

Part 1 - Appendix 3D
GMOC Reports

Missouri 4 CSR 240-22.030 8.C Reporting Requirements
Load Analysis and Forecasting

(8)(C) For the net system load, the utility shall provide plots of energy usage and peak demand.

(8)(C)(1) The energy plots shall include the summer, non-summer and total energy usage for each calendar year.

(8)(C)(2) The peak demand plots shall include the summer and winter peak demands.

Compliance: See Plots 3D-1 through 3D-12 for base-case KCP&L forecast reports designed to comply with section (8)(C) reporting requirements.

Forecast uncertainty is quantified through the use of alternative economic scenarios. Moody's Economy.com provided three economic scenarios termed Low, Base and High that represent a 95% confidence range around the base case for economic growth. These economic scenarios were each used to forecast load growth and these forecasts represent a 95% confidence interval around load growth based on the uncertainty due to economic growth.

Linked Files:

IRP_8C_GMO_NSI_Peak.xls

MPS Base System_Datalyzer.xls

MPS Low System_Datalyzer.xls

MPS High System_Datalyzer.xls

StJoe Base System_Datalyzer.xls

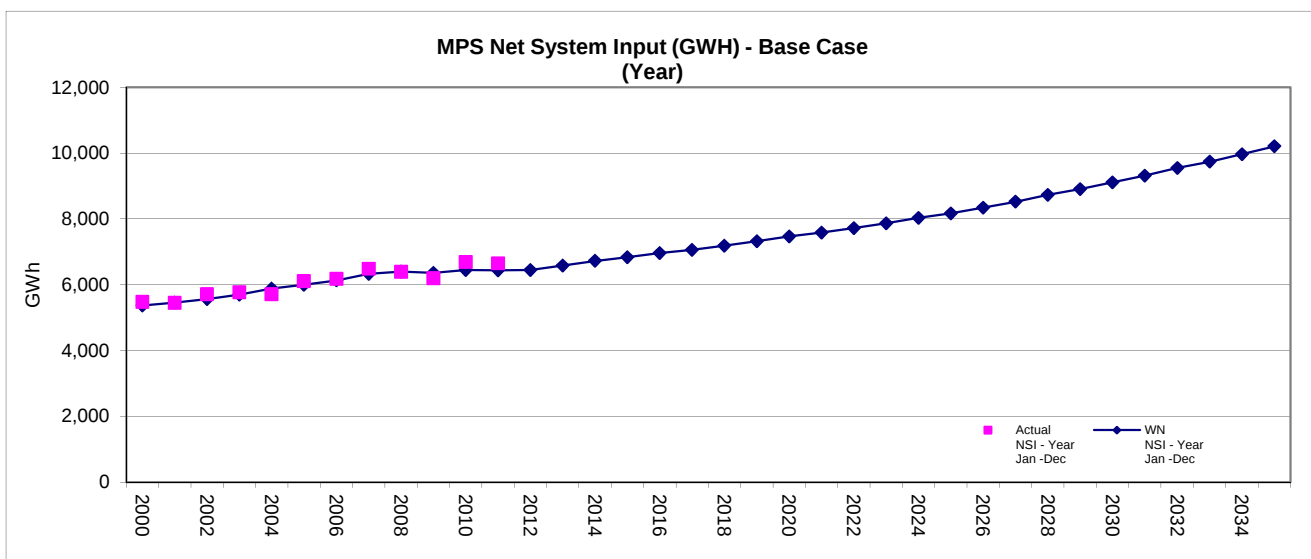
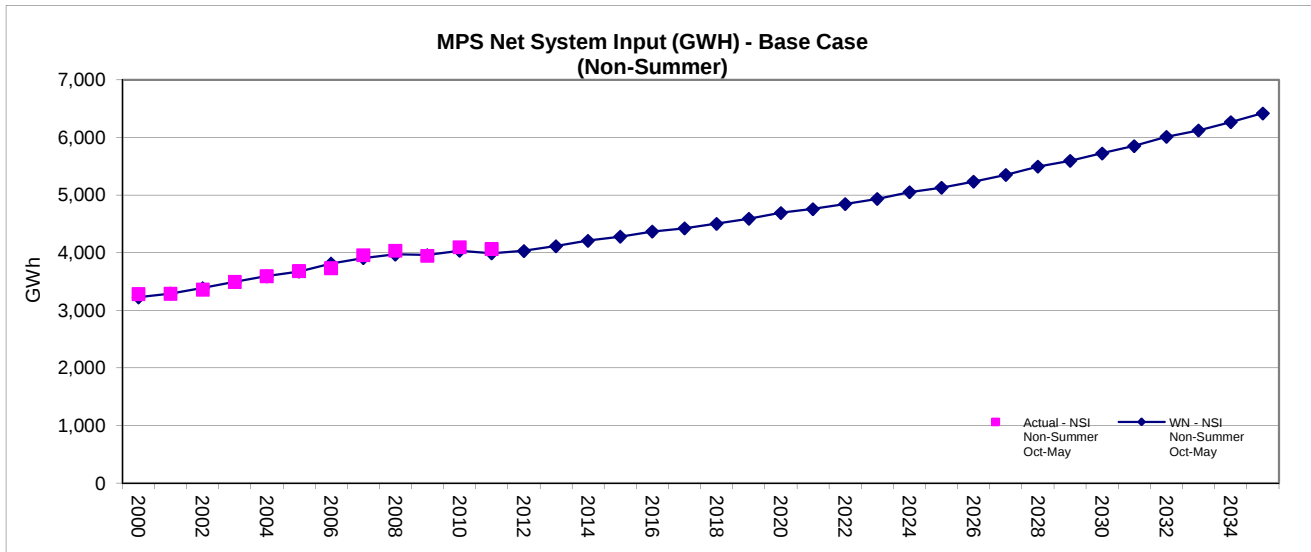
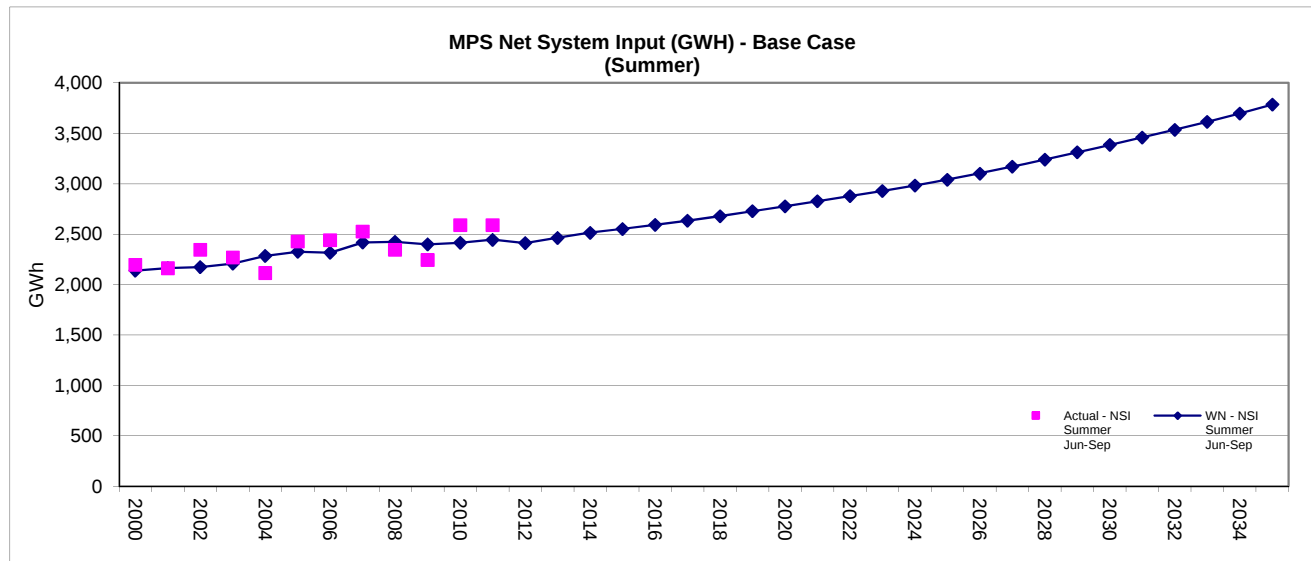
StJoe Low System_Datalyzer.xls

