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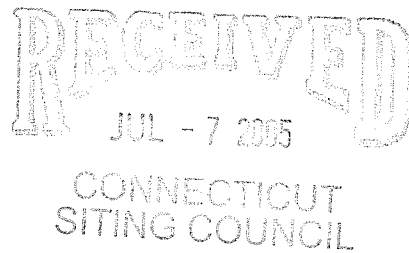
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WRITER'S DIRECT DIAL NUMBER:

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July 7, 2005

Mr. Derek S. Phelps
Executive Director
Connecticut Siting Council
Ten Franklin Square
New Britain, CT 06051



Re: Docket F-2005 - 2005 Ten Year Forecast Of Electric Loads And Resources

Dear Mr. Phelps:

On behalf of ISO New England Inc. ("ISO"), I am enclosing herewith an original and fifteen copies of the Pre-filed Testimony of Mr. David Ehrlich, ISO's Principal Economic and Load Analyst, Load Forecasting, who will testify on behalf of ISO in the above-referenced docket.

Please contact me if you have any questions or need additional information.

Sincerely,

Anthony M. Macleod

AMM:dcs
Enclosures

cc: Matthew Goldberg, Esq.
Mr. David Ehrlich
Mr. Eric Johnson
Service List

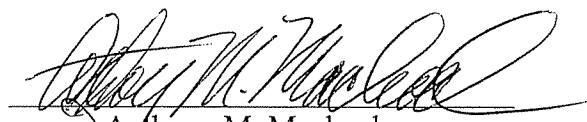
CERTIFICATE OF SERVICE

This is to certify that a copy of the foregoing has been sent via email or first class mail, postage prepaid, on July 7, 2005, to:

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party	Northeast Utilities Service Company	Stephen Gibelli, Counsel Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5513 (860) 665-5504 - fax gibels@nu.com Chris Bernard Senior Regulatory Planning Analyst Northeast Utilities Service Company P.O. Box 270 Hartford, CT 06141-0270 (860) 665-5957 (860) 665-3314 - fax bernacr@nu.com
Party	The United Illuminating Company	Michael Coretto Director – Regulatory Strategy & Retail Access The United Illuminating Company 157 Church Street New Haven, CT 06506-0901 (203) 499-2000 (203) 499-3664 – fax Linda L. Randell, Esq. Wiggin & Dana LLP One Century Tower New Haven, CT 06508-1832 (203) 498-4322 (203) 782-2889 - fax lrlandell@wiggin.com
Party	Connecticut Municipal Electric Energy Cooperative	Maurice R. Scully, Executive Director Connecticut Municipal Electric Energy Cooperative 30 Stott Avenue Norwich, CT 06360-1526 (860) 889-4088 (860) 889-81589 - fax

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party	Bridgeport Energy LLC	Brad Porlier General Manager Bridgeport Energy LLC 10 Atlantic Street Bridgeport, CT 06604 (203) 332-8694 (713) 627-5992 - fax
Party	PSEG Power LLC	Harold W. Borden Vice President and General Counsel PSEG Power LLC 80 Park Plaza Newark, NJ 07102-4194 (973) 430-6968 (973) 643-6026 – fax h.borden@pseg.com
Party	NRG Energy, Inc.	Judith E. Lagano NRG Energy, Inc. P. O. Box 1001 1866 River Road Middletown, CT 06457 (203) 854-3626 (203) 854-3658 - fax
Party	Northeast Generation Company (NGC)	Frederic Lee Klein, Esq. Assistant General Counsel Select Energy 107 Selden Street Berlin, CT 06037 (860) 665-2926 (860) 665-2330 – fax
Party	Department of Public Utility Control	-INTERDEPARTMENTAL- Cindy Jacobs, Research Department of Public Utility Control Ten Franklin Square New Britain, CT 06051
Party	Lake Road Generating Company, L. P	James T. Carlton, General Manager Lake Road Generating Company, L. P. 56 Alexander Parkway Dayville, CT 06241 (860) 779-8300 (860) 779-8360– fax
Party	PPL Wallingford Energy LLC	Lee Hoffman, Esq. Pullman & Comley, LLC 90 State House Square Hartford, CT 06103-3702 (860) 424-4346 (860) 424-4370 - fax lhoffman@pullcom.com

