block, related electrical systems, the staged gasifier system, and the on-site water supply system in accordance with applicable National Fire Protection Association standards. Plainfield Exhibit 1 at 78-81; 11/16/06 Tr. (afternoon) at 81.

62. The Project will incorporate fire safeguards including fire alarm and underground hydrant systems, a sprinkler system for interior spaces, a water storage tank, and an emergency plan. Plainfield Exhibit 1 at 78-81; 11/16/06 Tr. (afternoon) at 81.

63. The Project will use precautions specific to the biomass deliveries and storage, including "first in, first out" inventory control, initial screening and visual inspection for evidence of fire or smoldering, deluge-type nozzles and fire detectors in the storage area, delivery recordkeeping, and personnel training. Plainfield Exhibit 1 at 78-81, 82; 11/16/06 Tr. (afternoon) at 118.

Scenic, Historic, and Recreational Values

64. The Project will result in no substantial adverse environmental impacts relating to scenic, historic, and recreational values.

Archeological Assessment

65. The Connecticut State Historic Preservation Office recommended that Plainfield retain a professional archeologist to undertake a survey of the Site and requested the opportunity to review the survey prior to the commencement of Site construction. Plainfield Exhibit 5, Response to CSC-10.

Fish and Wildlife

66. There are seven plant communities on the Site (red maple forested wetland, sand barren, early successional hardwood stand, pitch pine stand, forested stand, early successional shrubland, and isolated wetlands). Plainfield Exhibit 1 at 97-98.

67. The DEP's Natural Diversity Database maps identified one endangered species (the eastern spadefoot toad), one threatened species (the blue-spotted salamander), and one species of special concern (savannah sparrow) in the general vicinity of the Site. A terrestrial ecology study of the Site by Kleinschmidt USA of Essex, Connecticut ("Kleinschmidt Study") found no evidence that these species are breeding and/or otherwise present at the Site. Plainfield Exhibit 1 at 97-98.

68. The DEP identified one endangered species (the eastern spadefoot toad) and one species of special concern (savannah sparrow) in the area of the intake structure on the Quinebaug River. According to a supplemental Kleinschmidt study, the area does not provide suitable habitat for either of these species. 11/16/06 Tr. (evening) at 60-61.

69. The intake structures at the Quinebaug River are specifically designed to protect fish. The intake structure will have a cylindrical wedge-wire screen with a slot opening of 0.125-inch to prevent fish entrainment and a maximum inlet velocity of less than 0.4-feet per second to prevent fish impingement. At inlet velocities of 0.5-feet per second or less, juvenile fish can swim up to the intake screen and safely swim away without getting stuck to the screen openings. Plainfield Exhibit 4, Response to CSC-5; *see also* Plainfield Exhibit 4, Response to CSC-7.

Forests and Parks

70. There are no parks located on the Site. The Site encompasses forested red maple wetlands and forested stand. Plainfield has proposed mitigating the unavoidable impact to the forested wetlands by excavating a 2,200 square foot area adjacent to the filled area and planting with wetland tree, shrub, and herb species. Plainfield plans to implement a wide range of additional mitigation measures for wetland impacts, more generally. Plainfield Exhibit 4, Response to CSC-14; 11/16/06 Tr. (afternoon) at 71-72; Plainfield Exhibit 1 at 102-103).

Solid Waste

71. Traditional office wastes will be collected by a conventional refuse contractor and handled as municipal solid waste ("MSW") as otherwise managed in the region. Such waste is likely to be disposed of at one of Connecticut's waste-to-energy plants, or at an out-of-state landfill. Plainfield Exhibit 1 at 30.

72. The cooling water received from the Quinebaug River will be clarified before it is used in the cooling tower. Approximately 250-280 tons/year of solids will be derived from this process; it is expected to be non-hazardous material suitable for management at a range of facilities in the state and New England region. Plainfield Exhibit 1 at 30.

73. The quantity of residue that will be produced by the fluidized bed staged gasifier energy system will be dependent upon the amount of non-combustible materials in the incoming biomass stream. PRE estimates annual production of 40,000-60,000 tons/year of residue, all of which will be landfilled. The residue stream includes: (i) non-combustibles contained within the biomass stream, including stones, dirt, metal fasteners, and ash

from the gasification process; (ii) residues generated by the air pollution control systems; (iii) approximately 150-180 tons/years of non-hazardous solids. Plainfield Exhibit 1 at 30.