

ERCOT

2007 Strategic Financial Plan & Budget Proposal

Board of Directors

November 14, 2006

AGENDA

- Budget Preparation
- Policy Considerations
- Key Assumptions
- Proposed Budget
- Sensitivity
- Finance and Audit Committee Recommendation

2007 Budget Preparation and Review

- **Process started April 17, 2006**
- **Rigorous review process**
 - Internal
 - Line managers
 - ERCOT officers
 - Budget group comparisons
 - External
 - Public review and feedback (September 26, 2006)
 - Six Finance and Audit Committee Updates/Reviews
 - Preview with Board of Directors during October Meeting
 - Feedback incorporated into proposed budget

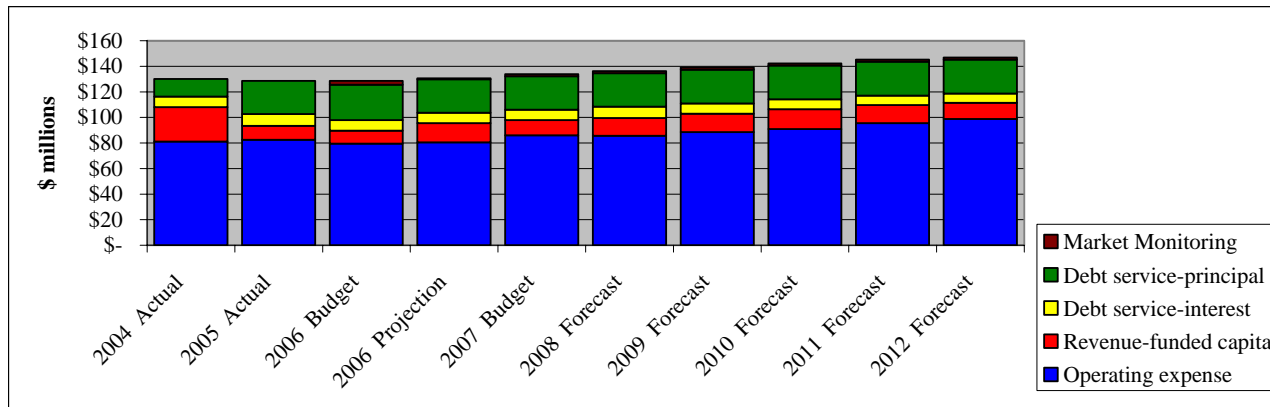
Policy Considerations

POLICY AREA	MANIFESTATION	RATIONALE	IMPACT
Zonal / Nodal project cost allocation	Accumulate and account for incurred projects costs separately	Fund incurred project costs from the appropriate fee/surcharge	Designation of project costs based on market requirements and support.
Use of leverage	Debt funding for portion of capital expenditures	Addition of interest cost is warranted due to benefit derived from holding fee steady over time and matching of cost with benefit.	Based on a 3 year average from 2004 – 2006 projected, approximately \$0.0283 in on-going fee is utilized to pay interest. If repayment of principal is deferred, unrestricted net assets will fall.
Balance sheet – unrestricted net assets	Timing differences resulting from asset lives and associated depreciation compared to debt maturity profile	Small negative balances are acceptable given that they do not grossly impede the company's ability to obtain debt financing and thus maintain financial flexibility	Current projected negative unrestricted net asset balance peaks at \$(26.1) million at year-end 2006 then trends positive post 2007. Note, includes impact of \$263M wholesale market redesign program funded via a surcharge through 2012.
Over funding of revenue requirements	Collections via the ERCOT System Administration Fee are greater than revenue requirements	Given policy issues regarding leverage and net unrestricted assets, using favorable variances to reduce outstanding debt is prudent.	Incrementally lower outstanding debt and higher net unrestricted net assets provides greater ability to fund unbudgeted, priority initiatives.
Under funding of revenue requirements	Collections via the ERCOT System Administration Fee are insufficient to cover revenue requirements	In recognition of the complexity and cost of changing ERCOT fees, it is efficient to manage reasonable unfavorable budget variances through cost control and short-term borrowing.	Heightened pressure to identify cost efficiencies or incrementally higher outstanding debt and lower net unrestricted net assets.
Reliability Organization	New operating costs are incurred	Designation of incurred expenses as statutory and/or non-statutory based on the Federal Power Act	Statutory functions funded via newly created Regional Entity surcharge and non-statutory functions funded via System Administration fee.
High level of system changes and project activity	More projects requested than are undertaken, capital rationing, and project prioritization	Reflects ERCOT's participatory governance model and heightens commitment and creativity to improve the market. Cognizant of limits on ERCOT's ability to successfully implement system projects.	Increase ERCOT asset values, and depending on how projects are funded, have incremental impact on outstanding debt and unrestricted net assets.

2007 Key Budget Assumptions

- Operating expenses
 - Consistent with historical spending
 - Continued emphasis on monitoring and controlling operating costs
- Debt service
 - Existing debt amortized per agreement
 - New debt amortized consistent with expected average asset lives
 - Interest rates consistent with debt agreements or based on long-term average LIBOR
- \$44 million in project expenditures
 - \$12 million revenue-funded
 - \$32 million debt financed
 - Temporarily modify 2007 and 2008 debt funding ratio
- Energy consumption growth at 3.2 percent over projected 2006 level
- Project spending reduced by \$14 million if TNMIP Zonal/Nodal dependencies remain with the TNMIP program