Status Granted	Status Holder (name, address & phone number)	Representative (name, address & phone number)
Party	Connecticut Resources Recovery Authority	Christopher J. Fancher Facilities Engineer Connecticut Resources Recovery Authority 100 Constitution Plaza, 17 th Floor Hartford, CT 06103-1722 (860) 757-7700 (860) 727-4141 – fax
Intervenor	Connecticut Center for Advanced Technology (CCAT)	Joel M. Rinebold Connecticut Center for Advanced Technology 111 Founders Plaza, Suite 1002 East Hartford, CT 06108 (860) 291-8832 (860) 291-8874 - fax jrinebold@ccat.us paresta @ccat.us
Intervenor	Connecticut Energy Advisory Board (CEAB) Office of Policy and Management 450 Capitol Avenue ATTN: CEAB Hartford, CT 06106	Mary J. Healey Consumer Counsel Ten Franklin Square New Britain, CT 06051 (860) 827-2900 (860) 827-2929 – fax occ.efile@po.state.ct.us Heather Hunt, Esq. 242 Whipporwill Lane Stratford, CT 06614 (203) 380-1477 hfhunt@optonline.net Mr. Brian Abbanat LaCapra Associates 20 Winthrop Square Boston, MA 02110 (617) 367-6500 Mr. John Hutts GDS Associates, Inc. 1850 Parkway Place, Suite 800 Marietta, GA 30067 (770) 425-8100 x 112


 Anthony M. Macleod

**STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL**

**2005 TEN YEAR FORECAST OF)
ELECTRIC LOADS AND RESOURCES)**

DOCKET NO. F-2005

JULY 7, 2005

**PREFILED TESTIMONY OF ISO NEW ENGLAND INC.
BY DAVID EHRLICH**

1 *Q. Please state your name, title and business address.*

2

3 A. David Ehrlich
4 Principal Economic and Load Analyst, Load Forecasting
5 ISO New England Inc.
6 One Sullivan Road
7 Holyoke, MA 01040

8 *Q. What positions have you held at ISO and what have your responsibilities been?*

9 A. As Principal Economic and Load Analyst, Load Forecasting, of ISO New England Inc.

10 ("ISO"), I am responsible for the long-run forecast of energy and seasonal peaks for

11 New England which I have been involved with for the last eighteen years. Prior to

12 that I was Project Manager for REMI, an economic modeling consulting firm. I have

13 a B.A. in Economics from Alfred University and a M.S.B.A. in Regional Management

14 and Planning from the University of Massachusetts.

15 *Q. What is your purpose in submitting pre-filed testimony today?*

16 A. I would like to share with the Siting Council information regarding ISO's 2005 load
17 forecast.

18 *Q. Is the information presented in this testimony true and correct to the best of your
19 knowledge and belief?*

20 A. Yes.

21 *Q. What are ISO's basic responsibilities?*

22 A. ISO, whose offices and operations center are located in Holyoke, Massachusetts, is the
23 regional transmission organization for the six-state New England region. ISO is
24 responsible for bulk electric power system operations, wholesale electricity market
25 administration and regional bulk power system planning under the jurisdiction of the
26 Federal Energy Regulatory Commission ("FERC").

27 *Q. Does ISO make any profit from its role as the Independent System Operator?*

28 A. No. ISO is a private, not-for-profit corporation governed by an independent Board of
29 Directors with no financial interest in any market participant companies or
30 transactions.

