Information Request DTE-7-14

In reference to Exhibit NSTAR-HCL-7, at 16 and Exhibit NSTAR-CPS 1, at 4, please provide a copy of any distribution planning manuals, used by each of the NSTAR Electric companies, that specify that distribution planning relies on non-coincident load.

Response

Attachment DTE-7-14 includes a list of the individual distribution loads that are included in the distribution system load forecast. These loads are the projected non-coincident peak loads for new customers that are added to the NSTAR Electric projection for load growth on the distribution system. As noted in Mr. Salamone's rebuttal testimony, the monitored peak load of distribution facilities is generally very close to the non-coincident peak loads for individual circuits under extreme weather conditions. The extreme weather projected circuit peak load in combination with the non-coincident peak load of customer load additions establishes a projection that is in effect the forecasted non-coincident peak load of the facility. The NSTAR Electric process includes a routine review and update of this information as part of the steps employed for updating the distribution system load forecast.

Sector	Station Number	Total Projected Incremental Load MW (Jun 04 - Jun 07)	Annualized KWH based on Total Projected Load	Proposed In Service	Incremental Load by June 1, 2004	Incremental Load by June 1, 2005	Incremental Load by June 1, 2006	Incremental Load by June 1, 2007
	4							
Office/Retail	4	30	50,000,000	3/1/04	30	0	0	0
Hotel	4	5	17,500,000	6/1/04	2	3	0	0
Transportation	4	2	15,000	1/1/03	2	0	0	0
Hotel	4	2	8,800,000	1/1/06	0	0	1	1
Hotel/Resd & Park	4	5	22,000,000	2/1/05	0	1	2	2
Office/Retail	4	5	20,000,000	6/1/04	2	3	0	0
Office	4	3	13,000,000	1/1/04	3	0	0	0
Office/Residential/I	4	9	37,000,000	6/1/05	0	3	3	3
Residential	4	5	18,000,000	6/1/06	0	0	2	3
Industrial	4	0	0	6/1/03	0	0	0	0
Office/Residential/I	4	2	6,000,000	6/1/07	0	0	0	2
	106							
Hospital	106	1.5	8,700,000	6/1/04	0.5	1	0	0
Transportation	106	3	20,000	7/1/04	3	0	0	0
Commercial	106	2.5	8,750,000	3/4/04	1	1.5	0	0
Hotel	106	1.5	5,250,000	1/4/05	0	1.5	0	0
Transportation	106	3	20,000	3/4/04	3	0	0	0
Residential	106	2.5	2,500,000	6/1/04	1	1.5	0	0
Education	106	2.5	3,000,000	6/1/04	1	1.5	0	0
Commercial	106	1	3,000,000	6/1/06	0	0	1	0
	483							
State	483	1	5,000	3/1/04	1	0	0	0
State	483	2	10,000	4/1/04	2	0	0	0
State		10	100,000	1/1/06	0	0	10	0
Residential/Comme	483	0	0	6/1/03	0	0	0	0
	2							
Government	2	3	15,000	Feb-04	1	1	1	0
Governement/Resi	2	3	15,000	Jan-04	1	1	1	0
Government	2	2	10,000	6/1/04	2	0	0	0
	2	1	3,500,000	12/1/04	0	0.5	0.5	0
2 Hotels	2	1	3,500,000	6/1/04	0.5	0.5	0	0
Biotech Lab	2	5	20,000,000	12/1/03	1	2	2	0

Sector	Station Number	Total Projected Incremental Load MW (Jun 04 - Jun 07)	Annualized KWH based on Total Projected Load	Proposed In Service	Incremental Load by June 1, 2004	Incremental Load by June 1, 2005	Incremental Load by June 1, 2006	Incremental Load by June 1, 2007
	12							
Hospital	12	10	40,000,000	12/1/03	5	2	2	1
Hospital	12	-2	-8,000,000	12/1/04	0	-2	0	0
Industrial	12	2	8,000,000	10/1/05	0	0	2	0
Transportation	12	4	20,000	6/1/03	2	2	0	0
Hotel/Office	12	3	10,500,000	9/1/05	0	0	3	0
Various	12	0	0	6/1/03	0	0	0	0
Residential Housir	12	4	8,000,000	9/5/05	0	0	2	2
Hotel	12	1	1,000,000	1/1/05	0	1	0	0
Parking	12	1	1	6/1/04	1	0	0	0
	53							
Commercial	53	0		6/1/07	0	0	0	5
	53	3	12,000,000	9/1/04	0	2	1	0
Hotel	53	3	10,500,000	3/1/04	1	1	1	0
Office	53	5	22,000,000	6/1/06	0	0	2	3
	71							
Hotel	71	2.5	8,750,000	6/1/05	0	2.5	0	0
Residential	71	4	15,000,000	4/1/04	1	3	0	0
Hotel	71	1	3,500,000	4/1/04	1	0	0	0
Mixed Use Building	71	2	7,000,000	10/1/03	2	0	0	0
Mixed Use Building	71	4	14,000,000	9/1/06	0	0	0	2
	492							
Hotel	492	2.5	8,750,000	8/1/03	2.5	0	0	0
Hotel	492	3	15,000,000	6/1/05	0	3	0	0
Office	492	2	1,400,000	6/1/04	2	0	0	0
Office/Light Indust	492	4	16,000,000	6/1/04	2	2	0	0
	514							
Telecommunicatior	514	3	13,500,000	6/1/06	0	0	3	0
Hotel	514	2.5	11,250,000	6/1/04	1	1.5	0	0
Office	514	7	31,000,000	9/1/03	1	2	2	2
Office	514	5	22,000,000	2/1/04	1	2	2	0

