

20-Year Load Forecast
Annual Energy Consumption Estimate
MWH including Losses
Base Case Forecast
Updated 30April 2015

Residential loss factor 1.0851

Forecast values for Residential and GS-1 Secondary rate classes are weather normalized

Actual historical energy values in **BOLD**

	Residential		Residential	Residential	Future	Total
	Total	Residential	Default Supply	Including	Residential	Residential
	Excluding	Default Supply	Future	Future	Choice	Including
	DSM & USB	DSM & USB	DSM & USB	DSM & USB		DSM+USB
						Energy
						Savings
2003	2,241,849	2,241,158			691	2,241,849
2004	2,215,560	2,215,540	2,215,540	2,215,540	21	2,215,560
2005	2,244,640	2,244,638	2,244,638	2,244,638	2	2,244,640
2006	2,380,123	2,380,115	2,380,115	2,380,115	9	2,380,123
2007	2,411,659	2,411,628	2,411,628	2,411,628	30	2,411,659
2008	2,490,380	2,490,234	2,490,234	2,490,234	146	2,490,380
2009	2,503,408	2,503,271	2,503,271	2,503,271	137	2,503,408
2010	2,518,232	2,518,102	2,518,102	2,518,102	130	2,518,232
2011	2,600,433	2,600,300	2,600,300	2,600,300	133	2,600,433
2012	2,561,328	2,561,198	2,561,198	2,561,198	129	2,561,328
2013	2,605,066	2,605,040	2,605,040	2,605,040	26	2,605,066
2014	2,610,081	2,610,072	2,610,072	2,610,072	9	2,610,081
2015	2,633,673	2,633,673	2,601,909	2,601,909	0	31,764
2016	2,666,295	2,666,295	2,602,768	2,602,768	0	63,527
2017	2,699,315	2,699,315	2,604,024	2,604,024	0	95,291
2018	2,732,705	2,732,705	2,605,651	2,605,651	0	127,054
2019	2,766,446	2,766,446	2,607,629	2,607,629	0	158,818
2020	2,800,522	2,800,522	2,609,940	2,609,940	0	190,581
2021	2,834,931	2,834,931	2,612,586	2,612,586	0	222,345
2022	2,869,647	2,869,647	2,615,539	2,615,539	0	254,108
2023	2,904,679	2,904,679	2,618,807	2,618,807	0	285,872
2024	2,940,009	2,940,009	2,622,374	2,622,374	0	317,635
2025	2,975,646	2,975,646	2,653,823	2,653,823	0	321,823
2026	3,011,580	3,011,580	2,689,757	2,689,757	0	321,823
2027	3,047,821	3,047,821	2,725,998	2,725,998	0	321,823
2028	3,084,370	3,084,370	2,762,546	2,762,546	0	321,823
2029	3,121,215	3,121,215	2,799,392	2,799,392	0	321,823
2030	3,158,368	3,158,368	2,836,545	2,836,545	0	321,823
2031	3,195,828	3,195,828	2,874,005	2,874,005	0	321,823
2032	3,233,603	3,233,603	2,911,780	2,911,780	0	321,823
2033	3,271,685	3,271,685	2,949,862	2,949,862	0	321,823
2034	3,310,083	3,310,083	2,988,260	2,988,260	0	321,823
2035	3,348,797	3,348,797	3,026,974	3,026,974	0	321,823
Forecasted						
Growth	1.2%	1.2%	0.8%	0.8%		12.3%
Rate						0.8%

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GS-1 Secondary loss factor 1.0851

