

Appendix E

Life-Cycle Cost Analysis

Input, assumptions and results for Bde HQ and TEMF LCCA Comparison:

Table E.1. Bde HQ CZ 2A Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
2a	Utility Costs	Natural Gas rates not available, only provided for specific addresses; assumed same value as El Paso, TX
3	Energy Usage	Provided by BdeHQ_Summary_10-24-12.xlsx - End Use Consumption Values
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCAINfo-Civil-HQASHRAE.xlss
10	Annual Rate of Increase Annual OM&R	4%

Table E.2. Bde HQ CZ 2A LCCA Comparison

BHQ - 2A	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 10,204,384	\$ 10,506,219	\$ 10,525,167
Energy Consumption Costs	\$ 1,743,608	\$ 1,620,199	\$ 1,462,147
Routine OM&R Costs	\$ 4,847,144	\$ 4,362,430	\$ 4,362,430
Major Repair and Replacement Costs	\$ 740,056	\$ 720,196	\$ 723,428
Total NPV LCC:	\$ 17,535,192	\$ 17,209,044	\$ 17,073,172
LCC Savings:	\$ -	\$ 326,148	\$ 462,020
Simple Payback Period (Years)	-	15	13

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Table E.3. Bde HQ CZ 3A Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
2a	Utility Costs	Assumes even distribution between summer and winter months. 6.783 cents/kWh summer, 3.705 cents/kWh winter. Average cost/kWh = 5.244
3	Energy Usage	Provided by BdeHQ_Summary_10-24-12.xlsx - End Use Consumption Values
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCainfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.4. Bde HQ CZ 3A LCCA Comparison

BHQ - 3A	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 10,874,474	\$ 11,197,107	\$ 11,188,297
Energy Consumption Costs	\$ 1,030,875	\$ 845,053	\$ 830,701
Routine OM&R Costs	\$ 5,165,442	\$ 4,648,897	\$ 4,648,897
Major Repair and Replacement Costs	\$ 645,782	\$ 634,654	\$ 634,654
Total NPV LCC:	\$ 17,716,573	\$ 17,325,711	\$ 17,302,549
LCC Savings:	\$ -	\$ 390,862	\$ 414,024
Simple Payback Period (Years)	-	14	13

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Table E.5. Bde HQ CZ 3B Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
2a	Utility Costs	Assumes even distribution between summer and winter months. 11.019 cents/kWh summer, 10.019 cents/kWh winter. Average cost/kWh = 10.519
3	Energy Usage	Provided by BdeHQ_Summary_10-24-12.xlsx - End Use Consumption Values
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCainfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.6. Bde HQ CZ 3B LCCA Comparison

BHQ - 3B	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 9,514,045	\$ 9,742,426	\$ 9,739,125
Energy Consumption Costs	\$ 1,937,313	\$ 1,701,298	\$ 1,674,628
Routine OM&R Costs	\$ 4,519,229	\$ 4,067,306	\$ 4,067,306
Major Repair and Replacement Costs	\$ 869,309	\$ 852,043	\$ 851,322
Total NPV LCC:	\$ 16,839,896	\$ 16,363,073	\$ 16,332,381
LCC Savings:	\$ -	\$ 476,823	\$ 507,515
Simple Payback Period (Years)	-	10	10

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Table E.7. Bde HQ CZ 4A Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
2a	Utility Costs	Assumes even distribution between summer and winter months. 8.831 cents/kWh summer, 8.001 cents/kWh winter. Average cost/kWh = 8.416
3	Energy Usage	kBtu/ft ² provided by TEMF Standards Modeling Overview, EUI Comparison with Plug Loads
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCainfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.8. Bde HQ CZ 4A LCCA Comparison

BHQ - 4A	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 11,962,768	\$ 12,317,939	\$ 12,314,190
Energy Consumption Costs	\$ 1,514,174	\$ 1,278,230	\$ 1,263,191
Routine OM&R Costs	\$ 5,682,388	\$ 5,114,149	\$ 5,114,149
Major Repair and Replacement Costs	\$ 794,586	\$ 753,352	\$ 753,134
Total NPV LCC:	\$ 19,953,916	\$ 19,463,670	\$ 19,444,664
LCC Savings:	\$ -	\$ 490,246	\$ 509,252
Simple Payback Period (Years)	-	13	13

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Table E.9. Bde HQ CZ 4C Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
3	Energy Usage	kBtu/ft ² provided by TEMF Standards Modeling Overview, EUI Comparison with Plug Loads
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCAinfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.10. Bde HQ CZ 4C LCCA Comparison

BHQ - 4C	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 12,582,844	\$ 12,922,715	\$ 12,913,450
Energy Consumption Costs	\$ 730,698	\$ 625,509	\$ 628,118
Routine OM&R Costs	\$ 5,976,927	\$ 5,379,235	\$ 5,379,235
Major Repair and Replacement Costs	\$ 563,618	\$ 561,645	\$ 561,843
Total NPV LCC:	\$ 19,854,087	\$ 19,489,104	\$ 19,482,646
LCC Savings:	\$ -	\$ 364,983	\$ 371,441
Simple Payback Period (Years)	-	15	15

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Table E.11. Bde HQ CZ 5B Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
3	Energy Usage	kBtu/ft ² provided by TEMF Standards Modeling Overview, EUI Comparison with Plug Loads
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCAinfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.12. Bde HQ CZ 5B LCCA Comparison

BHQ - 5B	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 11,572,793	\$ 11,867,148	\$ 11,858,991
Energy Consumption Costs	\$ 768,351	\$ 645,317	\$ 637,181
Energy Demand Charges	\$ 71,569	\$ 71,569	\$ 71,569
Routine OM&R Costs	\$ 5,497,147	\$ 4,947,432	\$ 4,947,432
Major Repair and Replacement Costs	\$ 872,905	\$ 857,363	\$ 849,608
Total NPV LCC:	\$ 18,782,765	\$ 18,388,829	\$ 18,364,781
LCC Savings:	\$ -	\$ 393,936	\$ 417,984
Simple Payback Period (Years)	-	14	13

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Table E.13. TEMF CZ 2A LCCA Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
2a	Utility Costs	Natural Gas rates not available, only provided for specific addresses; assumed same value as El Paso, TX
3	Energy Usage	Provided by BdeHQ_Summary_10-24-12.xlsx - End Use Consumption Values
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCAinfo-Civil-HQASHRAE.xlss
10	Annual Rate of Increase Annual OM&R	4%

Table E.14. TEMF CZ 2A LCCA Comparison

TEMF - 2A	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 10,516,194	\$ 10,637,187	\$ 10,621,423
Energy Consumption Costs	\$ 801,113	\$ 712,855	\$ 692,098
Routine OM&R Costs	\$ 4,995,256	\$ 4,495,730	\$ 4,495,730
Major Repair and Replacement Costs	\$ 675,512	\$ 662,189	\$ 662,189
Total NPV LCC:	\$ 16,988,075	\$ 16,507,961	\$ 16,471,440
LCC Savings:	\$ -	\$ 480,114	\$ 516,635
Simple Payback Period (Years)	-	8	6

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Table E.15. TEMF CZ 3A Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
2a	Utility Costs	Assumes even distribution between summer and winter months. 6.783 cents/kWh summer, 3.705 cents/kWh winter. Average cost/kWh = 5.244
3	Energy Usage	kBtu/ft ² provided by TEMF Standards Modeling Overview, EUI Comparison with Plug Loads
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCainfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.16. TEMF CZ 3A LCCA Comparison

TEMF - 3A	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 11,036,691	\$ 11,181,818	\$ 11,161,113
Energy Consumption Costs	\$ 536,527	\$ 486,594	\$ 476,526
Routine OM&R Costs	\$ 5,242,495	\$ 4,718,246	\$ 4,718,246
Major Repair and Replacement Costs	\$ 623,397	\$ 623,397	\$ 618,613
Total NPV LCC:	\$ 17,439,110	\$ 17,010,055	\$ 16,974,498
LCC Savings:	\$ -	\$ 429,055	\$ 464,612
Simple Payback Period (Years)	-	9	8

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Table E.17. TEMF CZ 3B Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
2a	Utility Costs	Assumes even distribution between summer and winter months. 11.019 cents/kWh summer, 10.019 cents/kWh winter. Average cost/kWh = 10.519
3	Energy Usage	kBtu/ft ² provided by TEMF Standards Modeling Overview, EUI Comparison with Plug Loads
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCAinfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.18. TEMF CZ 3B LCCA Comparison

TEMF - 3B	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 9,698,280	\$ 9,891,072	\$ 9,874,654
Energy Consumption Costs	\$ 972,133	\$ 874,000	\$ 851,072
Routine OM&R Costs	\$ 4,606,742	\$ 4,146,068	\$ 4,146,068
Major Repair and Replacement Costs	\$ 657,625	\$ 648,350	\$ 648,350
Total NPV LCC:	\$ 15,934,780	\$ 15,559,490	\$ 15,520,144
LCC Savings:	\$ -	\$ 375,290	\$ 414,636
Simple Payback Period (Years)	-	11	10

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Table E.19. TEMF CZ 4A Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
2a	Utility Costs	Assumes even distribution between summer and winter months. 8.831 cents/kWh summer, 8.001 cents/kWh winter. Average cost/kWh = 8.416
3	Energy Usage	kBtu/ft ² provided by TEMF Standards Modeling Overview, EUI Comparison with Plug Loads
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCainfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.20. TEMF CZ 4A LCCA Comparison

TEMF - 4A	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 12,469,534	\$ 12,658,053	\$ 12,643,585
Energy Consumption Costs	\$ 880,314	\$ 790,736	\$ 775,076
Routine OM&R Costs	\$ 5,923,105	\$ 5,330,794	\$ 5,330,794
Major Repair and Replacement Costs	\$ 628,181	\$ 623,397	\$ 623,397
Total NPV LCC:	\$ 19,901,134	\$ 19,402,980	\$ 19,372,852
LCC Savings:	\$ -	\$ 498,154	\$ 528,282
Simple Payback Period (Years)	-	10	9

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Table E.21. TEMF CZ 4C Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
3	Energy Usage	kBtu/ft ² provided by TEMF Standards Modeling Overview, EUI Comparison with Plug Loads
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCAinfo-Civil-HQASHRAE.xlsx
10	Annual Rate of Increase Annual OM&R	4%