Proposed Budget and Fee

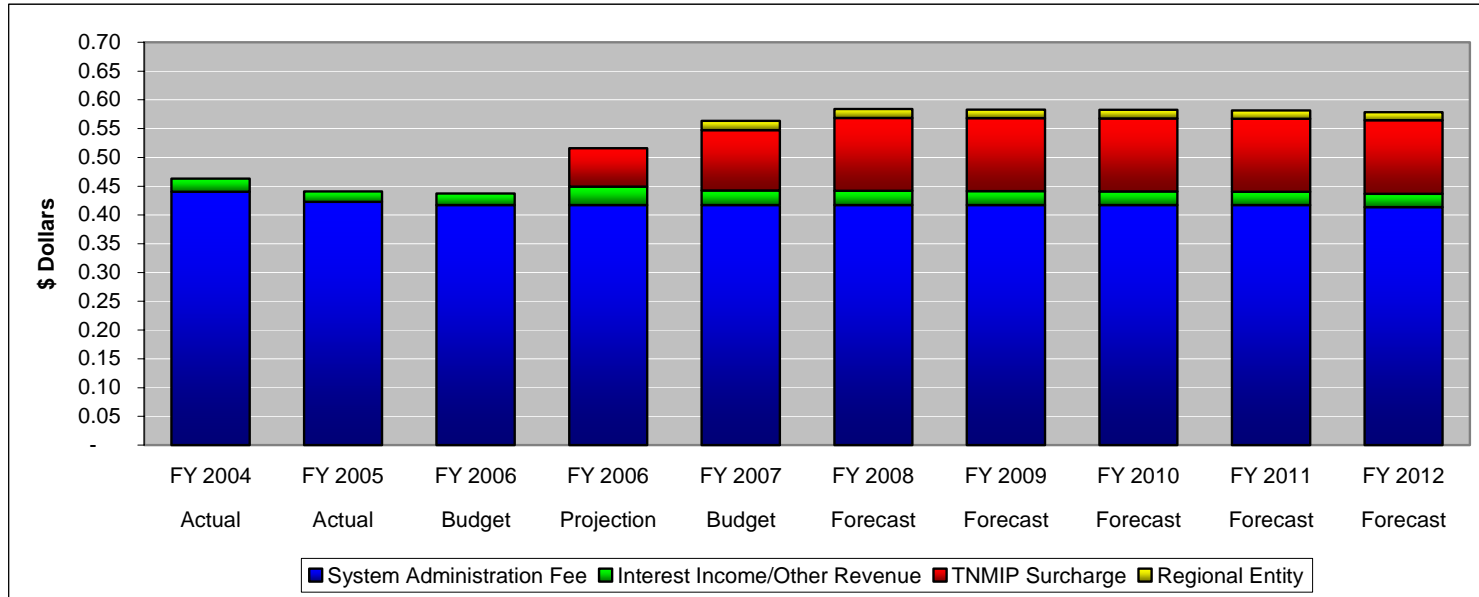


	2004 Actual	2005 Actual	2006 Budget	2006 Projection	2007 Budget	2008 Forecast	2009 Forecast	2010 Forecast	2011 Forecast	2012 Forecast
(\$Millions)										
Operating expense	81.0	82.5	79.5	80.6	86.0	85.6	88.6	90.8	95.5	98.7
Revenue-funded capital	26.9	10.9	10.0	15.0	12.0	14.0	14.4	15.6	14.2	12.8
Debt service-interest	8.4	9.2	8.4	8.2	8.0	8.8	7.9	7.7	7.4	7.2
Debt service-principal	13.6	26.1	27.6	26.1	26.1	26.1	26.4	26.4	26.4	26.4
Market Monitoring	0.0	0.0	3.0	0.8	1.7	1.8	1.7	1.7	1.7	1.7
Total revenue requirement	130.0	128.7	128.5	130.6	133.8	136.2	139.0	142.2	145.2	146.8
GWh	288.3	298.8	301.9	303.1	312.7	318.6	325.2	332.9	340.1	346.7
System Administration Fee	\$0.44	\$0.42	\$0.4171	\$0.4171	\$0.4171	\$0.4171	\$0.4171	\$0.4171	\$0.4171	\$0.4138
Debt Outstanding	178.4	160.6	149.0	149.5	154.1	134.9	130.2	127.2	122.1	114.9
Total Capital Spending	46.8	16.4	25.0	34.3	44.0	21.0	36.0	39.0	35.5	32.0
(\$ / MWh)										
Operating expense	0.27	0.27	0.2582	0.2573	0.2680	0.2619	0.2658	0.2664	0.2743	0.2782
Revenue-funded capital	0.09	0.04	0.0325	0.0477	0.0374	0.0429	0.0432	0.0458	0.0408	0.0361
Debt service-interest	0.03	0.03	0.0272	0.0262	0.0250	0.0269	0.0238	0.0226	0.0213	0.0204
Debt service-principal	0.05	0.09	0.0896	0.0835	0.0815	0.0800	0.0792	0.0774	0.0758	0.0744
Market Monitoring	0.00	0.00	0.0097	0.0024	0.0051	0.0054	0.0051	0.0050	0.0049	0.0048
Total revenue requirement	\$0.44	\$0.42	\$0.4171	\$0.4171	\$0.4171	\$0.4171	\$0.4171	\$0.4171	\$0.4171	\$0.4138

Note:

- (1) Other revenue will supplement System Administration Fee to meet total funding requirement.
- (2) Revenues collected in excess of funding requirement are utilized to reduce debt funding.

Estimate of Total Fees

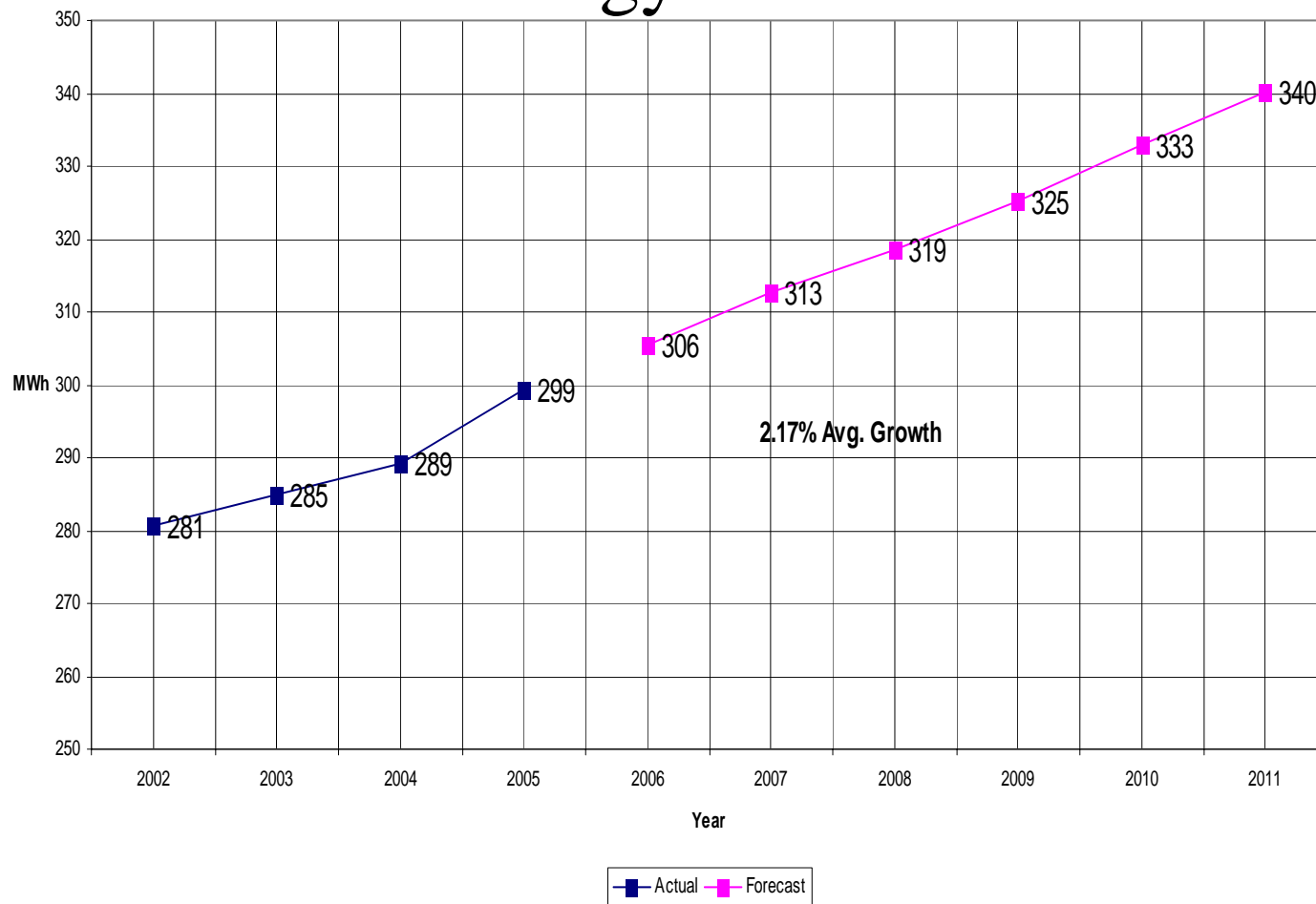


	Actual FY 2004	Actual FY 2005	Budget FY 2006	Projection FY 2006	Budget FY 2007	Forecast FY 2008	Forecast FY 2009	Forecast FY 2010	Forecast FY 2011	Forecast FY 2012
System Administration Fee	0.44	0.42	0.4171	0.4171	0.4171	0.4171	0.4171	0.4171	0.4171	0.4138
Interest Income/Other Revenue	0.02	0.02	0.0204	0.0323	0.0254	0.0250	0.0244	0.0239	0.0234	0.0231
TNMIP Surcharge	-	-	-	0.0663	0.1052	0.1265	0.1266	0.1266	0.1267	0.1274
Regional Entity	-	-	-	-	0.0156	0.0156	0.0152	0.0149	0.0146	0.0143
Total	0.46	0.44	0.4375	0.5157	0.5633	0.5842	0.5834	0.5825	0.5818	0.5787

Notes:

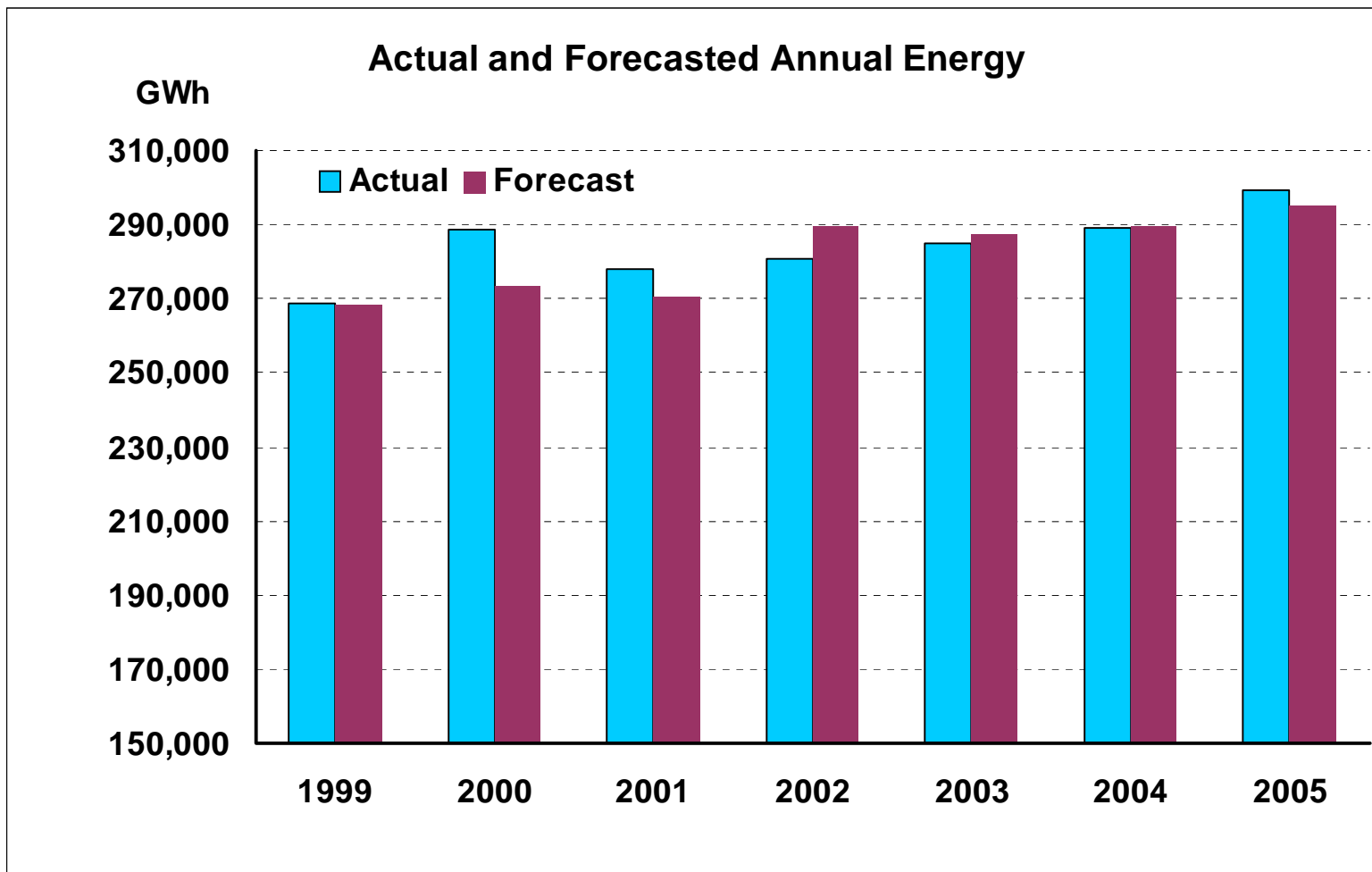
- (1) TNMIP cost is expected to be fully recovered by 2012 and the surcharge eliminated in 2013.
- (2) TNMIP surcharge is approximation that will be adjusted consistent with the final outcome of the TNMIP Fee Filing.