StJoe High System_Datalyzer.xls

**Plot 3D-1 Missouri Public Service Energy Forecast (GWH) - Base Case: Net System Input (NSI)
(Actual vs. Weather Normalized)**

Year	Actual - NSI Summer Jun-Sep	WN - NSI Summer Jun-Sep	Actual - NSI Non-Summer Oct-May	WN - NSI Non-Summer Oct-May	Actual NSI - Year Jan -Dec	WN NSI - Year Jan -Dec
1995	1,740.7	-	2,543	-	4,283.8	-
1996	1,705.8	-	2,760	-	4,466.0	-
1997	1,837.0	-	2,821	-	4,658.3	-
1998	2,045.0	-	2,959	-	5,004.2	-
1999	2,029.5	-	3,017	-	5,046.7	-
2000	2,195.1	2,138.8	3,282	3,227.9	5,477.4	5,366.7
2001	2,162.3	2,164.8	3,285	3,290.1	5,447.3	5,455.0
2002	2,345.7	2,173.3	3,362	3,387.8	5,707.8	5,561.1
2003	2,269.8	2,207.8	3,493	3,492.6	5,762.4	5,700.5
2004	2,114.9	2,285.3	3,593	3,593.7	5,707.4	5,879.0
2005	2,429.5	2,325.9	3,680	3,673.5	6,109.3	5,999.4
2006	2,440.8	2,316.1	3,734	3,814.0	6,174.8	6,130.0
2007	2,526.5	2,418.2	3,958	3,907.6	6,484.9	6,325.8
2008	2,346.4	2,425.6	4,037	3,972.7	6,383.7	6,398.3
2009	2,245.1	2,398.6	3,946	3,960.2	6,191.2	6,358.8
2010	2,589.4	2,415.1	4,099	4,034.9	6,688.3	6,450.0
2011	2,589.6	2,445.4	4,065	3,990.9	6,654.7	6,436.3
2012		2,412.4		4,032.9		6,445.3
2013		2,464.6		4,117.1		6,581.7
2014		2,515.0		4,208.7		6,723.7
2015		2,553.2		4,280.3		6,833.5
2016		2,592.3		4,369.5		6,961.8
2017		2,633.5		4,423.4		7,056.9
2018		2,679.7		4,503.8		7,183.5
2019		2,728.9		4,589.3		7,318.2
2020		2,777.1		4,693.8		7,470.9
2021		2,827.0		4,759.7		7,586.6
2022		2,877.4		4,846.8		7,724.1
2023		2,928.4		4,935.6		7,863.9
2024		2,982.8		5,051.6		8,034.4
2025		3,042.0		5,129.1		8,171.1
2026		3,102.4		5,235.7		8,338.1
2027		3,170.7		5,350.9		8,521.6
2028		3,239.5		5,495.2		8,734.7
2029		3,311.9		5,595.3		8,907.2
2030		3,386.6		5,724.9		9,111.5
2031		3,459.9		5,852.1		9,312.0
2032		3,535.6		6,011.7		9,547.3
2033		3,614.6		6,122.3		9,736.8
2034		3,696.8		6,267.2		9,964.0
2035		3,785.2		6,419.1		10,204.3
00-'10	1.7%	1.2%	2.2%	2.3%	2.0%	1.9%
10-'15		1.1%		1.2%		1.2%
15-'20		1.7%		1.9%		1.8%
20-'25		1.8%		1.8%		1.8%
25-'30		2.2%		2.2%		2.2%
30-'35		2.3%		2.3%		2.3%
10-'35		1.8%		1.9%		1.9%

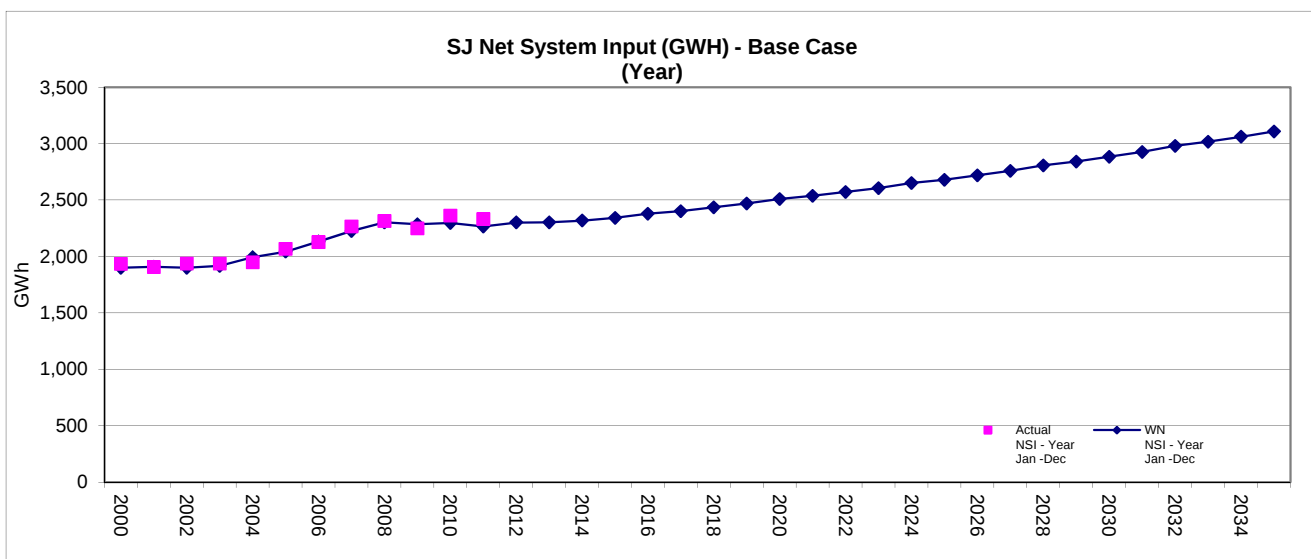
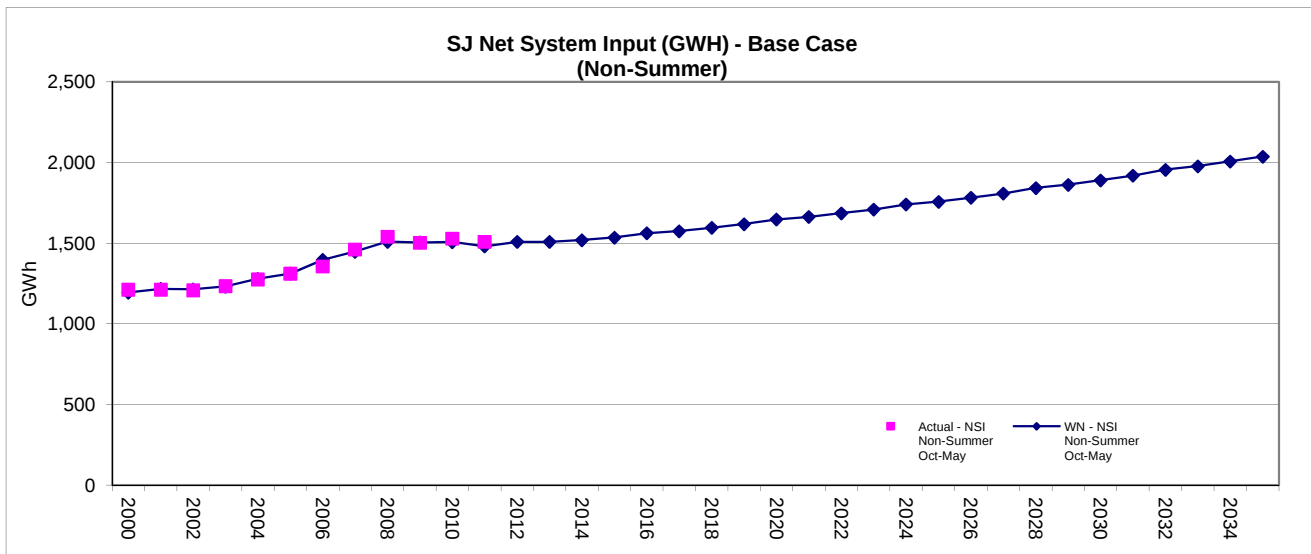
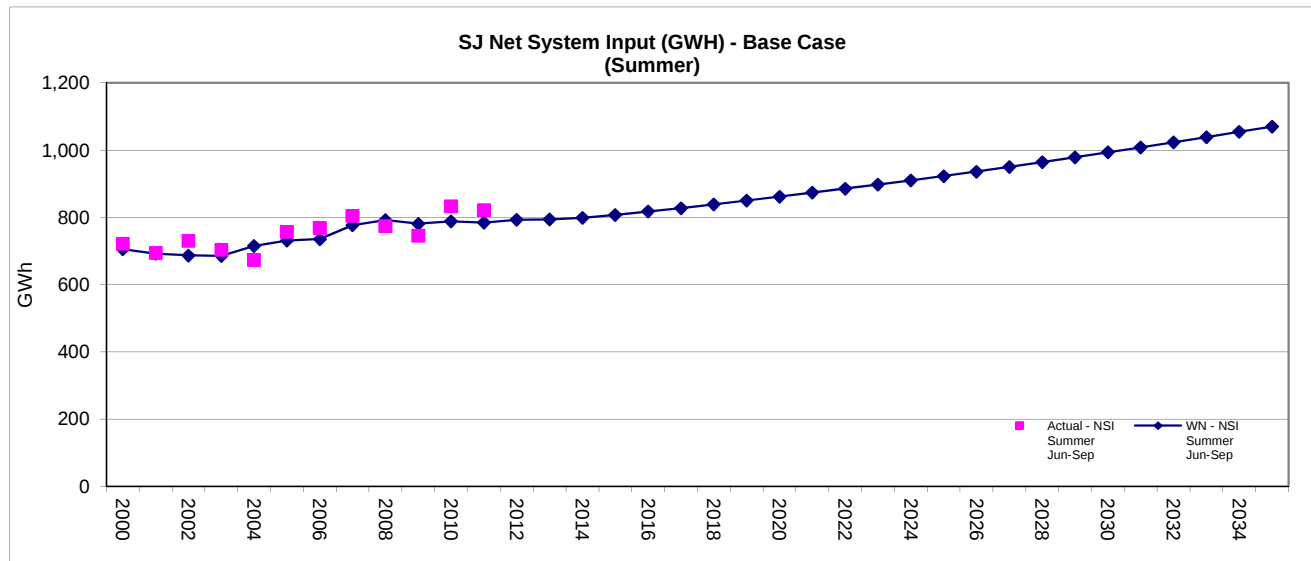
Note: Energy MWH (NSI) Includes annual system losses