Table E.22. TEMF CZ 4C LCCA Comparison

TEMF - 4C	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 12,953,225	\$ 13,239,183	\$ 13,225,615
Energy Consumption Costs	\$ 507,379	\$ 467,169	\$ 462,671
Routine OM&R Costs	\$ 6,152,861	\$ 5,537,575	\$ 5,537,575
Major Repair and Replacement Costs	\$ 645,241	\$ 629,671	\$ 629,671
Total NPV LCC:	\$ 20,258,706	\$ 19,873,598	\$ 19,855,532
LCC Savings:	\$ -	\$ 385,108	\$ 403,174
Simple Payback Period (Years)	-	14	13

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Table E.23. TEMF CZ 5B Assumptions

Assumption	Category	Description
1	Analysis	MILCON Analysis, Mid-Year Discounting, Constant Dollar Analysis, Real Discount Rate of 3%, Inflation Rate of 0.9%
2	Utility Costs	Utility Rates provided by "ASHRAE 189.1 Study: Utility Rates by City" included at the end of this Appendix
3	Energy Usage	kBtu/ft ² provided by TEMF Standards Modeling Overview, EUI Comparison with Plug Loads
4	Expected Life	Assumes 40 Years
5	Cost Phasing of Initial Costs	Assumes an even distribution of total project cost between a two year period (Jan 2013-Jan 2015)
6	Residual Value Factor	0%
7	Cost Adjustment Factor	0%
8	Routine, Annual OM&R Costs	Assumed 1% of cumulative construction value for ASHRAE 90.1-2007 installation. 189.1 Standards assume a 10% efficiency against the 90.1-2007 Standard.
9	Major Repair/Replacement Costs	Incorporates repair/service/replacement costs of mechanical systems from ASHRAE 189 Study Maint Estimate Summary.xlsx and major civil expenditures from LCCAinfo-Civil-HQASHRAE.xlss
10	Annual Rate of Increase Annual OM&R	4%

Table E.24. TEMF CZ 5B LCCA Comparison

TEMF - 5B	ASHRAE 90.1-2007	ASHRAE 189.1-2009	ASHRAE 189.1-2011
Investment Cost	\$ 12,012,868	\$ 12,229,597	\$ 12,213,620
Energy Consumption Costs	\$ 544,938	\$ 506,289	\$ 501,480
Energy Demand Charges	\$ 71,569	\$ 71,569	\$ 71,569
Routine OM&R Costs	\$ 5,706,186	\$ 5,135,567	\$ 5,135,567
Major Repair and Replacement Costs	\$ 649,862	\$ 645,077	\$ 634,454
Total NPV LCC:	\$ 18,985,423	\$ 18,588,099	\$ 18,556,690
LCC Savings:	\$ -	\$ 397,324	\$ 428,733
Simple Payback Period (Years)	-	12	11

ASHRAE 189.1 Study

Utility Rates by City

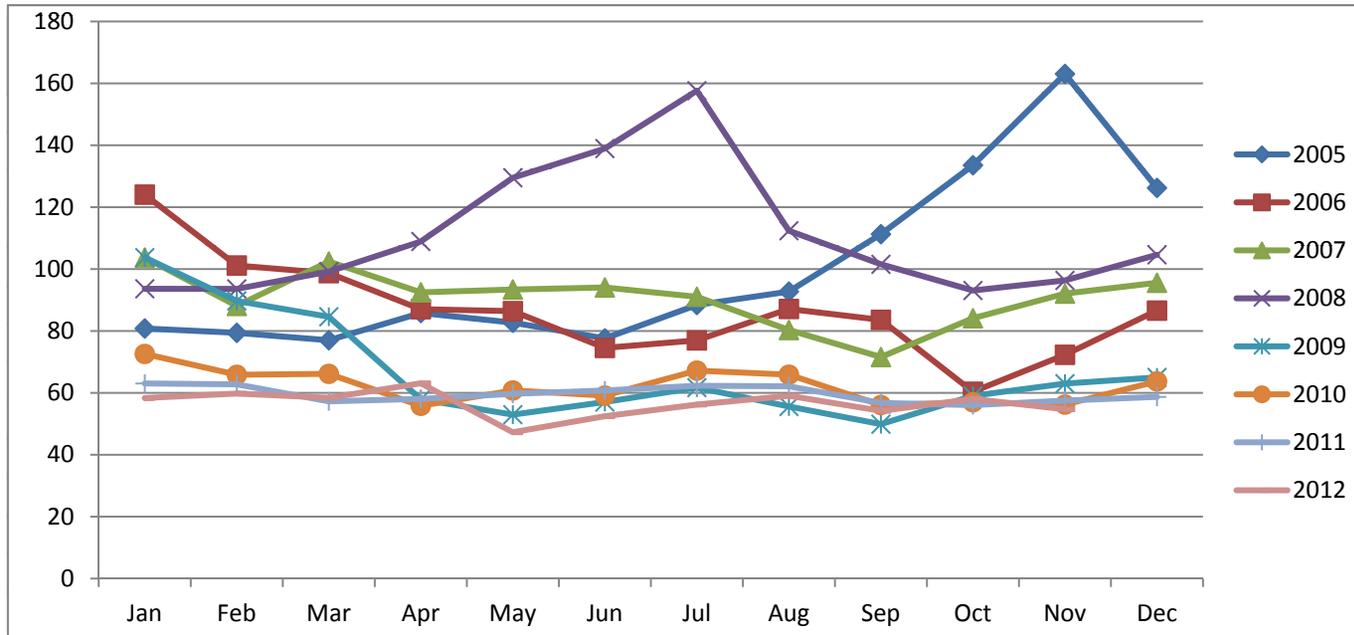
City	Electrical	Gas
Baltimore, MD	Baltimore Gas & Electric (Phone: 410-637-8713) Summer: 8.831 cents/kWh Winter: 8.001 cents/kWh	Baltimore Gas & Electric (Phone: 410-637-8713) 59.43 cents/therm (month average for the past 3 yrs 2010-2012)
Memphis, TN	Memphis Light, Gas, and Water (Phone: (901) 528-4270) Summer: 6.783 cents/kWh Winter: 3.705 cents/kWh On Peak demand greater than 25000 kw	Memphis Light, Gas, and Water (Phone: (901) 528-4270) demand charge: \$.251/ccf plus first 200,000 ccf/month @ \$.488/ccf. Volumes exceeding 200,000 ccf/month @ \$0.374/ccf plus \$0.904/ccf min charge for each ccf higher than demand charge
El Paso, TX	El Paso Electric (Phone: 915-543-5970) Summer: 12.304 cents/kWh Winter: 11.573 cents/kWh for first 1500 kWh greater than 1500 kWh, Summer: 11.019 cents/kWh Winter: 10.019 cents/kWh	Texas Gas Service (Phone: 1-800-700-2443) .3770 (\$/therm or per ccf or other. Provider did not clarify units)
Houston, TX	www.Powertochoose.com provides a list of electric providers and bid rates. The following is a middle bid Southwest Power & Light (Phone: 713-341-3015) 8.7 cents/kWh	Centerpoint Energy (Phone: 713-659-2111) could not provide natural gas rates (by specific address only)
Salem, OR	Salem Electric (Phone: 503.362.3601) Summer: 7.81 cents/kWh for the first 3000 kW 6.37 cents/kWh for 3000kW - 20000kW 4.84 cents/kWh for over 20000 kw	Northwest Natural Gas (Phone: 800.422.4012) 86 cents/therm Flat Rate for Commercial
Boise, ID	Idaho Power (Phone: 208-388-2323) \$299/month for large power service plus 4.660 cents/kWh	Intermountain Gas Company (Phone: 208-377-6840) April-November: first 200 therms @ \$.72011 next 1800 therms @ \$.69838 over 2000 therms @ \$.67736 December-March: first 200 therms @ \$.66926 next 1800 therms @ \$.64806 over 2000 therms @ \$.62760

	2005	2006	2007	2008	2009	2010	2011	2012
Jan	80.81	124.05	103.73	93.64	103.71	72.59	63.04	58.33
Feb	79.4	101.16	88.1	93.6	89.71	65.85	62.76	59.79
Mar	77.01	98.69	102.43	99.17	84.6	66.15	57.26	58.42
Apr	85.81	87.04	92.49	108.91	57.92	55.83	58.06	63.1
May	82.69	86.41	93.4	129.5	52.97	60.78	59.69	47.27
Jun	77.6	74.54	94.06	138.94	57.05	59.14	60.78	52.47
Jul	88.41	76.97	91.05	157.63	61.71	67.2	62.31	56.22
Aug	92.73	87.12	80.32	112.4	55.61	65.89	62.11	59.07
Sep	111.28	83.59	71.59	101.55	49.89	56.08	56.75	54.19
Oct	133.54	60.37	84.12	93.09	59.05	56.98	56.05	58.03
Nov	163.05	72.3	92.08	96.34	62.99	56.23	57.51	54.71
Dec	126.22	86.58	95.58	104.6	65	63.71	58.71	

Average

99.87917 86.56833 90.74583 110.7808 66.68417 62.2025 59.58583 56.50909

Average last
3 yr 59.43247





**Gas Commodity Prices: Schedule D – Residential
and
Schedule C – General Service**

Please note that historical rates may not be an accurate indicator of future prices.

