ref2012.d121011b

Report Annual Energy Outlook 2012 Early Release
Scenario ref2012 Reference case
Datekey d121011b
Release Date January 2012

82. Electric Power Projections for EMM Region

10 - Reliability First Corporation / Michigan

Electricity Supply and Demand	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	2019	2020	2021	2022	2023	2024	2025	2026	2027	2028	2029	2030	2031	2032	2033	2034	2035	2010-2035
Electricity Generating Capacity 1/ (gigawatts)																												
Electric Power Sector																												
Coal	10.77	10.77	10.77	10.77	9.44	9.44	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	9.05	-0.7%
Oil and Natural Gas Steam 2/	2.85	2.81	2.81	2.81	2.81	2.81	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	2.39	-0.6%
Combined Cycle	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.76	4.82	4.88	6.04	6.04	6.04	6.04	6.04	6.13	6.29	6.40	6.48	6.65	6.74	6.86	1.5%
Combustion Turbine/Diesel	3.89	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.88	3.91	3.91	3.91	0.0%
Nuclear Power	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	1.88	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	2.13	1.88	1.88	1.88	0.0%
Pumped Storage/Other 3/	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	1.87	0.0%
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Renewable Sources 4/	0.52	0.52	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	0.74	1.4%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	- -
Total Capacity	**26.54**	**26.50**	**26.71**	**26.71**	**25.38**	**25.38**	**24.57**	**24.57**	**24.57**	**24.57**	**24.57**	**24.82**	**24.82**	**24.88**	**24.94**	**26.11**	**26.11**	**26.11**	**26.11**	**26.11**	**26.21**	**26.37**	**26.49**	**26.58**	**26.54**	**26.63**	**26.75**	**0.0%**
Cumulative Planned Additions 6/																												
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Oil and Natural Gas Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Renewable Sources 4/	0.00	0.00	0.25	0.26	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	0.28	- -
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Total Planned Additions	**0.00**	**0.00**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**- -**
Cumulative Unplanned Additions 6/																												
Coal	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Oil and Natural Gas Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.06	0.12	1.28	1.28	1.28	1.28	1.28	1.37	1.53	1.64	1.72	1.89	1.98	2.10	- -
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.03	0.03	0.03	- -
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Pumped Storage/Other 3/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.02	0.03	0.03	0.04	0.05	0.05	- -
Total Unplanned Additions	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.06**	**0.12**	**1.28**	**1.28**	**1.29**	**1.29**	**1.29**	**1.39**	**1.55**	**1.67**	**1.75**	**1.97**	**2.06**	**2.18**	**- -**
Cumulative Electric Power Sector Additions	**0.00**	**0.00**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.22**	**0.28**	**0.34**	**1.50**	**1.50**	**1.51**	**1.51**	**1.51**	**1.60**	**1.77**	**1.89**	**1.97**	**2.18**	**2.28**	**2.40**	**- -**
Cumulative Retirements 7/																												
Coal	0.00	0.00	0.00	0.00	1.33	1.33	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	1.71	- -
Oil and Natural Gas Steam 2/	0.00	0.00	0.00	0.00	0.00	0.00	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	0.42	- -
Combined Cycle	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Combustion Turbine/Diesel	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Nuclear Power	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.25	0.25	0.25	- -
Pumped Storage	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Fuel Cells	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Renewable Sources 4/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	- -
Total	**0.00**	**0.00**	**0.00**	**0.00**	**1.34**	**1.34**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.14**	**2.39**	**2.39**	**2.39**	**- -**
End-Use Sectors 8/																												
Coal	0.11	0.10	0.10	0.10	0.10	0.10	0.10	0.16	0.16	0.16	0.16	0.16	0.16	0.17	0.17	0.18	0.18	0.19	0.20	0.20	0.21	0.22	0.23	0.24	0.25	0.25	0.26	3.8%
Petroleum	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.4%
Natural Gas	0.08	0.09	0.11	0.12	0.14	0.15	0.16	0.17	0.18	0.18	0.19	0.19	0.20	0.21	0.21	0.22	0.23	0.24	0.25	0.27	0.28	0.30	0.32	0.34	0.36	0.38	0.41	6.5%
Other Gaseous Fuels	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.6%
Renewable Sources 4/	0.04	0.06	0.10	0.15	0.20	0.26	0.32	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.38	0.39	0.39	0.39	0.39	0.39	0.39	7.5%
Other	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.0%
Total	**0.25**	**0.28**	**0.33**	**0.40**	**0.48**	**0.54**	**0.61**	**0.73**	**0.74**	**0.74**	**0.75**	**0.75**	**0.76**	**0.78**	**0.79**	**0.80**	**0.82**	**0.83**	**0.86**	**0.88**	**0.91**	**0.94**	**0.97**	**1.00**	**1.02**	**1.05**	**1.09**	**5.6%**

