STATE OF NEW HAMPSHIRE

BEFORE THE

NEW HAMPSHIRE PUBLIC UTILITIES COMMISSION

Pinetree Power-Tamworth Inc.	)))	**Docket No. _____**

APPLICATION OF PINETREE POWER-TAMWORTH INC. FOR CERTIFICATION AS A RENEWABLE PORTFOLIO STANDARD ("RPS") CLASS III GENERATOR

Pursuant to RSA 362-F:11 and PUC Interim Rule part 2500, Pinetree Power-Tamworth, Inc. (hereinafter Applicant) makes the following application for RPS Class III generator certification and requests certification of eligibility in accordance with the statute and rules.

Applicant provides the following information:

(a)	The name and address of the applicant:	Pinetree Power-Tamworth, Inc. PO Box 233 West Ossipee, NH 03890 1-603-323-8187 x 303 1-603-323-7501 Russell Dowd (contact)
(b)	The location of the facility:	469 Plains Road Tamworth, NH 03886
(c)	The ISO-New England asset identification number:	MSS 592
(d)	The NEPOOL GIS facility code:	Not yet assigned; application in process.
(e)	Description of the facility:	Name plate capacity: 23.8 MW Gross generation capacity: 23.8 MW Initial commercial operation date: 4/1/1987 Fuel type: See following:

Applicant uses biomass fuels as defined in RSA 362-F:2, including clean and untreated wood such as brush, stumps, lumber ends and trimmings, wood pallets, bark, wood chips, wood pellets, shavings, sawdust, and slash.

(f)	Emission information:	Permitted NO_x emissions rate:	0.265lbs/Mmbtu
		RPS eligibility NO_x rate:	.065lbs or less/Mmbtu (quarterly average)
		Permitted particulate matter rate:	0.025lbs/Mmbtu
		RPS eligibility particulate matter rate:	0.02lbs or less/Mmbtu
		Proposed practices:	See following:

Applicant intends to employ four different NO_x reduction technologies to achieve the RPS eligibility NO_x emission rate. These technologies are overfire air (OFA), flue gas recirculation (FGR), selective non-catalytic reduction (SNCR) and selective catalytic reduction (SCR). This combination of technologies will provide the plant flexibility in managing the boiler emissions. The chosen configuration requires a modification of an existing OFA system and installation of new FGR, SNCR, and SCR systems. The four technologies are described, in brief, below.

The existing OFA system will be modified and reused. The existing OFA fan and headers will supply air to six new ports. The existing ports will be abandoned. The new OFA system will operate at a lower pressure, thereby enabling the OFA fan to achieve a higher airflow rate. The existing OFA control philosophy will be maintained, however, the amount of OFA will be increased and the undergrate air reduced. A small amount of oxygen will be introduced in the FGR system and fuel distributors.

An FGR fan will be installed to extract flue gas from the air heater outlet and direct it to the undergrate air plenum. Three FGR duct plenums will be installed underneath the grate to distribute the FGR in the proper zones for reducing NO_x emissions. Each plenum will have a manual damper that will be set during optimization and then locked in place. A flow meter will measure the FGR flow. The FGR rate will be determined during optimization. The FGR flow rate will be set from the boiler steam flow. An analog steam flow signal will be used to set the FGR fan speed.

The SNCR system will incorporate a reagent storage and delivery system to automatically inject urea reagent into the upper furnace combustion gases of the boiler. Urea reagent reacts with NO_x in the flue gas to form nitrogen, carbon dioxide and water. A concentrated urea solution will be metered to the boiler for NO_x reduction by a metering pump, based upon boiler steam flow. SNCR injectors will be automatically retracted from the boiler if the boiler is operated below 75% load. An upper furnace temperature monitor will trim the vertical position of the injectors to maintain the injection in the optimal temperature zone.

An SCR system will be installed after the existing electrostatic precipitator. The SCR reactor will have 4 injectors installed in the duct prior to an SCR reactor box. A separate urea

pump will be provided to control the injection rate of urea to the SCR duct. The flow rate of urea to the SCR will be automatically controlled by the stack NO_x set point. This stack NO_x set point will be adjustable by the operator. Atomizing air with individual pressure regulators on a distribution module will be provided to the SCR injectors to control droplet size, penetration and distribution of urea into the duct. A temperature transmitter will be installed at the SCR reactor outlet. This transmitter will be used to control the air heater by-pass damper to maintain a 420°F stack temperature. The SCR system will be equipped with manual isolation and by-pass dampers (2% leakage dampers) so the boiler can be operated without the SCR in service.

Applicant currently uses two pieces of pollution control equipment to control particulate emissions at a level that DES certification of stack tests will demonstrate satisfies the RPS eligibility requirement for particulate emissions. Applicant utilizes a multicyclone as its primary particulate control and an electrostatic precipitator ("ESP") as its secondary particulate control. The two controls are operated in series. Emissions pass through the multicyclone first. Emissions from the multicyclone are then drawn to the ESP by a fan.

(g) Demonstration of regulatory approvals:

Applicant operates under a Title V air permit issued by the New Hampshire Department of Environmental Services. The permit number is TV-0P-018. See Attachment A. This permit was issued on October 17, 2005 and is valid until October 31, 2010. Following the modification of its pollution control equipment, Applicant will operate under permit number TP-B-0543, which was issued by the Department on March 17, 2008 and which expires on September 30, 2009. See Attachment B.

(h) Interconnection study: See Docket No. DR 86-028 and Attachment C.

(i) Proof of filing with DES: See Attachment D.

(j) Additional information:

Applicant was certified as a Class II generator in the State of Connecticut on March 13, 2008. Applicant intends to apply for Connecticut Class I RPS generator certification once data necessary for the application is collected.

WHEREFORE, Pinetree Power-Tamworth, Inc. respectfully requests that the Commission conditionally certify its facility as a Class III generator, and, upon receipt of the necessary emission information from the Department of Environmental Services, designate the facility as eligible pursuant to RSA 362-F:6, III as of the date of the facility's stack tests for initial certification under 362-F:12, III.

Respectfully submitted:
Pinetree Power, Inc.
By its attorneys:

Date: April 1, 2008

By: David J. Shulock, Esq.

Robert A. Olson, Esq.
David J. Shulock, Esq.
Brown, Olson & Gould, PC
2 Delta Drive, Ste. 301
Concord, NH 03301
(603) 225-9716 (voice)
(603) 225-6394 (fax)
rolson@bowlaw.com
dshulock@bowlaw.com