Public Service Company of New Hampshire

Long Range Plans For Bulk Power Supply Facilities

April 30, 2008



Public Service of New Hampshire

The Northeast Utilities System

ATTESTATION

My name is Allen W. Scarfone. I am employed by Northeast Utilities Service Company. I am the Manager of the Transmission Planning Department. I am authorized to submit the Long Range Plans for Bulk Power Supply Facilities on behalf of Public Service Company of New Hampshire. The enclosed forms were prepared by me or under my supervision and were completed on the date written below.

April 30, 2008 Date

/s/ *Allen W. Scarfone* Allen W. Scarfone

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

In compliance with RSA 162-H:17, Public Service Company of New Hampshire submits its longrange plans for bulk power supply facilities for 2008. This filing, in accordance with the guidelines established by the New Hampshire Public Utilities Commission, consists of the following:

FORM A

Load forecast projections in megawatts, for each year in the plan:

See attached Form A Load Forecasts, and Form A-Attachment 1 ISO-NE Peak Load Forecast

FORM B

Long-Range Plans for Bulk Power Supply Transmission Lines of 100 kV or more:

See attached Form B, pages 1 through 3.

Currently, system impact studies are being performed in the northern New Hampshire area to interconnect new generation resources. In addition, studies are also being conducted to determine the impact of connecting renewable generation projects in northern New England and Canada. Future transmission plans may be developed as a result of these studies to reliably support regional power flows into and through New Hampshire.

Attachment 1 to Form B: <u>General location of the transmission line on the United States</u> <u>Geological Survey sheet</u>. The United States Geological Survey sheets will be provided to the New Hampshire Public Utilities Commission in a separate filing.

Attachment 2 to Form B: <u>Statement indicating the relationship of the planned site or route</u> <u>and facilities thereon to environmental values and describing generally how potential</u> <u>adverse effects on such values shall be lessened</u>. With the exception of the Deerfield-Laconia line which has been previously granted a certificate of site and facility, all of the transmission lines planned are expected to be placed within existing rights of way in which one or more lines already exist. As a result of the use of existing rights of way for the planned routes, the potential adverse effects on environmental values from these new transmission lines, if any, should be significantly lessened, as compared to siting of these lines in new right of way corridors. As a matter of company policy regarding environmental stewardship and restoration, and in accordance with state and federal regulations, all PSNH transmission construction crews, including outside contractors, are required to use best management practices (BMPs) to minimize or eliminate potential adverse environmental impacts which may result from construction activities, such as wetlands impacts, sedimentation and erosion.

Attachment 3 to Form B: <u>Statement describing the utility's efforts to involve</u> <u>environmental protection and land-use planning agencies in their planning process so as</u> <u>to identify environmental problems at the earliest stage in the planning process</u>. As the proposed transmission lines are planned in almost all instances for construction in existing right of way already occupied by one or more lines, with anticipated minimal incremental environmental problems, PSNH has not directly engaged environmental protection and land-use planning agencies in the planning process. PSNH and its agents will comply with the applicable permitting requirements of local and state regulatory agencies and governmental authorities prior to and during the construction of proposed transmission facilities. PSNH and its agents are committed to mitigating the environmental impacts of construction activities and to reasonably resolving any land-use issues an agency may have with proposed transmission facilities.

FORM C

Application for Certificate of Site and Facility for Transmission Lines of 100 kV or more:

Applications for Certificate of Site and Facility are not required for the proposed transmission lines identified in Form B.

April 30, 2008

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

LONG RANGE PLANS FOR BULK POWER SUPPLY

All Figures In Megawatts

		SYSTEM GENERATION		SALES TO	CAPACITY				RANGE OF	CASTS	
YEAR	SYSTEM CAPABILITY (1)	ADDITIONS/ REACTIVATIONS	SYSTEM PURCHASES (1)(2)	OTHER SYSTEMS (1)(3)	RETIREMENTS/ DEACTIVATIONS	TOTAL CAPABILITY (1)		ERVES (4)	LOW ESTIMATE	PRESENT ESTIMATE	HIGH ESTIMATE
2008 2009 2010 2011 2012 2013 2014 2015 2016 2017	1273.2		79.6	0		1368.6	-313.85	-570.4	1682 1726 1769 1809 1852 1889 1925 1958 1958 1988 2015	1771 1817 1862 1904 1950 1988 2027 2062 2093 2121	1939 1992 2044 2093 2142 2191 2233 2272 2307 2342

Notes:

(1) At time of system peak load(2008 = 2008 Summer Peak).

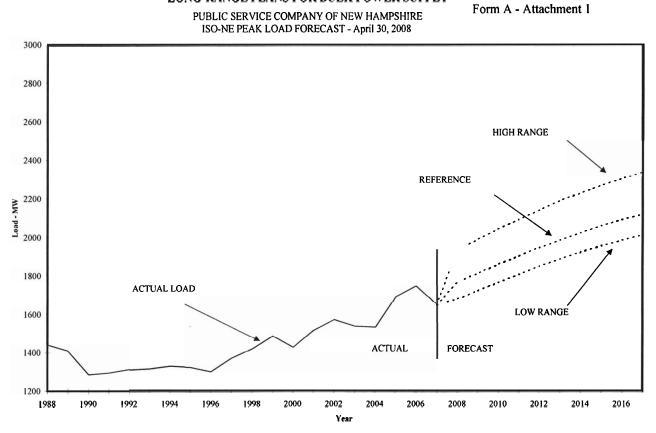
(2) Includes Small Power Producer capability credits of 59.5 MW and Vt.Yankee Purchase Power Agreement of 20.1 MW.

(3) Reflects system sales.

