January 5, 2015

#### **VIA Electronic Filing**

The Honorable Kimberly D. Bose, Secretary Federal Energy Regulatory Commission 888 First Street, N.E. Washington, DC 20426

Re: Supplement to July 31, 2014 Annual Informational Filing Regarding ISO Tariff Charges in Effect as of June 1, 2014, Pursuant to Docket Nos. RT04-2-000, et. al.

Dear Secretary Bose:

The Participating Transmission Owners' Administrative Committee ("PTO AC") on behalf of New England's Participating Transmission Owners ("PTOs") hereby electronically submits for informational purposes this letter and supporting materials to supplement its July 31, 2014, PTO AC Informational Filing under Section II of the ISO New England Inc. ("ISO-NE") Transmission, Markets and Services Tariff ("ISO Tariff") in the above captioned proceeding.<sup>1</sup>

#### I. Background

On July 31, 2014, the PTOs submitted to the Commission the PTO AC Informational Filing ("July 31 Informational Filing") identifying updated rates for regional formula transmission charges for Scheduling, System Control and Dispatch Service ("S&D")<sup>2</sup>, Through or Out ("TOUT") Service<sup>3</sup>, and Regional Network Service ("RNS")<sup>4</sup>, pursuant to Commission-approved formula rates respectively contained in Schedule 1, Schedule 8, and Schedule 9 under the ISO Tariff. These charges were based on actual cost data for calendar year 2013 and estimated data for calendar year 2014 and became effective as of June 1, 2014.<sup>5</sup>

<sup>&</sup>lt;sup>1</sup> Capitalized terms used, but otherwise not defined in this filing letter, are intended to have the meanings ascribed to them by the ISO Tariff.

<sup>&</sup>lt;sup>2</sup> See ISO Tariff, Section II, Schedule 1.

<sup>&</sup>lt;sup>3</sup> See ISO Tariff, Section II, Schedule 8.

<sup>&</sup>lt;sup>4</sup> See ISO Tariff, Section II, Schedule 9.

<sup>&</sup>lt;sup>5</sup> As stated in the July 31 Informational Filing, the PTOs are aware of the Commission Staff Guidance on Formula Rate Updates issued July 17, 2014. The PTOs are still in the process of reviewing applicable formula rate protocols for consistency with the Commission Staff's guidance. During its review of the guidelines, FG&E discovered an omission that would result in an increase of \$1,640 to its transmission revenue requirements for the period covered by this informational filing. Since this error would result in an increase to transmission rates, FG&E proposes to waive collection of these revenues for the remainder of the present rate year and prior year periods, but will make this correction to its revenue requirement in the 2015-2016 rate year, and any other corrections or clarifications determined to be appropriate under the PTO review process as part of the next Annual Informational filing that will be submitted to the Commission in July, 2015.

Pursuant to Section II, Attachment F and Schedule 1 of the ISO Tariff, the PTOs are required to submit an informational filing to the Commission annually before July 31 of each year reflecting the calculation of regional transmission rates based on the most recent calendar year data. The ISO Tariff also requires revising the informational filing, and hence the rates for regional transmission services, if an error is found or if there is a change to the underlying data used in the calculation of the rates. Under Schedule 1 and Attachment F, "[i]f there are any corrections made to the information reflected in the informational filing after it has been submitted, the PTOs will file corrections to the informational filing."

The modifications reflected in a corrected informational filing are used to revise the rates for S&D, TOUT<sup>7</sup> and RNS, whichever is applicable, and to adjust customer bills accordingly. Attachment F makes clear that an informational filing "does not reopen the formula rate…but rather is contestable only with respect to the accuracy of the information contained in the informational filing." Pursuant to the advance posting provisions in the Attachment F Implementation Rule of the ISO Tariff, the rates subject to the revisions submitted with this filing, and supporting information, have been posted on the ISO-NE website 45 days in advance of the date of this filing. Through the date of this filing, no comments have been received regarding this informational posting.

#### II. Description of Adjustments Made to the July 31, 2014 Annual Informational Filing

This supplemental filing contains revised information from New England Power Company d/b/a National Grid ("NEP") which results in adjustments to the S&D, TOUT and RNS rates in effect for the period beginning June 1, 2014 through May 31, 2015. The proposed supplemental PTO AC rate information contained in this filing identifies the impact of NEP's revisions on the S&D and RNS rates. The revised support sheets for S&D and RNS rates and revised information for NEP are attached to this transmittal letter as Attachment 2.

NEP's revisions in this filing are the result of a limited tariff waiver granted by the Commission in Docket No. ER14-1686. On April 8, 2013, NEP filed a Request for Limited Tariff Waiver requesting a waiver of certain requirements under Attachment F to the ISO Tariff to (1) permit NEP to provide estimated data as the basis for calculating its calendar year 2013 Transmission Revenue Requirement for the S&D, TOUT and RNS service rates submitted for the July 31 Informational Filing and (2) give NEP until February 28, 2015, to submit a corrected informational filing to the Commission with NEP's Transmission Revenue Requirement updated

<sup>&</sup>lt;sup>6</sup> See ISO Tariff, Section II, Schedule 1, and Attachment F "Implementation Rule." See also ISO Tariff Section II.8.7 ("The ISO and the PTOs shall (consistent with Attachment L4 to this OATT) calculate refunds from the PTOs to the ISO and/or surcharges by the PTOs to the ISO, which will be passed through by the ISO to its Customers, attributable to adjustments associated with charges under Attachment F and Schedules 1, 8 and 9 of this OATT resulting from: (i) an audit of the regional rates; (ii) a Commission order . . . or (iii) a billing correction.").

<sup>&</sup>lt;sup>7</sup> See Section II.25.2 of the ISO Tariff. The TOUT rate is derived directly from the RNS rate. The ISO updates the TOUT rate based on the pool RNS rate, and therefore the PTOs are not submitting supporting documents regarding changes to the TOUT with this filing.

<sup>&</sup>lt;sup>8</sup> ISO Tariff, Section II, Attachment F, Implementation Rule.

<sup>&</sup>lt;sup>9</sup> New England Power Company, 147 FERC ¶ 61,187 (June 6, 2014)("Limited Tariff Waiver").

such that it fully complies with the ISO Tariff's requirement that 2013 FERC Form 1 data be used for calculating NEP's Transmission Revenue Requirement.

On June 6, 2014 the Commission granted National Grid's request with certain modifications. Specifically, the Commission granted the waiver request, but shortened the proposed filing date to no later than January 12, 2015. The Commission also required that the corrected rates be posted on the ISO-NE website for no less than 45 days prior to making the supplemental filing, or no later than November 29, 2014 if the filing was to be made on January 12<sup>th</sup>. The actual posting took place on November 21, 2014. Today's supplemental filing complies with the 45-day posting requirement.

Using actual information from its 2013 FERC Form 1 results in a decrease to NEP's Annual Transmission Revenue Requirement ("ATRR") of \$3,600,458 from the estimated ATRR included in the July 31 Informational Filing. This is a decrease to the RNS rate of \$0.17218/kW-yr. for the period June 1, 2014 through May 31, 2015. <sup>10</sup> In addition, the use of actual 2013 FERC Form 1 data results in a decrease to the Schedule 1 S&D rate of \$0.04684/kW-yr. Worksheets supporting the calculation of NEP's revenue requirements for 2013 are provided in Attachment 1 to this transmittal letter.

NEP's revisions in this filing also consist of corrections to address certain errors from The 2013 ATRR true-up in this supplemental filing includes a one-time adjustment for the period of June 1, 2014 through May 31, 2015 to correct ATRR calculations for the years 2008 through 2012. This correction is a result of correcting the basis for identifying plant investment as Pool Transmission Facilities ("PTF") owned by NEP and its affiliates for purposes of establishing NEP's ATRR for RNS rates. In validating 2013 plant balances for the FERC Form 1, anomalies were noted in transmission plant values which prompted a further review of internal plant reports used to determine the plant accounting inputs for the ATRR calculation. This review revealed that the underlying tables used to calculate specific PTF and Non-PTF asset values required correction back to December 2008. The Company has now updated the tables to reflect the corrected information for the PTF and Non-PTF transmission plant assets. 11 The internal plant reports were also revised to correct Post-2003 PTF Investment and PTF plant investment specifically related to the New England East West Solution ("NEEWS") both of which qualify for incentive rate treatment. Attachment 3 provides a summary of the corrections to plant investment for the years 2008 through 2012. To correct the impact of these errors on RNS rates, NEP recalculated its ATRRs for 2008 through 2012 based on the corrected plant balances and associated accumulated depreciation and accumulated deferred taxes. The increase to the PTF plant balances also caused an increase to the PTF Plant Allocation Factor that is used to allocate certain rate base and revenue requirement items that contributes to the increase in the ATRR. The revised calculations for this time period are contained in Attachment 4, Exhibits 1 through 8, to this transmittal letter. The total change to the

<sup>&</sup>lt;sup>10</sup> As part of the Limited Tariff Waiver, NEP has agreed that its shareholders, not customers, will pay ISO-NE's administrative charges necessary to rebill customers for the period from June 1, 2014 through September 30, 2014. In accordance with the Billing Protocol under Section I of the ISO Tariff, revised rates for transmission service rendered after October 1, 2014 will be captured in real time under ISO-NE's 90-day resettlement period.

<sup>&</sup>lt;sup>11</sup> A corresponding decrease to NEP's non-PTF plant values will be reflected shortly in cumulative refunds, with interest, that will be applied to the bills of transmission customers taking Local Network Services over NEP's non-PTF transmission facilities under Schedule 21-NEP of the ISO Tariff.

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ATRRs for these years resulted in a total revenue requirement increase of \$13,691,514 which has been included as a one-time adjustment to the ATRR calculation for the June 1, 2014 through May 31, 2015 rate period. NEP is not seeking recovery of any interest on this amount. The \$13,691,514 increase to ATRR results in a one-time increase to the RNS rate of \$0.65476/kW-yr. or 0.7 percent for the period from June 1, 2014 through May 31, 2015.

The combined effect of the \$3,600,458 decrease to ATRR from NEP's actual 2013 FERC Form 1 results and the one-time adjustment resulting from the correction of plant investment values from prior years results in a net increase of \$10,091,055 million to the ATRR, which will increase the RNS rate by approximately \$0.48258/kW-year, or 0.5 percent for the period of June 1, 2014 through May 31, 2015.

#### III. Method Utilized by NEP To Revise Prior Year Revenue Requirements

NEP has proposed to include its prior year ATRR revenue requirement corrections through a one-time adjustment to the current RNS rate effective June 1, 2014 through May 31, 2015 (referred to herein as "prospective adjustment"). The ISO-NE Billing Policy<sup>12</sup> is generally utilized for recalculations that are performed within a short time frame from the original billing. Longer term recalculations require the ISO to undertake a significant level of administrative effort.

NEP respectfully requests that the Commission grant any waivers that may be necessary to enable the PTOs to reflect the revisions in prior-year PTF revenue requirements as a prospective adjustment to the current year's RNS rate. NEP submits that there is good cause for using a prospective adjustment because in these circumstances it is administratively simpler, more efficient, and less costly than undertaking a complete rebilling. Implementing re-billing for these relatively small adjustments would precipitate administrative charges for time spent by ISO-NE to recalculate over 60 months of ISO billings to correct over- and under-collections on a monthly basis to all customers as part of the re-billing process under the ISO-NE Re-Billing Protocol.<sup>13</sup> This re-billing would entail substantial administrative effort and expense whereas a prospective adjustment will fully recover the past under-collection with minimal administrative effort. Therefore, NEP has adopted a prospective rate adjustment approach and respectfully submits that such an approach is the most efficient and effective method to remedy the prior errors in its PTF revenue requirement calculations.

At the PTO AC Meeting held on November 19, 2014, the Participating Transmission Owners were notified of the proposed prospective rate adjustment. There were no objections by the PTOs to the use of this methodology.

#### IV. Charges Resulting from the Adjustments Reflected in This Supplement to the July 31, 2014 Annual Informational Filing

<sup>&</sup>lt;sup>12</sup> See ISO Tariff, Exhibit I D (ISO New England Billing Policy), Section 2.6(a) ("Adjustments Requested by Covered Entities").

<sup>&</sup>lt;sup>13</sup> *Id.*, and *See* ISO-NE Re-Billing Policy at: http://www.iso-ne.com/stlmnts/assur\_crdt/misc/rebilling\_protocol.pdf

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The impact of these revisions on the S&D and RNS rates is, respectively, a decrease of \$0.04684/kW-yr. and increase \$0.48258/kW-yr. The revised S&D rate is \$1.64867/kW-yr. and revised RNS rate is \$90.27897/kW-yr.

#### V. Attachments and Additional Supporting Information

- This Transmittal Letter;
- Attachment 1 NEP's revised PTF revenue requirement worksheets for 2013;
- Attachment 2 Revised support sheets for S&D and RNS for rates effective June 1, 2014
   May 31, 2015;
- Attachment 3 Summary of corrections to ATRR plant investment inputs;
- Attachment 4 NEP's revised PTF revenue requirement worksheets for 2008 2012;
- Attachment 5 Service List of state regulators and other interested parties; and
- Attachment 6 List of Participating Transmission Owners sponsoring this supplemental informational filing.

#### VI. Communications

The PTOs request that correspondence and communications with respect to this supplement to the July 31 Informational Filing in this proceeding be addressed to the following:

New England Power Company d/b/a National Grid

Timothy J Martin Principal Program Manager National Grid 40 Sylvan Road Waltham, MA 02451

Tel: (781) 907-2417 Fax: (781) 907-5700

Timothy.martin@nationalgrid.com

Terry L. Schwennesen Counsel for National Grid c/o National Grid 40 Sylvan Road Waltham, MA 02451

Tel: (401) 480-9051

Terry.Schwennesen@nationalgrid.com

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PTO AC Legal Work Group Chair PTO AC Chair

James Clemente The United Illuminating Company 180 Marsh Hill Road Orange, CT 06477 Tel: (203) 499-3669

James.Clemente@uinet.com

Michael J. Hall Senior Counsel 780 N. Commercial Street Manchester, NH 03257

Tel: (603) 634-2273 Fax: (603) 634-2438 Michael.Hall@nu.com

Accordingly, the PTOs request that these individuals be entered on the official service list maintained by the Secretary in this proceeding.

A copy of this submission is being sent to state regulators in New England, the New England Conference of Public Utility Commissioners ("NECPUC"), ISO New England, Inc., NEPOOL and the Power Planning Committee of the New England Governors Conference, Inc. Attachment 5 identifies the entities to which this filing has been sent. In addition, Attachment 6 includes a service list of the PTOs making up the PTO AC and sponsoring this filing.

Thank you for your attention to this matter. Please contact me if you have any questions concerning this informational filing.

Respectfully submitted,

/s/ Michael J. Hall

Michael J. Hall, Esq. Counsel to Northeast Utilities & Chair of the PTO AC Legal Work Group On behalf of the PTO Administrative Committee

Attachments

cc: Persons and Entities identified in Attachments 5 and 6.

#### **Attachment 1**

NEP's Revised PTF Revenue Requirement Worksheets for 2013

ISO Tariff Billing
ISO Annual Transmission Revenue Requirements
per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

			Change	Pre-97 Revenue Post-96 Revenue Requirements Total	\$1,668,494 (\$4,003,531)	\$630	(\$16,332)	(\$5,521) \$22,251	\$1,646,010 (\$3,981,280)	N/A \$1.147,900	\$1,700,861 (\$4,113,949)	\$3,346,871 (\$6,947,329) (\$3,600,458)	\$4,111,477 \$9,580,037 \$13,691,514	\$10,091,055
Calendar Year 2013 June 2014 May-2015 New England Power Company			Preliminary Filing	Post-96 Revenue Requirements	\$162,544,944	0\$	0\$	(\$948,601)	\$161,596,343	\$54,717,557	(\$34,261,510)	\$182,052,390	80	\$346,484,625
New				Pre-97 Revenue Requirements	\$142,889,550	\$5,207,983	\$713,765	(\$322,516)	\$138,072,817	N/A	\$26,359,418	\$164,432,235	80	(b) +
Calendar Year 2013 June 2014 May 2015 New England Power Company				Post-96 Revenue <u>Requirements</u>	\$158,541,414 (f)	(g) 0\$	(h) \$0	(\$926,350) (i)	)+( \$157,615,064 (j)	\$55,865,456 (k)	(\$38,375,459) (m)	(1) \$175,105,060 (0)=(j)+(k)+(m)	\$9,580,037 (q)	\$356,575,680 (r) = (n) + (o) + (p) + (q)
a N				Pre-97 Revenue Requirements	\$144,558,044 (a)	\$5,208,613 (b)	\$697,433 (c)	(\$328,037) (d)	\$139,718,827 (e)=(a)-(b)+(	N/A	\$28,060,279 (1)	\$167,779,106 (n)=(e)+(l)	\$4,111,477 (p)	
Submitted on:  Revenue Requirements for (year):  Rates Effective for the Period:  Through:  Customer:	Customer's NABs Number:	Name of Participant responsible for customer's billing:	DUNs number of Participant responsible for customer's billing:		Total of Attachment F - Sections A through I	Total of Attachment F - Section J - Support Revenue	Total of Attachment F - Section K - Support Expense	Total of Attachment F - Section (L through O)	Sub Total - Sum (A through I) - J + K + (L through O)	Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	Annual True-up (per Attachment C to Attachment F Implementation Rule)	Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	One-time Adjustment to Correct ATRR Calculations - 2008 through 2012	Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirements & Post-96 Revenue Requirements Subtotals, Forecasted Revenue Requirements and True-ups (including interest)

#### PTO 2013 12 CP NETWORK LOADS

	2013
	Network
Local Networks	Load (MW)
Central Maine Power Co.	1,418.440
Emera Maine	254.663
Fitchburg Gas & Electric Light Co.	76.971
New England Power Co.	6,019.709
Northeast Utilities	7,235.546
NSTAR Electric Co.	4,339.080
The United Illuminating Co.	734.933
VT Transco LLC	831.238
Total	20,910.580

Long Term TOUT (MW)	0

Total impact to RNS rate

PTO RNS Rates for 6/1/14	PRE 97 RNS Rate	Post 96 RNS Rate	RNS Rates for June 1, 2014 (Revised November 19, 2014)	RNS Rates previously in effect June 1, 2014	Delta
Total NE Rev Req Total NE Loads - kW Total NE RNS \$ / kW-yr.	\$351,555,970 20,910,580 16.81235	\$1,536,229,681 20,910,580 73.46662		89.79639	0.48258

Impact To ATRR Of Final 2013 FERC Form 1

Impact To ATKK Of Final 2013 FERC Form T		1			1
PTO RNS Rates for 6/1/14	PRE 97	Post 96	RNS Rates for June 1, 2014	RNS Rates previously	Delta
	RNS Rate	RNS Rate	(Revised November 19, 2014)	in effect	
			,	June 1, 2014	
				June 1, 2014	
Total NE Rev Reg	\$347,444,493	\$1,526,649,644			
Total NE Loads - kW	20.910.580	20,910,580			
		- , ,			
Total NE RNS \$ / kW-yr.	16.61573	73.00848	89.62421	89.79639	(0.17218)

Impact To ATRR Of One-time Adjustment To Correct ATRR 2008-2012

PTO RNS Rates for 6/1/14	PRE 97 RNS Rate	Post 96 RNS Rate	RNS Rates for June 1, 2014 (Revised November 19, 2014)	RNS Rates previously in effect June 1, 2014	Delta
Total NE Rev Req Total NE Loads - kW Total NE RNS \$ / kW-yr.	\$4,111,477 20,910,580 0.19662		0.65476	0.0000	0.65476

	REGIONAL RATES NOTICE
то:	NEPOOL Transmission Committee Members and Alternates
FROM:	Tiffany Forsyth, Member - Rates Work Group ("RWG") of the Participating Transmission Owners Administrative Committee ("PTO AC")
DATE:	November 19, 2014
RE:	RNS and Schedule 1 Rates Effective June 1, 2014 (Revised November 19, 2014)

Please note that the formula rates for Regional Network Service ("RNS") and Regional Schedule 1 Service effective June 1, 2014 have been updated to reflect actual data for 2013, forecasted data for 2014 and the annual true-up and associated interest of New England Power Company. The resulting rates for RNS and Schedule 1 are included in the table below for stakeholder information purposes and for posting on OASIS.

		REGION	AL RATES (\$ / kW-year)		
	Pre 97	Post 96	Total RNS Rate Effective 6/1/14 (Revised 11/19/14)	Total RNS Rate Previously in Effect 6/1/14	Change
RNS - revised	16.81235	73.46662	90.27897	89.79639	0.48258
Schedule 1			1.64867	1.69551	(0.04684)

The PTO AC has approved the revised RNS and Schedule 1 rates effective June 1, 2014 at the meeting scheduled on November 19, 2014.

The PTO AC on behalf of the New England PTOs will submit an Annual Informational Filing to FERC on or before January 12, 2015 and a draft of the Information Filing will be available for viewing on ISO's web site by November 21, 2014 at:

http://www.iso-ne.com/stlmnts/iso\_rto\_tariff/supp\_docs/2014/index.html

Revised Support Sheets for S&D and RNS for Rates Effective June 1, 2014 – May 31, 2015

#### SUMMARY

### ISO NE Transmission, Markets & Services Tariff OATT Regional Schedule 1 - Scheduling System Control and Dispatch Service Rate Effective June 1, 2014 - May 31, 2015

#### Revised 11/19/2014

1 Total of FERC account 561-561.4 (exclude ME, REMVEC, CONVEX /ESCC costs)	\$ 13,289,811	1
2 Less ISO & OATT Sch 1 costs included in above accounts	1,976,914	2
3 Sub-total (1-2)	11,312,897	3
4 Amount allocated to transmission function	11,312,897	4
5 Transmission related S&D costs from SCADA or other systems	7,361,664	5
6 Sub-total (4+5)	18,674,561	6
7 PTF allocation factors (see page 2 for details)	79.3283%	7
8 Sub-total after applying PTF allocation factors (from page 2)	14,814,216	8
9 Maine LCC costs	3,436,400	9
10 REMVEC II costs	837,157	10
11 CONVEX costs	16,468,859	11
12 Sub-total (9+10+11)	20,742,416	12
13 100% allocated to transmission function	20,742,416	13
14 Revenues credited for short-term Transmission Service	(1,081,954)	14
15 Total transmission related system & dispatch revenue requirement (8+13+14)	34,474,677	15
16 12 month CP LOAD (kW) as defined in section 46.1 of the ISO-NE Tariff	20,910,580	16
17 Long Term Firm PTP Capacity (kW)	-	17
18 Scheduling System Control and Dispatch Service Rate (\$/kW-YR): (15/(16+17))	\$ 1.64867	18

# ISO NE Transmission, Markets & Services Tariff OATT Regional Schedule 1 - Scheduling System Control and Dispatch Service Rate Effective June 1, 2014 - May 31, 2015 (Reflecting 2013 Schedule 1 Costs) Revised 11/19/2014

		SCHEDULE 1
COMPANY		DISTRIBUTION %
Braintree Electric Light Department		0.02414%
Central Maine Power Company		8.30193%
Emera Maine		2.76534%
Fitchburg Gas and Electric Light Company		0.11229%
Hudson Light & Power Department		0.01732%
Maine Electric Power Company		0.41530%
Massachusetts Municipal Wholesale Electric		0.16830%
Middleborough Gas & Electric Department		0.00765%
New England Power Company		15.44335%
Northeast Utilities		46.97644%
NSTAR Electric Company		18.07881%
Reading Municipal Light Plant		0.02540%
Taunton Municipal Light Plant		0.03225%
United Illuminating Company		0.04380%
Vermont Transco LLC		7.58768%
	TOTAL =	100.00%

# PTO 2013 12 CP NETWORK LOADS

	2013
	Network
Local Networks	Load (MW)
Central Maine Power Co.	1,418.440
Emera Maine	254.663
Fitchburg Gas & Electric Light Co.	76.971
New England Power Co.	6,019.709
Northeast Utilities	7,235.546
NSTAR Electric Co.	4,339.080
The United Illuminating Co.	734.933
VT Transco LLC	831.238
Total	20,910.580

0	
Long Term TOUT (MW)	

PTO RNS Rates for 6/1/14	PRE 97 RNS Rate	Post 96 RNS Rate	RNS Rates for June 1, 2014 (Revised November 19, 2014)	RNS Rates previously in effect June 1, 2014	Delta
Total NE Rev Req Total NE Loads - kW Total NE RNS \$ / kW-yr.	\$351,555,970 20,910,580 16.81235	\$1,536,229,681 20,910,580 73.46662	90.27897	89.79639	0.48258

				PTO 2013 Rev Reg				
				PTO Annual Input Data 2013 (Revised 11/1	11/19/14)			
					PTF Revenu	Je Re	PTF Revenue Requirements	
					Pre-1997		Post-1996	
		Customer #	# SNNO	DUNS Name	PTF		PTF	
					\$		\$	
-		2	17-057-1897 E	Braintree Electric Light Department	\$ 144,673	\$	1,362,936	1
7			00-694-8954	Central Maine Power Company	\$ 17,204,907	↔	234,358,293	7
က			11-468-3899	Chicopee Electric Light Department	\$ 26,708	↔	799,367	က
4			96-773-8696	Connecticut Transmission Municipal Electric	\$ 343,747	↔	8,917,213	4
2			00-694-9002	Emera Maine	\$ 913,486	↔	50,353,845	2
9			00-695-4317	Fitchburg Gas & Electric Light Co.	\$ 162,815	ઝ	381,572	9
7			08-465-0050	Holyoke Gas & Electric Department	\$ 1,169,086	ઝ	2,081,628	7
∞			10-775-5126	Hudson Light & Power Department	\$ 204,065	ઝ	1	∞
တ			06-099-4258	Maine Electric Power Company	\$ 3,105,402	ઝ	1,714,115	ဝ
10			07-172-4900	Massachusetts Municipal Wholesale Electric	\$ 807,579	ઝ	533,025	10
7			15-597-6665	Middleborough Gas & Electric Department	\$ 47,246	↔	902,712	1
12			00-695-2881	New England Power Company	\$171,890,583		\$184,685,097	12
13			83-132-2677	New Hampshire Transmission, LLC	\$ 2,903,404	↔	16,175,338	13
4			95-910-8929	Northeast Utilities	\$ 66,148,984	↔	602,215,243	4
15			08-421-1572	Norwood Municipal Light Department	- ج	↔	2,563,775	15
16			00-695-1552	NSTAR Electric Company	\$ 49,558,238	ઝ	190,933,064	16
17			86-703-4654	Reading Municipal Light Plant	\$ (142,959)	<del>⇔</del>	324,779	17
18			04-661-6033	Taunton Municipal Light Plant	\$ (73,960)	<del>⇔</del>	13,633	18
19	*	185	79-806-8342	Unitil Power Corp.	\$ 126,672	ઝ	1	19
20			00-691-7967	United Illuminating Company	\$ 21,271,544	↔	94,937,914	20
21			78-039-9163	Vermont Transco LLC	\$ 12,474,570	ઝ	138,008,051	21
21			00-579-1934	Vermont Electric Power Co, Inc.	3,1	ઝ	4,486,791	21
22			01-013-9228	Wallingford Electric	\$ 78,137	\$	481,290	22
23				Total	\$351,555,970	\$	1,536,229,681	23
	*	Revenue requir	ement amounts	Revenue requirement amounts indicate payments made to support PTF owned by other Participants	Participants.			
	1							I

Sheet: Input Panel

## ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:				
Revenue Requirements for (year):		Calend	dar Year 2013	
Rates Effective for the Period: Through:			une 2014 ember 2014	
Customer:	New England Po	ower Compa	iny	
Customer's NABs Number:				
Name of Participant responsible for customer's billing:				
DUNs number of Participant responsible for customer's billing:				l
	Pre-97 Revenue Requirements		Post-96 Revenue Requirements	
Total of Attachment F - Sections A through I	\$144,558,044	(a)	\$158,541,414	(f)
Total of Attachment F - Section J - Support Revenue	\$5,208,613	(b)	\$0	(g)
Total of Attachment F - Section K - Support Expense	\$697,433	(c)	\$0	(h)
Total of Attachment F - Section (L through O)	(\$328,037)	(d)	(\$926,350)	(i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$139,718,827	(e)=(a)-(b)+(c)+(d)	\$157,615,064	(j)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A		\$55,865,456	(k)
Annual True-up (per Attachment C to Attachment F Implementation Rule)	N/A	(1)	N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$139,718,827	(n)=(e)+(l)	\$213,480,520	(o)=(j)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirements Subtotals, Forecasted Revenue Requirement True-ups (including interest)			\$353,199,347	(p) = (ı

PTF Revenue Requirements Worksheet 1 of 6 Page 1 of 2

#### New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2013

#### POST-1996

			Attachment F		
	I.	INVESTMENT BASE	Reference	NEP	Reference
Line No.			Section:		
1		Transmission Plant	(A)(1)(a)	\$986,723,295	Worksheet 3, line 1&2 column 5
2		General Plant	(A)(1)(b)	\$3,236,344	Worksheet 3, line 3 column 5
3		Plant Held For Future Use	(A)(1)(c)	\$542,157	Worksheet 3, line 5 column 5
4		Total Plant (Lines 1+2+3)		\$990,501,796	
5		Accumulated Depreciation	(A)(1)(d)	(\$209,979,240)	Worksheet 3, line 8 column 5
6		Accumulated Deferred Income Taxes	(A)(1)(e)	(\$223,376,635)	Worksheet 3, line 11 column 5
7		Loss On Reacquired Debt	(A)(1)(f)	\$102,169	Worksheet 3, line 12 column 5
8		Other Regulatory Assets	(A)(1)(g)	\$22,676,431	Worksheet 3, line 16 column 5
9		Net Investment (Line 4+5+6+7+8)	( )( )(3)	\$579,924,521	
10		Prepayments	(A)(1)(h)	\$140,767	Worksheet 3, line 17 column 5
11		Materials & Supplies	(A)(1)(i)	\$1,861,480	Worksheet 3, line 18 column 5
12		Cash Working Capital	(A)(1)(j)	\$4,911,504	Worksheet 3, line 25 column 5
13		NEEWS CWIP	(A)(1)(k)	\$15,340,495	Worksheet 3, line 26 column 5
14		Total Investment Base (Line 9+10+11+12+13)		\$602,178,767	
	II.	REVENUE REQUIREMENTS			
15		Investment Return and Income Taxes	(A)	\$80,450,478	Worksheet 2
16		Depreciation Expense	(B)	\$21,116,358	Worksheet 4, line 3, column 5
17		Amortization of Loss on Reacquired Debt	(C)	\$47,186	Worksheet 4, line 4, column 5
18		Investment Tax Credit	(D)	(\$202,818)	Worksheet 4, line 5, column 5
19		Property Tax Expense	(E)	\$16,940,728	Worksheet 4, line 6, column 5
20		Payroll Tax Expense	(F)	\$897,449	Worksheet 4, line 22, column 5
21		Operation & Maintenance Expense	(G)	\$20,238,401	Worksheet 4, line 11, column 5
22		Administrative & General Expense	(H)	\$19,053,632	Worksheet 4, line 21, column 5
23		Transmission Related Integrated Facilities Charge	(I)	\$0	Attachment 4, line 6
24		Transmission Support Revenue	(J)	\$0	Worksheet 6
25		Transmission Support Expense	(K)	\$0	Worksheet 6
26		Transmission Related Expense from Generators	(L)	\$0	
27		Transmission Related Taxes and Fees Charge	(M)	\$0	
28		Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$380,112)	Attachment 7
29		Transmission Rents Received from Electric Property	(O)	(\$546,238)	Attachment 6
30		Total Revenue Requirements (Line 14 thru 28)		\$157,615,064	

PTF Revenue Requirements Worksheet 1 of 6 Page 2 of 2

#### New England Power Company Post 1996 Regional Network Service Revenue Requirement For Test Year Ended 12/31/2013

		Attachment F	Forecasted	
Line No.	<u>Description</u>	Reference	Amount \$	Reference
1	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)		\$ 41,123,368	Line 6
2	Forecasted Revenue Requirements for Forecasted Transmission CWIP		\$14,742,088	Line 9
3	Forecasted Transmission Revenue Requirements		\$ 55,865,456	Line 1 + Line 2
4	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)	Appendix C iv	\$ 262,525,453	Project Detail
5	Carrying Charge Factor (CCF)	Appendix C vi	15.66453%	Line 20
6	Forecasted Revenue Requirements for FTPA		\$ 41,123,368	Line 4 * Line 5
7	Forecasted New England Power Company (NEP) NEEWS CWIP (FNCWIP)	Appendix C xiii	\$ 102,335,530	Project Detail
8	NEEWS NEP Cost of Capital Rate (NCOC)	Appendix C xiv	14.40564%	Worksheet 2, Cap Structure 12.89%
9	Forecasted Revenue Requirements for FNCWIP		\$ 14,742,088	Line 7 * Line 8
	Derivation of Carrying Charge (CCF)			
10	Investment Return and Income Taxes	(A)	\$76,474,592	Worksheet 2, excluding NEEWS CWIP
11	Depreciation Expense	(B)	21,116,358	Summary, Line 16
12	Amortization of Loss on Reacquired Debt	(C)	47,186	Summary, Line 17
13	Investment Tax Credit	(D)	(202,818)	Summary, Line 18
14	Property Tax Expense	(E)	16,940,728	Summary, Line 19
15	Payroll Tax Expense	(F)	897,449	Summary, Line 20
16	Operation & Maintenance Expense	(G)	20,238,401	Summary, Line 21
17	Administrative & General Expense	(H)	19,053,632	Summary, Line 22
18	Total Expenses (Lines 10 thru 17)		\$154,565,528	
19	PTF Transmission Plant	(A)(1)(a)	\$986,723,295	Summary, Line 1
20	Carrying Charge Factor (FTPA)		15.66453%	Line 18 / Line 19

				CAPITALIZATION 12/31/2012	CAPITALIZATION COST OF RATIOS CAPITAL	COST OF EQUITY CAPITAL PORTION
			LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY	\$ 410,350,000 \$ 1,111,700 \$ 832,696,968	32.98% 0.09% 66.93% 0.63% 0.63% 0.63% 0.63%	0.01% 0.01%
			TOTAL INVESTMENT RETURN	\$1,244,158,668	100.00%	8.01% 7.80%
Cost of Capital Rate=		0.0004				
(a) Weighted Cost of Capital	=	0.0801	PTF Inv. Eq. AFUDC			
(b) Federal Income Tax	= (	R.O.E. +	( (Tax Credit + of Deprec. Exp. ) /	PTF Inv. Base)	x Federal Income Tax Rate - Federal Income Tax Rate	.) )
	= (	0.0780 +	·( (\$202,818) + \$798,777 ) /	\$602,178,767 )	x 0.35	<u>)</u>
	=	0.0425329			0.00	,
(c) State Income Tax	= (	R.O.E. +	PTF Inv. Eq. AFUDC ( (Tax Credit + of Deprec. Exp. ) /	PTF Inv. Base)	+ Federal Income Tax - State Income Tax Rate	)* State Income Tax Rate
	= (		·( (\$202,818) + \$798,777 ) /	\$602,178,767 )	+ 0.0425329	)* 0.059466
	=	0.0076834			- 0.059466	)
		0.0070004				
(a)+(b)+(c) Cost of Capital Rate	=	0.1303163				
		(PTF)				
INVESTMENT BASE		\$602,178,767	From Worksheet 1			
x Cost of Capital Rate		0.1303163				
= Investment Return and Income Taxes		\$78,473,709	To Worksheet 1			
INVESTMENT BASE (Excluding NEEW	S CWIP)	\$586,838,272	From Worksheet 1			
x Cost of Capital Rate		0.1303163				
= Investment Return and Income Taxes		\$76,474,592	To Worksheet 2			
Post 2003 PTF Investment Base w/ In Plant In-Service	cremental 100 bps:	\$ 209,862,929	From Attachment 1			
Accumulated Depreciation Accumulate Deferred Income Taxes Total Post-2003 Investment		(44,104,898) (47,203,372) \$ 118,554,659	From Worksheets 5 & 7 From Worksheets 5 & 7 Calculated			
Incremental ROE:	1.00%		Calculated			
Federal Income Taxes: State Income Taxes:		0.00360 0.00065	Per Attachment F Per Attachment F			
Cost of Capital Rate Incremental Return and Taxes on Post-	2003 PTF Investment	0.01094 <b>1,296,988</b>				
NEEWS In-Service w/ Incremental 12	5 bps:					
New England Power NEEWS In-Servi Accumulated Depreciation		\$ 60,742,476 (12,765,586)	PowerPlant PTF 4 & 5 reports - PTF only From Worksheets 3 & 5			
Accumulate Deferred Income Taxes Total New England Power NEEWS Inc	vestment	(13,662,089) \$ 34,314,801	From Worksheets 3 & 5 Calculated			
Incremental ROE:	1.25%		Calculated			
Federal Income Taxes: State Income Taxes:		0.00451 0.00081	Per Attachment F Per Attachment F			
Cost of Capital Rate Incremental Return and Taxes on NEEV	VS PTF Investment	0.01369 <b>\$ 469,770</b>				
NEEWS in CWIP  New England Power NEEWS In-Servi	ce	\$ 15,340,495	From Worksheets 3			
Accumulated Depreciation Accumulate Deferred Income Taxes		0				
Total New England Power NEEWS Inv Incremental ROE:	vestment	\$ 15,340,495 6 0.00837	Calculated  Calculated			
Federal Income Taxes: State Income Taxes:	1.237	0.00837 0.00451 0.00081	Per Attachment F Per Attachment F			
Cost of Capital Rate Incremental Return and Taxes on NEEV	VS PTF Investment	0.01369 \$ 210,011				
NEETHO AND AND A STATE OF						
NEEWS Allocation Factor  Total Transmission Investment		\$1,868,987,087	Worksheet 5 Line 2			
Total NEEWS In-Service - NEI For Accumulated Depreciation		\$ 60,742,476 3.2500%	Plant Accounting Records			
NEEWS Allocation Factor Plant Allocation Factor For Accumulated Deferred Inco	nme Taves	3.2500% 0.993561 3.2290%	Worksheet 5 Line 16			
i oi Accumulateu Dereneu IIIO	ome ranes	3.227070				

PTF Revenue Requirements

Worksheet 2 of 6

Page 2 of 2

New England Power Company
Annual Revenue Requirements
For Costs in 2013

Shading denotes an input

	CAPITALIZATION 12/31/2013	CAPITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY	\$ 410,350,000 \$ 1,111,700 \$ 832,696,968	32.98% 0.09% 66.93%	0.63% 6.02% 12.89%	0.21% 0.01% 8.63%	0.01% 8.63%
TOTAL INVESTMENT RETURN	\$1,244,158,668	100.00%		8.85%	8.64%

#### Cost of Capital Rate=

(a) Weighted Cost of Capital	= 0.088	<u> 55</u>				
(b) Federal Income Tax	= ( R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base) x	Federal Income Tax Rate Federal Income Tax Rate	)
	= ( 0.0864	+( (\$202,818) +	\$798,777 ) /	\$602,178,767 ) x	0.35 0.35	))
	= 0.047056	<u> </u>				
(c) State Income Tax	= ( R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base) +	Federal Income Tax State Income Tax Rate	)* State Income Tax Rate
	= ( 0.0864	+( (\$202,818) +	\$798,777 ) /	\$602,178,767 ) +	0.0470560 0.059466	)* 0.059466
	= 0.008500	<u>4</u>				,
(a)+(b)+(c) Cost of Capital Rate	= 0.144056	4				

PTF Revenue Requirements Worksheet 3 of 6

#### Shading denotes an input

Line No.			(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+ 3)	\$	6,142,337	99.8004% (a)	\$6,130,077 \$6,130,077	52.7945% (b)_ =	\$986,723,295 \$0 \$3,236,344 \$989,959,639	Attachment 1, Page 1 Attachment 2 FERC Form 1 page 207.99g
5	<u>Transmission Plant Held for Future Use</u>	\$	1,026,919		\$1,026,919	52.7945% (b)_	\$542,157	FERC Form 1 page 214.2d,4d,9d
6 7 8	Transmission Accumulated Depreciation Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+ 7)	\$	(392,787,258) (4,952,011)	99.8004% (a)	(\$392,787,258) (\$4,942,127) (\$397,729,385)	52.7945% (b) 52.7945% (b)_	(\$207,370,069) (\$2,609,171) (\$209,979,240)	FERC Form 1 page 219.25b FERC Form 1 Page 219.28b
9 10 11	Transmission Accumulated Deferred Taxes Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	\$	(474,541,945) 48,694,028		(\$471,486,369) \$48,380,487 (\$423,105,882)	52.7945% (b) 52.7945% (b)_	(\$248,918,871) \$25,542,236 (\$223,376,635)	FERC Form 1 page 113.62-64 FERC Form 1 page 111.82
12	Transmission Loss on Reacquired Debt	\$	193,522	100.0000%	\$193,522	52.7945% (b)_	\$102,169	FERC Form 1 Page 111.81c
13 14 15	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 ( Liability Account 254 ) Total (line 13+14+ 15)	\$ \$ \$	42,952,261 - \$42,952,261	99.8004% (a) 100.0000% 100.0000%	\$0 \$42,952,261 \$0 \$42,952,261	52.7945% (b) 52.7945% (b) 52.7945% (b)_	\$0 \$22,676,431 \$0 \$22,676,431	FERC Form 1 Page 232.8f FERC Form 1 Page 232.6f FERC Form 1 Page 278
17	<u>Transmission Prepayments</u>	\$	267,164	99.8004% (a)	\$266,631	52.7945% (b)_	\$140,767	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$	3,525,898		\$3,525,898	52.7945% (b)_	\$1,861,480	FERC Form 1 Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)					- - -	\$20,238,401 \$19,053,632 \$0 \$39,292,033 0.1250 \$4,911,504	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 8 x 45 / 360
26	NEEWS CWIP	\$	15,340,495			=	\$15,340,495	Plant Accounting Records

New England Power Company

<sup>(</sup>a) Worksheet 5 Line 11 (b) Worksheet 5 Line 3 (c) Worksheet 5 Line 16

PTF Revenue Requirements Worksheet 4 of 6

#### Shading denotes an input

#### **New England Power Company**

Line No. 1 2 3	Depreciation Expense Transmission Depreciation General Depreciation Total (line 1+2)	(1) Total (g) \$39,663,532 \$334,405	Wage/Plant Allocation Factors (3) = (1)*(2) Transmission Allocated \$39,663,532 \$333,738 \$39,997,270	PTF Allocation Factor (b) 52.7945% 52.7945%	(5) = (3)*(4) PTF Allocated \$20,940,163 \$176,195 \$21,116,358	Source Reference for Col (1)  FERC Form 1 Page 336.7b  FERC Form 1 Page 336.10b
4	Amortization of Loss on Reacquired Debt	\$89,376	\$89,376	52.7945%	\$47,186	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$384,165)	(\$384,165)	52.7945%	(\$202,818)	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$32,088,055	\$32,088,055	52.7945%	\$16,940,728	Property Tax - Footnote (e)
7 8 9 10 *	Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3)  * Station Expenses & Rents - #562 & #567 O&M less lines 8, 9 & 10	\$61,559,182 \$14,396,724 \$8,828,161 \$0 \$38,334,297	\$61,559,182 \$14,396,724 \$8,828,161 \$38,334,297	52.7945% 52.7945% 52.7945% 52.7945%	\$32,499,862 \$7,600,678 \$4,660,783 \$0 \$20,238,401	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
12 13 14 15 16 17	Transmission Administrative and General Total Administrative and General Less: Properly Insurance (4924) Less: Regulatory Commission Expenses (4928) Less: General Advertising Expense (4930.1) Subtotal [line 12 minus (13 lbru 15)] Plus: Properly Insurance Allocated using Plant Allocation Plus: Regulatory Commission Expense	\$36,234,131 \$904,273 \$2,575,980 \$0 \$32,753,878 \$904,273 \$2,418,553	99.8004% (a) \$32.688,501 99.3661% (c) \$898,450 99.3561% (c) \$2,402,980	52.7945% 52.7945% 52.7945%	\$17,257,731 \$474,332 \$1,268,641	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b  Line 13 Attachment 5 Line 6
19 20 21	Plus: Specifically identified Trans. Related General Advertising Expense Plus: Specifically identified Trans. Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$100,454 \$36,177,158	\$0 99.8004% (a) \$100,253 \$36,090,184	52.7945% 52.7945%	\$0 \$52,928 \$19,053,632	Line 15 2013 FERC Form1 Page 350.15d
22	Payroll Tax Expense	\$1,703,290	99.8004% (a) \$1,699,890	52.7945%	\$897,449	FERC Form 1 Page 263.3,4i - Footnote (d)
(0	d) Payroli taxes - G/L 408.1		(e) Property Taxes			
	Payroll Taxes Total	\$1,703,290 \$1,703,290	Massachusetts New Hampshire Vermont Maine Rhode Island Connecticut	\$27,570,229 \$3,190,388 \$1,178,548 \$0 \$148,889 \$0 \$32,088,055		

<sup>(</sup>a) Worksheet 5, Line 11
(b) Worksheet 5 Line 3
(c) Worksheet 5 Line 16
(d) Transmission Only - Payroll Taxes - General Ledger query
(e) Transmission Only - Property Taxes - Stephen Adams, Property Taxes
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

PTF Revenue Requirements
Worksheet 5 of 6

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1	PTF Transmission Investment	\$986,723,295	Attachment 1, Page 1
2	Total Transmission Investment	\$1,868,987,087	FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	52.7945%	
	Transmission Wages and Salaries Allocation Factor		
4	Direct Transmission Wages and Salaries	\$0	FERC Form 1 Page 354.14b
5	Affiliated Company Transmission Wages and Salaries	\$18,057,103	General Ledger Query
6	Total Transmission Wages and Salaries (Line 4 + Line 5)	\$18,057,103	
7	Total Wages and Salaries	\$0	FERC Form 1 Page 354.28b
8	Administrative and General Wages and Salaries	\$0	FERC Form 1 Page 354.27b
9	Affiliated Company Wages and Salaries less A&G	\$18,093,209	General Ledger Query
10	Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$18,093,209	
11	Percent Allocation (Line 6/Line 10)	99.8004%	
	Plant Allocation Factor		
12	Total Transmission Investment	\$1,868,987,087	Line 2
13	plus Transmission-Related General Plant (Line 2 of Wkst. 3)	\$6,130,077	Worksheet 5, Line 3, Column 3
14	= Revised Numerator (Line 12 + Line 13)	\$1,875,117,164	
15	Total Plant in Service	\$1,887,269,647	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.3561%	
	Post-2003 PTF Allocation Factor		
17	Total Post-2003 PTF Investment	\$ 209,862,929	Attachment 1 Line 7
18	Total Transmission Investment	\$1,868,987,087	Line 2
19	Percent Allocation (Line 17/Line 18) for Post-2003 to Total Tx	11.2287%	
20	Total Invst in Tx Plant/Total Plant in Serv *		
21	Post-2003 PTF Tx Plant/Total Invst in Tx Plant	11.1564%	Line 19 * Line 16

PTF Revenue Requirements
Worksheet 6 of 6

#### New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2013

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

		TOTA	<b>NL</b>
PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
		(a)	(b)
HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$(
Bell Rock Road	Page 330.5 Line 12 Col (n)	\$0	
Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabroo	Page 330.1 Line 8 Col (n)	\$0	
Public Service CoMoore 115 kV Substation	Page 330.1 Line 5 Col (n)	\$0	
Chester SVC	Transmission Billing		\$0
HQ Phase II - AC in MA	Page 330 Line 11 Col (n)	\$0	
Comerford 115 kV Substation	Page 330.1 Line 12 Col (n)	\$0	
	Totals	\$0	\$(
	HQ Phase II - AC in MA Bell Rock Road Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabroo Public Service CoMoore 115 kV Substation Chester SVC HQ Phase II - AC in MA	HQ Phase II - AC in MA  Pg 332 Line 5 Col (g)  Bell Rock Road  Page 330.5 Line 12 Col (n)  Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabroo  Public Service CoMoore 115 kV Substation  Page 330.1 Line 8 Col (n)  Page 330.1 Line 5 Col (n)  Chester SVC  Transmission Billing  HQ Phase II - AC in MA  Page 330 Line 11 Col (n)	PTF Supporting Facilities

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

#### **Attachment 1**

Parcent

#### New England Power Company 2013 Informational Filing PTF Plant Allocation

			_	Pre/Post
1	2012	Pre-1997 PTF Transmission Plant	\$352,959,991	
2	2012	Post-1996 PTF Transmission Plant	\$918,015,798	
3	2013	Additions/Retirements	\$65,163,152	
4	2013	Pre-1997 PTF Transmission Plant	\$349,415,646	26.15%
5	2013	Post-1996 PTF Transmission Plant	\$986,723,295	73.85%
6	2013	Total PTF Transmission Plant	\$1,336,138,941	100.00%
7	2013	Post-2003 PTF Transmission Plant	\$209,862,929	

#### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5
- 7 PTF Plant Report: Post 2003 RSP Projects

#### GROSS PLANT ASSOC. WITH HVDC LEASES 2013

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$0
2 3 4	Allocation Miles used by NHH (a) Total miles at Comerford Station Percentage of Total Gross Plant leased by NHH (a)	0 0 0%
5	Total Gross Plant leased by NHH (a)	\$0
6	Total Land from Sandy Pond to New Hampshire	\$0
7	HVDC lines occupy 35% of Right of Way	0%
8	Total Land leased by NEH (a)	\$0
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$0

#### Source:

- 1 FERC Form 1, Page 423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 Total miles per lease agreement
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)".