Plot 3D-2 St. Joseph Energy Forecast (GWH) - Base Case: Net System Input (NSI)
(Actual vs. Weather Normalized)

Year	Actual - NSI Summer Jun-Sep	WN - NSI Summer Jun-Sep	Actual - NSI Non-Summer Oct-May	WN - NSI Non-Summer Oct-May	Actual NSI - Year Jan -Dec	WN NSI - Year Jan -Dec
1995	586.8	-	996.3	-	1,583	-
1996	583.2	-	1,075.3	-	1,658	-
1997	606.1	-	1,074.6	-	1,681	-
1998	675.4	-	1,095.6	-	1,771	-
1999	670.8	-	1,130.5	-	1,801	-
2000	722.0	705.8	1,212.6	1,193.8	1,935	1,899.6
2001	694.2	691.9	1,212.5	1,217.5	1,907	1,909.4
2002	730.2	687.0	1,206.9	1,213.6	1,937	1,900.5
2003	703.6	685.4	1,233.4	1,232.0	1,937	1,917.4
2004	673.2	714.8	1,276.0	1,279.8	1,949	1,994.6
2005	757.1	731.2	1,309.9	1,312.0	2,067	2,043.2
2006	768.3	735.6	1,357.0	1,397.2	2,125	2,132.8
2007	804.8	777.1	1,461.9	1,448.6	2,267	2,225.6
2008	773.8	791.8	1,541.1	1,509.8	2,315	2,301.6
2009	745.2	781.2	1,502.4	1,504.3	2,248	2,285.5
2010	833.1	788.1	1,529.3	1,507.7	2,362	2,295.8
2011	821.3	784.6	1,508.4	1,480.9	2,330	2,265.4
2012		793.3		1,508.1		2,301.4
2013		793.7		1,509.0		2,302.7
2014		798.7		1,519.7		2,318.4
2015		807.1		1,535.5		2,342.6
2016		817.8		1,562.3		2,380.1
2017		827.7		1,575.3		2,403.0
2018		838.6		1,596.2		2,434.8
2019		850.4		1,618.7		2,469.1
2020		862.0		1,647.7		2,509.6
2021		873.9		1,663.5		2,537.4
2022		885.9		1,686.2		2,572.1
2023		897.9		1,709.1		2,607.1
2024		910.4		1,740.2		2,650.6
2025		923.1		1,757.1		2,680.2
2026		936.4		1,782.1		2,718.5
2027		950.2		1,808.2		2,758.4
2028		964.4		1,842.7		2,807.1
2029		978.8		1,862.3		2,841.1
2030		993.6		1,890.5		2,884.2
2031		1,008.5		1,919.0		2,927.5
2032		1,023.7		1,956.0		2,979.7
2033		1,039.1		1,977.3		3,016.4
2034		1,054.5		2,006.9		3,061.3
2035		1,070.2		2,037.0		3,107.2
00-'10	1.4%	1.1%	2.3%	2.4%	2.0%	1.9%
10-'15		0.5%		0.4%		0.4%
15-'20		1.3%		1.4%		1.4%
20-'25		1.4%		1.3%		1.3%
25-'30		1.5%		1.5%		1.5%
30-'35		1.5%		1.5%		1.5%
10-'35		1.2%		1.2%		1.2%