Energy Forecast



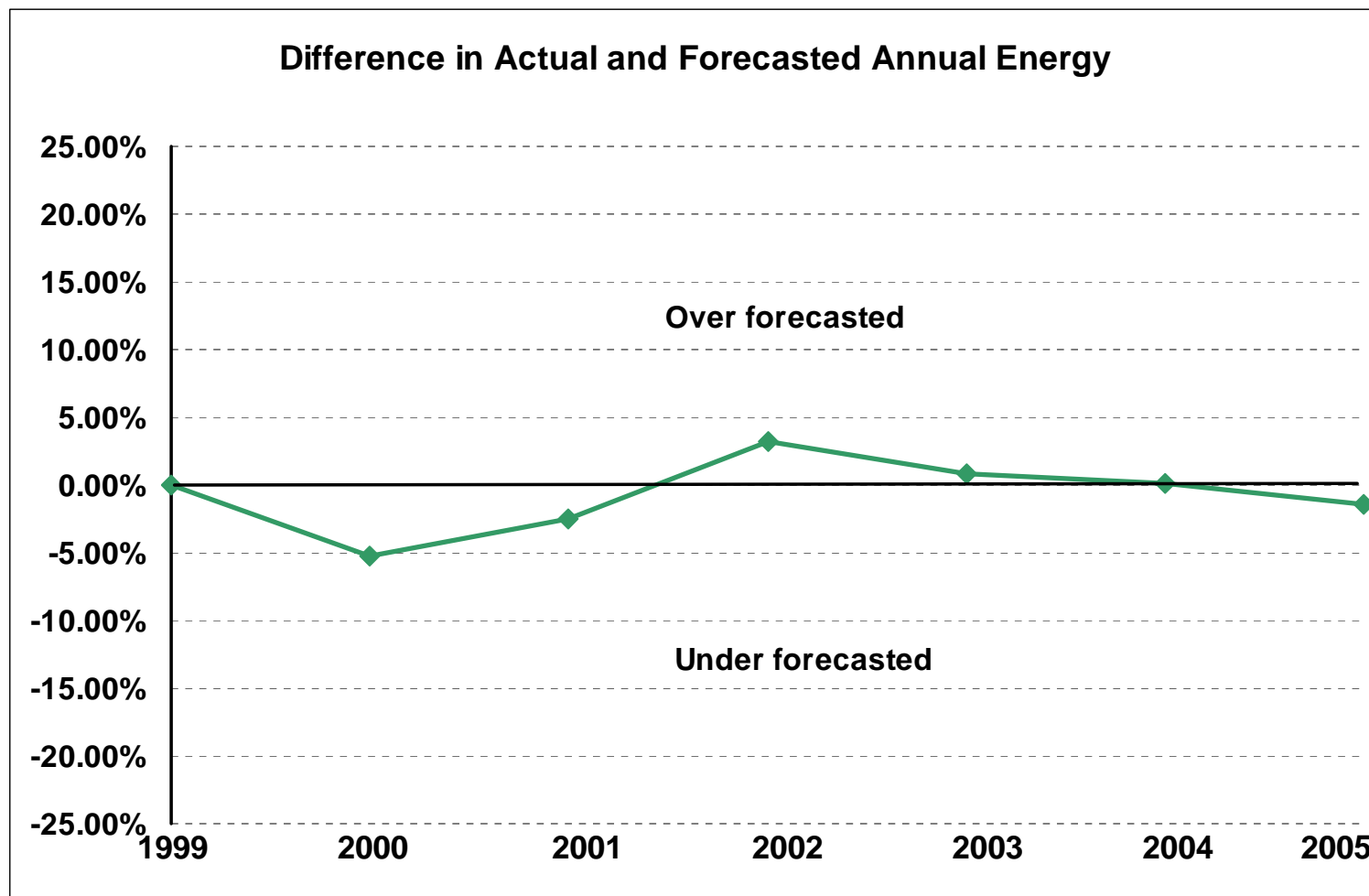
*Source: 2006 Report on the Capacity, Demand, & Resources for the ERCOT Region
Board of Directors, June, 2006 (See Appendix)*

Forecast Performance



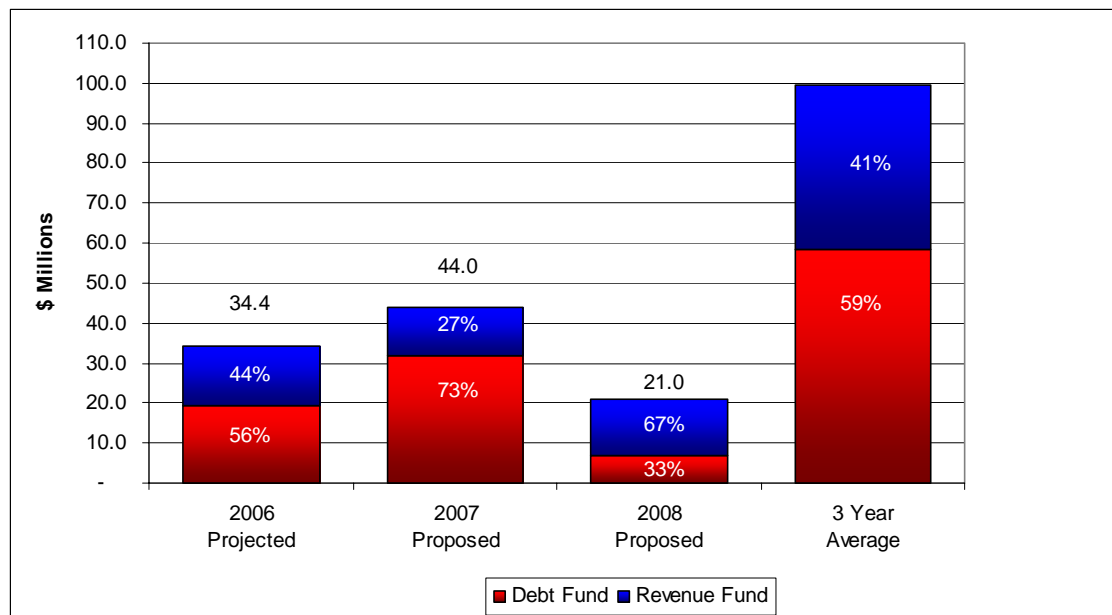
Source: 2006 Report on the Capacity, Demand, & Resources for the ERCOT Region Board of Directors, June, 2006 (See Appendix)

Forecast Performance



Source: 2006 Report on the Capacity, Demand, & Resources for the ERCOT Region Board of Directors, June, 2006 (See Appendix)

Debt Funding



- To accommodate Zonal/Nodal dependent projects, the 2007 proposed capital budget includes additional spending of \$14 million.
- ERCOT's Targeted Debt Funding Ratio is 60% Debt and 40% Revenue.
- A temporary annual modification in 2007 and 2008 with the 3 year average remaining consistent with the Financial Standard is proposed.
- Requirement to restore the targeted equity funding ratio by 2009

Sensitivity and Risks

Category	\$.01/MWh Equivalent
Operating cost	+ - \$3 million
Electricity consumption	+ - 7 GWh (2.2% variance)
Revenue funded capital (assumed at 40%)	+ - \$7.5 million

- All contingencies eliminated
- Bank facilities and working capital used to manage unanticipated variances

2007 Strategic Financial Plan and Budget Alternatives

	Alternative 1 (\$14M TNMIP Zonal/Nodal project dependencies included)	Alternative 2 (\$14M TNMIP Zonal/Nodal project dependencies excluded)
System Administration Fee	0.4171	0.4171
Revenue Requirement	133.8	133.8
Total Spending Authorization	165.74	151.78
Debt Funding Ratio (Debt % : Revenue %)	73% : 27%	60% : 40%

Note:

Please refer to Board Agenda Item 7A for the Decision Template


APPENDIX

Revenue Requirement

	Actual FY 2004	Actual FY 2005	Budget FY 2006	Projection FY 2006	Budget FY 2007	Forecast FY 2008	Forecast FY 2009	Forecast FY 2010	Forecast FY 2011	Forecast FY 2012
ERCOT O&M Expense										
<i>Labor & Benefits</i>	\$ 44,646	\$ 55,004	\$ 59,313	\$ 63,034	\$ 72,988	\$ 75,908	\$ 67,104	\$ 68,446	\$ 69,815	\$ 71,211
<i>Contra-Labor to Capital Projects</i>	(5,486)	(5,599)	(6,791)	(5,371)	(7,374)	(5,586)	(7,188)	(6,909)	(6,542)	(6,803)
<i>Contra-Labor to TNMIP</i>	-	-	-	(6,454)	(13,777)	(17,647)	-	-	-	-
<i>Subtotal - Labor & Benefits</i>	39,160	49,405	52,523	51,209	51,838	52,676	59,916	61,536	63,273	64,408
<i>Tools, Equipment, & Supplies</i>	1,421	1,166	1,294	1,158	1,204	1,227	1,249	1,272	1,296	1,322
<i>Hardware & Software Expenses</i>	6,125	7,189	7,219	7,461	9,372	9,465	9,484	9,513	9,551	9,570
<i>Outside Services</i>	18,819	9,268	7,377	8,783	9,447	8,242	7,925	7,992	7,744	7,944
<i>Special Audits</i>	34	1,752	-	-	-	-	-	-	-	-
<i>Utilities, Maintenance & Facilities</i>	6,421	6,591	6,090	6,617	7,245	7,383	7,516	7,651	7,796	7,952
<i>Employee Expenses</i>	1,737	1,396	1,401	1,355	1,860	1,896	1,930	1,965	2,002	2,042
<i>Insurance</i>	1,585	1,699	1,762	1,656	1,758	1,792	1,824	1,857	1,892	1,930
<i>Property Taxes</i>	1,198	1,016	1,043	652	1,116	1,136	1,225	1,300	1,340	1,362
<i>NERC Dues</i>	880	914	968	984	968	968	968	968	968	968
<i>Other</i>	3,639	2,055	715	711	1,150	1,117	1,137	1,158	1,180	1,203
<i>Subtotal - O&M Expenses</i>	81,020	82,451	80,391	80,587	85,958	85,901	93,173	95,210	97,040	98,699
Less: Fee Reduction/Cost Reduction TBD			(858)			(350)	(4,600)	(4,380)	(1,560)	-
<i>Subtotal - O&M Expenses</i>	81,020	82,451	79,533	80,587	85,958	85,551	88,573	90,830	95,480	98,699
Debt service - interest expense	8,426	9,189	8,375	8,201	8,031	8,793	7,946	7,690	7,425	7,233
Debt service - principal payments	13,637	26,137	27,587	26,137	26,137	26,137	26,387	26,387	26,387	26,387
Revenue-funded capital	26,925	10,880	10,000	14,950	12,000	14,000	14,400	15,600	14,200	12,800
Total Revenue Requirement	130,008	128,657	125,495	129,875	132,126	134,481	137,306	140,507	143,492	145,119
Less Other Revenue	2,615	2,050	1,890	2,300	2,567	2,567	2,567	2,567	2,567	2,567
Less Interest Income	347	250	672	1,900	789	789	789	789	789	789
Plus:										
<i>Market Monitoring</i>	-	-	3,000	750	1,650	1,750	1,700	1,700	1,700	1,700
Revenue Rqmt from System Admin Fee	\$ 127,046	\$ 126,357	\$ 125,933	\$ 126,425	\$ 130,420	\$ 132,875	\$ 135,650	\$ 138,851	\$ 141,836	\$ 143,463
GWh	288,291	298,782	301,917	303,105	312,680	318,554	325,212	332,867	340,076	346,698
% GWh Growth	1.1%	3.6%	1.0%	1.4%	3.2%	1.9%	2.1%	2.4%	2.2%	1.9%
ERCOT System Administration Fee	0.44	\$ 0.42	\$ 0.4171	\$ 0.4171	\$ 0.4171	\$ 0.4171	\$ 0.4171	\$ 0.4171	\$ 0.4171	\$ 0.4138
Capital Spending - Revenue Funded	26,925	10,880	10,000	14,950	12,000	14,000	14,400	15,600	14,200	12,800
Capital Spending - % Revenue Funded	58%	66%	40%	44%	27%	67%	40%	40%	40%	40%
Capital Spending - Debt Funded	19,839	5,485	15,000	19,330	31,960	7,040	21,600	23,400	21,300	19,200
Capital Spending - % Debt Funded	42%	34%	60%	56%	73%	33%	60%	60%	60%	60%
Total Capital Spending	46,764	16,365	25,000	34,280	43,960	21,040	36,000	39,000	35,500	32,000
Total ERCOT Spending Authorization	149,847	134,142	143,495	149,955	165,736	143,271	160,606	165,607	166,492	166,019
Debt Outstanding at Year-end	\$ 178,363	\$ 160,634	\$ 149,039	\$ 149,497	\$ 154,132	\$ 134,938	\$ 130,151	\$ 127,164	\$ 122,077	\$ 114,890

Committee Briefs: PMO: 2007 Capital Budget Adjustment Impact

David Troxtell

<u>CART</u>	<u>Original</u>	<u>Revised</u>	<u>----- Reasons -----</u>
CO	\$ 5.75M	\$ 4.25M	Acceleration of \$0.25M from 2007, 2 deferrals to 2008, 1 merge with IO
IO	\$16.00M	\$12.75M	Acceleration of \$2.50M from 2007, reduction in estimate for Info Lifecycle
MO	\$ 2.06M	\$ 1.50M	TML Phase 3 reduction
RO	\$ 7.66M	\$ 7.00M	Deferral of portions of low ranked projects to 2008
ERCOT			
SO	\$ 4.91M	\$ 4.50M	Acceleration of \$0.25M from 2007, reduction in Operations Support Study
est.			
	\$36.38M	\$30.00M	Subtotal (initial Zonal budget reduction)
Nodal	\$ 0.00M	\$14.00M	Zonal/Nodal Dependencies
 Total	\$36.38M	\$44.00M	



2006 Report on the
Capacity, Demand, & Resources
for the ERCOT Region

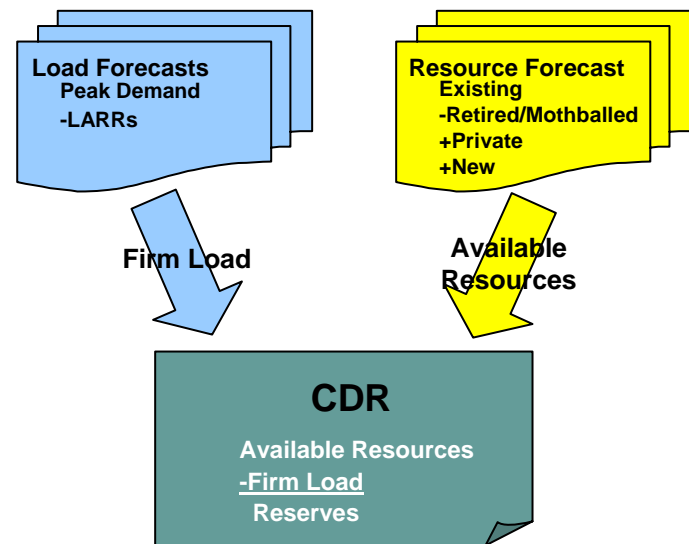
Board of Directors
June 1, 2006

Bill Bojorquez
System Planning

Elements of the CDR Report

In order to adequately prepare the CDR, ERCOT planners have compiled the best information available with regards to forecasted load demands and available resources.

- Load Forecasts
- LAARs
- Existing Resources
- Wind Generation
- Mothballed Units
- RMR Units
- Private Networks
- New Resources



The CDR is based on a single “snapshot” in time. Changes will, and do, occur on a continuous basis and may not be reflected in the current CDR.