Sector	Station Number	Total Projected Incremental Load MW (Jun 04 - Jun 07)	Annualized KWH based on Total Projected Load	Proposed In Service	Incremental Load by June 1, 2004	Incremental Load by June 1, 2005	Incremental Load by June 1, 2006	Incremental Load by June 1, 2007
Entertainment Cen	514	3	10,000,000	9/1/04	0	3	0	0
Movie Thearter	514	1	3,000,000	9/1/04	0	1	0	0
Mixed Retail/ Resic	514	3	13,500,000	1/6/05	0	3	0	0
	514	1	4,500,000	9/1/04	0	1	0	0
Hotel	514	1	4,500,000	9/1/04	0	1	0	0
	329							
Industrial	329	2	1,200,000	1/1/04	1	1	0	0
Industrial	329	1.5	900,000	6/1/05	0	1.5	0	0
Education- Housing	329	1.5	1,500,000	9/1/05	0	0	1.5	0
Industrial	329	0	0	3/1/03	0	0	0	0
Biotech	329	1	4,500,000	6/1/07	0	0	0	1
Biotech	329	0	0	6/1/08	0	0	0	0
Industrial	329	2	6,000,000	3/1/05	0	2	0	0
Commercial	329	5	15,000,000	6/1/07	0	0	0	5
Recreational	329	3	15,000,000	12/1/03	1.5	1.5	0	0
Church	329	0.5	2,250,000	6/1/05	-2	2.5	0	0
Biotech	329	4	18,000,000	6/1/06	0	0	4	0
Hospital & Reasea	329	10	45,000,000	6/1/06	0	0	5	5
Educational	329	2.5	7,500,000	1/1/07	0	0	0	2.5
Commercial	329	2	8,000,000	7/1/03	2	0	0	0
Educational	329	4	4,000,000	2/1/05	0	2	2	0
Industrial	329	5	25,000,000	1/1/05	0	5	0	0
Industrial	329	5	25,000,000	1/1/06	0	0	5	0
Educational	329	2	2,000,000	9/1/04		1.25	0.75	0
Hospital		10	40,000,000	6/1/05	0	10	0	0
R&D Facility	329	1	1,000,000	6/1/04	1	0	0	0
R&D Facility	329	6	0	6/1/05	0	0	0	0
	496							
Government	496	3.5	20,000	1/1/04	3.5	0	0	0
Industrial	496	8	48,000,000	6/1/04	2	2	2	2

Sector	Station Number	Total Projected Incremental Load MW (Jun 04 - Jun 07)	Annualized KWH based on Total Projected Load	Proposed In Service	Incremental Load by June 1, 2004	Incremental Load by June 1, 2005	Incremental Load by June 1, 2006	Incremental Load by June 1, 2007
Industrial	496	9	54,000,000	4/1/04	1	3	5	0
Industrial	496	-3.5	-17,500,000	6/1/04	-3.5	0	0	0
School	496	1.5	3,600,000	9/1/04	1.5	0	0	0
	342							
School	342	1	2,400,000	9/1/04	0	1	0	0
	240							
Industrial	240	3	22,140,000	7/1/03	1	1	1	0
School	240	2	4,800,000	9/1/04	0	2	0	0
Industrial	240	1.5	0	3/1/03	1.5	0	0	0
Industrial		1	700,000	4/1/04	1	0	0	0
Industrial		1.4	1,650,000	1/1/04	0.35	0.35	0.35	0.35
	126							
Industrial	126	0	0	7/1/03	0	0	0	0
Industrial	126	2.5	5,160,000	6/1/04	2.5	0	0	0
Industrial	126	1	6,000,000	6/1/05	0	1	0	0
Industrial	126	4	24,000,000	6/1/05	0	4	0	0
	470							
	470							
Office/Industrial	470	1	5,000,000	10/1/06	0	0	0	1
Educational	470	1	2,300,000	Sept-04	0	1	0	0
	148							