(Rates stated in cents/therm)

Month	2005	2006	2007	2008	2009	2010	2011	2012
Jan	80.81	124.05	103.73	93.64	103.71	72.59	63.04	58.33
Feb	79.40	101.16	88.10	93.60	89.71	65.85	62.76	59.79
Mar	77.01	98.69	102.43	99.17	84.60	66.15	57.26	58.42
Apr	85.81	87.04	92.49	108.91	57.92	55.83	58.06	63.10
May	82.69	86.41	93.40	129.50	52.97	60.78	59.69	47.27
Jun	77.60	74.54	94.06	138.94	57.05	59.14	60.78	52.47
Jul	88.41	76.97	91.05	157.63	61.71	67.20	62.31	56.22
Aug	92.73	87.12	80.32	112.40	55.61	65.89	62.11	59.07
Sep	111.28	83.59	71.59	101.55	49.89	56.08	56.75	54.19
Oct	133.54	60.37	84.12	93.09	59.05	56.98	56.05	58.03
Nov	163.05	72.30	92.08	96.34	62.99	56.23	57.51	54.71
Dec	126.22	86.58	95.58	104.60	65.00	63.71	58.71	

Baltimore Gas & Electric Company
Standard Offer Service (SOS) Rates/Miscellaneous Charges
(Transmission Rates Effective June 1, 2012)

		Standard Offer Service Rates				
		Generation		Transmission Rate		Total Supply Rate ¹
		Rate (1)	(2)		(3) = (1) + (2)	
		¢/kWh	¢/kWh	\$/kW	¢/kWh	\$/kW
RESIDENTIAL						
Schedule R	June 1 - Sept. 30, 2012	8.808	0.788	-	9.596	-
	Oct. 1, 2012 - May 31, 2013	7.955	0.788	-	8.743	-
Schedule RL	June 1 - Sept. 30, 2012 On-Peak	12.998	0.661	-	13.659	-
	June 1 - Sept. 30, 2012 Inter.-Peak	7.095	0.661	-	7.756	-
	June 1 - Sept. 30, 2012 Off-Peak	6.461	0.661	-	7.122	-
	Oct. 1, 2012 - May 31, 2013 On-Peak	9.781	0.661	-	10.442	-
	Oct. 1, 2012 - May 31, 2013 Inter.-Peak	8.955	0.661	-	9.616	-
	Oct. 1, 2012 - May 31, 2013 Off-Peak	6.848	0.661	-	7.509	-
COMMERCIAL & INDUSTRIAL						
Schedules G/GU - Type I SOS	June 1 - Sept. 30, 2012	8.325	0.506	-	8.831	-
	Oct. 1, 2012 - May 31, 2013	7.495	0.506	-	8.001	-
Schedule GS - Type I SOS	June 1 - Sept. 30, 2012 On-Peak	12.119	0.441	-	12.560	-
	June 1 - Sept. 30, 2012 Inter.-Peak	6.969	0.441	-	7.410	-
	June 1 - Sept. 30, 2012 Off-Peak	5.956	0.441	-	6.397	-
	Oct. 1, 2012 - May 31, 2013 On-Peak	9.159	0.441	-	9.600	-
	Oct. 1, 2012 - May 31, 2013 Inter.-Peak	8.364	0.441	-	8.805	-
	Oct. 1, 2012 - May 31, 2013 Off-Peak	6.422	0.441	-	6.863	-
Schedule SL - Type I SOS ²	June 1, 2012 - May 31, 2013	6.679	-	-	6.679	-
Schedule G - Type II SOS	Sep. 1 - Nov. 30, 2012	6.127	0.506	-	6.633	-
Schedule GS - Type II SOS	Oct. 1 - Nov. 30, 2012 On-Peak	7.038	0.441	-	7.479	-
	Oct. 1 - Nov. 30, 2012 Inter.-Peak	6.005	0.441	-	6.446	-
	Oct. 1 - Nov. 30, 2012 Off-Peak	5.075	0.441	-	5.516	-
Scheds. GL, P & T - Type II SOS	Oct. 1 - Nov. 30, 2012 On-Peak	6.966	-	-	6.966	-
	Oct. 1 - Nov. 30, 2012 Inter.-Peak	6.016	-	-	6.016	-
	Oct. 1 - Nov. 30, 2012 Off-Peak	5.105	-	-	5.105	-
Scheds. GL, P & T - Type II SOS	Transmission Demand Charge	-	-	1.81	-	1.81

Notes:
¹ Excludes Rider 8 Adjustment. Refer to "POLR Rate Adjustment Charts" at bge.com under "Rates & Tariffs" for Rider 8 adjustment.
² Charge per lamp-watt (¢/lamp-watt) = 6.679¢/kWh x 0.333 = 2.224¢/lamp-watt

BGE Electric Supply Price Comparison Information ¹			
(as shown on monthly BGE bill message)			
Rate Schedule	Oct. 1, 2012 through May 31, 2013 ¢/kWh (incl. Rider 8 ²)	June 1 through Sep. 30, 2013 ¢/kWh (excl. Rider 8)	Weighted Avg. Supply Price Oct. 1, 2012 through Sep. 30, 2013 ¢/kWh
R	8.964	10.474	9.508
RL (TOU)	8.781	10.239	9.269
G Type I SOS	8.536	9.453	8.843
GS (TOU) Type I SOS	8.403	9.256	8.685
SL	6.679	7.414	-

Notes:
¹ Seasonal and Weighted Supply Price information may change slightly beginning in February, June and October due to scheduled changes in the Rider 8 Adjustment and Transmission charges (June). The Supply Price for October 1, 2013 through May 31, 2014 will be set in May 2013. Type II comparison not provided as these rates change every 3 months.
² Rider 8 - Energy Cost Adjustment is used to true-up the actual costs of providing energy supply to our customers. It compares actual customer billings for electric supply against payments by BGE to the wholesale suppliers for that electricity. The comparison uses only known Rider 8 values. Schedule SL represents annual period June 1 - May 31 and excludes Rider 8.

Miscellaneous Charges on Bill						
RSP Charge/Misc. Credits Applicable to Residential Schedules R and RL						
Effective July 2012 Bills:			Charge/kWh			
Rate Stabilization Plan Charge		\$0.00805	(see Electric Rider 14)			
Nuclear Decomm. Credit		(0.00157)	(see Electric Rider 16)			
POLR Margin Credit		(0.00104)	(see Electric Rider 16)			
Financing Credit		(0.00067)	(see Electric Rider 20)			
Total Charge/kWh on Bill		\$0.00477				
EmPOWER Md. Charge						
Effective January 2012 Bills:						
	<u>Schs. R & RL</u>	<u>Sch. G</u>	<u>Sch. GS</u>	<u>Sch. GL</u>	<u>Schs. P & T</u>	
Electric Efficiency	\$0.00128	\$0.00210	\$0.00210	\$0.00087	\$0.00097	
Demand Response	0.00075	-	-	-	-	
Charge/kWh:	\$0.00203	\$0.00210	\$0.00210	\$0.00087	\$0.00097	
Rider 29 - Rate Mitigation and Recovery Charge Adjustment						
Effective October 2011 - September 2012 Bills			Charge/kWh			
Schedule G - Type II SOS		\$0.00000	(included in SOS charge)			
Schedule GS - Type II SOS		\$0.00000	(included in SOS charge)			
Non-Residential Distribution		\$0.00000	(included in Distribution charge)			
Rider 30 - Demand Resource Charge/Credit						
Effective June 2012 - May 2013 Bills - Charge or (Credit)/kWh:						
<u>Sch. R</u>	<u>Sch. RL</u>	<u>Sched. G</u>	<u>Sched. GS</u>	<u>Sched. GL</u>	<u>Sch. P</u>	<u>Sch. T</u>
\$0.00026	\$0.00022	\$0.00020	\$0.00018	\$0.00017	\$0.00015	\$0.00011

Delivery Service charges are available at bge.com. Click on "My Account", "Rates & Tariffs", then "Electric Service" for Rates & Tariffs for the corresponding rate schedule.

Effective Date: 10/1/2012

GS-1 General Service for:**April-November**

Customer Charge \$2.00 per bill

Commodity Charge:

First 200 therms per bill @ \$0.72011*

Next 1,800 therms per bill @ \$0.69838*

Over 2,000 therms per bill @ \$0.67736*

December-March

Customer Charge \$9.50 per bill

Commodity Charge:

First 200 therms per bill @ \$0.66926*

Next 1,800 therms per bill @ \$0.64806*

Over 2,000 therms per bill @ \$0.62760*

For separately metered deliveries of gas utilized solely as
Compressed Natural Gas Fuel in vehicular internal combustion
engines.

Customer Charge \$9.50 per bill

Commodity Charge \$0.62760 per therm*

*** Includes:**

Temporary purchased gas cost adjustment of \$(0.02861)

Weighted average cost of gas of \$0.33489

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EL PASO ELECTRIC COMPANY

SCHEDULE NO. 25
LARGE POWER SERVICE RATE

APPLICABILITY

This rate is available to all customers for lighting, power, and heating service with a highest measured demand as defined by the Determination of Billing Demand. Service under this rate shall be limited to customers who otherwise do not qualify for service under the Company's other rates and whose highest measured demand, during the current month and previous (11) month period, exceeded six hundred (600) kW, in any month.

TERRITORY

Texas Service Area

TYPE OF SERVICE

The type of service available will be determined by the Company and will either be single or three phase at the option of the Company and at a standard Company approved voltage. All service will be taken at the point of delivery designated by the Company and at one of the Company's standard types of service. Electric energy will be measured by a single meter, or other measuring device, of each kind needed.

MONTHLY RATE

	Secondary Voltage	Primary Voltage	Transmission Voltage
Customer Charge	\$100.00	\$100.00	\$200.00
Demand Charge per kW	\$19.67	\$18.62	\$17.75
Energy Charge per kWh			
On-Peak	\$0.13292	\$0.12998	\$0.12619
Off-Peak	\$0.00720	\$0.00709	\$0.00694

The on-peak period shall be from 12:00 P.M. through 6:00 P.M., Mountain Daylight Time, Monday through Friday for the months of June through September. Off-Peak period shall be all other hours not covered in the on-peak period.

MONTHLY MINIMUM

Customer Charge plus the applicable demand charge.

PUBLIC UTILITY

MAY 22 '12

40074

CONTROL # _____

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EL PASO ELECTRIC COMPANY

SCHEDULE NO. 25
LARGE POWER SERVICE RATE

PUBLIC UTILITY REGULATORY BOARD OF TEXAS

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CONTROL # _____

DETERMINATION OF BILLING DEMAND

Maximum demand is defined as the highest measured thirty (30) minute average kW load.

The billing demand will be the highest of:

- A. 600 kW; or,
- B. The maximum demand; or,
- C. 75% of the highest measured demand established during the billing months of June through September in the twelve (12) month period ending with the current month.

The Company may refuse service to another Customer at the same address when service is terminated to avoid or evade payment of the minimum demand charges as set forth in this rate.

THERMAL ENERGY STORAGE RIDER

This rider is closed to all new service applications.

Available to customers with separately metered Thermal Energy Storage (TES) Systems whose maximum demand does not exceed the maximum demand of the building after completion of the necessary contract arrangements and installation of necessary metering equipment. The billing demand for this separately metered load will be the highest measured thirty (30) minute average kW load established during the on-peak period.

On-Peak period shall be from 12:00 P.M. through 6:00 P.M., Mountain Daylight Time, Monday through Friday. Off-Peak period shall be all other hours not covered in the on-peak period.

No other options or riders are applicable to consumption covered under this rider. Both separately metered TES systems and total building loads must be served under this rate schedule.