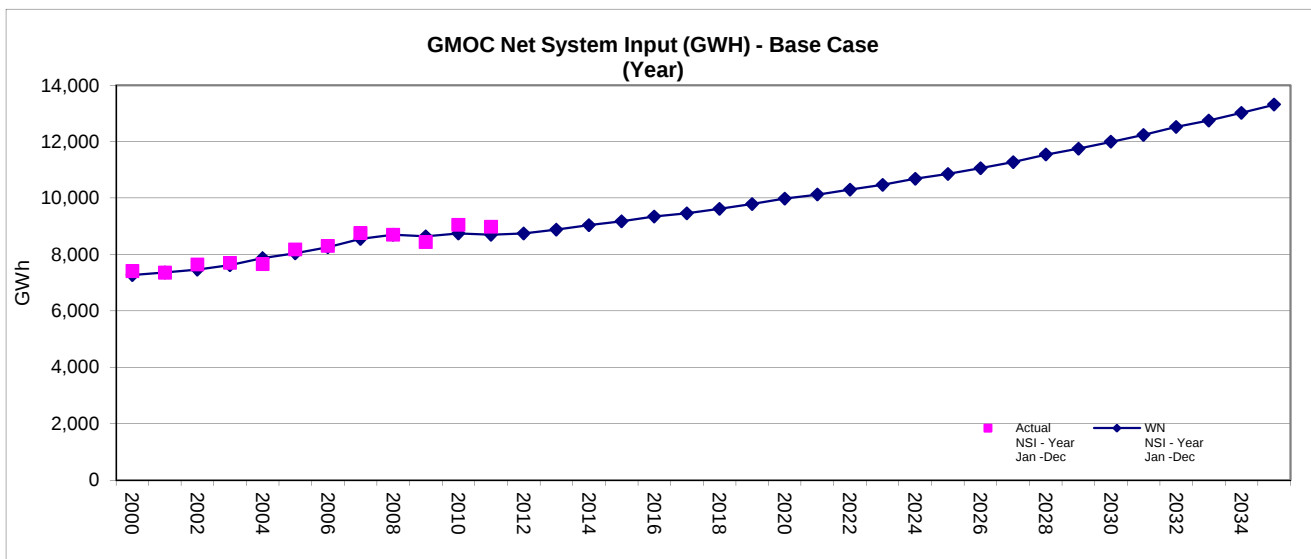
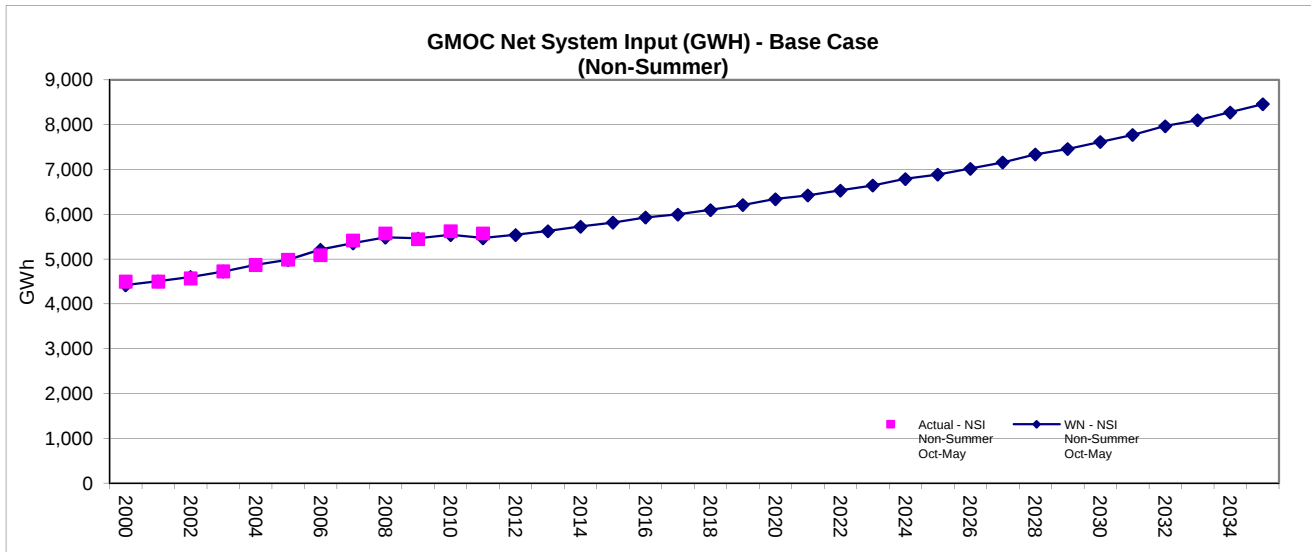
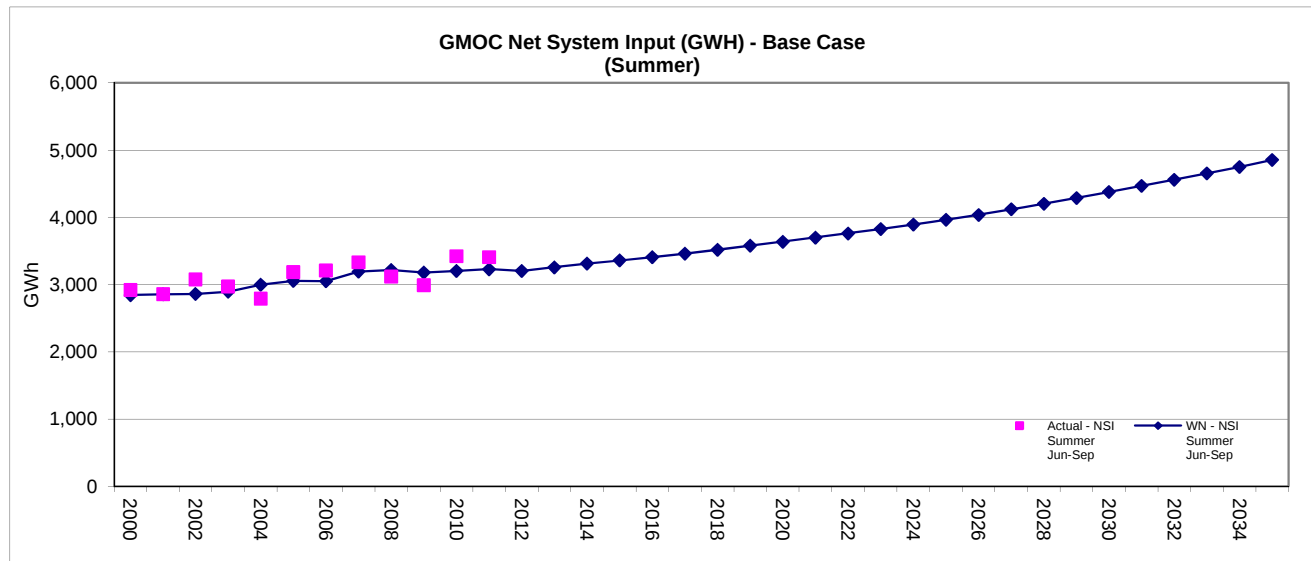
Note: Energy MWH (NSI) Includes annual system losses



**Plot 3D-3 Greater Missouri Operation Company (GMOC) Energy Forecast (GWH) - Base Case: Net System Input (NSI)
(Actual vs. Weather Normalized)**