Electricity Sales																												
(billion kilowatthours)																												
Residential	29.71	32.00	31.56	30.82	30.12	29.85	29.61	29.50	29.53	29.62	29.72	29.72	29.78	29.87	29.98	30.12	30.29	30.43	30.58	30.73	30.91	31.09	31.26	31.40	31.52	31.64	31.77	0.0%
Commercial/Other	34.99	35.81	35.84	33.80	34.80	35.01	35.29	35.64	36.05	36.52	36.99	37.42	37.86	38.27	38.73	39.21	39.75	40.27	40.77	41.27	41.78	42.30	42.80	43.28	43.74	44.19	44.65	0.9%
Industrial	24.51	26.52	27.08	26.54	26.78	27.29	27.53	27.78	28.07	28.25	28.37	28.43	28.43	28.35	28.11	27.88	27.72	27.51	27.23	26.98	26.77	26.51	26.28	26.02	25.81	25.60	25.36	-0.2%
Transportation	0.11	0.12	0.13	0.13	0.13	0.14	0.14	0.15	0.16	0.17	0.17	0.19	0.20	0.21	0.22	0.23	0.25	0.26	0.28	0.29	0.31	0.33	0.35	0.37	0.39	0.42	0.44	5.4%
Total Sales	89.31	94.45	94.61	91.29	91.83	92.29	92.58	93.07	93.81	94.55	95.26	95.76	96.27	96.71	97.05	97.45	98.01	98.47	98.86	99.27	99.77	100.23	100.69	101.07	101.47	101.85	102.22	0.3%
Net Energy for Load (billion kilowatthours) 7/																												
Gross International Imports	8.57	7.35	4.32	4.78	4.81	4.32	1.82	1.82	1.83	1.65	1.48	1.31	4.47	4.09	3.93	3.86	1.19	1.53	1.63	1.98	1.76	1.08	1.42	1.24	1.54	1.28	1.02	-7.6%
Gross International Exports	2.41	2.71	2.40	2.80	3.20	3.50	3.49	3.47	3.46	3.44	3.43	3.41	3.40	3.39	3.37	3.36	3.34	3.33	3.31	3.30	3.29	3.27	3.26	3.24	3.23	3.21	3.20	0.7%
Gross Interregional Electricity Imports	3.82	5.12	2.48	4.08	5.98	6.49	8.33	8.33	8.38	8.29	8.20	8.04	7.80	7.48	7.30	5.53	4.37	3.52	3.72	4.13	4.63	4.63	5.19	5.96	6.05	6.65	7.54	1.6%
Gross Interregional Electricity Exports	0.11	0.12	0.13	0.12	0.08	0.08	0.09	0.09	0.09	0.08	0.08	0.07	0.07	0.07	0.08	0.14	0.14	0.15	0.16	0.17	0.16	0.16	0.16	0.16	0.17	0.17	0.16	1.2%
Purchases from Combined Heat and Power 8/	0.28	0.28	0.29	0.30	0.29	0.30	0.30	0.40	0.40	0.40	0.40	0.40	0.42	0.43	0.44	0.45	0.46	0.47	0.50	0.52	0.55	0.58	0.61	0.64	0.66	0.69	0.72	3.8%
Electric Power Sector Generation for Customer	87.03	91.18	99.40	94.09	92.95	93.56	94.25	94.51	95.15	96.11	97.04	97.80	95.32	96.37	97.07	99.37	103.79	104.78	104.88	104.53	104.75	105.88	105.43	105.22	105.21	105.26	104.97	0.6%
Total Net Energy for Load	97.17	101.11	103.97	100.32	100.75	101.08	101.13	101.50	102.21	102.93	103.61	104.06	104.53	104.91	105.29	105.72	106.33	106.83	107.25	107.70	108.24	108.74	109.24	109.65	110.08	110.49	110.89	0.4%
Generation by Fuel Type																												
(billion kilowatthours)																												
Electric Power Sector																												
Coal	63.29	62.98	64.73	56.39	53.15	49.44	50.59	51.02	52.00	51.58	50.32	49.21	47.29	48.15	50.39	46.37	53.88	54.96	55.35	55.30	55.41	55.48	55.50	55.50	55.50	55.54	56.00	-0.5%
Petroleum	0.27	0.28	0.34	0.31	0.29	0.29	0.27	0.27	0.28	0.28	0.28	0.28	0.27	0.28	0.29	0.27	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.30	0.3%
Natural Gas	8.30	12.14	17.86	20.25	22.01	24.81	24.70	24.34	23.91	23.65	23.90	23.68	22.56	22.26	20.44	27.57	24.49	24.16	24.13	23.78	24.00	25.13	24.67	24.46	26.42	26.27	25.97	3.1%
