

DRAFT

**Case 07-M-0548  
Energy Efficiency Portfolio Standard**

**Central Hudson Gas & Electric Corp.  
Response to ALJ Stein Utility Specific Questions**

Question #1

*Please provide the actual annual sales data and an annual sales forecast (electric in MWhs, gas in DTs) for your service territory for each year 2007 through 2015. The data should be broken down by and include every service class (even the ones you might deem irrelevant) and transportation/sales. Please identify the source of the forecast.*

**Response:**

Central Hudson's forecasts for sales are oriented towards the short term (i.e., next three to five years) to provide "rate case quality" forecasts over that time horizon. To provide some information for the longer time horizon addressed in the question, Central Hudson updated its models and extended them to cover the period 2007 through 2015, as requested, without re-specifying or changing economic or price variables. Actual data for 2006 are shown on the attachment. The source of updated input information, assumptions made, and results obtained for the forecast period are summarized in the attachment. In light of the data and other limitations noted above, caution should be employed in evaluating forecast results beyond 2011.

Question #2

*Please provide the actual annual achieved end-user energy efficiency data for 2006 and annual end-user energy efficiency forecast (electric in MWhs, gas in DTs) for your service territory for your own already planned end-user energy efficiency programs each year 2007 through 2015. The data should be broken down by program and should not include peak shaving or demand response programs, and should not include NYISO or NYSEERDA programs (except ConEdison should include NYSEERDA programs provided solely for ConEdison). If possible, provide a description, cost per MWh or DT, and total resource cost test score for each program.*

**Response:**

The Company does not have data to support actual achieved end-use efficiency for 2006, at the present, and does not have an end user efficiency forecast resulting from its programs or any other new targeted energy efficiency initiative. As such, the forecast referenced in Question #1 above does not include specific forecasts of energy efficiency.

**Central Hudson Gas & Electric Corporation**  
**Case 07-M-0548**  
**2007 – 2015 Electric and Gas Sales Forecast**  
**General Assumptions**

The following general assumptions were employed in the preparation of Central Hudson’s electric and gas sales forecasts.

**Electric & Gas**

- Forecasts for each class reflect the utilization of regression models. Central Hudson’s forecast process models by revenue account group, which is then converted to Service Classification. Full service and transportation sales for each Service Classification are combined through the forecast process.
- Data for the economic and demographic variables utilized in the forecasts were obtained from the April 2007 forecast provided by Economy.com for the New York Independent System Operator.
- 2006 actual annual sales are not normalized for weather.
- 2007 annual sales include 3 months actual sales data (not normalized for weather) and 9 months normalized sales projections. The remainder of the forecast period sales are weather normalized using the annual normal degree days for billed sales as shown below:

	<b>Electric</b>				<b>Gas</b>	
	<b>Res HDD</b>	<b>Res CDD</b>	<b>C&amp;I HDD</b>	<b>C&amp;I CDD</b>	<b>Res HDD</b>	<b>C&amp;I HDD</b>
2007	6,028	715	6,027	714	5,946	5,946
2008	6,019	716	6,014	717	5,933	5,934
2009	6,002	718	6,000	718	5,919	5,920
2010	5,988	720	5,985	719	5,909	5,908
2011	5,974	722	5,972	722	5,897	5,896
2012	5,958	723	5,958	724	5,885	5,886
2013	5,947	726	5,947	726	5,870	5,871
2014	5,931	727	5,930	728	5,861	5,860
2015	5,918	728	5,915	729	5,846	5,848

**Electric**

- Prices used in the regression models are based on the May 22, 2007 NYMEX close of NYISO Zone G prices. Future prices beyond the NYMEX quotes were grown at ½ CPI indexed to the base year of 1997.
- Street and Area Lighting (SC Nos. 5 and 8) sales were projected by extrapolating recent inventory trends for existing fixtures.
- SC No. 13 sales are based largely on projections provided by these customers to Central Hudson’s New Business Supervisors.
- SC No. 14 sales are included in SC Nos. 1, 2 and 6 by default through the forecast process. SC 14 sales represent approximately 0.002% of total annual system sales.

## Gas

- Conversion Factor used to convert Mcf into Dth - 1.02
- Prices used in the regression models are based on the May 22, 2007 NYMEX-NG close. Future prices beyond NYMEX quotes were grown at  $\frac{1}{2}$  CPI indexed to the base year of 1997.