Year	Actual - NSI Summer Jun-Sep	WN - NSI Summer Jun-Sep	Actual - NSI Non-Summer Oct-May	WN - NSI Non-Summer Oct-May	Actual NSI - Year Jan -Dec	WN NSI - Year Jan -Dec
1995	2,327.5	0.0	3,539.4	0.0	5,866.9	0.0
1996	2,289.0	0.0	3,835.4	0.0	6,124.4	0.0
1997	2,443.0	0.0	3,895.9	0.0	6,338.9	0.0
1998	2,720.4	0.0	4,054.8	0.0	6,775.2	0.0
1999	2,700.3	0.0	4,147.7	0.0	6,848.0	0.0
2000	2,917.1	2,844.7	4,494.8	4,421.7	7,412.0	7,266.3
2001	2,856.5	2,856.7	4,497.5	4,507.6	7,354.0	7,364.3
2002	3,075.9	2,860.3	4,569.0	4,601.4	7,644.9	7,461.7
2003	2,973.5	2,893.3	4,726.1	4,724.6	7,699.5	7,617.9
2004	2,788.1	3,000.1	4,868.6	4,873.5	7,656.7	7,873.6
2005	3,186.6	3,057.2	4,989.7	4,985.5	8,176.3	8,042.7
2006	3,209.2	3,051.7	5,091.0	5,211.2	8,300.2	8,262.9
2007	3,331.3	3,195.3	5,420.3	5,356.1	8,751.6	8,551.4
2008	3,120.2	3,217.3	5,578.4	5,482.5	8,698.6	8,699.8
2009	2,990.3	3,179.8	5,448.6	5,464.5	8,438.9	8,644.3
2010	3,422.5	3,203.3	5,628.2	5,542.6	9,050.7	8,745.8
2011	3,410.9	3,230.0	5,573.4	5,471.8	8,984.3	8,701.8
2012		3,205.7		5,541.1		8,746.7
2013		3,258.3		5,626.1		8,884.4
2014		3,313.7		5,728.3		9,042.0
2015		3,360.3		5,815.8		9,176.1
2016		3,410.2		5,931.8		9,342.0
2017		3,461.2		5,998.7		9,459.9
2018		3,518.3		6,100.0		9,618.3
2019		3,579.3		6,207.9		9,787.3
2020		3,639.1		6,341.5		9,980.5
2021		3,700.9		6,423.2		10,124.1
2022		3,763.3		6,533.0		10,296.3
2023		3,826.3		6,644.7		10,471.0
2024		3,893.2		6,791.8		10,685.0
2025		3,965.1		6,886.2		10,851.3
2026		4,038.8		7,017.8		11,056.6
2027		4,120.9		7,159.1		11,280.0
2028		4,204.0		7,337.9		11,541.8
2029		4,290.8		7,457.5		11,748.3
2030		4,380.2		7,615.4		11,995.7
2031		4,468.5		7,771.1		12,239.5
2032		4,559.3		7,967.7		12,527.1
2033		4,653.6		8,099.6		12,753.2
2034		4,751.3		8,274.0		13,025.3
2035		4,855.4		8,456.1		13,311.5
00-'10	1.6%	1.2%	2.3%	2.3%	2.0%	1.9%
10-'15		1.0%		1.0%		1.0%
15-'20		1.6%		1.7%		1.7%
20-'25		1.7%		1.7%		1.7%
25-'30		2.0%		2.0%		2.0%
30-'35		2.1%		2.1%		2.1%
10-'35		1.7%		1.7%		1.7%

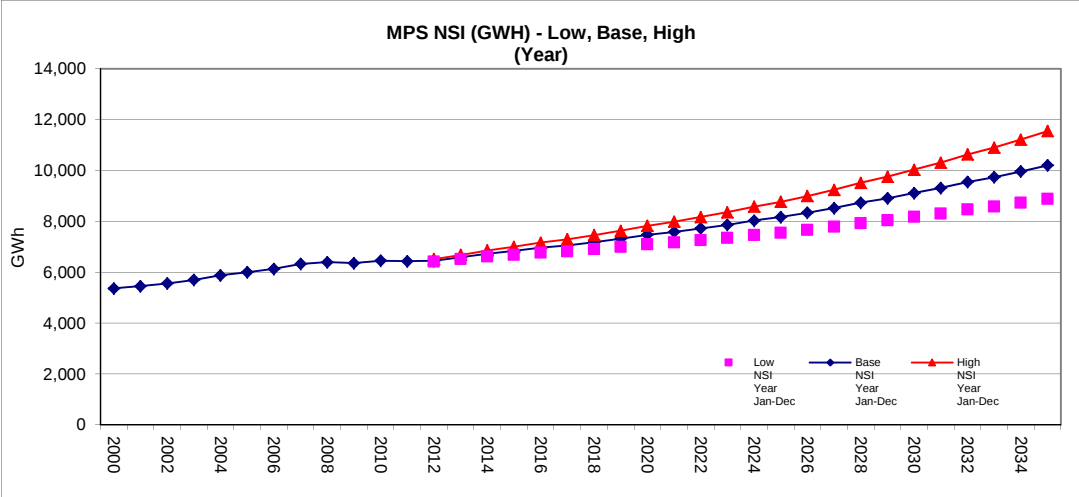
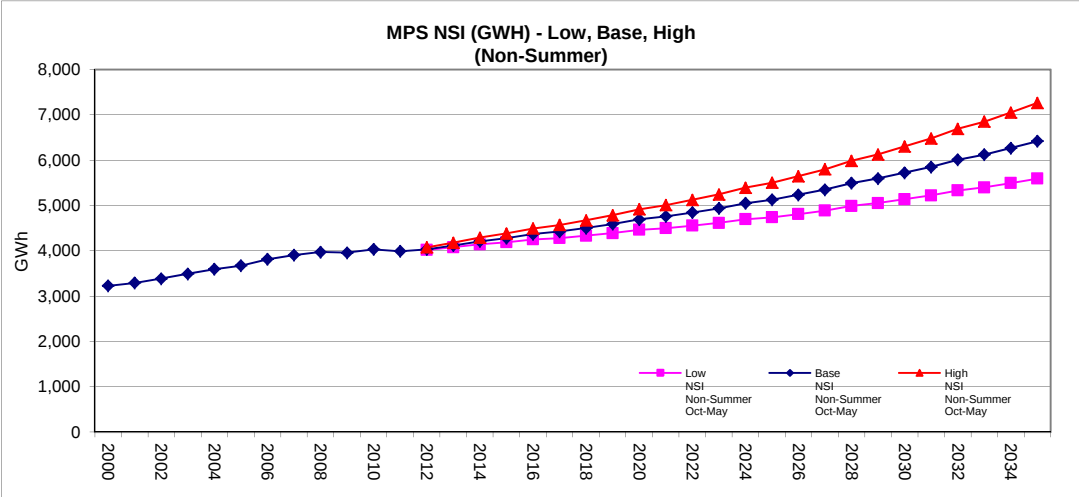
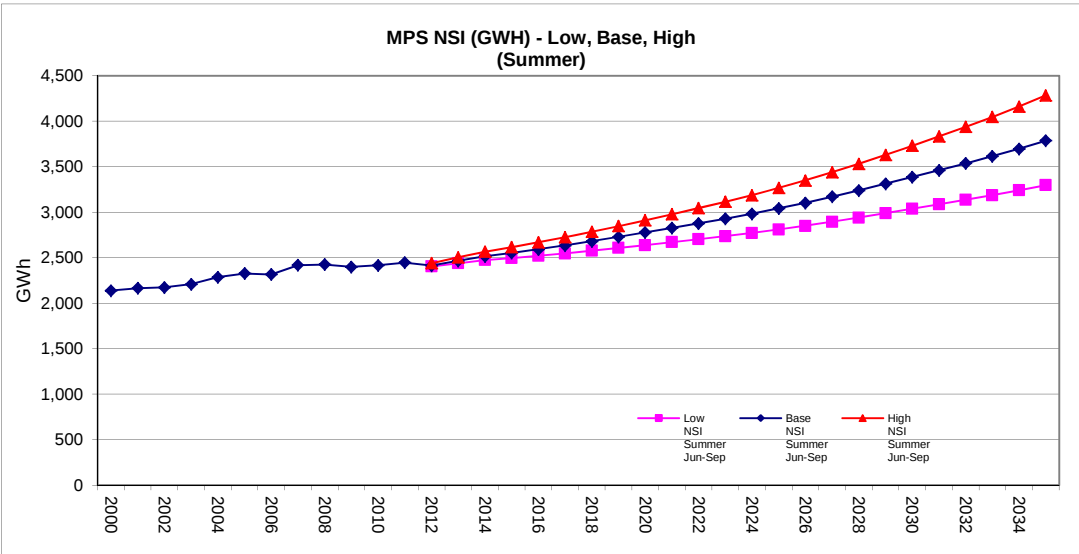
Note: Energy MWH (NSI) Includes annual system losses



Plot 3D-4 Missouri Public Service Energy Forecast (GWH): Net System Input (NSI)
(Low Case, Base Case, High Case)