Nuclear	13.53	13.98	14.52	14.81	15.01	15.11	15.11	15.11	15.11	15.11	15.11	17.08	17.08	17.08	17.08	17.08	17.08	17.08	17.08	17.08	17.08	17.08	17.08	17.08	15.11	15.11	15.11	0.3%
Pumped Storage/Other 9/	-0.50	-0.57	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-0.30	-2.6%
Renewable Sources 10/	2.42	2.54	2.51	2.90	3.05	4.47	4.14	4.33	4.42	6.05	7.99	8.11	8.68	9.17	9.43	8.64	8.61	8.83	8.57	8.63	8.51	8.45	8.43	8.43	8.43	8.58	8.12	4.8%
Distributed Generation 5/	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02	0.02	0.02	- -
Total Generation	**87.30**	**91.34**	**99.67**	**94.35**	**93.21**	**93.82**	**94.52**	**94.77**	**95.41**	**96.37**	**97.30**	**98.06**	**95.58**	**96.63**	**97.33**	**99.64**	**104.05**	**105.04**	**105.14**	**104.79**	**105.01**	**106.15**	**105.70**	**105.48**	**105.48**	**105.53**	**105.23**	**0.6%**
Sales to Customers	87.03	91.18	99.40	94.09	92.95	93.56	94.25	94.51	95.15	96.11	97.04	97.80	95.32	96.37	97.07	99.37	103.79	104.78	104.88	104.53	104.75	105.88	105.43	105.22	105.21	105.26	104.97	0.6%
Generation for Own Use	0.28	0.16	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	0.26	2.0%
End-Use Sectors 8/																												
Coal	0.40	0.40	0.40	0.40	0.40	0.40	0.40	0.78	0.78	0.78	0.78	0.78	0.82	0.87	0.92	0.94	0.99	1.01	1.08	1.14	1.21	1.27	1.34	1.41	1.46	1.51	1.57	5.6%
Petroleum	0.14	0.13	0.13	0.13	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	0.10	-1.0%
Natural Gas	0.30	0.31	0.43	0.51	0.61	0.67	0.72	0.77	0.80	0.83	0.87	0.90	0.94	0.98	1.02	1.07	1.13	1.20	1.28	1.36	1.47	1.59	1.71	1.84	1.97	2.11	2.27	8.3%
Other Gaseous Fuels	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.1%
Renewable Sources 10/	0.21	0.26	0.30	0.37	0.43	0.51	0.58	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.67	0.68	0.68	0.69	0.70	0.71	0.72	0.73	0.73	0.73	0.74	0.74	4.4%
Other	0.03	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	-1.1%
Total	**1.10**	**1.18**	**1.33**	**1.48**	**1.61**	**1.74**	**1.87**	**2.39**	**2.42**	**2.45**	**2.49**	**2.52**	**2.60**	**2.69**	**2.78**	**2.86**	**2.97**	**3.06**	**3.22**	**3.37**	**3.55**	**3.75**	**3.95**	**4.15**	**4.34**	**4.53**	**4.75**	**5.7%**
Sales to Utilities	0.28	0.28	0.29	0.30	0.29	0.30	0.30	0.40	0.40	0.40	0.40	0.40	0.42	0.43	0.44	0.45	0.46	0.47	0.50	0.52	0.55	0.58	0.61	0.64	0.66	0.69	0.72	3.8%
Generation for Own Use	0.82	0.90	1.04	1.18	1.32	1.45	1.57	1.99	2.02	2.05	2.08	2.12	2.19	2.26	2.34	2.41	2.50	2.58	2.72	2.85	3.00	3.17	3.34	3.51	3.67	3.85	4.03	6.2%
Total Electricity Generation	**88.40**	**92.52**	**101.00**	**95.83**	**94.82**	**95.56**	**96.39**	**97.16**	**97.83**	**98.82**	**99.79**	**100.59**	**98.19**	**99.32**	**100.11**	**102.49**	**107.02**	**108.10**	**108.36**	**108.17**	**108.56**	**109.90**	**109.65**	**109.63**	**109.82**	**110.06**	**109.98**	**0.7%**
End-Use Prices																												
(2010 cents per kilowatthour)																												