GENERATION INTERCONNECTION ACTIVITY

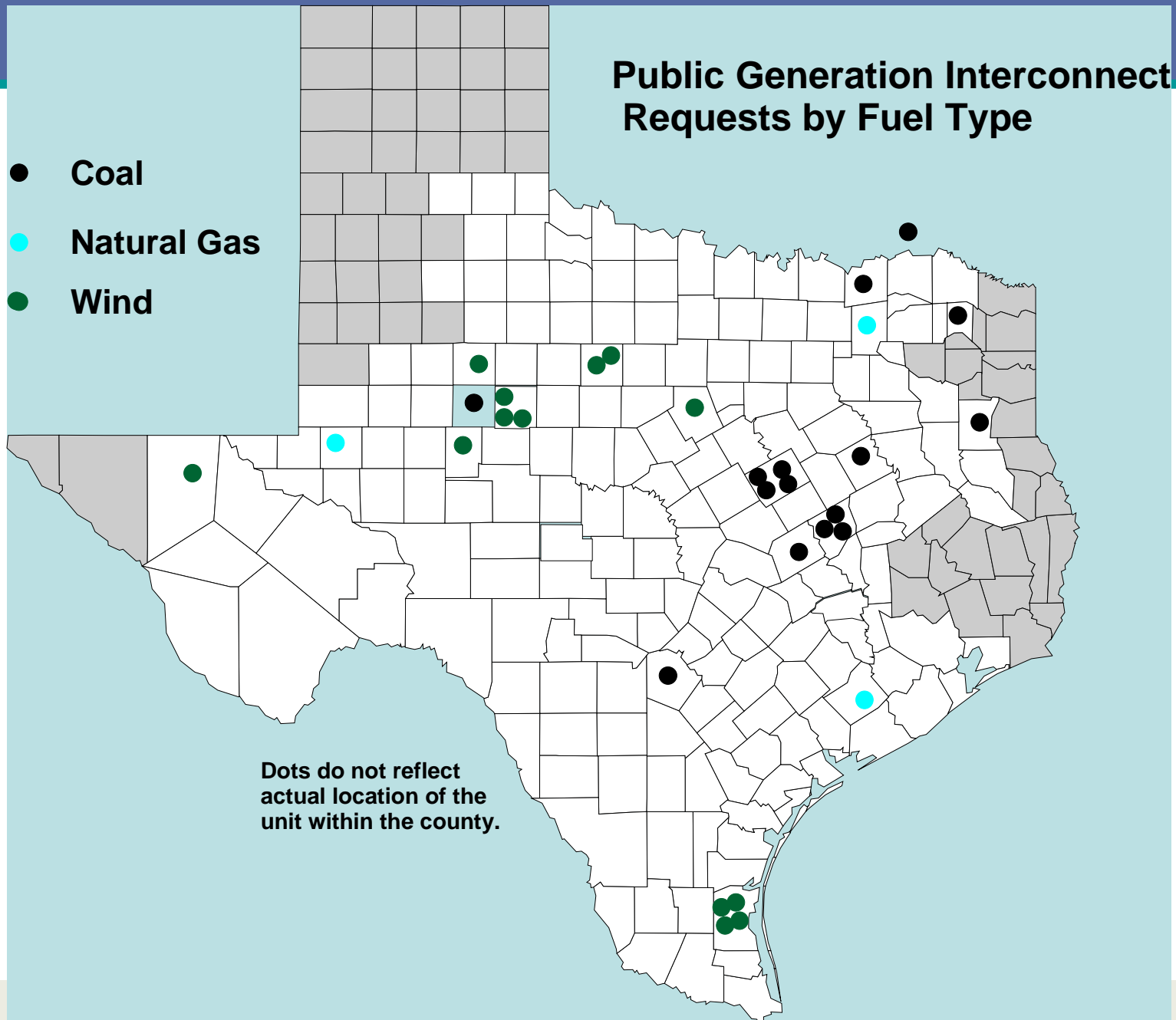
Currently tracking 99 active generation interconnection or change requests

	North	South	West	Total
Capacity for Grid, MW	14,550	9,730	10,779	35,059
Includes Wind, MW	480	2,930	9,237	12,647

Fuel Type	Not Public	Public	Total
Coal	3,992	11,245	15,237
Gas	3,900	2,300	6,200
Other	975	0	975
Wind	10,002	2,645	12,647
Grand Total	18,869	16,590	35,059

Public Generation Interconnect Requests by Fuel Type

- Coal
- Natural Gas
- Wind



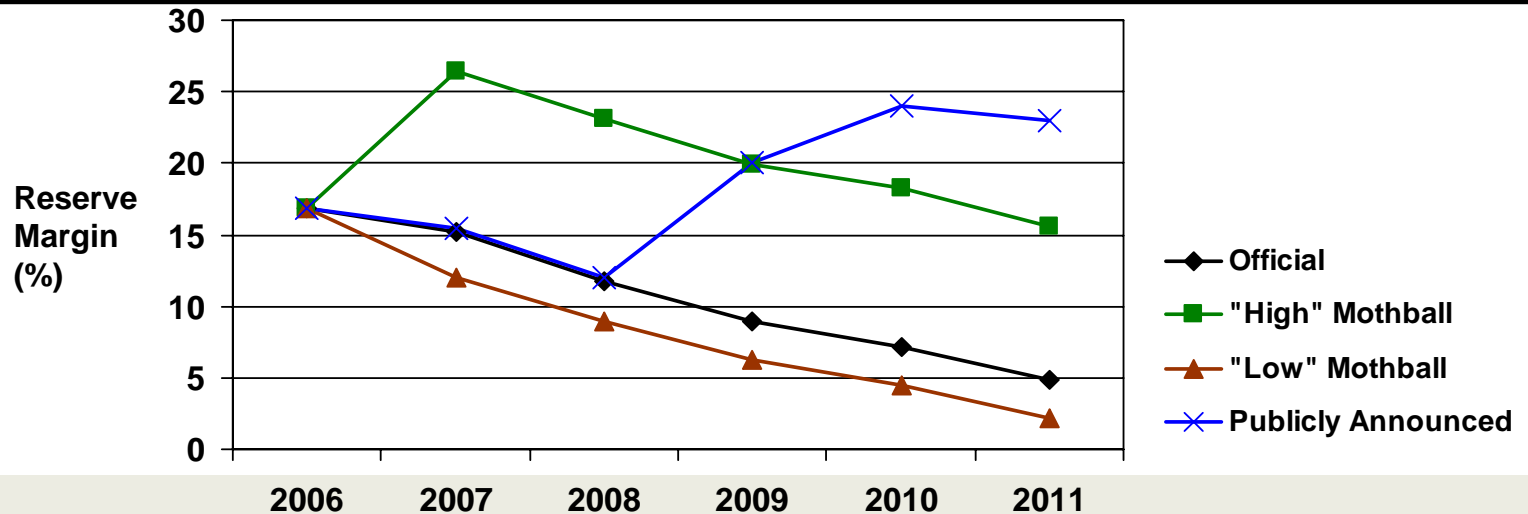
Capacity, Demand, & Reserves in the ERCOT Region for 2006-2011

	2006	2007	2008	2009	2010	2011
<i>Load Forecast (MW):</i>						
Total Summer Peak Demand	61,656	63,222	64,318	65,950	67,548	69,034
Less LAARs Serving as Responsive	(1,112)	(1,112)	(1,112)	(1,112)	(1,112)	(1,112)
Firm Load Forecast (MW):	60,544	62,110	63,206	64,838	66,436	67,922
<i>Resources (MW):</i>						
Installed Capacity	58,831	58,831	58,831	58,831	58,831	58,831
Less Retiring Units	0	0	(393)	(451)	(451)	(451)
Capacity from Private Networks	6,419	6,575	6,279	6,279	6,279	6,279
2.6% of Wind Generation	62	62	62	62	62	62
RMR Under Contract	267	170	170	170	0	0
50% of Asynchronous Ties	428	553	553	553	553	553
Switchable Units	2,645	2,810	2,810	2,810	2,810	2,810
Mothballed Units Available	2,104	1,997	1,790	1,787	1,783	1,820
Planned Units (Wind w/ IA -- 2.6%)	0	25	38	38	38	38
Planned Units (Fossil w/ IA)	0	550	550	550	1,300	1,300
Total Resources (MW):	70,756	71,573	70,690	70,628	71,205	71,242
OFFICIAL RESERVE MARGIN:	16.9%	15.2%	11.8%	8.9%	7.2%	4.9%

Alternate Scenarios for 2006 CDR

(Summer)

	2006	2007	2008	2009	2010	2011
Firm Load Forecast (MW):	60,544	62,110	63,206	64,838	66,436	67,922
Total Resources (MW):	70,756	71,573	70,690	70,628	71,205	71,242
RESERVE MARGIN:	16.9%	15.2%	11.8%	8.9%	7.2%	4.9%
"High" Reserve Margin <i>(all Mothballed Units Return)</i>	16.9%	26.4%	23.1%	19.9%	18.2%	15.6%
"Low" Reserve Margin <i>(no Mothballed Units Return)</i>	16.9%	12.0%	9.0%	6.2%	4.5%	2.2%
Reserve Margin w/ Publicly Announced Thermal Units	16.9%	15.4%	12.0%	20.0%	24.0%	23.0%



In examining the 2006 CDR, ERCOT staff has identified several key issues for to aid in understanding this report.

- **Projected annual demand growth has been increased from 1.8% to 2.3% based on updated social-economic data for Texas.**
- **ERCOT staff was unable to reconcile load demands which may be demand or price responsive, other than LAARs.**
- **Private Use Networks data was implemented for the first time.**
- **The TAC has charged the Generation Adequacy Task Force with reviewing all of the assumptions in the CDR calculation.**



ERCOT Demand and Energy “Long-Term” Forecasting

- **1999 to 2004:** Simple trend from historical peak and energy data applying engineering judgment.
- **2005 to current:** Econometric techniques that consider long-term economic growth trends, weather profiles, and calendar variables that capture the hourly, weekly, monthly and yearly load patterns.