Year	Low NSI Summer Jun-Sep	Base NSI Summer Jun-Sep	High NSI Summer Jun-Sep	Low NSI Non-Summer Oct-May	Base NSI Non-Summer Oct-May	High NSI Non-Summer Oct-May	Low NSI Year Jan-Dec	Base NSI Year Jan-Dec	High NSI Year Jan-Dec
1995		-			-			-	
1996		-			-			-	
1997		-			-			-	
1998		-			-			-	
1999		-			-			-	
2000		2,138.8			3,227.9			5,366.7	
2001		2,164.8			3,290.1			5,455.0	
2002		2,173.3			3,387.8			5,561.1	
2003		2,207.8			3,492.6			5,700.5	
2004		2,285.3			3,593.7			5,879.0	
2005		2,325.9			3,673.5			5,999.4	
2006		2,316.1			3,814.0			6,130.0	
2007		2,418.2			3,907.6			6,325.8	
2008		2,425.6			3,972.7			6,398.3	
2009		2,398.6			3,960.2			6,358.8	
2010		2,415.1			4,034.9			6,450.0	
2011		2,445.4			3,990.9			6,436.3	
2012	2,402.9	2,412.4	2,439.3	4,020.0	4,032.9	4,074.3	6,422.9	6,445.3	6,513.6
2013	2,439.4	2,464.6	2,503.5	4,078.1	4,117.1	4,178.6	6,517.4	6,581.7	6,682.1
2014	2,474.0	2,515.0	2,566.1	4,143.3	4,208.7	4,290.5	6,617.3	6,723.7	6,856.6
2015	2,496.6	2,553.2	2,616.5	4,188.8	4,280.3	4,382.7	6,685.4	6,833.5	6,999.2
2016	2,520.1	2,592.3	2,668.4	4,251.3	4,369.5	4,493.8	6,771.4	6,961.8	7,162.2
2017	2,545.4	2,633.5	2,723.0	4,279.0	4,423.4	4,569.6	6,824.4	7,056.9	7,292.5
2018	2,575.1	2,679.7	2,783.2	4,331.9	4,503.8	4,673.6	6,907.0	7,183.5	7,456.9
2019	2,607.4	2,728.9	2,847.3	4,388.8	4,589.3	4,784.1	6,996.2	7,318.2	7,631.4
2020	2,638.3	2,777.1	2,910.9	4,463.3	4,693.8	4,915.6	7,101.7	7,470.9	7,826.6
2021	2,670.5	2,827.0	2,977.1	4,500.2	4,759.7	5,008.1	7,170.7	7,586.6	7,985.2
2022	2,702.8	2,877.4	3,044.7	4,556.7	4,846.8	5,124.1	7,259.5	7,724.1	8,168.8
2023	2,735.3	2,928.4	3,113.7	4,614.0	4,935.6	5,243.4	7,349.4	7,863.9	8,357.1
2024	2,770.5	2,982.8	3,187.0	4,695.8	5,051.6	5,393.0	7,466.3	8,034.4	8,580.0
2025	2,809.4	3,042.0	3,266.3	4,740.6	5,129.1	5,503.1	7,550.1	8,171.1	8,769.4
2026	2,848.9	3,102.4	3,347.7	4,811.3	5,235.7	5,645.7	7,660.2	8,338.1	8,993.4
2027	2,894.8	3,170.7	3,438.8	4,888.5	5,350.9	5,799.5	7,783.3	8,521.6	9,238.3
2028	2,940.6	3,239.5	3,531.5	4,991.0	5,495.2	5,986.8	7,931.6	8,734.7	9,518.3
2029	2,988.8	3,311.9	3,629.4	5,052.0	5,595.3	6,128.0	8,040.8	8,907.2	9,757.4
2030	3,038.4	3,386.6	3,730.9	5,138.5	5,724.9	6,303.7	8,176.9	9,111.5	10,034.5
2031	3,086.2	3,459.9	3,831.8	5,221.9	5,852.1	6,478.1	8,308.1	9,312.0	10,309.9
2032	3,135.5	3,535.6	3,936.4	5,332.8	6,011.7	6,690.7	8,468.2	9,547.3	10,627.0
2033	3,186.6	3,614.6	4,046.0	5,398.5	6,122.3	6,851.0	8,585.2	9,736.8	10,896.9
2034	3,239.9	3,696.8	4,160.6	5,493.2	6,267.2	7,052.1	8,733.0	9,964.0	11,212.7
2035	3,297.4	3,785.2	4,284.0	5,592.1	6,419.1	7,263.8	8,889.6	10,204.3	11,547.8
00-'10	1.2%	1.2%	1.2%	2.3%	2.3%	2.3%	1.9%	1.9%	1.9%
10-'15	0.7%	1.1%	1.6%	0.8%	1.2%	1.7%	0.7%	1.2%	1.6%
15-'20	1.1%	1.7%	2.2%	1.3%	1.9%	2.3%	1.2%	1.8%	2.3%
20-'25	1.3%	1.8%	2.3%	1.2%	1.8%	2.3%	1.2%	1.8%	2.3%
25-'30	1.6%	2.2%	2.7%	1.6%	2.2%	2.8%	1.6%	2.2%	2.7%
30-'35	1.6%	2.3%	2.8%	1.7%	2.3%	2.9%	1.7%	2.3%	2.8%
10-'35	1.3%	1.8%	2.3%	1.3%	1.9%	2.4%	1.3%	1.9%	2.4%

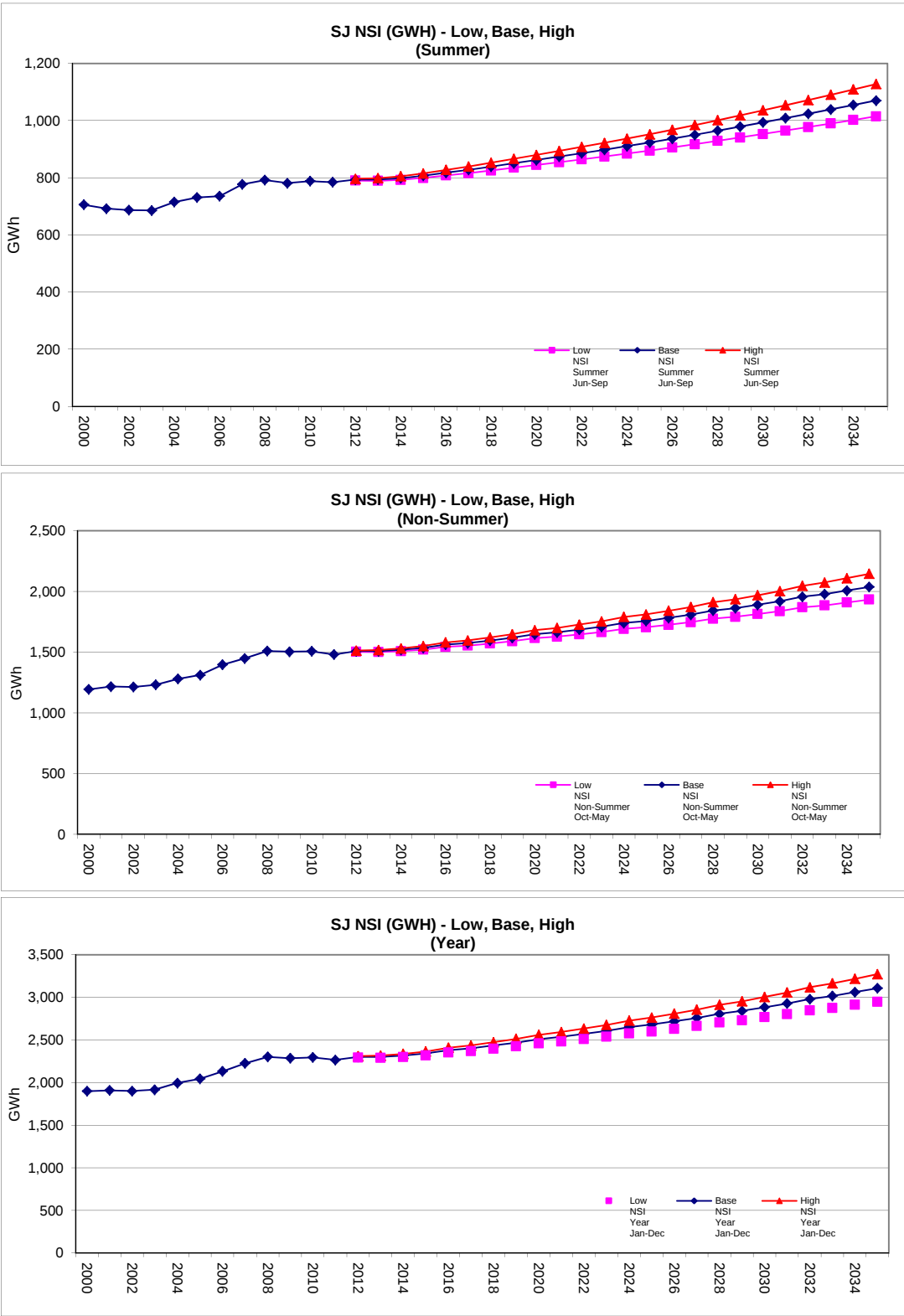
Note: Energy MWH (NSI) Includes annual system losses