31 *Q. Does ISO perform annual load forecasting?*

32 A. Yes. Each year ISO prepares and makes available a ten year forecast of energy and
33 seasonal peak loads.

34 *Q. Has ISO completed its load forecast for 2005?*

35 A. Yes. ISO's 2005 load forecast was published on April 29, 2005 in the report entitled,
36 "2005-2014 Forecast Report of Capacity, Energy, Loads and Transmission (CELT)
37 Report" (the "2005 CELT Report") and in supporting documentation.¹

38 *Q. What areas does ISO's 2005 load forecast address?*

39 A. ISO's 2005 load forecast includes energy and seasonal peak forecasts for the ISO
40 Control Area, the six New England States, and 13 sub-areas. The load forecast for the
41 sub-areas includes the forecast for three separate areas that together approximate the

¹ See <http://www.iso-ne.com/trans/celt/index.html>.

42 load forecast for the state of Connecticut: (1) Norwalk-Stamford; (2) Southwest
43 Connecticut; and (3) Connecticut.²

44 *Q. What is the basis for ISO's 2005 forecast?*

45 A. ISO forecasts energy and seasonal peak loads, based on an assumed set of economic
46 and demographic conditions. The seasonal peak loads are projected for a range of
47 weather conditions using over 35 years of historical weather data. This includes peak
48 loads under normal peak weather conditions (i.e. for New England, 90.4 degrees
49 Fahrenheit), which have a 50 percent chance of being exceeded, and peak loads under
50 more extreme weather conditions (i.e. for New England, 94.2 degrees Fahrenheit),
51 which have a 10 percent chance of being exceeded. ISO's 2005 forecast is attached
52 hereto.³

53 *Q. What does ISO's 2005 forecast show?*

54 A. The summer peak load forecast for 2005 and 2014 for both the New England region
55 and the State of Connecticut are shown in Table 1 below. The corresponding growth
56 in the summer peak load and energy forecasts for 2005 to 2014 respectively, are
57 shown in Table 2 below.

58

59

60

² Electrical areas, not geographic boundaries, define sub-areas. Therefore, the Connecticut sub-areas, when aggregated, do not correspond exactly with the State of Connecticut.

³See http://www.iso-ne.com/trans/celt/fsct_detail/2005/isone_2005_forecast_data.xls

61 **Table 1. Summer Peak Load Forecast: 2005, 2014 (Megawatts)**

Area (Probability of being exceeded)	2005 (50%)	2014 (50%)	2005 (10%)	2014 (10%)
ISO-NE Control Area	26355	30180	27985	32050
State of Connecticut	7125	8305	7580	8835
Norwalk-Stamford Sub-area	1250	1415	1330	1505
Southwest Connecticut Sub-area	2290	2645	2440	2815
Connecticut Sub-area	3515	4165	3740	4430

62

63 **Table 2. Compound Annual Growth Rates: 2005-2014 (Percent)**

Area	2005-2014 Summer Peak (50/50 and 90/10)	2005-2014 Energy
ISO-NE Control Area	1.5	1.4
State of Connecticut	1.7	1.8
Norwalk-Stamford Sub-area	1.4	1.8
Southwest Connecticut Sub-area	1.6	1.6
Connecticut Sub-area	1.9	1.6