#### New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2013</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$1,515,488
2	Less: Specifically identified Transmission-Related	
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission	\$9,664
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
	2011 Transmission	\$155,706
	2012 Transmission	\$210,246
	2013 Transmission	\$169,241 \$1,129,112
		\$1,128,113
3	Total unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.3561%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,881
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	<b>\$1,128,113</b>
7	Total Transmission-Related Equity AFUDC	\$1,512,994
8	Post-96 PTF Allocation Factor	52.7945%
9	Transmission-Related Equity AFUDC	\$798,777
		,

#### Sources:

- 1 & 2 Transmission Rates includes \$9,668 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 6 Post-96 PTF Allocation Factor
  - 9 Line 7 \* Line 8

#### New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2013	MECO 2013
1	Total Integrated Facilities Charges	\$0	\$0
2	Total 2013 PTF Property Total Transmission Plant in 2013	\$0 \$0	\$0 \$0
4	NECO or MECO PTF Plant Allocator	0.00%	0.00%
5	PTF Related Integrated Facilities Charge	\$0	\$0
6	Total Integrated Facilities	<u></u>	\$0

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

#### New England Power Company Development of 2013 Regulatory Commission Expense

Line <u>No.</u>		<u>2013</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$2,575,980	2013 FERC Form1 Page 350.46d (page
2	Less: New Hampshire PUC Assessment	\$56,973	2013 FERC Form1 Page 350.1d
3	Less: Mass Emergency Fund	\$0	2013 FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$0	2013 FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$100,454	2013 FERC Form1 Page 350.15d
6	Total Federal Assessments	\$2,418,553	Line 1 - (Line 2-5)

#### **Attachment 6**

#### Transmission Rents Received from Electric Property

#### **New England Power Company**

	<u>2013</u>
Revenues	\$1,034,650
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,034,650
PTF Allocation	52.7945%
Total PTF Revenue	\$546,238

#### Source:

Revenues: SAP account C4540000, C454000W, C4545000

#### **Attachment 7**

#### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

#### **New England Power Company**

	<u>2013</u>
Revenues	\$514,715
Post-96 PTF Percent	73.8489%

Total Post-96 PTF Revenue \$380,112

Source: Short Term Through and Out Revenues from ISO New England

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:		
Revenue Requirements for (year):	Calen	Calendar Year 2013
Rates Effective for the Period: Through:	des	June 2014 September 2014
Customer:	New England Power Company	any
Customer's NABs Number:		
Name of Participant responsible for customer's billing:		
DUNs number of Participant responsible for customer's billing:		
	Pre-97 Revenue <u>Requirements</u>	Post-96 Revenue <u>Requirements</u>
Total of Attachment F - Sections A through I	\$144,558,044 (a)	\$158,541,414 (1)
Total of Attachment F - Section J - Support Revenue	\$5,208,613 (b)	(b) <b>80</b>
Total of Attachment F - Section K - Support Expense	\$697,433 (c)	(4) <b>80</b>
Total of Attachment F - Section (L through O)	(\$328,037) (d)	(\$926,350) <sup>(())</sup>
Sub Total - Sum (A through I) - J + K + (L through O)	\$139,718,827 (e)=(a)-(b)+(c)+(d)	\$157,615,064 (1)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$55,865,456 (3)
Annual True-up (per Attachment C to Attachment F Im[plementation Rule	ule N/A ®	N/A (m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$139,718,827 (ŋ=(e) + (l)	\$213,480,520 (0)=(1)+(10)+(10)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirements and Post-96 Revenue Requirements Subtotals for rate calculations under the Tariff:	ements nder the Tariff:	\$353,199,347 (p) = (n) + (o)

PTF Revenue Requirements

Worksheet 1 of 6

# New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2013

## PRE-1997

	Reference	Worksheet 3, line 1&2 column 5 Worksheet 3, line 3 column 5 Worksheet 3, line 5 column 5	Worksheet 3, line 8 column 5 Worksheet 3, line 11 column 5 Worksheet 3, line 12 column 5 Worksheet 3, line 16 column 5	Worksheet 3, line 17 column 5 Worksheet 3, line 18 column 5 Worksheet 3, line 25 column 5			Worksheet 2 Worksheet 4, line 3, column 5 Worksheet 4, line 4, column 5 Worksheet 4, line 5, column 5 Worksheet 4, line 6, column 5 Worksheet 4, line 22, column 5 Worksheet 4, line 21, column 5 Worksheet 4, line 6 Worksheet 6 Worksheet 6 Worksheet 6
	NEP	\$335,700,109 \$1,146,049 \$191,988 \$337,038,146	(\$74,357,497) (\$79,101,760) \$36,180 \$8,030,140 \$191,645,209	\$49,848 \$659,184 \$1,739,254	\$194,093,495		\$25,305,599 \$7,477,690 \$16,709 (\$71,822) \$5,999,022 \$5,999,022 \$7,166,788 \$6,747,241 \$91,599,014 (\$5,208,613) \$697,433 \$697,433 \$697,433 \$134,604) (\$134,604) (\$133,718,827
Attorney T	Attachment r Reference	Section: (A)(1)(a) (A)(1)(b) (A)(1)(c)	(A)(1)(d) (A)(1)(e) (A)(1)(f) (A)(1)(g)	(A)(1)(h) (A)(1)(i) (A)(1)(j)			\$@QQ@£@£\$\$Q
Shading denotes an input	I. INVESTMENT BASE	Transmission Plant General Plant Plant Held For Future Use Total Plant (Lines 1+2+3)	Accumulated Depreciation Accumulated Deferred Income Taxes Loss On Reacquired Debt Other Regulatory Assets Net Investment (Line 4+5+6+7+8)	Prepayments Materials & Supplies Cash Working Capital	Total Investment Base (Line 9+10+11+12)	II. REVENUE REQUIREMENTS	Investment Return and Income Taxes Depreciation Expense Amortization of Loss on Reacquired Debt Investment Tax Credit Property Tax Expense Payroll Tax Expense Payroll Tax Expense Operation & Maintenance Expense Administrative & General Expense Administrative & General Expense Transmission Related Integrated Facilities Charge Transmission Support Revenue Transmission Support Expense Transmission Related Expense from Generators Transmission Related Taxes and Fees Charge Revenue for ST Trans. Service Under NEPOOL Tariff Transmission Rents Received from Electric Property Total Revenue Requirements (Line 14 thru 28)
200		Line No. 1 2 3 4	<b>ωωνω</b> ο	1 1 1 2	13	=	4 1 2 2 5 5 4 5 5 5 6 6 6 6 6 6 6 6 6 6 6 6 6 6

# New England Power Company Annual Revenue Requirements For Costs in 2013

Annual J

					CAPITALIZATION 12/31/2013	CAI	CAPITALIZATION COS RATIOS CAF	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION	
			<u>a</u>	LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY	\$ 410,350,000 \$ 1,111,700 \$ 832,696,968		32.98% 0.09% 66.93%	0.63% 6.02% 11.64%	0.21% 0.01% 7.79%	0.01%	
			TOTAL INV	TOTAL INVESTMENT RETURN	\$1,244,158,668		100.00%		8.01%	7.80%	
Cost of Capital Rate=											
(a) Weighted Cost of Capital	II	0.0801									
(b) Federal Income Tax	П	( R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	×	Federal Income Tax Rate Federal Income Tax Rate				
	II	0.0780	+( (\$71,822) +	\$282,862)/	\$194,093,495	×	0.35				
	II	0.0425855					0.35				
		000710	PTF Inv	Ea. AFUDC							
(c) State Income Tax	Ш	( R.O.E. +	( (Tax Credit +	of Deprec. Exp. ) /	PTF Inv. Base)	+ '	Federal Income Tax State Income Tax Rate	*	State Income Tax Rate	te l	
	II	0.0780	+( (\$71,822) +	\$282.862)	\$194.093.495	+	0.0425855	*_	0.059466	99	
							0.059466				
	II	0.0076929									
(a)+(b)+(c) Cost of Capital Rate	II	0.1303784									
		(PTF)									
INVESTMENT BASE		\$194,093,495	From Worksheet 1								
x Cost of Capital Rate		0.1303784									
= Investment Return and Income Taxes	ø	\$25,305,599	To Worksheet 1								

(a) Worksheet 5 Line 11(b) Worksheet 5 Line 3(c) Worksheet 5 Line 16

	Source Reference	Attachment 1, Page 1 Attachment 2 FERC Form 1 Page 207.99g	FERC Form 1 page 214.2d,4d,9d	FERC Form 1 page 219.25b FERC Form 1 Page 219.28b	FERC Form 1 Page 113.62-64 FERC Form 1 Page 111.82	FERC Form 1 Page 111.81c	FERC Form 1 Page 232.8f FERC Form 1 Page 232.6f FERC Form 1 Page 278	FERC Form 1 Page 111.57c	FERC Form 1 Page 227.8c	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 6 x 45 / 360
	(4) PTF Allocation Factor (b) Allocated Allocated	\$349,415,646 (\$13,715,537) 18.6955% (b) \$1,146,049 \$336,846,158	18.6955% (b) \$191,988	18.6955% (b) (\$73,433,542) 18.6955% (b) (\$923,955) (\$74,357,497)	18.6955% (b) (\$88,146,734) 18.6955% (b) \$9,044,974 (\$79,101,760)	18.6955% (b) \$36,180	18.6955% (b) \$8,030,140 18.6955% (b) \$8,030,140 18.6955% (b) \$8,030,140	18.6955% (b) \$49,848	18.6955% (b) \$659,184	\$7,166,788 \$6,747,241 \$0 \$13,914,029 0.1250 \$1,739,254
New England Power Company	(2) $(3) = (1)^*(2)$ Allocation Transmission Factors Allocated	99.8004% (a) \$6,130,077 \$6,130,077	\$1,026,919	(\$392,787,258) 99.8004% (a) (\$4,942,127) (\$397,729,385)	99.3561% (c) (\$471,486,369) 99.3561% (c) \$48,380,487 (\$423,105,882)	100.0000% \$193,522	\$9.8004% (a) \$42,952,261 100.0000% \$42,952,261 \$0.0000% \$52,261	99.8004% (a) \$266,631	\$3,525,898	
	(1) Total	\$ 6,142,337	\$ 1,026,919	\$ (392,787,258) \$ (4,952,011)	\$ (474,541,945) \$ 48,694,028	\$ 193,522	\$ 42,952,261 \$ - - \$42,952,261	\$ 267,164	\$ 3,525,898	
tracino octoros scisodo	Origaning deriotes an impart	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+ 3)	Transmission Plant Held for Future Use	Transmission Accumulated Depreciation Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+7)	Transmission Accumulated Deferred Taxes Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	Transmission Loss on Reacquired Debt	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 (Liability Account 254) Total (line 13+14+ 15)	Transmission Prepayments	Transmission Materials and Supplies	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)
	Line No.	− 0 m 4	2	9 / 8	6 1 1	12	£ 4 £ £	17	48	0 0 7 7 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8 8

PTF Revenue Requirements

Worksheet 4 of 6

<sup>(</sup>a) Worksheet 5 Line 11
(b) Worksheet 5 Line 3
(c) Worksheet 5 Line 16
(d) Transmission Only - Payroll Taxes - General Ledger query
(e) Transmission Only - Property Taxes - Stephen Adams, Property Taxes
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

PTF Revenue Requirements Worksheet 5 of 6		Source Reference		Mtachment 1, Page 1 PERC Form 1 Page 207.58g - Page 200.4b	<b>%</b>		\$0 03 General Ledger Query	\$0 \$0 FERC Form 1 Page 354.28b \$0 General Ledger Query	<b>%</b>	17 Line 2 Worksheet 3, Line 3, Column 3 14	7 FERC Form 1 Page 207.104g - Page 200.4b	<b>"</b>
			NEP	\$349,415,646 \$1,868,987,087	18.6955%		\$18,057,1 \$18,057,1	\$18,093,2 \$18,093,2	99.8004%	\$1,868,987,087 \$6,130,077 \$1,875,117,164	\$1,887,269,647	99.3561%
	Shading denotes an input		PTF Transmission Plant Allocation Factor	PTF Transmission Investment	Percent Allocation (Line 1/Line 2)	Transmission Wages and Salaries Allocation Factor	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	Percent Allocation (Line 6/Line 10)	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant = Revised Numerator (Line 12 + Line 13)	Total Plant in Service	Percent Allocation (Line 14 / Line 16)
		Line No.		<del>-</del> 7	က		4 ი ი	7 8 9 10	<del></del>	5 to 4	15	16

# New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2013

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

	FERC Form 1 Reference Pg 332 Line 5 Col (g)	Revenues (a)	Cynonical
	Pg 332 Line 5 Col (g)	(6)	Expenses
	Pg 332 Line 5 Col (g)	(a)	(p)
			\$109,892
	Page 330.5 Line 12 Col (n)	\$39,828	
Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabroo∤	Page 330.1 Line 8 Col (n)	989'628\$	
Public Service CoMoore 115 kV Substation	Page 330.1 Line 5 Col (n)	\$14,736	
	Transmission Billing		\$587,541
HQ Phase II - AC in MA	Page 330 Line 11 Col (n)	\$4,736,248	
VT Elec Co.  Comerford 115 kV Substation	Page 330.1 Line 12 Col (n)	\$38,115	
	Totals	\$5,208,613	\$697,433
> 일     [휴	4/MA border - Tewksbury 394 Line (Seabrook 115 kV Substation tion	A border - Tewksbury 394 Line (Seabrool 5 kV Substation	A border - Tewksbury 394 Line (Seabrool Page 330.1 Line 8 Col (n)  5 kV Substation Transmission Billing  Page 330.1 Line 5 Col (n)  Page 330.1 Line 11 Col (n)  Page 330.1 Line 12 Col (n)  Totals

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

# New England Power Company 2013 Informational Filing PTF Plant Allocation

Percent Pre/Post

			26.15%	73.85%	100.00%
\$352,959,991	\$918,015,798	\$65,163,152	\$349,415,646	\$986,723,295	\$1,336,138,941
Pre-1997 PTF Transmission Plant	Post-1996 PTF Transmission Plant	Additions/Retirements	Pre-1997 PTF Transmission Plant	Post-1996 PTF Transmission Plant	Total PTF Transmission Plant
2012	2012	2013	2013	2013	2013
_	7	က	4	5	9

# Sources:

- 1 PTF Plant Reports for previous year
  - PTF Plant Reports for previous year
    - Line 6 Line 1 + Line 2
- PTF Plant Reports for current year
- PTF Plant Reports for current year Line 4 + 5
  - 2 PTF Plar
    3 Line 6 1
    4 PTF Plar
    5 PTF Plar
    6 Line 4 +

# GROSS PLANT ASSOC. WITH HVDC LEASES

(HVDC) NHH/NEH <u>LEASE</u>	\$14,975,714	224 \$253	%68	\$13,328,385.46	\$1,106,146	35%	\$387,151	\$13,715,537
	Gross Plant Value Comerford Station to Tewksbury Line	Allocation Miles used by NHH (a) Total miles at Comerford Station	Percentage of Total Gross Plant leased by NHH (a)	Total Gross Plant leased by NHH (a)	Total Land from Sandy Pond to New Hampshire	HVDC lines occupy 35% of Right of Way	Total Land leased by NEH (a)	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement
	~	9 %	4	2	9	_	∞	თ

# Source:

()     
.2, Line 1
22.2, 423
; Page 42
35 col (I)
s 18 + 3
3.1, Line
.22.1, 423
, Page 4
C Form 1
FERO
_

- Total miles used per lease agreement
- FERC Form 1, Page 422.1, Lines 18 + 35 col (f); Page 422.2, Line 1 col (f)
  - Line 2 / Line 3
    - Line 1 \* Line 4
- FERC Form 1, Page 422, 423, Line 20 col (j)
  - Percentage per lease agreement
- Line 6 \* Line 7 0 × 4 × 0 × 8 0
- Line 5 + Line 8

## Note:

NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)". (a)

# New England Power Company Determination of Book Depreciation on Equity AFUDC

2013 \$1,515,488	\$54,708 \$23,543 \$9,664 \$13,959 \$42,457 (\$8,299) \$23,561 \$8,889 \$16,500 \$15,518 \$49,757 \$64,352 \$42,418 \$57,508 \$98,437 \$79,948 \$155,706 \$210,246 \$169,241	\$387,375	\$384,881 \$1,128,113 \$1,512,994	18.6955% \$282,862	
1 Total Current Year Book Depreciation on Equity AFUDC	2 Less: Specifically Identified Transmission-Related Tewksbury Line Hydro-Quebec MontaupTransmission 1998 Transmission 2000 Transmission 2001 Transmission 2004 Transmission 2005 Transmission 2006 Transmission 2007 Transmission 2007 Transmission 2007 Transmission 2010 Transmission 2011 Transmission 2011 Transmission 2012 Transmission 2013 Transmission 2013 Transmission 2013 Transmission	3 Total Unidentified Book Depreciation on Equity AFUDC 4 Plant Allocator Factor	, , , ,	8 Pre-97 PTF Allocation Factor 9 Transmission-Related Equity AFUDC	Sources:  1 & 2 Transmission Rates includes \$9,668 from Montaup 3 Line 1 - Line 2 4 Worksheet 5 - PTF Plant Allocation Factor 5 Line 3 * Line 4 6 Line 2 7 Line 5 + Line 6 8 Worksheet 5 - Pre-97 PTF Allocation Factor 9 Line 7 * Line 8

New England Power Company
Determination of the PTF Related Integrated Facilities Charges

# Source:

- FF1 Page 330.4 Lines 13 & 14 Col (n)
- PowerPlant Reports
- FF1 Page 207 Line 58 (g)

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- Line 2 / Line 3
- Line 1 \* Line 4
- Line 5 Totals for Narragansett and Massachusetts Electric 4 12 0

Shading denotes an input

New England Power Company
Development of 2013 Regulatory Commission Expense

Source	2013 FERC Form1 Page 350.46d (page 323.189b) 2013 FERC Form1 Page 350.1d 2013 FERC Form1 Page 350.7d 2013 FERC Form1 Page 350.8d 2013 FERC Form1 Page 350.15d	Line 1 - (Line 2-5)
<u>2013</u>	\$2,575,980 \$56,973 \$0 \$0 \$100,454	\$2,418,553
	Total Regulatory Commission Expense - NEP Less: New Hampshire PUC Assessment Less: Mass Emergency Fund Less Mass DPU Special Assessment Less: Utility Expenses	Total Federal Assessments
Line No.	- 0 0 4 u	9

# Transmission Rents Received from Electric Property

# **New England Power Company**

	2013
Revenues	\$1,034,650
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,034,650
PTF Allocation	18.6955%
Total PTF Revenue	\$193,433

Source: Revenues: SAP account C4540000, C454000W, C4545000

# Revenue for Short-Term Transmission Service under the NEPOOL Tariff

# New England Power Company

<u>2013</u> \$514,715	26.1511%	\$ 134,604
Revenues	Pre-97 PTF Percent	Total Pre-97 PTF Revenue

Source: Short Term Through and Out Revenues from ISO New England

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:				
Revenue Requirements for (year):	Calen	Calendar Year 2013		
Rates Effective for the Period: Through:	Cept	June 2014 September 2014		
Customer:	New Englar	New England Power Company		
Customer's NABs Number:				
Name of Participant responsible for customer's billing:				
DUNs number of Participant responsible for customer's billing:				
	July 31, 2014 Informational Filing	tional Filing	Supplemental Filing	iling
	Pre-97 Revenue <u>Requirements</u>	Post-96 Revenue <u>Requirements</u>	Pre-97 Revenue <u>Requirements</u>	Post-9 Requ
Total of Attachment F - Sections A through I	\$142,889,550 (a)	\$162,544,944 ()	\$144,558,044 (a)	\$158
Total of Attachment F - Section J - Support Revenue	\$5,207,983 (b)	® <b>0\$</b>	\$5,208,613 (b)	
Total of Attachment F - Section K - Support Expense	\$713,765 (c)	(u) <b>0\$</b>	\$697,433 ©	
Total of Attachment F - Section (L through O)	(\$322,516) (a)	(\$948,601) <sub>0</sub>	(\$328,037) (d)	33
Sub Total - Sum (A through I) - J + K + (L through O)	\$138,072,817 (0)=(0)+(0)+(0)+(0)	\$161,596,343 <sub>0</sub>	\$139,718,827 (e)=(a)-(b)+(c)+(d)	\$157
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$54,717,557 (8)	N/A	\$55,
Annual True-up (per Attachment C to Attachment F Implementation Rule)	\$26,359,418 (0)	(\$34,261,510) (m)	\$32,171,756 (1)	(\$28)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$164,432,235 (n)=(0)+(l)	\$182,052,390 (0)=(0+(0)+(m))	\$171,890,583 (n)=(e)+(l)	\$184
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirements & Post-96 Revenue Requirements Subtotals, Forecasted Revenue Requirements and True-ups (including interest)		\$346,484,625 (p) = (n) + (o)		\$356

© © 0\$

(\$926,350)

\$157,615,064

\$55,865,456

Post-96 Revenue Requirements

\$158,541,414 (

# Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Shading denotes an input

	Calendar Year 2013	June 2014 September 2014	New England Power Company			:Bu	Pre-97 Revenue Post-96 Revenue Requirements Requirements	\$144,558,044 (a) \$158,541,414 (i)	\$5,208,613 (t) \$0 (t)	\$697,433 (c) \$0 (h)	(\$328,037) (d) (\$926,350) (l)	\$139,718,827 (e)=(a)-(p)+(c)-(d) \$157,615,064 (l)	N/A \$55,865,456 (8)	entation Rule) \$32,171,756 (i) (\$28,795,422) (iii)		\$171,890,583 (n)=(e)+(l) \$184,685,097 (o)=(l)+(k)+(m)	1,890,583 (ŋ=(e)+(i)	1,890,583 (ŋ=(e)+(l)
Submitted on:	Revenue Requirements for (year):	Rates Effective for the Period: Through:	Customer:	Customer's NABs Number:	Name of Participant responsible for customer's billing:	DUNs number of Participant responsible for customer's billing:		Total of Attachment F - Sections A through I	Total of Attachment F - Section J - Support Revenue	Total of Attachment F - Section K - Support Expense	Total of Attachment F - Section (L through O)	Sub Total - Sum (A through I) - J + K + (L through O)	Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	Annual True-up (per Attachment C to Attachment F Implementation Rule)	Adjusted Sub Total - Sum (Sub Total + Eprecast + True-up)		Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirements & Post-96 Revenue Requirements	Annual Revenue Requirement Total = Sum of Pre-97 Rever Post-96 Revenue Requirements Subtotals, Forecasted Read True-ups (including interest)

# New England Power Company Transmission Revenue Requirements of PTF Facilities 2013 True-up

		PRE 97	P	POST 1996	
	I. ANNUAL TRUE-UP PER ROE COMPLIANCE WITH FERC ROE ORDER				
<del>-</del>	Transmission Revenue Requirements (as billed)	\$112,563,456	↔	\$194,752,964	
7	True-up 2013 Actual Annual RR	\$139,718,827	↔	\$157,615,064	
က	(Over)/Under (Line 2 - Line 1)	\$27,155,371		(37,137,900)	
4	Per Month (Line 3/12)	2,262,948		(3,094,825)	
2	Total Rate Year (Over)/Under	\$27,155,371 \$ (37,137,900)	69	(37.137.900)	

FERC Interest Calculation associated with Under / (Over) Transmission Revenue Requirements of PTF Facilities **New England Power Company** 

Undercollection/(Overcollection) \$ Pre 97 Post 96

July 2013 August 2013 September 2013 Initial Billing Period October 2013 (\$37,137,900) June 2013

	0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0	DOCT 1006	FERC Monthly		00 07	905T 1006
p	Balance	Balance	Rate		Interest	Interest
	\$ 27,155,371	\$ (37,137,900)	0.27%	↔	73,320 \$	(100,272)
	27,228,691	(37,238,173)	0.28%		76,240	(104,267)
	27,228,691	(37,238,173)	0.28%		76,240	(104,267)
	27,228,691	(37,238,173)	0.27%		73,517	(100,543)
	27,454,689	(37,547,250)	0.28%		76,873	(105,132)
	27,454,689	(37,547,250)	0.27%		74,128	(101,378)
	27,454,689	(37,547,250)	0.28%		76,873	(105,132)
	27,682,563	(37,858,892)	0.28%		77,511	(106,005)
	27,682,563	(37,858,892)	0.25%		69,206	(94,647)
	27,682,563	(37,858,892)	0.28%		77,511	(106,005)
	27,906,792	(38,165,549)	0.27%		75,348	(103,047)
	27,906,792	(38,165,549)	0.28%		78,139	(106,864)
	•	Total Interest		₩	904,908 \$	(1,237,559)
		True-Up			27,155,371 \$	(37,137,900)
	•	Total TU & Interest		<del>\$</del>	28,060,279 \$	(38,375,459)
	2008	2008-2012 PTF True-up (excludes interest)			4,111,477	9,580,037
	Total Adju	Total Adjusted TU & Interest		₩	32,171,756 \$	(28,795,422)

January 2014 February 2014 March 2014

April 2014 May 2014

November 2013 December 2013

Summary Changes in NEP PTF Revenue Requirements - for June 1, 2014 RNS Rate

	Total	802,819	1,671,396	.,421,443	540,980	,254,876	691,514
	To		4,	4,		3,	\$ 13,
Retroactive Adj	Post-96	131,245 \$	3,922,454	4,005,593	(261,313)	1,782,058	9,580,037
Ret	Pre-97	671,573 \$	748,942	415,850	802,293	1,472,818	4,111,477 \$
	ī	\$					\$
	Total	87,489,083 \$ 169,871,037	188,226,488	196,248,449	222,965,794	251,547,317	\$ 1,028,859,085
As-Filed*	Post-96	\$ 87,489,083	105,284,991	114,618,878	128,435,692	139,646,043	\$ 575,474,687
	Pre-97	\$ 82,381,954 \$	82,941,498	81,629,570	94,530,102	111,901,274	\$ 453,384,398
	Total	\$ 170,673,856 \$	192,897,885	200,669,891	223,506,775	254,802,193	1,042,550,599
Re-Stated	Post-96	\$ 82,620,328 \$	109,207,445		128,174,379	141,428,102	\$ 457,495,875 \$ 585,054,724 \$ 1,042,550,599 \$ 453,384,398 \$ 575,474,687 \$ 1,028,859,085 <mark>\$ 4,111,477 \$ 9,580,037 \$ 13,691,514</mark>
	Pre-97	\$ 83,053,527	83,690,440		95,332,395	113,374,092	\$ 457,495,875
	Applicable Rate Period	June 1, 2009 - May 31, 2010 \$ 83,053,527 \$ 87,620,328 \$	June 1, 2010 - May 31, 2011	June 1, 2011 - May 31, 2012	June 1, 2012 - May 31, 2013	June 1, 2013 - May 31, 2014	Totals

Revised w/ True Up 13,691,514 356,575,680 342,884,167 Ş ᡐ b/f adjustments \$ 175,105,060 \$ 184,685,097 9,580,037 Post-96 ATRR \$ 167,779,106 \$ 171,890,583 b/f adjustments 4,111,477 PRE-97 ATRR June 1, 2014 - Sept 30, 2014 Plus Retroactive Ajustment

\* In compliance with FERC Docket No. EL11-66, the ROE rate was reduced from 11.64% to 11.07% for the period October 01, 2011 - December 31, 2012, Revenue Requirement (RR) years 2011 and 2012 - Rate period June 2012 to May 2014. Since the FERC order was issued in calendar year 2014 after submission of RR years 2011 and 2012, the "As-Filed" RR should be construed as follows:

RR year 2011 (Rate period June 1, 2012 - May 31, 2013) is pro-rated at: 4 mos (June 1, 2011 - Sept 30, 2011) @ 11.64% As-Filed, and 8 mos (Oct 1, 2011 - May 31, 2012) @ 11.07% FERC revised rate - not yet filed. · RR year 2012 (Rate period June 1, 2013 - May 31, 2014) is pro-rated at: 7 mos (June 1, 2012 - Dec 31, 2012) @ 11.07% FERC revised rate - not yet filed, and 5 mos (Jan 1, 2013 - May 2013) @ 11.64% As-Filed.

See Worksheet 1 for details.

Rate period June 1, 2012 - May 31, 2013 (RR year 2011) is pro-rated as follows: 4 mos (June 1, 2011 - Sept 30, 2011) @ 11.64% As-Filed, and 8 mos (Oct 1, 2011 - May 31, 2012) @ 11.07% FERC revised rate - not yet filed.

•

		June 11 -	Sep	ot 11		Pro-rated fo	r 4	months
			P	OST 1996		PRE 97	_	POST 1996
1 Transmission Revenue Requirements	\$	95,301,964	\$1	30,452,381	\$	31,767,321	\$	43,484,127
2 Transmission Revenue Requirements: Re-Stated		96,102,185	1	30,198,129		32,034,062		43,399,376
(Over)/Under Billing (Line 2 - Line 1)	\$	800,222	\$	(254,252)	\$	266,741	\$	(84,751)
			FER	C Order: 11.07%	% Rev	ised ROE Rate		
		Oct 11 -	Ma	y 12		Pro-rated fo	r 8	months
	_	PRE 97	P	OST 1996		PRE 97		POST 1996
1 Transmission Revenue Requirements	\$	94,144,172	\$1	27,427,347	\$	62,762,781	\$	84,951,565
2 Transmission Revenue Requirements: Re-Stated		94,947,500	1	27,162,504		63,298,334		84,775,003
(Over)/Under Billing (Line 2 - Line 1)	\$	803,329	\$	(264,843)	\$	535,553	\$	(176,562)
					Co	ombined		
				PRE 97		POST 1996	_	Total
1 Transmission Revenue Requirements: As-Filed & FERC Order			\$	94,530,102	\$	128,435,692	\$	222,965,794
2 Transmission Revenue Requirements: Re-Stated				95,332,395		128,174,379		223,506,775

**Rate period June 1, 2013 - May 31, 2014 (RR year 2012)** is pro-rated as follows: 7 mos (June 1, 2012 - Dec 31, 2012) @ 11.07% FERC revised rate - not yet filed, and 5 mos (Jan 1, 2013 - May 2013) @ 11.64% As-Filed

(Over)/Under Billing (Line 2 - Line 1)

1 2

### FERC Order: 11.07% Revised ROE Rate

(261,313) \$

540,980

802,293

	June 12 - Dec 12 Pro-rated for 7 months			
	PRE 97	POST 1996	PRE 97	POST 1996
1 Transmission Revenue Requirements	\$ 111,428,286	\$138,305,693	\$64,999,833.61	\$ 80,678,321
2 Transmission Revenue Requirements: Re-Stated	112,896,422	140,062,632	65,856,246	81,703,202
(Over)/Under Billing (Line 2 - Line 1)	\$ 1,468,135	\$ 1,756,939	\$ 856,412	\$ 1,024,881

### As-Filed: 11.64% ROE Rate

	Jaii 12 -	IVIAY 13	Pro-rateu io	1 5 1110111115
	PRE 97	POST 1996	PRE 97	POST 1996
1 Transmission Revenue Requirements	\$ 112,563,456	\$141,522,533	\$46,901,440.08	\$ 58,967,722
2 Transmission Revenue Requirements: Re-Stated	114,042,830	143,339,759	47,517,846	59,724,900
(Over)/Under Billing (Line 2 - Line 1)	\$ 1,479,373	\$ 1,817,226	\$ 616,406	\$ 757,177

### Combined

	PRE 97	POST 1996 Total
L Transmission Revenue Requirements: As-Filed & FERC Order	\$111,901,274	\$ 139,646,043 \$ 251,547,317
2 Transmission Revenue Requirements: Re-Stated	113,374,092	141,428,102 254,802,193
(Over)/Under Billing (Line 2 - Line 1)	\$ 1,472,818	\$ 1,782,058 \$ 3,254,876

### **Attachment 3**

**Summary of Corrections to ATRR Plant Investment Inputs** 

### New England Power Company Summary of Change in PTF Plant Inputs to Pre 97 and Post 96 ISO Annual Transmission Revenue Requirement 2008 - 2012

			2008	2009	2010	2011	2012
ine No.	-	Revised					
		ssion Revenue Requirement					
1	Attachment 1 ln 4	PTF Plant*	353,995,853	352,386,820	351,115,800	349,334,382	352,959,991
2	Attachment 4 ln 2	Narragansett Total PTF Property**	170,859,376	173,100,030	209,109,440	234,900,022	386,991,881
3	Attachment 4 ln 2	Mass Electric Total PTF Property**	20,288,739	21,108,649	21,182,153	21,875,675	24,868,977
			545,143,968	546,595,499	581,407,393	606,110,079	764,820,849
	Post-1996 Transmi	ission Revenue Requirement					
4	Attachment 1 ln 5	PTF Plant*	503,285,683	664,596,724	755,657,102	819,449,952	918,015,798
5	Attachment 1 ln 7	Post 2003 PTF Investment Base w/ Incremental 100 bps***	188,364,644	206,004,443	213,120,061	213,375,099	213,518,137
6	Worksheet 2 Pg 1	NEEWS In-Service w/Incremental 125 bps ****	774,674	5,893,661	14,281,610	52,962,648	56,490,343
			692,425,001	876,494,828	983,058,773	1,085,787,699	1,188,024,278
		Filed					
	Pre-1997 Transmis	ssion Revenue Requirement					
7	Attachment 1 ln 4	PTF Plant	352,396,942	350,766,082	351,352,992	350,215,608	349,727,420
8	Attachment 4 ln 2	Narragansett Total PTF Property	169,846,333	172,481,172	206,391,771	228,545,943	380,877,791
9	Attachment 4 ln 2	Mass Electric Total PTF Property	19,073,085	19,014,465	21,044,551	23,325,823	24,846,487
			541,316,360	542,261,719	578,789,314	602,087,374	755,451,698
	Post-1996 Transmi	ission Revenue Requirement					
10	Attachment 1 ln 5	PTF Plant	502,643,379	640,156,098	725,670,117	816,526,816	900,658,296
11	Attachment 1 ln 7	Post 2003 PTF Investment Base w/ Incremental 100 bps	190,125,725	229,012,126	326,955,170	327,705,145	352,797,993
12	Worksheet 2 Pg 1	NEEWS In-Service w/Incremental 125 bps	4,279,317	10,856,783	15,743,593	55,119,725	59,854,691
			697,048,421	880,025,007	1,068,368,880	1,199,351,686	1,313,310,980
		Change					
	Pre-1997 Revenue	Requirement					
13	Attachment 1 ln 4	PTF Plant	1,598,911	1,620,738	(237,192)	(881,226)	3,232,571
14	Attachment 4 ln 2	Narragansett Total PTF Property	1,013,043	618,858	2,717,669	6,354,079	6,114,090
15	Attachment 4 ln 2	Mass Electric Total PTF Property	1,215,654	2,094,184	137,602	(1,450,148)	22,490
			3,827,608	4,333,780	2,618,079	4,022,705	9,369,151
	Post-1996 Revenue	Requirement					
16	Attachment 1 ln 5	PTF Plant	642,304	24,440,626	29,986,985	2,923,136	17,357,502
17	Attachment 1 ln 7	Post 2003 PTF Investment Base w/ Incremental 100 bps	(1,761,081)	(23,007,683)	(113,835,109)	(114,330,046)	(139,279,856)
18	Worksheet 2 Pg 1	NEEWS In-Service w/Incremental 125 bps	(3,504,643)	(4,963,122)	(1,461,983)	(2,157,077)	(3,364,348)
			(4,623,420)	(3,530,179)	(85,310,107)	(113,563,987)	(125,286,702)
	T-4-1 Channel D	FFF Plant (ln 12 + 14 + 15 + 10)	4.460.012	20 774 407	22 (05 0(4	C 0.45 0.41	26 526 652
		FF Plant (ln 13 + 14 + 15+ 16)	4,469,912	28,774,406	32,605,064	6,945,841	26,726,653
	Total Change in R		(1,761,081)	(23,007,683)	(113,835,109)	(114,330,046)	(139,279,856)
	Total Change to N	EEWS In-Service (ln 18)	(3,504,643)	(4,963,122)	(1,461,983)	(2,157,077)	(3,364,348)
			(795,812)	803,601	(82,692,028)	(109,541,282)	(115,917,551)

<sup>\*</sup> Change to PTF plant results in a change to the PTF allocation factor used in the rate base and expense calculation worksheets

<sup>\*\*</sup> Change to Narragansett and Mass Electric PTF Plant results in a change to the PTF Plant allocator used to calculate the Integrated Facilities Charge

<sup>\*\*\*</sup> Change to Post 2003 PTF Investment Base w/ Incremental 100 bps results in a change to the incremental return on Post 2003 PTF investment

<sup>\*\*\*\*</sup> Change to NEEWS In-Service results in a change to the incremental return on NEEWS PTF Investment

### **Attachment 4**

NEP's Revised PTF Revenue Requirement Worksheets for 2008 - 2012

Summary Changes in NEP PTF Revenue Requirements - for June 1, 2014 RNS Rate

		Re-Stated	_		As-Filed*	_		Retroactive Adj	
Pre-97		Post-96	Total	Pre-97	Post-96	Total	Pre-97	Post-96	Total
\$ 83,053,527 \$	:27 \$	87,620,328 \$	170,673,856 \$	82,381,954 \$	87,489,083 \$	169,871,037 \$	671,573 \$	3 131,245 \$	802,819
83,690,440	40	109,207,445	192,897,885	82,941,498	105,284,991	188,226,488	748,942	3,922,454	4,671,396
82,045,4	:20	118,624,471	200,669,891	81,629,570	114,618,878	196,248,449	415,850	4,005,593	4,421,443
95,332,3	365	128,174,379	223,506,775	94,530,102	128,435,692	222,965,794	802,293	(261,313)	540,980
113,374,0	192	141,428,102	254,802,193	111,901,274	139,646,043	251,547,317	1,472,818	1,782,058	3,254,876
\$ 457,495,8	\$75 \$	585,054,724 \$	1,042,550,599 \$	453,384,398 \$	575,474,687 \$	1,028,859,085 \$	4,111,477 \$	\$ 9,580,037 \$	13,691,514
'RE-97 ATRR	Post-9	6 ATRR							
3/f adjustments	b/f adj		3d w∕ True Up						
\$ 167,779,1		175,105,060 \$	342,884,167						
4,111,4	LL:	9,580,037	13,691,514						
\$ 171,890,5	\$ \$83	184,685,097 \$	356,575,680						
197 - 14A 14A	82,045.4 95,332.3 113,374.0 \$ 457,495.8 b/f adjustments \$ 107,779.1 4,111,4	45,420 74,092 95,875 \$ Post-9 b/f adj 79,106 \$ 11,477 90,583 \$	45,470 118,624,471 32,395 128,174,379 128,174,379 141,428,102 95,875 \$ 585,054,724 Post-96 ATRR b/f adjustments 79,106 \$ 175,105,060 11,477 9,580,037 90,583 \$ 184,685,097	45,420 118,624,471 32,395 128,174,71 32,395 128,174,739 41,428,102 95,875 \$ 585,054,724 \$  Post-96 ATRR b/f adjustments Revised w 79,106 \$ 175,105,060 \$ 11,477 9,580,037 90,583 \$ 184,685,097 \$	45,420 118,624,471 200,669,891 128,644,471 200,669,891 128,174,471 203,669,891 141,4292 223,506,775 253,606,775 141,4292 141,428,102 254,802,193 175,105,060 \$ 342,884,167 11,477 9,580,037 \$ 13,691,514 99,583 \$ 184,685,097 \$ 356,575,680	245,420 118,63471 200,669,891 81,629,570 345,420 118,63471 220,5606,891 81,629,570 346,992 128,174,379 223,506,775 94,530,102 14,092 141,428,102 254,802,193 111,901,274 110,61,274 \$ 1,042,550,599 \$ 453,384,398 \$ 585,054,724 \$ 1,042,550,599 \$ 453,384,398 \$ 587,634,724 \$ 1,042,530,599 \$ 453,384,398 \$ 587,636,637 11,477 9,580,037 13,691,514 90,583 \$ 184,685,097 \$ 356,575,680	22,305 118,624,471 200,605,881 81,629,570 114,618,878 32,395 128,174,379 223,506,775 94,530,102 128,435,692 374,092 141,428,102 224,802,193 111,901,274 139,646,043 95,875 \$ 585,034,724 \$ 1,042,550,599 \$ 453,384,398 \$ 575,474,687 \$ 107,406 \$ 175,105,000 \$ 342,884,167 79,106 \$ 175,105,000 \$ 342,884,167 95,80,037 13,691,514 90,583 \$ 184,685,097 \$ 356,575,680	45,420 118,624,471 220,669,881 81,629,570 114,618,878 196,248,449 81,629,570 114,618,878 196,248,449 81,629,570 128,475,692 222,965,794 14,428,102 254,802,193 111,901,274 139,646,043 251,547,317 195,875 \$ 585,054,724 \$ 1,042,550,599 \$ 453,384,398 \$ 575,474,687 \$ 1,028,859,085 \$ 575,474,687 \$ 1,028,859,085 \$ 1,028,859,085 \$ 1,042,550,599 \$ 453,384,598 \$ 575,474,687 \$ 1,028,859,085 \$ 1,028,859,085 \$ 1,047,105,060 \$ 342,884,167 \$ 9,580,037 \$ 13,691,514 \$ 10,477 \$ 9,580,037 \$ 356,575,680 \$ 1,047,578,080 \$ 1,047,578,080 \$ 1,047,578,080 \$ 1,047,578,080 \$ 1,047,578,080 \$ 1,048,085,097 \$ 136,691,514 \$ 10,048,085,097 \$ 136,591,544 \$ 10,048,085,097 \$ 136,591,544 \$ 10,048,085,097 \$ 13	45,420 118,624,471 200,669,891 81,629,570 114,618,878 196,248,449 415,850 4 32,395 128,174,379 223,506,775 94,530,102 128,435,692 222,965,797 802,293 132,395 114,428,102 224,802,193 111,901,274 139,646,043 251,547,377 1,472,818 1 95,875 \$ 585,054,724 \$ 1,042,550,599 \$ 453,384,398 \$ 575,474,687 \$ 1,028,859,085 \$ 4,111,477 \$ 9 96,875 \$ 175,105,060 \$ 342,884,167

\* In compliance with FERC Docket No. EL11-66, the ROE rate was reduced from 11.64% to 11.07% for the period October 01, 2011 - December 31, 2012, Revenue Requirement (RR) years 2011 and 2012 - Rate period June 2012 to May 2014. Since the FERC order was issued in calendar year 2014 after submission of RR years 2011 and 2012, the "As-Filed" RR should be construed as follows:

- RR year 2011 (Rate period June 1, 2012 - May 31, 2013) is pro-rated at: 4 mos (June 1, 2011 - Sept 30, 2011) @ 11.64% As-Filled, and 8 mos (Oct 1, 2011 - May 31, 2012) @ 11.07% FERC revised rate - not yet filled. - RR year 2012 (Rate period June 1, 2013 - May 31, 2014) is pro-rated at: 7 mos (June 1, 2012 - Dec 31, 2012) @ 11.07% FERC revised rate - not yet filled, and 5 mos (Jan 1, 2013 - May 2013) @ 11.64% As-Filled.