**Central Hudson Gas & Electric Corporation**  
**Case 07-M-0548**  
**2007 - 2015 Electric Sales Forecast (MWh)**

	2006 Actual	2007 Estimate	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast	2012 Forecast	2013 Forecast	2014 Forecast	2015 Forecast
Service Classification No. 1 (Residential)										
Heating	310,340	323,320	321,240	321,000	323,810	325,850	327,010	328,380	330,720	332,890
Nonheating	1,711,090	1,748,960	1,755,900	1,789,110	1,839,260	1,885,060	1,927,700	1,970,290	2,011,130	2,054,360
Unbilled	<u>(8,270)</u>	<u>1,590</u>	<u>610</u>							
	2,013,160	2,073,870	2,077,750	2,110,720	2,163,680	2,211,520	2,255,320	2,299,280	2,342,460	2,387,860
Service Classification No. 2 (General)										
Nondemand	172,250	178,690	179,840	180,470	181,840	183,070	184,110	184,920	185,650	186,260
Primary	212,690	221,640	220,930	223,770	227,760	231,300	234,620	237,790	240,900	243,920
Secondary	1,429,990	1,465,680	1,456,250	1,480,650	1,515,150	1,546,280	1,575,360	1,603,530	1,630,810	1,657,550
Unbilled	<u>(180)</u>	<u>(280)</u>	<u>(160)</u>							
	1,814,750	1,865,730	1,856,860	1,884,730	1,924,590	1,960,490	1,993,930	2,026,080	2,057,200	2,087,570
Service Classification No. 3 (Large Power Primary)	332,760	353,560	352,480	356,160	361,700	366,460	370,890	375,140	379,170	383,170
Service Classification No. 5 (Area Lighting)	13,310	13,430	13,470	13,590	13,690	13,790	13,870	13,870	13,870	13,870
Service Classification No. 6 (Residential Time-of-Use)										
Heating	15,640	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000	18,000
Nonheating	<u>22,950</u>	<u>24,000</u>								
	38,590	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000	42,000
Service Classification No. 8 (Public Street/Highway Lighting)	23,240	23,000	22,880	22,830	22,800	22,790	22,790	22,790	22,790	22,790
Service Classification No. 9 (Traffic Signal Service)	3,433	3,428	3,428	3,428	3,428	3,428	3,428	3,428	3,428	3,428
Service Classification No. 13 (Large Power)										
Transmission	1,089,160	1,027,310	1,027,430	1,027,430	1,027,430	1,027,430	1,027,430	1,027,430	1,027,430	1,027,430
Substation	<u>170,080</u>	<u>176,740</u>	<u>178,330</u>							
	1,259,240	1,204,050	1,205,760	1,205,760	1,205,760	1,205,760	1,205,760	1,205,760	1,205,760	1,205,760
Interdepartmental	920	890	910	910	910	910	910	910	910	910
<b>Total Own Territory</b>	<u>5,499,403</u>	<u>5,579,958</u>	<u>5,575,538</u>	<u>5,640,128</u>	<u>5,738,558</u>	<u>5,827,148</u>	<u>5,908,898</u>	<u>5,989,258</u>	<u>6,067,588</u>	<u>6,147,358</u>

**Central Hudson Gas & Electric Corporation**  
**Case - 07-M-0548**  
**Summary of Gas Sales by Service Classification**

	Actual <u>2006</u>	Estimate <u>2007</u>	<u>2008</u>	<u>2009</u>	<u>2010</u>	Forecast		<u>2013</u>	<u>2014</u>	<u>2015</u>
Sales & Transport (Dth)						<u>2011</u>	<u>2012</u>			
Service Classification Nos. 1 & 12										
Residential Heat	4,600,683	5,086,143	5,174,193	5,220,146	5,341,897	5,481,512	5,599,744	5,689,196	5,761,115	5,818,020
Residential Nonheat	200,168	202,088	191,141	184,884	180,079	175,319	170,492	165,536	160,510	155,288
Residential Unbilled	<u>(84,729)</u>	<u>16,330</u>								
	4,716,123	5,304,561	5,381,664	5,421,360	5,538,306	5,673,160	5,786,566	5,871,062	5,937,956	5,989,638
Service Classification Nos. 2, 6 & 13										
Commercial Heat	3,723,986	4,165,142	4,204,130	4,261,351	4,377,531	4,509,240	4,654,491	4,729,373	4,831,990	4,929,137
Commercial Nonheat	592,922	580,859	555,514	559,628	568,857	578,333	587,762	593,351	599,089	604,581
Commercial OPA	749,227	830,136	810,580	808,095	805,178	802,232	799,828	796,819	794,710	792,159
Industrial	414,288	439,720	398,703	395,063	409,379	424,101	436,627	443,305	445,794	448,156
Commercial Unbilled	<u>(15,768)</u>	<u>15,637</u>								
	5,464,656	6,031,494	5,984,563	6,039,774	6,176,581	6,329,543	6,494,344	6,578,485	6,687,219	6,789,669
West Point	796,425	849,202	825,014	823,846	822,845	821,761	821,010	819,759	818,841	817,757
Interdepartmental firm	26,346	26,520	26,520	26,520	26,520	26,520	26,520	26,520	26,520	26,520
Service Classification No. 8										
Interruptible Com	124,598	154,836	154,836	154,836	154,836	154,836	154,836	154,836	154,836	154,836
Interruptible OPA	239,609	313,854	313,854	313,854	313,854	313,854	313,854	313,854	313,854	313,854
Interruptible Ind	<u>73,866</u>	<u>67,320</u>								
	438,072	536,010	536,010	536,010	536,010	536,010	536,010	536,010	536,010	536,010
Service Classification No. 9	912,635	952,578	952,578	952,578	952,578	952,578	952,578	952,578	952,578	952,578
Service Classification No. 11	1,767,982	1,706,460	1,706,460	1,706,460	1,706,460	1,706,460	1,706,460	1,706,460	1,706,460	1,706,460
<b>Total Sales &amp; Transport</b>	<b><u>14,122,239</u></b>	<b><u>15,406,824</u></b>	<b><u>15,412,810</u></b>	<b><u>15,506,549</u></b>	<b><u>15,759,301</u></b>	<b><u>16,046,032</u></b>	<b><u>16,323,488</u></b>	<b><u>16,490,874</u></b>	<b><u>16,665,584</u></b>	<b><u>16,818,631</u></b>