1. Develop equations describing:

- Monthly Energy
 - Different equation for each season
- Hourly Load Shape
 - Different equation for each season

2. Insert forecasted values for variables into equations

- Except no economic growth for Load Shape equations

3. Produce hourly energy forecast by putting forecasted monthly energy under projected hourly load shape

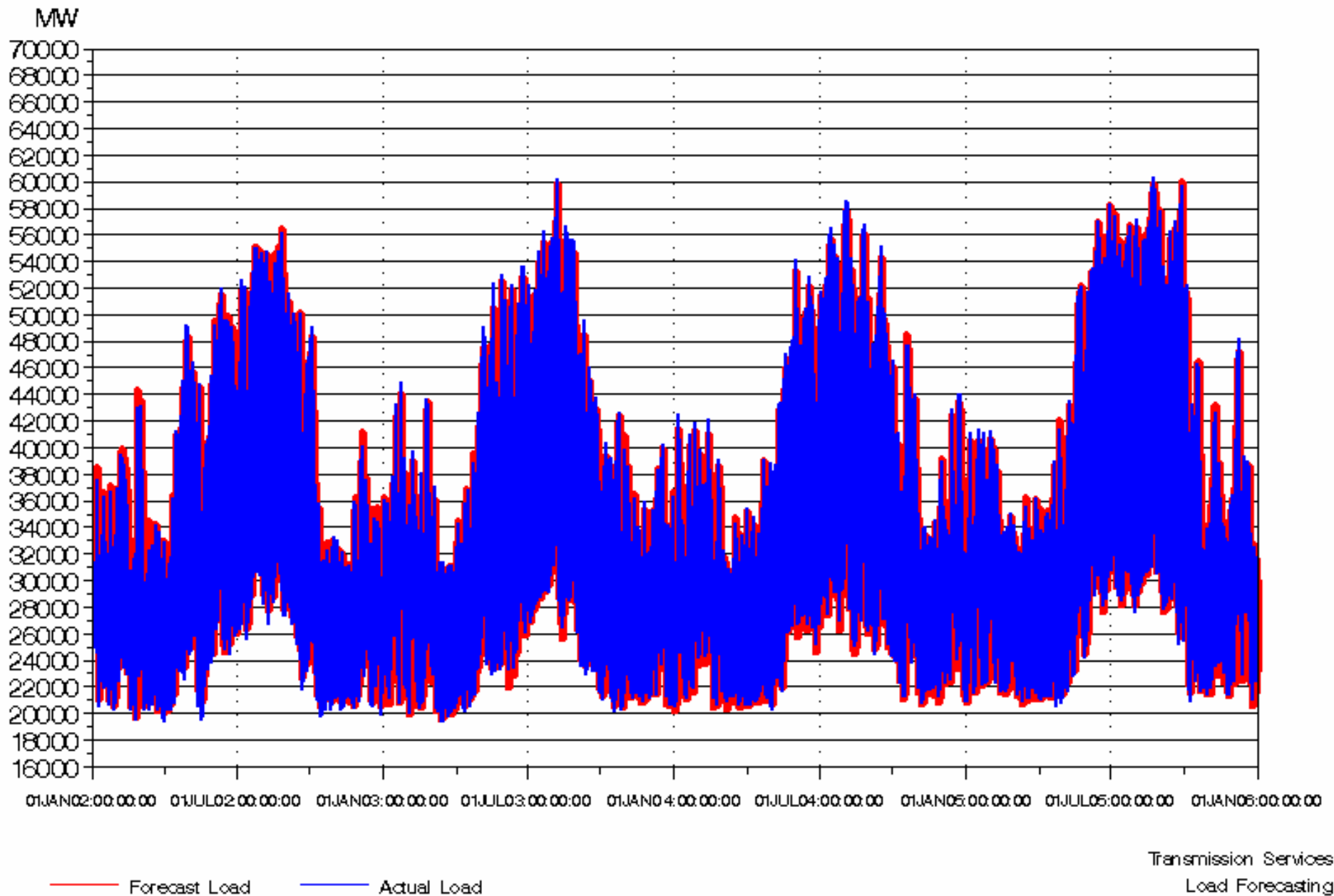
Load_{hour i} = f {Population, Income, Hour of Day Indicators, Weekday/Weekend, Max Temps, Lagged Temps, Heat Index, Non-Linear Temp Components (square and cube), Temp Gains (diff between daily High and Low temps), Temp Build-up, Dew Point, Dark Fractions, Month*Temp Interactions}

Energy_{Month i} = f {CDD, HDD, Income, Population, Monthly Indicators}

ERCOT Hourly Load Shape

Historical Fit (2002 – 2005)