POWER FACTOR ADJUSTMENT

Effective April 1, 2011, if the power factor at the time of the highest measured thirty (30) minute interval kW demand for the entire plant is below 90% lagging, a power factor

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EL PASO ELECTRIC COMPANY

SCHEDULE NO. 25
LARGE POWER SERVICE RATE

adjustment shall be calculated as follows:

ADJ = ((kW x .95 / PF) – kW) x DC, where
ADJ = Increase to applicable Demand Charge,
kW = Monthly Billing Demand,
PF = Monthly measured Power Factor, and
DC = Demand Charge.

PUBLIC UTILITY SERVICE OF TEXAS
MAY 22 '12 11:43 AM
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METER VOLTAGE ADJUSTMENT

If electric service is delivered on the high voltage side of a Customer-supplied transformer, but metered on the low voltage side of the transformer, the following meter adjustments shall be made:

Adjusted Maximum kW Demand = Metered Maximum kilowatts multiplied by 1.015
Billing kilowatt-hours = Metered kilowatt-hours multiplied by 1.021

If electric service is delivered on the low voltage side of a Company-owned transformer and metered on the high voltage side of the transformer, the following meter adjustments shall be made:

Adjusted Maximum kW Demand = Metered Maximum kilowatts divided by 1.015
Billing kilowatt-hours = Metered kilowatt-hours divided by 1.021

FIXED FUEL FACTOR

The above rates are subject to the provisions of the Company's Tariff Schedule No. 98 entitled Fixed Fuel Factor.

ENERGY EFFICIENCY COST RECOVERY FACTOR

The above rates, excluding the Transmission Voltage rate, are subject to the provisions of the Company's Tariff Schedule No. 97, entitled Energy Efficiency Cost Recovery Factor.

MILITARY BASE DISCOUNT RECOVERY FACTOR

The above rates are subject to the provisions of the Company's Tariff Schedule No. 96, entitled Military Base Discount Recovery Factor.

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EL PASO ELECTRIC COMPANY

SCHEDULE NO. 25
LARGE POWER SERVICE RATE

TERMS OF PAYMENT

The due date of the bill for utility service shall not be less than sixteen (16) days after issuance. A bill becomes delinquent if not received at the Company by the due date.

TERMS AND CONDITIONS

The Company's Rules and Regulations apply to service under this rate schedule.

Any new Customer that has not established a prior service history with the Company shall be classified under the appropriate rate schedule in accordance with a demand estimate performed by the Company.

EL PASO ELECTRIC COMPANY

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SOUTHWEST POWER & LIGHT (“SOUTHWEST”)
 PUCT LICENSE #10126 - TERMS OF SERVICE AGREEMENT
 FIXED RATE PLANS
 (Version SWPLFIXRES060111)

Terms of Service: Southwest values the opportunity to serve you. The following is your Terms of Service Agreement (“Terms of Service”) with Southwest for the purchase of residential electric service. These terms are conditioned upon Southwest accepting you as a customer. This version of the Terms of Service (SWPLFIXRES060111) applies to all residential customers who submitted applications or signed up for residential electric service under a Southwest fixed rate product on or after June 15, 2011. You may print the Terms of Service at www.southwestpl.com, or you may request a printed version. Please retain this document for your records. This Terms of Service, the Electricity Facts Label (“EFL”), and your Documentation of Enrollment (as defined below) constitute your Agreement (“Agreement”). The term “Documentation of Enrollment” means, as applicable, your Residential Service Application and Authorization (“RSA”) if you signed up in person, or, if you signed up via the internet, your Completed Internet Enrollment Authorization, or, if you signed up via the telephone, your Verified Telephonic Enrollment (“VTE”). Southwest is an authorized trade name of Texpo Power, LP and is certified as a Retail Electric Provider (“REP”) by the Public Utility Commission of Texas (“PUCT”), license number 10126. **Esta información es disponible en Español. Por favor llame a Southwest al 713-341-3014 y fuera de Houston 877-831-6407, o por correo electrónico a servicioalcliente@southwestpl.com.**

General: As your REP, Southwest will arrange for the delivery of electricity from your Transmission and Distribution Service Provider (“TDSP”) (Local Energy Delivery Company) to your service location pursuant to this Terms of Service. You (the customer) agree to be bound by this Terms of Service by enrolling for service or by accepting electric service from Southwest.

24 Hour Service Outage & Emergency Reporting: If you have an electrical emergency or a power outage, please call the applicable telephone number below:

Oncor Electric Delivery Company (“Oncor”)	(888) 313-4747	CenterPoint Energy (“CenterPoint”)	(800) 332-7143
AEP Texas North Company (“AEP-North”)	(866) 223-8508	AEP Texas Central Company (“AEP-Central”)	(866) 223-8508
Texas New Mexico Power (“TNMP”)	(888) 866-7456	Sharyland Utilities, LP (“Sharyland”)	(956) 668-9551

SOUTHWEST CONTACT INFORMATION:

INTERNET ADDRESS:	www.southwestpl.com	EMAIL ADDRESS:	customer.care@southwestpl.com
MAILING ADDRESS:	Southwest Power & Light 5773 Woodway Drive, #311 Houston, Texas 77057	GENERAL OFFICE HOURS:	8:30am - 5:30pm, CST M-F (except holidays)
TELEPHONE:	(713) 341-3015	CUSTOMER SERVICE HOURS:	8:30am - 5:30pm, CST M-F (except holidays)
TOLL-FREE NUMBER:	(866) 941-SWPL (866) 941-7975 8:30am - 5:30pm, CST M-F	ENROLLMENT CENTER	(866) 941-SWPL (713) 341-3015 8am – 8pm, CST M-Fri 8am – 4pm, CST Sat
ORDERS FAX:	Fax: (713) 341-3018		

Cancellation Rights: If you are switching to Southwest from a different REP, you have the right to cancel your service request with Southwest without any fee or penalty within three (3) federal business days of receiving (or receiving access to) your Agreement. To cancel your Agreement, you may call, email, or fax us at the contact numbers provided above (you will need to include your name, phone number, service address, social security number or, if you prefer, the last four digits of your social security number and a request to cancel service pursuant to this provision in this Terms of Service).

Term & Renewal: Your service will begin on your next meter read cycle date (your “Effective Date”), which is set by your TDSP. If you are doing a move-in (new service) or a self-selected switch, your service will begin when your meter is activated, in which case your activation date will be your Effective Date. The minimum Term of this Terms of Service is three months from the Effective Date and the maximum term is thirty-six months from the Effective Date, as you selected during your enrollment process in your Documentation of Enrollment. See the “Automatic Continuance & Termination of Agreement” sections below for procedures for termination at the end of your Term. Notwithstanding the foregoing, Southwest is not liable for, nor is it able to commit to, an exact date for the commencement of service with Southwest.

Pricing: Pricing for service is indicated in your EFL, and the conditions for pricing and service are specified in this Terms of Service and Documentation of Enrollment. For the applicable version of your EFL, please refer to the EFL given (or made available) on the day and at the time when you enrolled. If you enrolled online or via telephone, please see the applicable EFL (with the same name as your chosen plan) that was in effect on the day you submitted your request for enrollment, a copy of which EFL you were advised to print out and retain for your records. If you enrolled via written enrollment, please see the EFL given to you along with your RSA at the time of sign-up. The price you will be charged for your electric service will be equal to the “fixed base energy price” referenced in the body of your EFL, plus a \$7.95 monthly customer-service-meter-fee (Southwest will not charge the monthly customer-service-meter-fee for each billing cycle in which you use at least 1,000 kWhs), charges from the Electric Reliability Council of Texas (“ERCOT”) and your TDSP (collectively, “Delivery Charges”), PUCT fees and assessments, and Taxes, as defined in the “Payments” Section below, and any other charges permitted hereunder including, without limitation, late fees. Delivery Charges, PUCT fees and assessments, and Taxes are further defined below and will be passed through to you with no mark-up.

Your monthly bill will itemize the following charges for your convenience: Energy Charges, Delivery Charges (referred to on your invoice as “Utility Charges”), PUCT fees and assessments, any monthly customer-service meter-fee if applicable, all applicable Taxes, and any additional permitted charges. The pricing disclosure(s) shown in your EFL includes a 0.5¢/kWh discount for electing to authorize monthly payments of your invoices via automatic recurring (i) withdrawals from your checking or savings accounts, or (ii) charges to your credit card. If you do not elect to give such authorization, your price will be 0.5¢/kWh higher.

Pursuant to Southwest’s Lone Star Price Guaranty, regardless of how many kWhs you consume throughout the duration of this plan’s term, **Southwest guarantees that your total price per kWh** you will pay to Southwest under Southwest’s Spirit of Texas Fixed Rate E-Plan with Guaranteed Savings (including the base energy price plus all Taxes, Delivery Charges, and any other charges on a kWh basis) will be between **5% and 15% lower** than the total price to be paid per kWh (including the base energy price plus all Taxes, Delivery Charges, and any other charges on a kWh basis) under any residential fixed price plan with the same fixed term (i.e., the same number of months) that is presently offered to the general public by Reliant Energy in the CenterPoint service area, TXU Energy in the Oncor service area, CPL Energy in the AEP-Central service area, WTU Retail Energy in the AEP-North service area, and First Choice Power in the TNMP service area, or, if you chose Southwest’s Renewable Healthy Heart of Texas Fixed Rate E-Plan, under any residential fixed price green plan with the same fixed term, that is presently offered to the general public by Reliant Energy in the CenterPoint service area, TXU Energy in the Oncor service area, CPL Energy in the AEP-Central service area, WTU Retail Energy in the AEP-North service area, and First Choice Power in the TNMP service area.

For purposes of the Lone Star Price Guaranty, to qualify as “presently offered,” the fixed price offered by Reliant Energy, TXU Energy, CPL Energy, WTU Retail Energy, and First Choice Power (collectively, the “AREPs”) needs to have been offered within two weeks of the date on which you submitted your application for enrollment to Southwest, and the applicable prices charged by the AREPs are their prices per kWh for solely residential electric service within Texas in the particular service areas as specified above under any fixed price residential retail plan (or fixed price residential retail green plan, as applicable) with the same fixed term that is publicly offered to the general public by the AREPs in such service areas.

For example, if you live in the Oncor service area and sign up for Southwest’s Spirit of Texas Fixed Rate E-Plan with Guaranteed Savings for 12 months, you would compare your price to that of TXU Energy’s twelve month residential fixed price plan, or if you live in the CenterPoint service area and sign up for Southwest’s Renewable Healthy Heart of Texas Fixed Rate E-Plan with a 12-month term, you would compare your price to that of Reliant Energy’s 12-month residential fixed price green plan with the same amount of renewable content as Southwest, and so forth. To qualify as “green” as used in this paragraph, the plan of the AREP needs to qualify as a green plan within the meaning of the PUCT’s Customer Protection Rules (“Customer Rules”) which may be found at <http://www.puc.state.tx.us/rules/subrules/electric>.