Plot 3D-5 St. Joseph Energy Forecast (GWH): Net System Input (NSI)
(Low Case, Base Case, High Case)

Year	Low NSI Summer Jun-Sep	Base NSI Summer Jun-Sep	High NSI Summer Jun-Sep	Low NSI Non-Summer Oct-May	Base NSI Non-Summer Oct-May	High NSI Non-Summer Oct-May	Low NSI Year Jan-Dec	Base NSI Year Jan-Dec	High NSI Year Jan-Dec
1995		-			-			-	
1996		-			-			-	
1997		-			-			-	
1998		-			-			-	
1999		-			-			-	
2000		705.8			1,193.8			1,899.6	
2001		691.9			1,217.5			1,909.4	
2002		687.0			1,213.6			1,900.5	
2003		685.4			1,232.0			1,917.4	
2004		714.8			1,279.8			1,994.6	
2005		731.2			1,312.0			2,043.2	
2006		735.6			1,397.2			2,132.8	
2007		777.1			1,448.6			2,225.6	
2008		791.8			1,509.8			2,301.6	
2009		781.2			1,504.3			2,285.5	
2010		788.1			1,507.7			2,295.8	
2011		784.6			1,480.9			2,265.4	
2012	790.2	793.3	796.3	1,502.9	1,508.1	1,513.5	2,293.1	2,301.4	2,309.8
2013	789.0	793.7	798.3	1,500.7	1,509.0	1,517.3	2,289.7	2,302.7	2,315.7
2014	792.3	798.7	805.0	1,508.2	1,519.7	1,531.1	2,300.5	2,318.4	2,336.2
2015	799.1	807.1	815.2	1,520.8	1,535.5	1,550.1	2,319.9	2,342.6	2,365.3
2016	808.0	817.8	827.7	1,544.2	1,562.3	1,580.4	2,352.2	2,380.1	2,408.0
2017	816.0	827.7	839.4	1,553.9	1,575.3	1,596.7	2,370.0	2,403.0	2,436.1
2018	825.1	838.6	852.2	1,571.3	1,596.2	1,621.2	2,396.4	2,434.8	2,473.3
2019	835.0	850.4	865.9	1,590.2	1,618.7	1,647.4	2,425.2	2,469.1	2,513.3
2020	844.6	862.0	879.5	1,615.3	1,647.7	1,680.3	2,459.9	2,509.6	2,559.8
2021	854.5	873.9	893.6	1,627.5	1,663.5	1,699.9	2,481.9	2,537.4	2,593.5
2022	864.4	885.9	907.7	1,646.2	1,686.2	1,726.7	2,510.6	2,572.1	2,634.4
2023	874.2	897.9	922.0	1,665.1	1,709.1	1,753.8	2,539.3	2,607.1	2,675.8
2024	884.4	910.4	936.7	1,691.8	1,740.2	1,789.5	2,576.2	2,650.6	2,726.2
2025	894.8	923.1	951.8	1,704.6	1,757.1	1,810.6	2,599.4	2,680.2	2,762.5
2026	905.8	936.4	967.7	1,725.2	1,782.1	1,840.3	2,631.0	2,718.5	2,808.0
2027	917.1	950.2	984.0	1,746.7	1,808.2	1,871.2	2,663.8	2,758.4	2,855.3
2028	928.9	964.4	1,000.9	1,776.1	1,842.7	1,911.0	2,705.0	2,807.1	2,911.9
2029	940.7	978.8	1,018.1	1,791.1	1,862.3	1,935.5	2,731.8	2,841.1	2,953.6
2030	952.8	993.6	1,035.7	1,814.3	1,890.5	1,969.1	2,767.1	2,884.2	3,004.8
2031	965.0	1,008.5	1,053.5	1,837.6	1,919.0	2,003.1	2,802.6	2,927.5	3,056.6
2032	977.3	1,023.7	1,071.7	1,869.0	1,956.0	2,046.2	2,846.3	2,979.7	3,118.0
2033	989.8	1,039.1	1,090.2	1,885.2	1,977.3	2,073.0	2,875.0	3,016.4	3,163.2
2034	1,002.2	1,054.5	1,108.8	1,909.1	2,006.9	2,108.6	2,911.4	3,061.3	3,217.4
2035	1,014.8	1,070.2	1,127.8	1,933.3	2,037.0	2,144.9	2,948.2	3,107.2	3,272.7
00-'10	1.1%	1.1%	1.1%	2.4%	2.4%	2.4%	1.9%	1.9%	1.9%
10-'15	0.3%	0.5%	0.7%	0.2%	0.4%	0.6%	0.2%	0.4%	0.6%
15-'20	1.1%	1.3%	1.5%	1.2%	1.4%	1.6%	1.2%	1.4%	1.6%
20-'25	1.2%	1.4%	1.6%	1.1%	1.3%	1.5%	1.1%	1.3%	1.5%
25-'30	1.3%	1.5%	1.7%	1.3%	1.5%	1.7%	1.3%	1.5%	1.7%
30-'35	1.3%	1.5%	1.7%	1.3%	1.5%	1.7%	1.3%	1.5%	1.7%
10-'35	1.1%	1.2%	1.4%	1.0%	1.2%	1.4%	1.0%	1.2%	1.4%