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Shading denotes an input

Submitted on:				
Revenue Requirements for (year):		Calend	lar Year 2008	
Rates Effective for the Period: Through:			ine 2009 ay 2010	
Customer:		New England	d Power Company	
Customer's NABs Number:				
Name of Participant responsible for customer's billing:				
DUNs number of Participant responsible for customer's billing:				
	Pre-97 Revenue Requirements		Post-96 Revenue Requirements	
Total of Attachment F - Sections A through I	\$91,613,205	(a)	\$88,628,221	_(f)
Total of Attachment F - Section J - Support Revenue	\$9,231,767	(b)	\$0	(g)
Total of Attachment F - Section K - Support Expense	\$1,381,011	(c)	\$0	(h)
Total of Attachment F - Section (L through O)	(\$708,921)	(d)	(\$1,007,893)	(i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$83,053,527	(e)=(a)-(b)+(c)+(d)	\$87,620,328	(i)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A		\$28,985,933	_(k)
Annual True-up (per Attachment C to Attachment F Implementation Rule	)N/A	(1)	N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$83,053,527	(n)=(e)+(l)	\$116,606,261	(o)=(j)+(k)+(m)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirer Post-96 Revenue Requirements Subtotals, Forecasted Revenue Requirement True-ups (including interest)			\$199,659,789	_ (p) = (n) + (o)

Attachment 4 Exhibit 2 Page 2 of 29

New England Power Company
Annual Revenue Requirements of PTF Facilities
for costs in 2008

POST-1996

Attachment F

PTF Revenue Requirements

Worksheet 1 of 5

Shading denotes an input

Sheet: Worksheet 1

	I. INVESTMENT BASE	Reference		NEP	Reference
Line No.		Section:			
1	Transmission Plant	(A)(1)(a)		\$503,285,683	Worksheet 3, line 1&2 column 5
2	General Plant	(A)(1)(b)		\$2,736,482	Worksheet 3, line 3 column 5
3	Plant Held For Future Use	(A)(1)(c)		\$428,195	Worksheet 3, line 5 column 5
4	Total Plant (Lines 1+2+3)			\$506,450,360	
5	Accumulated Depreciation	(A)(1)(d)	24%	\$121,358,910	Worksheet 3, line 8 column 5
6	Accumulated Deferred Income Taxes	(A)(1)(e)	16%	\$79,754,173	Worksheet 3, line 11 column 5
7	Loss On Reacquired Debt	(A)(1)(f)	0%	\$534,919	Worksheet 3, line 12 column 5
8	Other Regulatory Assets	(A)(1)(g)	5%	\$26,807,686	Worksheet 3, line 16 column 5
9	Net Investment (Line 4-5-6+7+8)			\$332,679,882	
10	Prepayments	(A)(1)(h)	0%	\$0	Worksheet 3, line 17 column 5
11	Materials & Supplies	(A)(1)(i)	0%	\$1,504,846	Worksheet 3, line 18 column 5
12	Cash Working Capital	(A)(1)(j)	1%	\$2,982,100	Worksheet 3, line 25 column 5
13	Total Investment Base (Line 9+10+11+12)			\$337,166,828	
II.	REVENUE REQUIREMENTS				
14	Investment Return and Income Taxes	(A)		\$45,902,164	Worksheet 2
15	Depreciation Expense	(B)	2%	\$11,111,540	Worksheet 4, line 3, column 5
16	Amortization of Loss on Reacquired Debt	(C)	0%	\$134,321	Worksheet 4, line 4, column 5
17	Investment Tax Credit	(D)	0%	(\$169,353)	Worksheet 4, line 5, column 5
18	Property Tax Expense	(E)	1%	\$7,031,960	Worksheet 4, line 6, column 5
19	Payroll Tax Expense	(F)	0%	\$760,792	Worksheet 4, line 22, column 5
20	Operation & Maintenance Expense	(G)	3%	\$15,287,279	Worksheet 4, line 11, column 5
21	Administrative & General Expense	(H)	2%	\$8,569,518	Worksheet 4, line 21, column 5
22	Transmission Related Integrated Facilities Charge	(I)		\$0	Attachment 4, line 6
23	Transmission Support Revenue	(J)		\$0	Worksheet 6
24	Transmission Support Expense	(K)		\$0	Worksheet 6
25	Transmission Related Expense from Generators	(L)		\$0	Worksheet 7
26	Transmission Related Taxes and Fees Charge	(M)		\$0	AU 1 17
27	Revenue for ST Trans. Service Under NEPOOL Tariff	(N)		(\$694,521)	Attachment 7
28	Transmission Rents Received from Electric Property	(O)		(\$313,372)	Attachment 6
29	Total Revenue Requirements (Line 14 thru 28)			\$87,620,328	

88,628,221

### New England Power Company Forecasted Transmission Revenue Requirements of PTF Facilities

				POST-	-1996	
	Sha	iding denotes an input				
Lina Na	I.	FORECASTED TRANSMISSION REVENUE REQUIREMENTS	<u>Period</u>	Attachment F Reference Section:	NEP	Reference
Line No. 1 2 3		Forecasted Transmission Plant Additions Carrying Charge Factor Total Forecasted Revenue Requirements (Lines 1*2)	2008	Appendix C Appendix C	164,600,000 17.61% \$28,985,933	
	II.	CARRYING CHARGE FACTOR				
4		Investment Return and Income Taxes		(A)	\$45,902,164	Summary, line 14
5		Depreciation Expense		(B)	\$11,111,540	Summary, line 15
6		Amortization of Loss on Reacquired Debt		(C)	\$134,321	Summary, line 16
7		Investment Tax Credit		(D)	(\$169,353)	Summary, line 17
8		Property Tax Expense		(E)	\$7,031,960	Summary, line 18
9		Payroll Tax Expense		(F)	\$760,792	Summary, line 19
10		Operation & Maintenance Expense		(G)	\$15,287,279	Summary, line 20
11		Administrative & General Expense		(H)	\$8,569,518	Summary, line 21
12		Total Expenses (Lines 4 thru 11)			\$88,628,221	
13 14		PTF Transmission Plant Carrying Charge Factor (Lines 12/13)		(A)(1)(a)	\$503,285,683 17.61%	Summary, line 1

New England Power Company
Annual Revenue Requirements
For Costs in 2008 Sheet: Worksheet 2

Shading denotes an input

				LONG-T	ERM DEBT	CAPITALIZATION 12/31/2008 \$410,350,000	CAPITALIZATION RATIOS 34.25%	COST OF CAPITAL	COST OF CAPITAL 0.78%	EQUITY PORTION
				PREFERR	RED STOCK ON EQUITY	\$1,111,700 \$786,651,891	0.09% 65.66%	6.02% 11.64%	0.01% 7.64%	0.0° 7.64
				TOTAL INVESTMEN		\$1,198,113,591	100.00%	11.0470	8.43%	7.65
Cost of Capital Rate=										
(a) Weighted Cost of Capital	=	0.0843								
(b) Federal Income Tax	= (	R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp.	) /	PTF Inv. Base)	x Federal Income - Federal Income	Tax Rate		
	= (	0.0765 + <sub>1</sub>	(\$169,353) +		\$311,865 ) /	\$337,166,828 )	x 0.35 - 0.35	]	}	
	=	0.0414199								
(c) State Income Tax	= (	R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp.	) /	PTF Inv. Base)	+ Federal Incor - State Income 1		* State Income Tax F	₹ate
	= (	0.0765 +	(\$169,353) +		\$311,865 ) /	\$337,166,828 )	+ 0.041419 - 0.054326	99	* 0.0543	126
(a)+(b)+(c) Cost of Capital Rate	=	0.0067984								
INVESTMENT BASE		(PTF) \$337,166,828	From Worksheet 1							
x Cost of Capital Rate		0.1325183	- w							
= Investment Return and Income Taxes urce: Attachment 2		\$44,680,775	To Worksheet 1							
Post 2003 PTF Investment Base w/ Incremental Plant Accum. Depreciation Accum. Deferred	100 bps:	\$ 188,364,644 \$ 44,750,429 \$ 29,584,149 \$ 114,030,067	From Attachment 1 From Worksheets 3 & From Worksheets 3 &							
Total Post-2003 Investment Incremental ROE: FIT: State Income Taxes: Cost of Capital Rate Incremental Return and Taxes on Post-2003 PTF	1.00%		Calculated Per Attach. F Per Attach. F							
NEEWS PTF Investment Base w/ Incremental 12 Plant Accum. Deprecialion Accum. Deferred Total NEEWS Investment	5 bps:	\$ 774,674 \$ 184,042 \$ 121,669 \$ 468,963	PowerPlant PTF 4 & 5 From Worksheets 3 & From Worksheets 3 & Calculated	5						
Incremental ROE: FIT: State Income Taxes: Cost of Capital Rate Incremental Return and Taxes on NEEWS PTF In	1.25%	0.00438 0.00236 0.00039 0.00712 \$ 3,338	Calculated Per Attach. F Per Attach. F							
NEEWS Allocation Factor Total Trans Investment Total NEEWS in Service For Accum Depreciation Post-2003 PTF Allocation Facto Plant Allocation Factor For Accum Deferred	Of	\$1,208,005,587 \$774,674 0.0641% 0.091107 0.0636%								

### New England Power Company

Sheet: Worksheet 3

Page 5 of 29
PTF Revenue Requirements Worksheet 3 of 5

	Shading denotes an input		(2)		(4)		
Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	FERC Form 1 Reference for col (1)
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+3)	\$6,586,814	99.7176% (a)	\$6,568,213 \$6,568,213	41.6625%	\$503,285,683 \$0 \$2,736,482 \$506,022,165	Attachment 1, Page 1 Attachment 1, Page 2 FERC Form 1 page 207.99
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	41.6625%	\$428,195	Page 214, Lines 2, 4, 9
6 7 8	Transmission Accumulated Depreciation Transmission Accum. Depreciation General Plant Accum.Depreciation Total (line 6+ 7)	\$286,989,993 \$4,312,698	99.7176% (a)	\$286,989,993 \$4,300,519 \$291,290,512	41.6625% 41.6625%	\$119,567,206 \$1,791,704 \$121,358,910	FERC Form 1 page 219.25 FERC Form 1 Page 219.28
9 10 11	Transmission Accumulated Deferred Taxe Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	\$0 -\$191,429,157	100.0000%	\$0 (\$191,429,157) (\$191,429,157)	41.6625% 41.6625%	\$0 (\$79,754,173) (\$79,754,173)	See Note for Page 274, FERC Form 1 See Note for Page 274, FERC Form 1
12	Transmission loss on Reacquired Debt	\$1,283,935	100.0000%	\$1,283,935	41.6625%	\$534,919	Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 ( Liability Account 254 ) Total (line 13+14+ 15)	\$0 \$64,344,881 \$0 \$64,344,881	99.7176% (a) 100.0000% 100.0000%	\$0 \$64,344,881 \$0 \$64,344,881	41.6625% 41.6625% 41.6625%	\$0 \$26,807,686 \$0 \$26,807,686	Page 232.7f Page 278.9
17	Transmission Prepayments	\$0	99.7176% (a)	\$0	41.6625%	\$0	Page 111.57c
18	Transmission Materials and Supplies	\$3,611,991		\$3,611,991	41.6625%	\$1,504,846	Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)					\$15,287,279 \$8,569,518 \$0 \$23,856,797 0.1250 \$2,982,100	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 6 x 45 / 360

<sup>(</sup>a) Worksheet 5 of 6, line 11 (b) Worksheet 5 of 6 line 3 (c) Worksheet 5 of 6, line 16

Attachment 4 Exhibit 2 Page 6 of 29

Worksheet 4 of 5

New England Power Company PTF Revenue Requirements

(4)

Sheet: Worksheet 4 (2)

Shading denotes an input

	Chading denoted an input						
Line No.		(1) Total (g)	Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	FERC Form 1 Reference for col (1)
1 2 3	Depreciation Expense Transmission Depreciation General Depreciation Total (line 1+2)	\$26,331,765 \$339,557	99.7176% (a)	\$26,331,765 \$338,598 \$26,670,363 #	41.6625% 41.6625%	\$10,970,472 \$141,068 \$11,111,540	Page 336.7b Page 336.10b
4	Amortization of Loss on Reacquired Debt	\$322,402	100.0000% (f)	\$322,402	41.6625%	\$134,321	Page 117.64c
5	Amortization of Investment Tax Credits	\$406,488	100.0000% (f)	\$406,488	41.6625%	\$169,353	Page 266.8f - Footnote (f)
6	Property Taxes	\$16,878,393	100.0000% (f)	\$16,878,393	41.6625%	\$7,031,960	Page 263i - Footnote (e)
7 8 9 10 11	Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 **Station Expenses & Rents - #562 & #567 O&M less lines 8, 9 & 10	\$63,832,583 \$16,917,655 \$10,221,789 \$0 \$36,693,139		\$63,832,583 \$16,917,655 \$10,221,789 \$36,693,139	41.6625% 41.6625% 41.6625% 41.6625%	\$26,594,250 \$7,048,318 \$4,258,653 \$0 \$15,287,279	Page 321.112b Page 321.96b Page 321.84-87b Page 321.93b & .98b
12 13 14 15 16 17 18 19 20	Transmission Administrative and General Total Administrative and General less Property Insurance (#924) less Regulatory Commission Expenses (#928) less General Advertising Expense (#930.1) Subtotal [line 12 minus (13 thru 15)] PLUS Property Insurance alloc. using Plant Allocator  PLUS Specifically identified Trans. Related General Advertising Expense PLUS Specifically identified Trans. Related Regulatory Expense	\$22,288,359 -\$531,974 \$3,589,657 \$224,120 \$19,006,556 -\$531,974 \$1,859,626 \$224,120 \$76,055	99.7176% (a) 99.1107% <i>(c)</i> 99.1107% <i>(c)</i>	\$18,952,881 -\$527,243 \$1,843,088 \$224,120 \$76,055	41.6625% 41.6625% 41.6625% 41.6625% 41.6625%	\$7,896,244 -\$219,663 \$767,877 \$93,374 \$31,686	Page 323.197b Page 323.185b Page 323.189b Page 323.191b Line 13 Attachment 5 Page 350.17c
21	Total A&G [line 16 + (17 thru 20)]	\$20,634,383	00.71769/ (a)	\$20,568,901	44 66259/	\$8,569,518	Footpote (d)
22	Payroll Tax Expense  (a) Worksheet 5 of 6, line 11 (b) Worksheet 5 of 8, line 3 (c) Worksheet 5 of 8, line 16  (d) Payroll taxes FERC Form 1, page 263.i	\$1,831,256	99.7176% (a) (e)	\$1,826,085  Property Taxes F  Massachusetts New Hampshire Vermont Maine	41.6625% F1, Page 263i \$13,987,726 \$2,200,310 \$569,515 \$0	\$760,792	Footnote (d)
	Federal Unemployment FICA Payroll Taxes State Unemployment Total  (e) Transmission Only - Property Taxes - Specifi (f) Transmission Only - Amortization of ITC - Spe			Rhode Island Connecticut	\$120,842 \$0 \$16,878,393		

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 2
Page 7 of 29
PTF Revenue Requirements Worksheet 5 of 5

Sheet: Worksheet 5

Shading denotes an input

Line No. FERC Form 1 Reference

NO.			Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment Total Transmission Investment	\$503,285,683 \$1,208,005,587	Attachment 1, Page 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	41.6625%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$18,886,140 \$18,886,140	Page 354.14b 2007 Business Objects Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$18,939,620 \$18,939,620	Page 354.28b Page 354.27b 2007 Business Objects Query
11	Percent Allocation (Line 6/Line 10)	99.7176%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant (Line 2 of Wkst. 3) = Revised Numerator (Line 12 + Line 13)	\$1,208,005,587 <u>\$6,568,213</u> \$1,214,573,800	Worksheet 3, Line 3, Column 3
15	Total Plant in Service	\$1,225,471,598	Page 207.104g-Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.1107%	
17 18 19	Post-2003 PTF Allocation Factor Total Post-2003 PTF Investment Total Transmission Investment Percent Allocation (Line 17/Line 18) for Post-2003 to Total Tx	\$ 188,364,644 \$1,208,005,587 15.5930%	Attachment 1, Page 1
20 21	Total Invst in Tx Plant/Total Plant in Serv * Post-2003 PTF Tx Plant/Total Invst in Tx Plant	15.4544%	

### PTF Revenue Requirements

### **Sheet: Support**

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTA	L
Participant	PTF Supporting Facilities	FERC Form 1	Revenues (a)	Expenses (b)
BECO	345 kV Sherman - Medway 336 line	İ		
ВЕСС	115 kV Somerville 402 Substation		İ	
	115/345 kV North Cambridge 509 Substation		!	
	345 kV Golden Hills -Mystic 389 (x&y) line			\$(
	West Medway 345 kV breaker	Page 332 Line 6 Column (g)		\$(
	115 kV Millbury-Medway 201 line	Page 332 Line 2 Column (g)		\$(
	HQ Phase II - AC in MA	Page 332 Line 5 Column (g)	·	\$(
	345 kV "stabilizer" 342 line	Page 332 Line 3 Column (g)		\$(
	345 kV Walpole - Medway 325 line	· <del></del>		
	345 kV Carver - Walpole 331 line	Page 332 Line 4 Column (g)		\$(
	345 kV Jordan Rd - Canal 342 line	· <del> </del> · · · · · · · · · · · · · · · · · · ·		. —
CEC	Second Canal line	Page 332 Line 7 Column (g)		\$0
	345 kV Pilgrim-Bridgewater - 355 line	· Ţ	· <del>-</del>	\$(
	345 kV Myles Standish - Canal 342 line	· <del>-;</del>		\$(
	Bell Rock Road		\$0	\$(
CMP	345 kV Buxton-South Gorham 386 line			\$(
	115 kV Wyman 164-167 lines	Page 332.1 Line 3		\$(
	115 kV Maine Yankee transmission	· <del></del>	·	·—
EUA	245 IA/ Company Wellands 224 line		\$0	
LUA	345 kV Carver - Walpole 331 line	·+	- — <del></del>	
	345 kV Medway - Bridgewater 344 Line		\$0 N/A	N/A
	Northern Rhode Island transmission	·÷ <del> </del> -	N/A	N/F
NEP	Chester SVC	<u>. i                                     </u>	<u> </u>	\$0
	Fitchburg Support	; . <del></del>	·	\$(
	MWRA Transmission			\$(
	Comerford 115 kV Substation	Page 330.1 Line 12	<u>\$0</u> 1	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line	. <del> </del>	<b></b>	
	345 kV Tewksbury-Woburn 338 line]	Page 330 Line 4	\$0	
	Boston-Edison [115 kV Tewksbury - Woburn M139 line		<u> </u>	
	115 kV Tewksbury - Woburn N140 line]	Page 330 Line 3	\$0	
	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5	\$0	
	HQ Phase II - AC in MA	Page 300 Line 10	\$0	\$0
	Boston Edison -345 kV Golden Hills-Mystic 349 line	Page 300 Line 2	\$0	
	345 kV NH/MA border-Tewksbury 394 line	Page 300.1 Line 8	\$0	\$(
	115 kV Read - Washington V148 line	Page 300.1 Line 3	\$0	\$(
NU	PSNH 345 kV 363, 369 and 394 Seabrook lines	Page 332 Line 11 & Montuap Fin		\$(
	Fairmont 115 kV Substation	·		
	345 kV Millstone-Manchester 310 line	Page 332.1 Line 5		\$(
	UI Substations	· <del> ·</del>		
	Black Pond		·	. —
	Total	<u>.</u>	\$0	\$0

Attachment 4
Exhibit 2
Page 9 of 29
Attachment 1
Page 1 of 2

New England Power Company
2008 Informational Filing
PTF Plant Allocation

Percent Pre / Post

1	2007	Pre-1997 PTF Transmission Plant	\$358,707,072	
2	2007	Post-1996 PTF Transmission Plant	\$457,529,370	
3	2008	Additions/Retirements	\$41,045,094	
4	2008	Pre-1997 PTF Transmission Plant	\$353,995,853	41.29%
5	2008	Post-1996 PTF Transmission Plant	\$503,285,683	58.71%
6	2008	Total PTF Transmission Plant	\$857,281,536	100.00%
7	2008	Post-2003 PTF Transmission Plant	\$ 188,364,644	

### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5
- 7 PTF Plant Report: Post 2003 RSP Projects

### GROSS PLANT ASSOC. WITH HVDC LEASES 2008

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$0
2 3	Allocation Miles used by NHH (a) Total miles at Comerford Station	0
4	Percentage of Total Gross Plant leased by NHH (a)	0%
5	Total Gross Plant leased by NHH (a)	\$0
6	Total Land from Sandy Pond to New Hampshire	\$0
7	HVDC lines occupy 35% of Right of Way	0%
8	Total Land leased by NEH (a)	\$0
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$0

### Source:

- 1 FERC Form 1, Page 423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 Total miles per lease agreement
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

**Attachment 2** 

### New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2008</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$751,996
2	Less: Specifically identified Transmission-Related	
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$21,209
	2008 Transmission	\$28,754
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561 \$204,604
		\$364,621
3	Total unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.1107%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$383,930
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	\$364,621
7	Total Transmission-Related Equity AFUDC	\$748,551
	• •	
8	Post-96 PTF Allocation Factor	41.6625%
9	Transmission-Related Equity AFUDC	\$311,865

### Sources:

- 1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 5 Pre-97 or Post-96 PTF Allocation Factor
  - 9 Line 7 \* Line 8

### New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2008	MECO 2008
1	Total Integrated Facilities Charges (*)	\$0	\$0
2 3 4	Total 2008 PTF Property Total Transmission Plant in 2008 NECO or MECO PTF Plant Allocator	\$0 \$0 0.00%	\$0 \$0 0.00%
5	PTF Related Integrated Facilities Charge	\$0	\$0

### Source:

- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- (\*) Includes Rental Expenses from Montaup Financials

Attachment 5

### New England Power Company Development of 2008 Regulatory Commission Expense

		<u>2008</u>	Source
1	Total Regulatory Commission Expense - NEP	\$3,589,657	FERC FF1 p350.46d
2	Less: New Hampshire PUC Assessment	\$42,981	FERC FF1 p350.2d
3	Less: Mass Emergency Fund	\$0	FERC FF1 p350.8d
4	Less Mass DPU Special Assessment	\$237,488	
5	Less: Utility Expenses	\$1,449,562	FERC FF1 p350.46c
6	Total Federal Assessments	\$1,859,626	Line 1 - (Line 2-5)
-		, , ,	- ()

Attachment 4 Exhibit 2 Page 14 of 29

# Transmission Rents Received from Electric Property New England Power Company

### Attachment 6

	<u>2008</u>
Revenues	\$752,168
Plant Allocation Factor	100.00%
Transmission Allocated	\$752,168
PTF Allocation	41.6625%
Total PTF Revenue	\$313,372

### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

Attachment 7

New England Power Company

<u>2008</u>

Revenues \$1,183,025

Post-96 PTF Percent 58.7072%

Total Post-96 PTF Revenue \$694,521

Source: Short Term Through and Out Revenues from ISO New England

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Shading denotes an input

Submitted on:	<u> </u>		
Revenue Requirements for (year):		Calendar Year 2008	
Rates Effective for the Period: Through:		June 2009 May 2010	
Customer:	Ne	ew England Power Compa	any
Customer's NABs Number:			
Name of Participant responsible for customer's billing:			
DUNs number of Participant responsible for customer's billing:	<u> </u>		
	Pre-97 Revenue <u>Requirements</u>	Post-96 Rever <u>Requirement</u>	
Total of Attachment F - Sections A through I	\$91,613,205 (a)	\$88,628,2	(f)
Total of Attachment F - Section J - Support Revenue	\$9,231,767 (b)		<b>\$0</b> (g)
Total of Attachment F - Section K - Support Expense	\$1,381,011 (c)		<b>\$0</b> (h)
Total of Attachment F - Section (L through O)	(\$708,921) (d)	(\$1,007,8	93) (1)
Sub Total - Sum (A through I) - J + K + (L through O)	\$83,053,527 (e)=	(a)-(b)+(c)+(d) \$87,620,3	28 (i)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$28,985,933	<b>(</b> k)
Annual True-up (per Attachment C to Attacment F Im[plementation Rul	e) <u>N/A</u> ()	N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$83,053,527 (n)=1	(e) + (l) \$116,606,2	61 (o)=(j)+(k)+(m)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Require and Post-96 Revenue Requirements Subtotals for rate calculations un		\$199,659,7	(p) = (n) + (o)

Sheet: Worksheet 1

28

29

Transmission Rents Received from Electric Property

Total Revenue Requirements (Line 14 thru 28)

### **New England Power Company Annual Revenue Requirements of PTF Facilities** for costs in 2008 PRE-1997

Page 17 of 29 PTF Revenue Requirements

Attachment 4 Exhibit 2

Worksheet 1 of 6

### Shading denotes an input

	ondaning denotes an impar			
		Attachment F		
	I. INVESTMENT BASE	Reference	NEP	Reference
Line No.	Transmission Diore	Section:	¢244 202 075	Wantabaat 2 line 102 ashuma F
1	Transmission Plant General Plant	(A)(1)(a)	\$341,203,075	Worksheet 3, line 1&2 column 5
2	Plant Held For Future Use	(A)(1)(b)	\$1,924,762 \$301,180	Worksheet 3, line 3 column 5 Worksheet 3, line 5 column 5
		(A)(1)(c)	\$343,429,017	Worksheet 3, line 5 column 5
4	Total Plant (Lines 1+2+3)		\$343,429,017	
5	Accumulated Depreciation	(A)(1)(d)	\$85,360,355	Worksheet 3, line 8 column 5
6	Accumulated Deferred Income Taxes	(A)(1)(e)	\$56,096,783	Worksheet 3, line 11 column 5
7	Loss On Reacquired Debt	(A)(1)(f)	\$376,247	Worksheet 3, line 12 column 5
8	Other Regulatory Assets	(A)(1)(g)	\$18,855,753	Worksheet 3, line 16 column 5
9	Net Investment (Line 4-5-6+7+8)	( )( )(0)	\$221,203,879	·
10	Prepayments	(A)(1)(h)	\$0	Worksheet 3, line 17 column 5
11	Materials & Supplies	(A)(1)(i)	\$1,058,465	Worksheet 3, line 18 column 5
12	Cash Working Capital	(A)(1)(j)	\$2,097,523	Worksheet 3, line 25 column 5
	· ·	. , . , . ,		
13	Total Investment Base (Line 9+10+11+12)		\$224,359,867	
	II. DEVENUE DECUMPENTO			
	II. REVENUE REQUIREMENTS			
14	Investment Return and Income Taxes	(A)	\$29,735,176	Worksheet 2
15	Depreciation Expense	(B)	\$7,815,536	Worksheet 4, line 3, column 5
16	Amortization of Loss on Reacquired Debt	(C)	\$94,477	Worksheet 4, line 4, column 5
17	Investment Tax Credit	(D)	(\$119,118)	Worksheet 4, line 5, column 5
18	Property Tax Expense	(E)	\$4,946,078	Worksheet 4, line 6, column 5
19	Payroll Tax Expense	(F)	\$535,119	Worksheet 4, line 22, column 5
20	Operation & Maintenance Expense	(G)	\$10,752,632	Worksheet 4, line 11, column 5
21	Administrative & General Expense	(H)	\$6,027,552	Worksheet 4, line 21, column 5
22	Transmission Related Integrated Facilities Charge	(1)	\$31,825,752	Attachment 4, line 6
23	Transmission Support Revenue	(J)	(\$9,231,767)	Worksheet 6
24	Transmission Support Expense	(K)	\$1,381,011	Worksheet 6
25	Transmission Related Expense from Generators	(L)	\$0	Worksheet 7
26	Transmission Related Taxes and Fees Charge	(M)	\$0	
27	Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$488,504)	Attachment 7
20	Tananasianian Danta Dannis ad farm Flantsia Dannasts	(0)	(MOOO 447)	A + + + - /

(O)

(\$220,417)

\$83,053,527

Attachment 6

Sheet: Worksheet 2

# New England Power Company Annual Revenue Requirements For Costs in 2008

PTF Revenue Requirements Worksheet 2 of 6

Shading denotes an input

					CAPITALIZATION 12/31/2008		CAPITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
				LONG-TERM DEBT REFERRED STOCK COMMON EQUITY	\$410,350,000 \$1,111,700 \$786,651,89	)	34.25% 0.09% 65.66%	2.28% 6.02% 11.64%	0.78% 0.01% 7.64%	0.01% 7.64%
			TOTAL INV	ESTMENT RETURN	\$1,198,113,59	<u> </u>	100.00%		8.43%	7.65%
Cost of Capital Rate=										
(a) Weighted Cost of Capital	=	0.0843								
(b) Federal Income Tax	= (	R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	X -	Federal Income Tax Federal Income Tax		) )	
	= (	0.0765	-( (\$119,118) +	\$219,357 ) /	\$224,359,867	) x	0.35 0.35		)	
	=	0.0414329					0.00		,	
(c) State Income Tax	= (	R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	+	Federal Income T		)* State Income Tax Ra	ite
	= (		-( (\$119,118) +	\$219,357 ) /	\$224,359,867	) +	0.0414329	ade	)* 0.0543	326
	=	0.0068005				-	0.054326		)	
		0.000000								
(a)+(b)+(c) Cost of Capital Rate	=	0.1325334								
		(PTF)								
INVESTMENT BASE		\$224,359,867	From Worksheet 1	1						
x Cost of Capital Rate		0.1325334								
= Investment Return and Income Taxes	3	\$29,735,176	To Worksheet 1							

#### Source: Attachment 2

Attachment 4 Exhibit 2 Page 19 of 29
PTF Revenue Requirements
Worksheet 3 of 6

#### Sheet: Worksheet 3

	Shading denotes an input		(0)		(4)		
Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	FERC Form 1 Reference for col (1)
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+3)	\$6,586,812	99.7176% (a)	\$0 \$6,568,211 \$6,568,211	29.3042%	\$353,995,853 (\$12,792,778) \$1,924,762 \$343,127,837	Attachment 1, Page 1 Attachment 1, Page 2 FERC Form 1 page 207.99g
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	29.3042%	\$301,180	Page 214, Lines 2, 4, 9
6 7 8	Transmission Accumulated Depreciation Transmission Accum. Depreciation General Plant Accum.Depreciation Total (line 6+ 7)	\$286,989,993 \$4,312,698	99.7176% (a)	\$286,989,993 \$4,300,519 \$291,290,512	29.3042% 29.3042%	\$84,100,122 \$1,260,233 \$85,360,355	FERC Form 1 page 219.25 FERC Form 1 Page 219.28
9 10 11	Transmission Accumulated Deferred Taxe Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	\$0 -\$191,429,157	100.0000% 100.0000%	\$0 (\$191,429,157) (\$191,429,157)	29.3042% 29.3042%	\$0 (\$56,096,783) (\$56,096,783)	See Note for Page 274, FERC Form 1 See Note for Page 274, FERC Form 1
12	Transmission loss on Reacquired Debt	\$1,283,935	100.0000%	\$1,283,935	29.3042%	\$376,247	Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 ( Liability Account 254 ) Total (line 13+14+ 15)	\$0 \$64,344,881 \$0 \$64,344,881	99.7176% (a) 100.0000% 100.0000%	\$0 \$64,344,881 \$0 \$64,344,881	29.3042% 29.3042% 29.3042%	\$0 \$18,855,753 \$0 \$18,855,753	Page 232.7f
17	Transmission Prepayments	\$0	99.7176% (a)	\$0	29.3042%	\$0	Page 111.57c
18	Transmission Materials and Supplies	\$3,611,991		\$3,611,991	29.3042%	\$1,058,465	Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)					\$10,752,632 \$6,027,552 \$0 \$16,780,184 0.1250 \$2,097,523	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 6 x 45 / 360

<sup>(</sup>a) Worksheet 5 of 6, line 11 (b) Worksheet 5 of 6 line 3 (c) Worksheet 5 of 6, line 16

New England Power Company

PTF Revenue Requirements Worksheet 4 of 6

Shading denotes an input (2) (4) Wage/Plant (3) = (1)\*(2)PTF (5) = (3)\*(4)Line Allocation Transmission Allocation PTF FERC Form 1 (1) No. Total (g) Factors Allocated Factor (b) Allocated Reference for col (1) Depreciation Expense \$26,331,765 Transmission Depreciation \$26,331,765 29.3042% \$7,716,313 Page 336.7b \$99,223 \$7.815.536 2 General Depreciation \$339.557 99.7176% (a) \$338,598 29.3042% Page 336.10b \$26,670,363 3 \$322,402 \$322,402 Amortization of Loss on Reacquired Debt 100.0000% (f) 29.3042% \$94,477 Page 117.64c Amortization of Investment Tax Credits \$406,488 100.0000% (f) \$406,488 29.3042% \$119,118 Page 266.8f - Footnote (f) 6 Property Taxes \$16,878,393 100.0000% (f) \$16,878,393 29.3042% \$4,946,078 Page 263i - Footnote (e) Transmission Operation and Maintenance 7 Operation and Maintenance \$63.832.583 \$63.832.583 29.3042% \$18,705,628 Page 321.112b Transmission of Electricity by Others - #565 \$16,917,655 \$16.917.655 29.3042% \$4.957.583 Page 321.96b 8 Load Dispatching - #561 \$10,221,789 29.3042% Page 321.84-87b \$10.221.789 \$2,995,413 9 10 \*\*Station Expenses & Rents - #562 / #567 Page 321.93b & .98b \$0 \$0 O&M less lines 8, 9 & 10 \$36,693,139 \$36,693,139 29.3042% \$10,752,632 11 Transmission Administrative and General 12 Total Administrative and General \$22,288,359 Page 323.197b 13 less Property Insurance (#924) -\$531.974 Page 323.185b 14 less Regulatory Commission Expenses (#928) \$3,589,657 Page 323.189b 15 less General Advertising Expense (#930.1) \$224,120 Page 323.191b Subtotal [line 12 minus (13 thru 15)] \$19,006,556 99.7176% (a) \$18,952,881 29.3042% \$5,553,990 16 17 PLUS Property Insurance alloc. using Plant Allocation -\$531,974 99.1107% (c) -\$527,243 29.3042% -\$154,504 Line 13 \$1,859,626 99.1107% (c) \$1,843,088 29.3042% \$540,102 18 Attachment 5 PLUS Regulatory Comm. Exp. \$224,120 \$224,120 29.3042% \$65,677 Business Obj Query 19 PLUS Specifically identified T rans. Related General Advertising Expense \$76,055 29.3042% \$22,287 Page 350.17c 20 PLUS Specifically identified Trans. Related Regulatory Expense \$76,055 \$20,634,383 21 Total A&G [line 16 + (17 thru 20)] \$20,568,901 \$6,027,552 22 Payroll Tax Expense \$1,831,256 99.7176% (a) \$1,826,085 29.3042% \$535,119 Footnote (d) (a) Worksheet 5 of 6, line 11 (e) Property Taxes FF1, Page 263i (b) Worksheet 5 of 8, line 3 (c) Worksheet 5 of 8, line 16 Massachusetts \$13,987,726 New Hampshire \$2,200,310 (d) Payroll taxes FERC Form 1, page 263.i Vermont \$569,515 Maine \$0 Federal Unemployment -\$1.709 Rhode Island \$120,842 FICA \$1.832.965 Connecticut Payroll Taxes \$16,878,393 \$0 State Unemployment \$0 Total \$1,831,256

Sheet: Worksheet 4

<sup>(</sup>e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1

<sup>(</sup>f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4 Exhibit 2 Page 21 of 29
PTF Revenue Requirements
Worksheet 5 of 6

Sheet: Worksheet 5

Shading denotes an input

Line No

ine No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment	\$353,995,853 \$1,208,005,587	Attachment 1, Page 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	29.3042%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 \$18,886,140 \$18,886,140	Page 354.14b 2008 Business Objects Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$18,939,620 \$18,939,620	Page 354.28b Page 354.27b 2008 Business Objects Query
11	Percent Allocation (Line 6/Line 10)	99.7176%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant (Line 2 of Wkst. 3) = Revised Numerator (Line 12 + Line 13)	\$1,208,005,587 <u>\$6,568,211</u> \$1,214,573,798	Worksheet 3, Line 3, Column 3
15	Total Plant in Service	\$1,225,471,598	Page 207.104g-Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.1107%	

Sheet: Support Worksheet 6 of 6

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTAI	L
Participant	PTF Supporting Facilities	FERC Form 1	Revenues	Expenses
2500			(a)	(b)
BECO	345 kV Sherman - Medway 336 line	ii-	<u>-</u>	. —
	115 kV Somerville 402 Substation			
	115/345 kV North Cambridge 509 Substation	14092582		
	345 kV Golden Hills -Mystic 389 (x&y) line	Contract Suspended Oct. 1997		\$
	West Medway 345 kV breaker	Pg 332 Line 6 Col (g)		\$(
	115 kV Millbury-Medway 201 line	Pg 332 Line 2 Col (g)		\$14,570
	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)	<mark></mark>	\$100,64
	345 kV "stabilizer" 342 line	Pg 332 Line 3 Col (g)		\$171,97
	345 kV Walpole - Medway 325 line	<u>iii</u>	<u> </u>	
	345 kV Carver - Walpole 331 line	Pg 332 Lines 12 & 13 Col (g)		\$306,74
	345 kV Jordan Rd - Canal 342 line	[		
CEC	Second Canal line	Pg 332 Line 4 Col (g)		\$47,040
	345 kV Pilgrim-Bridgewater - 355 line	!		\$(
	345 kV Myles Standish - Canal 342 line	i		\$0
	Bell Rock Road	Page 330.5 Line 12	\$17,268	
CMP	345 kV Buxton-South Gorham 386 line	Page 332.1, Line 4		\$0
	115 kV Wyman 164-167 lines	Pg 332.1 Line 3 Col (g)		\$(
	115 kV Maine Yankee transmission			
	!			
NEP	345 kV Carver - Walpole 331 line	İ	\$0	
	345 kV Medway - Bridgewater 344 Line	Pg 330.5, Line 11	\$92,568	
	Northern Rhode Island transmission	Reflect in Integr. Fac. Chg. Wksh1	N/A	N/A
	ļ			
NEP	Chester SVC	Tx Billing		\$730,025
	Fitchburg Support	See Attachment 9	<del></del>	\$(
	MWRA Transmission (MDC)	Contract		\$10,000
/T Elec Co.	Comerford 115 kV Substation	Page 328.1 Line 12	\$42,602	Ψ10,000
7 1 LICC 00.		1 age 320.1 Line 12	Ψ+2,002	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line		\$903,852	
	345 kV Tewksbury-Woburn 338 line]	Page 330 Line 4	\$903,032	
	Boston-Edison [115 kV Tewksbury - Woburn M139 line		\$160,908	
	115 kV Tewksbury - Woburn N140 line]	Page 330 Line 3		. —
	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5	\$13,319	. —
	HQ Phase II - AC in MA	Page 330 Line 11	\$4,616,942	
	Boston Edison -345 kV Golden Hills-Mystic 349 line	Page 330 Line 2	\$562,484	
	345 kV NH/MA border-Tewksbury 394 line (Seabrook)	Page 330.1 Line 8	\$2,821,824	
	<del></del>	· <del> </del> <del> </del> -	<del> </del>	
1U	PSNH 345 kV 363, 369 and 394 Seabrook lines	Page 332 Line 11		\$(
	Fairmont 115 kV Substation			Ψ
	345 kV Millstone-Manchester 310 line	Page 332.1 Line 5	<del> </del>	\$(
	<u> </u>	1 age 332.1 Lille 3	<del> </del> -	φι
	UI Substations		<del>-</del>	. —
	Black Pond	1	#0.004.7CT	M4 004 04
	To	tal =	\$9,231,767	\$1,381,011

Page 1 of 2

100.00%

### Shading denotes an input

New England Power Company 2008 Informational Filing PTF Plant Allocation		Percent Pre Post
Pre-1997 PTF Transmission Plant	\$358,707,072	
Post-1996 PTF Transmission Plant	\$457,529,370	
Additions/Retirements	\$41,045,094	
Pre-1997 PTF Transmission Plant	\$353,995,853	41.29%
Post-1996 PTF Transmission Plant	\$503,285,683	58.71%

\$857,281,536

## Sources:

1

2

3

4

5

6

2007

2007

2008

2008

2008

2008

1 PTF Plant Reports for previous year

**Total PTF Transmission Plant** 

- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5

# GROSS PLANT ASSOC. WITH HVDC LEASES 2008

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$13,938,907
2	Allocation Miles used by NHH (a)	224
3	Total miles at Comerford Station	253
4	Percentage of Total Gross Plant leased by NHH (a)	89%
5	Total Gross Plant leased by NHH (a)	\$12,405,627
6	Total Land from Sandy Pond to New Hampshire	\$1,106,146
_		/
7	HVDC lines occupy 35% of Right of Way	35%
8	Total Land leased by NEH (a)	\$387,151
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$12,792,778

#### Source:

- 1 FERC Form 1, Page 422.1-423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 FERC Form 1, Page 422.1 Lines 5 + 16 col (f)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

# New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2008</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$751,996
2	Less: Specifically Identified Transmission-Related	
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$21,209
	2008 Transmission	\$28,754
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	<u>\$23,561</u>
		\$364,621
3	Total Unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.1107%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$383,930
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	\$364,621
7	Total Transmission-Related Equity AFUDC	\$748,551
8	Pre-97 PTF Allocation Factor	29.3042%
9	Transmission-Related Equity AFUDC	\$219,357
	• •	•

#### Sources:

- 1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 5 Pre-97 or Post-96 PTF Allocation Factor
  - 9 Line 7 \* Line 8

## Shading denotes an input

# New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2008	MECO 2008
1	Total Integrated Facilities Charges (*)	\$38,882,752	\$8,331,313
2 3 4	Total 2008 PTF Property Total Transmission Plant in 2008 NECO or MECO PTF Plant Allocator	\$170,859,376 \$237,350,850 71.99%	\$20,288,739 \$44,069,025 46.04%
5	PTF Related Integrated Facilities Charge	\$27,990,137	\$3,835,616
6	Total Integrated Facilities	=	\$31,825,752

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 col (n)
- 2 PowerPlant Reportss
- 3 FF1 Page 207 Line 58
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric
- (\*) Includes Rental Expenses from Montaup Financials

# New England Power Company Development of 2008 Regulatory Commission Expense

		<u>2008</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$3,589,657	FERC FF1 p350.46d
2	Less: New Hampshire PUC Assessment	\$42,981	FERC FF1 p350.2d
3	Less: Mass Emergency Fund	\$0	FERC FF1 p350.7d
4	Less Mass DPU Special Assessment	\$237,488	FERC FF1 p350.8d
5	Less: Utility Expenses	\$1,449,562	FERC FF1 p350.46c
6	Total Federal Assessments	\$1,859,626	Line 1 - (Line 2-5)

Attachment 4 Exhibit 2 Page 28 of 29 Attachment 6

# Transmission Rents Received from Electric Property New England Power Company

	<u>2008</u>
Revenues	\$752,168
Plant Allocation Factor	100.00%
Transmission Allocated	\$752,168
PTF Allocation	29.3042%
Total PTF Revenue	\$220,417

## Revenue for Short-Term Transmission Service under the NEPOOL Tariff

Attachment 7

**New England Power Company** 

	<u>2008</u>
Revenues	\$1,183,025
Pre-97 PTF Percent	41.2928%
Total Pre-97 PTF Revenue	\$ 488,504

Source: Short Term Through and Out Revenues from ISO New England

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:					
Revenue Requirements for (year):	Cale	endar Year 2009			
Rates Effective for the Period: Through:	June 2010 May 2011				
Customer:	New England Power Com	pany			
Customer's NABs Number:					
Name of Participant responsible for customer's billing:					
DUNs number of Participant responsible for customer's billing:					
	Pre-97 Revenue Requirements	Post-96 Revenue Requirements			
Total of Attachment F - Sections A through I	\$90,404,997 (a)	\$110,240,121 (f)			
Total of Attachment F - Section J - Support Revenue	\$7,130,058 (b)	<b>\$0</b> _(g)			
Total of Attachment F - Section K - Support Expense	\$963,053 (c)	<b>\$0</b> _(h)			
Total of Attachment F - Section (L through O)	(\$547,552) (d)	(\$1,032,676) <sub>(1)</sub>			
Sub Total - Sum (A through I) - J + K + (L through O)	\$83,690,440 (e)=(a)-(b)+(c)+(d	\$109,207,445 <sub>(i)</sub>			
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$25,171,563 (k)			
Annual True-up (per Attachment C to Attachment F Implementation I	Rule)()	(m)			
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$83,690,440 (n)=(e)+(l)	\$134,379,008(o)=(j)+(k)+(r			
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirements Subtotals, Forecasted Revenue Requirements Subtotals, Forecasted Revenue Regard True-ups (including interest)		\$218,069,448 (p) = (n) + (o			

#### Attachment 4 Exhibit 3 Page 2 of 29

PTF Revenue Requirements
Worksheet 1 of 7

#### New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2009

POST-1996

			Attachment F		
	I.	INVESTMENT BASE	Reference	NEP	Reference
Line No.			Section:		
1		Transmission Plant	(A)(1)(a)	\$664,596,724	Worksheet 3, line 1&2 column 5
2		General Plant	(A)(1)(b)	\$3,164,504	Worksheet 3, line 3 column 5
3		Plant Held For Future Use	(A)(1)(c)	\$496,668	Worksheet 3, line 5 column 5
4		Total Plant (Lines 1+2+3)	( )( )(-)	\$668,257,896	
		,		, , ,	
5		Accumulated Depreciation	(A)(1)(d)	\$148,983,596	Worksheet 3, line 8 column 5
6		Accumulated Deferred Income Taxes	(A)(1)(e)	\$134,031,553	Worksheet 3, line 11 column 5
7		Loss On Reacquired Debt	(A)(1)(f)	\$478,726	Worksheet 3, line 12 column 5
8		Other Regulatory Assets	(A)(1)(g)	\$29,678,590	Worksheet 3, line 16 column 5
9		Net Investment (Line 4-5-6+7+8)	(-7(-7(3)	\$415,400,063	
ū		(2 (2 )		ψ · · · · · · · · · · · · · · · · · · ·	
10		Prepayments	(A)(1)(h)	\$0	Worksheet 3, line 17 column 5
11		Materials & Supplies	(A)(1)(i)	\$1,877,837	Worksheet 3, line 18 column 5
12		Cash Working Capital	(A)(1)(j)	\$3,777,107	Worksheet 3, line 25 column 5
		Caon Working Capital	(**)(**/0)	Ψο, ττ, τοτ	Workshoot of mile 25 column o
13		Total Investment Base (Line 9+10+11+12)		\$421,055,007	
	II.	REVENUE REQUIREMENTS			
14		Investment Return and Income Taxes	(A)	\$55,185,546	Worksheet 2
15		Depreciation Expense	(B)	\$13,815,406	Worksheet 4, line 3, column 5
16		Amortization of Loss on Reacquired Debt	(C)	\$141,733	Worksheet 4, line 4, column 5
17		Investment Tax Credit	(D)	(\$196,264)	Worksheet 4, line 5, column 5
18		Property Tax Expense	(E)	\$10,128,938	Worksheet 4, line 6, column 5
19		Payroll Tax Expense	(F)	\$947,908	Worksheet 4, line 22, column 5
20		Operation & Maintenance Expense	(G)	\$16,615,219	Worksheet 4, line 11, column 5
21		Administrative & General Expense	(H)	\$13,601,635	Worksheet 4, line 21, column 5
22		Transmission Related Integrated Facilities Charge	(I)	\$0	Attachment 4, line 6
23		Transmission Support Revenue	(J)	\$0	Worksheet 6
24		Transmission Support Expense	(K)	\$0	Worksheet 6
25		Transmission Related Expense from Generators	(L)	\$0	Worksheet 7
26		Transmission Related Taxes and Fees Charge	(M)	\$0	
27		Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$603,747)	Attachment 7
28		Transmission Rents Received from Electric Property	(O)	(\$428,929)	Attachment 6
			` '		
29		Total Revenue Requirements (Line 14 thru 28)		\$109,207,445	
_0		. Stat. 1. Stat. and 1 to quillo months (Emb 1 1 time 20)		Ψ100,201,110	

Attachment 4 Exhibit 3 Page 3 of 29

PTF Revenue Requirements

Worksheet 2 of 7

#### New England Power Company Forecasted Transmission Revenue Requirements of PTF Facilities

#### POST-1996

		Γ	731-1330			
	Sha	ading denotes an input				
	l.	FORECASTED TRANSMISSION REVENUE REQUIREMENTS	<u>Period</u>	Attachment F Reference Section:	NEP	Reference
Line No.						
1		Forecasted Transmission Plant Additions	2009	Appendix C	\$151,750,000	
2		Carrying Charge Factor		Appendix C	16.59%	
3		Total Forecasted Revenue Requirements (Lines 1*2)			\$25,171,563	
	II.	CARRYING CHARGE FACTOR				
4		Investment Return and Income Taxes		(A)	\$55,185,546	Summary, line 14
5		Depreciation Expense		(B)	13,815,406	Summary, line 15
6		Amortization of Loss on Reacquired Debt		(C)	141,733	Summary, line 16
7		Investment Tax Credit		(D)	(196,264)	Summary, line 17
8		Property Tax Expense		(E)	10,128,938	Summary, line 18
9		Payroll Tax Expense		(F)	947,908	Summary, line 19
10		Operation & Maintenance Expense		(G)	16,615,219	Summary, line 20
11		Administrative & General Expense		(H)	13,601,635	Summary, line 21
12		Total Expenses (Lines 4 thru 11)			\$110,240,121	
13		PTF Transmission Plant		(A)(1)(a)	\$664,596,724	Summary, line 1
14		Carrying Charge Factor (Lines 12/13)			16.59%	

# Page 4 of 29 PTF Revenue Requirements Worksheet 3 of 7

Shading denotes an input

New England Power Company
Annual Revenue Requirements
For Costs in 2009

							CAPITALIZATION 12/31/2009	CAP	ITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
					PREFERE	ERM DEBT RED STOCK ON EQUITY	\$410,350,000 \$1,111,700 \$745,076,320		35.48% 0.10% 64.42%	1.58% 6.02% 11.64%	0.56% 0.01% 7.50%	0.01% 7.50%
					TOTAL INVESTMEN	NT RETURN	\$1,156,538,020		100.00%		8.07%	7.51%
	Cost of Capital Rate=											
	(a) Weighted Cost of Capital	=	0.0807									
	(b) Federal Income Tax	= (	R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp.	) /	PTF Inv. Base)	x	Federal Income Ta			
		= (	•	+( (\$196,264) +		\$433,647 ) /	\$421,055,007 )	х	0.35	)		
		= (	0.0407420					-	0.35	)		
	(c) State Income Tax	= (	R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp.	:	PTF Inv. Base)	+	Federal Income	Tax )*	State Income Tax	Rate
		= (	0.0751	+( (\$196,264) +		\$433,647 ) /	\$421,055,007 )	+	State Income Tax 0.0407420	Rate )	0.05	3641
		Ì	1	- (ψ150,204)		ψ+00,04 <i>i</i>	φ+21,000,007 <i>)</i>	-	0.053641	)	0.000	
		=	0.0065980									
	(a)+(b)+(c) Cost of Capital Rate	=	0.1280400									
			(PTF)									
	INVESTMENT BASE		\$421,055,007	From Worksheet 1								
	x Cost of Capital Rate		0.1280400									
	= Investment Return and Income Taxes		\$53,911,883	To Worksheet 1								
Sour	ce: Attachment 2											
	Post 2003 PTF Investment Base w/ Incremental 1 Plant Accum. Depreciation Accum. Deferred Total Post-2003 Investment	00 bps:	\$ 206,004,443 \$ 45,482,926 \$ 41,220,054 \$ 119,301,463	From Attachment 1 From Worksheets 3 From Worksheets 3 Calculated	3 & 5							
	Incremental ROE: FIT:	1.00%	0.00644 0.00347	Calculated Per Attach. F								
	State Income Taxes: Cost of Capital Rate		0.00056 0.01047	Per Attach. F								
	Incremental Return and Taxes on Post-2003 PTF	Investment										
	NEEWS PTF Investment Base w/ Incremental 128 Plant Accum. Depreciation Accum. Deferred Total NEEWS Investment	5 bps:	\$ 5,893,661 \$ 1,301,239 \$ 1,179,281 \$ 3,413,142	PowerPlant PTF 4 From Worksheets 3 From Worksheets 3 Calculated								
	Incremental ROE:	1.25%	0.00438	Calculated								
	FIT: State Income Taxes:		0.00236 0.00038	Per Attach. F Per Attach. F								
	Cost of Capital Rate Incremental Return and Taxes on NEEWS PTF In	nvestment	\$ 24,275									
	NEEWS Allocation Factor Total Trans Investment Total NEEWS In-Service		\$1,375,270,230 \$5,893,661									
	For Accum Depreciation		0.4285%									
	Post-2003 PTF Allocation Factor Plant Allocation Factor For Accum Deferred	r	0.4285% 0.992163 0.4252%									

Page 5 of 29
PTF Revenue Requirements
Worksheet 4 of 7

#### New England Power Company

		<b>(1)</b>	(2) Wage/Plant	(3) = (1)*(2)	(4) PTF	(5) = (3)*(4)	
Line No.		(1) Total	Allocation Factors	Transmission Allocated	Allocation Factor (b)	PTF Allocated	Source Reference for Col (1)
INO.		TOLAI	Factors	Allocated	Factor (b)	Allocateu	Source Reference for Cor (1)
1	Transmission Plant			\$0		\$664,596,724	Attachment 1, Page 1
2	Less: Plant Assoc. HVDC Leases					\$0	Attachment 1, Page 2
3	General Plant	\$6,563,943	99.7633% (a)		48.3248%	\$3,164,504	FERC Form 1 page 207.99
4	Total (line 1+2+ 3)		;	\$6,548,406		\$667,761,228	
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	48.3248%	\$496,668	FERC Form 1 page 214.2,4,9
	Transmission Assumed to d. Barrariation						
6	Transmission Accumulated Depreciation Transmission Accum. Depreciation	\$303,640,607		\$303,640,607	48.3248%	\$146,733,716	FERC Form 1 page 219.25
7	General Plant Accum. Depreciation	\$4,666,793	99.7633% (a)		48.3248%	\$2,249,880	FERC Form 1 Page 219.28
8	Total (line 6+ 7)	ψ1,000,100	σσ., σσσ /σ (α)	\$308,296,354	10.02 10 /0	\$148,983,596	1 E1(0 1 0) 11 1 1 ago 2 10:20
	· · · · · · · · · · · · · · · · · · ·		•	, , , , , , , , , , , , , , , , , , , ,		7,	
	Transmission Accumulated Deferred Taxes						
9	Accumulated Deferred Taxes (281-283)	-\$430,463,140	99.2163%	(\$427,089,600)	48.3248%	(\$206,390,195)	FERC Form 1 page 113.62-64
10	Accumulated Deferred Taxes (190)	\$150,916,705	99.2163%	\$149,733,971	48.3248%	\$72,358,642	FERC Form 1 page 111.82
11	Total (line 9+ 10)		:	(\$277,355,629)		(\$134,031,553)	
12	Transmission Loss on Reacquired Debt	\$990,643	100.0000%	\$990,643	48.3248%	\$478,726	FERC Form 1 Page 111.81c
	011 5 11 4 1						
13	Other Regulatory Assets FAS 106	\$0	99.7633% (a)	\$0	48.3248%	\$0	
14	FAS 100 FAS 109 (Asset Account 182.3)	\$61,414,823	100.0000%	\$61,414,823	48.3248%	\$29,678,590	FERC Form 1 Page 232.7f
15	FAS 109 (Liability Account 254)	\$01,414,025	100.0000%	\$01,414,023	48.3248%	\$0	1 LIC Tomi 11 age 232.71
16	Total (line 13+14+ 15)	\$61,414,823	100.000070	\$61,414,823	10.021070	\$29,678,590	
17	Transmission Prepayments	\$0	99.7633% (a)	\$0	48.3248%	\$0	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$3,885,867		\$3,885,867	48.3248%	\$1,877,837	FERC Form 1 Page 227.8c
19	Cash Working Capital						
20	Operation & Maintenance Expense					\$16,615,219	Worksheet 1, Line 20
21	Administrative & General Expense					\$13,601,635	Worksheet 1, Line 21
22	Transmission Support Expense					\$0	Worksheet 6
23	Subtotal (line 20+21+22)					\$30,216,854	
24						0.1250	x 45 / 360
25	Total (line 23 * line 24)					\$3,777,107	