Residential	11.9	12.6	12.1	11.5	11.6	11.8	12.1	12.2	12.1	12.1	12.1	12.1	12.1	12.1	12.0	12.0	12.0	11.9	11.9	11.9	11.9	11.9	11.9	11.9	12.0	12.1	12.1	-0.2%
Commercial	9.4	9.8	9.1	8.6	8.6	8.6	8.9	8.9	8.8	8.8	8.8	8.8	8.7	8.7	8.7	8.7	8.7	8.6	8.6	8.5	8.5	8.5	8.6	8.6	8.7	8.8	8.9	-0.4%
Industrial	7.3	7.2	6.7	6.5	6.4	6.5	6.7	6.7	6.7	6.6	6.7	6.6	6.7	6.7	6.7	6.7	6.7	6.6	6.6	6.6	6.7	6.7	6.7	6.8	6.9	7.0	7.1	-0.1%
Transportation	9.7	9.3	8.7	8.5	8.4	8.4	8.6	8.5	8.4	8.3	8.3	8.2	8.1	8.1	8.3	8.5	8.7	8.8	8.9	9.1	9.2	9.3	9.5	9.6	9.8	10.0	10.2	0.4%
All Sectors Average	9.7	10.0	9.4	9.0	8.9	9.0	9.2	9.3	9.2	9.2	9.2	9.2	9.2	9.2	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.1	9.2	9.3	9.4	9.4	-0.2%
(nominal cents per kilowatthour)																												
Residential	11.8	12.6	12.3	11.8	12.1	12.5	13.1	13.4	13.6	13.8	14.1	14.3	14.6	14.9	15.2	15.4	15.8	16.0	16.3	16.6	16.9	17.2	17.5	17.9	18.4	18.8	19.3	1.7%
Commercial	9.3	9.8	9.2	8.9	8.9	9.1	9.6	9.8	9.9	10.0	10.2	10.4	10.6	10.8	11.0	11.2	11.4	11.5	11.7	11.9	12.1	12.4	12.6	13.0	13.3	13.7	14.1	1.5%
Industrial	7.2	7.2	6.8	6.7	6.7	6.9	7.2	7.4	7.5	7.6	7.8	7.9	8.1	8.3	8.4	8.6	8.7	8.9	9.1	9.3	9.5	9.7	9.9	10.2	10.6	10.9	11.2	1.8%
Transportation	9.6	9.3	8.9	8.8	8.7	8.9	9.2	9.4	9.4	9.5	9.6	9.7	9.8	10.1	10.5	10.9	11.4	11.8	12.2	12.6	13.1	13.5	14.0	14.5	15.0	15.6	16.1	2.2%
All Sectors Average	9.6	10.0	9.6	9.3	9.3	9.5	10.0	10.2	10.3	10.5	10.7	10.9	11.1	11.3	11.5	11.7	12.0	12.1	12.4	12.6	12.9	13.2	13.5	13.8	14.2	14.6	15.0	1.6%
Prices by Service Category																												
(2010 cents per kilowatthour)																												
Generation	6.8	7.2	6.5	6.1	5.9	6.0	6.1	6.1	6.0	6.0	6.0	6.0	6.0	6.0	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	5.9	6.0	6.1	6.2	6.2	-0.6%
Transmission	0.6	0.6	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	0.6	-0.4%
Distribution	2.2	2.3	2.3	2.3	2.4	2.4	2.5	2.5	2.5	2.5	2.5	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.6	2.7	0.6%
(nominal cents per kilowatthour)																												
Generation	6.8	7.2	6.6	6.2	6.2	6.3	6.6	6.7	6.8	6.8	7.0	7.1	7.2	7.4	7.5	7.6	7.8	7.8	8.0	8.2	8.3	8.5	8.7	9.0	9.3	9.6	9.9	1.3%
Transmission	0.6	0.6	0.6	0.6	0.7	0.7	0.7	0.7	0.7	0.7	0.7	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.8	0.9	0.9	0.9	0.9	1.4%
Distribution	2.2	2.3	2.3	2.4	2.4	2.6	2.7	2.8	2.8	2.9	3.0	3.0	3.1	3.2	3.3	3.3	3.4	3.5	3.6	3.7	3.7	3.8	3.9	4.0	4.0	4.1	4.2	2.5%
Fuel Consumption (quadrillion Btu) 11/																												
Coal	0.65	0.65	0.69	0.58	0.55	0.50	0.51	0.52	0.53	0.53	0.51	0.50	0.48	0.49	0.52	0.47	0.55	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.57	0.58	-0.5%
Natural Gas	0.09	0.12	0.16	0.18	0.20	0.22	0.22	0.21	0.21	0.21	0.21	0.21	0.20	0.20	0.18	0.22	0.20	0.20	0.20	0.19	0.19	0.20	0.20	0.20	0.21	0.21	0.20	2.2%
Oil	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-0.1%
Total	**0.74**	**0.77**	**0.85**	**0.77**	**0.75**	**0.72**	**0.74**	**0.74**	**0.74**	**0.74**	**0.73**	**0.71**	**0.68**	**0.69**	**0.70**	**0.70**	**0.76**	**0.77**	**0.77**	**0.77**	**0.77**	**0.78**	**0.77**	**0.77**	**0.78**	**0.78**	**0.78**	**0.1%**