	GS-1 Secondary Total Excluding DSM & USB	GS-1 Secondary Default Supply	GS-1 Secondary Default Supply Including Future DSM & USB	GS-1 Secondary Choice	GS-1 Secondary Future DSM+USB Energy Savings	Total GS-1 Secondary Including DSM+USB Energy Savings
2003	2,794,459	2,404,061		390,398		
2004	2,806,179	2,687,250	2,687,250	118,929		2,806,179
2005	2,831,105	2,787,422	2,787,422	43,683		2,831,105
2006	2,965,333	2,899,025	2,899,025	66,308		2,965,333
2007	2,996,060	2,922,255	2,922,255	73,805		2,996,060
2008	3,042,807	2,947,597	2,947,597	95,210		3,042,807
2009	2,986,731	2,894,430	2,894,430	92,301		2,986,731
2010	2,973,871	2,883,696	2,883,696	90,175		2,973,871
2011	3,004,086	2,915,383	2,915,383	88,704		3,004,086
2012	3,012,497	2,928,740	2,928,740	83,757		3,012,497
2013	3,006,257	2,932,788	2,932,788	73,469		3,006,257
2014	3,023,863	2,953,558	2,953,558	70,306		3,023,863
2015	3,077,043	3,006,737	2,981,468	70,306	25,269	3,051,773
2016	3,118,677	3,048,372	2,997,833	70,306	50,539	3,068,139
2017	3,162,427	3,092,121	3,016,313	70,306	75,808	3,086,619
2018	3,207,380	3,137,074	3,035,996	70,306	101,077	3,106,302
2019	3,252,995	3,182,690	3,056,343	70,306	126,347	3,126,649
2020	3,298,901	3,228,596	3,076,980	70,306	151,616	3,147,286
2021	3,344,973	3,274,668	3,097,782	70,306	176,885	3,168,088
2022	3,391,004	3,320,698	3,118,544	70,306	202,154	3,188,850
2023	3,436,993	3,366,687	3,139,263	70,306	227,424	3,209,569
2024	3,482,899	3,412,593	3,159,900	70,306	252,693	3,230,206
2025	3,528,764	3,458,458	3,202,434	70,306	256,024	3,272,739
2026	3,574,587	3,504,281	3,248,257	70,306	256,024	3,318,563
2027	3,620,327	3,550,021	3,293,997	70,306	256,024	3,364,303
2028	3,666,109	3,595,803	3,339,779	70,306	256,024	3,410,084
2029	3,711,891	3,641,585	3,385,560	70,306	256,024	3,455,866
2030	3,757,672	3,687,367	3,431,342	70,306	256,024	3,501,648
2031	3,803,578	3,733,273	3,477,248	70,306	256,024	3,547,554
2032	3,849,526	3,779,220	3,523,196	70,306	256,024	3,593,502
2033	3,895,557	3,825,251	3,569,226	70,306	256,024	3,639,532
2034	3,941,670	3,871,364	3,615,340	70,306	256,024	3,685,646
2035	3,987,949	3,917,644	3,661,619	70,306	256,024	3,731,925
Forecasted Growth Rate	1.3%	1.3%	1.0%	0.0%	12.3%	1.0%

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GS-1 Primary Loss factor 1.0554 GS-2 Sub Loss factor 1.0463

GS-1 Primary assumes that usage continues until a known change occurs

GS-2 Substation forecast based on "known changes"

	GS-1 Primary Total	GS-1 Primary Default Supply	GS-1 Primary Choice	GS-2 Substation Total	GS-2 Substation Default Supply	GS-2 Substation Choice
2003	377,727	303,937	73,789	1,887,950	273,108	1,614,842
2004	385,325	310,992	74,334	2,226,943	273,059	1,953,884
2005	399,734	316,653	83,081	2,294,539	342,953	1,951,586
2006	426,753	331,594	95,159	2,252,968	290,040	1,962,929
2007	446,133	351,673	94,460	2,250,194	317,226	1,932,968
2008	425,802	343,644	82,159	2,324,550	324,439	2,000,111
2009	423,747	338,877	84,870	2,070,694	214,705	1,855,989
2010	427,602	341,837	85,765	1,883,732	165,545	1,718,188
2011	444,780	364,127	80,654	1,891,633	214,615	1,677,018
2012	441,203	366,461	74,741	1,889,172	229,072	1,660,100
2013	428,118	359,508	68,609	1,960,489	239,340	1,721,149
2014	439,487	369,501	69,986	1,989,158	243,560	1,745,598
2015	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2016	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2017	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2018	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2019	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2020	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2021	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2022	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2023	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2024	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2025	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2026	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2027	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2028	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2029	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2030	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2031	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2032	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2033	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2034	439,487	369,501	69,986	1,971,368	239,515	1,731,852
2035	439,487	369,501	69,986	1,971,368	239,515	1,731,852
Forecasted Growth Rate	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%

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GS-2 Trans Loss Factor 1.0400 Lighting Loss Factor 1.0851

GS-2 Transmission forecast based on "known changes"

	GS-2 Transmission Total	GS-2 Transmission Default Supply	GS-2 Transmission Choice	Lighting Total	Lighting Default Supply	Lighting Choice
2003	675,095	108,892	566,203	68,478	54,892	13,587
2004	771,020	100,978	670,042	68,457	67,684	773
2005	874,141	122,498	751,642	65,871	61,214	4,657
2006	882,403	163,468	718,934	65,974	61,230	4,744
2007	873,063	155,047	718,016	66,244	61,458	4,786
2008	936,703	154,180	782,523	66,421	61,597	4,824
2009	955,832	151,221	804,611	65,915	61,158	4,757
2010	987,020	151,045	835,975	65,776	61,020	4,756
2011	1,062,994	140,512	922,482	65,363	60,607	4,756
2012	1,118,207	128,098	990,109	65,419	60,678	4,741
2013	1,089,923	138,538	951,385	65,809	61,053	4,756
2014	976,163	137,471	838,691	65,383	60,741	4,642
2015	1,122,819	137,471	985,348	65,383	60,741	4,642
2016	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2017	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2018	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2019	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2020	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2021	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2022	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2023	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2024	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2025	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2026	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2027	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2028	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2029	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2030	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2031	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2032	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2033	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2034	1,211,739	137,471	1,074,268	65,383	60,741	4,642
2035	1,211,739	137,471	1,074,268	65,383	60,741	4,642
Forecasted Growth Rate	0.4%	0.0%	0.4%	0.0%	0.0%	0.0%