<sup>(</sup>a) Worksheet 6 Line 11 (b) Worksheet 6 Line 3

#### New England Power Company

Line No.		(1) Total (g)	Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3	<u>Depreciation Expense</u> Transmission Depreciation General Depreciation Total (line 1+2)	\$28,239,845 \$349,629	99.7633% (a)	\$28,239,845 \$348,801 \$28,588,646	48.3248% 48.3248%	\$13,646,849 \$168,557 \$13,815,406	FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
4	Amortization of Loss on Reacquired Debt	\$293,292	100.0000%	\$293,292	48.3248%	\$141,733	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	\$406,136	100.0000%	\$406,136	48.3248%	\$196,264	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$20,960,123	100.0000%	\$20,960,123	48.3248%	\$10,128,938	FERC Form 1 Page 263.10,17,23,28i - Footnote (e)
7 8 9 10 11	Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3) **Station Expenses & Rents - #562 & #567 O&M less lines 8, 9 & 10	\$62,195,739 \$15,883,436 \$11,929,915 \$0 \$34,382,388		\$62,195,739 \$15,883,436 \$11,929,915 \$34,382,388	48.3248% 48.3248% 48.3248% 48.3248%	\$30,055,966 \$7,675,639 \$5,765,108 \$0 \$16,615,219	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
12 13 14 15 16 17 18 19 20 21	Transmission Administrative and General Total Administrative and General less Property Insurance (#924) less Regulatory Commission Expenses (#928) less General Advertising Expense (#930.1) Subtotal [line 12 minus (13 thru 15)] PLUS Property Insurance aloc. using Plant Allocator  PLUS Specifically identified Trans. Related General Advertising Expense PLUS Specifically identified Trans. Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$29,814,013 -\$440,927 \$4,241,188 \$24,704 \$25,989,048 -\$440,927 \$2,608,204 \$24,704 \$43,753 \$28,224,782	99.7633% (a) 99.2163% (c) 99.2163% (c)	\$25,927,532 -\$437,471 \$2,587,764 \$24,704 \$43,753 \$28,146,282	48.3248% 48.3248% 48.3248% 48.3248% 48.3248%	\$12,529,428 -\$211,407 \$1,250,532 \$11,938 \$21,144 \$13,601,635	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b  Line 13 Attachment 5 Line 6 Line 15 FERC Form 1 Page 350.18c
22	Payroll Tax Expense	\$1,966,189	99.7633% (a)	\$1,961,535	48.3248%	\$947,908	FERC Form 1 Page 263.3,4i - Footnote (d)
	(a) Worksheet 6, Line 11 (b) Worksheet 6 Line 3 (c) Worksheet 6 Line 16		. ,	Property Taxes FF Massachusetts			
	(c) Worksheet 6 Line 16 (d) Payroll taxes FERC Form 1, page 263.i			New Hampshire Vermont Maine	\$17,745,431 \$2,340,263 \$730,106 \$0		
	Federal Unemployment FICA Payroll Taxes State Unemployment Total  (a) Transmission Only - Property Taxes - Specifically	\$13,994 \$1,952,195 \$0 \$0 \$1,966,189		Rhode Island Connecticut	\$144,323 \$0 \$20,960,123		

<sup>(</sup>e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 3
Page 7 of 29
PTF Revenue Requirements
Worksheet 6 of 7

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment Total Transmission Investment	\$664,596,724 \$1,375,270,230	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	48.3248%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 \$22,154,668 \$22,154,668	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$22,207,232 \$22,207,232	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.7633%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant (Line 2 of Wkst. 3) = Revised Numerator (Line 12 + Line 13)	\$1,375,270,230 <u>\$6,548,406</u> \$1,381,818,636	Line 2 Worksheet 3, Line 3, Column 3
15	Total Plant in Service	\$1,392,733,917	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2163%	
17 18 19	Post-2003 PTF Allocation Factor Total Post-2003 PTF Investment Total Transmission Investment Percent Allocation (Line 17/Line 18) for Post-2003 to Total Tx	\$ 206,004,443 \$1,375,270,230 14.9792%	Attachment 1 Line 7 Line 2
20 21	Total Invst in Tx Plant/Total Plant in Serv * Post-2003 PTF Tx Plant/Total Invst in Tx Plant	14.8618%	Line 19 * Line 16

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTA	
Participant	PTF Supporting Facilities	FERC Form 1	Revenues	Expenses
ECO	1245 IAV Charman Maduray 226 line	<del>!</del>	(a)	(b)
ECO	345 kV Sherman - Medway 336 line	- <del> </del>	<del> </del> -	
	115 kV Somerville 402 Substation	<del></del>		
	115/345 kV North Cambridge 509 Substation	- <del></del>	-	
	345 kV Golden Hills -Mystic 389 (x&y) line	- <del> </del>		
	West Medway 345 kV breaker	Page 332 Line 6 Column (g)	-	
	115 kV Millbury-Medway 201 line	Page 332 Line 2 Column (g)	-	
	HQ Phase II - AC in MA	Page 332 Line 5 Column (g)	<u> </u>	
	345 kV "stabilizer" 342 line	Page 332 Line 3 Column (g)		
	345 kV Walpole - Medway 325 line	<u>ii</u>		
	345 kV Carver - Walpole 331 line	Page 332 Line 4 Column (g)		
	345 kV Jordan Rd - Canal 342 line	i i		
	!	!	<u>-</u> -	
CEC	Second Canal line	Page 332 Line 7 Column (g)		Ş
	345 kV Pilgrim-Bridgewater - 355 line			
	345 kV Myles Standish - Canal 342 line	-;		
	Bell Rock Road	- <del> </del>	\$0	
CMP	345 kV Buxton-South Gorham 386 line	1	ΨΟ	
JIVII	<u> </u>	Dans 222 1 Line 2	-	
	115 kV Wyman 164-167 lines	Page 332.1 Line 3	-	
	115 kV Maine Yankee transmission	- <del> </del>	- —	
EUA	345 kV Carver - Walpole 331 line		\$0:	
	345 kV Medway - Bridgewater 344 Line	 	\$0	
	Northern Rhode Island transmission	<u> </u>	N/A	N <sub>i</sub>
	1	<u> </u>		<del></del>
NEP	Chester SVC		-	
	Fitchburg Support	· +		
	MWRA Transmission	<u> </u>		
	Comerford 115 kV Substation	Page 330.1 Line 12	\$0	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line	1	1	
	345 kV Tewksbury-Woburn 338 line]	Page 330 Line 4	\$0	
	Boston-Edison [115 kV Tewksbury - Woburn M139 line	-,	- —	
	115 kV Tewksbury - Woburn N140 line]	Page 330 Line 3	\$0	
	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5	\$0	
	HQ Phase II - AC in MA	Page 300 Line 10	\$0¦	
	Boston Edison -345 kV Golden Hills-Mystic 349 line	Page 300 Line 2	\$0	
	345 kV NH/MA border-Tewksbury 394 line	Page 300.1 Line 8	\$0T	
	<u> </u>		\$0 <u>-</u> - \$0:	
	115 kV Read - Washington V148 line	Page 300.1 Line 3	<sub>Φ</sub> 0	
NU	PSNH 345 kV 363, 369 and 394 Seabrook lines	Page 332 Line 11 & Montuap Fin	<u>'</u>	
	Fairmont 115 kV Substation	in ago ooz zino i i a montaap i ili _ [		
		-	<del> </del> -	
	345 kV Millstone-Manchester 310 line	Page 332.1 Line 5	-	
	UI Substations	-,		
	Black Pond	1	i 	
	Total	=	\$0	9

## New England Power Company 2009 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post	
1	2008	Pre-1997 PTF Transmission Plant	\$353,995,853		
2	2008	Post-1996 PTF Transmission Plant	\$503,285,683		
3	2009	Additions/Retirements	\$159,702,008		
4	2009	Pre-1997 PTF Transmission Plant	\$352,386,820	34.65%	
5	2009	Post-1996 PTF Transmission Plant	\$664,596,724	65.35%	
6	2009	Total PTF Transmission Plant	\$1,016,983,544	100.00%	
7	2009	Post-2003 PTF Transmission Plant	\$206,004,443		

### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5
- 7 PTF Plant Report: Post 2003 RSP Projects

# GROSS PLANT ASSOC. WITH HVDC LEASES 2009

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$0
2 3 4	Allocation Miles used by NHH (a) Total miles at Comerford Station Percentage of Total Gross Plant leased by NHH (a)	0 0 0%
5	Total Gross Plant leased by NHH (a)	\$0
6	Total Land from Sandy Pond to New Hampshire	\$0
7	HVDC lines occupy 35% of Right of Way	0%
8	Total Land leased by NEH (a)	\$0
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$0

#### Source:

- 1 FERC Form 1, Page 423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 Total miles per lease agreement
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

# New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u> 2009</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$900,396
2	Less: Specifically identified Transmission-Related	
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
		\$513,021
3	Total unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.2163%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,339
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	<u>\$513,021</u>
7	Total Transmission-Related Equity AFUDC	\$897,360
8	Post-96 PTF Allocation Factor	48.3248%
9	Transmission-Related Equity AFUDC	\$433,647

#### Sources:

- 1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 6 Post-96 PTF Allocation Factor
  - 9 Line 7 \* Line 8

# New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2009	MECO 2009
1	Total Integrated Facilities Charges	\$0	\$0
2 3 4	Total 2009 PTF Property Total Transmission Plant in 2009 NECO or MECO PTF Plant Allocator	\$0 \$0 0.00%	\$0 \$0 0.00%
5	PTF Related Integrated Facilities Charge	\$0	\$0
6	Total Integrated Facilities	<u> </u>	\$0

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

# Shading denotes an input

# New England Power Company Development of 2009 Regulatory Commission Expense

Line <u>No.</u>		2009	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$4,241,188	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$54,748	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$249,867	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$0	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$1,328,369	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,608,204	Line 1 - (Line 2-5)

Attachment 4 Exhibit 3 Page 14 of 29

#### **Attachment 6**

# Transmission Rents Received from Electric Property New England Power Company

	<u> 2009</u>
Revenues	\$887,595
Plant Allocation Factor	100.00%
Transmission Allocated	\$887,595
PTF Allocation	48.3248%
Total PTF Revenue	\$428,929

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### Attachment 7

## Revenue for Short-Term Transmission Service under the NEPOOL Tariff

# **New England Power Company**

**2009**Revenues \$923,870

Post-96 PTF Percent 65.3498%

Total Post-96 PTF Revenue \$603,747

Source: Short Term Through and Out Revenues from ISO New England

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:			
Revenue Requirements for (year):		Calendar Year 2009	
Rates Effective for the Period: Through:		June 2010 May 2011	
Customer:	New England P	ower Company	
Customer's NABs Number:			
Name of Participant responsible for customer's billing:			
DUNs number of Participant responsible for customer's billing	j:		
	Pre-97 Revenue <u>Requirements</u>	Post-96 Revenue Requirements	•
Total of Attachment F - Sections A through I	\$90,404,997	(a) \$110,240,121	(f)
Total of Attachment F - Section J - Support Revenue	\$7,130,058	(b) \$0	(g)
Total of Attachment F - Section K - Support Expense	\$963,053	(c) <b>\$0</b>	(h)
Total of Attachment F - Section (L through O)	(\$547,552)	(d) (\$1,032,676	<u>)</u> (i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$83,690,440	(e)=(a)-(b)+(c)+(d) \$109,207,445	(j)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$25,171,563	(k)
Annual True-up (per Attachment C to Attacment F Im[plemen	tation Rule) N/A	(I) N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$83,690,440	(n)=(e) + (l) \$134,379,008	(o)=(j)+(k)+(
Annual Revenue Requirement Total = Sum of Pre-97 Revenu and Post-96 Revenue Requirements Subtotals for rate calcu	•	\$218,069,448	(p) = (n) + (c

PTF Revenue Requirements

Worksheet 1 of 6

#### New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2009

#### PRE-1997

	0110	ang denotes an input	Attachment F		
	I.	INVESTMENT BASE	Reference	NEP	Reference
Line No.	١.	INVESTMENT BASE	Section:	INLI	reletence
1		Transmission Plant	(A)(1)(a)	\$339,300,092	Worksheet 3, line 1&2 column 5
2		General Plant	(A)(1)(b)	\$1,677,905	Worksheet 3, line 3 column 5
3		Plant Held For Future Use	(A)(1)(c)	\$263,347	Worksheet 3, line 5 column 5
4		Total Plant (Lines 1+2+3)	(/ ()( 1)(0)	\$341,241,344	Worksheet 9, line 3 column 3
7		Total Flant (Emos 1-2-0)		ψοτ1,2τ1,0ττ	
5		Accumulated Depreciation	(A)(1)(d)	\$78,995,083	Worksheet 3, line 8 column 5
6		Accumulated Deferred Income Taxes	(A)(1)(e)	\$71,067,110	Worksheet 3, line 11 column 5
7		Loss On Reacquired Debt	(A)(1)(f)	\$253,833	Worksheet 3, line 12 column 5
8		Other Regulatory Assets	(A)(1)(g)	\$15,736,382	Worksheet 3, line 16 column 5
9		Net Investment (Line 4-5-6+7+8)	( )( )(0)	\$207,169,366	· ·
		,			
10		Prepayments	(A)(1)(h)	\$0	Worksheet 3, line 17 column 5
11		Materials & Supplies	(A)(1)(i)	\$995,680	Worksheet 3, line 18 column 5
12		Cash Working Capital	(A)(1)(j)	\$2,002,723	Worksheet 3, line 25 column 5
13		Total Investment Base (Line 9+10+11+12)		\$210,167,769	
	II.	REVENUE REQUIREMENTS			
14		Investment Return and Income Taxes	(A)	\$26,914,505	Worksheet 2
15		Depreciation Expense	(B)	\$7,325,298	Worksheet 4, line 3, column 5
16		Amortization of Loss on Reacquired Debt	(C)	\$75,151	Worksheet 4, line 4, column 5
17		Investment Tax Credit	(D)	(\$104,065)	Worksheet 4, line 5, column 5
18		Property Tax Expense	(E)	\$5,370,633	Worksheet 4, line 6, column 5
19		Payroll Tax Expense	(F)	\$502,606	Worksheet 4, line 22, column 5
20		Operation & Maintenance Expense	(G)	\$8,809,833	Worksheet 4, line 11, column 5
21		Administrative & General Expense	(H)	\$7,211,949	Worksheet 4, line 21, column 5
22		Transmission Related Integrated Facilities Charge	(1)	\$34,299,087	Attachment 4, line 6
23		Transmission Support Revenue	(J)	(\$7,130,058)	Worksheet 6
24		Transmission Support Expense	(K)	\$963,053	Worksheet 6
25		Transmission Related Expense from Generators	(L)	\$0	Worksheet 7
26		Transmission Related Taxes and Fees Charge	(M)	\$0	
27		Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$320,123)	Attachment 7
28		Transmission Rents Received from Electric Property	(O)	(\$227,429)	Attachment 6
29		Total Revenue Requirements (Line 14 thru 28)		\$83,690,440	

PTF Revenue Requirements

Worksheet 2 of 6

# New England Power Company Annual Revenue Requirements For Costs in 2009

Shading denotes an input

				LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY IVESTMENT RETURN	CAPITALIZATION 12/31/2009  \$410,350,000 \$1,111,700 \$745,076,320  \$1,156,538,020		CAPITALIZATION RATIOS  35.48% 0.10% 64.42%	COST OF CAPITAL 1.58% 6.02% 11.64%	COST OF CAPITAL 0.56% 0.01% 7.50%	EQUITY PORTION 0.01% 7.50% 7.51%
Cost of Capital Rate=										
(a) Weighted Cost of Capital	=	0.0807								
(b) Federal Income Tax	=	( R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	x -	Federal Income Tax		)	
	=	( 0.0751 +	( (\$104,065)	\$229,931 ) /	\$210,167,769 )	х	0.35		)	
		( 1				-	0.35		)	
	=	0.0407609								
(c) State Income Tax	=	( R.O.E. +	PTF Inv. ( (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	+	Federal Income Ta		)* State Income Tax F	ate
	=	( 0.0751 +	( (\$104,065)	\$229,931 ) /	\$210,167,769 )	+	0.0407609		)* 0.05	3641
		( 1				-	0.053641		)	
	=	0.0066011								
(a)+(b)+(c) Cost of Capital Rate	=	0.1280620								
		(PTF)								
INVESTMENT BASE		\$210,167,769	From Worksheet	1						
x Cost of Capital Rate		0.1280620								
= Investment Return and Income Taxes		\$26,914,505	To Worksheet 1							

#### Source: Attachment 2

#### New England Power Company

			New England Pov	wer Company			
	Shading denotes an input						
Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1	Transmission Plant			\$0		\$352,386,820	Attachment 1, Page 1
2	Less: Plant Assoc. HVDC Leases			ΨΟ		(\$13,086,728)	Attachment 1, Page 2
3	General Plant	\$6,563,943	99.7633% (a	s) \$6,548,406	25.6231%	\$1,677,905	FERC Form 1 Page 207.99g
4	Total (line 1+2+ 3)		,	\$6,548,406		\$340,977,997	
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	25.6231%	\$263,347	FERC Form 1 Page 214.2,4,9
	Transmission Accumulated Depreciation						
6	Transmission Accum. Depreciation	\$303,640,607		\$303,640,607	25.6231%	\$77,802,136	FERC Form 1 Page 219.25
7	General Plant Accum.Depreciation	\$4,666,793	99.7633% (a		25.6231%	\$1,192,947	FERC Form 1 Page 219.28
8	Total (line 6+ 7)			\$308,296,354		\$78,995,083	
	Transmission Accumulated Deferred Taxes						
9	Accumulated Deferred Taxes (281-283)	-\$430,463,140	99.2163%	(\$427,089,600)	25.6231%	(\$109,433,595)	FERC Form 1 Page 113.62-64
10	Accumulated Deferred Taxes (190)	\$150,916,705	99.2163%	\$149,733,971	25.6231%	\$38,366,485	FERC Form 1 Page 111.82
11	Total (line 9+ 10)			(\$277,355,629)		(\$71,067,110)	
12	Transmission Loss on Reacquired Debt	\$990,643	100.0000%	\$990,643	25.6231%	\$253,833	FERC Form 1 Page 111.81c
	Other Regulatory Assets						
13	FAS 106	\$0	99.7633% (a	a) \$0	25.6231%	\$0	
14	FAS 109 (Asset Account 182.3)	\$61,414,823	100.0000%	\$61,414,823	25.6231%	\$15,736,382	FERC Form 1 Page 232.7f
15	FAS 109 ( Liability Account 254 )	\$0	100.0000%	\$0	25.6231%	\$0	
16	Total (line 13+14+ 15)	\$61,414,823		\$61,414,823		\$15,736,382	
17	Transmission Prepayments	\$0	99.7633% (a	a) \$0	25.6231%	\$0	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$3,885,867		\$3,885,867	25.6231%	\$995,680	FERC Form 1 Page 227.8c
19	Cash Working Capital						
20	Operation & Maintenance Expense					\$8,809,833	Worksheet 1, Line 20
21	Administrative & General Expense					\$7,211,949	Worksheet 1, Line 21
22	Transmission Support Expense					\$0	Worksheet 6
23	Subtotal (line 20+21+22)					\$16,021,782	
24						0.1250	x 45 / 360
25	Total (line 23 * line 24)					\$2,002,723	

<sup>(</sup>a) Worksheet 5 Line 11 (b) Worksheet 5 Line 3

PTF Revenue Requirements
Worksheet 4 of 6

#### New England Power Company

Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
	Depreciation Expense		1 401013				
1 2	Transmission Depreciation General Depreciation	\$28,239,845 \$349,629	99.7633% (a)	\$28,239,845 \$348,801	25.6231% 25.6231%	\$7,235,924 \$89,374	FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
3		V. 15,122	(2)	\$28,588,646		\$7,325,298	
4	Amortization of Loss on Reacquired Debt	\$293,292	100.0000%	\$293,292	25.6231%	\$75,151	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	\$406,136	100.0000%	\$406,136	25.6231%	\$104,065	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$20,960,123	100.0000%	\$20,960,123	25.6231%	\$5,370,633	FERC Form 1 Page 263.10,17,23,28i - Footnote (e)
_	Transmission Operation and Maintenance						
7 8	Operation and Maintenance Transmission of Electricity by Others - #565	\$62,195,739 \$15,883,436		\$62,195,739 \$15,883,436	25.6231% 25.6231%	\$15,936,476 \$4,069,829	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b
9	Load Dispatching - #561 (excl #561.3)	\$11,929,915		\$11,929,915	25.6231%	\$3,056,814	FERC Form 1 Page 321.84-92b less 87b
10	**Station Expenses & Rents - #562 / #567	\$0		201 000 000	05.00048/	\$0	FERC Form 1 Page 321.93b & .98b
11	O&M less lines 8, 9 & 10	\$34,382,388		\$34,382,388	25.6231%	\$8,809,833	
12	Transmission Administrative and General Total Administrative and General	\$29,814,013					EEDC Form 1 Dogo 222 107h
13	less Property Insurance (#924)	-\$440,927					FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b
14	less Regulatory Commission Expenses (#928)	\$4,241,188					FERC Form 1 Page 323.189b
15	less General Advertising Expense (#930.1)	\$24,704					FERC Form 1 Page 323.191b
16 17	Subtotal [line 12 minus (13 thru 15)] PLUS Property Insurance alloc. using Plant Allocatior	\$25,989,048 -\$440,927	99.7633% (a) 99.2163% (c)	\$25,927,532 -\$437,471	25.6231% 25.6231%	\$6,643,437 -\$112,094	Line 13
18	PLUS Regulatory Comm. Exp.	\$2,608,204	99.2163% (c)	\$2,587,764	25.6231%	\$663.065	Attachment 5 Line 6
19	PLUS Specifically identified T rans. Related General Advertising Expense	\$24,704		\$24,704	25.6231%	\$6,330	Line 15
20	PLUS Specifically identified Trans. Related Regulatory Expense	\$43,753		\$43,753	25.6231%	\$11,211	FERC Form 1 Page 350.18c
21	Total A&G [line 16 + (17 thru 20)]	\$28,224,782		\$28,146,282		\$7,211,949	
22	Payroll Tax Expense	\$1,966,189	99.7633% (a)	\$1,961,535	25.6231%	\$502,606	FERC Form 1 Page 263.3,4i - Footnote (d)
	(a) Worksheet 5 Line 11		(e)	Property Taxes F	F1, Page 263i		
	(b) Worksheet 5 Line 3 (c) Worksheet 5 Line 16			Massachusetts	\$17,745,431		
	(c) Francisco & Line 10			New Hampshire	\$2,340,263		
	(d) Payroll taxes FERC Form 1, page 263.i			Vermont	\$730,106		
	Federal Unemployment	\$13,994		Maine Rhode Island	\$0 \$144,323		
	FICA	\$1,952,195		Connecticut	\$144,323		
	Payroll Taxes	\$0			\$20,960,123		
	State Unemployment	\$0					
	Total	\$1,966,189					

Total \$\frac{\$\frac{1,966,189}{\text{Property Taxes}}\$}\$

(e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1

(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

 $<sup>^{\</sup>star\star}$  Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 3
Page 21 of 29
PTF Revenue Requirements
Worksheet 5 of 6

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment	\$352,386,820 \$1,375,270,230	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	25.6231%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 \$22,154,668 \$22,154,668	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$22,207,232 \$22,207,232	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.7633%	
12	Plant Allocation Factor Total Transmission Investment	\$1,375,270,230	Line 2
13 14	plus Transmission-Related General Plant = Revised Numerator (Line 12 + Line 13)	\$6,548,406 \$1,381,818,636	Worksheet 3, Line 3, Column 3
15	Total Plant in Service	\$1,392,733,917	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2163%	

# Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTAL	_
Participant	PTF Supporting Facilities	FERC Form 1	Revenues (a)	Expenses (b)
BECO	345 kV Sherman - Medway 336 line		(a)	(b)
SE O O	115 kV Somerville 402 Substation	·—; —	- —	
	115/345 kV North Cambridge 509 Substation	14092582	- —	
	:345 kV Golden Hills -Mystic 389 (x&y) line	Contract Suspended Oct. 1997		
			- — — — - <del>  - —</del>	<del>-</del> \$
	West Medway 345 kV breaker	Pg 332 Line 6 Col (g)	- — —	 \$9,33
	115 kV Millbury-Medway 201 line	Pg 332 Line 2 Col (g)	- — — - — - <mark>  - —</mark>	\$115,22
	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)	- —	
	345 kV "stabilizer" 342 line	[Pg 332 Line 3 Col (g) ]	-	\$69,18
	345 kV Walpole - Medway 325 line		- — —	¢40.40
	345 kV Carver - Walpole 331 line	Pg 332 Lines 12 & 13 Col (g)	- — — — - <mark>- —</mark>	\$19,46
	345 kV Jordan Rd - Canal 342 line	. — -  -	- —	
<u> </u>	Second Count line	IDe 222 Line 4 Col (*)		\$47,04
CEC	Second Canal line	Pg 332 Line 4 Col (g)	\ <mark></mark>	
	345 kV Pilgrim-Bridgewater - 355 line		- — — - — - <mark></mark>	<u>\$</u>
	345 kV Myles Standish - Canal 342 line	·— <u>-</u>	Ø4.400	\$
01.45	Bell Rock Road	Page 330.5 Line 12	-\$4,408	
CMP	345 kV Buxton-South Gorham 386 line	Page 332.1, Line 4	- —	\$
	115 kV Wyman 164-167 lines	Pg 332.1 Line 3 Col (g)		\$
	115 kV Maine Yankee transmission	. —	- <b></b>	
	1			
NEP	345 kV Carver - Walpole 331 line	. — - <del> </del> —	\$01	
	345 kV Medway - Bridgewater 344 Line	Pg 330.5, Line 11	\$166,069	
	Northern Rhode Island transmission	Reflect in Integr. Fac. Chg. Wksh1	N/A	N//
NEP	lou e eve	IT DOWN		¢602.00
NEF	Chester SVC	Tx Billing	- — —	\$692,80
	Fitchburg Support	See Attachment 9	- — — — - <mark>- —</mark>	φ10.00
/T EL O	MWRA Transmission (MDC)	Contract		\$10,00
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12	\$41,705	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line	. — - <del> </del> —	054000	
	345 kV Tewksbury-Woburn 338 line]	Page 330 Line 4	\$854,688	— —
	Boston-Edison [115 kV Tewksbury - Woburn M139 line	·		— —
	115 kV Tewksbury - Woburn N140 line	Page 330 Line 3	\$110,499	
	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5	\$13,319	
	HQ Phase II - AC in MA	Page 330 Line 11	\$5,099,585	
	Boston Edison -345 kV Golden Hills-Mystic 349 line	Page 330 Line 2	\$425,327	— —
	345 kV NH/MA border-Tewksbury 394 line (Seabrook)	Page 330.1 Line 8	\$423,274 *	
	<u> </u>			
NU	PSNH 345 kV 363, 369 and 394 Seabrook lines	Page 332 Line 11		\$
	Fairmont 115 kV Substation		- —	Υ
	345 kV Millstone-Manchester 310 line	Page 332.1 Line 5		\$
	UI Substations			Ψ
	Black Pond	·	- — <del>-  </del> - —	
	IDIAUK FUNU	1		

<sup>\*</sup> Adjusted FERC Form Pg 330.1 Line 8 to reflect FERC Order #ER09-1764-000 amending the Seabrook Transmission Support Agreement.

## Shading denotes an input

## New England Power Company 2009 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post
1	2008	Pre-1997 PTF Transmission Plant	\$353,995,853	
2	2008	Post-1996 PTF Transmission Plant	\$503,285,683	
3	2009	Additions/Retirements	\$159,702,008	
4	2009	Pre-1997 PTF Transmission Plant	\$352,386,820	34.65%
5	2009	Post-1996 PTF Transmission Plant	\$664,596,724	65.35%
6	2009	Total PTF Transmission Plant	\$1,016,983,544	100.00%

## Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5

### GROSS PLANT ASSOC. WITH HVDC LEASES **2009**

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$14,269,187
	Allocation	
2	Miles used by NHH (a)	224
3	Total miles at Comerford Station	253
4	Percentage of Total Gross Plant leased by NHH (a)	89%
5	Total Gross Plant leased by NHH (a)	\$12,699,576
6	Total Land from Sandy Pond to New Hampshire	\$1,106,146
	·	
7	HVDC lines occupy 35% of Right of Way	35%
_		
8	Total Land leased by NEH (a)	\$387,151
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$13,086,728

#### Source:

- 1 FERC Form 1, Page 422.1-423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 FERC Form 1, Page 422.1 Lines 5 + 16 col (f)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

### New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2009</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$900,396
2	Less: Specifically Identified Transmission-Related	
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission 2000 Transmission	\$42,457
	2000 Transmission	(\$8,299) \$23,561
	2001 Hansinission	\$513,021
		φ515,021
3	Total Unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.2163%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,339
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	\$513,021
7	Total Transmission-Related Equity AFUDC	\$897,360
	• •	
8	Pre-97 PTF Allocation Factor	25.6231%
9	Transmission-Related Equity AFUDC	\$229,931

#### Sources:

- 1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 5 Pre-97 PTF Allocation Factor
  - 9 Line 7 \* Line 8

Shading denotes an input

## New England Power Company Determination of the PTF Related Integrated Facilities Charges

		REVISE	D PTF
		Narragansett	MECO
		<u>2009</u>	<u>2009</u>
1	Total Integrated Facilities Charges	\$42,294,362	\$7,830,887
2	Total 2009 PTF Property	\$173,100,030	\$21,108,649
3	Total Transmission Plant in 2009	\$239,329,792	\$44,568,938
4	NECO or MECO PTF Plant Allocator	72.33%	47.36%
5	PTF Related Integrated Facilities Charge	\$30,590,238	\$3,708,849
6	Total Integrated Facilities	<u>-</u>	\$34,299,087

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

#### New England Power Company Development of 2009 Regulatory Commission Expense

Line <u>No.</u>		2009	Source
1	Total Regulatory Commission Expense - NEP	\$4,241,188	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$54,748	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$249,867	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$0	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$1,328,369	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,608,204	Line 1 - (Line 2-5)

# Transmission Rents Received from Electric Property New England Power Company

	<u>2009</u>
Revenues	\$887,595
Plant Allocation Factor	100.00%
Transmission Allocated	\$887,595
PTF Allocation	25.6231%
Total PTF Revenue	\$227,429

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

#### New England Power Company

**2009**Revenues \$923,870

Pre-97 PTF Percent 34.6502%

Total Pre-97 PTF Revenue \$ 320,123

Source: Short Term Through and Out Revenues from ISO New England

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:				
Revenue Requirements for (year):		Calend	dar Year 2010	
Rates Effective for the Period: Through:			une 2011 lay 2012	
Customer:	New England P	ower Compa	ny	
Customer's NABs Number:				
Name of Participant responsible for customer's billing:				
DUNs number of Participant responsible for customer's billing:				
	Pre-97 Revenue Requirements		Post-96 Revenue Requirements	
Total of Attachment F - Sections A through I	\$88,866,750	(a)	\$121,119,799	(f)
Total of Attachment F - Section J - Support Revenue	\$6,543,377	(b)	\$0	(g)
Total of Attachment F - Section K - Support Expense	\$881,501	(c)	\$0	(h)
Total of Attachment F - Section (L through O)	(\$1,159,454)	(d)	(\$2,495,328)	(i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$82,045,420	(e)=(a)-(b)+(c)+(d)	\$118,624,471	(j)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	_	\$19,133,246	(k)
Annual True-up (per Attachment C to Attachment F Implementation Rule)	N/A	(1)	N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$82,045,420	(n)=(e)+(l)	\$137,757,717	(o)=(j)+(k)+(m
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirements Subtotals, Forecasted Revenue Requirements True-ups (including interest)			\$219,803,137	(p) = (n) + (o)

PTF Revenue Requirements
Worksheet 1 of 8

# New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2010

#### POST-1996

		·	Attachment F		
	I.	INVESTMENT BASE	Reference	NEP	Reference
Line No.			Section:		
1		Transmission Plant	(A)(1)(a)	\$755,657,102	Worksheet 5, line 1&2 column 5
2		General Plant	(A)(1)(b)	\$3,501,114	Worksheet 5, line 3 column 5
3		Plant Held For Future Use	(A)(1)(c)	\$523,217	Worksheet 5, line 5 column 5
4		Total Plant (Lines 1+2+3)	( / ( / ( /	\$759,681,433	
5		Accumulated Depreciation	(A)(1)(d)	(\$168,493,923)	Worksheet 5, line 8 column 5
6		Accumulated Deferred Income Taxes	(A)(1)(e)	(\$160,012,647)	Worksheet 5, line 11 column 5
7		Loss On Reacquired Debt	(A)(1)(f)	\$355,007	Worksheet 5, line 12 column 5
8		Other Regulatory Assets	(A)(1)(g)	\$22,586,072	Worksheet 5, line 16 column 5
9		Net Investment (Line 4+5+6+7+8)	( )( )(0)	\$454,115,942	
10		Prepayments	(A)(1)(h)	\$0	Worksheet 5, line 17 column 5
11		Materials & Supplies	(A)(1)(i)	\$2,273,926	Worksheet 5, line 18 column 5
12		Cash Working Capital	(A)(1)(j)	\$4,024,393	Worksheet 5, line 25 column 5
13		Total Investment Base (Line 9+10+11+12)		\$460,414,261	
	II.	REVENUE REQUIREMENTS			
14		Investment Return and Income Taxes	(A)	\$59,812,781	Worksheet 3
15		Depreciation Expense	(B)	\$16,593,368	Worksheet 6, line 3, column 5
16		Amortization of Loss on Reacquired Debt	(C)	\$149,309	Worksheet 6, line 4, column 5
17		Investment Tax Credit	(D)	(\$201,661)	Worksheet 6, line 5, column 5
18		Property Tax Expense	(E)	\$11,520,944	Worksheet 6, line 6, column 5
19		Payroll Tax Expense	(F)	\$1,049,911	Worksheet 6, line 22, column 5
20		Operation & Maintenance Expense	(Ġ)	\$16,817,224	Worksheet 6, line 11, column 5
21		Administrative & General Expense	(H)	\$15,377,923	Worksheet 6, line 21, column 5
22		Transmission Related Integrated Facilities Charge	(I)	\$0	Attachment 4, line 6
23		Transmission Support Revenue	(J)	\$0	Worksheet 8
24		Transmission Support Expense	(K)	\$0	Worksheet 8
25		Transmission Related Expense from Generators	(L)	\$0	
26		Transmission Related Taxes and Fees Charge	(M)	\$0	
27		Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$1,922,989)	Attachment 7
28		Transmission Rents Received from Electric Property	(O)	(\$572,339)	Attachment 6
29		Total Revenue Requirements (Line 14 thru 28)		\$118,624,471	

PTF Revenue Requirements
Worksheet 2 of 8

#### New England Power Company Post 1996 Regional Network Service Revenue Requirement For Test Year Ended 12/31/2010

Line No. 1 2 3	<u>Description</u> Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)  Forecasted Revenue Requirements for Forecasted Transmission CWIP  Forecasted Transmission Revenue Requirements	Attachment F Reference	Forecasted Amount \$ \$ 11,629,831     7,503,415 \$ 19,133,246	Reference Line 6 Line 9 Line 1 + Line 2
4 5 6 7 8	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA) Carrying Charge Factor (CCF) Forecasted Revenue Requirements for FTPA  Forecasted New England Power Company (NEP) NEEWS CWIP (FNCWIP) NEEWS NEP Cost of Capital Rate (NCCC)	Appendix C iv Appendix C vi Appendix C xiii Appendix C xiv	\$ 73,388,000 15.84705% \$ 11,629,831 \$ 53,588,131 14,00201%	Project Detail Line 20 Line 4 * Line 5  Filing Workpaper Workpaper 4
9	Forecasted Revenue Requirements for FNCWIP	Appendix 6 xiv	\$ 7,503,415	Line 7 * Line 8
	<b>Derivation of Carrying Charge (CCF)</b>			
10 11 12 13 14 15	Investment Return and Income Taxes Depreciation Expense Amortization of Loss on Reacquired Debt Investment Tax Credit Property Tax Expense Payroll Tax Expense Operation & Maintenance Expense	(A) (B) (C) (D) (E) (F) (G)	\$58,442,316 16,593,368 149,309 (201,661) 11,520,944 1,049,911 16,817,224	Summary, Line 14 Summary, Line 15 Summary, Line 16 Summary, Line 17 Summary, Line 18 Summary, Line 19 Summary, Line 20
17 18 19 20	Administrative & General Expense Total Expenses (Lines 10 thru 17) PTF Transmission Plant Carrying Charge Factor (FTPA)	(H) (A)(1)(a)	15,377,923 \$119,749,334 \$755,657,102 15.84705%	Summary, Line 21  Summary, Line 1  Line 18 / Line 19

New England Power Company
Annual Revenue Requirements
For Costs in 2010

PTF Revenue Requirements Worksheet 3 of 8

						CAPITALIZATION 12/31/2010	CAI	PITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
				LONG-TEF PREFERRE	RM DEBT D STOCK N EQUITY	\$410,350,000 \$1,111,700		35.93% 0.10%	1.25% 6.02% 11.64%	0.45% 0.01%	0.01%
				TOTAL INVESTMENT		\$730,712,039 \$1,142,173,739		63.98% 100.01%	11.04%	7.45%	7.45% 7.46%
Cost of Capital Rate=											
(a) Weighted Cost of Capital	=	0.0791									
(b) Federal Income Tax	= (	R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp.	) /	PTF Inv. Base)	x -	Federal Income Tax Federal Income Tax	Rate )		
	= (	0.0746 +	(\$201,661) +		\$497,607 ) /	\$460,414,261 )	х	0.35 0.35	)		
	- '	0.0405153					•	0.35	)		
		0.0400100	PTF Inv.	Eq. AFUDC							
(c) State Income Tax	= (	R.O.E. + (	(Tax Credit +	of Deprec. Exp.	) /	PTF Inv. Base)	+	Federal Income Tax		State Income Tax F	tate
	= (	0.0746 +	(\$201,661) +		\$497,607 ) /	\$460,414,261 )	+	0.0405153	)*	0.059	466
	_	0.0073189					-	0.059466	)		
	=	0.0073189									
(a)+(b)+(c) Cost of Capital Rate	=	0.1269342									
		(PTF)									
INVESTMENT BASE		\$460,414,261	From Worksheet 1								
x Cost of Capital Rate		0.1269342									
= Investment Return and Income Taxes		\$58,442,316	To Worksheet 1								
Post 2003 PTF Investment Base w/ Inc	remental 100 bps:										
Plant In-Service Accumulated Depreciation		\$ 213,120,061 (46,801,214)	From Attachment 1 From Worksheets 5 & 7								
Accumulate Deferred Income Taxes Total Post-2003 Investment		\$ 121,525,527	From Worksheets 5 & 7 Calculated	,							
Incremental ROE:	1.00%	0.00640 0.00345	Calculated								
Federal Income Taxes: State Income Taxes: Cost of Capital Rate		0.00345 0.00062 0.01047	Per Attachment F Per Attachment F								
Incremental Return and Taxes on Post-20	03 PTF Investment	\$ 1,271,815									
NEEWS CWIP w/ Incremental 125 bps:											
New England Power NEEWS In-Service Accumulated Depreciation	•	\$ 14,281,610 (3,431,595)	PowerPlant PTF 4 & 5 r From Worksheets 3 & 5	,							
Accumulate Deferred Income Taxes Total New England Power NEEWS Inve	stment	\$ 7,541,046	From Worksheets 3 & 5 Calculated	•							
Incremental ROE:	1.25%	0.00800	Calculated								
Federal Income Taxes: State Income Taxes:		0.00431 0.00078	Per Attachment F Per Attachment F								
Cost of Capital Rate Incremental Return and Taxes on NEEWS	3 PTF Investment	0.01308 \$ 98,650									
NEEWS Allocation Factor Total Transmission Investment		\$1,484,361,243	Worksheet 7 Line 2								
Total NEEWS In-Service - NEP For Accumulated Depreciation		\$15,743,593 1.0606%	PowerPlant Report								
NEEWS Allocation Factor		1.0606%									
Plant Allocation Factor For Accumulated Deferred Inco	me Taxes	0.992566 1.0527%	Worksheet 7 Line 16								

COST OF CAPITAL

CAPITALIZATION RATIOS COST OF CAPITAL

PTF Revenue Requirements Worksheet 4 of 8

> EQUITY PORTION

New England Power Company
Annual Revenue Requirements
For Costs in 2010

Shading denotes an input

							PREFERE	ERM DEBT RED STOCK ON EQUITY NT RETURN	\$410,350,00 \$1,111,70 \$730,712,03 \$1,142,173,73	0 9	=	35.93% 0.10% 63.98% 100.01%	%	0.45% 0.01% 8.25% 8.71%	0.01% 8.25% 8.26%
Cost of Capital Rate=															
(a) Weighted Cost of Capital	=		0.0871												
(b) Federal Income Tax	=	(	R.O.E. +	(	PTF Inv. (Tax Credit	+	Eq. AFUDC of Deprec. Ex		PTF Inv. Base)		x -	Federal Income Tax Rate Federal Income Tax Rate	—) —)		
	=	(	0.0826	+(	(\$201,661)	+		\$497,607 ) /	\$460,414,261	)	x -	0.35 0.35	_)		
	=		0.0448230												
(c) State Income Tax	=	(	R.O.E. +	(	PTF Inv. (Tax Credit	+	Eq. AFUDC of Deprec. Ex		PTF Inv. Base)		+	Federal Income Tax State Income Tax Rate		State Income Tax Rate	
	=	(	0.0826	+(	(\$201,661)	+		\$497,607 ) /	\$460,414,261	)	+	0.0448230 0.059466		0.059466	
	=	,	0.0080971									0.000400	,		
(a)+(b)+(c) Cost of Capital Rate	e =		0.1400201												

CAPITALIZATION 12/31/2010

PTF Revenue Requirements
Worksheet 5 of 8

#### New England Power Company

	Shading denotes an input						
Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+3)	\$6,894,870	99.7459% (a)	\$6,877,350 \$6,877,350	50.9079% (b)_ =	\$755,657,102 \$0 \$3,501,114 \$759,158,216	Attachment 1, Page 1 Attachment 2 FERC Form 1 page 207.99
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	50.9079% (b)_	\$523,217	FERC Form 1 page 214.2,4,9
6 7 8	Transmission Accumulated Depreciation Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+ 7)	(\$325,966,071) (\$5,024,647)	99.7459% (a)	(\$325,966,071) (\$5,011,879) (\$330,977,950)	50.9079% (b) 50.9079% (b)_ =	(\$165,942,481) (\$2,551,442) (\$168,493,923)	FERC Form 1 page 219.25 FERC Form 1 Page 219.28
9 10 11	Transmission Accumulated Deferred Taxes Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	(\$374,482,727) \$57,810,678	99.2566% (c) 99.2566% (c)	(\$371,698,822) \$57,380,913 (\$314,317,909)	50.9079% (b) 50.9079% (b)_	(\$189,224,065) \$29,211,418 (\$160,012,647)	FERC Form 1 page 113.62-64 FERC Form 1 page 111.82
12	Transmission Loss on Reacquired Debt	\$697,351	100.0000%	\$697,351	50.9079% (b)_	\$355,007	FERC Form 1 Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 ( Liability Account 254 ) Total (line 13+14+ 15)	\$0 \$44,366,536 \$0 \$44,366,536	99.7459% (a) 100.0000% 100.0000%	\$0 \$44,366,536 \$0 \$44,366,536	50.9079% (b) 50.9079% (b) 50.9079% (b)_	\$0 \$22,586,072 \$0 \$22,586,072	FERC Form 1 Page 232.7f FERC Form 1 Page 278
17	Transmission Prepayments	\$0	99.7459% (a)	\$0	50.9079% (b)_	\$0	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$4,466,745		\$4,466,745	50.9079% (b)_	\$2,273,926	FERC Form 1 Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)				- - -	\$16,817,224 \$15,377,923 \$0 \$32,195,147 0.1250 \$4,024,393	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 8 x 45 / 360

<sup>(</sup>a) Worksheet 7 Line 11 (b) Worksheet 7 Line 3 (c) Worksheet 7 Line 16

PTF Revenue Requirements Worksheet 6 of 8

#### New England Power Company

Line No.		(1) Total (g)		(3) = (1)*(2) ransmission Allocated	PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2	Depreciation Expense Transmission Depreciation General Depreciation	\$32,237,934 \$357,854	99.7459% (a)	\$32,237,934 \$356,945	50.9079% 50.9079%	\$16,411,655 \$181,713	FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
3	Total (line 1+2)			\$32,594,879		\$16,593,368	
4	Amortization of Loss on Reacquired Debt	\$293,292		\$293,292	50.9079%	\$149,309	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$396,129)		(\$396,129)	50.9079%	(\$201,661)	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$22,630,955	=	\$22,630,955	50.9079%	\$11,520,944	FERC Form 1 Page 263.10,17,23,28i - Footnote (e)
7	<u>Transmission Operation and Maintenance</u> Operation and Maintenance	\$60,951,521		\$60,951,521	50.9079%	\$31,029,139	FERC Form 1 Page 321.112b
8	Transmission of Electricity by Others - #565	\$16,215,370		\$16,215,370	50.9079%	\$8,254,904	FERC Form 1 Page 321.96b
9	Load Dispatching - #561 (excl #561.3)	\$11,701,546		\$11,701,546	50.9079%	\$5,957,011	FERC Form 1 Page 321.84-92b less 87b
10 **	* Station Expenses & Rents - #562 & #567	\$0				\$0	FERC Form 1 Page 321.93b & .98b
11	O&M less lines 8, 9 & 10	\$33,034,605	_	\$33,034,605	50.9079%	\$16,817,224	
	Transmission Administrative and General						
12	Total Administrative and General	\$32,504,326					FERC Form 1 Page 323.197b
13	Less: Property Insurance (#924)	(\$179,245)					FERC Form 1 Page 323.185b
14	Less: Regulatory Commission Expenses (#928)	\$4,562,078					FERC Form 1 Page 323.189b
15	Less: General Advertising Expense (#930.1)	\$0					FERC Form 1 Page 323.191b
16	Subtotal [line 12 minus (13 thru 15)]	\$28,121,493	99.7459% (a)	\$28,050,036	50.9079%	\$14,279,684	
17	Plus: Property Insurance Allocated using Plant Allocation	(\$179,245)	99.2566% (c)	(\$177,912)	50.9079%	(\$90,571)	Line 13
18	Plus: Regulatory Commission Expense	\$2,349,311	99.2566% (c)	\$2,331,846	50.9079%	\$1,187,094	Attachment 5 Line 6
19	Plus: Specifically identifed Trans. Related General Advertising Expense	\$0		\$0	50.9079% 50.9079%	\$0 \$1.716	Line 15
20 21	Plus: Specifically identified Trans. Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$3,370 \$30,294,929	_	\$3,370 \$30,207,340	50.9079%	\$1,716 \$15,377,923	FERC Form 1 Page 350.18c
21	Total A&G [lille 16 + (17 thiu 20)]	\$30,294,929	_	\$30,207,340		\$15,377,923	
22	Payroll Tax Expense	\$2,067,627	99.7459% (a)	\$2,062,373	50.9079%	\$1,049,911	FERC Form 1 Page 263.3,4i - Footnote (d)
(0	d) (d) Payroll taxes FERC Form 1, page 263.i		(e) <u>P</u>	roperty Taxes FF	1, Page 263i		
	Federal Unemployment	(\$37,667)		lassachusetts	\$19,219,508		
	FICA	\$2,105,294		ew Hampshire	\$2,582,427		
	Payroll Taxes	\$0		ermont	\$685,578		
	State Unemployment	\$0		laine	\$0		
	Total	\$2,067,627		hode Island	\$143,442		
			C	onnecticut	\$0 \$22,630,955		
					\$∠∠,030,955		

<sup>(</sup>a) Worksheet 7, Line 11
(b) Worksheet 7 Line 3
(c) Worksheet 7 Line 16
(d) Transmission Only - Payroll Taxes - Specifically identified in FERC From 1
(e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