Fuel Prices (2010 dollars per million Btu)																												
Coal	1.83	2.01	2.05	2.12	2.09	2.14	2.12	2.12	2.16	2.17	2.18	2.20	2.23	2.25	2.26	2.28	2.33	2.36	2.40	2.44	2.48	2.51	2.53	2.56	2.60	2.63	2.66	1.1%
Natural Gas	4.60	4.98	4.49	4.23	4.23	4.16	4.27	4.29	4.38	4.54	4.65	4.73	4.91	5.12	5.22	5.33	5.32	5.51	5.67	5.70	5.69	5.77	5.96	6.18	6.36	6.54	6.77	1.2%
Distillate Fuel Oil	15.34	19.16	23.81	24.00	20.40	21.57	22.51	22.84	23.35	23.54	23.77	23.97	24.18	24.42	24.69	24.84	25.12	25.36	25.55	25.70	25.97	26.16	26.54	26.77	27.28	27.83	28.16	1.6%
Residual Fuel Oil	8.43	9.99	14.17	13.64	14.32	15.49	16.33	16.60	17.02	17.30	17.43	17.58	17.72	17.83	18.06	18.17	18.33	18.36	18.51	18.70	18.81	18.74	18.60	18.35	18.72	19.01	19.23	2.7%
(nominal dollars per million Btu)																												
Coal	1.81	2.01	2.09	2.18	2.17	2.26	2.29	2.33	2.42	2.48	2.54	2.61	2.70	2.79	2.85	2.94	3.07	3.16	3.28	3.40	3.52	3.64	3.74	3.86	3.98	4.10	4.21	3.0%
Natural Gas	4.55	4.98	4.58	4.35	4.40	4.40	4.60	4.72	4.91	5.18	5.41	5.62	5.95	6.33	6.58	6.87	7.00	7.39	7.75	7.95	8.09	8.36	8.80	9.30	9.74	10.21	10.75	3.1%
Distillate Fuel Oil	15.16	19.16	24.28	24.71	21.22	22.82	24.26	25.10	26.16	26.88	27.68	28.48	29.32	30.21	31.17	32.00	33.01	34.01	34.95	35.84	36.92	37.91	39.19	40.27	41.79	43.40	44.70	3.4%
Residual Fuel Oil	8.34	9.99	14.46	14.05	14.89	16.39	17.61	18.24	19.07	19.76	20.30	20.90	21.49	22.06	22.80	23.41	24.10	24.63	25.31	26.08	26.75	27.16	27.46	27.60	28.67	29.66	30.53	4.6%
Emissions 12/																												
Total Carbon (million tons)	21.70	20.69	22.73	19.88	19.17	18.23	18.59	18.68	18.93	18.81	18.47	18.07	17.31	17.56	18.11	17.50	19.57	19.94	20.08	20.02	20.06	20.18	20.12	20.09	20.32	20.30	20.39	-0.1%
Carbon Dioxide (million tons)	79.56	75.87	83.35	72.89	70.29	66.86	68.16	68.49	69.41	68.98	67.73	66.25	63.46	64.38	66.39	64.18	71.77	73.10	73.63	73.40	73.54	74.01	73.77	73.68	74.50	74.44	74.77	-0.1%
Sulfur Dioxide (million tons)	0.26	0.23	0.33	0.25	0.26	0.22	0.22	0.20	0.19	0.19	0.19	0.19	0.18	0.16	0.15	0.13	0.14	0.15	0.15	0.15	0.14	0.14	0.14	0.14	0.15	0.15	0.15	-1.9%
Nitrogen Oxide (million tons)	0.07	0.07	0.07	0.05	0.06	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.06	0.05	-1.0%
Mercury (tons)	1.70	1.38	1.52	1.34	1.27	1.20	0.16	0.16	0.17	0.16	0.16	0.15	0.15	0.17	0.15	0.14	0.17	0.18	0.18	0.18	0.17	0.18	0.18	0.18	0.18	0.18	0.18	-7.8%