The Lone Star Price Guaranty also assumes you will adhere to the terms of your contract and pay your invoices in a timely manner, and thus all late, collection and termination fees, penalties and interest shall be excluded from the prices of Southwest and the AREP for purposes of comparing Southwest’s price to the prices of the AREP in your service area. The Lone Star Price Guaranty also assumes you will choose to enjoy the 0.5¢ /kWh discount for electing to authorize monthly payments of your invoices via automatic recurring withdrawals from your checking or savings accounts, or charges to your credit card. The “Fixed Base Energy Price” referenced in the body of your EFL, does not include Delivery Charges or applicable Taxes, which Delivery Charges and Taxes will be passed through to you with no mark-up. A one time service charge of \$3.50 will be charged for additional copies (including email and electronic copies) of your bill, duplicate bills, credit reference letters, and disconnect notices (which charges shall not be included as part of Southwest’s price for purposes of the Lone Star Price Guaranty). Please note that as Delivery Charges fluctuate and vary, your total price charged will vary from the examples of your *total* price per kWh shown in *the table* within your EFL.

Delivery Charges include the charges, costs, surcharges and fees charged or levied on Southwest by the Utilities and the applicable independent system operator (“ISO”) of the electricity grid in your region or State (your ISO is the NYISO if in New York, the CAISO if in California, and ERCOT if in Texas). “Utility” means the TDSP owning and/or controlling and maintaining the system used for delivery of electricity to your meters/accounts. *Please note that the Lone Star Price Guaranty is not applicable to plans longer than 12 months in term and is not available for any plan in the Sharyland service area.*

Renewable Energy: If you signed up for Southwest’s Renewable Healthy Heart of Texas Fixed Rate E-Plan, you are contributing to a healthier and cleaner environment in our great State of Texas. To satisfy your electricity needs while also preserving the environment, Southwest has purchased green power (which may include Texas natural gas and renewable energy) in the form of Renewable Energy Certificates (“RECs”). RECs constitute an essential source of renewable energy used to meet the State of Texas’s environmentally conscious renewable energy goals.

No Fees to Switch: Southwest will not charge you a fee to select, switch, or enroll with us unless you request a switch or enrollment that does not conform with the normal meter reading and billing cycle and, in such case, such fee shall not exceed the rate for such charged to Southwest by the TDSP, which rate is further described below.

Payments: You will receive a bill from Southwest monthly. All bills are due and payable 16 calendar days from the date reflected on the invoice. If you elected to authorize monthly payment of your invoices via automatic recurring (i) withdrawals from your checking or savings accounts, or (ii) charges to your credit card, then Southwest may debit your bank account (or charge your credit card) on or after the third day after the date of the invoice’s issuance, and you irrevocably waive any right to have more time to make your payment in exchange for the 0.5¢/kWh price discount referenced in your EFL. Bills shall be deemed past due and late at the close of business on the day the bill is due. Late payments and past due balances will result in a one-time late fee equal to 5% of the month’s past due amount. For any method of payment including checks, bank drafts or debit/credit card transactions, you will incur a \$40.00 insufficient funds fee per transaction for any transaction not processed due to insufficient funds or credit availability.

You are responsible for all applicable Taxes, charges and fees. “Taxes” means all federal, state and local taxes, governmental charges, assessments, and charges presently or hereafter imposed on you, as purchaser (or on Southwest, as seller) of electricity under your Agreement, or on electricity sales transactions, including gross receipts, privilege, sales, use, special assessment, excise and other taxes, as applicable, municipal administrative fees and generation, utility, TDSP, regulatory, British Thermal Unit (“BTU”) or electricity taxes and assessments. If you are tax exempt, it is your responsibility to provide Southwest with the documentation needed to prove your tax exempt status. Even if tax exempt, you will be responsible for gross receipts taxes and PUCT assessments and possibly other types of Taxes depending on the scope of your exemption.

Nonpayment of your Southwest bill may result in the above listed late fees, accrual of interest as allowed by law, as well as disconnection of your service and termination of your Agreement. If you fail to make a payment, Southwest will notify you 10 calendar days prior to disconnecting your electric

service and terminating this Terms of Service. **If you fail to make a payment for electric service, Southwest has the right to (i) authorize the disconnection of your electric service**, with proper notice, and (ii) terminate your Agreement. After three days from the date on which you enroll for service and obtain access to copies of your Agreement, you shall incur a termination-fee in the amount of \$175.00 if you terminate your Agreement in violation of your Agreement (or for any termination resulting from your breach of this Terms of Service); however, no termination fee shall apply in the event that you permanently move prior to the end of your Term so long as you provide Southwest with your forwarding address, reasonable evidence of your move, and thirty days prior written notice that you're moving along with your move-out date, subject to Southwest's satisfaction and approval.

Southwest reserves the right to include (in any subsequent bill) adjustments to previous billings, previous billing errors, meter read errors, miscalculation of taxes and other errors, except as limited by the Customer Rules (<http://www.puc.state.tx.us/rules/subrules/electric>). Disconnection of your electric service and/or termination of your Agreement will not excuse you from paying any outstanding amounts owed to Southwest and are in addition to all other remedies available under your Agreement and by law. If you satisfactorily correct the reason for disconnection, you may be permitted to reinstate electric service with Southwest and will be charged a \$20.00 reconnect fee by Southwest in addition to any reconnect fees charged by the TDSP. You may also choose to sign-up for our "Paperless Billing" program to help do your part for the environment. Call Southwest for details, or go online to www.southwestpl.com for more information.

DISPUTE RESOLUTION PROCEDURES AND COMPLAINTS: Please contact us if you have comments, questions, complaints or bill questions. Southwest's friendly knowledgeable representatives are trained to research and resolve your customer inquiries. Southwest will work hard to make sure your problem is handled and you are pleased with Southwest's service. You may also contact the PUCT. Please see the Your Rights as a Customer Disclosure ("YRAC") disclosure at www.southwestpl.com for more information. Southwest's acceptance of any partial payment from you will not relieve you of your obligation to pay the full amount owed by you, and all purported settlements must be expressly approved by Southwest in writing. Each party agrees it has a duty to mitigate damages that may result out of the other party's performance or non-performance of your Agreement, and you agree that you will irrevocably waive all disputes relating to invoices, deposits, and charges unless they are presented to Southwest in writing within 60 days after the date of the invoice (or deposit-request) to be disputed.

To facilitate any concerns arising out of Southwest's Lone Star Price Guaranties (the "[Price Guaranties](#)"), and to better create a friendly and more efficient means of resolving disputes and misunderstandings, please take note of the following procedures governing all disputes and misunderstandings arising out of, or relating to, Southwest's Price Guaranties. If you feel Southwest has charged you a price that contravenes one of Southwest's Price Guaranties, as applicable, you agree you must provide Southwest written documentation from the AREPs, as applicable, reasonably sufficient to demonstrate to Southwest the amount of the electricity prices offered or charged by the applicable AREP along with the time periods during which such prices were available to you. You must also demonstrate to Southwest that such prices were for residential service available to you in your service area, were for a fixed rate plan that has the same Term (i.e., same number of months) as your plan with Southwest, and were retail prices publicly offered and made available to the general public.

For Southwest's Renewable Healthy Heart of Texas Fixed Rate E-Plan, you must also demonstrate to Southwest that such prices were for a green plan of the AREP, as applicable. If the AREP terminates a respective fixed-price (as applicable), or raises the price for such a plan (however described), then the comparison of such prices under the Price Guaranties shall be based on the AREP's actually charged prices during the term of their fixed priced plan. If you demonstrate that the AREP's total electricity price charged (over the course of the Term under their fixed price plan) is lower than Southwest's price charged for the same period in contravention of the terms of the applicable Price Guaranties, your exclusive remedy shall be limited to Southwest providing you a credit on your account for the difference in price for such period, multiplied by your actual usage during such period. *You understand and agree that all claims and disputes that Southwest did not meet the Price Guaranties shall be deemed irrevocably waived by you if you terminate your Agreement before the term expires, if Southwest terminates your Agreement because you failed to pay your invoice or otherwise breached your Agreement, or if your claims and disputes are not submitted to Southwest in writing within 60 days of the end of the period during which the AREP would have provided you such service at a price lower than Southwest's price.*

Credit Requirements & Deposits: Southwest may use credit reporting agencies to document and evaluate your credit and/or electric payment history. If you do not meet Southwest's credit standards or cannot demonstrate satisfactory credit, Southwest may require a deposit from you pursuant to the Customer Rules (<http://www.puc.state.tx.us/rules/subrules/electric>). The total of any deposits requested by Southwest will not exceed the greater of: (i) the sum of your estimated billings for the next two months; (ii) one-fifth of your estimated annual billing; or (iii) the amount permitted by the Customer Rules (<http://www.puc.state.tx.us/rules/subrules/electric>).

You will earn a rate of interest at the rate established by law (0.28% per year as of December 2010 or as the rate may be adjusted by the PUCT as posted in the most recent December PUCT News Release found at <http://www.puc.state.tx.us/nrelease/index.cfm>) on any deposit retained by Southwest for longer than 30 days. Southwest may require an additional deposit from any existing customer if a disconnect notice has been issued. Southwest has the right to refuse enrollment of service or, if already a customer, to disconnect your service if a deposit is not paid within 10 days of the request for deposit. Upon request, Southwest will refund any deposit held plus accrued interest calculated at the PUCT stated rate when you form a record of no late payment for 12 consecutive monthly invoices. For a full list of qualifications regarding alternatives to paying a deposit in the form of a Letter of Guarantee, please review Section 25.478(i) of the Customer Rules (<http://www.puc.state.tx.us/rules/subrules/electric>) or ask one of Southwest's customer care experts. Southwest may disconnect service with or without prior written notice for any of the reasons stated in Section 25.483 of the Customer Rules (<http://www.puc.state.tx.us/rules/subrules/electric>) and may also terminate your Agreement without penalty in response to a change in market conditions.