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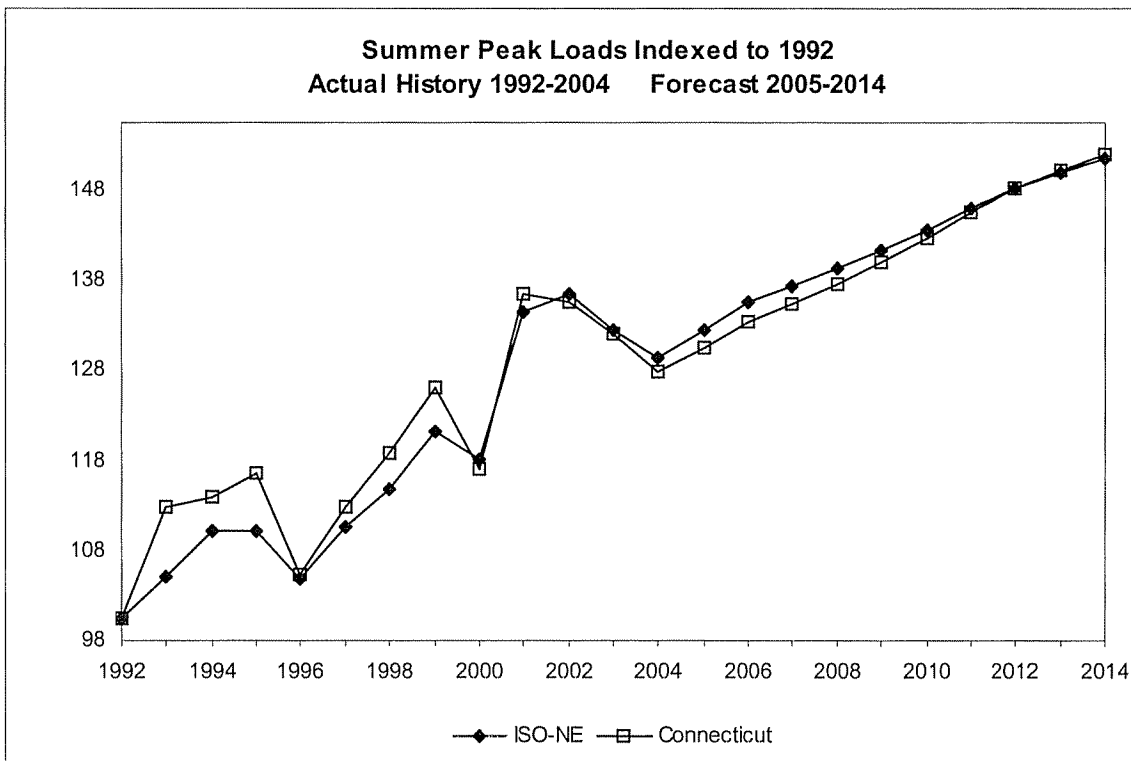
65 *Q. Does the ISO forecast account for reductions from energy conservation and efficiency*
66 *programs?*

67 A. The ISO forecast includes estimated energy reductions from utility-sponsored demand-
68 side management programs (i.e. energy conservation) and efficiency programs. By
69 2014, the reductions amount to approximately 1500 MW for New England and
70 approximately 550 MW for Connecticut.

71 Q. How does projected growth in summer peak demand in Connecticut compare with
72 growth in demand for electricity in New England generally?

73 A. Figure 1 shows the projected growth in summer peak demand for electricity in
74 Connecticut compared to New England.

75 **Figure 1. Growth of Summer Peak Demand in Connecticut and New England**



76
77
78 Q. Does this conclude your testimony?

79 A. Yes, thank you.

2005 CELT & RSP Forecast Detail: ISO-NE Control Area, New England States, and RSP Sub-areas

		Reference Weather Peaks (MW) 50% chance of being exceeded		Extreme Weather Peaks (MW) 10% chance of being exceeded			
		Summer	Winter	Summer	Winter	Energy (GWH)	
ISO-NE CA %ISO-NE CA		100	100				100
	2005	26355	22830	27985	23740		134085
	2006	26970	23175	28660	24100		136630
	2007	27350	23540	29070	24485		138590
	2008	27750	23890	29495	24845		140700
	2009	28145	24245	29910	25215		142680
	2010	28565	24640	30350	25625		144725
	2011	29050	25095	30860	26090		146860
	2012	29500	25400	31330	26400		148985
	2013	29845	25680	31700	26695		150785
	2014	30180	26005	32050	27030		152505
	%ISO-NE CA	100	100				100
	CAGR	1.5	1.5				1.4
	States:						
CT %ISO-NE CA		27	26.4				25.8
	2005	7125	6025	7580	6285		34620
	2006	7280	6130	7745	6400		35455
	2007	7390	6240	7870	6510		36050
	2008	7520	6350	8005	6630		36720
	2009	7650	6470	8140	6755		37370
	2010	7795	6600	8295	6885		38035
	2011	7950	6730	8460	7020		38750
	2012	8105	6815	8620	7110		39430
	2013	8205	6900	8725	7195		39970
	2014	8305	6990	8835	7290		40500
	%ISO-NE CA	27.5	26.9				26.6