Sector	Station Number	Total Projected Incremental Load MW (Jun 04 - Jun 07)	Annualized KWH based on Total Projected Load	Proposed In Service	Incremental Load by June 1, 2004	Incremental Load by June 1, 2005	Incremental Load by June 1, 2006	Incremental Load by June 1, 2007
Government	148	4	9,600,000	6/1/04	2	1	1	0
Educational	148	1	2,400,000	9/7/04	0	0	0	1
	375							
Industrial	375	0	0	4/1/03	0	0	0	0
Industrial	375	1	6,000,000	6/1/04	-1.5	2.5	0	0
Educational	375	1	2,400,000	9/5/04	0	1	0	0
	391							
Industrial	391	0.5	3,000,000	12/1/03	-1	1.5	0	0
Industrial	391	4.5	46,750,000	1/1/07	0	0	0	4.5
Industrial	391	-1	-6,000,000	1/1/05	-1	0	0	0
	450							
Industrial	450	3.5	34,000,000	1/1/07	0	0	0	3.5
Office	450	3.5	15,750,000	1/1/06	0	0	1	2.5
Education	450	4	45,000,000	6/1/05		1	1	2
Office	450	1	1,000,000	11/1/03	1	0	0	0
	488							
Airport	488	3.6	28,000,000	6/1/04	1	2.6	0	0
Airport	488	2.5	19,500,000	6/1/04	2.5	0	0	0
Airport	488	2.5	19,500,000	6/1/05	0	2.5	0	0
Hotel	488	0	0	9/1/02	0	0	0	0
Industrial		1	4,500,000	9/1/03	1	0	0	0
Industrial	533	-2	12,000,000	7/5/04	-2			
	320							
Medical Manufactu	320	1.3	7,800,000	6/1/03	1.3	0	0	0
Industrial	320	-1.5	-7,000,000	9/1/03	-1.5	0	0	0
Industrial	320	0	0	6/3/03	0	0	0	0
	402			6/1/03	0			
Transportation	402	3	15,000	6/1/04	3	0	0	0
Commercial	402	1.2	4,800,000	1/1/04	1.2	0	0	0

Sector	Station Number	Total Projected Incremental Load MW (Jun 04 - Jun 07)	Annualized KWH based on Total Projected Load	Proposed In Service	Incremental Load by June 1, 2004	Incremental Load by June 1, 2005	Incremental Load by June 1, 2006	Incremental Load by June 1, 2007
	292							
School	292	0.7	1,680,000	9/1/04	0	0.7	0	0
Commercial/retail	292	0.7	3,000,000	9/1/05	0	0	0.7	0
	467							
Commercial	467	-1.5	-7,500,000	6/1/04	-1.5	0	0	0
Educational		0.5	1,200,000	9/1/04	0	0.5	0	0
	800							
Industrial	800	4.5	27,000,000	8/1/02	1.5	4	0	0
"	800	3.4	20,400,000	6/1/04	1	2.4	0	0
"	800	3	18,000,000	6/1/05	0	1	2	0
"	800	3.5	21,000,000	8/1/03	1	2.5	0	0
"	800	1.5	9,000,000	6/1/05	0	0.5	1	0
Commercial	800	1	3,500,000	6/1/04	1	0	0	0
Commercial	800	2	9,000,000	6/1/04	2	0	0	0
Commercial/Resid.	800	4	18,000,000	1/1/06	0	0	2	2
Biotech	800	1.5	6,000,000	12/1/04	0	1.5	0	0
Biotech	800	5	30,000,000	9/1/03	1	2	2	0
Commercial	800	6	36,000,000	6/1/03	2	2	2	0
Commercial	800	6	27,000,000	6/1/04	2	2	2	0
Residential	800	3	13,500,000	1/1/05	0	1	1	1
	831							
Commercial	831	1.5	6,000,000	10/4/04	0	1	0.5	
Residential	831	1.8	7,200,000	1/1/05	0	1	0.8	0
Commercial	831	0		8/1/02	0	0	0	0
Educational/Resea	831	5.1	30,600,000	8/1/03	1.7	0	3.4	0
University/Resid	831	12	60,000,000	1/1/04	3	3	3	3
	828							

Sector	Station Number	Total Projected Incremental Load MW (Jun 04 - Jun 07)	Annualized KWH based on Total Projected Load	Proposed In Service	Incremental Load by June 1, 2004	Incremental Load by June 1, 2005	Incremental Load by June 1, 2006	Incremental Load by June 1, 2007
Research / Chiller I	828	10 (load will eventu	100,000,000	1/1/06	0	0	5	5
Bio-Tech/Lght man	?	1.7	10,200,000	5/15/02	0	1.2	0.5	0
Nursing Home	828	1	3,000,000	8/1/03	0.5	0.5	0	0

Information Request DTE-7-15

In reference to Exhibit NSTAR-CPS-1, at 4-6, please provide by geographic location the number of distribution substations (23/13.8/13.2 kV) and the number of circuits under each distribution sub-station for each of the NSTAR Electric companies. Identify the DG facilities connected to these distribution circuits.