**20-Year Load Forecast
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Base Case Forecast**

Irrigation Loss Factor 1.0851

DSM Loss Fa 1.0851

YNP Loss factor
1.0851

	Irrigation Total	Irrigation Default Supply	Irrigation Choice	YNP Default Supply	Load Reduction From Future USB + DSM (MWH)
2003	104,867	104,867	0	20,054	
2004	97,664	97,647	17	20,279	
2005	84,405	84,187	217	20,808	
2006	100,029	99,837	192	20,416	
2007	95,057	94,808	248	20,039	
2008	95,279	95,040	240	20,285	
2009	94,357	94,149	208	20,226	
2010	75,631	75,456	176	21,533	
2011	84,192	83,994	197	20,034	
2012	116,914	116,695	219	20,860	
2013	104,244	104,044	201	20,333	
2014	94,375	94,203	173	22,511	
2015	105,178	104,981	197	22,511	57,033
2016	105,178	104,981	197	22,511	114,066
2017	105,178	104,981	197	22,511	171,099
2018	105,178	104,981	197	22,511	228,131
2019	105,178	104,981	197	22,511	285,164
2020	105,178	104,981	197	22,511	342,197
2021	105,178	104,981	197	22,511	399,230
2022	105,178	104,981	197	22,511	456,263
2023	105,178	104,981	197	22,511	513,296
2024	105,178	104,981	197	22,511	570,329
2025	105,178	104,981	197	22,511	577,848
2026	105,178	104,981	197	22,511	577,848
2027	105,178	104,981	197	22,511	577,848
2028	105,178	104,981	197	22,511	577,848
2029	105,178	104,981	197	22,511	577,848
2030	105,178	104,981	197	22,511	577,848
2031	105,178	104,981	197	22,511	577,848
2032	105,178	104,981	197	22,511	577,848
2033	105,178	104,981	197	22,511	577,848
2034	105,178	104,981	197	22,511	577,848
2035	105,178	104,981	197	22,511	577,848
Forecasted Growth Rate	0.0%	0.0%	0.0%	0.0%	12.3%

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	Historic Default Supply Useage (MWH)	Historic Total Useage (MWH)	Total Projected Annual Energy Including DSM&USB (MWH)	Total Projected Default Supply Including DSM (MWH)	Default Supply Load Change Including Future DSM Impacts	Total Projected Choice (MWH)	Total Projected Default Supply Excluding DSM (MWH)	Default Supply Load Change Excluding Future DSM Impacts
2003	5,510,969	8,170,480						
2004	5,773,429	8,591,428						
2005	5,980,373	8,815,242						
2006	6,245,724	9,094,000						
2007	6,334,134	9,158,449						
2008	6,437,015	9,402,228						
2009	6,278,039	9,120,911						
2010	6,218,232	8,953,396						
2011	6,399,572	9,173,517						
2012	6,411,802	9,225,599						
2013	6,460,644	9,280,238						
2014	6,491,617	9,221,021						
2015			9,380,428	6,518,096	0.4%	2,862,331	6,575,129	1.3%
2016			9,486,572	6,535,321	0.3%	2,951,251	6,649,386	1.1%
2017			9,506,309	6,555,057	0.3%	2,951,251	6,726,156	1.2%
2018			9,527,618	6,576,366	0.3%	2,951,251	6,804,498	1.2%
2019			9,549,942	6,598,691	0.3%	2,951,251	6,883,855	1.2%
2020			9,572,891	6,621,640	0.3%	2,951,251	6,963,837	1.2%
2021			9,596,340	6,645,088	0.4%	2,951,251	7,044,318	1.2%
2022			9,620,053	6,668,802	0.4%	2,951,251	7,125,065	1.1%
2023			9,644,042	6,692,790	0.4%	2,951,251	7,206,086	1.1%
2024			9,668,245	6,716,993	0.4%	2,951,251	7,287,322	1.1%
2025			9,742,227	6,790,975	1.1%	2,951,251	7,368,823	1.1%
2026			9,823,985	6,872,733	1.2%	2,951,251	7,450,581	1.1%
2027			9,905,966	6,954,715	1.2%	2,951,251	7,532,562	1.1%
2028			9,988,296	7,037,044	1.2%	2,951,251	7,614,892	1.1%
2029			10,070,924	7,119,672	1.2%	2,951,251	7,697,520	1.1%
2030			10,153,858	7,202,606	1.2%	2,951,251	7,780,454	1.1%
2031			10,237,224	7,285,972	1.2%	2,951,251	7,863,820	1.1%
2032			10,320,947	7,369,695	1.1%	2,951,251	7,947,543	1.1%
2033			10,405,059	7,453,808	1.1%	2,951,251	8,031,655	1.1%
2034			10,489,571	7,538,319	1.1%	2,951,251	8,116,167	1.1%
2035			10,574,564	7,623,313	1.1%	2,951,251	8,201,160	1.0%
Forecasted Growth Rate			0.6%	0.8%		0.2%	1.1%	