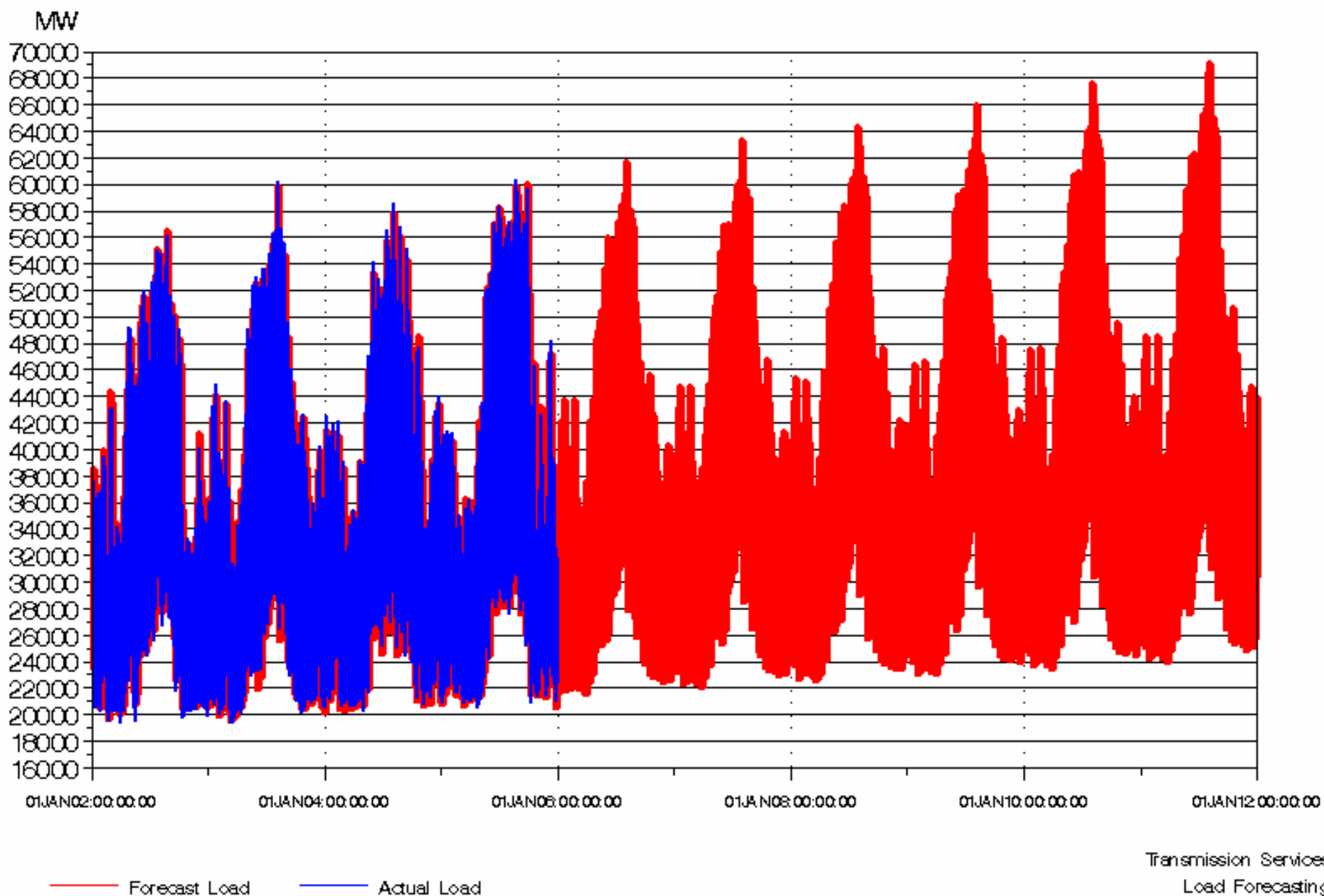
February 23, 2006



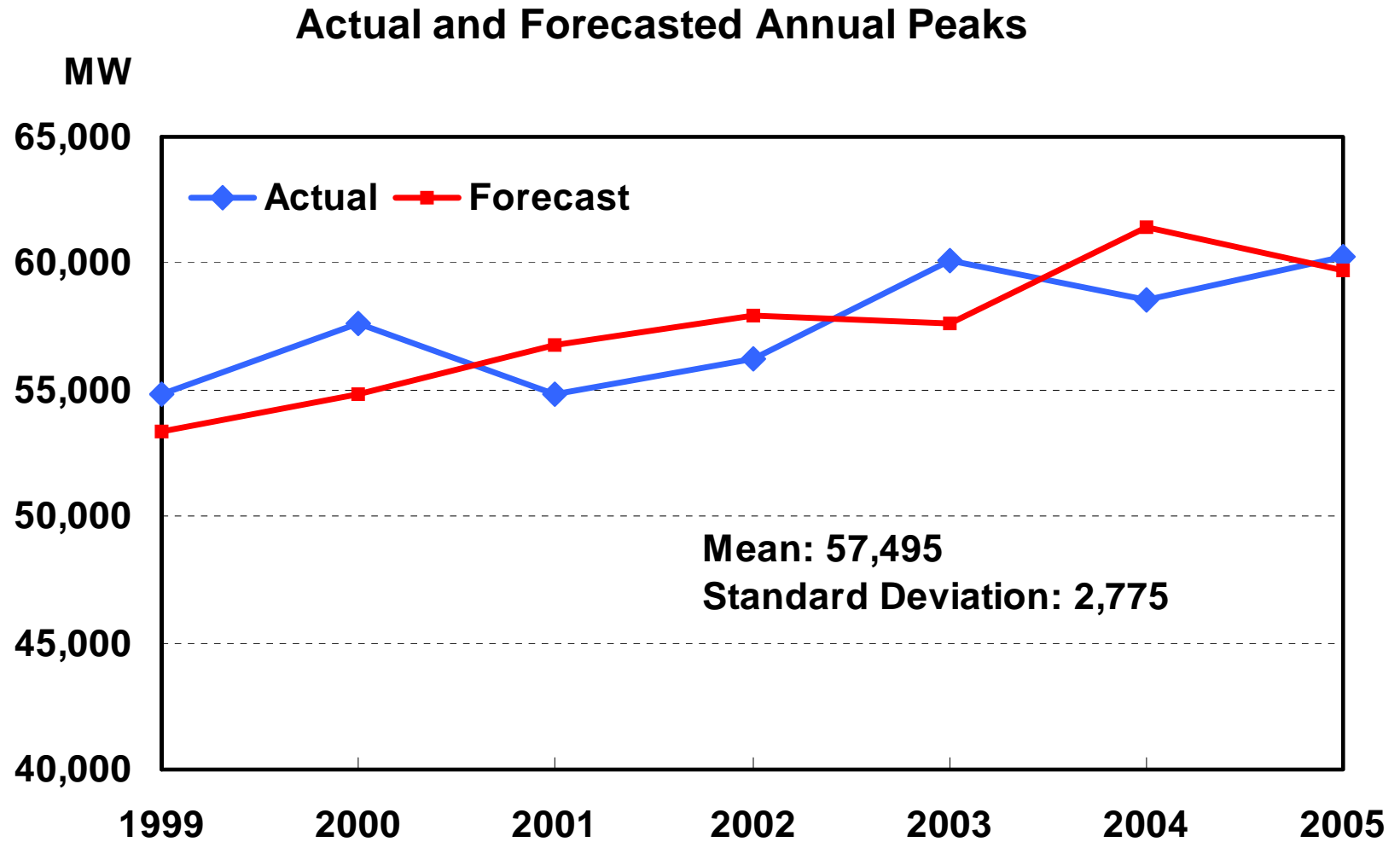
ERCOT Hourly Load Shape

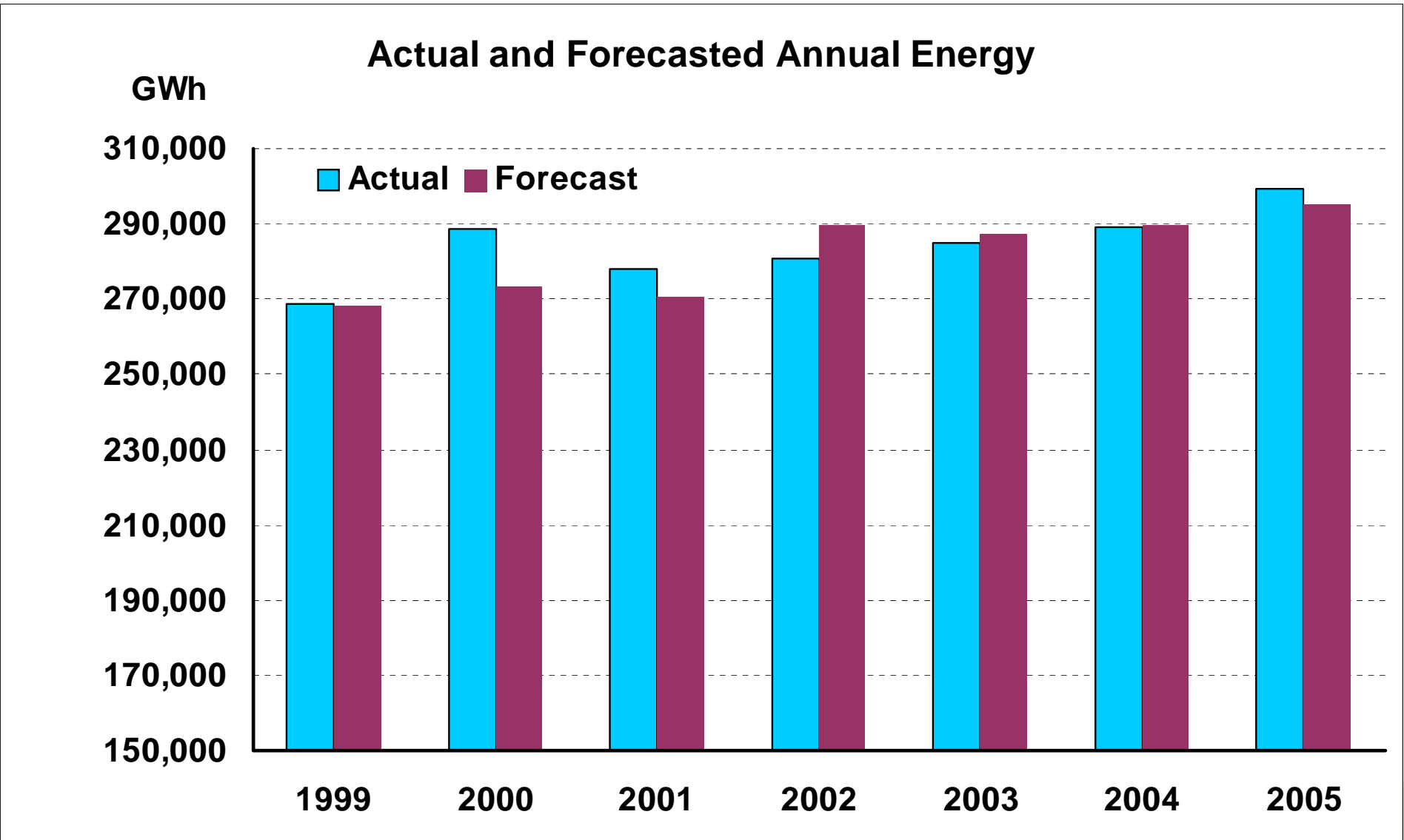
Historical Fit/Forecast (2002 - 2012)