If you fail to make any payments due under your Agreement: (i) you agree to pay a collections processing fee of \$20.00 if your indebtedness is referred to Southwest's internal collections group; and (ii) in addition, you agree to pay reasonable fees and expenses (including attorney fees) incurred by Southwest in the collection of such indebtedness. Without limitation, if your indebtedness is placed with an attorney or collection agent for collection, or suit is brought on same, or the same is collected through probate, bankruptcy or other judicial proceedings, then you also agree to reimburse Southwest for its collection expenses in an amount equal to between 25% and 40% of the total amount due and unpaid to Southwest. Your initial deposit demanded by Southwest (if any) is based on our estimations of your historical and future demand and usage profiles, and if your actual demand and usage data falls outside of those estimations or expectations, or if you gave us erroneous information regarding your demand and usage pattern, Southwest may require an additional deposit, or reject your enrollment request.

Deposit Requirement Waiver: Please let us know if you (i) are 65 years of age or older and you are not currently delinquent in payment of any

electric service account, or (ii) have been determined to be a victim of family violence (as defined in Texas Family Code §71.004, <http://www.statutes.legis.state.tx.us/Docs/FA/htm/FA.71.htm>) by a family violence center (as defined in Texas Human Resources Code §51.002, <http://www.statutes.legis.state.tx.us/Docs/HR/htm/HR.51.htm#51.002>), by treating medical personnel, by law enforcement personnel, by the Office of a Texas District Attorney, by the Office of the Attorney General, or by a grantee of the Texas Equal Access to Justice Foundation as it may be possible for you to obtain electric service from Southwest without a deposit.

Usage: Southwest will provide, and you shall pay for, all the electricity to satisfy all the electricity requirements for each service address that you enroll with Southwest. You may not resell any portion of such electricity to any third party.

Critical Care Residential Customer & Chronic Care Residential Customer: If you or someone who is permanently residing in your home has been diagnosed by a physician as having a serious medical condition that requires an electric-powered medical device or electric heating or cooling to prevent the impairment of a major life function through a significant deterioration or exacerbation of your or the person's medical condition, you have the right to apply for the "Chronic Condition Residential Customer" designation. If you or someone permanently residing in your home is dependent on an electric-powered medical device to sustain life, you have the right to apply for the "Critical Care Residential Customer" designation. Anyone receiving such designation(s) is eligible for certain protections against the suspension or disconnection of electric service. Upon your request, your REP will provide to you the standardized application for such designation, which you must have your physician complete and return to your TDSP. Qualification as a critical care residential customer and/or a chronic care residential customer does not relieve you of the obligation to pay for the electric service you receive. Please see your YRAC or call Southwest for additional information.

Non-Discrimination: Southwest proudly discloses that it does not discriminate, deny service, or require a prepayment or deposit for service based on a customer's race, creed, color, national origin, ancestry, sex, marital status, lawful source of income, level of income, disability, familial status, location in an economically distressed geographic area, or qualification for low income or energy efficiency services. Additionally, Southwest does not use credit scores, credit history, or utility payment history as the basis for determining price for electricity customers.

Contract Changes: Any changes to your terms referenced in this paragraph will not include changes to your fixed price, which shall remain fixed throughout the entire Term except in the unusual event of re-regulation of the electric markets or another type of "change in law" occurs, as is further described below. Southwest will provide you with 14 calendar days advance written notice of any adverse change in the provisions of your Agreement (which will not include a change to your fixed price), either in your bill or in a separate mailing. The changes will take effect on the date stated in the notice unless you cancel your Agreement. If you find the new terms unacceptable, so long as you elect to terminate your Agreement within fourteen calendar days of your receipt of Southwest's notice of the change in your Agreement's provisions, you may terminate your Agreement with no termination penalty. This provision does not apply to, and notice is not required to be given for, material changes that benefit you or that are mandated by a regulatory agency or to any other provision in your Agreement that does not require Southwest to give notice. Nor does this provision apply to (and nor is notice required for) any adjustments to your fixed price to account for any PUCT-approved increases (if any) in the amount of Delivery Charges.

Customer Information: By entering into this Agreement, you permit your TDSP to release to us certain information that Southwest needs to provide you with service, including your address, phone number, account numbers, and historical usage information.

Taxes and the Roles of Your ISO and Utility: The Utilities (also including the applicable ISO) are solely responsible for the electricity transmission and distribution grid and system along with all interruptions in the delivery of service. Southwest is not in any way liable or responsible for any interruption or disruption in electric service or related services caused wholly or partially by interruption, deterioration or problems on the Utility's systems or on the ISO-controlled grid. You are responsible for all transmission, distribution and delivery charges due to the Utilities and your ISO, including, if any, costs of congestion, costs of ancillary services, estimated line losses, estimated unaccounted for energy, uplifts from the ISO, and your ISO's administration fees as permitted by the Customer Rules (<http://www.puc.state.tx.us/rules/subrules/electric>). Southwest will have no liability and is not responsible for any of the Utilities' or ISO's acts or failures to act, and you agree that you shall be solely responsible for all amounts due to the Utilities or ISO for their services rendered in connection with the electricity services provided to your meters. In addition, you are liable for and shall pay all Taxes applicable to the sale of electricity incurred by Southwest for your account.

Force Majeure: Southwest will endeavor to provide service in a commercially reasonable manner, but REPs do not guarantee a continuous supply of electricity. Events outside Southwest's control, called "*force majeure*" events, may result in interruptions in service, for which Southwest will not be liable. REPs do not generate your electricity, nor do REPs transport it from the generation point to you. Therefore, notwithstanding any representation or any other provision in your Agreement or any other document to the contrary, you agree that Southwest is not responsible for damages or liability caused wholly or in part by *force majeure* events, which include, without limitation, acts of God, acts of any governmental authority, including the PUCT, acts of the ERCOT, accidents, strikes, labor trouble, required maintenance work, problems with or acts of the TDSPs, problems with (or acts of) suppliers, qualified scheduling entities, unlawful or negligent actions of other REPs, delay of deregulation or changes in laws, rules, regulations, and practices or procedures of any governmental entity or ERCOT, or any other cause beyond Southwest's control. You acknowledge that Southwest does not have care, control or custody of your property or premises, or of any electrical facilities, including, but not limited to, lines, wires, or the meter, located on or next to your property or premises. You further acknowledge that you are in exclusive control (and responsible for any damages or injury caused thereby) of electricity at and from such meter.

LIMITATIONS OF LIABILITY: *Southwest's liabilities not excused by reason of force majeure or otherwise (including, with respect to your Agreement) shall be limited to direct actual damages only, and such direct actual damages shall be your sole and exclusive remedy regardless of the cause of action or theory of recovery. You irrevocably waive all other remedies at law or in equity. Without limitation to the foregoing, neither party will be liable to the other for consequential, incidental, punitive, exemplary or indirect damages. These limitations apply without regard to the cause of any liability or damage for any reason.* There are no third party beneficiaries to this Agreement. If any provision of your Agreement is held unenforceable, the remaining provisions shall remain valid. Southwest shall have no responsibility for payment of any outstanding debts owed by you to previous suppliers of electricity, and you may not withhold payments to Southwest pending any refunds or other settlement of billing from any other REP.

Representations & Warranties: *The electricity sold under your Agreement will be supplied from a variety of sources. Southwest makes no representations or warranties other than those expressly set forth in your Agreement. Southwest expressly disclaims all other warranties, expressed or implied, including warranties of merchantability, conformity to models or samples, and fitness for a*

particular purpose.

Assignment: You may not assign your Agreement, in whole or in part, or any of its rights or obligations hereunder without the prior written consent of Southwest. Southwest may, and you hereby agree and grant your express written consent permitting Southwest to: (a) transfer, sell, pledge, encumber or assign your Agreement or the accounts, revenues or proceeds hereof in connection with any financing or other financial agreement or arrangement; (b) transfer or assign your Agreement to any past, present or future affiliate of Southwest or to a party who supplies (or who seeks to provide) wholesale power or QSE services to Southwest; (c) transfer or assign your Agreement to any person or entity succeeding to all or a portion of the assets or control of Southwest; and/or (d) transfer or assign your Agreement to a certified REP. In the case of (b), (c) or (d), any such assignee shall agree in writing to be bound by the terms and conditions hereof.

If you authorized the monthly payment of your invoices via automatic recurring (i) withdrawals from your checking or savings accounts, or (ii) charges to your credit card, you also hereby agree and irrevocably grant your express written consent permitting Southwest to transfer or assign such consent and authorization to any assignee under any assignment permitted under this paragraph. Upon and after any sort of transfer or assignment set forth in this Paragraph, to which you hereby consent in advance, you agree that Southwest shall have no further obligations hereunder. In the case of (a), (b), (c) or (d), you also hereby forever and irrevocably waive all present and future claims arising out of (or related to) the theory that you have been slammed (or switched to another REP) in an unauthorized or prohibited manner.

Governing Law: Your Agreement shall be governed by and construed, enforced and performed in accordance with the laws of the State of Texas and venue shall be proper in Harris County, Texas. The provisions of the Uniform Commercial Code ("UCC") shall apply to your Agreement and electricity shall be a "good" for purposes of the UCC (<http://www.law.cornell.edu/ucc/ucc.table.html>).

Change of Law: If there is a change in law, or if the PUCT, ISO, or other State or Federal agency adopts any regulation, rule, tariff, protocol, or law, or when a nodal market design is implemented in your service area, and such changes, adoption, and/or implementation result in a fee or other charge (or an increase in a fee, cost or charge) that modifies the cost of delivering or providing electricity or capacity to you, to the fullest extent permitted by law, Southwest may adjust your price or any component of the price and/or fees charged under your Agreement, whether up or down, *only* to the extent necessary to reimburse and cover Southwest for such change in the costs of providing or delivering electricity and/or capacity to you, and you agree to pay the resulting adjusted price(s) and/or fee(s). You also agree that any action taken under this "Change of Law" Section will not be deemed a change to your Agreement under the "Contract Change" Section referenced above.

Termination of Agreement: Southwest may terminate your Agreement immediately without further notice if you fail to make a payment in full when due, and such failure is not remedied within 10 days prior notice, and either party may also terminate your Agreement immediately upon written notice if the other party fails to perform an obligation under your Agreement, except in the case of *force majeure*, and if the failure is not remedied within 10 days of notice. See the above "Payments" Section for information regarding early termination fees in breach of your Agreement. Notwithstanding any other provision to the contrary, regardless of the reason for your Agreement's termination, until paid in full, you will continue to remain liable for (a) all energy services obtained up through the time at which Southwest no longer serves your meter, and (b) payment of all other fees and charges permitted hereunder. Notwithstanding any other provision in your Agreement or any other document to the contrary, Southwest's termination of your Agreement shall be in addition to any and all other remedies available in your Agreement or under applicable rule, law or equity.