(4) Reserve range shown is Total Capability less Low Estimate Load Forecast and Total Capability less High Estimate Load Forecast.

(5) Scenarios consistent with the ISO-NE forecast. Form A Attachment 1 is a graphical representation of the load forecast scenarios.

FORM A April 30, 2008



LONG-RANGE PLANS FOR BULK POWER SUPPLY

Form B Page 1 of 3 April 30, 2008

PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

LONG-RANGE PLANS FOR BULK POWER SUPPLY OF TRANSMISSION LINES OF 100 KILOVOLTS OR MORE

	F	ROM	ТО			LENGTH		ALONG		1
ATT. NO.	STATION	CITY OR TOWN	STATION	CITY OR TOWN	VOLTAGE (kV)	OF LINE (MILES)	NEW ROUTES (MILES)	EXISTING ROUTE (MILES)	START YEAR	COMP. YEAR
B-1*	Deerfield	Deerfield	Laconia	Laconia	115	36.4	17.5	18.9	*	*
B-2**	Jackman	Hillsboro	Greggs	Goffstown	115	20.4	0.0	20.4	2007	2008
B-3**	Garvins	Bow	Webster	Franklin	115	23.8	0.0	23.8	2007	2008
B-4**	Keene	Keene	Chestnut Hill	Hinsdale	115	5.0	0.0	5.0	2008	2008
B-5**	Scobie Pond	Londonderry	Chester	Chester	115	6.0	0.0	6.0	TBD	TBD
B-6**	Deerfield	Deerfield	Madbury	Madbury	115	12.9	0.0	12.9	TBD	TBD
B-7**	Schiller	Portsmouth	Ocean Road	Greenland	115	5.4	0.0	5.4	TBD	TBD
B-8**	Schiller	Portsmouth	Ocean Road	Greenland	115	5.5	0.0	5.5	TBD	TBD
B-9***	Greggs	Goffstown	Reeds Ferry	Merrimack	115	11.1	0.0	11.1	TBD	TBD
B-10**	Jackman	Hillsboro	Keene	Keene	115	25.8	0.0	25.8	TBD	TBD
B-11***	Dover	Dover	Rochester	Rochester	115	TBD	TBD	TBD	TBD	TBD

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

LONG-RANGE PLANS FOR BULK POWER SUPPLY OF TRANSMISSION LINES OF 100 KILOVOLTS OR MORE

	F	ROM	ТО			LENGTH		ALONG		
		CITY		CITY		OF	NEW	EXISTING		
ATT.	STATION	OR	STATION	OR	VOLTAGE	LINE	ROUTES	ROUTE	START	COMP
NO.		TOWN		TOWN	(kV)	(MILES)	(MILES)	(MILES)	YEAR	YEAR
B-12***	Peterborough	Peterborough	Fitzwilliam	Fitzwilliam	115	TBD	TBD	TBD	TBD	TBD
B-13***	Jackman	Hillsboro	Peterborough	Peterborough	115	TBD	TBD	TBD	TBD	TBD
B-14***	White Lake	Tamworth	Ashland	Ashland	115	TBD	TBD	TBD	TBD	TBD
B-15***	Beebe	Campton	Pemigewasset	New Hampton	115	18.4	0.0	18.4	TBD	TBD
B-16***	Pemigewasset	New Hampton	Webster	Franklin	115	10.6	0.0	10.6	TBD	TBD
B-17***	Three Rivers	Elliot, Maine	Schiller	Portsmouth	115	6.3	0.0	6.3	TBD	TBD
B-18***	Long Hill	Nashua	Broad Street	Nashua	115	TBD	TBD	TBD	TBD	TBD
B-19***	Broad Street	Nashua	Bridge Street	Nashua	115	TBD	TBD	TBD	TBD	TBD
B-20***	Monadnock	Troy	Keene	Keene	115	TBD	TBD	TBD	TBD	TBD
B-21***	Bridge Street	Nashua	Thorton	Merrimack	115	TBD	TBD	TBD	TBD	TBD
B-22***	Scobie Pond	Londonderry	Pine Hill	Hooksett	115	TBD	TBD	TBD	TBD	TBD

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PUBLIC SERVICE COMPANY OF NEW HAMPSHIRE

LONG-RANGE PLANS FOR BULK POWER SUPPLY OF TRANSMISSION LINES OF 100 KILOVOLTS OR MORE

	FROM			TO		LENGTH		ALONG		
		CITY		CITY		OF	NEW	EXISTING		
ATT.	STATION	OR	STATION	OR	VOLTAGE	LINE	ROUTES	ROUTE	START	COMP.
NO.		TOWN		TOWN	(kV)	(MILES)	(MILES)	(MILES)	YEAR	YEAR
B-23***	Scobie Pond	Londonderry	MA Border	Pelham	345	TBD	TBD	TBD	TBD	TBD
B-24***	Deerfield	Deerfield	Webster	Franklin	345	TBD	TBD	TBD	TBD	TBD
	10				_	- 10 - 10 - 10 - 10 - 10 - 10 - 10 - 10				
B-25***	Webster	Franklin	VT Border	Claremont	345	TBD	TBD	TBD	TBD	TBD
B-26***	Three Rivers	Elliot, Maine	Newington	Newington	345	TBD	TBD	TBD	TBD	TBD

* Line for which Certificate of Site and Facility has been issued. The plan is reviewed on an annual basis and may change as the situation warrants.

 ** The existing 115 kV line is expected to be upgraded.
*** The facility is reviewed on an annual basis and may change as the situation warrants to incorporate PSNH's needs for new distribution substations or ISO-NE's regional system planning requirements.

TBD - To Be Determined