Response

Attachment DTE-7-15(a) lists the geographic locations that each substation serves and identifies the number of circuits connected to each station on the Boston Edison system. Attachment DTE-7-15(b), titled "DG Facility Connections," shows the circuit, substation and size of existing DG units connected to the Boston Edison system. The units listed include all units that are operating as commercial units and are not considered customer emergency backup units.

NSTAR SUBSTATION LOCATION INFORMATION

Station Number	Station Name	Distribution Lines and Circuits	Area(s) Station Primarily Serves	Other Area(s) Station Serves
106	Andrew Square	26	Roxbury, S. Boston	W. Roxbury, Dorchester
110	Baker Street	11	Dedham	W. Roxbury, Newton
329	Brighton	32	Brighton, Brookline	Roxbury, W. Roxbury
391	Burlington	19	Burlington	Lexington, Woburn
470	Canton	15	Canton	Westwood
71	Carver Street	20	Downtown Boston	N/A
12	Chatham Street	28	Downtown Boston	N/A
488	Chelsea	13	Chelsea, E. Boston, Charlestown	N/A
483	Dewar St.	24	Dorchester	Roxbury, S. Boston
456	Dover	4	Dover, Westwood	Dedham, Medfiled
240	Framingham	12	SE Framingham, Natick	Sherborn
2	Hawkins Street	20	Downtown Boston	N/A
53	High Street	27	Downtown Boston	N/A
126	Hopkinton	12	Hopkinton	N/A
496	Hyde Park	24	Hyde Park, Milton	W. Roxbury
385D	K Street Distribution Station	44	South Boston	N/A
514	Kingston Street	24	Downtown Boston	N/A
320	Lexington	12	Lexington, Lincoln	N/A
416	Maynard	12	Maynard, Acton	Sudbury
65	Medway	7	Holliston, Medway, Bellingham,	Hopkinton, Millis, Norfolk, Sherborn, Ashland
250	Mystic	28	Somerville	N/A
533	N. Lexington	16	N. Lexington, Bedford, Carlisle	N/A
148	Needham	8	Needham, Dover	Natick, Sherborn
292	Newton	22	Newton	Brookline, Brighton
375	North Woburn	13	N. Woburn, Stoneham	N/A
492	Scotia Street	24	Downtown Boston	N/A
274	Sherborn	6	Sherborn	Holliston, Ashland, Framingham
402	Somerville*	6	Somerville	N/A
433	Speen Street	17	NE Framingham	Wayland, Natick, Weston
342	Sudbury	6	Sudbury	Wayland, Framingham
450	Trapelo Road	11	Waltham	Weston
146	Walpole	16	Walpole, Sharon	Medfield, Norfolk,
282	Waltham	21	Waltham	Weston, Newton
467	Watertown	24	Watertown	Waltham
455	West Framingham	7	W. Framingham	Ashland, Hopkinton
211	Woburn	21	Winchester, Woburn, Arlington	Lexington

NSTAR Distribution System Connected Commercial Generation	
Circuit Identifier	Size of Generator
1603	500
1603 Total	500
1605	100
1605 Total	100
2004	100
2004 Total	100
	50
2305 Total	50
3003	300
3003 Total	300
3615	300
3615 Total	300
4901	50
4901 Total	50
4908	50
4908 Total	50
5212	300
5212 Total	300
6002	300
6002 Total	300
6703	50
6703 Total	50
124-06	50
124-06 Total	50
14N29	150
14N29 Total	150
211-H8	300
211-H8 Total	300
250-H5	50
250-H5 Total	50
278-03	50
278-03 Total	50
282-H3	50
282-H3 Total	50
284-04	100
284-04 Total	100
293-03	113
293-03 Total	113
320-H2	50
320-H2 Total	50
322-1397H1	112
322-1397H1 Total	112
351-04	750
351-04 Total	750
380-01	50
380-01 Total	50
416-H3	112
416-H3 Total	112
	1000
433-H3 Total	1000

433-H8	25
433-H8 Total	25
445-H4	50
	50
	50
445-H4 Total	150
466-1482H1	50
	50
466-1482H1 Total	100
466-1482H2	300
466-1482H2 Total	300
483-H1	50
483-H1 Total	50
592-70XYH1	212
592-70XYH1 Total	212
Grand Total	5874