### PTF Revenue Requirements Worksheet 7 of 8

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment Total Transmission Investment	\$755,657,102 \$1,484,361,243	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	50.9079%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 \$22,444,501 \$22,444,501	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$22,501,688 \$22,501,688	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.7459%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant (Line 2 of Wkst. 3) = Revised Numerator (Line 12 + Line 13)	\$1,484,361,243 <u>\$6,877,350</u> \$1,491,238,593	Line 2 Worksheet 5, Line 3, Column 3
15	Total Plant in Service	\$1,502,407,856	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2566%	
17 18 19	Post-2003 PTF Allocation Factor Total Post-2003 PTF Investment Total Transmission Investment Percent Allocation (Line 17/Line 18) for Post-2003 to Total Tx	\$ 213,120,061 \$1,484,361,243 14.3577%	Attachment 1 Line 7 Line 2
20 21	Total Invst in Tx Plant/Total Plant in Serv * Post-2003 PTF Tx Plant/Total Invst in Tx Plant	14.2510%	Line 19 * Line 16

Worksheet 8 of 8

#### New England Power Company Post-96 RNs Revenue Requirments For Test Year Ended 12/31/2010

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTA	<b>AL</b>
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
			(a)	(b)
NSTAR	115 kV Millbury-Medway 201 Line	Pg 332 Line 2 Col (g)		\$0
	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$0
	345 kV "stabilizer" 342 Line	Pg 332 Line 3 Col (g)		\$0
	345 kV Carver - Walpole 331 Line	Pg 332 Line 13 Col (g)		\$0
	Second Canal Line	Pg 332 Line 4 Col (g)		\$0
	Bell Rock Road	Page 330.5 Line 12	\$0	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line-345kV Tewksbury-Woburn 338 Line]	Page 330 Line 4	\$0	
	Boston-Edison [115 kV Tewksbury - Woburn M139 line - 115kV Tewksbury-Woburn N140 Line]	Page 330 Line 3	\$0	
	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5	\$0	
	Boston Edison -345 kV Golden Hills-Mystic 349 Line	Page 330 Line 2	\$0	
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabroo	Page 330.1 Line 8	\$0	
EUA	345 kV Medway - Bridgewater 344 Line	Pg 330.5, Line 11	\$0	
NEP	Chester SVC	Transmission Billing		\$0
	HQ Phase II - AC in MA	Page 330 Line 11	\$0	
	MWRA Transmission (MDC)	Contract - Line Lease/Use		\$0
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12	\$0	
		Totals	\$0	\$0

#### New England Power Company 2010 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post
1	2009	Pre-1997 PTF Transmission Plant	\$352,386,820	
2	2009	Post-1996 PTF Transmission Plant	\$664,596,724	
3	2010	Additions/Retirements	\$89,789,358	
4	2010	Pre-1997 PTF Transmission Plant	\$351,115,800	31.72%
5	2010	Post-1996 PTF Transmission Plant	\$755,657,102	68.28%
6	2010	Total PTF Transmission Plant	\$1,106,772,902	100.00%
7	2010	Post-2003 PTF Transmission Plant	\$213,120,061	

#### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5
- 7 PTF Plant Report: Post 2003 RSP Projects

### GROSS PLANT ASSOC. WITH HVDC LEASES 2010

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$0
2 3 4	Allocation Miles used by NHH (a) Total miles at Comerford Station Percentage of Total Gross Plant leased by NHH (a)	0 0 0%
5	Total Gross Plant leased by NHH (a)	\$0
6	Total Land from Sandy Pond to New Hampshire	\$0
7	HVDC lines occupy 35% of Right of Way	0%
8	Total Land leased by NEH (a)	\$0
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$0

#### Source:

- 1 FERC Form 1, Page 423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 Total miles per lease agreement
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

#### Shading denotes an input

#### **Attachment 3**

### New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2010</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$980,344
2	Less: Specifically identified Transmission-Related	
_	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
		\$592,969
		Ψ002,000
3	Total unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.2566%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,495
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	\$592,969
7	Total Transmission-Related Equity AFUDC	\$977,464
8	Post-96 PTF Allocation Factor	50.9079%
9	Transmission-Related Equity AFUDC	\$497,607

#### Sources:

- 1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 6 Post-96 PTF Allocation Factor
  - 9 Line 7 \* Line 8

### New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett <u>2010</u>	MECO <u>2010</u>
1	Total Integrated Facilities Charges	\$0	\$0
2	Total 2010 PTF Property	\$0	\$0
3	Total Transmission Plant in 2010	\$0	\$0
4	NECO or MECO PTF Plant Allocator	0.00%	0.00%
5	PTF Related Integrated Facilities Charge	\$0	\$0
6	Total Integrated Facilities	_	\$0

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

#### Shading denotes an input

#### Attachment 5

### New England Power Company Development of 2010 Regulatory Commission Expense

Line <u>No.</u>		<u>2010</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$4,562,078	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$57,482	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$293,722	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$1,861,563	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,349,311	Line 1 - (Line 2-5)

#### Transmission Rents Received from Electric Property New England Power Company

	<u>2010</u>
Revenues	\$1,124,263
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,124,263
PTF Allocation	50.9079%
Total PTF Revenue	\$572,339

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

## Revenue for Short-Term Transmission Service under the NEPOOL Tariff New England Power Company

<u>2010</u>

Revenues \$2,816,506

Post-96 PTF Percent 68.2757%

Total Post-96 PTF Revenue \$1,922,989

Source: Short Term Through and Out Revenues from ISO New England

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:	<u> </u>			
Revenue Requirements for (year):		Calend	ar Year 2010	
Rates Effective for the Period: Through:		ne 2011 ay 2012		
Customer:	New England Po	ower Compar	ıy	
Customer's NABs Number:				
Name of Participant responsible for customer's billing:				
DUNs number of Participant responsible for customer's billing:	<u> </u>			
	Pre-97 Revenue Requirements		Post-96 Revenue Requirements	
Total of Attachment F - Sections A through I	\$88,866,750	(a)	\$121,119,799	(f)
Total of Attachment F - Section J - Support Revenue	\$6,543,377	(b)	\$0	(g)
Total of Attachment F - Section K - Support Expense	\$881,501	(c)	\$0	(h)
Total of Attachment F - Section (L through O)	(\$1,159,454)	(d)	(\$2,495,328)	(i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$82,045,420	(e)=(a)-(b)+(c)+(d)	\$118,624,471	0
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A		\$19,133,246	(k)
Annual True-up (per Attachment C to Attacment F Im[plementation Rule)	N/A	(1)	N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$82,045,420	(n)=(e) + (l)	\$137,757,717	(o)=(j)+(k)+(m)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirement and Post-96 Revenue Requirements Subtotals for rate calculations unde			\$219,803,137	(p) = (n) + (o)

PTF Revenue Requirements

Worksheet 1 of 6

#### **New England Power Company Annual Revenue Requirements of PTF Facilities** For Costs in 2010

#### PRE-1997

	Shading denotes an input			
		Attachment F		
	I. <u>INVESTMENT BASE</u>	Reference	NEP	Reference
Line No.		Section:	4000 000 070	W
1	Transmission Plant	(A)(1)(a)	\$338,029,073	Worksheet 3, line 1&2 column 5
2	General Plant	(A)(1)(b)	\$1,626,789	Worksheet 3, line 3 column 5
3	Plant Held For Future Use	(A)(1)(c)	\$243,112	Worksheet 3, line 5 column 5
4	Total Plant (Lines 1+2+3)		\$339,898,974	
5	Accumulated Depreciation	(A)(1)(d)	(\$78,290,517)	Worksheet 3, line 8 column 5
6	Accumulated Deferred Income Taxes	(A)(1)(e)	(\$74,349,701)	Worksheet 3, line 11 column 5
7	Loss On Reacquired Debt	(A)(1)(f)	\$164,953	Worksheet 3, line 12 column 5
8	Other Regulatory Assets	(A)(1)(g)	\$10,494,594	Worksheet 3, line 16 column 5
9	Net Investment (Line 4+5+6+7+8)		\$197,918,303	
10	Prepayments	(A)(1)(h)	\$0	Worksheet 3, line 17 column 5
11	Materials & Supplies	(A)(1)(i)	\$1,056,577	Worksheet 3, line 18 column 5
12	Cash Working Capital	(A)(1)(j)	\$1,869,930	Worksheet 3, line 25 column 5
13	Total Investment Base (Line 9+10+11+12)		\$200,844,810	
	II. REVENUE REQUIREMENTS			
14	Investment Return and Income Taxes	(A)	\$25,499,438	Worksheet 2
15	Depreciation Expense	(B)	\$7,710,091	Worksheet 4, line 3, column 5
16	Amortization of Loss on Reacquired Debt	(C)	\$69,376	Worksheet 4, line 4, column 5
17	Investment Tax Credit	(D)	(\$93,702)	Worksheet 4, line 5, column 5
18	Property Tax Expense	(E)	\$5,353,194	Worksheet 4, line 6, column 5
19	Payroll Tax Expense	(F)	\$487,840	Worksheet 4, line 22, column 5
20	Operation & Maintenance Expense	(G)	\$7,814,105	Worksheet 4, line 11, column 5
21	Administrative & General Expense	(H)	\$7,145,335	Worksheet 4, line 21, column 5
22	Transmission Related Integrated Facilities Charge	(I)	\$34,881,073	Attachment 4, line 6
23	Transmission Support Revenue	(J)	(\$6,543,377)	Worksheet 6
24	Transmission Support Expense	(K)	\$881,501	Worksheet 6
25	Transmission Related Expense from Generators	(L)	\$0	Worksheet 7
26	Transmission Related Taxes and Fees Charge	(M)	\$0	
27	Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$893,517)	Attachment 7
28	Transmission Rents Received from Electric Property	(O)	(\$265,937)	Attachment 6
29	Total Revenue Requirements (Line 14 thru 28)		\$82,045,420	

COST OF CAPITAL

EQUITY PORTION

PTF Revenue Requirements Worksheet 2 of 6

COST OF CAPITAL

### New England Power Company Annual Revenue Requirements For Costs in 2010

Shading denotes an input

			PF	ONG-TERM DEBT REFERRED STOCK COMMON EQUITY STMENT RETURN	\$410,350,000 \$1,111,700 \$730,712,039 \$1,142,173,739	-	35.93% 0.10% 63.98% 100.01%	1.25% 6.02% 11.64%	0.45% 0.01% 7.45% 7.91%	0.01% 7.45% 7.46%
Cost of Capital Rate=										
(a) Weighted Cost of Capital	=	0.0791								
(b) Federal Income Tax	= (	R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	x -	Federal Income Tax Rate Federal Income Tax Rate	}		
	= (	0.0746 +	( (\$93,702) +	\$231,212 ) /	\$200,844,810 )	x	0.35 0.35	)		
	=	0.0405379				-	0.35	,		
(c) State Income Tax	= (	R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	+	Federal Income Tax State Income Tax Rate	)*	State Income Tax Rate	
	= (	0.0746 +	( (\$93,702) +	\$231,212 ) /	\$200,844,810 )	+	0.0405379	)*	0.059466	
	=	0.0073230				=	0.059466	)		
(a)+(b)+(c) Cost of Capital Rate	=	0.1269609								
		(PTF)								
INVESTMENT BASE		\$200,844,810	From Worksheet 1							
x Cost of Capital Rate		0.1269609								

CAPITALIZATION 12/31/2010

CAPITALIZATION RATIOS

#### New England Power Company

	Shading denotes an input						
Line No.		(1) Total		(3) = (1)*(2) Fransmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference
1	Transmission Plant					\$351,115,800	Attachment 1, Page 1 Attachment 2
2	Less: Plant Assoc. HVDC Leases General Plant	\$6,894,870	99.7459% (a)	\$6,877,350	23.6543% (b)	(\$13,086,728) \$1,626,789	FERC Form 1 Page 207.99g
3 4	Total (line 1+2+ 3)	\$0,094,070	99.7459% (a)	\$6,877,350	23.0543% (D)_	\$339,655,862	FERC Form 1 Page 207.999
4	Total (lifle 1+2+ 3)		=	Φ0,077,330	=	\$339,055,002	
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	23.6543% (b)	\$243,112	FERC Form 1 Page 214.2,4,9
	Transmission Accumulated Depreciation						
6	Transmission Accumulated Depreciation	(\$325,966,071)	()	\$325,966,071)	23.6543% (b)	(\$77,104,992)	FERC Form 1 Page 219.25
7	General Plant Accumulated Depreciation	(\$5,024,647)	99.7459% (a)	(\$5,011,879)	23.6543% (b)_	(\$1,185,525)	FERC Form 1 Page 219.28
8	Total (line 6+ 7)		(5	\$330,977,950)	_	(\$78,290,517)	
			_		_		
	Transmission Accumulated Deferred Taxes						
9	Accumulated Deferred Taxes (281-283)	(\$374,482,727)	99.2566% (c) (		23.6543% (b)	(\$87,922,754)	FERC Form 1 Page 113.62-64
10	Accumulated Deferred Taxes (190)	\$57,810,678	99.2566% (c)		23.6543% (b)		FERC Form 1 Page 111.82
11	Total (line 9+ 10)		<u></u>	\$314,317,909)	=	(\$74,349,701)	
12	Transmission Loss on Reacquired Debt	\$697,351	100.0000%	\$697,351	23.6543% (b)	\$164,953	FERC Form 1 Page 111.81c
	Other Regulatory Assets						
13	FAS 106	\$0	99.7459% (a)	\$0	23.6543% (b)	\$0	
14	FAS 100 (Asset Account 182.3)	\$44,366,536	100.0000%	\$44,366,536	23.6543% (b)	\$10,494,594	FERC Form 1 Page 232.7f
15	FAS 109 (Liability Account 254)	\$0	100.0000%	\$0	23.6543% (b)	\$0	FERC Form 1 Page 278
16	Total (line 13+14+ 15)	\$44,366,536	100.000070	\$44,366,536	20.004070 (b)	\$10,494,594	1 ENG 1 Gilli 11 age 270
	,		=		=		
17	Transmission Prepayments	\$0	99.7459% (a)	\$0	23.6543% (b)	\$0	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$4,466,745		\$4,466,745	23.6543% (b)	\$1,056,577	FERC Form 1 Page 227.8c
19	Cash Working Capital						
20	Operation & Maintenance Expense					\$7,814,105	Worksheet 1, Line 20
21	Administrative & General Expense					\$7,145,335	Worksheet 1, Line 21
22	Transmission Support Expense					\$0	Worksheet 6
23	Subtotal (line 20+21+22)				-	\$14,959,440	
24					_	0.1250	x 45 / 360
25	Total (line 23 * line 24)				<u>-</u>	\$1,869,930	
					-		

<sup>(</sup>a) Worksheet 5 Line 11 (b) Worksheet 5 Line 3 (c) Worksheet 5 Line 16

#### **New England Power Company**

Line No.		(1) Total	Allocation Transm	(4) (1)*(2) PTF nission Allocation cated Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3	<u>Depreciation Expense</u> Transmission Depreciation General Depreciation	\$32,237,934 \$357,854	99.7459% (a) \$3	237,934 23.6543% (b) 23.6543% (b) 594,879	\$7,625,658 \$84,433 \$7,710,091	FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
4	Amortization of Loss on Reacquired Debt	\$293,292	100.0000% \$2	293,292 23.6543% (b)	\$69,376	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$396,129)	100.0000% (\$3	96,129) 23.6543% (b)	(\$93,702)	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$22,630,955	100.0000% \$22,6	23.6543% (b)	\$5,353,194	FERC Form 1 Page 263.10,17,23,28i - Footnote (e)
7 8 9 10 11	Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3) **Station Expenses & Rents - #562 / #567 O&M less lines 8, 9 & 10	\$60,951,521 \$16,215,370 \$11,701,546 \$0 \$33,034,605	\$16,2 \$11,7	951,521 23.6543% (b) 215,370 23.6543% (b) 701,546 23.6543% (b) 334,605 23.6543% (b)	\$14,417,656 \$3,835,632 \$2,767,919 \$0 \$7,814,105	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
12 13 14 15 16 17 18 19 20 21	Transmission Administrative and General Total Administrative and General Less: Properly Insurance (4924) Less: General Advertising Expense (4920) Less: General Advertising Expense (4920.1) Subtotal [line 12 minus (13 thru 15)] Plus: Properly Insurance Allocated using Plant Allocator Plus: Regulatory Commission Expense Plus: Specifically identified Trans. Related General Advertising Expense Plus: Specifically identified Trans. Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$32,504,326 (\$179,245) \$4,562,078 \$0 \$28,121,493 (\$179,245) \$2,349,311 \$0 \$33,370 \$30,294,929	99.2566% (c) (\$1 99.2566% (c) \$2,3	050,036 23.6543% (b) 777,912) 23.6543% (b) 331,846 23.6543% (b) \$0 23.6543% (b) 23.6543% (b)	\$6,635,040 (\$42,084) \$551,582 \$0 \$797 \$7,145,335	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b  Line 13 Attachment 5 Line 6 Line 15 FERC Form 1 Page 350.18c
22	Payroll Tax Expense	\$2,067,627		062,373 23.6543% (b)		FERC Form 1 Page 263.3,4i - Footnote (d)
(	d) Payroll taxes FERC Form 1, page 263.i		(e) <u>Propert</u>	ty Taxes FF1, Page 263i		
	Federal Unemployment FICA Payroll Taxes State Unemployment Total	\$2,105,294 \$0 \$0 \$2,067,627		\$0 Island \$143,442		

<sup>(</sup>a) Worksheet 5 Line 11
(b) Worksheet 5 Line 3
(c) Worksheet 5 Line 16
(d) Transmission Only - Payroll Taxes - Specifically identified in FERC From 1
(e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 4
Page 22 of 30
PTF Revenue Requirements
Worksheet 5 of 6

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment	\$351,115,800 \$1,484,361,243	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	23.6543%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 \$22,444,501 \$22,444,501	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$22,501,688 \$22,501,688	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.7459%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant = Revised Numerator (Line 12 + Line 13)	\$1,484,361,243 <u>\$6,877,350</u> \$1,491,238,593	Line 2 Worksheet 3, Line 3, Column 3
15	Total Plant in Service	\$1,502,407,856	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2566%	

Shading denotes input

#### New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2010

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTA	L
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
			(a)	(b)
NSTAR	115 kV Millbury-Medway 201 Line	Pg 332 Line 2 Col (g)		\$4,633
	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$106,178
	345 kV "stabilizer" 342 Line	Pg 332 Line 3 Col (g)		\$63,954
	345 kV Carver - Walpole 331 Line	Pg 332 Line 13 Col (g)		\$12,07
	Second Canal Line	Pg 332 Line 4 Col (g)		\$47,040
	Bell Rock Road	Page 330.5 Line 12	\$37,353	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line-345kV Tewksbury-Woburn 338 Line]	Page 330 Line 4	\$72,849	
	Boston-Edison [115 kV Tewksbury - Woburn M139 line - 115kV Tewksbury-Woburn N140 Line]	Page 330 Line 3	\$108,916	
	Boston Edison -345 kV Golden Hills-Mystic 349 Line	Page 330 Line 2	\$477,334	
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabrook	Page 330.1 Line 8	\$240,367 *	
EUA	345 kV Medway - Bridgewater 344 Line	Pg 330.5, Line 11	\$193,987	
NU	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5	\$13,319	
NEP	Chester SVC	Transmission Billing		\$647,61
	HQ Phase II - AC in MA	Page 330 Line 11	\$5,358,445	
	MWRA Transmission (MDC)	Contract - Line Lease/Use		\$
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12	\$40,807	
		Totals	\$6,543,377	\$881,50

\* Adjusted FERC Form Pg 330.1 Line 8 to reflect FERC Order #ER09-1764-000 amending the Seabrook Transmission Support Agreement.

FF1 Pg 330.1 Line 8 \$ (3,957,093)
Add Back: FP&L Write-Off
Add Back: Refunds to

MMWEC,Taunton & Hudson
FF1 Adjusted for RNS \$ 240,367

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

#### Shading denotes an input

#### **New England Power Company** 2010 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post
1	2009	Pre-1997 PTF Transmission Plant	\$352,386,820	
2	2009	Post-1996 PTF Transmission Plant	\$664,596,724	
3	2010	Additions/Retirements	\$89,789,358	
4	2010	Pre-1997 PTF Transmission Plant	\$351,115,800	31.72%
5	2010	Post-1996 PTF Transmission Plant	\$755,657,102	68.28%
6	2010	Total PTF Transmission Plant	\$1,106,772,902	100.00%

#### Sources:

- PTF Plant Reports for previous year 1
- PTF Plant Reports for previous year 2
- 3 Line 6 - Line 1 + Line 2
- 4
- PTF Plant Reports for current year PTF Plant Reports for current year 5
- Line 4 + 5

### GROSS PLANT ASSOC. WITH HVDC LEASES 2010

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$14,269,187
2	Allocation Miles used by NHH (a)	224
3	Total miles at Comerford Station	253
4	Percentage of Total Gross Plant leased by NHH (a)	89%
5	Total Gross Plant leased by NHH (a)	\$12,699,576
6	Total Land from Sandy Pond to New Hampshire	\$1,106,146
7	HVDC lines occupy 35% of Right of Way	35%
8	Total Land leased by NEH (a)	\$387,151
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$13,086,728

#### Source:

- 1 FERC Form 1, Page 422.1-423.1, Lines 5 + 16 col (I)
- 2 Total miles used per lease agreement
- 3 FERC Form 1, Page 422.1 Lines 5 + 16 col (f)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

## New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2010</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$980,344
2	Less: Specifically Identified Transmission-Related	
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
		\$592,969
3	Total Unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.2566%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,495
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	<u>\$592,969</u>
7	Total Transmission-Related Equity AFUDC	\$977,464
8	Pre-97 PTF Allocation Factor	23.6543%
9	Transmission-Related Equity AFUDC	\$231,212

#### Sources:

- 1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 5 Pre-97 PTF Allocation Factor
  - 9 Line 7 \* Line 8

#### Shading denotes an input

### New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2010	MECO <u>2010</u>
1	Total Integrated Facilities Charges	\$43,062,545	\$8,366,692
2 3 4	Total 2010 PTF Property Total Transmission Plant in 2010 NECO or MECO PTF Plant Allocator	\$209,109,440 \$290,660,448 71.94%	\$21,182,153 \$45,434,656 46.62%
5	PTF Related Integrated Facilities Charge	\$30,980,427	\$3,900,647
6	Total Integrated Facilities	<u>-</u>	\$34,881,073

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

### New England Power Company Development of 2010 Regulatory Commission Expense

Line <u>No.</u>		<u>2010</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$4,562,078	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$57,482	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$293,722	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$1,861,563	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,349,311	Line 1 - (Line 2-5)

Attachment 4
Exhibit 4
Page 29 of 30

#### Attachment 6

# Transmission Rents Received from Electric Property New England Power Company

	2010
Revenues	\$1,124,263
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,124,263
PTF Allocation	23.6543%
Total PTF Revenue	\$265,937

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

#### New England Power Company

Revenues \$2,816,506

Pre-97 PTF Percent 31.7243%

Total Pre-97 PTF Revenue \$ 893,517

Source: Short Term Through and Out Revenues from ISO New England

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:		
Revenue Requirements for (year):	Cale	ndar Year 2011
Rates Effective for the Period: Through:		June 2012 May 2013
Customer:	New England Power Comp	oany
Customer's NABs Number:		
Name of Participant responsible for customer's billing:		
DUNs number of Participant responsible for customer's billing:		
	Pre-97 Revenue <u>Requirements</u>	Post-96 Revenue Requirements
Total of Attachment F - Sections A through I	\$101,550,462 (a)	\$131,389,736 (f)
Total of Attachment F - Section J - Support Revenue	\$5,663,545 (b)	<b>\$0</b> (g)
Total of Attachment F - Section K - Support Expense	\$723,254 (c)	<b>\$0</b> (h)
Total of Attachment F - Section (L through O)	(\$507,986) (d)	(\$1,191,607) <sub>(1)</sub>
Sub Total - Sum (A through I) - J + K + (L through O)	\$96,102,185 (e)=(a)-(b)+(c)+(d)	<b>\$130,198,129</b> (i)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$37,048,823 (k)
Annual True-up (per Attachment C to Attachment F Implementation Rule	e)()	<b>N/A</b> (m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$96,102,185 (n)=(e)+(l)	\$167,246,952 (o)=(j)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirer Post-96 Revenue Requirements Subtotals, Forecasted Revenue Requirement True-ups (including interest)		\$263,349,137 (p) = (

PTF Revenue Requirements
Worksheet 1 of 8

#### New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2011

#### POST-1996

	Snading denotes an input			
		Attachment F		
	I. <u>INVESTMENT BASE</u>	Reference	NEP	Reference
Line No.		Section:	<u> </u>	
1	Transmission Plant	(A)(1)(a)	\$819,449,952	Worksheet 5, line 1&2 column 5
2	General Plant	(A)(1)(b)	\$3,282,852	Worksheet 5, line 3 column 5
3	Plant Held For Future Use	(A)(1)(c)	\$528,485	Worksheet 5, line 5 column 5
4	Total Plant (Lines 1+2+3)	( )( )(-)	\$823,261,289	
•	. 513 13 (255 . 2 5)		<b>4010,10</b> ., <b>100</b>	
5	Accumulated Depreciation	(A)(1)(d)	(\$181,769,040)	Worksheet 5, line 8 column 5
6	Accumulated Deferred Income Taxes	(A)(1)(e)	(\$179,110,753)	Worksheet 5, line 11 column 5
7	Loss On Reacquired Debt	(A)(1)(f)	\$215,570	Worksheet 5, line 12 column 5
8	Other Regulatory Assets	(A)(1)(g)	\$21,943,602	Worksheet 5, line 16 column 5
9		(A)(1)(g)	\$484,540,668	Worksheet 5, line to column 5
9	Net Investment (Line 4+5+6+7+8)		\$404,340,000	
10	Prepayments	(A)(1)(h)	\$71,225	Worksheet 5, line 17 column 5
11	Materials & Supplies		\$1,967,145	Worksheet 5, line 18 column 5
12	• •	(A)(1)(i)		Worksheet 5, line 25 column 5
	Cash Working Capital	(A)(1)(j)	\$4,083,981	•
13	NEEWS CWIP	(A)(1)(k)	\$10,910,787	Worksheet 5, line 26 column 5
14	Total Investment Base (Line 9+10+11+12+13)		\$501,573,805	
	II. REVENUE REQUIREMENTS			
15	Investment Return and Income Taxes	(A)	\$65,757,864	Worksheet 3
16	Depreciation Expense	(A) (B)	\$17,882,627	Worksheet 6, line 3, column 5
17	Amortization of Loss on Reacquired Debt	(C)	\$143,011	Worksheet 6, line 4, column 5
18	Investment Tax Credit	(D)	(\$203,026)	Worksheet 6, line 5, column 5
19	Property Tax Expense	(E)	\$13,971,698	Worksheet 6, line 6, column 5
20	Payroll Tax Expense	(E) (F)	\$1,165,718	Worksheet 6, line 22, column 5
21	Operation & Maintenance Expense	(F) (G)	\$17,931,179	Worksheet 6, line 11, column 5
22	Administrative & General Expense	(H)	\$14,740,665	Worksheet 6, line 21, column 5
23	Transmission Related Integrated Facilities Charge		\$14,740,003	Attachment 4, line 6
23 24		(1)	\$0 \$0	Worksheet 8
	Transmission Support Revenue	(J)		
25	Transmission Support Expense	(K)	\$0	Worksheet 8
26	Transmission Related Expense from Generators	(L)	\$0 \$0	
27	Transmission Related Taxes and Fees Charge	(M)	\$0 (\$567.475)	Attack 7
28	Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$567,475)	Attachment 7
29	Transmission Rents Received from Electric Property	(O)	(\$624,132)	Attachment 6
30	Total Revenue Requirements (Line 14 thru 28)		\$130,198,129	

Attachment 4
Exhibit 5
Page 3 of 30
PTF Revenue Requirements
Worksheet 2 of 8

## New England Power Company Post 1996 Regional Network Service Revenue Requirement For Test Year Ended 12/31/2011

		Attachment F	Forecasted	
Line No.	<u>Description</u>	Reference	Amount \$	Reference
1	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)		\$ 37,168,678	Line 6
2	Forecasted Revenue Requirements for Forecasted Transmission CWIP		\$119,855	Line 9
3	Forecasted Transmission Revenue Requirements		\$ 37,048,823	Line 1 + Line 2
4	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)	Appendix C iv	\$237,573,000	Project Detail
5	Carrying Charge Factor (CCF)	Appendix C vi	15.64516%	Line 20
6	Forecasted Revenue Requirements for FTPA		\$ 37,168,678	Line 4 * Line 5
7	Forecasted New England Power Company (NEP) NEEWS CWIP (FNCWIP)	Appendix C xiii	\$ (851,389)	Project Detail
8	NEEWS NEP Cost of Capital Rate (NCOC)	Appendix C xiv	14.07757%	Workpaper 4
9	Forecasted Revenue Requirements for FNCWIP		\$ (119,855)	Line 7 * Line 8
	Derivation of Carrying Charge (CCF)			
10	Investment Return and Income Taxes	(A)	\$62,572,390	Summary, Line 14
11	Depreciation Expense	(B)	17,882,627	Summary, Line 15
12	Amortization of Loss on Reacquired Debt	(C)	143,011	Summary, Line 16
13	Investment Tax Credit	(D)	(203,026)	Summary, Line 17
14	Property Tax Expense	(E)	13,971,698	Summary, Line 18
15	Payroll Tax Expense	(F)	1,165,718	Summary, Line 19
16	Operation & Maintenance Expense	(G)	17,931,179	Summary, Line 20
17	Administrative & General Expense	(H)	14,740,665	Summary, Line 21
18	Total Expenses (Lines 10 thru 17)		\$128,204,262	
19	PTF Transmission Plant	(A)(1)(a)	\$819,449,952	Summary, Line 1
20	Carrying Charge Factor (FTPA)		15.64516%	Line 18 / Line 19

COST OF CAPITAL

CAPITALIZATION RATIOS

EQUITY PORTION

COST OF CAPITAL

CAPITALIZATION 12/31/2011

				LONG-TERI PREFERRED COMMON	STOCK	\$410,350,000 \$1,111,700 \$746,206,523		35.45% 0.10% 64.45%	1.18% 6.02% 11.64%	0.42% 0.01% 7.50%	0.01% 7.50%
				TOTAL INVESTMENT F	RETURN	\$1,157,668,223		100.00%		7.93%	7.51%
Cost of Capital Rate=											
(a) Weighted Cost of Capital	=	0.0793									
(b) Federal Income Tax	= (	R.O.E. +	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp.	) /	PTF Inv. Base)	x -	Federal Income Ta Federal Income Ta			
	= (	0.0751 +	( (\$203,026) +	\$	583,896 ) /	\$501,573,805 )	x	0.35 0.35	)		
	=	0.0408473							,		
(c) State Income Tax	= (	R.O.E. +	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp.	) /	PTF Inv. Base)	+	Federal Income State Income Tax		State Income Tax R	ate
	= (	0.0751 +	( (\$203,026) +	\$	5583,896 ) /	\$501,573,805 )	+	0.0408473	)*	0.0594	66
	` (	1	,	-	· · · · ·		-	0.059466	)		
	=	0.0073789									
(a)+(b)+(c) Cost of Capital Rate	=	0.1275262									
		(PTF)									
INVESTMENT BASE		\$501,573,805	From Worksheet 1								
x Cost of Capital Rate		0.1275262									
= Investment Return and Income Taxes		\$63,963,801	To Worksheet 1								
INVESTMENT BASE (Excluding NEEWS x Cost of Capital Rate	CWIP)	\$490,663,019 0.1275262	From Worksheet 1								
= Investment Return and Income Taxes		\$62,572,390	To Worksheet 2								
invocations recommend meeting reason		<del></del>	10 11011012								
Post 2003 PTF Investment Base w/ Incr Plant In-Service Accumulated Depreciation Accumulate Deferred Income Taxes Total Post-2003 Investment	remental 100 bps:	\$ 213,375,099 (46,695,224) (46,311,697) \$ 120,368,177	From Attachment 1 From Worksheets 5 & From Worksheets 5 & Calculated								
Incremental ROE: Federal Income Taxes: State Income Taxes: Cost of Capital Rate Incremental Return and Taxes on Post-20	1.00% 003 PTF Investment	0.00645 0.00347 0.00063 0.01054 \$ 1,268,957	Calculated Per Attachment F Per Attachment F								
NEEWS In-Service w/ Incremental 125 New England Power NEEWS In-Service Accumulated Depreciation Accumulate Deferred Income Taxes Total New England Power NEEWS Inve	e	\$ 52,962,648 (12,062,457) (11,963,383) \$ 28,936,808	PowerPlant PTF 4 & 5 From Worksheets 3 & From Worksheets 3 & Calculated	5							
Incremental ROE: Federal Income Taxes: State Income Taxes: Cost of Capital Rate Incremental Return and Taxes on NEEWS	1.25% S PTF Investment	0.00806 0.00434 0.00078 0.01318 \$ 381,325	Calculated Per Attachment F Per Attachment F								
NEEWS Allocation Factor Total Transmission Investment Total NEEWS In-Service - NEP For Accumulated Depreciation		\$1,593,625,753 \$55,119,725 3.4588%	Worksheet 7 Line 2 Plant Accounting Reco	ords							
NEEWS Allocation Factor Plant Allocation Factor For Accumulated Deferred Incon	ne Taxes	3.4588% 0.992997 3.4345%	Worksheet 7 Line 16								

PTF Revenue Requirements

Worksheet 4 of 8

### New England Power Company Annual Revenue Requirements For Costs in 2011

						CAPITALIZATION 12/31/2011	C	APITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
				PREFERRI	RM DEBT ED STOCK ON EQUITY	\$410,350,000 \$1,111,700 \$746,206,523		35.45% 0.10% 64.46%	1.18% 6.02% 12.89%	0.42% 0.01% 8.31%	0.01% 8.31%
				TOTAL INVESTMEN	T RETURN	\$1,157,668,223	_	100.00%		8.74%	8.32%
Cost of Capital Rate=											
(a) Weighted Cost of Capital	=	0.0874									
(b) Federal Income Tax	= (	R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp	) /	PTF Inv. Base)	X	Federal Income Tax Federal Income Tax			
	= (	0.0832 +(	(\$203,026) +		\$583,896 ) /	\$501,573,805 )	х	0.35	)		
	=	0.0452089					-	0.35	)		
(a) Chata langua Tau	- (	DOE /	PTF Inv.	Eq. AFUDC	) /	DTE Inv. Dass)		Federal Income Ta	\*	Chata la como Tou	Data
(c) State Income Tax	= (	R.O.E. + (	(Tax Credit +	of Deprec. Exp	),	PTF Inv. Base)	-	State Income Tax R		State Income Tax	Rate
	= (	0.0832 +(	(\$203,026) +		\$583,896 ) /	\$501,573,805 )	+	0.0452089 0.059466	)*	0.059	9466
	=	0.0081668						0.000	,		
(a)+(b)+(c) Cost of Capital Rate	=	0.1407757									

#### **New England Power Company**

			New England I o	wer Company			
	Shading denotes an input						
Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+3)	\$6,396,486	99.8099% (a)	\$6,384,326 \$6,384,326	51.4205% (b)_ =	\$819,449,952 \$0 \$3,282,852 \$822,732,804	Attachment 1, Page 1 Attachment 2 FERC Form 1 page 207.99
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	51.4205% (b)_	\$528,485	FERC Form 1 page 214.2,4,10
6 7 8	Transmission Accumulated Depreciation Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+ 7)	(\$348,750,683) (\$4,753,633)	99.8099% (a)	(\$348,750,683) (\$4,744,596) (\$353,495,279)	51.4205% (b) 51.4205% (b) =	(\$179,329,345) (\$2,439,695) (\$181,769,040)	FERC Form 1 page 219.25 FERC Form 1 Page 219.28
9 10 11	Transmission Accumulated Deferred Taxes Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	(\$402,325,609) \$51,543,505	99.2997% (c) 99.2997% (c)	(\$399,508,123) \$51,182,546 (\$348,325,577)	51.4205% (b) 51.4205% (b)	(\$205,429,074) \$26,318,321 (\$179,110,753)	FERC Form 1 page 113.62-64 FERC Form 1 page 111.82
12	Transmission Loss on Reacquired Debt	\$419,230	100.0000%	\$419,230	51.4205% (b)_	\$215,570	FERC Form 1 Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 (Liability Account 254) Total (line 13+14+ 15)	\$0 \$42,674,813 \$0 \$42,674,813	99.8099% (a) 100.0000% 100.0000%	\$0 \$42,674,813 \$0 \$42,674,813	51.4205% (b) 51.4205% (b) 51.4205% (b) =	\$0 \$21,943,602 \$0 \$21,943,602	FERC Form 1 Page 232.6f FERC Form 1 Page 278
17	Transmission Prepayments	\$138,779	99.8099% (a)	\$138,515	51.4205% (b)_	\$71,225	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$3,825,605		\$3,825,605	51.4205% (b)_	\$1,967,145	FERC Form 1 Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22)  Total (line 23 * line 24)	¢10.010.797			- - -	\$17,931,179 \$14,740,665 \$0 \$32,671,844 0.1250 \$4,083,981	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 8  x 45 / 360
26	NEEWS CWIP	\$10,910,787			_	\$10,910,787	Plant Accounting Records

<sup>(</sup>a) Worksheet 7 Line 11 (b) Worksheet 7 Line 3 (c) Worksheet 7 Line 16

#### **New England Power Company**

Line		(1)	Wage/Plant Allocation	(3) = (1)*(2) Transmission	PTF Allocation	(5) = (3)*(4) PTF	
No.		Total (q)	Factors	Allocated	Factor (b)	Allocated	Source Reference for Col (1)
	Depreciation Expense						
1	Transmission Depreciation	\$34,416,139		\$34,416,139	51.4205%	\$17,696,951	FERC Form 1 Page 336.7b
2	General Depreciation	\$361,782	99.8099% (a)		51.4205%	\$185,676	FERC Form 1 Page 336.10b
3	Total (line 1+2)			\$34,777,233		\$17,882,627	
4	Amortization of Loss on Reacquired Debt	\$278,121		\$278,121	51.4205%	\$143,011	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$394,835)		(\$394,835)	51.4205%	(\$203,026)	FERC Form 1 Page 266.8f - Footnote (f)
						<del></del>	
6	Property Taxes	\$27,171,454		\$27,171,454	51.4205%	\$13,971,698	FERC Form 1 Page 263.10,17,23,28,31i - Footnote (e)
_	Transmission Operation and Maintenance	004 005 700		004 005 700	54 40050/	<b>****</b>	FFD0 F
7 8	Operation and Maintenance	\$61,295,709		\$61,295,709	51.4205%	\$31,518,560	FERC Form 1 Page 321.112b
9	Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3)	\$14,532,110 \$11,891,943		\$14,532,110 \$11,891,943	51.4205% 51.4205%	\$7,472,484 \$6,114,897	FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b
	** Station Expenses & Rents - #562 & #567	\$11,891,943		\$11,091,943	31.4203%	\$0,114,697 \$0	FERC Form 1 Page 321.93b & .98b
11	O&M less lines 8, 9 & 10	\$34,871,656		\$34,871,656	51.4205%	\$17,931,179	1 LNO 1 01111 11 age 321.335 & .305
• • •	C d 1886	Ψο ι,σ: ι,σσσ		40.1,01.1,000	020070	<u> </u>	
	Transmission Administrative and General						
12	Total Administrative and General	\$30,296,960					FERC Form 1 Page 323.197b
13	Less: Property Insurance (#924)	(\$135,569)					FERC Form 1 Page 323.185b
14	Less: Regulatory Commission Expenses (#928)	\$4,168,438					FERC Form 1 Page 323.189b
15	Less: General Advertising Expense (#930.1)	\$0					FERC Form 1 Page 323.191b
16	Subtotal [line 12 minus (13 thru 15)]	\$26,264,091	99.8099% (a)		51.4205%	\$13,479,454	
17	Plus: Property Insurance Allocated using Plant Allocation	(\$135,569)	99.2997% (c)	(\$134,620)	51.4205%	(\$69,222)	Line 13
18	Plus: Regulatory Commission Expense	\$2,605,606	99.2997% (c)	\$2,587,359	51.4205%	\$1,330,433	Attachment 5 Line 6
19	Plus: Specifically identifed Trans. Related General Advertising Expense	\$0		\$0	51.4205%	\$0	Line 15
20	Plus: Specifically identified Trans. Related Regulatory Expense	\$0		\$0	51.4205%	\$0	FERC Form 1 Page 350.18c
21	Total A&G [line 16 + (17 thru 20)]	\$28,734,128		\$28,666,902		\$14,740,665	
22	Payroll Tax Expense	\$2,271,348	99.8099% (a)	\$2,267,030	51.4205%	\$1,165,718	FERC Form 1 Page 263.3,4i - Footnote (d)
(	d) (d) Payroll taxes FERC Form 1, page 263.i		(e)	Property Taxes F	F1, Page 263i		
	Federal Unemployment	\$9,327		Massachusetts	\$23,571,202		
	FICA	\$2,262,021		New Hampshire	\$2,662,307		
	Payroll Taxes	\$0		Vermont	\$786,615		
	State Unemployment	\$0		Maine	\$0		
	Total	\$2,271,348		Rhode Island	\$151,330		
				Connecticut	\$0		
					\$27,171,454		

<sup>(</sup>a) Worksheet 7, Line 11

<sup>(</sup>b) Worksheet 7 Line 3

<sup>(</sup>c) Worksheet 7 Line 16

<sup>(</sup>d) Transmission Only - Payroll Taxes - Specifically identified in FERC From 1

<sup>(</sup>e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1 (f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4 Exhibit 5
Page 8 of 30
PTF Revenue Requirements
Worksheet 7 of 8

#### Shading denotes an input

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment Total Transmission Investment	\$819,449,952 \$1,593,625,753	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	51.4205%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 <b>\$23,467,616</b> \$23,467,616	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 <b>\$23,512,307</b> \$23,512,307	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.8099%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant (Line 2 of Wkst. 3) = Revised Numerator (Line 12 + Line 13)	\$1,593,625,753 \$6,384,326 \$1,600,010,079	Line 2 Worksheet 5, Line 3, Column 3
15	Total Plant in Service	\$1,611,293,575	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2997%	
17 18 19	Post-2003 PTF Allocation Factor Total Post-2003 PTF Investment Total Transmission Investment Percent Allocation (Line 17/Line 18) for Post-2003 to Total Tx	\$ 213,375,099 \$1,593,625,753 13.3893%	Attachment 1 Line 7 Line 2
20 21	Total Invst in Tx Plant/Total Plant in Serv * Post-2003 PTF Tx Plant/Total Invst in Tx Plant	13.2955%	Line 19 * Line 16

#### Worksheet 8 of 8

#### New England Power Company Post-96 RNs Revenue Requirments For Test Year Ended 12/31/2011

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOT	AL
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
			(a)	(b)
NSTAR	115 kV Millbury-Medway 201 Line	Pg 332 Line 2 Col (g)		\$0
	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$0
	345 kV "stabilizer" 342 Line	Pg 332 Line 3 Col (g)		\$0
	345 kV Carver - Walpole 331 Line	Pg 332 Line 13 Col (g)		\$0
	Second Canal Line	Pg 332 Line 4 Col (g)		\$0
	Bell Rock Road	Page 330.5 Line 12	\$0	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line-345kV Tewksbury-Woburn 338 Line]	Page 330 Line 4	\$0	
	Boston-Edison [115 kV Tewksbury - Woburn M139 line - 115kV Tewksbury-Woburn N140 Line]	Page 330 Line 3	\$0	
	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5	\$0	
	Boston Edison -345 kV Golden Hills-Mystic 349 Line	Page 330 Line 2	\$0	
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabrook	Page 330.1 Line 8	\$0	
EUA	345 kV Medway - Bridgewater 344 Line	Pg 330.5, Line 11	\$0	
NEP	Chester SVC	Transmission Billing		\$0
	HQ Phase II - AC in MA	Page 330 Line 11	\$0	
	MWRA Transmission (MDC)	Contract - Line Lease/Use		\$0
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12	\$0	
		Tatala	to.	\$(
		Totals	\$0	

#### New England Power Company 2011 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post
1	2010	Pre-1997 PTF Transmission Plant	\$351,115,800	
2	2010	Post-1996 PTF Transmission Plant	\$755,657,102	
3	2011	Additions/Retirements	\$62,011,432	
4	2011	Pre-1997 PTF Transmission Plant	\$349,334,382	29.89%
5	2011	Post-1996 PTF Transmission Plant	\$819,449,952	70.11%
6	2011	Total PTF Transmission Plant	\$1,168,784,335	100.00%
7	2011	Post-2003 PTF Transmission Plant	\$213,375,099	

#### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5
- 7 PTF Plant Report: Post 2003 RSP Projects

### GROSS PLANT ASSOC. WITH HVDC LEASES **2011**

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$0
2 3 4	Allocation Miles used by NHH (a) Total miles at Comerford Station Percentage of Total Gross Plant leased by NHH (a)	0 0 0%
5	Total Gross Plant leased by NHH (a)	\$0
6	Total Land from Sandy Pond to New Hampshire	\$0
7	HVDC lines occupy 35% of Right of Way	0%
8	Total Land leased by NEH (a)	\$0
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$0

#### Source:

- 1 FERC Form 1, Page 423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 Total miles per lease agreement
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

#### New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2011</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$1,138,245
2	Less: Specifically identified Transmission-Related	
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
	2011 Transmission	\$157,814
		\$750,783
3	Total unidentified Book Depreciation on Equity AFUDC	\$387,462
4	Plant Allocator Factor	99.2997%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,749
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	<u>\$750,783</u>
7	Total Transmission-Related Equity AFUDC	\$1,135,532
8	Post-96 PTF Allocation Factor	51.4205%
9	Transmission-Related Equity AFUDC	\$583,896

- Sources:
  1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - Line 2
  - 7 Line 5 + Line 6
  - Worksheet 6 Post-96 PTF Allocation Factor
  - Line 7 \* Line 8

### New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2011	MECO 2011
1	Total Integrated Facilities Charges	\$0	\$0
2 3 4	Total 2011 PTF Property Total Transmission Plant in 2011 NECO or MECO PTF Plant Allocator	\$0 \$0 0.00%	\$0 \$0 0.00%
5	PTF Related Integrated Facilities Charge	\$0	\$0
6	Total Integrated Facilities	<u>-</u>	\$0

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

#### Shading denotes an input

#### Attachment 5

### New England Power Company Development of 2011 Regulatory Commission Expense

Line <u>No.</u>		<u>2011</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$4,168,438	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$78,276	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$229,133	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$1,255,423	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,605,606	Line 1 - (Line 2-5)

#### **Attachment 6**

### Transmission Rents Received from Electric Property New England Power Company

Revenues \$1,213,781

Plant Allocation Factor 100.00%

Transmission Allocated \$1,213,781

PTF Allocation 51.4205%

Total PTF Revenue \$624,132

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### **Attachment 7**

### Revenue for Short-Term Transmission Service under the NEPOOL Tariff New England Power Company

	<u> 2011</u>
Revenues	\$809,392
Post-96 PTF Percent	70.1113%
Total Post-96 PTF Revenue	\$567,475

Source: Short Term Through and Out Revenues from ISO New England

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:				
Revenue Requirements for (year):		Calend	ar Year 2011	
Rates Effective for the Period: Through:			ne 2012 ay 2013	
Customer:	New England F	ower Compar	ıy	
Customer's NABs Number:				
Name of Participant responsible for customer's billing:				
DUNs number of Participant responsible for customer's billing:				
	Pre-97 Revenue <u>Requirements</u>		Post-96 Revenue Requirements	
Total of Attachment F - Sections A through I	\$101,550,462	(a)	\$131,389,736	_(f)
Total of Attachment F - Section J - Support Revenue	\$5,663,545	(b)	\$0	(g)
Total of Attachment F - Section K - Support Expense	\$723,254	(c)	\$0	(h)
Total of Attachment F - Section (L through O)	(\$507,986)	(d)	(\$1,191,607)	(i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$96,102,185	(e)=(a)-(b)+(c)+(d)	\$130,198,129	(1)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	_ ,	\$37,048,823	(k)
Annual True-up (per Attachment C to Attacment F Im[plementa	tion Rule) N/A	(1)	N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$96,102,185	(n)=(e) + (l)	\$167,246,952	(o)=(j)+(k)+(m)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue			\$263 349 137	(n) = (n) + (o)