Automatic Continuance: After the expiration of your Agreement's Term, unless you have elected to disconnect or switch your electricity service to a new REP, Southwest may continue to provide electricity service to you, in which case your service will continue automatically on a monthly basis during which time (i) you or Southwest may cancel your Agreement at any time, and (ii) Southwest's monthly default pricing will apply, which pricing will vary from month to month based on the costs of procuring or producing electricity as would be specified in the Default EFL attached to your Contract Expiration and Renewal Notice ("Expiration Notice"). Southwest will send you an Expiration Notice at least 14 days prior to the end of your Term.

Payment Options: Southwest's "levelized" billing option bases your monthly bill on the previous year's average electricity usage for the premise in which you seek to enroll in the levelized billing program. Your account is then periodically reconciled based on your actual usage. Southwest needs at least twelve months of your billing history on file to calculate the levelized rate. You may enroll in Southwest's levelized billing program year-round by calling Southwest's Customer Care Center.

Southwest hereby offers you a deferred payment plan if (i) a bill becomes due during an extreme weather emergency, pursuant to Section 25.483(j) of the Customer Rules (<http://www.puc.state.tx.us/rules/subrules/electric>), (ii) you are invoiced for services for which you were previously under-billed or (iii) as otherwise required by the Customer Rules (<http://www.puc.state.tx.us/rules/subrules/electric>). Southwest must confirm any such plan in writing, a copy of which you may request. If you accept the terms of a deferred payment plan, the balance of the amount deferred may not appear on each monthly invoice. To find out the current amount of any deferred balance, please contact a Southwest Customer Care Representative.

You may also qualify for other alternative payment arrangements. Please call Southwest for more information.

Payment Assistance Programs & Other Arrangements: Southwest has a bill payment assistance program for the benefit of qualified residential customers. On your bill, Southwest will offer you an opportunity to voluntarily contribute to this program. You may also request and obtain additional information about whether you qualify for any of Southwest's payment plans such as payments via automated bank draft, low-income energy assistance programs, disconnection moratoriums for the ill, and of the eligibility requirements and procedures for applying for each.

Options For Those Who Meet State Poverty Thresholds: Upon demonstration of your qualification for the State's low-income rate reduction program, you may pay a required deposit that exceeds \$50 in two equal installments. To be eligible for the rate reduction program, among other requirements, you must be enrolled in a Texas Department of Human Services sponsored program, such as Medicaid, Temporary Assistance for Needy Families, Supplemental Security Income or food stamps.

Electricity Facts Label and Other Disclosures: The EFL and your Documentation of Enrollment set forth additional details and important information and are a part of your Agreement. For the applicable version of the EFL, please refer to the EFL given (or made available) to you when you enrolled. If you enrolled online or via telephone, please see the applicable EFL (with the same name as your chosen plan) that was in effect on the day you submitted your request for enrollment, a copy of which EFL you were (and are) advised to print out and retain for your records. Please also see the YRAC for all residential customers, Version RESSOUTHWEST01011, available at www.southwestpl.com. Southwest will send you a copy by mail upon your request. No changes or edits to your Agreement will be valid unless duly approved in a signed writing by Southwest.

Non-Recurring Fee Schedule of the TDSPs: The table below itemizes the standard non-recurring fees as charged by your TDSP as of June 3, 2011. **These fees are passed through to you at no mark-up and are the same no matter what REP you choose.** The following abbreviations and corresponding definitions are used for the one-time fees in the table below: MVI — Move In; Install - New Meter Installation; PMVI — Priority Move-In (less than 24-48 hrs of notice on average, please contact a Southwest representative about your exact moving date); Reread — TDSP makes a meter reading to verify usage by request; Self-Selected Switch — TDSP makes your switch outside the normal meter reading schedule; DNP — Disconnection Fee; RNP — Reconnection Fee; PRNP — Priority Reconnection Fee (in addition to the standard RNP fee, if the Reconnection is needed in less than 24 hours); W/E RNP — Weekend Reconnection Fee (in addition to the standard RNP fee, when RNP is needed on a weekend); Meter Test (4 yrs) — TDSPs allow for one free meter test every four years (specific to the ESIID), and any additional meter tests would subject the owner of the ESID at that time to pay the fee; Svc. Call (Bus. Hrs.) — Service call by a TDSP employee to your premises to investigate an outage or other service problem that, upon investigation, is determined not to be a problem with TDSP equipment. We intend that all non-recurring fees will be disclosed prior to submitting any transactions that would generate such non-recurring fees.

TDSP	CenterPoint	Oncor	AEP-Central	AEP-North	TNMP	Sharyland
MVI	\$16.00	\$ 6.80	\$ 25.00	\$ 23.00	\$ 54.00	\$21.00
Install	\$92.00	\$14.45	\$ 39.00	\$ 51.00	\$ 60.00	\$21.00
PMVI	\$42.00	\$11.70	\$ 54.00	\$ 35.00	\$ 79.00	\$51.00
Reread	\$ 3.88	\$ 5.00	\$ 12.00	\$ 17.00	\$ 27.00	\$ 7.00
Self-Selected Switch	\$ 3.66	\$ 3.70	\$ 11.00	\$ 16.00	\$ 27.00	\$ 7.00
DNP	\$ 9.00	\$ 5.45	\$ 14.00	\$ 12.00	\$ 28.00	\$21.00
RNP	\$10.00	\$ 6.45	\$ 14.00	\$ 11.00	\$ 29.00	\$21.00
PRNP (after 2p.m. cst)	\$35.00	\$ 8.90	\$ 28.00	\$ 39.00	\$ 54.00	\$21.00
W/E RNP	\$35.00	\$43.15	\$ 35.00	\$ 53.00	\$160.00	\$51.00
Meter Test (4 yrs.)	\$45.00	\$33.60	\$111.00	\$112.00	\$132.00	\$18.00
Svc. Call (Bus. Hrs.)	\$45.00	N/A	\$ 70.00	\$ 72.00	\$ 65.00	\$61.00

Please note that the above listed fees are subject to change without notice. Please see your TDSP's tariff for the most current list of fees.

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SOUTHWEST POWER & LIGHT
ADDENDUM TO THE TERMS OF SERVICE AGREEMENT
PUCT License No. 10126
Version SWPLADD081011

This Addendum is attached to, and incorporated by reference in, the Terms of Service Agreement (Version No. SWPLFIXRES060111 or SWPLFLEXRES060111) for the purchase of residential electricity service with Southwest Power & Light ("Southwest"), which will amend the Terms of Service as of August 10, 2011.

Consent to Contact Via Text, Email, Automatic Phone Dialing and the Use of Pre-Recorded Voice Systems: To further Southwest's efforts to keep its valued customers informed concerning important account updates and other account information, you agree and consent to Southwest and/or its representatives contacting you via text, email, automatic phone dialing systems and/or using an artificial or prerecorded voice or message delivery systems concerning the status of your electricity account with Southwest via any and all of the contact information provided during your enrollment or thereafter, including but not limited to residential, work, facsimile, and/or cellular telephone numbers and/or home or email addresses. This provision shall survive any termination of your electricity agreement with Southwest for a period of two years. Please contact Southwest at 1-866-941-7975 with any questions or if you wish to update your contact information.

Miscellaneous: The Agreement (together with your EFL, YRAC, Documentation of Enrollment, and any and all Addendums or Exhibits) sets forth all understandings between you and Southwest, and any prior or contemporaneous representations, understandings, price quotes, and inducements are fully merged into and superseded by this Agreement. The Agreement may be amended by written Addendums prepared solely by Southwest and attached to or otherwise made available with the Terms of Service.

**MEMPHIS LIGHT, GAS AND WATER DIVISION
CITY OF MEMPHIS
ELECTRIC SERVICE SCHEDULE GSD**

GENERAL POWER RATE - PART D

AVAILABILITY

This rate shall apply to the firm electric power requirements where a customer's currently effective onpeak or offpeak contract demand, whichever is higher, is greater than 25,000 kW; provided that the other conditions of this section are met.

Unless otherwise provided for in a written agreement between TVA and the Division providing service under this rate schedule, for customers served under this rate schedule, the customer's "meter-reading time" shall be 0000 hours CST or CDT, whichever is currently effective, on the first day of the calendar month following the month for which a bill under this rate schedule is being calculated. Further, in accordance with TVA furnished or approved guidelines or specifications, TVA shall have unrestricted remote access to the metering data at all times, as well as unrestricted physical access to the metering facilities for the purpose of confirming remotely-accessed data during such periods as are specified by TVA.

For a customer requesting that its onpeak contract demand be different from its offpeak contract demand, this rate schedule shall be available only for (1) a new contract, (2) a replacement or renewal contract following expiration of the existing contract, or (3) a replacement or renewal contract or an amended existing contract in which the customer is increasing its demand requirements above the existing contract demand level, but under this item (3) neither the new onpeak nor the new offpeak contract demand shall be lower than the customer's existing contract demand.

Electricity supplied under this rate schedule is for the exclusive use of the Customer and shall not be resold or shared with others.

CHARACTER OF SERVICE

Alternating current, single phase or three-phase, 60 hertz. Power shall be delivered at a transmission voltage of 161 KV or, if such transmission voltage is not available, at the highest voltage available in the vicinity, unless at the customer's request a lower standard voltage is agreed upon.

BASE CHARGES

	Summer	Winter	Transition
Customer charge per delivery point per month:	\$1,500.00	\$1,500.00	\$1,500.00
TVA Administrative charge per delivery point per month:	\$350.00	\$350.00	\$350.00
On-peak per kW of billing demand charges per month:	\$16.11	\$9.01	
Per kW charge per month for each kW, if any, by which offpeak billing demand exceeds onpeak billing demand:	\$3.67	\$3.67	\$3.67
Excess per kW charge per month by which billing demand exceeds contract demand:	\$16.11	\$9.01	\$3.67
On-peak per kWh energy charge:	\$0.06783	\$0.03705	
First 425 hours use of maximum metered demand multiplied by the ratio of offpeak energy to total energy rate per kWh:	\$0.03307	\$0.03307	\$0.03307
Next 195 hours use of maximum metered demand multiplied by the ratio of offpeak energy to total energy rate per kWh:	\$0.01441	\$0.01441	\$0.01441
Hours use of maximum metered demand in excess of 620 hours multiplied by the ratio of offpeak energy to total energy rate per kWh:	-\$0.00144	-\$0.00144	-\$0.00144

TENNESSEE VALLEY AUTHORITY FUEL COST AND PURCHASED POWER ADJUSTMENT RIDER

The above rates are subject to adjustment under the provisions of the Tennessee Valley Authority Fuel Cost and Purchased Power Adjustment Rider.