1/ Net summer capacity is the steady hourly output that generating equipment is expected to supply to system load (exclusive of auxiliary power), as demonstrated by tests during summer peak demand. Includes electric utilities, small power producers, and exempt wholesale generators.

2/ Includes oil-, gas-, and dual-fired capacity.

3/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, and spent sulfite liquor.

4/ Includes conventional hydroelectric, geothermal, wood, wood waste, municipal waste, other biomass, solar thermal, photovoltaics, and wind power.

5/ Primarily peak-load capacity fueled by natural gas.

6/ Cumulative additions after December 31, 2010.

7/ Generation to meet system load by source.

8/ Includes combined heat and power plants and electricity-only plants in the commercial and industrial sectors; and small on-site generating systems in the residential, commercial, and industrial sectors used primarily for own-use generation, but which may also sell some power to the grid.

9/ Other includes methane, propane gas, and blast furnace gas for utilities; and hydrogen, sulfur, batteries, chemicals, fish oil, spent sulfite liquor, and non-biogenic municipal waste.

10/ Includes conventional hydroelectric, geothermal, wood, wood waste, biogenic municipal waste, other biomass, solar thermal, photovoltaics, and wind power.

11/ Includes fuel consumption by electric utilities, small power producers, independent power producers, and exempt wholesale generators.

12/ Estimated emissions from utilities and nonutilities (excluding combined heat and power).

EMM = Electricity market module.

- - = Not applicable.

Note: Totals may not equal sum of components due to independent rounding.

Sources: 2009 and 2010 (except for prices and nonutility data): U.S. Energy Information Administration (EIA), Annual Energy Review 2010, DOE/EIA-0384(2010) (Washington, DC, October 2011). Other 2009 and 2010 and projections: EIA, AEO2012 National Energy Modeling System run ref2012.d121011b.