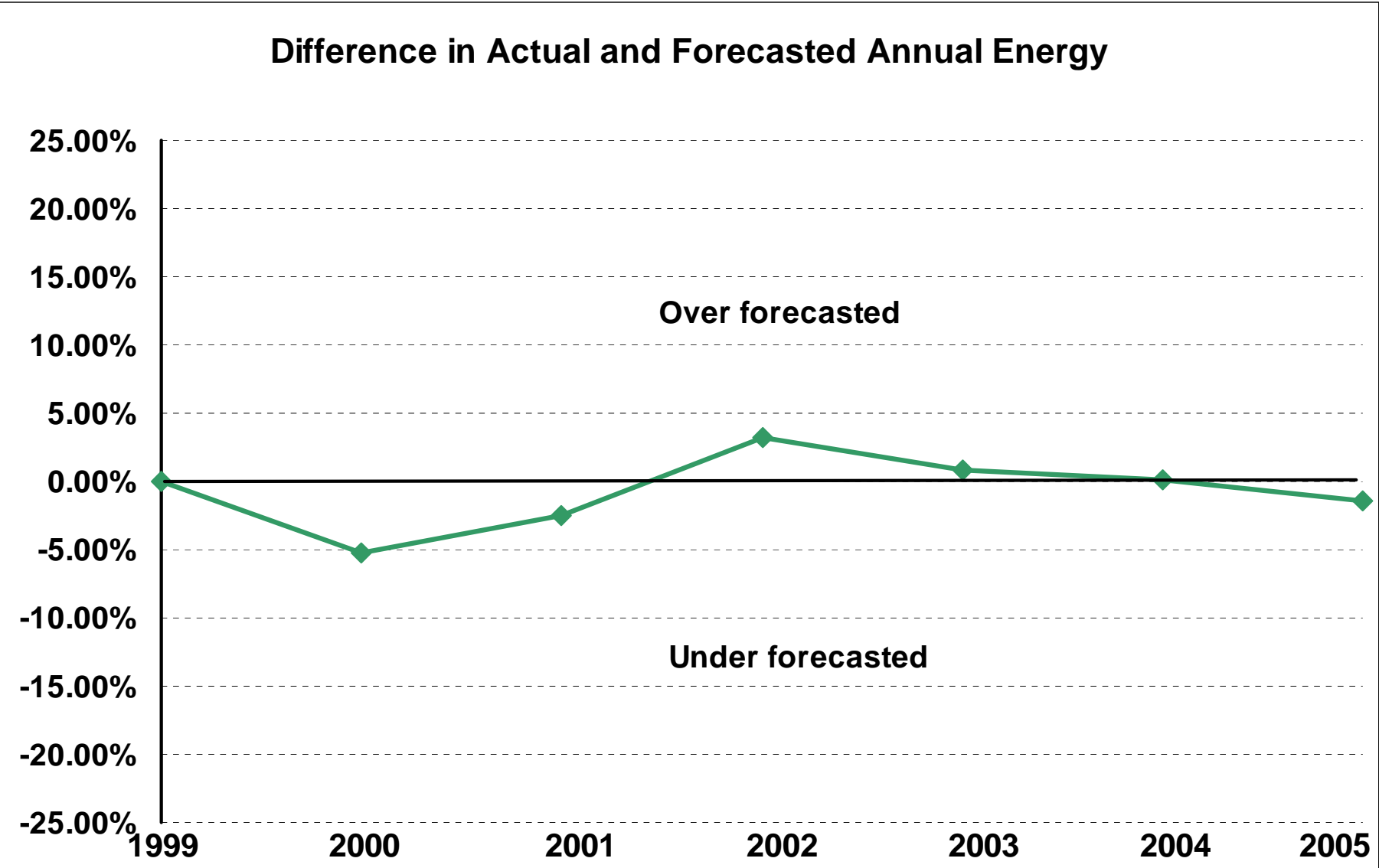
February 23, 2006



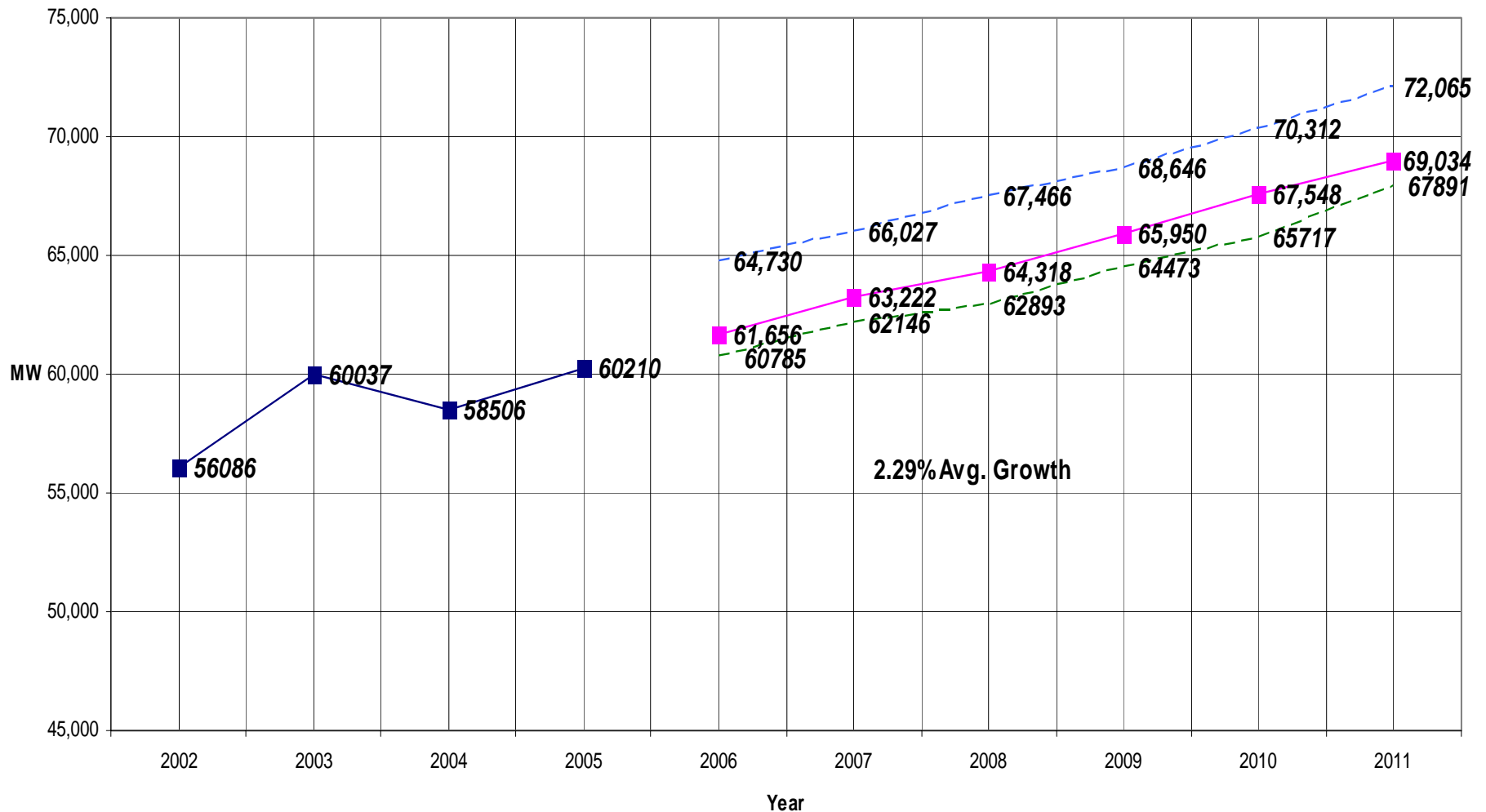
Forecast Performance



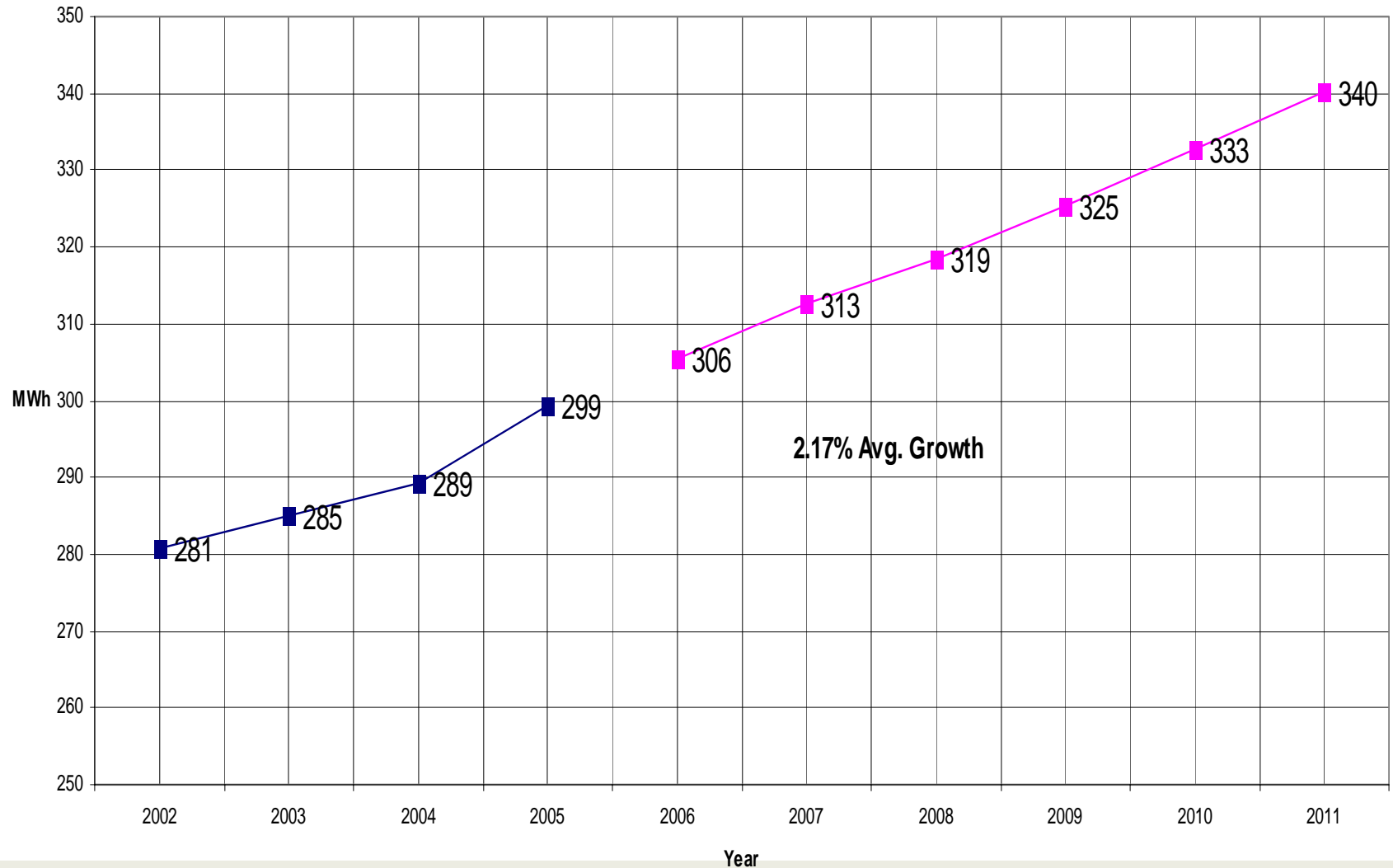




Peak Demand and Approx. 90% Confidence Limits



Energy Forecast





Questions?