ADJUSTMENT

The base demand and energy charges shall be increased or decreased in accordance with the current Adjustment Addendum published by TVA. (In addition, such charges shall be increased or decreased to correspond to increases or decreases determined by TVA in the value of the hydro generation benefit allocated to residential customers.)

DETERMINATION OF SEASONAL PERIODS

Summer Period shall mean the June, July, August, and September billing months. Winter Period shall mean the December, January, February, and March billing months. Transition Period shall mean the April, May, October, and November billing months.

DETERMINATION OF ONPEAK AND OFFPEAK HOURS

Except for Saturdays and Sundays and the weekdays that are observed as Federal holidays for New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving Day, and Christmas Day, onpeak hours for each day shall be from 1 p.m. to 7 p.m. during the Summer Period and from 4 a.m. to 10 a.m. during the Winter Period. For the Summer Period and the Winter Period, all other hours of each day that are not otherwise defined as onpeak hours and all hours of such excepted days shall be offpeak hours. For the Transition Period, all hours shall be offpeak hours. Such times shall be Central Standard Time or Central Daylight Time, whichever is then in effect. Said onpeak and offpeak hours are subject to change by TVA. In the event TVA determines that such changed onpeak and offpeak hours are appropriate, it shall so notify Division at least 12 months prior to the effective date of such changed hours, and Division shall promptly notify customer.

DETERMINATION OF ONPEAK AND OFFPEAK DEMANDS, MAXIMUM METERED DEMAND, AND ENERGY AMOUNTS

The onpeak and offpeak kWh for any month shall be the energy amounts taken during the respective hours of the month designated under this rate schedule as onpeak and offpeak hours; provided, however, that notwithstanding the metered energy amount, the offpeak energy for any month shall in no case be less than the product of (1) the offpeak billing demand as calculated in the last sentence of the paragraph below and (2) 110 hours (reflecting a 15 percent load factor applied to the average number of hours in a month).

Division shall meter the onpeak and offpeak demands in kW of all customers taking service under this rate schedule. The onpeak metered demand and offpeak metered demand for any month shall be determined separately for the respective hours of the month designated under this rate schedule as onpeak and offpeak hours and in each case shall be the highest demand during any 30-consecutive-minute period beginning or ending on a clock hour of the month of the load metered in kW, and, except as provided below in this section, such amounts shall be used as the onpeak and offpeak billing demands. The maximum metered demand for any month shall be the higher of (1) the highest onpeak metered demand in the month or (2) the highest offpeak metered demand in the month. The onpeak billing demand shall in no case be less than the sum of (1) 30 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, (3) 50 percent of the next 25,000 kW, (4) 60 percent of the next 50,000 kW, (5) 70 percent of the next 100,000 kW, (6) 80 percent of the next 150,000 kW, and (7) 85 percent of all kW in excess of 350,000 kW of the higher of the currently effective onpeak contract demand or the highest onpeak billing demand established during the preceding 12 months. The offpeak billing demand shall in no case be less than the sum of (1) 30 percent of the first 5,000 kW, (2) 40 percent of the next 20,000 kW, (3) 50 percent of the next 25,000 kW, (4) 60 percent of the next 50,000 kW, (5) 70 percent of the next 100,000 kW, (6) 80 percent of the next 150,000 kW, and (7) 85 percent of all kW in excess of 350,000 kW of the higher of the currently effective offpeak contract demand or the highest offpeak billing demand established during the preceding 12 months.

FACILITIES RENTAL CHARGE

There shall be no facilities rental charge under this rate schedule for delivery at bulk transmission voltage levels of 161 kV or higher.

For delivery at less than 161 kV, there shall be added to the customer's bill a facilities rental charge. This charge shall be \$.38 per kW per month except for delivery at voltages below 46 kV, in which case the charge shall be \$.97

per kW per month for the first 10,000 kW and \$1.76 per kW per month for the excess over 10,000 kW. Such charge shall be applied to the highest of (1) the highest onpeak or offpeak billing demand established during the latest 12-consecutive-month period, (2) the customer's currently effective onpeak contract demand, or (3) the customer's currently effective offpeak contract demand and shall be in addition to all other charges under this rate schedule, including minimum bill charges.

REACTIVE DEMAND CHARGES

If the reactive demand (in kVAR) is lagging during the 30-consecutive-minute period beginning or ending on a clock hour of the month in which the customer's highest metered demand occurs, there shall be added to the customer's bill a reactive charge of \$1.46 per kVAR of the amount, if any, by which the reactive demand exceeds 33 percent of such metered demand. If the reactive demand (in kVAR) is leading during the 30 consecutive minute period beginning or ending on a clock hour of the month in which the customer's lowest metered demand (excluding any metered demands which are less than 25 percent of the highest metered demand) occurs, there shall be added to the customer's bill a reactive charge of \$1.14 per kVAR of the amount of reactive demand. Such charges shall be in addition to all other charges under this rate schedule, including minimum bill charges.

MINIMUM MONTHLY BILL

The monthly bill under this rate schedule, excluding any facilities rental charges and any reactive charges, shall not be less than the sum of (1) the base customer charge, (2) the portion of the base demand charge, as adjusted, (but excluding the additional portion thereof applicable to excess of billing demand over contract demand) applicable to onpeak billing demand applied to the customer's onpeak billing demand, (3) the portion of the base demand charge, as adjusted, (but excluding the additional portion thereof applicable to excess of billing demand over contract demand) applicable to any excess of offpeak over onpeak billing demand applied to the amount, if any, by which the customer's offpeak billing demand exceeds its onpeak billing demand, (4) the base onpeak energy charge, as adjusted, applied to the customer's onpeak energy takings, and (5) the base offpeak energy charge, as adjusted, applied to the higher of customer's actual offpeak energy takings or the minimum offpeak energy takings amount provided for in the first paragraph of the section of this rate schedule entitled "Determination of Onpeak and Offpeak Demands, Maximum Metered Demand, and Energy Amounts".

Division may require minimum bills higher than those stated above.

CONTRACT REQUIREMENT

Division shall require contracts for all service provided under this rate schedule. The contract shall be for an initial term of at least 5 years and any renewals or extensions of the initial contract shall be for a term of at least 5 years; after 10 years of service, any such contract for the renewal or extension of service may provide for termination upon not less than 16 months' notice. The customer shall contract for its maximum requirements, which shall not exceed the amount of power capable of being used by customer, and Division shall not be obligated to supply power in greater amount at any time than the customer's currently effective onpeak or offpeak contract demand. If the customer uses any power other than that supplied by Division under this rate schedule, the contract may include other special provisions. The rate schedule in any power contract shall be subject to adjustment, modification, change, or replacement from time to time as provided under the power contract between Division and TVA.

PAYMENT

Above rates and charges are net. In the event that any bill is not paid on or before the delinquent date shown on bill, there shall be added to the bill an amount equal to 5 percent on the first \$250.00 of the bill plus one percent on any portion of the bill exceeding \$250.00; to any amount remaining unpaid 30 days after the delinquent date of the bill, there shall be added a penalty of one percent, and an additional one percent shall be added at the end of each successive 30-day period until the amount is paid in full.

SINGLE-POINT DELIVERY

The charges under this rate schedule are based upon the supply of service through a single delivery and metering point, and at a single voltage. If service is supplied to the same customer through more than one point of delivery or at different voltages, the supply of service at each delivery and metering point and at each different voltage shall be separately metered and billed.

Service is subject to Rules and Regulations of Division.

**MEMPHIS LIGHT, GAS AND WATER DIVISION
CITY OF MEMPHIS**

GAS SERVICE

**SCHEDULES G-8 & G-9
LARGE GENERAL SERVICE**

AVAILABILITY

This rate schedule is available for gas service to all Customers contracting for not less than 100 Ccf of Maximum Daily Demand. Gas supplied under this rate schedule is for the exclusive use of the Customer and shall not be resold.

CONTRACT REQUIREMENT

Customer taking service under this rate schedule shall be required to execute a written contract for a period of not less than one (1) year that specifies a Daily Contract Demand. For purposes of this rate schedule, a Daily Contract Demand means the maximum quantity of service that the Division will render during a day.

MONTHLY RATE (Ccf equals 100 cubic feet)

DEMAND CHARGE: \$0.251 per Ccf per month of Daily Contract Demand or Maximum Daily Demand during the twelve (12) months ending with the billing month, whichever is higher, plus

FOR GAS CONSUMED:

First 200,000 Ccf per month @ \$0.488 per Ccf
Volumes exceeding 200,000 Ccf per month @ \$0.374 per Ccf, plus

PURCHASED GAS ADJUSTMENT RIDER

The above rates are subject to adjustment under the provisions of the Purchased Gas Adjustment Rider.

MAXIMUM DAILY DEMAND

The Maximum Daily Demand shall be defined as the maximum volume consumed during a twenty-four (24) hour period during the current month. The Maximum Daily Demand shall be determined at the option of MLGW according to one of the following methods:

1. By estimate – one-twentieth (1/20) of the current monthly consumption
2. By actual test
3. By demand meter

VOLUMETRIC RESTRICTIONS

The Division reserves the right to require a new contract from any Customer whose Maximum Daily Demand is less than his Contract Demand, and further reserves the right to prohibit the addition of any loads in excess of present loads or present Contract Demands without prior Division approval. Any Customer who violates these restrictions may be required to remove the excess load requirements or have full service discontinued.

MINIMUM BILL

The minimum bill shall be \$0.904 for each Ccf of the higher of: (1) the Maximum Daily Demand during the twelve (12) months ending with the billing month, or (2) the Daily Contract Demand.

PAYMENT

The above rates are net, the gross rates being 5% higher. In the event the current monthly bill is not paid on or before delinquent date shown on the bill, the gross rates shall apply.

SINGLE POINT DELIVERY AND JOINT SERVICE THROUGH ONE METER

Service under this rate schedule shall be delivered to a single meter and at a single pressure. Service for the same Customer at other meters or at different pressures shall be separately metered and billed under a separate service agreement.

Customer shall install and maintain at its expense any equipment deemed necessary by the Division to provide service under this rate schedule, including, but not limited to, telephone lines and power outlets.

If a Customer receives service under more than one rate schedule at a meter, the volumes delivered under each rate schedule will be determined as provided in the Rules and Regulations of the Division.

EMERGENCY CONDITIONS

In the event of a system emergency, the Division may curtail deliveries under this Rate Schedule.

RULES AND REGULATIONS

Service is subject to the Rules and Regulations of the Division.