PTF Revenue Requirements

Worksheet 1 of 6

#### **New England Power Company Annual Revenue Requirements of PTF Facilities** For Costs in 2011

#### PRE-1997

	Shading denotes an input			
		Attachment F		
	I. <u>INVESTMENT BASE</u>	Reference	NEP	Reference
Line No.	Townsieries Diest	Section:	<b>6000 047 055</b>	Madahada Bas 100 adama
1	Transmission Plant	(A)(1)(a)	\$336,247,655	Worksheet 3, line 1&2 column 5
2	General Plant	(A)(1)(b)	\$1,399,489	Worksheet 3, line 3 column 5
3	Plant Held For Future Use	(A)(1)(c)	\$225,295	Worksheet 3, line 5 column 5
4	Total Plant (Lines 1+2+3)		\$337,872,439	
5	Accumulated Depreciation	(A)(1)(d)	(\$77,488,640)	Worksheet 3, line 8 column 5
6	Accumulated Deferred Income Taxes	(A)(1)(e)	(\$76,355,405)	Worksheet 3, line 11 column 5
7	Loss On Reacquired Debt	(A)(1)(f)	\$91,898	Worksheet 3, line 12 column 5
8	Other Regulatory Assets	(A)(1)(g)	\$9,354,618	Worksheet 3, line 16 column 5
9	Net Investment (Line 4+5+6+7+8)	( )( )(0)	\$193,474,910	
10	Prepayments	(A)(1)(h)	\$30,363	Worksheet 3, line 17 column 5
11	Materials & Supplies	(A)(1)(i)	\$838,599	Worksheet 3, line 18 column 5
12	Cash Working Capital	(A)(1)(j)	\$1,741,012	Worksheet 3, line 25 column 5
12	Oddir Working Odpital	(**)(**)()	Ψ1,7-41,012	Worksheet of line 25 columns
13	Total Investment Base (Line 9+10+11+12)		\$196,084,884	
	II. REVENUE REQUIREMENTS			
14	Investment Return and Income Taxes	(A)	\$25,014,431	Worksheet 2
15	Depreciation Expense	(B)	\$7,623,413	Worksheet 4, line 3, column 5
16	Amortization of Loss on Reacquired Debt	(C)	\$60,966	Worksheet 4, line 4, column 5
17	Investment Tax Credit	(D)	(\$86,551)	Worksheet 4, line 5, column 5
18	Property Tax Expense	(E)	\$5,956,173	Worksheet 4, line 6, column 5
19	Payroll Tax Expense	(F)	\$496,949	Worksheet 4, line 22, column 5
20	Operation & Maintenance Expense	(G)	\$7,644,111	Worksheet 4, line 11, column 5
21	Administrative & General Expense	(H)	\$6,283,985	Worksheet 4, line 21, column 5
22	Transmission Related Integrated Facilities Charge	(I)	\$48,556,985	Attachment 4, line 6
23	Transmission Support Revenue	(J)	(\$5,663,545)	Worksheet 6
24	Transmission Support Expense	(K)	\$723,254	Worksheet 6
25	Transmission Related Expense from Generators	(L)	\$0	Worksheet 7
26	Transmission Related Taxes and Fees Charge	(M)	\$0	
27	Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$241,917)	Attachment 7
28	Transmission Rents Received from Electric Property	(O)	(\$266,069)	Attachment 6
29	Total Revenue Requirements (Line 14 thru 28)		\$96,102,185	

PTF Revenue Requirements
Worksheet 2 of 6

### New England Power Company Annual Revenue Requirements For Costs in 2011

				TOTAL	PF	LONG-TERM DEBT REFERRED STOCK COMMON EQUITY ESTMENT RETURN	CAPITALIZATION 12/31/2011 \$410,350,000 \$1,111,700 \$746,206,523 \$1,157,668,223		CAPITALIZATION RATIOS  35.45% 0.10% 64.46%	COST OF CAPITAL 1.18% 6.02% 11.64%			0.01% 7.50%
Cost of Capital Rate=													
(a) Weighted Cost of Capital	=	0.079	13										
(b) Federal Income Tax	=	( R.O.E. +	(	PTF Inv. (Tax Credit	+	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	x -	Federal Income Tax F		)		
	=	( 0.0751	+(	(\$86,551)	+	\$248,755 ) /	\$196,084,884 )	х	0.35		)		
	=	0.040883	19					-	0.35		)		
(c) State Income Tax	=	( R.O.E. +	(	PTF Inv. (Tax Credit	+	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	+	Federal Income Ta State Income Tax Ra		)*	State Income Tax Rate	
	=	( 0.0751	+(	(\$86,551)	+	\$248,755 ) /	\$196,084,884 )	+	0.0408839 0.059466		)*	0.059466	
	=	0.007385	5										
(a)+(b)+(c) Cost of Capital Rate	=	0.127569	14_										
		(PTF)	_										
INVESTMENT BASE		\$196,084,88	4	From Workshe	et 1								
x Cost of Capital Rate		0.127569	14										
= Investment Return and Income Taxes		\$25,014,43	1	To Worksheet	1								

#### New England Power Company

			New England Pov	wer Company			
	Shading denotes an input						
Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference
1	Transmission Plant					\$349,334,382	Attachment 1, Page 1
2	Less: Plant Assoc. HVDC Leases					(\$13,086,728)	Attachment 2
3	General Plant	\$6,396,486	99.8099% (a	a) \$6,384,326	21.9207% (b)	\$1,399,489	FERC Form 1 Page 207.99g
4	Total (line 1+2+ 3)			\$6,384,326		\$337,647,144	
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	21.9207% (b)	\$225,295	FERC Form 1 Page 214.2,4,9
	Transmission Accumulated Depreciation						
6	Transmission Accumulated Depreciation	(\$348,750,683)		(\$348,750,683)	21.9207% (b)	(\$76,448,591)	FERC Form 1 Page 219.25
7	General Plant Accumulated Depreciation	(\$4,753,633)	99.8099% (a	(\$4,744,596)	21.9207% (b)	(\$1,040,049)	FERC Form 1 Page 219.28
8	Total (line 6+ 7)			(\$353,495,279)		(\$77,488,640)	
	Transmission Accumulated Deferred Taxes						
9	Accumulated Deferred Taxes (281-283)	(\$402,325,609)	99.2997% (c	(\$399,508,123)	21.9207% (b)		FERC Form 1 Page 113.62-64
10	Accumulated Deferred Taxes (190)	\$51,543,505	99.2997% (c	5) \$51,182,546	21.9207% (b)		FERC Form 1 Page 111.82
11	Total (line 9+ 10)			(\$348,325,577)		(\$76,355,405)	
12	Transmission Loss on Reacquired Debt	\$419,230	100.0000%	\$419,230	21.9207% (b)	\$91,898	FERC Form 1 Page 111.81c
	Other Regulatory Assets						
13	FAS 106	\$0	99.8099% (a		21.9207% (b)		
14	FAS 109 (Asset Account 182.3)	\$42,674,813	100.0000%	\$42,674,813	21.9207% (b)		FERC Form 1 Page 232.7f
15	FAS 109 ( Liability Account 254 )	\$0	100.0000%	\$0	21.9207% (b)	\$0	FERC Form 1 Page 278
16	Total (line 13+14+ 15)	\$42,674,813		\$42,674,813		\$9,354,618	
17	Transmission Prepayments	\$138,779	99.8099% (a	a) \$138,515	21.9207% (b)	\$30,363	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$3,825,605		\$3,825,605	21.9207% (b)	\$838,599	FERC Form 1 Page 227.8c
19	Cash Working Capital						
20	Operation & Maintenance Expense					\$7,644,111	Worksheet 1, Line 20
21	Administrative & General Expense					\$6,283,985	Worksheet 1, Line 21
22	Transmission Support Expense					\$0	Worksheet 6
23	Subtotal (line 20+21+22)					\$13,928,096	45 / 000
24 25	Total (line 23 * line 24)					0.1250 \$1,741,012	x 45 / 360
-	, /					. , ,	

<sup>(</sup>a) Worksheet 5 Line 11 (b) Worksheet 5 Line 3 (c) Worksheet 5 Line 16

#### New England Power Company (2)

Line No.		(1) Total	Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3	<u>Depreciation Expense</u> Transmission Depreciation General Depreciation	\$34,416,139 \$361,782	99.8099% (a)	\$34,416,139 \$361,094 \$34,777,233	21.9207% (b) 21.9207% (b) _ =	\$7,544,259 \$79,154 \$7,623,413	FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
4	Amortization of Loss on Reacquired Debt	\$278,121	100.0000%	\$278,121	21.9207% (b) <sub>=</sub>	\$60,966	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$394,836)	100.0000%	(\$394,836)	21.9207% (b) <sub>=</sub>	(\$86,551)	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$27,171,454	100.0000%	\$27,171,454	21.9207% (b) <sub>=</sub>	\$5,956,173	FERC Form 1 Page 263.10,17,23,28i - Footnote (e)
7 8 9 10 11	Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3) **Station Expenses & Rents - #562 / #567 O&M less lines 8, 9 & 10	\$61,295,709 \$14,532,110 \$11,891,943 \$0 \$34,871,656		\$61,295,709 \$14,532,110 \$11,891,943 \$34,871,656	21.9207% (b) 21.9207% (b) 21.9207% (b) 21.9207% (b)	\$13,436,448 \$3,185,540 \$2,606,797 \$0 \$7,644,111	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
12 13 14 15 16 17 18	Transmission Administrative and General Total Administrative and General Less: Property Insurance (#92) Less: Regulatory Commission Expenses (#928) Less: General Advertising Expense (#920.1) Subtical [[line 12 minus (13 hru 15]] Plus: Property Insurance Allocated using Plant Allocatior Plus: Regulatory Commission Expense Plus: Specifically identified Trans Related General Advertising Expense	\$30,296,960 (\$135,569) \$4,168,438 \$0 \$26,264,091 (\$135,569) \$2,605,606	99.8099% (a) 99.2997% (c) 99.2997% (c)	\$26,214,163 (\$134,620) \$2,587,359 \$0	21.9207% (b) 21.9207% (b) 21.9207% (b) 21.9207% (b)	\$5,746,328 (\$29,510) \$567,167 \$0	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b Line 13 Attachment 5 Line 6 Line 15
20 21	Plus: Specifically Identified Trans. Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$0 \$28,734,128		\$0 \$28,666,902	21.9207% (b) _ =	\$0 \$6,283,985	FERC Form 1 Page 350.18c
22	Payroll Tax Expense	\$2,271,348	99.8099% (a)	\$2,267,030	21.9207% (b)	\$496,949	FERC Form 1 Page 263.3,4i - Footnote (d)
(	d) Payroll taxes FERC Form 1, page 263.i		(e)	Property Taxes F	F1, Page 263i		
	Federal Unemployment FICA Payroll Taxes State Unemployment Total	\$9,327 \$2,262,021 \$0 \$0 \$2,271,348		Massachusetts New Hampshire Vermont Maine Rhode Island Connecticut	\$23,571,202 \$2,662,307 \$786,615 \$0 \$151,330 \$0 \$27,171,454		

(4)

<sup>(</sup>a) Worksheet 5 Line 11
(b) Worksheet 5 Line 3
(c) Worksheet 5 Line 16
(d) Transmission Only - Payroll Taxes - Specifically identified in FERC From 1
(e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 5
Page 22 of 30
PTF Revenue Requirements
Worksheet 5 of 6

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment	\$349,334,382 \$1,593,625,753	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	21.9207%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 <u>\$23,467,616</u> \$23,467,616	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 <b>\$23,512,307</b> \$23,512,307	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.8099%	
	Plant Allocation Factor		
12	Total Transmission Investment	\$1,593,625,753	Line 2
13	plus Transmission-Related General Plant	\$6,384,326	Worksheet 3, Line 3, Column 3
14	= Revised Numerator (Line 12 + Line 13)	\$1,600,010,079	
15	Total Plant in Service	\$1,611,293,575	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2997%	

Shading denotes input

#### New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2011

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTA	L
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
			(a)	(b)
NSTAR	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$102,578
	345 kV "stabilizer" 342 Line	Pg 332 Line 3 Col (g)		(446)
	345 kV Switch Tap Bridge - Station 451 Whitman	Pg 332 Line 13 Col (g)		\$774
	Bell Rock Road	Page 330.5 Line 12 Col (n)	\$38,953	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line-345kV Tewksbury-Woburn 338 Line]	Page 330 Line 4 Col (n)	\$61,463	
	Boston-Edison [115 kV Tewksbury - Woburn M139 line - 115kV Tewksbury-Woburn N140 Line]	Page 330 Line 3 Col (n)	\$11,594	
	Boston Edison -345 kV Golden Hills-Mystic 349 Line	Page 330 Line 2 Col (n)	\$47,313	
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabrook	Page 330.1 Line 8 Col (n)	\$423,318	
NU	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5 Col (n)	\$13,319	
NEP	Chester SVC	Transmission Billing		\$620,348
	HQ Phase II - AC in MA	Page 330 Line 11 Col (n)	\$5,027,675	
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12 Col (n)	\$39,910	
		Totals	\$5,663,545	\$723,254

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

#### Shading denotes an input

#### New England Power Company 2011 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post	
1	2010	Pre-1997 PTF Transmission Plant	\$351,352,992		
2	2010	Post-1996 PTF Transmission Plant	\$725,670,117		
3	2011	Additions/Retirements	\$91,761,225		
4	2011	Pre-1997 PTF Transmission Plant	\$349,334,382	29.89%	
5	2011	Post-1996 PTF Transmission Plant	\$819,449,952	70.11%	
6	2011	Total PTF Transmission Plant	\$1,168,784,335	100.00%	

#### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5

### GROSS PLANT ASSOC. WITH HVDC LEASES 2011

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$14,269,187
2	Allocation Miles used by NHH (a)	224
3 4	Total miles at Comerford Station  Percentage of Total Gross Plant leased by NHH (a)	253 89%
7	refeemage of rotal cross riant leased by Will (a)	00 /0
5	Total Gross Plant leased by NHH (a)	\$12,699,576
6	Total Land from Sandy Pond to New Hampshire	\$1,106,146
7	HVDC lines occupy 35% of Right of Way	35%
8	Total Land leased by NEH (a)	\$387,151
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$13,086,728

#### Source:

- 1 FERC Form 1, Page 422.1-423.1, Lines 5 + 16 col (I)
- 2 Total miles used per lease agreement
- 3 FERC Form 1, Page 422.1 Lines 5 + 16 col (f)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

### New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2011</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$1,137,510
2	Less: Specifically Identified Transmission-Related	
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
	2011 Transmission	\$157,122
		\$750,091
3	Total Unidentified Book Depreciation on Equity AFUDC	\$387,419
4	Plant Allocator Factor	99.2997%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,706
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	\$750,091
7	Total Transmission-Related Equity AFUDC	\$1,134,797
8	Pre-97 PTF Allocation Factor	21.9207%
9	Transmission-Related Equity AFUDC	\$248,755

#### Sources:

- 1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 5 Pre-97 PTF Allocation Factor
  - 9 Line 7 \* Line 8

#### Shading denotes an input

### New England Power Company Determination of the PTF Related Integrated Facilities Charges

		REVISED PTF		
		Narragansett	MECO	
		<u>2011</u>	<u>2011</u>	
1	Total Integrated Facilities Charges	\$60,868,519	\$8,564,781	
_				
2	Total 2011 PTF Property	\$234,900,022	\$21,875,675	
3	Total Transmission Plant in 2011	\$321,180,057	\$46,378,064	
4	NECO or MECO PTF Plant Allocator	73.14%	47.17%	
5	PTF Related Integrated Facilities Charge	\$44,517,136	\$4,039,849	
6	Total Integrated Facilities	_	\$48,556,985	

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

#### Shading denotes an input

### New England Power Company Development of 2011 Regulatory Commission Expense

Line <u>No.</u>		<u>2011</u>	Source
1	Total Regulatory Commission Expense - NEP	\$4,168,438	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$78,276	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$229,133	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$1,255,423	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,605,606	Line 1 - (Line 2-5)

#### **Attachment 6**

### Transmission Rents Received from Electric Property New England Power Company

**2011**Revenues \$1,213,781

Plant Allocation Factor 100.00%

Transmission Allocated \$1,213,781

PTF Allocation 21.9207%

Total PTF Revenue \$266,069

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### Attachment 7

#### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

### New England Power Company

<u> 2011</u>

Revenues \$809,392

Pre-97 PTF Percent 29.8887%

Total Pre-97 PTF Revenue \$ 241,917

Source: Short Term Through and Out Revenues from ISO New England

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:		
Revenue Requirements for (year):		Calendar Year 2011
Rates Effective for the Period: Through:		June 2012 May 2013
Customer:	New England Power (	Company
Customer's NABs Number:		
Name of Participant responsible for customer's billing:		
DUNs number of Participant responsible for customer's billing:		
	Pre-97 Revenue <u>Requirements</u>	Post-96 Revenue <u>Requirements</u>
Total of Attachment F - Sections A through I	\$100,395,777 (a)	\$128,354,111 (f)
Total of Attachment F - Section J - Support Revenue	\$5,663,545 (b)	<b>\$0</b> (g)
Total of Attachment F - Section K - Support Expense	\$723,254 (c)	<b>\$0</b> (h)
Total of Attachment F - Section (L through O)	(\$507,986) (d)	(\$1,191,607) <sub>(i)</sub>
Sub Total - Sum (A through I) - J + K + (L through O)	\$94,947,500 (e)=(a)-(b)	+(c)+(d) \$127,162,504 (j)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$36,193,039_(k)
Annual True-up (per Attachment C to Attachment F Implementation F	Rule)()	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$94,947,500 (n)=(e)+(l)	\$163,355,543 (o)=(j)+(k)+(m
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirements Subtotals, Forecasted Revenue Reand True-ups (including interest)		\$258,303,043 (p) = (n) + (o)

PTF Revenue Requirements

Worksheet 1 of 8

#### New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2011

#### POST-1996

			Attachment F		
	I.	INVESTMENT BASE	Reference	NEP	Reference
Line No.			Section:		
1		Transmission Plant	(A)(1)(a)	\$819,449,952	Worksheet 5, line 1&2 column 5
2		General Plant	(A)(1)(b)	\$3,282,852	Worksheet 5, line 3 column 5
3		Plant Held For Future Use	(A)(1)(c)	\$528,485	Worksheet 5, line 5 column 5
4		Total Plant (Lines 1+2+3)		\$823,261,289	
5		Accumulated Depreciation	(A)(1)(d)	(\$181,769,040)	Worksheet 5, line 8 column 5
6		Accumulated Deferred Income Taxes	(A)(1)(e)	(\$179,110,753)	Worksheet 5, line 11 column 5
7		Loss On Reacquired Debt	(A)(1)(f)	\$215,570	Worksheet 5, line 12 column 5
8		Other Regulatory Assets	(A)(1)(g)	\$21,943,602	Worksheet 5, line 16 column 5
9		Net Investment (Line 4+5+6+7+8)		\$484,540,668	
10		Prepayments	(A)(1)(h)	\$71,225	Worksheet 5, line 17 column 5
11		Materials & Supplies	(A)(1)(i)	\$1,967,145	Worksheet 5, line 18 column 5
12		Cash Working Capital	(A)(1)(j)	\$4,083,981	Worksheet 5, line 25 column 5
13		NEEWS CWIP	(A)(1)(k)	\$10,910,787	Worksheet 5, line 26 column 5
14		Total Investment Base (Line 9+10+11+12+13)		\$501,573,805	
	II.	REVENUE REQUIREMENTS			
15		Investment Return and Income Taxes	(A)	\$62,722,239	Worksheet 3
16		Depreciation Expense	(B)	\$17,882,627	Worksheet 6, line 3, column 5
17		Amortization of Loss on Reacquired Debt	(C)	\$143,011	Worksheet 6, line 4, column 5
18		Investment Tax Credit	(D)	(\$203,026)	Worksheet 6, line 5, column 5
19		Property Tax Expense	(E)	\$13,971,698	Worksheet 6, line 6, column 5
20		Payroll Tax Expense	(F)	\$1,165,718	Worksheet 6, line 22, column 5
21		Operation & Maintenance Expense	(G)	\$17,931,179	Worksheet 6, line 11, column 5
22		Administrative & General Expense	(H)	\$14,740,665	Worksheet 6, line 21, column 5
23		Transmission Related Integrated Facilities Charge	(1)	\$0	Attachment 4, line 6
24		Transmission Support Revenue	(J)	\$0	Worksheet 8
25		Transmission Support Expense	(K)	\$0	Worksheet 8
26		Transmission Related Expense from Generators	(L)	\$0	
27		Transmission Related Taxes and Fees Charge	(M)	\$0	
28		Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$567,475)	Attachment 7
29		Transmission Rents Received from Electric Property	(O)	(\$624,132)	Attachment 6
30		Total Revenue Requirements (Line 14 thru 28)		\$127,162,504	

Attachment 4
Exhibit 6
Page 3 of 30
PTF Revenue Requirements
Worksheet 2 of 8

### New England Power Company Post 1996 Regional Network Service Revenue Requirement For Test Year Ended 12/31/2011

Line No.	Description	Attachment F Reference	Forecasted Amount \$	Reference
1	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)	Reference	\$ 36,307,741	Line 6
2	Forecasted Revenue Requirements for Forecasted Transmission CWIP		\$114,702	Line 9
3	Forecasted Transmission Revenue Requirements		\$ 36,193,039	Line 1 + Line 2
4	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)	Appendix C iv	\$237,573,000	Project Detail
5	Carrying Charge Factor (CCF)	Appendix C vi	15.28277%	Line 20
6	Forecasted Revenue Requirements for FTPA		\$ 36,307,741	Line 4 * Line 5
7	Forecasted New England Power Company (NEP) NEEWS CWIP (FNCWIP)	Appendix C xiii	\$ (851,389)	Project Detail
8	NEEWS NEP Cost of Capital Rate (NCOC)	Appendix C xiv	13.47235%	Workpaper 4
9	Forecasted Revenue Requirements for FNCWIP		\$ (114,702)	Line 7 * Line 8
	Derivation of Carrying Charge (CCF)			
10	Investment Return and Income Taxes	(A)	\$59,602,800	Summary, Line 14
11	Depreciation Expense	(B)	17,882,627	Summary, Line 15
12	Amortization of Loss on Reacquired Debt	(C)	143,011	Summary, Line 16
13	Investment Tax Credit	(D)	(203,026)	Summary, Line 17
14	Property Tax Expense	(E)	13,971,698	Summary, Line 18
15	Payroll Tax Expense	(F)	1,165,718	Summary, Line 19
16	Operation & Maintenance Expense	(G)	17,931,179	Summary, Line 20
17	Administrative & General Expense	(H)	14,740,665	Summary, Line 21
18	Total Expenses (Lines 10 thru 17)		\$125,234,672	
19	PTF Transmission Plant	(A)(1)(a)	\$819,449,952	Summary, Line 1
20	Carrying Charge Factor (FTPA)		15.28277%	Line 18 / Line 19

COST OF CAPITAL

COST OF CAPITAL

CAPITALIZATION RATIOS

CAPITALIZATION 12/31/2011 PTF Revenue Requirements Worksheet 3 of 8

> EQUITY PORTION

### New England Power Company Annual Revenue Requirements For Costs in 2011

				LONG-TER PREFERREI COMMON	D STOCK	\$410,350,000 \$1,111,700 \$746,206,523		35.45% 0.10% 64.45%	1.18% 6.02% 11.07%	0.42% 0.01% 7.13%	0.01% 7.13%
			Т	TOTAL INVESTMENT RETURN =		\$1,157,668,223		100.00%		7.56%	7.14%
Cost of Capital Rate=		0.0750									
(a) Weighted Cost of Capital	=	0.0756	PTF Inv.	Eq. AFUDC							
(b) Federal Income Tax	= (	R.O.E. + (	(Tax Credit +	of Deprec. Exp.	) /	PTF Inv. Base)		Federal Income Tax			
	= (	0.0714 +	(\$203,026) +		\$583,896 ) /	\$501,573,805 )	x	0.35	)		
	(	1					-	0.35	)		
	=	0.0388550	PTF Inv.	Eq. AFUDC							
(c) State Income Tax	= (	R.O.E. + (	(Tax Credit +	of Deprec. Exp.	) /	PTF Inv. Base)	+	Federal Income Tax		State Income Tax Ra	ate
	= (		(\$203,026) +		\$583,896 ) /	\$501,573,805 )	+	0.0388550	)*	0.05946	66
	(	1				•	-	0.059466	)		
	=	0.0070190									
(a)+(b)+(c) Cost of Capital Rate	_	0.1214740									
(a)+(b)+(c) Cost of Capital Nate	-	0.1214740									
		(PTF)									
INVESTMENT BASE		\$501,573,805	From Worksheet 1								
x Cost of Capital Rate = Investment Return and Income Taxes		0.1214740 \$60,928,176	To Worksheet 1								
= investment return and income raxes		\$00,928,170	TO WORKSHEEL T								
INVESTMENT BASE (Excluding NEEWS	CWIP)	\$490,663,019	From Worksheet 1								
x Cost of Capital Rate		0.1214740									
= Investment Return and Income Taxes		\$59,602,800	To Worksheet 2								
Plant In-Service	remental 100 bps:	\$ 213,375,099 (46,695,224)	From Attachment 1 From Worksheets 5 & 7								
Accumulated Depreciation Accumulate Deferred Income Taxes Total Post-2003 Investment		(46,311,697) \$ 120,368,177	From Worksheets 5 & 7 Calculated								
Incremental ROE:	1.00%		Calculated								
Federal Income Taxes: State Income Taxes:		0.00347 0.00063	Per Attachment F Per Attachment F								
Cost of Capital Rate Incremental Return and Taxes on Post-20	003 PTF Investment	0.01054 \$ 1,268,957									
NEEWS In-Service w/ Incremental 125	hne:										
New England Power NEEWS In-Service Accumulated Depreciation	<u> </u>	\$ 52,962,648 (12,062,457)	PowerPlant PTF 4 & 5 repo	orts - PTF only							
Accumulate Deferred Income Taxes Total New England Power NEEWS Inve	estment	(11,963,383) \$ 28,936,808	From Worksheets 3 & 5 Calculated								
Incremental ROE:	1.25%		Calculated								
Federal Income Taxes: State Income Taxes:		0.00434 0.00078	Per Attachment F Per Attachment F								
Cost of Capital Rate Incremental Return and Taxes on NEEWS	S PTF Investment	0.01318 \$ 381,325									
NEEWS Allocation Factor Total Transmission Investment		\$1,593,625,753	Worksheet 7 Line 2								
Total NEEWS In-Service - NEP For Accumulated Depreciation		\$55,119,725 3.4588%	Plant Accounting Records								
NEEWS Allocation Factor		3.4588%	Madabast 711 10								
Plant Allocation Factor For Accumulated Deferred Incom	ne Taxes	0.992997 3.4345%	Worksheet 7 Line 16								
		I									

COST OF

COST OF

CAPITALIZATION

PTF Revenue Requirements
Worksheet 4 of 8

EQUITY

New England Power Company

Annual Revenue Requirements

For Costs in 2011

Shading denotes an input

						12/31/2011		RATIOS	CAPITAL	CAPITAL	PORTION
					D STOCK N EQUITY	\$410,350,000 \$1,111,700 \$746,206,523		35.45% 0.10% 64.46%	1.18% 6.02% 12.32%	0.42% 0.01% 7.94%	0.01% 7.94%
				TOTAL INVESTMENT	RETURN	\$1,157,668,223	=	100.00%		8.37%	7.95%
Cost of Capital Rate=											
(a) Weighted Cost of Capital	=	0.0837									
(b) Federal Income Tax	=	(R.O.E. +(	PTF Inv. (Tax Credit	Eq. AFUDC of Deprec. Exp	. )/	PTF Inv. Base)	x -	Federal Income Tax Federal Income Tax			
	=		(\$203,026)	+	\$583,896 ) /	\$501,573,805 )	х	0.35	)		
		( 1					-	0.35	)		
	=	0.0432166									
(c) State Income Tax	=	( R.O.E. + (	PTF Inv. (Tax Credit	Eq. AFUDC of Deprec. Exp	. )/	PTF Inv. Base)	+	Federal Income Ta	ax )*	State Income Tax F	Rate
		( 1					-	State Income Tax R	ate )		-
	=	( 0.0795 +(	(\$203,026)	<b>+</b>	\$583,896 ) /	\$501,573,805 )	+	0.0432166	)*	0.059	466
		( 1					-	0.059466	)		
	=	0.0078069									
(a)+(b)+(c) Cost of Capital Rate	=	0.1347235									

CAPITALIZATION

#### New England Power Company

Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+ 3)	\$6,396,486	99.8099% (a)	\$6,384,326 \$6,384,326	51.4205% (b)_	\$819,449,952 \$0 \$3,282,852 \$822,732,804	Attachment 1, Page 1 Attachment 2 FERC Form 1 page 207.99
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	51.4205% (b)	\$528,485	FERC Form 1 page 214.2,4,10
6 7 8	<u>Transmission Accumulated Depreciation</u> Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+ 7)	(\$348,750,683) (\$4,753,633)	99.8099% (a)	(\$348,750,683) (\$4,744,596) (\$353,495,279)	51.4205% (b) 51.4205% (b)	(\$179,329,345) (\$2,439,695) (\$181,769,040)	FERC Form 1 page 219.25 FERC Form 1 Page 219.28
9 10 11	<u>Transmission Accumulated Deferred Taxes</u> Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	(\$402,325,609) \$51,543,505	99.2997% (c) 99.2997% (c)	(\$399,508,123) \$51,182,546 (\$348,325,577)	51.4205% (b) 51.4205% (b)	(\$205,429,074) \$26,318,321 (\$179,110,753)	FERC Form 1 page 113.62-64 FERC Form 1 page 111.82
12	Transmission Loss on Reacquired Debt	\$419,230	100.0000%	\$419,230	51.4205% (b)_	\$215,570	FERC Form 1 Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 (Liability Account 254 ) Total (line 13+14+ 15)	\$0 \$42,674,813 \$0 \$42,674,813	99.8099% (a) 100.0000% 100.0000%	\$0 \$42,674,813 \$0 \$42,674,813	51.4205% (b) 51.4205% (b) 51.4205% (b)	\$0 \$21,943,602 \$0 \$21,943,602	FERC Form 1 Page 232.6f FERC Form 1 Page 278
17	Transmission Prepayments	\$138,779	99.8099% (a)	\$138,515	51.4205% (b)_	\$71,225	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$3,825,605		\$3,825,605	51.4205% (b)_	\$1,967,145	FERC Form 1 Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)				- - <u>-</u>	\$17,931,179 \$14,740,665 \$0 \$32,671,844 0.1250 \$4,083,981	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 8 x 45 / 360
26	NEEWS CWIP	\$10,910,787			=	\$10,910,787	Plant Accounting Records

<sup>(</sup>a) Worksheet 7 Line 11 (b) Worksheet 7 Line 3 (c) Worksheet 7 Line 16

#### **New England Power Company**

Wage/Plant

Line No.		(1) Total (g)	Allocation Factors	Transmission Allocated	Allocation Factor (b)	PTF Allocated	Source Reference for Col (1)
INU.	Depreciation Expense	Total (g)	Factors	Allocated	racioi (b)	Allocated	Source Reference for Cor(1)
1	Transmission Depreciation	\$34,416,139		\$34,416,139	51.4205%	\$17,696,951	FERC Form 1 Page 336.7b
2	General Depreciation	\$361,782	99.8099% (a)	\$361,094	51.4205%	\$185,676	FERC Form 1 Page 336.10b
3	Total (line 1+2)	****	( )	\$34,777,233		\$17,882,627	
	,						
4	Amortization of Loss on Reacquired Debt	\$278,121		\$278,121	51.4205%	\$143,011	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$394,835)		(\$394,835)	51.4205%	(\$203,026)	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$27,171,454		\$27,171,454	51.4205%	\$13,971,698	FERC Form 1 Page 263.10,17,23,28,31i - Footnote (e)
-	Transmission Operation and Maintenance Operation and Maintenance	\$61,295,709		\$61,295,709	51.4205%	\$31,518,560	FERC Form 1 Page 321.112b
7 8	Transmission of Electricity by Others - #565	\$14,532,110		\$14,532,110	51.4205%	\$31,516,560 \$7,472,484	FERC Form 1 Page 321.112b
9	Load Dispatching - #561 (excl #561.3)	\$11,891,943		\$11,891,943	51.4205%	\$6,114,897	FERC Form 1 Page 321.84-92b less 87b
	** Station Expenses & Rents - #562 & #567	\$0		ψ11,001,010	01.120070	\$0	FERC Form 1 Page 321.93b & .98b
11	O&M less lines 8, 9 & 10	\$34,871,656		\$34,871,656	51.4205%	\$17,931,179	3
	Transmission Administrative and General						
12	Total Administrative and General	\$30,296,960					FERC Form 1 Page 323.197b
13	Less: Property Insurance (#924)	(\$135,569)					FERC Form 1 Page 323.185b
14	Less: Regulatory Commission Expenses (#928)	\$4,168,438					FERC Form 1 Page 323.189b
15 16	Less: General Advertising Expense (#930.1)	\$0 \$26,264,091	99.8099% (a)	\$26,214,163	51.4205%	\$13,479,454	FERC Form 1 Page 323.191b
17	Subtotal [line 12 minus (13 thru 15)] Plus: Property Insurance Allocated using Plant Allocatior	(\$135,569)	99.2997% (c)	(\$134,620)	51.4205%	(\$69,222)	Line 13
18	Plus: Regulatory Commission Expense	\$2,605,606	99.2997% (c)	\$2,587,359	51.4205%	\$1,330,433	Attachment 5 Line 6
19	Plus: Specifically identified Trans. Related General Advertising Expense	\$0	99.2991 /0 (C)	\$0	51.4205%	ψ1,330, <del>4</del> 33	Line 15
20	Plus: Specifically identified Trans. Related Regulatory Expense	\$0		\$0	51.4205%	\$0	FERC Form 1 Page 350.18c
21	Total A&G [line 16 + (17 thru 20)]	\$28,734,128		\$28,666,902	01.120070	\$14,740,665	1 Enter eim 11 age eeu 100
	. , , , ,		•				
22	Payroll Tax Expense	\$2,271,348	99.8099% (a)	\$2,267,030	51.4205%	\$1,165,718	FERC Form 1 Page 263.3,4i - Footnote (d)
(	d) (d) Payroll taxes FERC Form 1, page 263.i		(e)	Property Taxes F	F1, Page 263i		
	Federal Unemployment	\$9,327		Massachusetts	\$23,571,202		
	FICA	\$2,262,021		New Hampshire	\$2,662,307		
	Payroll Taxes	\$0		Vermont .	\$786,615		
	State Unemployment	\$0		Maine	\$0		
	Total	\$2,271,348		Rhode Island	\$151,330		
				Connecticut	\$0		
					\$27,171,454		

 $(3) = (1)^*(2)$ 

PTF

(5) = (3)\*(4)

<sup>(</sup>a) Worksheet 7, Line 11
(b) Worksheet 7 Line 3
(c) Worksheet 7 Line 16
(d) Transmission Only - Payroll Taxes - Specifically identified in FERC From 1
(e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 6
Page 8 of 30
PTF Revenue Requirements
Worksheet 7 of 8

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment Total Transmission Investment	\$819,449,952 \$1,593,625,753	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	51.4205%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 <b>\$23,467,616</b> \$23,467,616	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 <u>\$23,512,307</u> \$23,512,307	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.8099%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant (Line 2 of Wkst. 3) = Revised Numerator (Line 12 + Line 13)	\$1,593,625,753 <u>\$6,384,326</u> \$1,600,010,079	Line 2 Worksheet 5, Line 3, Column 3
15	Total Plant in Service	\$1,611,293,575	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2997%	
17 18 19	Post-2003 PTF Allocation Factor Total Post-2003 PTF Investment Total Transmission Investment Percent Allocation (Line 17/Line 18) for Post-2003 to Total Tx	\$ 213,375,099 \$1,593,625,753 13.3893%	Attachment 1 Line 7 Line 2
20 21	Total Invst in Tx Plant/Total Plant in Serv * Post-2003 PTF Tx Plant/Total Invst in Tx Plant	13.2955%	Line 19 * Line 16

#### Worksheet 8 of 8

#### New England Power Company Post-96 RNs Revenue Requirments For Test Year Ended 12/31/2011

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTA	<b>\L</b>	
Participant  NSTAR  EUA  NEP  T Elec Co.	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses	
			(a)	(b)	
NSTAR	115 kV Millbury-Medway 201 Line	Pg 332 Line 2 Col (g)		\$0	
	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$0	
	345 kV "stabilizer" 342 Line	Pg 332 Line 3 Col (g)		\$0	
	345 kV Carver - Walpole 331 Line	Pg 332 Line 13 Col (g)		\$0	
	Second Canal Line	Pg 332 Line 4 Col (g)		\$0	
	Bell Rock Road	Page 330.5 Line 12	\$0		
	Boston-Edison [345 kV Sandy-Tewksbury 337 line-345kV Tewksbury-Woburn 338 Line]	Page 330 Line 4	\$0		
	Boston-Edison [115 kV Tewksbury - Woburn M139 line - 115kV Tewksbury-Woburn N140 Line]	Page 330 Line 3	\$0		
	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5	\$0		
EUA	Boston Edison -345 kV Golden Hills-Mystic 349 Line	Page 330 Line 2	\$0		
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabrook	Page 330.1 Line 8	\$0		
EUA	345 kV Medway - Bridgewater 344 Line	Pg 330.5, Line 11	\$0		
NEP	Chester SVC	Transmission Billing		\$0	
	HQ Phase II - AC in MA	Page 330 Line 11	\$0		
	MWRA Transmission (MDC)	Contract - Line Lease/Use		\$0	
√T Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12	\$0		
		Totals	\$0	\$(	

### New England Power Company 2011 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post	
1	2010	Pre-1997 PTF Transmission Plant	\$351,115,800		
2	2010	Post-1996 PTF Transmission Plant	\$755,657,102		
3	2011	Additions/Retirements	\$62,011,432		
4	2011	Pre-1997 PTF Transmission Plant	\$349,334,382	29.89%	
5	2011	Post-1996 PTF Transmission Plant	\$819,449,952	70.11%	
6	2011	Total PTF Transmission Plant	\$1,168,784,335	100.00%	
7	2011	Post-2003 PTF Transmission Plant	\$213,375,099		

### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5
- 7 PTF Plant Report: Post 2003 RSP Projects

# GROSS PLANT ASSOC. WITH HVDC LEASES **2011**

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$0
2 3 4	Allocation Miles used by NHH (a) Total miles at Comerford Station Percentage of Total Gross Plant leased by NHH (a)	0 0 0%
5	Total Gross Plant leased by NHH (a)	\$0
6	Total Land from Sandy Pond to New Hampshire	\$0
7	HVDC lines occupy 35% of Right of Way	0%
8	Total Land leased by NEH (a)	\$0
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$0

#### Source:

- 1 FERC Form 1, Page 423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 Total miles per lease agreement
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

#### New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u> 2011</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$1,138,245
2	Less: Specifically identified Transmission-Related	
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
	2011 Transmission	\$157,814
		\$750,783
3	Total unidentified Book Depreciation on Equity AFUDC	\$387,462
4	Plant Allocator Factor	99.2997%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,749
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	\$750,783
7	Total Transmission-Related Equity AFUDC	\$1,135,532
8	Post-96 PTF Allocation Factor	51.4205%
9	Transmission-Related Equity AFUDC	\$583,896
	i ,	

- Sources:
  1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - Line 2
  - 7 Line 5 + Line 6
  - Worksheet 6 Post-96 PTF Allocation Factor
  - Line 7 \* Line 8

# New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2011	MECO 2011
1	Total Integrated Facilities Charges	\$0	\$0
2	Total 2011 PTF Property	\$0	\$0
3	Total Transmission Plant in 2011	\$0	\$0
4	NECO or MECO PTF Plant Allocator	0.00%	0.00%
5	PTF Related Integrated Facilities Charge	\$0	\$0
6	Total Integrated Facilities	=	\$0

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

### Shading denotes an input

## New England Power Company Development of 2011 Regulatory Commission Expense

Line <u>No.</u>		<u>2011</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$4,168,438	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$78,276	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$229,133	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$1,255,423	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,605,606	Line 1 - (Line 2-5)

Attachment 4 Exhibit 6 Page 15 of 30

#### **Attachment 6**

## Transmission Rents Received from Electric Property New England Power Company

	<u> 2011</u>
Revenues	\$1,213,781
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,213,781
PTF Allocation	51.4205%
Total PTF Revenue	\$624,132

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

# Revenue for Short-Term Transmission Service under the NEPOOL Tariff New England Power Company

**2011**Revenues \$809,392

Post-96 PTF Percent 70.1113%

Total Post-96 PTF Revenue \$567,475

Source: Short Term Through and Out Revenues from ISO New England

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:		
Revenue Requirements for (year):		Calendar Year 2011
Rates Effective for the Period: Through:		June 2012 May 2013
Customer:	New England Power C	Company
Customer's NABs Number:		
Name of Participant responsible for customer's billing:		
DUNs number of Participant responsible for customer's billing:		
	Pre-97 Revenue <u>Requirements</u>	Post-96 Revenue Requirements
Total of Attachment F - Sections A through I	\$100,395,777 (a)	\$128,354,111 <sub>(f)</sub>
Total of Attachment F - Section J - Support Revenue	\$5,663,545 (b)	<b>\$0</b> _(g)
Total of Attachment F - Section K - Support Expense	\$723,254 (c)	<b>\$0</b> _(h)
Total of Attachment F - Section (L through O)	(\$507,986) (d)	(\$1,191,607) (i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$94,947,500 (e)=(a)-(b)+	(c)+(d) \$127,162,504 (j)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$36,193,039 (k)
Annual True-up (per Attachment C to Attacment F Im[plementation	Rule) <u>N/A</u> ()	<b>N/A</b> (m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$94,947,500 (n)=(e) + (l)	\$163,355,543 (o)=(j)+(k)+(m)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Rec and Post-96 Revenue Requirements Subtotals for rate calculation	•	\$258,303,043 (p) = (n) + (o)

PTF Revenue Requirements

Worksheet 1 of 6

#### **New England Power Company Annual Revenue Requirements of PTF Facilities** For Costs in 2011

#### PRE-1997

			Attachment F		
	I.	INVESTMENT BASE	Reference	NEP	Reference
Line No.			Section:		
1		Transmission Plant	(A)(1)(a)	\$336,247,655	Worksheet 3, line 1&2 column 5
2		General Plant	(A)(1)(b)	\$1,399,489	Worksheet 3, line 3 column 5
3		Plant Held For Future Use	(A)(1)(c)	\$225,295	Worksheet 3, line 5 column 5
4		Total Plant (Lines 1+2+3)	( /( /( /	\$337,872,439	
		,			
5		Accumulated Depreciation	(A)(1)(d)	(\$77,488,640)	Worksheet 3, line 8 column 5
6		Accumulated Deferred Income Taxes	(A)(1)(e)	(\$76,355,405)	Worksheet 3, line 11 column 5
7		Loss On Reacquired Debt	(A)(1)(f)	\$91,898	Worksheet 3, line 12 column 5
8		Other Regulatory Assets	(A)(1)(g)	\$9,354,618	Worksheet 3, line 16 column 5
9		Net Investment (Line 4+5+6+7+8)	( )( )(0)	\$193,474,910	
10		Prepayments	(A)(1)(h)	\$30,363	Worksheet 3, line 17 column 5
11		Materials & Supplies	(A)(1)(i) (A)(1)(i)	\$838,599	Worksheet 3, line 18 column 5
12		Cash Working Capital		\$1,741,012	Worksheet 3, line 25 column 5
12		Cash Working Capital	(A)(1)(j)	\$1,741,012	Worksheet 5, line 25 column 5
13		Total Investment Base (Line 9+10+11+12)		\$196,084,884	
	II.	REVENUE REQUIREMENTS			
14		Investment Return and Income Taxes	(A)	\$23,859,746	Worksheet 2
15		Depreciation Expense	(B)	\$7,623,413	Worksheet 4, line 3, column 5
16		Amortization of Loss on Reacquired Debt	(C)	\$60,966	Worksheet 4, line 4, column 5
17		Investment Tax Credit	(D)	(\$86,551)	Worksheet 4, line 5, column 5
18		Property Tax Expense	(E)	\$5,956,173	Worksheet 4, line 6, column 5
19		Payroll Tax Expense	(F)	\$496,949	Worksheet 4, line 22, column 5
20		Operation & Maintenance Expense	(G)	\$7,644,111	Worksheet 4, line 11, column 5
21		Administrative & General Expense	(H)	\$6,283,985	Worksheet 4, line 21, column 5
22		Transmission Related Integrated Facilities Charge	(1)	\$48,556,985	Attachment 4, line 6
23		Transmission Support Revenue	(J)	(\$5,663,545)	Worksheet 6
24		Transmission Support Expense	(K)	\$723,254	Worksheet 6
25		Transmission Related Expense from Generators	(L)	\$0	Worksheet 7
26		Transmission Related Taxes and Fees Charge	(M)	\$0	
27		Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$241,917)	Attachment 7
28		Transmission Rents Received from Electric Property	(O)	(\$266,069)	Attachment 6
29		Total Revenue Requirements (Line 14 thru 28)		\$94,947,500	

COST OF CAPITAL

COST OF CAPITAL

CAPITALIZATION RATIOS

EQUITY PORTION

# New England Power Company Annual Revenue Requirements For Costs in 2011

Shading denotes an input

			PR	ONG-TERM DEBT REFERRED STOCK COMMON EQUITY STMENT RETURN	\$410,350,000 \$1,111,700 \$746,206,523 \$1,157,668,223	_	35.45% 0.10% 64.46% 100.00%	1.18% 6.02% 11.07%	0.42% 0.01% 7.14%	0.01% 7.14% 7.15%
Cost of Capital Rate=										
(a) Weighted Cost of Capital	=	0.0757								
(b) Federal Income Tax	=	( R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	x -	Federal Income Tax Rat			
	=	( 0.0715 +(	(\$86,551) +	\$248,755) /	\$196,084,884 )	х	0.35	)		
		( 1				-	0.35	)		
	=	0.0389454								
			PTF Inv.	Eq. AFUDC						
(c) State Income Tax	=	( R.O.E. + (	(Tax Credit +	of Deprec. Exp. ) /	PTF Inv. Base)	+	Federal Income Tax	)*	State Income Tax Rate	
		( 1				-	State Income Tax Rate	)		
	=	( 0.0715 +(	(\$86,551) +	\$248,755 ) /	\$196,084,884 )	+	0.0389454	)*	0.059466	
		( 1				-	0.059466	)		
	=	0.0070353								
(a)+(b)+(c) Cost of Capital Rate	=	0.1216807								
		(PTF)								
INVESTMENT BASE		\$196,084,884 F	rom Worksheet 1							
x Cost of Capital Rate		0.1216807								
= Investment Return and Income Taxe	s	\$23,859,746	o Worksheet 1							

CAPITALIZATION 12/31/2011

#### New England Power Company

			New England Pov	wer Company			
	Shading denotes an input						
Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference
1	Transmission Plant					\$349,334,382	Attachment 1, Page 1
2	Less: Plant Assoc. HVDC Leases					(\$13,086,728)	Attachment 2
3	General Plant	\$6,396,486	99.8099% (a	a) \$6,384,326	21.9207% (b)	\$1,399,489	FERC Form 1 Page 207.99g
4	Total (line 1+2+ 3)			\$6,384,326		\$337,647,144	
5	Transmission Plant Held for Future Use	\$1,027,771		\$1,027,771	21.9207% (b)	\$225,295	FERC Form 1 Page 214.2,4,9
	Transmission Accumulated Depreciation						
6	Transmission Accumulated Depreciation	(\$348,750,683)		(\$348,750,683)	21.9207% (b)	(\$76,448,591)	FERC Form 1 Page 219.25
7	General Plant Accumulated Depreciation	(\$4,753,633)	99.8099% (a	(\$4,744,596)	21.9207% (b)	(\$1,040,049)	FERC Form 1 Page 219.28
8	Total (line 6+ 7)			(\$353,495,279)		(\$77,488,640)	
	Transmission Accumulated Deferred Taxes						
9	Accumulated Deferred Taxes (281-283)	(\$402,325,609)	99.2997% (c	(\$399,508,123)	21.9207% (b)		FERC Form 1 Page 113.62-64
10	Accumulated Deferred Taxes (190)	\$51,543,505	99.2997% (c	5) \$51,182,546	21.9207% (b)		FERC Form 1 Page 111.82
11	Total (line 9+ 10)			(\$348,325,577)		(\$76,355,405)	
12	Transmission Loss on Reacquired Debt	\$419,230	100.0000%	\$419,230	21.9207% (b)	\$91,898	FERC Form 1 Page 111.81c
	Other Regulatory Assets						
13	FAS 106	\$0	99.8099% (a		21.9207% (b)		
14	FAS 109 (Asset Account 182.3)	\$42,674,813	100.0000%	\$42,674,813	21.9207% (b)		FERC Form 1 Page 232.7f
15	FAS 109 ( Liability Account 254 )	\$0	100.0000%	\$0	21.9207% (b)	\$0	FERC Form 1 Page 278
16	Total (line 13+14+ 15)	\$42,674,813		\$42,674,813		\$9,354,618	
17	Transmission Prepayments	\$138,779	99.8099% (a	a) \$138,515	21.9207% (b)	\$30,363	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$3,825,605		\$3,825,605	21.9207% (b)	\$838,599	FERC Form 1 Page 227.8c
19	Cash Working Capital						
20	Operation & Maintenance Expense					\$7,644,111	Worksheet 1, Line 20
21	Administrative & General Expense					\$6,283,985	Worksheet 1, Line 21
22	Transmission Support Expense					\$0	Worksheet 6
23	Subtotal (line 20+21+22)					\$13,928,096	45 / 000
24 25	Total (line 23 * line 24)					0.1250 \$1,741,012	x 45 / 360
-	, /					. , ,	

<sup>(</sup>a) Worksheet 5 Line 11 (b) Worksheet 5 Line 3 (c) Worksheet 5 Line 16

#### New England Power Company Shading denotes an input

(2)