CAGR	1.7	1.7	1.7	1.8
ME				
%ISO-NE CA	7.5	8.6		9.1
	1975	1960	2060	12140
2005	2020	1985	2110	12350
2006	2050	2020	2135	12500
2007	2080	2050	2170	12710
2008	2110	2075	2200	12890
2009	2140	2100	2230	13050
2010	2165	2135	2260	13235
2011	2200	2165	2295	13440
2012	2230	2190	2325	13620
2013	2255	2220	2355	13790
2014	7.5	8.5		9
%ISO-NE CA	1.5	1.4		1.4
CAGR				
MA				
%ISO-NE CA	45.9	45.3		45.2
	12110	10340	12845	60590
2005	12390	10485	13150	61580
2006	12560	10635	13330	62360
2007	12720	10770	13500	63140
2008	12875	10900	13660	63860
2009	13040	11065	13835	64625
2010	13245	11255	14050	65445
2011	13400	11370	14215	66170
2012	13535	11470	14355	66825
2013	13660	11600	14485	67430
2014	45.3	44.6		44.2
%ISO-NE CA	1.3	1.3		1.2
CAGR				
NH				
%ISO-NE CA	8.7	8.9		8.8
	2300	2040	2490	11840
2005	2365	2070	2565	12090
2006	2400	2105	2600	12295
2007	2430	2140	2640	12510
2008	2470	2180	2685	12735
2009	2515	2220	2730	12965
2010				

%ISO-NE CA CAGR RI	2011	2565	2270	2785	2365	13210
	2012	2620	2315	2845	2410	13490
	2013	2670	2355	2900	2455	13740
	2014	2720	2400	2950	2500	13990
		9	9.2			9.2
%ISO-NE CA		1.9	1.8			1.9
		6.8	6.3			6.4
	2005	1805	1435	1920	1490	8525
	2006	1845	1460	1965	1520	8685
	2007	1875	1490	1995	1545	8820
%ISO-NE CA CAGR VT	2008	1905	1510	2025	1570	8955
	2009	1930	1540	2050	1600	9090
	2010	1960	1560	2085	1620	9245
	2011	1990	1600	2120	1660	9390
	2012	2030	1620	2160	1680	9555
%ISO-NE CA	2013	2050	1640	2180	1700	9660
	2014	2075	1660	2205	1720	9760
		6.9	6.4			6.4
		1.6	1.6			1.5
		4	4.5			4.8
%ISO-NE CA CAGR	2005	1045	1030	1100	1060	6375
	2006	1070	1050	1130	1075	6475
	2007	1085	1065	1145	1095	6570
	2008	1100	1080	1160	1110	6670
	2009	1115	1090	1175	1120	6740
%ISO-NE CA CAGR	2010	1125	1100	1185	1130	6805
	2011	1140	1110	1200	1145	6835
	2012	1150	1125	1210	1155	6900
	2013	1160	1135	1225	1165	6970
	2014	1175	1150	1235	1180	7035
RSP Sub-areas:		3.9	4.4			4.6
		1.3	1.2			1.1

%ISO-NE CA CAGR NH	2012	670	640	695	650	4016
	2013	680	650	705	660	4078
	2014	685	655	715	670	4132
		2.3	2.5			2.7
%ISO-NE CA		1.6	1.5			1.5
		7.1	7.3			7.2
	2005	1860	1675	2010	1745	9665
	2006	1920	1705	2080	1780	9920
%ISO-NE CA CAGR VT	2007	1955	1740	2120	1815	10101
	2008	1990	1775	2160	1850	10289
	2009	2030	1810	2205	1885	10494
	2010	2070	1840	2245	1920	10689
	2011	2115	1880	2290	1960	10883
	2012	2160	1920	2345	1995	11101
	2013	2205	1950	2395	2035	11325
	2014	2250	1990	2440	2070	11539
		7.5	7.7			7.6
		2.1	1.9			2
%ISO-NE CA		4.6	5.1			5.4
	2005	1220	1175	1295	1210	7189
	2006	1250	1190	1325	1225	7279
	2007	1260	1205	1340	1245	7365
	2008	1270	1220	1350	1255	7441
	2009	1285	1235	1360	1270	7517
	2010	1295	1250	1375	1285	7594
	2011	1315	1260	1390	1305	7677
	2012	1330	1280	1410	1320	7746
	2013	1340	1295	1425	1335	7843
	2014	1360	1315	1440	1350	7939
		4.5	5.1			5.2
		1.2	1.3			1.1
%ISO-NE CA Boston		20.3	19.8			20
	2005	5360	4515	5685	4700	26767
	2006	5470	4570	5805	4755	27213