Line No.		(1) Total	Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3	<u>Depreciation Expense</u> Transmission Depreciation General Depreciation	\$34,416,139 \$361,782	99.8099% (a)	\$34,416,139 \$361,094 \$34,777,233	21.9207% (b) 21.9207% (b) _ =	\$7,544,259 \$79,154 \$7,623,413	FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
4	Amortization of Loss on Reacquired Debt	\$278,121	100.0000%	\$278,121	21.9207% (b) <sub>=</sub>	\$60,966	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$394,836)	100.0000%	(\$394,836)	21.9207% (b) <sub>=</sub>	(\$86,551)	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$27,171,454	100.0000%	\$27,171,454	21.9207% (b) <sub>=</sub>	\$5,956,173	FERC Form 1 Page 263.10,17,23,28i - Footnote (e)
7 8 9 10 11	Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3) **Station Expenses & Rents - #562 / #567 O&M less lines 8, 9 & 10	\$61,295,709 \$14,532,110 \$11,891,943 \$0 \$34,871,656		\$61,295,709 \$14,532,110 \$11,891,943 \$34,871,656	21.9207% (b) 21.9207% (b) 21.9207% (b) 21.9207% (b)	\$13,436,448 \$3,185,540 \$2,606,797 \$0 \$7,644,111	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
12 13 14 15 16 17 18	Transmission Administrative and General Total Administrative and General Less: Property Insurance (#92) Less: Regulatory Commission Expenses (#928) Less: General Advertising Expense (#920.1) Subtical [[line 12 minus (13 hru 15]] Plus: Property Insurance Allocated using Plant Allocatior Plus: Regulatory Commission Expense Plus: Specifically identified Trans Related General Advertising Expense	\$30,296,960 (\$135,569) \$4,168,438 \$0 \$26,264,091 (\$135,569) \$2,605,606	99.8099% (a) 99.2997% (c) 99.2997% (c)	\$26,214,163 (\$134,620) \$2,587,359 \$0	21.9207% (b) 21.9207% (b) 21.9207% (b) 21.9207% (b)	\$5,746,328 (\$29,510) \$567,167 \$0	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b Line 13 Attachment 5 Line 6 Line 15
20 21	Plus: Specifically Identified Trans. Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$0 \$28,734,128		\$0 \$28,666,902	21.9207% (b) _ =	\$0 \$6,283,985	FERC Form 1 Page 350.18c
22	Payroll Tax Expense	\$2,271,348	99.8099% (a)	\$2,267,030	21.9207% (b)	\$496,949	FERC Form 1 Page 263.3,4i - Footnote (d)
(	d) Payroll taxes FERC Form 1, page 263.i		(e)	Property Taxes F	F1, Page 263i		
	Federal Unemployment FICA Payroll Taxes State Unemployment Total	\$9,327 \$2,262,021 \$0 \$0 \$2,271,348		Massachusetts New Hampshire Vermont Maine Rhode Island Connecticut	\$23,571,202 \$2,662,307 \$786,615 \$0 \$151,330 \$0 \$27,171,454		

(4)

<sup>(</sup>a) Worksheet 5 Line 11
(b) Worksheet 5 Line 3
(c) Worksheet 5 Line 16
(d) Transmission Only - Payroll Taxes - Specifically identified in FERC From 1
(e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 6
Page 22 of 30
PTF Revenue Requirements
Worksheet 5 of 6

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment	\$349,334,382 \$1,593,625,753	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	21.9207%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 \$23,467,616 \$23,467,616	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 <u>\$23,512,307</u> \$23,512,307	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.8099%	
	Plant Allocation Factor		
12	Total Transmission Investment	\$1,593,625,753	Line 2
13	plus Transmission-Related General Plant	\$6,384,326	Worksheet 3, Line 3, Column 3
14	= Revised Numerator (Line 12 + Line 13)	\$1,600,010,079	
15	Total Plant in Service	\$1,611,293,575	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2997%	

Shading denotes input

#### New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2011

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTA	L
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
			(a)	(b)
NSTAR	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$102,578
	345 kV "stabilizer" 342 Line	Pg 332 Line 3 Col (g)		(446)
	345 kV Switch Tap Bridge - Station 451 Whitman	Pg 332 Line 13 Col (g)		\$774
	Bell Rock Road	Page 330.5 Line 12 Col (n)	\$38,953	
	Boston-Edison [345 kV Sandy-Tewksbury 337 line-345kV Tewksbury-Woburn 338 Line]	Page 330 Line 4 Col (n)	\$61,463	
	Boston-Edison [115 kV Tewksbury - Woburn M139 line - 115kV Tewksbury-Woburn N140 Line]	Page 330 Line 3 Col (n)	\$11,594	
	Boston Edison -345 kV Golden Hills-Mystic 349 Line	Page 330 Line 2 Col (n)	\$47,313	
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabrook	Page 330.1 Line 8 Col (n)	\$423,318	
NU	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5 Col (n)	\$13,319	
NEP	Chester SVC	Transmission Billing		\$620,348
	HQ Phase II - AC in MA	Page 330 Line 11 Col (n)	\$5,027,675	
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12 Col (n)	\$39,910	
		Totals	\$5,663,545	\$723,254

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

### Shading denotes an input

### New England Power Company 2011 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post	
1	2010	Pre-1997 PTF Transmission Plant	\$351,352,992		
2	2010	Post-1996 PTF Transmission Plant	\$725,670,117		
3	2011	Additions/Retirements	\$91,761,225		
4	2011	Pre-1997 PTF Transmission Plant	\$349,334,382	29.89%	
5	2011	Post-1996 PTF Transmission Plant	\$819,449,952	70.11%	
6	2011	Total PTF Transmission Plant	\$1,168,784,335	100.00%	

### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5

# GROSS PLANT ASSOC. WITH HVDC LEASES 2011

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$14,269,187
2	Allocation  Miles used by NHH (a)  Total miles at Comerford Station	224 253
4	Percentage of Total Gross Plant leased by NHH (a)	89%
5	Total Gross Plant leased by NHH (a)	\$12,699,576
6	Total Land from Sandy Pond to New Hampshire	\$1,106,146
7	HVDC lines occupy 35% of Right of Way	35%
8	Total Land leased by NEH (a)	\$387,151
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$13,086,728

#### Source:

- 1 FERC Form 1, Page 422.1-423.1, Lines 5 + 16 col (I)
- 2 Total miles used per lease agreement
- 3 FERC Form 1, Page 422.1 Lines 5 + 16 col (f)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

**Attachment 3** 

# New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2011</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$1,137,510
2	Less: Specifically Identified Transmission-Related	
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission Only 1990 - 1999	\$9,713
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
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	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
	2011 Transmission	\$157,122
		\$750,091
3	Total Unidentified Book Depreciation on Equity AFUDC	\$387,419
4	Plant Allocator Factor	99.2997%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,706
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	<u>\$750,091</u>
7	Total Transmission-Related Equity AFUDC	\$1,134,797
8	Pre-97 PTF Allocation Factor	21.9207%
9	Transmission-Related Equity AFUDC	\$248,755

#### Sources:

- 1 & 2 Transmission Rates includes \$9,713 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 5 Pre-97 PTF Allocation Factor
  - 9 Line 7 \* Line 8

# New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2011	MECO <u>2011</u>
1	Total Integrated Facilities Charges	\$60,868,519	\$8,564,781
2 3 4	Total 2011 PTF Property Total Transmission Plant in 2011 NECO or MECO PTF Plant Allocator	\$234,900,022 \$321,180,057 73.14%	\$21,875,675 \$46,378,064 47.17%
5	PTF Related Integrated Facilities Charge	\$44,517,136	\$4,039,849
6	Total Integrated Facilities	<u>-</u>	\$48,556,985

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

# New England Power Company Development of 2011 Regulatory Commission Expense

Line <u>No.</u>		<u>2011</u>	Source
1	Total Regulatory Commission Expense - NEP	\$4,168,438	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$78,276	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$229,133	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$1,255,423	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,605,606	Line 1 - (Line 2-5)

#### **Attachment 6**

# Transmission Rents Received from Electric Property New England Power Company

**2011**Revenues \$1,213,781

Plant Allocation Factor 100.00%

Transmission Allocated \$1,213,781

PTF Allocation 21.9207%

Total PTF Revenue \$266,069

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### Attachment 7

### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

### New England Power Company

<u>2011</u>

Revenues \$809,392

Pre-97 PTF Percent 29.8887%

Total Pre-97 PTF Revenue \$ 241,917

Source: Short Term Through and Out Revenues from ISO New England

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:		
Revenue Requirements for (year):	Cale	ndar Year 2012
Rates Effective for the Period: Through:		June 2013 May 2014
Customer:	New England Power Com	pany
Customer's NABs Number:		
Name of Participant responsible for customer's billing:		
DUNs number of Participant responsible for customer's billing:		
	Pre-97 Revenue <u>Requirements</u>	Post-96 Revenue Requirements
Total of Attachment F - Sections A through I	\$119,273,424 (a)	\$144,708,124 (f)
Total of Attachment F - Section J - Support Revenue	\$5,407,628 (b)	<b>\$0</b> (g)
Total of Attachment F - Section K - Support Expense	\$703,144 (c)	<b>\$0</b> (h)
Total of Attachment F - Section (L through O)	(\$526,111) (d)	(\$1,368,365) (i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$114,042,830 (e)=(a)-(b)+(c)+(d)	\$143,339,759 <sub>(i)</sub>
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$53,230,475 (k)
Annual True-up (per Attachment C to Attachment F Implementa	ation Rule) N/A ()	<b>N/A</b> (m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$114,042,830 (n)=(e)+(l)	\$196,570,234 (o)=(j)+(k)+(m)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Post-96 Revenue Requirements Subtotals, Forecasted Revenand True-ups (including interest)	•	\$310,613,063 (p) = (n) + (o)

Attachment 4 Exhibit 7 Page 2 of 30

> PTF Revenue Requirements Worksheet 1 of 6 Page 1 of 2

# New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2012

#### POST-1996

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	ondaning donoted an impair	Attachment F		
	I. INVESTMENT BASE	Reference	NEP	Reference
Line No.		Section:		
1	Transmission Plant	(A)(1)(a)	\$918,015,798	Worksheet 5, line 1&2 column 5
2	General Plant	(A)(1)(b)	\$3,421,788	Worksheet 5, line 3 column 5
3	Plant Held For Future Use	(A)(1)(c)	\$551,011	Worksheet 5, line 5 column 5
4	Total Plant (Lines 1+2+3)	· / / / /	\$921,988,597	
5	Accumulated Depreciation	(A)(1)(d)	(\$201,785,268)	Worksheet 5, line 8 column 5
6	Accumulated Deferred Income Taxes	(A)(1)(e)	(\$210,488,062)	Worksheet 5, line 11 column 5
7	Loss On Reacquired Debt	(A)(1)(f)	\$151,668	Worksheet 5, line 12 column 5
8	Other Regulatory Assets	(A)(1)(g)	\$24,851,635	Worksheet 5, line 16 column 5
9	Net Investment (Line 4+5+6+7+8)		\$534,718,570	
10	Prepayments	(A)(1)(h)	\$0	Worksheet 5, line 17 column 5
11	Materials & Supplies	(A)(1)(i)	\$2,621,268	Worksheet 5, line 18 column 5
12	Cash Working Capital	(A)(1)(j)	\$4,629,975	Worksheet 5, line 25 column 5
13	NEEWS CWIP	(A)(1)(k)	\$14,550,755	Worksheet 5, line 26 column 5
14	Total Investment Base (Line 9+10+11+12+13)		\$556,520,569	
	II. REVENUE REQUIREMENTS			
15	Investment Return and Income Taxes	(A)	\$71,452,053	Worksheet 3
16	Depreciation Expense	(B)	\$20,122,458	Worksheet 6, line 3, column 5
17	Amortization of Loss on Reacquired Debt	(C)	\$73,091	Worksheet 6, line 4, column 5
18	Investment Tax Credit	(D)	(\$209,438)	Worksheet 6, line 5, column 5
19	Property Tax Expense	(E)	\$15,372,820	Worksheet 6, line 6, column 5
20	Payroll Tax Expense	(F)	\$857,337	Worksheet 6, line 22, column 5
21	Operation & Maintenance Expense	(G)	\$18,125,978	Worksheet 6, line 11, column 5
22	Administrative & General Expense	(H)	\$18,913,825	Worksheet 6, line 21, column 5
23	Transmission Related Integrated Facilities Charge	(I)	\$0	Attachment 4, line 6
24	Transmission Support Revenue	(J)	\$0	Worksheet 8
25	Transmission Support Expense	(K)	\$0	Worksheet 8
26	Transmission Related Expense from Generators	(L)	\$0	
27	Transmission Related Taxes and Fees Charge	(M)	\$0	
28	Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$762,866)	Attachment 7
29	Transmission Rents Received from Electric Property	(O)	(\$605,499)	Attachment 6
30	Total Revenue Requirements (Line 14 thru 28)		\$143,339,759	

Attachment 4
Exhibit 7
Page 3 of 30
PTF Revenue Requirements
Worksheet 1 of 6
Page 2 of 2

#### New England Power Company Post 1996 Regional Network Service Revenue Requirement For Test Year Ended 12/31/2012

		Attachment F	Forecasted	
Line No.	<u>Description</u>	Reference	Amount \$	Reference
1	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)		\$ 53,403,146	Line 6
2	Forecasted Revenue Requirements for Forecasted Transmission CWIP		\$172,671	Line 9
3	Forecasted Transmission Revenue Requirements		\$ 53,230,475	Line 1 + Line 2
4	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)	Appendix C iv	\$ 347,591,621	Project Detail
5	Carrying Charge Factor (CCF)	Appendix C vi	15.36376%	Line 20
6	Forecasted Revenue Requirements for FTPA		\$ 53,403,146	Line 4 * Line 5
7	Forecasted New England Power Company (NEP) NEEWS CWIP (FNCWIP)	Appendix C xiii	\$ (1,248,323)	Project Detail
8	NEEWS NEP Cost of Capital Rate (NCOC)	Appendix C xiv	13.83223%	Workpaper 4
9	Forecasted Revenue Requirements for FNCWIP		\$ (172,671)	Line 7 * Line 8
	Derivation of Carrying Charge (CCF)			
10	Investment Return and Income Taxes	(A)	\$67,785,682	Summary, Line 14
11	Depreciation Expense	(B)	20,122,458	Summary, Line 15
12	Amortization of Loss on Reacquired Debt	(C)	73,091	Summary, Line 16
13	Investment Tax Credit	(D)	(209,438)	Summary, Line 17
14	Property Tax Expense	(E)	15,372,820	Summary, Line 18
15	Payroll Tax Expense	(F)	857,337	Summary, Line 19
16	Operation & Maintenance Expense	(G)	18,125,978	Summary, Line 20
17	Administrative & General Expense	(H)	18,913,825	Summary, Line 21
18	Total Expenses (Lines 10 thru 17)		\$141,041,753	
19	PTF Transmission Plant	(A)(1)(a)	\$918,015,798	Summary, Line 1
20	Carrying Charge Factor (FTPA)		15.36376%	Line 18 / Line 19

Worksheet 2 of 6

Page 1 of 2

#### New England Power Company Annual Revenue Requirements For Costs in 2012

Shading denotes an input

NEEWS Allocation Factor

For Accumulated Deferred Income Taxes

Plant Allocation Factor

3.2990%

0.992978

3.2759%

Worksheet 7 Line 16

CAPITALIZATION CAPITALIZATION COST OF COST OF EQUITY 12/31/2012 RATIOS CAPITAL CAPITAL PORTION LONG-TERM DEBT 410,350,000 35.77% 0.65% 0.23% PREFERRED STOCK 0.01% 1.111.700 0.10% 6.02% 0.01% COMMON EQUITY 735,600,299 11.64% 7.46% 64.13% 7.46% TOTAL INVESTMENT RETURN \$1,147,061,999 100.00% 7.70% 7.47% Cost of Capital Rate= 0.0770 (a) Weighted Cost of Capital PTF Inv Eq. AFUDC (b) Federal Income Tax R.O.E. + PTF Inv. Base) Federal Income Tax Rate (Tax Credit of Deprec. Exp. Federal Income Tax Rate 0.0747 \$720,355)/ \$556,520,569 (\$209,438) 0.35 0.0407174 PTF Inv Eq. AFUDC (c) State Income Tax R.O.E. + (Tax Credit PTF Inv. Base) Federal Income Tax )\* State Income Tax Rate of Deprec. Exp. State Income Tax Rate 0.0747 (\$209,438) \$720,355)/ \$556,520,569 0.0407174 0.059466 0.0073554 (a)+(b)+(c) Cost of Capital Rate 0.1250728 (PTF) INVESTMENT BASE \$556,520,569 From Worksheet 1 x Cost of Capital Rate 0.1250728 = Investment Return and Income Taxes \$69,605,586 To Worksheet 1 INVESTMENT BASE (Excluding NEEWS CWIP) \$541,969,813 From Worksheet 1 x Cost of Capital Rate 0.1250728 = Investment Return and Income Taxes \$67,785,682 To Worksheet 2 Post 2003 PTF Investment Base w/ Incremental 100 bps: 213,518,137 From Attachment 1 Accumulated Depreciation From Worksheets 5 & 7 (46.296.429) Accumulate Deferred Income Taxes
Total Post-2003 Investment From Worksheets 5 & 7 118,608,761 Calculated Incremental ROF: 1.00% 0.00641 Calculated Federal Income Taxes: 0.00345 Per Attachment F 0.00062 0.01049 State Income Taxes: Per Attachment F 1,244,200 NEEWS In-Service w/ Incremental 125 bps: New England Power NEEWS In-Service 56,490,343 PowerPlant PTF 4 & 5 reports - PTF only Accumulated Depreciation
Accumulate Deferred Income Taxes (12,248,613) (12,861,493) From Worksheets 3 & 5 From Worksheets 3 & 5 **Total New England Power NEEWS Investment** 31.380.236 Calculated Incremental ROF: 1 25% 0.00802 Calculated Federal Income Taxes: 0.00432 Per Attachment F 0.00078 Per Attachment F Cost of Capital Rate Incremental Return and Taxes on NEEWS PTF Investment 411,471 NEEWS Allocation Factor Total Transmission Investment \$1,712,325,359 Worksheet 7 Line 2 Total NEEWS In-Service - NEP 56,490,343 Plant Accounting Records For Accumulated Depreciation 3.29909

### Attachment 4 Exhibit 7

# Page 5 of 30 PTF Revenue Requirements Worksheet 2 of 6 Page 2 of 2

Shading denotes an input

(a)+(b)+(c) Cost of Capital Rate

0.1383223

	CAPITALIZATION 12/31/2012	CAPITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY	\$ 410,350,000 \$ 1,111,700 \$ 735,600,299	35.77% 0.10% 64.13%	0.65% 6.02% 12.89%	0.23% 0.01% 8.27%	0.01% 8.27%
TOTAL INVESTMENT RETURN	\$1,147,061,999	100.00%		8.51%	8.28%

#### Cost of Capital Rate= (a) Weighted Cost of Capital 0.0851 PTF Inv. (Tax Credit Eq. AFUDC of Deprec. Exp. (b) Federal Income Tax R.O.E. + PTF Inv. Base) Federal Income Tax Rate Federal Income Tax Rate 0.0828 \$720,355 ) / \$556,520,569 0.0450790 Eq. AFUDC of Deprec. Exp. PTF Inv. (Tax Credit + R.O.E. + PTF Inv. Base) Federal Income Tax State Income Tax Rate (c) State Income Tax )\* State Income Tax Rate \$720,355 ) / \$556,520,569 ) 0.0450790 0.059466 0.059466 0.0081433

New England Power Company Annual Revenue Requirements For Costs in 2012

New	Fna	and	Power	Company

Line No.			(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+3)	\$	6,396,194	99.7856% (a)	\$6,382,481 \$6,382,481	53.6122% (b)_ =	\$918,015,798 \$0 \$3,421,788 \$921,437,586	Attachment 1, Page 1 Attachment 2 FERC Form 1 page 207.99g
5	Transmission Plant Held for Future Use	\$	1,027,771		\$1,027,771	53.6122% (b)_	\$551,011	FERC Form 1 page 214.2d,4d,9d
6 7 8	Transmission Accumulated Depreciation Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+ 7)	\$	(371,277,823) (5,112,522)	99.7856% (a)	(\$371,277,823) (\$5,101,561) (\$376,379,384)	53.6122% (b) 53.6122% (b)	(\$199,050,209) (\$2,735,059) (\$201,785,268)	FERC Form 1 page 219.25b FERC Form 1 Page 219.28b
9 10 11	Transmission Accumulated Deferred Taxes Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)		(508,206,767) 112,818,102		(\$504,638,139) \$112,025,893 (\$392,612,246)	53.6122% (b) 53.6122% (b)_	(\$270,547,608) \$60,059,546 (\$210,488,062)	FERC Form 1 page 113.62-64 FERC Form 1 page 111.82
12	Transmission Loss on Reacquired Debt	\$	282,898	100.0000%	\$282,898	53.6122% (b)_	\$151,668	FERC Form 1 Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 (Liability Account 254 ) Total (line 13+14+15)	\$ \$ \$	46,354,440 - \$46,354,440	99.7856% (a) 100.0000% 100.0000%	\$0 \$46,354,440 \$0 \$46,354,440	53.6122% (b) 53.6122% (b) 53.6122% (b) =	\$0 \$24,851,635 \$0 \$24,851,635	FERC Form 1 Page 232.8f FERC Form 1 Page 232.6f FERC Form 1 Page 278
17	Transmission Prepayments	\$	-	99.7856% (a)	\$0	53.6122% (b)_	\$0	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$	4,889,313		\$4,889,313	53.6122% (b)_	\$2,621,268	FERC Form 1 Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)					- - -	\$18,125,978 \$18,913,825 \$0 \$37,039,803 0.1250 \$4,629,975	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 8 x 45 / 360
26	NEEWS CWIP	\$	14,550,755			_	\$14,550,755	Plant Accounting Records

<sup>(</sup>a) Worksheet 7 Line 11 (b) Worksheet 7 Line 3 (c) Worksheet 7 Line 16

#### Shading denotes an input

#### **New England Power Company**

Line         No.           Depreciation Expense           1         Transmission Depreciation           2         General Depreciation           3         Total (line 1+2)	(1) Total (g) \$37,176,180 \$357,944	Wage/Plant Allocation Factors (3) = (1)*(  99.7856% (a) \$37,176, \$357, \$37,533,	Allocation Factor (b)  180 53.6122% 177 53.6122%	(5) = (3)*(4) PTF Allocated \$19,930,968 \$191,490 \$20,122,458	Source Reference for Col (1)  FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
4 Amortization of Loss on Reacquired Debt	\$136,332	\$136,	332 53.6122%	\$73,091	FERC Form 1 Page 117.64c
5 Amortization of Investment Tax Credits	(\$390,654)	(\$390,6	53.6122%	(\$209,438)	FERC Form 1 Page 266.8f - Footnote (f)
6 <u>Property Taxes</u>	\$28,674,108	\$28,674,	<u>108</u> 53.6122%	\$15,372,820	FERC Form 1 Page 263.10,17,23,28,31i - Footnote (e)
Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3) The station Expenses & Rents - #562 & #567 O&M less lines 8, 9 & 10	\$56,023,206 \$12,561,903 \$9,651,875 \$0 \$33,809,428	\$56,023, \$12,561, \$9,651,	903 53.6122% 875 53.6122%	\$30,035,273 \$6,734,712 \$5,174,583 \$0 \$18,125,978	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
Transmission Administrative and General Total Administrative and General Less: Properly Insurance (4924) Less: Regulatory Commission Expenses (4928) Less: Ceneral Advertising Expense (4930 1) Subtotal [line 12 milus (13 thru 15)] Plus: Properly Insurance Allocated using Plant Allocatior Plus: Regulatory Commission Expense Plus: Specifically identified Trans. Related General Advertising Expense Plus: Specifically identified Trans. Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$36,456,496 \$113,624 \$3,645,548 \$0 \$32,697,324 \$113,624 \$2,502,632 \$0 \$53,850 \$35,367,430	99.7856% (a) \$32,627, 99.2978% (c) \$112,8 99.2978% (c) \$2,485, \$53, \$35,278,	53.6122% 53.6122% 53.6122% 50 53.6122% 850 53.6122%	\$17,492,171 \$60,489 \$1,332,295 \$0 \$28,870 \$18,913,825	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b  Line 13 Attachment 5 Line 6 Line 15 FERC Form 1 Page 350.18c
22 Payroll Tax Expense	\$1,602,581	99.7856% (a) \$1,599,	145 53.6122%	\$857,337	FERC Form 1 Page 263.3,4i - Footnote (d)
(d) Payroll taxes - G/L 408.1		(e) Property Ta	ixes FF1, Page 263i		Property Taxes
Federal Unemployment FICA Payroll Taxes State Unemployment Total	\$0 \$0 \$1,602,581 \$0 \$1,602,581	Line 4(i) Massachus Line 3(i) New Hamp Vermont Line 9 (i) Maine Rhode Islai Connecticu	\$2,788,702 \$1,080,853 \$0 \$146,854		FERC Form 1 Page 263.10(i) FERC Form 1 Page 263.17(i) FERC Form 1 Page 263.23(i) n/a FERC Form 1 Page 263.28(i) & 35(i) FERC Form 1 Page 263.28(i) & 35(i)

<sup>(</sup>a) Worksheet 7, Line 11
(b) Worksheet 7 Line 3
(c) Worksheet 7 Line 16
(d) Transmission Only - Payroll Taxes - Specifically identified in FERC Form 1
(e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 7
Page 8 of 30
PTF Revenue Requirements
Worksheet 5 of 6

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment Total Transmission Investment	\$918,015,798 \$1,712,325,359	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	53.6122%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$0 \$18,493,757 \$18,493,757	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$18,533,501 \$18,533,501	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.7856%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant (Line 2 of Wkst. 3) = Revised Numerator (Line 12 + Line 13)	\$1,712,325,359 <u>\$6,382,481</u> \$1,718,707,840	Line 2 Worksheet 5, Line 3, Column 3
15	Total Plant in Service	\$1,730,862,090	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2978%	
17 18 19	Post-2003 PTF Allocation Factor Total Post-2003 PTF Investment Total Transmission Investment Percent Allocation (Line 17/Line 18) for Post-2003 to Total Tx	\$ 213,518,137 \$1,712,325,359 12.4695%	Attachment 1 Line 7 Line 2
20 21	Total Invst in Tx Plant/Total Plant in Serv * Post-2003 PTF Tx Plant/Total Invst in Tx Plant	12.3819%	Line 19 * Line 16

#### New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2012

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOT	AL
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
			(a)	(b)
NSTAR	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$0
	Bell Rock Road	Page 330.5 Line 12 Col (n)	\$0	
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabroo	Page 330.1 Line 8 Col (n)	\$0	
NU	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5 Col (n)	\$0	
NEP	Chester SVC	Transmission Billing		\$0
	HQ Phase II - AC in MA	Page 330 Line 11 Col (n)	\$0	
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12 Col (n)	\$0	
		Totals	\$0	\$0

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

### New England Power Company 2012 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post
1	2011	Pre-1997 PTF Transmission Plant	\$349,334,382	
2	2011	Post-1996 PTF Transmission Plant	\$819,449,952	
3	2012	Additions/Retirements	\$102,191,455	
4	2012	Pre-1997 PTF Transmission Plant	\$352,959,991	27.77%
5	2012	Post-1996 PTF Transmission Plant	\$918,015,798	72.23%
6	2012	Total PTF Transmission Plant	\$1,270,975,789	100.00%
7	2012	Post-2003 PTF Transmission Plant	\$213,518,137	172.23%

### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5
- 7 PTF Plant Report: Post 2003 RSP Projects

# GROSS PLANT ASSOC. WITH HVDC LEASES 2012

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$0
2 3 4	Allocation Miles used by NHH (a) Total miles at Comerford Station Percentage of Total Gross Plant leased by NHH (a)	0 0 0%
5	Total Gross Plant leased by NHH (a)	\$0
6	Total Land from Sandy Pond to New Hampshire	\$0
7	HVDC lines occupy 35% of Right of Way	0%
8	Total Land leased by NEH (a)	\$0
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$0

#### Source:

- 1 FERC Form 1, Page 423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 Total miles per lease agreement
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

# New England Power Company Determination of Book Depreciation on Equity AFUDC

	<u>2012</u>
1 Total Current Year Book Depreciation on Equity AFUDC	\$1,346,360
O Local Crosifically identified Transcription Deleted	
2 Less: Specifically identified Transmission-Related	¢54.700
Tewksbury Line Hydro-Quebec	\$54,708
MontaupTransmission	\$23,543 \$9,777
1998 Transmission	\$13,959
1999 Transmission	\$42,457
2000 Transmission	(\$8,299)
2001 Transmission	\$23,561
2002 Transmission	\$8,889
2003 Transmission	\$16,500
2004 Transmission	\$15,518
2005 Transmission	\$49,757
2006 Transmission	\$64,352
2007 Transmission	\$42,418
2008 Transmission	\$57,508
2009 Transmission	\$98,437
2010 Transmission	\$79,948
2011 Transmission	\$155,706
2012 Transmission	\$210,246
	\$958,985
Total unidentified Book Depreciation on Equity AFUDC	\$387,375
4 Plant Allocator Factor	99.2978%
5 Allocated Transmission Related Book Depreciation on Equ	uity AFUDC \$384,655
6 Plus: Specifically Identified Transmission-Related Equity A	
7 Total Transmission-Related Equity AFUDC	\$1,343,640
8 Post-96 PTF Allocation Factor	53.6122%
9 Transmission-Related Equity AFUDC	\$720,355

#### Sources:

- 1 & 2 Transmission Rates includes \$9,777 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 6 Post-96 PTF Allocation Factor
  - 9 Line 7 \* Line 8

## New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett 2012	MECO 2012
1	Total Integrated Facilities Charges	\$0	\$0
2 3	Total 2012 PTF Property Total Transmission Plant in 2012	\$0 \$0	\$0 \$0
4 5	NECO or MECO PTF Plant Allocator  PTF Related Integrated Facilities Charge	0.00% \$0	0.00%
6	Total Integrated Facilities	_	\$0

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

#### New England Power Company Development of 2012 Regulatory Commission Expense

Line <u>No.</u>		<u>2012</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$3,645,548	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$63,704	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$229,133	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$850,079	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,502,632	Line 1 - (Line 2-5)

#### Transmission Rents Received from Electric Property

#### New England Power Company

	<u>2012</u>
Revenues	\$1,129,406
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,129,406
PTF Allocation	53.6122%
Total PTF Revenue	\$605,499

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

#### **New England Power Company**

<u>2012</u>

Revenues \$1,056,174

Post-96 PTF Percent 72.2292%

Total Post-96 PTF Revenue \$762,866

Source: Short Term Through and Out Revenues from ISO New England

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:				
Revenue Requirements for (year):		Calendar Year 2012		
Rates Effective for the Period: Through:		June 2013 May 2014		
Customer:	New England Pow	ver Compan	у	
Customer's NABs Number:				
Name of Participant responsible for customer's billing:				
DUNs number of Participant responsible for customer's billing:	_			
	Pre-97 Revenue Requirements		Post-96 Revenue Requirements	
Total of Attachment F - Sections A through I	\$119,273,424 (a)	=	\$144,708,124	(f)
Total of Attachment F - Section J - Support Revenue	\$5,407,628 (b)	_	\$0	(g)
Total of Attachment F - Section K - Support Expense	\$703,144 (c)	=	\$0	(h)
Total of Attachment F - Section (L through O)	(\$526,111) (d)	_	(\$1,368,365)	(i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$114,042,830 (e)=(	(a)-(b)+(c)+(d)	\$143,339,759	(1)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	-	\$53,230,475	(k)
Annual True-up (per Attachment C to Attachment F Im[plementation Rule	N/A (I)	=	N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$114,042,830 (n)=(	(e) + (l)	\$196,570,234	(o)=(j)+(k)+(n
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirement and Post-96 Revenue Requirements Subtotals for rate calculations under			\$310,613,063	(p) = (n) + (o)

PTF Revenue Requirements

Worksheet 1 of 6

## New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2012

#### PRE-1997

	Shading denotes an input			
	I INVESTMENT DAGE	Attachment F		D (
	I. <u>INVESTMENT BASE</u>	Reference	NEP	Reference
Line No.		Section:	<b>*****</b>	W
1	Transmission Plant	(A)(1)(a)	\$339,265,312	Worksheet 3, line 1&2 column 5
2	General Plant	(A)(1)(b)	\$1,315,614	Worksheet 3, line 3 column 5
3	Plant Held For Future Use	(A)(1)(c)	\$211,853	Worksheet 3, line 5 column 5
4	Total Plant (Lines 1+2+3)		\$340,792,779	
5	Accumulated Depreciation	(A)(1)(d)	(\$77,582,706)	Worksheet 3, line 8 column 5
6	Accumulated Deferred Income Taxes	(A)(1)(e)	(\$80,928,770)	Worksheet 3, line 11 column 5
7	Loss On Reacquired Debt	(A)(1)(f)	\$58,313	Worksheet 3, line 12 column 5
8	Other Regulatory Assets	(A)(1)(g)	\$9,554,994	Worksheet 3, line 16 column 5
9	Net Investment (Line 4+5+6+7+8)	( )( )(0)	\$191,894,610	
10	Prepayments	(A)(1)(h)	\$0	Worksheet 3, line 17 column 5
11	Materials & Supplies	(A)(1)(i)	\$1,007,829	Worksheet 3, line 18 column 5
12	Cash Working Capital	(A)(1)(j)	\$1,780,140	Worksheet 3, line 25 column 5
	Cash Working Capital	(,,(,,0)		vvolkanost o, ima 20 solumin o
13	Total Investment Base (Line 9+10+11+12)		\$194,682,579	
	II. REVENUE REQUIREMENTS			
14	Investment Return and Income Taxes	(A)	\$24,360,748	Worksheet 2
15	Depreciation Expense	(B)	\$7,736,714	Worksheet 4, line 3, column 5
16	Amortization of Loss on Reacquired Debt	(C)	\$28,102	Worksheet 4, line 4, column 5
17	Investment Tax Credit	(D)	(\$80,525)	Worksheet 4, line 5, column 5
18	Property Tax Expense	(E)	\$5,910,565	Worksheet 4, line 6, column 5
19	Payroll Tax Expense	(F)	\$329,630	Worksheet 4, line 22, column 5
20	Operation & Maintenance Expense	(G)	\$6,969,104	Worksheet 4, line 11, column 5
21	Administrative & General Expense	(H)	\$7,272,016	Worksheet 4, line 21, column 5
22	Transmission Related Integrated Facilities Charge	(1)	\$66,747,070	Attachment 4, line 6
23	Transmission Support Revenue	(J)	(\$5,407,628)	Worksheet 6
24	Transmission Support Expense	(K)	\$703,144	Worksheet 6
25	Transmission Related Expense from Generators	(L)	\$0	Worksheet 7
26	Transmission Related Taxes and Fees Charge	(M)	\$0	
27	Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$293,308)	Attachment 7
28	Transmission Rents Received from Electric Property	(O)	(\$232,803)	Attachment 6
29	Total Revenue Requirements (Line 14 thru 28)		\$114,042,830	

## New England Power Company Annual Revenue Requirements For Costs in 2012

					CAPITALIZATION 12/31/2012	_	CAPITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
				LONG-TERM DEBT REFERRED STOCK COMMON EQUITY	\$ 410,350,000 \$ 1,111,700 \$ 735,600,299		35.77% 0.10% 64.13%	0.65% 6.02% 11.64%	0.23% 0.01% 7.46%	0.01% 7.46%
			TOTAL INV	ESTMENT RETURN	\$1,147,061,999	)	100.00%		7.70%	7.47%
Cost of Capital Rate=										
(a) Weighted Cost of Capital	=	0.0770								
(b) Federal Income Tax	= (	R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	x	Federal Income Ta: Federal Income Ta:			
	= (	0.0747 +	(\$80,525) +	\$276,963 ) /	\$194,682,579	) x	0.35 0.35	) )		
	=	0.0407664					0.55	,		
(c) State Income Tax	= (	R.O.E. + (	PTF Inv. (Tax Credit +	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base)	+	Federal Income State Income Tax		State Income Tax F	Rate
	= (	0.0747 +	(\$80,525) +	\$276,963 ) /	\$194,682,579	) +	0.0407664 0.059466	)*	0.05	9466
	=	0.0073642						,		
(a)+(b)+(c) Cost of Capital Rate	=	0.1251306								
		(PTF)								
INVESTMENT BASE		\$194,682,579	From Worksheet 1	I						
x Cost of Capital Rate		0.1251306								
= Investment Return and Income Taxes		\$24,360,748	To Worksheet 1							

PTF Revenue Requirements
Worksheet 3 of 6

#### New England Power Company

	Shading denotes an input				
Line No.		(1) Total	(2)         Wage/Plant       (3) = (1)*(2)         Allocation       Transmission         Factors       Allocated	(4) PTF (5) = (3)*(4) Allocation PTF Factor (b) Allocated	Source Reference
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+ 3)	\$ 6,396,194	99.7856% (a) \$6,382,481 \$6,382,481	\$352,959,991 (\$13,694,679) 20.6129% (b) \$1,315,614 \$340,580,926	Attachment 1, Page 1 Attachment 2 FERC Form 1 Page 207.99g
5	Transmission Plant Held for Future Use	\$ 1,027,771	\$1,027,771	20.6129% (b) \$211,853	FERC Form 1 page 214.2d,4d,9d
6 7 8	Transmission Accumulated Depreciation Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+ 7)	\$ (371,277,823) \$ (5,112,522)	(\$371,277,823) 99.7856% (a) (\$5,101,561) (\$376,379,384)		FERC Form 1 page 219.25b FERC Form 1 Page 219.28b
9 10 11	Transmission Accumulated Deferred Taxes Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	\$ (508,206,767) \$ 112,818,102	99.2978% (c) (\$504,638,139) 99.2978% (c) \$112,025,893 (\$392,612,246)	20.6129% (b) (\$104,020,555) 20.6129% (b) \$23,091,785 (\$80,928,770)	FERC Form 1 Page 113.62-64 FERC Form 1 Page 111.82
12	Transmission Loss on Reacquired Debt	\$ 282,898	100.0000% \$282,898	20.6129% (b) \$58,313	FERC Form 1 Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 ( Liability Account 254 ) Total (line 13+14+ 15)	\$ 46,354,440 \$ - \$46,354,440	99.7856% (a) \$0 100.0000% \$46,354,440 100.0000% \$0 \$46,354,440	20.6129% (b) \$0 20.6129% (b) \$9,554,994 20.6129% (b) \$0 \$9,554,994	FERC Form 1 Page 232.8f FERC Form 1 Page 232.6f FERC Form 1 Page 278
17	Transmission Prepayments	\$ -	99.7856% (a) \$0	20.6129% (b) \$0	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$ 4,889,313	\$4,889,313	20.6129% (b) \$1,007,829	FERC Form 1 Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)			\$6,969,104 \$7,272,016 \$0 \$14,241,120 0.1250 \$1,780,140	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 6 x 45 / 360

<sup>(</sup>a) Worksheet 5 Line 11 (b) Worksheet 5 Line 3 (c) Worksheet 5 Line 16

PTF Revenue Requirements
Worksheet 4 of 6

#### New England Power Company Shading denotes an input

	Shading denotes an input						
Line No.		(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3	<u>Depreciation Expense</u> Transmission Depreciation General Depreciation	\$37,176,180 \$357,944	99.7856% (a) _	\$37,176,180 \$357,177 \$37,533,357	20.6129% (b) 20.6129% (b) _ =	\$7,663,089 \$73,625 \$7,736,714	FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
4	Amortization of Loss on Reacquired Debt	\$136,332	100.0000%	\$136,332	20.6129% (b) <sub>=</sub>	\$28,102	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$390,654)	100.0000%	(\$390,654)	20.6129% (b) <sub>=</sub>	(\$80,525)	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$28,674,108	100.0000%	\$28,674,108	20.6129% (b) _	\$5,910,565	FERC Form 1 Page 263.10,17,23,28i - Footnote (e)
7 8 9 10 11	Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3) **Station Expenses & Rents - #562 / #567 O&M less lines 8, 9 & 10	\$56,023,206 \$12,561,903 \$9,651,875 \$0 \$33,809,428	- -	\$56,023,206 \$12,561,903 \$9,651,875 \$33,809,428	20.6129% (b) 20.6129% (b) 20.6129% (b) 20.6129% (b)	\$11,548,007 \$2,589,372 \$1,989,531 \$0 \$6,969,104	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
12 13 14 15 16 17 18	Transmission Administrative and General Total Administrative and General Less: Properly Insurance (#924) Less: Regulatory Commission Expenses (#928) Less: General Advertising Expenses (#930.1) Subtotal [line 12 minus (13 thru 15)] Plus: Properly Insurance Allocated using Plant Allocator Plus: Regulatory Commission Expense Plus: Specifically identified Trans. Related General Advertising Expense	\$36,456,496 \$113,624 \$3,645,548 \$0 \$32,697,324 \$113,624 \$2,502,632 \$0	99.7856% (a) 99.2978% (c) 99.2978% (c)	\$32,627,221 \$112,826 \$2,485,059 \$0	20.6129% (b) 20.6129% (b) 20.6129% (b) 20.6129% (b)	\$6,725,416 \$23,257 \$512,243 \$0	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b  Line 13  Attachment 5 Line 6 Line 15
20 21	Plus: Specifically identified Trans. Related Regulatory Expense  Total A&G [line 16 + (17 thru 20)]	\$53,850 \$35,367,430	-	\$53,850 \$35,278,956	20.6129% (b) _	\$11,100 \$7,272,016	FERC Form 1 Page 350.10c
22	Payroll Tax Expense	\$1,602,581	99.7856% (a)	\$1,599,145	20.6129% (b)	\$329,630	FERC Form 1 Page 263.3,4i - Footnote (d)
(0	d) Payroll taxes - G/L 408.1		(e)	Property Taxes FF	F1, Page 263i		
	Federal Unemployment FICA Payroll Taxes State Unemployment Total	\$0 \$0 \$1,602,581 \$0 \$1,602,581		Massachusetts New Hampshire Vermont Maine Rhode Island Connecticut	\$24,657,699 \$2,788,702 \$1,080,853 \$0 \$146,854 \$0 \$28,674,108		FERC Form 1 Page 263.10(i) FERC Form 1 Page 263.17(i) FERC Form 1 Page 263.23(i) n/a FERC Form 1 Page 263.28(i) & 35(i) FERC Form 1 Page 263.31(i)

<sup>(</sup>a) Worksheet 5 Line 11
(b) Worksheet 5 Line 3
(c) Worksheet 5 Line 16
(d) Transmission Only - Payroll Taxes - Specifically identified in FERC Form 1

<sup>(</sup>e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1 (f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 7
Page 22 of 30
PTF Revenue Requirements
Worksheet 5 of 6

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment	\$352,959,991 \$1,712,325,359	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	20.6129%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$18,493,757 \$18,493,757	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$18,533,501 \$18,533,501	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.7856%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant = Revised Numerator (Line 12 + Line 13)	\$1,712,325,359 <u>\$6,382,481</u> \$1,718,707,840	Line 2 Worksheet 3, Line 3, Column 3
15	Total Plant in Service	\$1,730,862,090	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2978%	

Shading denotes input

PTF Revenue Requirements
Worksheet 6 of 6

#### New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2012

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTAL		
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses	
			(a)	(b)	
NSTAR	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$99,271	
	Bell Rock Road	Page 330.5 Line 12 Col (n)	\$44,768		
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabrook	Page 330.1 Line 8 Col (n)	\$366,468		
NU	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5 Col (n)	\$13,571		
NEP	Chester SVC	Transmission Billing		\$603,873	
	HQ Phase II - AC in MA	Page 330 Line 11 Col (n)	\$4,946,997		
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12 Col (n)	\$35,824		
		Totals	\$5,407,628	\$703,144	

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

#### New England Power Company 2012 Informational Filing PTF Plant Allocation

			_	Percent Pre/Post
1	2011	Pre-1997 PTF Transmission Plant	\$349,334,382	
2	2011	Post-1996 PTF Transmission Plant	\$819,449,952	
3	2012	Additions/Retirements	\$102,191,455	
4	2012	Pre-1997 PTF Transmission Plant	\$352,959,991	27.77%
5	2012	Post-1996 PTF Transmission Plant	\$918,015,798	72.23%
6	2012	Total PTF Transmission Plant	\$1,270,975,789	100.00%

#### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5

## GROSS PLANT ASSOC. WITH HVDC LEASES 2012

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$14,952,279
2 3 4	Allocation  Miles used by NHH (a)  Total miles at Comerford Station  Percentage of Total Gross Plant leased by NHH (a)	224 253 89%
5	Total Gross Plant leased by NHH (a)	\$13,307,528
6	Total Land from Sandy Pond to New Hampshire	\$1,106,146
7	HVDC lines occupy 35% of Right of Way	35%
8	Total Land leased by NEH (a)	\$387,151
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$13,694,679

#### Source:

- 1 FERC Form 1, Page 422.1-423.1, Lines 5 + 16 col (I)
- 2 Total miles used per lease agreement
- 3 FERC Form 1, Page 422.1 Lines 5 + 16 col (f)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15 col (j)
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

## New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2012</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$1,346,360
2	Less: Specifically Identified Transmission-Related	
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission	\$9,777
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
	2011 Transmission	\$155,706
	2012 Transmission	\$210,246
		\$958,985
3	Total Unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.2978%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,655
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	\$958,98 <u>5</u>
7	Total Transmission-Related Equity AFUDC	\$1,343,640
0	Dro 07 DTE Allocation Factor	20.64209/
8 9	Pre-97 PTF Allocation Factor Transmission Polated Equity AFLIDC	20.6129%
9	Transmission-Related Equity AFUDC	\$276,963

#### Sources:

- 1 & 2 Transmission Rates includes \$9,777 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 5 Pre-97 PTF Allocation Factor
  - 9 Line 7 \* Line 8

## New England Power Company Determination of the PTF Related Integrated Facilities Charges

			Narragansett 2012	MECO 2012
1	Total Integrated Facilities Charges		\$77,884,781	\$9,279,091
2 3 4	Total 2012 PTF Property Total Transmission Plant in 2012 NECO or MECO PTF Plant Allocator	(NECO includes \$88M topside) (NECO includes \$88M topside)	\$386,991,881 \$486,729,573 79.51%	\$24,868,977 \$47,856,277 51.97%
5	PTF Related Integrated Facilities Charg	ge	\$61,925,101	\$4,821,969
6	Total Integrated Facilities		_	\$66,747,070

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

#### New England Power Company Development of 2012 Regulatory Commission Expense

Line <u>No.</u>		<u>2012</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$3,645,548	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$63,704	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$229,133	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$850,079	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,502,632	Line 1 - (Line 2-5)

#### Transmission Rents Received from Electric Property

#### New England Power Company

	<u>2012</u>
Revenues	\$1,129,406
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,129,406
PTF Allocation	20.6129%
Total PTF Revenue	\$232,803

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

#### **New England Power Company**

 Z012

 Revenues
 \$1,056,174

 Pre-97 PTF Percent
 27.7708%

 Total Pre-97 PTF Revenue
 \$ 293,308

Source: Short Term Through and Out Revenues from ISO New England

Sheet: Input Panel

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:		
Revenue Requirements for (year):	Cal	endar Year 2012
Rates Effective for the Period: Through:		June 2013 May 2014
Customer:	New England Power Con	npany
Customer's NABs Number:		
Name of Participant responsible for customer's billing:		
DUNs number of Participant responsible for customer's billing:		
	Pre-97 Revenue <u>Requirements</u>	Post-96 Revenue Requirements
Total of Attachment F - Sections A through I	\$118,127,016 (a)	\$141,430,997 (f)
Total of Attachment F - Section J - Support Revenue	\$5,407,628 (b)	<b>\$0</b> (g)
Total of Attachment F - Section K - Support Expense	<b>\$703,144</b> (c)	<b>\$0</b> (h)
Total of Attachment F - Section (L through O)	(\$526,111) (d)	(\$1,368,365) <sub>(1)</sub>
Sub Total - Sum (A through I) - J + K + (L through O)	\$112,896,422 (e)=(a)-(b)+(c)+(	station state = \$140,062,632 (j)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$52,042,711_(k)
Annual True-up (per Attachment C to Attachment F Implementation	on Rule)0	<b>N/A</b> (m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$112,896,422 (n)=(e)+(l)	\$192,105,342 (o)=(j)+(k)+(m)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Repost-96 Revenue Requirements Subtotals, Forecasted Revenue and True-ups (including interest)	•	305,001,764 (p) = (n) + (o)

Attachment 4
Exhibit 8
Page 2 of 30
PTF Revenue Requirements
Worksheet 1 of 6
Page 1 of 2