	2007	5530	4630	5865	4820	27520
	2008	5580	4685	5925	4875	27835
	2009	5635	4745	5975	4940	28116
	2010	5695	4820	6045	5020	28443
	2011	5780	4910	6130	5105	28828
	2012	5840	4960	6190	5160	29166
	2013	5890	5010	6245	5210	29456
	2014	5940	5070	6295	5275	29721
%ISO-NE CA		19.7	19.5			19.5
CAGR		1.1	1.3			1.2
CMA/NEMA						
%ISO-NE CA		6.5	6.4			6.4
	2005	1705	1470	1815	1540	8516
	2006	1750	1490	1860	1560	8685
	2007	1780	1510	1890	1580	8809
	2008	1805	1530	1920	1600	8936
	2009	1830	1545	1950	1620	9053
	2010	1860	1570	1975	1640	9170
	2011	1890	1595	2010	1670	9305
	2012	1920	1610	2040	1685	9427
	2013	1940	1625	2065	1700	9534
	2014	1965	1645	2085	1720	9633
%ISO-NE CA		6.5	6.3			6.3
CAGR		1.6	1.3			1.4
WMA						
%ISO-NE CA		7.6	8.2			8
	2005	2015	1865	2140	1940	10776
	2006	2055	1885	2180	1960	10945
	2007	2075	1910	2205	1985	11062
	2008	2095	1930	2225	2005	11181
	2009	2115	1945	2245	2020	11287
	2010	2130	1970	2265	2050	11380
	2011	2160	1995	2290	2075	11496
	2012	2175	2010	2310	2090	11591
	2013	2190	2020	2320	2100	11668
	2014	2200	2035	2335	2115	11734
%ISO-NE CA		7.3	7.8			7.7

CAGR 1 1

SEMA

%ISO-NE CA

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%ISO-NE CA

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%ISO-NE CA

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3410

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17668
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18273
18650

2011	3960	3340	4210	3485	19035
2012	4050	3390	4300	3540	19404
2013	4105	3440	4365	3590	19689
2014	4165	3490	4430	3645	19979
%ISO-NE CA	13.8	13.4			13.1
CAGR	1.9	1.7			1.8
SWCT					
%ISO-NE CA	8.7	8.7			8.4
2005	2290	1980	2440	2065	11273
2006	2350	2020	2500	2105	11525
2007	2385	2060	2545	2150	11731
2008	2435	2100	2590	2190	11963
2009	2480	2135	2640	2225	12193
2010	2520	2170	2680	2260	12372
2011	2560	2205	2725	2295	12553
2012	2600	2220	2765	2315	12722
2013	2620	2240	2790	2335	12835
2014	2645	2260	2815	2360	12950
%ISO-NE CA	8.8	8.7			8.5
CAGR	1.6	1.5			1.6
NOR					
%ISO-NE CA	4.7	4.4			4.4
2005	1250	1000	1330	1045	5877
2006	1270	1020	1350	1065	5978
2007	1280	1040	1360	1085	6056
2008	1290	1060	1375	1110	6147
2009	1300	1080	1385	1130	6236
2010	1330	1105	1410	1155	6353
2011	1355	1125	1440	1175	6472
2012	1380	1140	1470	1190	6586
2013	1400	1155	1490	1205	6671
2014	1415	1170	1505	1220	6757
%ISO-NE CA	4.7	4.5			4.4
CAGR	1.4	1.8			1.6

CAGR is the compound annual growth rate