#### New England Power Company Annual Revenue Requirements of PTF Facilities For Costs in 2012

#### POST-1996

			Attachment F		
	I.	INVESTMENT BASE	Reference	NEP	Reference
Line No.			Section:		
1		Transmission Plant	(A)(1)(a)	\$918,015,798	Worksheet 5, line 1&2 column 5
2		General Plant	(A)(1)(b)	\$3,421,788	Worksheet 5, line 3 column 5
3		Plant Held For Future Use	(A)(1)(c)	\$551,011	Worksheet 5, line 5 column 5
4		Total Plant (Lines 1+2+3)	( )( )(-)	\$921,988,597	
		1,		, , , , , , , , , , , , , , , , , , , ,	
5		Accumulated Depreciation	(A)(1)(d)	(\$201,785,268)	Worksheet 5, line 8 column 5
6		Accumulated Deferred Income Taxes	(A)(1)(e)	(\$210,488,062)	Worksheet 5, line 11 column 5
7		Loss On Reacquired Debt	(A)(1)(f)	\$151,668	Worksheet 5, line 12 column 5
8		Other Regulatory Assets	(A)(1)(g)	\$24,851,635	Worksheet 5, line 16 column 5
9		Net Investment (Line 4+5+6+7+8)	(,,(,,(3)	\$534,718,570	Transmer of mile to column o
Ü		riot invocations (Ento 12000120)		ψοσ τ,τ το,στο	
10		Prepayments	(A)(1)(h)	\$0	Worksheet 5, line 17 column 5
11		Materials & Supplies	(A)(1)(i)	\$2,621,268	Worksheet 5, line 18 column 5
12		Cash Working Capital	(A)(1)(j)	\$4,629,975	Worksheet 5, line 25 column 5
13		NEEWS CWIP	(A)(1)(k)	\$14,550,755	Worksheet 5, line 26 column 5
13		NEEWO OWII	(A)(1)(K)	ψ14,330,733	Worksheet 5, line 20 column 5
14		Total Investment Base (Line 9+10+11+12+13)		\$556,520,569	
14		Total investment base (Line 9 10 111 12 13)		\$330,320,309	
	II.	REVENUE REQUIREMENTS			
15		Investment Return and Income Taxes	(A)	\$68,174,926	Worksheet 3
16		Depreciation Expense	(B)	\$20,122,458	Worksheet 6, line 3, column 5
17		Amortization of Loss on Reacquired Debt	(C)	\$73,091	Worksheet 6, line 4, column 5
18		Investment Tax Credit	(D)	(\$209,438)	Worksheet 6, line 5, column 5
19		Property Tax Expense	(E)	\$15,372,820	Worksheet 6, line 6, column 5
20		Payroll Tax Expense	(F)	\$857,337	Worksheet 6, line 22, column 5
21		Operation & Maintenance Expense	(G)	\$18,125,978	Worksheet 6, line 11, column 5
22		Administrative & General Expense	(H)	\$18,913,825	Worksheet 6, line 21, column 5
23		Transmission Related Integrated Facilities Charge	(I)	\$0	Attachment 4, line 6
24		Transmission Support Revenue	(J)	\$0 \$0	Worksheet 8
25		Transmission Support Expense	(K)	\$0	Worksheet 8
26		Transmission Related Expense from Generators	(L)	\$0	Worksheet
27		Transmission Related Taxes and Fees Charge	(M)	\$0 \$0	
28		Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$762,866)	Attachment 7
29		Transmission Rents Received from Electric Property	(N) (O)	(\$605,499)	Attachment 6
20		Transmission North Necestral Iron Electric 1 10perty	(0)	(ψουσ, ποσ)	Attachment
30		Total Revenue Requirements (Line 14 thru 28)		\$140,062,632	

Attachment 4
Exhibit 8
Page 3 of 30
PTF Revenue Requirements
Worksheet 1 of 6
Page 2 of 2

#### New England Power Company Post 1996 Regional Network Service Revenue Requirement For Test Year Ended 12/31/2012

		Attachment F	Forecasted	
Line No.	<u>Description</u>	Reference	Amount \$	Reference
1	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)		\$ 52,194,758	Line 6
2	Forecasted Revenue Requirements for Forecasted Transmission CWIP		\$152,047	Line 9
3	Forecasted Transmission Revenue Requirements		\$ 52,042,711	Line 1 + Line 2
4	Forecasted Revenue Requirements for Forecasted Transmission Plant Additions (FTPA)	Appendix C iv	\$347,591,621	Project Detail
5	Carrying Charge Factor (CCF)	Appendix C vi	15.01612%	Line 20
6	Forecasted Revenue Requirements for FTPA	rr	\$ 52,194,758	Line 4 * Line 5
7	Forecasted New England Power Company (NEP) NEEWS CWIP (FNCWIP)	Appendix C xiii	\$ (1,248,323)	Project Detail
8	NEEWS NEP Cost of Capital Rate (NCOC)	Appendix C xiv	12.18014%	Workpaper 4
9	Forecasted Revenue Requirements for FNCWIP		\$ (152,047)	Line 7 * Line 8
	Derivation of Carrying Charge (CCF)			
10	Investment Return and Income Taxes	(A)	\$64,594,239	Summary, Line 14
11	Depreciation Expense	(B)	20,122,458	Summary, Line 15
12	Amortization of Loss on Reacquired Debt	(C)	73,091	Summary, Line 16
13	Investment Tax Credit	(D)	(209,438)	Summary, Line 17
14	Property Tax Expense	(E)	15,372,820	Summary, Line 18
15	Payroll Tax Expense	(F)	857,337	Summary, Line 19
16	Operation & Maintenance Expense	(G)	18,125,978	Summary, Line 20
17	Administrative & General Expense	(H)	18,913,825	Summary, Line 21
18	Total Expenses (Lines 10 thru 17)		\$137,850,309	
19	PTF Transmission Plant	(A)(1)(a)	\$918,015,798	Summary, Line 1
20	Carrying Charge Factor (FTPA)		15.01612%	Line 18 / Line 19

COST OF CAPITAL

# Exhibit 8 Page 4 of 30 PTF Revenue Requirements Worksheet 2 of 6 Page 1 of 2

COST OF CAPITAL

EQUITY PORTION

New England Power Company
Annual Revenue Requirements
For Costs in 2012

CAPITALIZATION 12/31/2012

CAPITALIZATION RATIOS

(a) Weighted Cost of Capital					12/31/2012	RATIOS CAFI	TAL CAPITAL FORTION
Column   C							
Coard of Capital Rines  (a) Mystered Coard Capital = 0.0754  (b) Faderal Income Tax = (							
Col   State Income Tax				TOTAL INVESTMENT RETURN	\$1,147,061,999	100.00%	7.34% 7.11%
Col   Federal Income Tax   Col   Federal Incom							
Part   Part	Cost of Capital Rate=						
ROLE +	(a) Weighted Cost of Capital	=	0.0734				
Control   Cont							
Co.0557792    FTT Fro.   Fg. AFLICE   Fg.	(b) Federal Income Tax	= (		( (Tax Credit + of Deprec. Exp.	) / PTF Inv. Base)		
Control   Cont		= (		+( (\$209,438) + \$720,355	) / \$556,520,569 )		)
Comment   Comm						- 0.35	)
Comment   Table		=	0.0387790				
### 1720,265   ### 17	(c) State Income Tax	= (	R.O.E. +		) / PTF Inv. Base)		)* State Income Tax Rate
			( 1			- State Income Tax Rate	)
(a)*(b)*(c) Cost of Capital Rate		= (		+( (\$209,438) + \$720,355	) / \$556,520,569 )		)* <u>0.059466</u> )
(a)*(b)*(c) Cost of Capital Rate		=	0.0070052				
Prof.   Prof							
NVESTMENT BASE	(a)+(b)+(c) Cost of Capital Rate	=	0.1191842				
NVESTMENT BASE							
NVESTMENT BASE							
x Cost of Capital Rate			(PTF)				
Investment Return and Income Taxes   \$66,328,455   To Worksheet 1	INVESTMENT BASE		\$556,520,569	From Worksheet 1			
NVESTMENT BASE (Excluding NEEWS CWIP)   \$541,969,813   From Worksheet 1	x Cost of Capital Rate		0.1191842				
x Cost of Capital Rate	= Investment Return and Income Taxes		\$66,328,459	To Worksheet 1			
x Cost of Capital Rate	INVESTMENT BASE (Excluding NEEW)	S C(WID)	\$5/1 060 813	From Worksheet 1			
Post 2003 PTF Investment Base w/ Incremental 100 bps:   Plant in Service   Accumulated Depreciation   (49,284,239)   From Attachment 1   Prom Worksheet 2   Prom Worksheet 5 & 7   Accumulated Depreciation   (49,284,237)   Prom Worksheet 5 & 7   Prom Worksheet 5 & 8   Prom W		3 GWII )		TIOH WORSHEELT			
Post 2003 PTF Investment Base w/ Incremental 100 bps;   Plant In-Service   State Income Taxes   Calculated				To Markeleast 2			
Flant In-Service   \$ 213.518,137   From Markschement   Accumulate Depreciation   (48.296.429)   From Workscheets 5 & 7   From Workscheets 3 & 5   From Workscheets 5 & 7   From Workscheets 3 & 5	= investment Return and income Taxes		\$64,594,239	10 Worksneet 2			
Flant In-Service   \$ 213.518,137     Accumulate Depreciation   (46.296.429)     Accumulate Depreciation   (48.296.429)     Accumulate Depreciation   (48.612.947)     Total Post-2003 Investment   \$ 118.08,761     Incremental ROE:   1.00%     Cost of Capital Rate     Incremental Return and Taxes on Post-2003 PTF Investment   \$ 56,490,343     Accumulate Depreciation   (12.248.513)     Return Incremental Roes   1.25%     Cativated   Power National Power National Roes   1.25%     Cativated   Power Nation							
Accumulate Deferred Income Taxes	Plant In-Service	cremental 100 bps	\$ 213,518,137				
Calculated   Federal Income Taxes:   0.00845   State Income Taxes:   0.00845   O.00845   Per Attachment F	Accumulate Deferred Income Taxes		(48,612,947)				
Federal Income Taxes:	Total Post-2003 Investment		\$ 118,608,761	Calculated			
State Income Taxes:	Incremental ROE: Federal Income Taxes:	1.0					
NEEWS In-Service w/ Incremental 125 bps:   New England Power NEEWS In-Service   \$ 56,490,343   (12,248,613)   From Worksheets 3 & 5   Calculated	State Income Taxes:		0.00062				
New England Power NEEWS In-Service   \$ 56,490,343   (12,248,613)		2003 PTF Investme					
New England Power NEEWS In-Service   \$ 56,490,343   (12,248,613)	NEEWS In-Service w/ Incremental 40	5 hne:					
Accumulate Deferred Income Taxes   (12,861,493)   From Worksheets 3 & 5     Total New England Power NEEWS Investment   \$ 31,380,236   Calculated     Incremental ROE:	New England Power NEEWS In-Service						
Calculated   Per Attachment   Federal Income Taxes:   0.00432   0.00078     State Income Taxes:   0.00182   0.00181     Cost of Capital Rate   0.01311     Incremental Return and Taxes on NEEWS PTF Investment   \$ 11,471      NEEWS Allocation Factor   Total Transmission Investment   \$ 1,712,325,359     Total NEEWS Incertain Factor   \$ 5,490,343     For Accumulated Depreciation   \$ 3,2990%     Plant Allocation Factor   0.99978     Plant Allocation Factor   0.99978     Plant Allocation Factor   0.99978     Plant Allocation Factor   0.99978     O.00131     Per Attachment   F Per	Accumulate Deferred Income Taxes		(12,861,493)	From Worksheets 3 & 5			
Per Attachment   Factor   State Income Taxes:   0.00078   0.001311   Tocremental Return and Taxes on NEEWS PTF Investment							
D.01311   S	Federal Income Taxes:	1.2	0.00432	Per Attachment F			
NEEWS Allocation Factor	Cost of Capital Rate		0.01311	Per Attachment F			
Total Transmission Investment   \$1,712,325,359     Total NEBWS In-Service - NEP   \$ 56,490,343     For Accumulated Depreciation   3.2990%     NEBWS Allocation Factor   0.992978     Plant Allocation Factor   0.992978     Worksheet 7 Line 2     Plant Accounting Records     Worksheet 7 Line 16     Plant Accounting Records     Incremental Return and Taxes on NEEV	VS PTF Investmen	t \$ 411,471					
Total Transmission Investment   \$1,712,325,359     Total NEBWS In-Service - NEP   \$ 56,490,343     For Accumulated Depreciation   3.2990%     NEBWS Allocation Factor   0.992978     Plant Allocation Factor   0.992978     Worksheet 7 Line 2     Plant Accounting Records     Worksheet 7 Line 16     Plant Accounting Records							
Total Transmission Investment   \$1,712,325,359     Total NEBWS In-Service - NEP   \$ 56,490,343     For Accumulated Depreciation   32,990%     NEBWS Allocation Factor   0,992978     Plant Allocation Factor   0,992978     Worksheet 7 Line 2     Plant Accounting Records							
Total NEEWS In-Service - NEP For Accumulated Depreciation         \$ 56,490,343   Plant Accounting Records           NEEWS Allocation Factor Plant Allocation Factor         3,2990%   Oversheet 7 Line 16           Plant Allocation Factor         0,992978   Worksheet 7 Line 16	NEEWS Allocation Factor  Total Transmission Investment		\$1 712 325 350	Worksheet 7 Line 2			
NEEWS Allocation Factor         3.2990%           Plant Allocation Factor         0.992978         Worksheet 7 Line 16	Total NEEWS In-Service - NEP		\$ 56,490,343				
Plant Allocation Factor 0.992978 Worksheet 7 Line 16							
For Accumulated Deterred Income Taxes 3.2/59%	Plant Allocation Factor	T	0.992978	Worksheet 7 Line 16			
	For Accumulated Deterred Inco	me Taxes	3.2/59%				

#### Attachment 4 Exhibit 8 Page 5 of 30

COST OF CAPITAL

0.65% 6.02% 11.32%

CAPITALIZATION RATIOS

35.77% 0.10% 64.13% COST OF CAPITAL

0.23% 0.01% 7.26%

## New England Power Company Annual Revenue Requirements For Costs in 2012

LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY CAPITALIZATION 12/31/2012

\$ 410,350,000 \$ 1,111,700 \$ 735,600,299

Shading denotes an input

PTF Revenue Requirements
Worksheet 2 of 6
Page 2 of 2

EQUITY PORTION

> 0.01% 7.26%

		TOTAL INVESTMENT RETURN	\$1,147,061,999	100.00%	7.50% 7.27%
Cost of Capital Rate=					
(a) Weighted Cost of Capital	= 0.0750				
(b) Federal Income Tax	PTF Inv. = (	Eq. AFUDC of Deprec. Exp. ) /	PTF Inv. Base) x	Federal Income Tax Rate	)
	( 1		-	Federal Income Tax Rate	)
	= ( 0.0727 +( (\$209,438) +	\$720,355 ) /	\$556,520,569 ) x	0.35	)
	( 1		-	0.35	
	= 0.0396405				
	PTF Inv.	Eq. AFUDC			
(c) State Income Tax	= ( R.O.E. + ( (Tax Credit +	of Deprec. Exp. ) /	PTF Inv. Base) +	Federal Income Tax	* State Income Tax Rate
	( 1		•	State Income Tax Rate	1
	= ( 0.0727 +( (\$209,438) +	\$720,355 ) /	\$556,520,569 ) +	0.0396405	* 0.059466
	( 1		-	0.059466	
	= 0.0071609				
(a)+(b)+(c) Cost of Capital Rate	= 0.1218014				

New	Fna	and	Power	Company

Line No.			(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+3)	\$	6,396,194	99.7856% (a)	\$6,382,481 \$6,382,481	53.6122% (b)_ =	\$918,015,798 \$0 \$3,421,788 \$921,437,586	Attachment 1, Page 1 Attachment 2 FERC Form 1 page 207.99g
5	Transmission Plant Held for Future Use	\$	1,027,771		\$1,027,771	53.6122% (b)_	\$551,011	FERC Form 1 page 214.2d,4d,9d
6 7 8	Transmission Accumulated Depreciation Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+ 7)	\$	(371,277,823) (5,112,522)	99.7856% (a)	(\$371,277,823) (\$5,101,561) (\$376,379,384)	53.6122% (b) 53.6122% (b)	(\$199,050,209) (\$2,735,059) (\$201,785,268)	FERC Form 1 page 219.25b FERC Form 1 Page 219.28b
9 10 11	Transmission Accumulated Deferred Taxes Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)		(508,206,767) 112,818,102		(\$504,638,139) \$112,025,893 (\$392,612,246)	53.6122% (b) 53.6122% (b)_	(\$270,547,608) \$60,059,546 (\$210,488,062)	FERC Form 1 page 113.62-64 FERC Form 1 page 111.82
12	Transmission Loss on Reacquired Debt	\$	282,898	100.0000%	\$282,898	53.6122% (b)_	\$151,668	FERC Form 1 Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 (Liability Account 254 ) Total (line 13+14+15)	\$ \$ \$	46,354,440 - \$46,354,440	99.7856% (a) 100.0000% 100.0000%	\$0 \$46,354,440 \$0 \$46,354,440	53.6122% (b) 53.6122% (b) 53.6122% (b) =	\$0 \$24,851,635 \$0 \$24,851,635	FERC Form 1 Page 232.8f FERC Form 1 Page 232.6f FERC Form 1 Page 278
17	Transmission Prepayments	\$	-	99.7856% (a)	\$0	53.6122% (b)_	\$0	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$	4,889,313		\$4,889,313	53.6122% (b)_	\$2,621,268	FERC Form 1 Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)					- - -	\$18,125,978 \$18,913,825 \$0 \$37,039,803 0.1250 \$4,629,975	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 8 x 45 / 360
26	NEEWS CWIP	\$	14,550,755			_	\$14,550,755	Plant Accounting Records

<sup>(</sup>a) Worksheet 7 Line 11 (b) Worksheet 7 Line 3 (c) Worksheet 7 Line 16

#### Shading denotes an input

#### **New England Power Company**

Line         No.           Depreciation Expense           1         Transmission Depreciation           2         General Depreciation           3         Total (line 1+2)	(1) Total (g) \$37,176,180 \$357,944	Wage/Plant   (3) = (1   Allocation   Transmi   Allocation   Factors   \$37,11   99.7856% (a)   \$33   \$37,53	Allocation Factor (b) 76,180 53.6122% 57,177 53.6122%	(5) = (3)*(4) PTF Allocated \$19,930,968 \$191,490 \$20,122,458	Source Reference for Col (1)  FERC Form 1 Page 336.7b  FERC Form 1 Page 336.10b
4 Amortization of Loss on Reacquired Debt	\$136,332	\$13	36,332 53.6122%	\$73,091	FERC Form 1 Page 117.64c
5 Amortization of Investment Tax Credits	(\$390,654)	(\$39	0,654) 53.6122%	(\$209,438)	FERC Form 1 Page 266.8f - Footnote (f)
6 Property Taxes	\$28,674,108	\$28,67	74,108 53.6122%	\$15,372,820	FERC Form 1 Page 263.10,17,23,28,31i - Footnote (e)
Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3)  ** Station Expenses & Rents - #562 & #567 O&M less lines 8, 9 & 10	\$56,023,206 \$12,561,903 \$9,651,875 \$0 \$33,809,428	\$56,02 \$12,56 \$9,66	51,903 53.6122% 51,875 53.6122%	\$30,035,273 \$6,734,712 \$5,174,583 \$0 \$18,125,978	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
Transmission Administrative and General Total Administrative and General Less: Properly Insurance (1924) Less: Regulatory Commission Expenses (1928) Less: General Advertising Expense (1930.1) Subtotal [line 12 minus (13 thru 15)] Plus: Properly Insurance Allocated using Plant Allocatior Plus: Regulatory Commission Expense Plus: Specifically identified Trans: Related General Advertising Expense Plus: Specifically identified Trans: Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$36,456,496 \$113,624 \$3,645,548 \$0 \$32,697,324 \$113,624 \$2,502,632 \$0 \$53,850 \$35,367,430	99.2978% (c) \$2,48	2,826 53.6122% 35,059 53.6122% \$0 53.6122% 53,850 53.6122%	\$17,492,171 \$60,489 \$1,332,295 \$0 \$28,870 \$18,913,825	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b  Line 13 Attachment 5 Line 6 Line 15 FERC Form 1 Page 350.18c
22 <u>Payroll Tax Expense</u>	\$1,602,581	99.7856% (a) \$1,59	99,145 53.6122%	\$857,337	FERC Form 1 Page 263.3,4i - Footnote (d)
(d) Payroll taxes - G/L 408.1		(e) Property	Taxes FF1, Page 263i		Property Taxes
Federal Unemployment FICA Payroll Taxes State Unemployment Total	\$0 \$0 \$1,602,581 \$0 \$1,602,581	Line 4(i) Massach Line 3(i) New Har Vermont Line 9 (i) Maine Rhode Is Connect	\$2,788,702 \$1,080,853 \$0 \$146,854		FERC Form 1 Page 263.10(i) FERC Form 1 Page 263.17(i) FERC Form 1 Page 263.23(i) n/a FERC Form 1 Page 263.28(i) & 35(i) FERC Form 1 Page 263.28(i) & 35(i)

<sup>(</sup>a) Worksheet 7, Line 11
(b) Worksheet 7 Line 3
(c) Worksheet 7 Line 16
(d) Transmission Only - Payroll Taxes - Specifically identified in FERC Form 1
(e) Transmission Only - Property Taxes - Specifically Identified in FERC Form 1
(f) Transmission Only - Amortization of ITC - Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 8
Page 8 of 30
PTF Revenue Requirements
Worksheet 5 of 6

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1	PTF Transmission Investment	\$918,015,798	Attachment 1, Page 1
2	Total Transmission Investment	\$1,712,325,359	FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	53.6122%	
	Transmission Wages and Salaries Allocation Factor		
4	Direct Transmission Wages and Salaries	\$0	FERC Form 1 Page 354.14b
5	Affiliated Company Transmission Wages and Salaries	\$18,493,757	General Ledger Query
6	Total Transmission Wages and Salaries (Line 4 + Line 5)	\$18,493,757	Ç
7	Total Wages and Salaries	\$0	FERC Form 1 Page 354.28b
8	Administrative and General Wages and Salaries	\$0	FERC Form 1 Page 354.27b
9	Affiliated Company Wages and Salaries less A&G	\$18,533,501	General Ledger Query
10	Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$18,533,501	
11	Percent Allocation (Line 6/Line 10)	99.7856%	
	Plant Allocation Factor		
12	Total Transmission Investment	\$1,712,325,359	Line 2
13	plus Transmission-Related General Plant (Line 2 of Wkst. 3)	\$6,382,481	Worksheet 5, Line 3, Column 3
14	= Revised Numerator (Line 12 + Line 13)	\$1,718,707,840	
15	Total Plant in Service	\$1,730,862,090	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2978%	
	Post-2003 PTF Allocation Factor		
17	Total Post-2003 PTF Investment	\$ 213,518,137	Attachment 1 Line 7
18	Total Transmission Investment	\$1,712,325,359	Line 2
19	Percent Allocation (Line 17/Line 18) for Post-2003 to Total Tx	12.4695%	
20	Total Invst in Tx Plant/Total Plant in Serv *		
21	Post-2003 PTF Tx Plant/Total Invst in Tx Plant	12.3819%	Line 19 * Line 16

Shading denotes input

#### New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2012

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOT	ΓAL
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
			(a)	(b)
NSTAR	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$0
	Bell Rock Road	Page 330.5 Line 12 Col (n)	\$0	
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabroo	Page 330.1 Line 8 Col (n)	\$0	
NU	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5 Col (n)	\$0	
NEP	Chester SVC	Transmission Billing		\$0
	HQ Phase II - AC in MA	Page 330 Line 11 Col (n)	\$0	
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12 Col (n)	\$0	
		Totals	\$0	\$0

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

#### New England Power Company 2012 Informational Filing PTF Plant Allocation

			Total _	Percent Pre/Post
1	2011	Pre-1997 PTF Transmission Plant	\$349,334,382	
2	2011	Post-1996 PTF Transmission Plant	\$819,449,952	
3	2012	Additions/Retirements	\$103,978,575	
4	2012	Pre-1997 PTF Transmission Plant	\$352,959,991	27.77%
5	2012	Post-1996 PTF Transmission Plant	\$918,015,798	72.23%
6	2012	Total PTF Transmission Plant	\$1,270,975,789	100.00%
7	2012	Post-2003 PTF Transmission Plant	\$213,518,137	172.23%

#### Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5
- 7 PTF Plant Report: Post 2003 RSP Projects

## GROSS PLANT ASSOC. WITH HVDC LEASES 2012

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$0
2 3 4	Allocation Miles used by NHH (a) Total miles at Comerford Station Percentage of Total Gross Plant leased by NHH (a)	0 0 0%
5	Total Gross Plant leased by NHH (a)	\$0
6	Total Land from Sandy Pond to New Hampshire	\$0
7	HVDC lines occupy 35% of Right of Way	0%
8	Total Land leased by NEH (a)	\$0
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$0

#### Source:

- 1 FERC Form 1, Page 423.1, Lines 5 + 16
- 2 Total miles used per lease agreement
- 3 Total miles per lease agreement
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

### New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2012</u>
1	Total Current Year Book Depreciation on Equity AFUDC	\$1,346,360
2	Less: Specifically identified Transmission-Related	
	Tewksbury Line	\$54,708
	Hydro-Quebec	\$23,543
	MontaupTransmission	\$9,777
	1998 Transmission	\$13,959
	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
	2001 Transmission	\$23,561
	2002 Transmission	\$8,889
	2003 Transmission	\$16,500
	2004 Transmission	\$15,518
	2005 Transmission	\$49,757
	2006 Transmission	\$64,352
	2007 Transmission	\$42,418
	2008 Transmission	\$57,508 \$98,437
	2009 Transmission 2010 Transmission	\$90,437 \$79,948
	2010 Transmission	\$155,706
	2011 Transmission	\$210,246
	2012 1141131111331011	\$958,985
		ψ930,903
3	Total unidentified Book Depreciation on Equity AFUDC	\$387,375
4	Plant Allocator Factor	99.2978%
5	Allocated Transmission Related Book Depreciation on Equity AFUDC	\$384,655
6	Plus: Specifically Identified Transmission-Related Equity AFUDC	\$958,985
7	Total Transmission-Related Equity AFUDC	\$1,343,640
8	Post-96 PTF Allocation Factor	53.6122%
9	Transmission-Related Equity AFUDC	\$720,355

#### Sources:

- 1 & 2 Transmission Rates includes \$9,777 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 6 Post-96 PTF Allocation Factor
  - 9 Line 7 \* Line 8

## New England Power Company Determination of the PTF Related Integrated Facilities Charges

		Narragansett <u>2012</u>	MECO 2012
1	Total Integrated Facilities Charges	\$0	\$0
2 3	Total 2012 PTF Property Total Transmission Plant in 2012	\$0 \$0	\$0 \$0
4 5	NECO or MECO PTF Plant Allocator  PTF Related Integrated Facilities Charge	0.00% \$0	0.00%
6	Total Integrated Facilities	_	\$0

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

#### New England Power Company Development of 2012 Regulatory Commission Expense

Line <u>No.</u>		<u>2012</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$3,645,548	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$63,704	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$229,133	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$850,079	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,502,632	Line 1 - (Line 2-5)

#### Transmission Rents Received from Electric Property

#### New England Power Company

	<u>2012</u>
Revenues	\$1,129,406
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,129,406
PTF Allocation	53.6122%
Total PTF Revenue	\$605,499

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

#### Revenue for Short-Term Transmission Service under the NEPOOL Tariff

#### **New England Power Company**

<u>2012</u>

Revenues \$1,056,174

Post-96 PTF Percent 72.2292%

Total Post-96 PTF Revenue \$762,866

Source: Short Term Through and Out Revenues from ISO New England

# ISO Tariff Billing ISO Annual Transmission Revenue Requirements per Tariff Attachment F and ISO Agreement Part 2, Section 6.3

Submitted on:	<u> </u>		
Revenue Requirements for (year):		Calendar Year 2012	
Rates Effective for the Period: Through:	June 2013 May 2014		
Customer:	New England Po	ower Company	
Customer's NABs Number:	_		
Name of Participant responsible for customer's billing:			
DUNs number of Participant responsible for customer's billing:			
	Pre-97 Revenue Requirements	Post-96 Revenue Requirements	е
Total of Attachment F - Sections A through I	\$118,127,016	(a) \$141,430,997	<b>(</b> f)
Total of Attachment F - Section J - Support Revenue	\$5,407,628	(b) \$C	<b>)</b> (g)
Total of Attachment F - Section K - Support Expense	\$703,144	(c) <b>\$C</b>	)(h)
Total of Attachment F - Section (L through O)	(\$526,111)	(\$1,368,365	<mark>5)</mark> (i)
Sub Total - Sum (A through I) - J + K + (L through O)	\$112,896,422	(e)=(a)-(b)+(c)+(d) \$140,062,632	<u>2</u> (i)
Forecasted Transmission Revenue Requirements (per Attachment C to Attachment F Implementation Rule)	N/A	\$52,042,711	(k)
Annual True-up (per Attachment C to Attachment F Im[plementation Rule)	N/A	(I) N/A	(m)
Adjusted Sub Total - Sum (Sub Total + Forecast + True-up)	\$112,896,422	(n)=(e) + (l) \$192,105,342	(o)=(j)+(k)+(m)
Annual Revenue Requirement Total = Sum of Pre-97 Revenue Requirement and Post-96 Revenue Requirements Subtotals for rate calculations unde		\$305,001,764	(p) = (n) + (o)

PTF Revenue Requirements

Worksheet 1 of 6

#### **New England Power Company Annual Revenue Requirements of PTF Facilities** For Costs in 2012

#### PRE-1997

	Shading denotes an input			
		Attachment F		
	I. <u>INVESTMENT BASE</u>	Reference	NEP	Reference
Line No.	T	Section:	#000 00F 040	Madahada Bas 100 adama
1	Transmission Plant	(A)(1)(a)	\$339,265,312	Worksheet 3, line 1&2 column 5
2	General Plant	(A)(1)(b)	\$1,315,614	Worksheet 3, line 3 column 5
3	Plant Held For Future Use	(A)(1)(c)	\$211,853	Worksheet 3, line 5 column 5
4	Total Plant (Lines 1+2+3)		\$340,792,779	
5	Accumulated Depreciation	(A)(1)(d)	(\$77,582,706)	Worksheet 3, line 8 column 5
6	Accumulated Deferred Income Taxes	(A)(1)(e)	(\$80,928,770)	Worksheet 3, line 11 column 5
7	Loss On Reacquired Debt	(A)(1)(f)	\$58,313	Worksheet 3, line 12 column 5
8	Other Regulatory Assets	(A)(1)(g)	\$9,554,994	Worksheet 3, line 16 column 5
9	Net Investment (Line 4+5+6+7+8)	. , , , , , ,	\$191,894,610	
10	Prepayments	(A)(1)(h)	\$0	Worksheet 3, line 17 column 5
11	Materials & Supplies	(A)(1)(i)	\$1,007,829	Worksheet 3, line 18 column 5
12	Cash Working Capital	(A)(1)(j)	\$1,780,140	Worksheet 3, line 25 column 5
	•	(-7(-70)		
13	Total Investment Base (Line 9+10+11+12)		\$194,682,579	
	II. REVENUE REQUIREMENTS			
14	Investment Return and Income Taxes	(A)	\$23,214,340	Worksheet 2
15	Depreciation Expense	(B)	\$7,736,714	Worksheet 4, line 3, column 5
16	Amortization of Loss on Reacquired Debt	(C)	\$28,102	Worksheet 4, line 4, column 5
17	Investment Tax Credit	(D)	(\$80,525)	Worksheet 4, line 5, column 5
18	Property Tax Expense	(E)	\$5,910,565	Worksheet 4, line 6, column 5
19	Payroll Tax Expense	(F)	\$329,630	Worksheet 4, line 22, column 5
20	Operation & Maintenance Expense	(G)	\$6,969,104	Worksheet 4, line 11, column 5
21	Administrative & General Expense	(H)	\$7,272,016	Worksheet 4, line 21, column 5
22	Transmission Related Integrated Facilities Charge	(I)	\$66,747,070	Attachment 4, line 6
23	Transmission Support Revenue	(J)	(\$5,407,628)	Worksheet 6
24	Transmission Support Expense	(K)	\$703,144	Worksheet 6
25	Transmission Related Expense from Generators	(L)	\$0	Worksheet 7
26	Transmission Related Taxes and Fees Charge	(M)	\$0	
27	Revenue for ST Trans. Service Under NEPOOL Tariff	(N)	(\$293,308)	Attachment 7
28	Transmission Rents Received from Electric Property	(O)	(\$232,803)	Attachment 6
29	Total Revenue Requirements (Line 14 thru 28)		\$112,896,422	

Worksheet 2 of 6

# New England Power Company Annual Revenue Requirements For Costs in 2012

Shading denotes an input

	C.A	APITALIZATION 12/31/2012	CAPITALIZATION RATIOS	COST OF CAPITAL	COST OF CAPITAL	EQUITY PORTION
LONG-TERM DEBT PREFERRED STOCK COMMON EQUITY	\$ \$ \$	410,350,000 1,111,700 735,600,299	35.77% 0.10% 64.13%	0.65% 6.02% 11.07%	0.23% 0.01% 7.10%	0.01% 7.10%
TOTAL INVESTMENT RETURN		\$1,147,061,999	100.00%		7.34%	7.11%

#### Cost of Capital Rate= 0.0734 (a) Weighted Cost of Capital PTF Inv. Eq. AFUDC (b) Federal Income Tax R.O.E. + ( (Tax Credit + of Deprec. Exp. ) / 0.0711 +( (\$80,525) + \$276,963 ) / \$194,682,579 ) 0.0388279 PTF Inv. Eq. AFUDC (c) State Income Tax ( (Tax Credit + of Deprec. Exp. ) / Federal Income Tax State Income Tax Rate State Income Tax Rate \$276,963 ) / \$194,682,579 ) 0.0388279 0.059466 0.059466 0.0070141 (a)+(b)+(c) Cost of Capital Rate 0.1192420 (PTF) INVESTMENT BASE \$194,682,579 From Worksheet 1 x Cost of Capital Rate 0.1192420 = Investment Return and Income Taxes \$23,214,340 To Worksheet 1

#### **New England Power Company**

Line No.	Critically dericted all impat	(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference
1 2 3 4	Transmission Plant Less: Plant Assoc. HVDC Leases General Plant Total (line 1+2+ 3)	\$ 6,396,194	99.7856% (a)	\$6,382,481 \$6,382,481	20.6129% (b)	\$352,959,991 (\$13,694,679) \$1,315,614 \$340,580,926	Attachment 1, Page 1 Attachment 2 FERC Form 1 Page 207.99g
5	Transmission Plant Held for Future Use	\$ 1,027,771		\$1,027,771	20.6129% (b)	\$211,853	FERC Form 1 page 214.2d,4d,9d
6 7 8	Transmission Accumulated Depreciation Transmission Accumulated Depreciation General Plant Accumulated Depreciation Total (line 6+ 7)	\$ (371,277,823) \$ (5,112,522)	99.7856% (a) -	(\$371,277,823) (\$5,101,561) (\$376,379,384)	20.6129% (b) 20.6129% (b)	** * * * * * * * * * * * * * * * * * * *	FERC Form 1 page 219.25b FERC Form 1 Page 219.28b
9 10 11	Transmission Accumulated Deferred Taxes Accumulated Deferred Taxes (281-283) Accumulated Deferred Taxes (190) Total (line 9+ 10)	\$ (508,206,767) \$ 112,818,102	99.2978% (c)	(\$504,638,139) \$112,025,893 (\$392,612,246)		(\$104,020,555) \$23,091,785 (\$80,928,770)	FERC Form 1 Page 113.62-64 FERC Form 1 Page 111.82
12	Transmission Loss on Reacquired Debt	\$ 282,898	100.0000%	\$282,898	20.6129% (b)	\$58,313	FERC Form 1 Page 111.81c
13 14 15 16	Other Regulatory Assets FAS 106 FAS 109 (Asset Account 182.3) FAS 109 (Liability Account 254) Total (line 13+14+ 15)	\$ - \$ 46,354,440 \$ - \$46,354,440	99.7856% (a) 100.0000% 100.0000%	\$0 \$46,354,440 \$0 \$46,354,440	20.6129% (b) 20.6129% (b) 20.6129% (b)	\$9,554,994	FERC Form 1 Page 232.8f FERC Form 1 Page 232.6f FERC Form 1 Page 278
17	Transmission Prepayments	\$ -	99.7856% (a)	\$0	20.6129% (b)	\$0	FERC Form 1 Page 111.57c
18	Transmission Materials and Supplies	\$ 4,889,313		\$4,889,313	20.6129% (b)	\$1,007,829	FERC Form 1 Page 227.8c
19 20 21 22 23 24 25	Cash Working Capital Operation & Maintenance Expense Administrative & General Expense Transmission Support Expense Subtotal (line 20+21+22) Total (line 23 * line 24)					\$6,969,104 \$7,272,016 \$0 \$14,241,120 0.1250 \$1,780,140	Worksheet 1, Line 20 Worksheet 1, Line 21 Worksheet 6 x 45 / 360

<sup>(</sup>a) Worksheet 5 Line 11 (b) Worksheet 5 Line 3 (c) Worksheet 5 Line 16

Shading denotes an input

#### New England Power Company

Line No.	Depreciation Expense	(1) Total	(2) Wage/Plant Allocation Factors	(3) = (1)*(2) Transmission Allocated	(4) PTF Allocation Factor (b)	(5) = (3)*(4) PTF Allocated	Source Reference for Col (1)
1 2 3	Transmission Depreciation General Depreciation	\$37,176,180 \$357,944	99.7856% (a) _	\$37,176,180 \$357,177 \$37,533,357	20.6129% (b) 20.6129% (b)	\$7,663,089 \$73,625 \$7,736,714	FERC Form 1 Page 336.7b FERC Form 1 Page 336.10b
4	Amortization of Loss on Reacquired Debt	\$136,332	100.0000%	\$136,332	20.6129% (b)	\$28,102	FERC Form 1 Page 117.64c
5	Amortization of Investment Tax Credits	(\$390,654)	100.0000%	(\$390,654)	20.6129% (b)	(\$80,525)	FERC Form 1 Page 266.8f - Footnote (f)
6	Property Taxes	\$28,674,108	100.0000%	\$28,674,108	20.6129% (b)	\$5,910,565	FERC Form 1 Page 263.10,17,23,28i - Footnote (e)
7 8 9 10 11	Transmission Operation and Maintenance Operation and Maintenance Transmission of Electricity by Others - #565 Load Dispatching - #561 (excl #561.3) **Station Expenses & Rents - #562 / #567 O&M less lines 8, 9 & 10	\$56,023,206 \$12,561,903 \$9,651,875 \$0 \$33,809,428	- -	\$56,023,206 \$12,561,903 \$9,651,875 \$33,809,428	20.6129% (b) 20.6129% (b) 20.6129% (b) 20.6129% (b)	\$11,548,007 \$2,589,372 \$1,989,531 \$0 \$6,969,104	FERC Form 1 Page 321.112b FERC Form 1 Page 321.96b FERC Form 1 Page 321.84-92b less 87b FERC Form 1 Page 321.93b & .98b
12 13 14 15 16 17	Transmission Administrative and General Total Administrative and General Less: Property Insurance (#924) Less: Regulatory Commission Expenses (#928) Less: General Advertising Expense (#930.1) Subtotal [line 12 minus (13 thru 15)] Plus: Property Insurance Allocated using Plant Allocatior Plus: Regulatory Commission Expense	\$36,456,496 \$113,624 \$3,645,548 \$0 \$32,697,324 \$113,624 \$2,502,632	99.7856% (a) 99.2978% (c) 99.2978% (c)	\$32,627,221 \$112,826 \$2,485,059	20.6129% (b) 20.6129% (b) 20.6129% (b)	\$6,725,416 \$23,257 \$512,243	FERC Form 1 Page 323.197b FERC Form 1 Page 323.185b FERC Form 1 Page 323.189b FERC Form 1 Page 323.191b  Line 13 Attachment 5 Line 6
19 20 21	Plus: Specifically identifed Trans. Related General Advertising Expense Plus: Specifically identified Trans. Related Regulatory Expense Total A&G [line 16 + (17 thru 20)]	\$0 \$53,850 \$35,367,430	- -	\$0 \$53,850 \$35,278,956	20.6129% (b) 20.6129% (b)	\$0 \$11,100 \$7,272,016	Line 15 FERC Form 1 Page 350.10c
22	Payroll Tax Expense	\$1,602,581	99.7856% (a)	\$1,599,145	20.6129% (b)	\$329,630	FERC Form 1 Page 263.3,4i - Footnote (d)
(	d) Payroll taxes - G/L 408.1		(e)	Property Taxes FF	1, Page 263i		
	Federal Unemployment FICA Payroll Taxes State Unemployment Total	\$0 \$0 \$1,602,581 \$0 \$1,602,581	,	Massachusetts New Hampshire Vermont Maine Rhode Island Connecticut	\$24,657,699 \$2,788,702 \$1,080,853 \$0 \$146,854 \$0 \$28,674,108		FERC Form 1 Page 263.10(i) FERC Form 1 Page 263.17(i) FERC Form 1 Page 263.23(i) n/a FERC Form 1 Page 263.28(i) & 35(i) FERC Form 1 Page 263.31(i)

(a) Worksheet 5 Line 11

Shading denotes an input

- (b) Worksheet 5 Line 3
- (c) Worksheet 5 Line 16
- (d) Transmission Only Payroll Taxes Specifically identified in FERC Form 1
- (e) Transmission Only Property Taxes Specifically Identified in FERC Form 1
- (f) Transmission Only Amortization of ITC Specifically Identified in FERC Form 1

<sup>\*\*</sup> Subtract Accounts #562 & #567 from O&M Expense to the extent that they include PTF Support Payments.

Attachment 4
Exhibit 8
Page 22 of 30
PTF Revenue Requirements
Worksheet 5 of 6

#### Shading denotes an input

Line No.			Source Reference
	PTF Transmission Plant Allocation Factor	NEP	
1 2	PTF Transmission Investment	\$352,959,991 \$1,712,325,359	Attachment 1, Page 1 FERC Form 1 Page 207.58g - Page 200.4b
3	Percent Allocation (Line 1/Line 2)	20.6129%	
	Transmission Wages and Salaries Allocation Factor		
4 5 6	Direct Transmission Wages and Salaries Affiliated Company Transmission Wages and Salaries Total Transmission Wages and Salaries (Line 4 + Line 5)	\$18,493,757 \$18,493,757	FERC Form 1 Page 354.14b General Ledger Query
7 8 9 10	Total Wages and Salaries Administrative and General Wages and Salaries Affiliated Company Wages and Salaries less A&G Total Wages and Salaries net of A&G (Line 7 - 8 + 9)	\$0 \$0 \$18,533,501 \$18,533,501	FERC Form 1 Page 354.28b FERC Form 1 Page 354.27b General Ledger Query
11	Percent Allocation (Line 6/Line 10)	99.7856%	
12 13 14	Plant Allocation Factor Total Transmission Investment plus Transmission-Related General Plant = Revised Numerator (Line 12 + Line 13)	\$1,712,325,359 \$6,382,481 \$1,718,707,840	Line 2 Worksheet 3, Line 3, Column 3
15	Total Plant in Service	\$1,730,862,090	FERC Form 1 Page 207.104g - Page 200.4b
16	Percent Allocation (Line 14 / Line 16)	99.2978%	

Shading denotes input

#### New England Power Company Pre-97 RNs Revenue Requirments For Test Year Ended 12/31/2012

Input Revenues associated with the PTF Supporting Facilities in columns (a) and expenses associated with the facilities in columns (b). The totals are then linked to Worksheet 1, Lines 23 and 24.

			TOTA	\L
Participant	PTF Supporting Facilities	FERC Form 1 Reference	Revenues	Expenses
			(a)	(b)
NSTAR	HQ Phase II - AC in MA	Pg 332 Line 5 Col (g)		\$99,271
	Bell Rock Road	Page 330.5 Line 12 Col (n)	\$44,768	
	Boston Edison -345 kV NH/MA border - Tewksbury 394 Line (Seabrook	Page 330.1 Line 8 Col (n)	\$366,468	
NU	Public Service CoMoore 115 kV Substation	Page 330.1 Line 5 Col (n)	\$13,571	
NEP	Chester SVC	Transmission Billing		\$603,873
	HQ Phase II - AC in MA	Page 330 Line 11 Col (n)	\$4,946,997	
VT Elec Co.	Comerford 115 kV Substation	Page 330.1 Line 12 Col (n)	\$35,824	
		Totals	\$5,407,628	\$703,144

Amount by which Support Expense exceeds Support Revenues (To Worksheet 3, Line 22, Column 5)

# New England Power Company 2012 Informational Filing PTF Plant Allocation

			Total	Percent Pre/Post	
			Total_	116/1031	-
1	2011	Pre-1997 PTF Transmission Plant	\$349,334,382		
2	2011	Post-1996 PTF Transmission Plant	\$819,449,952		
3	2012	Additions/Retirements	\$103,978,575		
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6	2012	Total PTF Transmission Plant	\$1,270,975,789	100.00%	

# Sources:

- 1 PTF Plant Reports for previous year
- 2 PTF Plant Reports for previous year
- 3 Line 6 Line 1 + Line 2
- 4 PTF Plant Reports for current year
- 5 PTF Plant Reports for current year
- 6 Line 4 + 5

# GROSS PLANT ASSOC. WITH HVDC LEASES 2012

LINE <u>NO</u>		(HVDC) NHH/NEH <u>LEASE</u>
1	Gross Plant Value Comerford Station to Tewksbury Line	\$14,952,279
2 3 4	Allocation  Miles used by NHH (a)  Total miles at Comerford Station  Percentage of Total Gross Plant leased by NHH (a)	224 253 89%
5	Total Gross Plant leased by NHH (a)	\$13,307,528
6	Total Land from Sandy Pond to New Hampshire	\$1,106,146
7	HVDC lines occupy 35% of Right of Way	35%
8	Total Land leased by NEH (a)	\$387,151
9	Total NEP Gross Plant leased by HVDC to be excluded from PTF Revenue requirement	\$13,694,679

#### Source:

- 1 FERC Form 1, Page 422.1-423.1, Lines 5 + 16 col (I)
- 2 Total miles used per lease agreement
- 3 FERC Form 1, Page 422.1 Lines 5 + 16 col (f)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 FERC Form 1, Page 422-423, Line 15 col (j)
- 7 Percentage per lease agreement
- 8 Line 6 \* Line 7
- 9 Line 5 + Line 8

#### Note:

(a) NEH and NHH are acronyms for two of the three "Hydro Companies, New England Hydo Transmission (NEH) Electric Company, New England Electric Transmission Corporation, and New England Hydro Transmission Electric Company, Inc. (NHH)" which own and lease the HVDC interconnection facilities to the participants to the NEPOOL HVDC agreements.

# New England Power Company Determination of Book Depreciation on Equity AFUDC

		<u>2012</u>
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2	Less: Specifically Identified Transmission-Related	
	Tewksbury Line	\$54,708
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	MontaupTransmission	\$9,777
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	1999 Transmission	\$42,457
	2000 Transmission	(\$8,299)
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	2008 Transmission	\$57,508
	2009 Transmission	\$98,437
	2010 Transmission	\$79,948
	2011 Transmission	\$155,706
	2012 Transmission	\$210,246
		\$958,985
3	Total Unidentified Book Depreciation on Equity AFUDC	\$387,375
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7	Total Transmission-Related Equity AFUDC	\$1,343,640
8	Pre-97 PTF Allocation Factor	20.6129%
9	Transmission-Related Equity AFUDC	\$276,963

#### Sources:

- 1 & 2 Transmission Rates includes \$9,777 from Montaup
  - 3 Line 1 Line 2
  - 4 Worksheet 5 PTF Plant Allocation Factor
  - 5 Line 3 \* Line 4
  - 6 Line 2
  - 7 Line 5 + Line 6
  - 8 Worksheet 5 Pre-97 PTF Allocation Factor
  - 9 Line 7 \* Line 8

# Shading denotes an input

# New England Power Company Determination of the PTF Related Integrated Facilities Charges

			Narragansett 2012	MECO 2012
1	Total Integrated Facilities Charges		\$77,884,781	\$9,279,091
2 3 4	Total 2012 PTF Property Total Transmission Plant in 2012 NECO or MECO PTF Plant Allocator	(NECO includes \$88M topside) (NECO includes \$88M topside)	\$386,991,881 \$486,729,573 79.51%	\$24,868,977 \$47,856,277 51.97%
5	PTF Related Integrated Facilities Char	rge	\$61,925,101	\$4,821,969
6	Total Integrated Facilities		<u>-</u>	\$66,747,070

#### Source:

- 1 FF1 Page 330.4 Lines 13 & 14 Col (n)
- 2 PowerPlant Reports
- 3 FF1 Page 207 Line 58 (g)
- 4 Line 2 / Line 3
- 5 Line 1 \* Line 4
- 6 Line 5 Totals for Narragansett and Massachusetts Electric

# New England Power Company Development of 2012 Regulatory Commission Expense

Line <u>No.</u>		<u>2012</u>	<u>Source</u>
1	Total Regulatory Commission Expense - NEP	\$3,645,548	FERC Form1 Page 350.46d
2	Less: New Hampshire PUC Assessment	\$63,704	FERC Form1 Page 350.2d
3	Less: Mass Emergency Fund	\$0	FERC Form1 Page 350.7d
4	Less Mass DPU Special Assessment	\$229,133	FERC Form1 Page 350.8d
5	Less: Utility Expenses	\$850,079	FERC Form1 Page 350.46c
6	Total Federal Assessments	\$2,502,632	Line 1 - (Line 2-5)

# Transmission Rents Received from Electric Property

# **New England Power Company**

	<u>2012</u>
Revenues	\$1,129,406
Plant Allocation Factor	100.00%
Transmission Allocated	\$1,129,406
PTF Allocation	20.6129%
Total PTF Revenue	\$232,803

Source: Peoplesoft Activities #454002, 454020 and 454024 - see Analysis for details

# Revenue for Short-Term Transmission Service under the NEPOOL Tariff

# **New England Power Company**

Revenues 2012 \$1,056,174

Pre-97 PTF Percent 27.7708%

Total Pre-97 PTF Revenue \$ 293,308

Source: Short Term Through and Out Revenues from ISO New England

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Sarah Hoffman, Executive Director N.E. Conf. of Public Utilities Commissioners 50 State Street, Suite 1 Montpelier, VT 05620 director@necpuc.org **Service List of Participating Transmission Owners** 

# Service List of Participating Transmission Owners

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