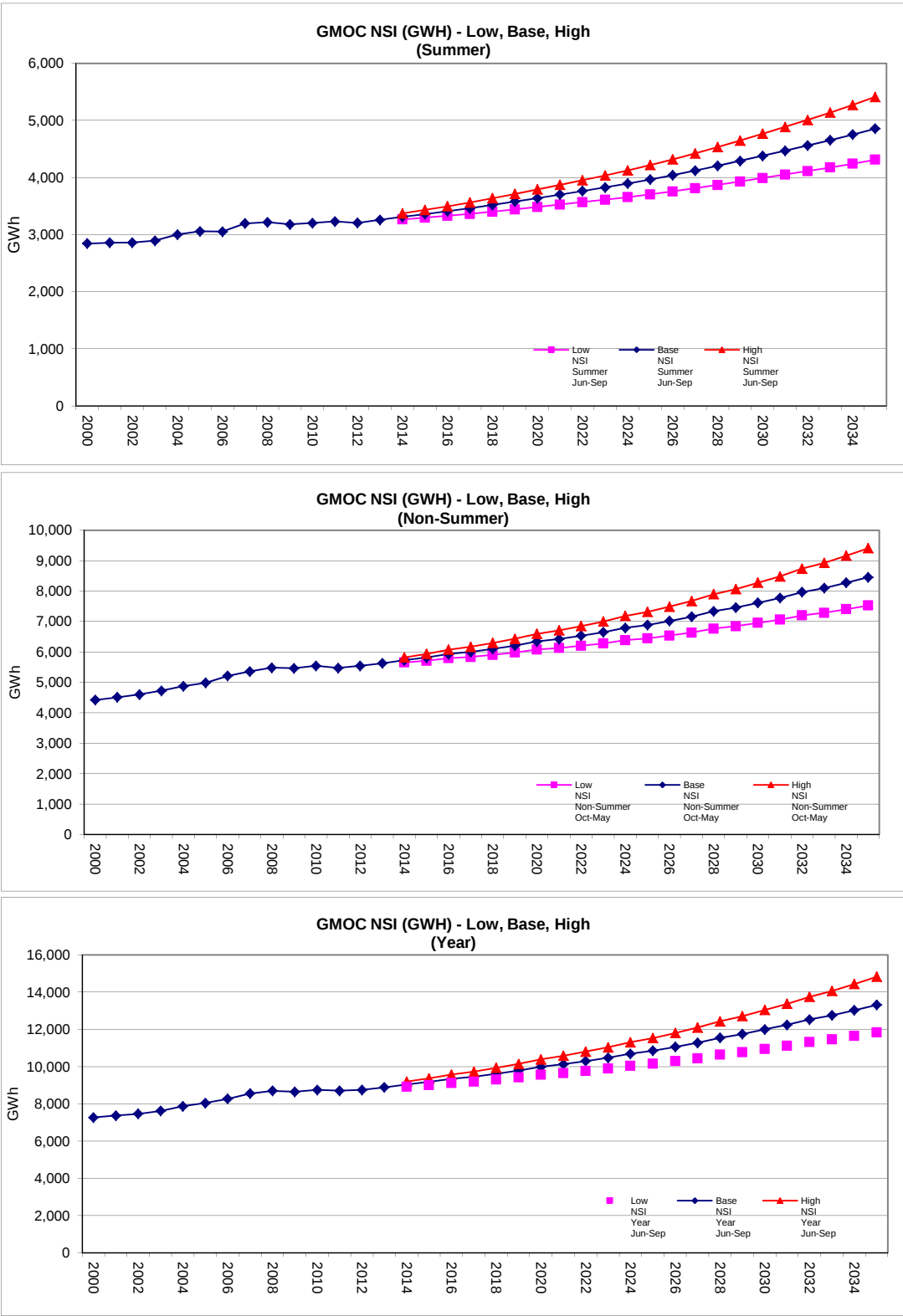
Note: Energy MWH (NSI) Includes annual system losses



Plot 3D-6 Greater Missouri Operation Company (GMOC) Energy Forecast (GWH): Net System Input (NSI)
(Low Case, Base Case, High Case)

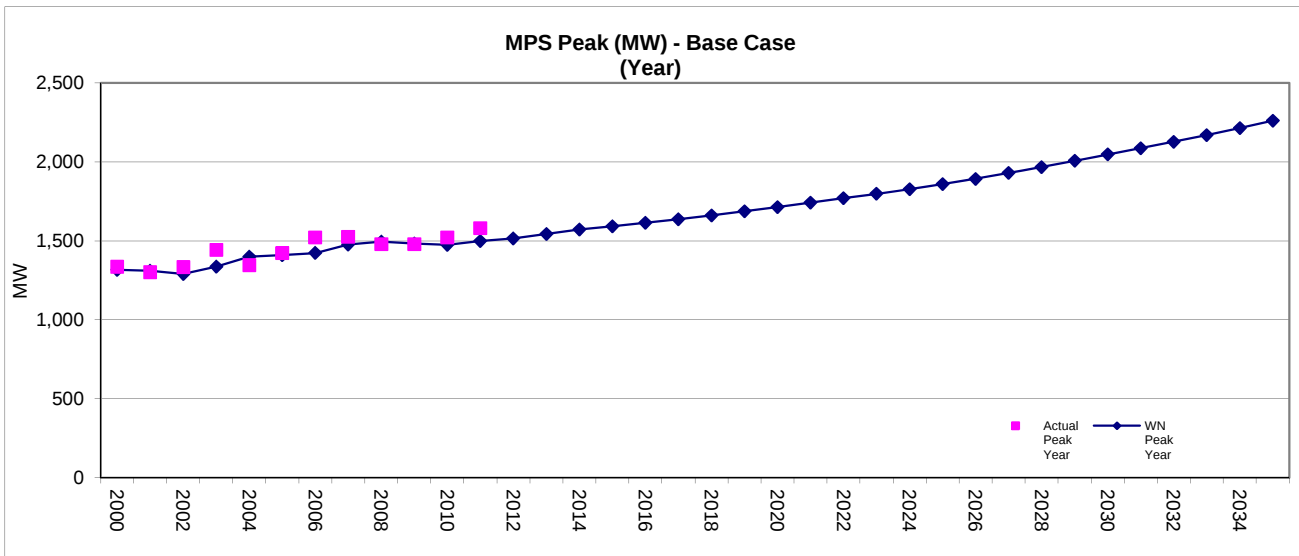
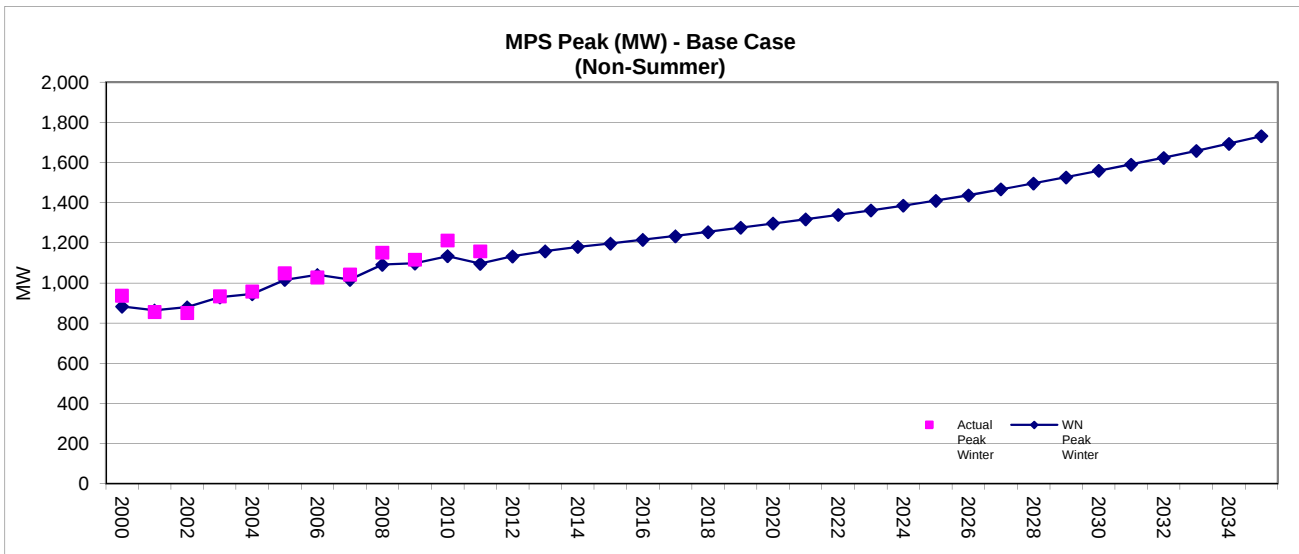
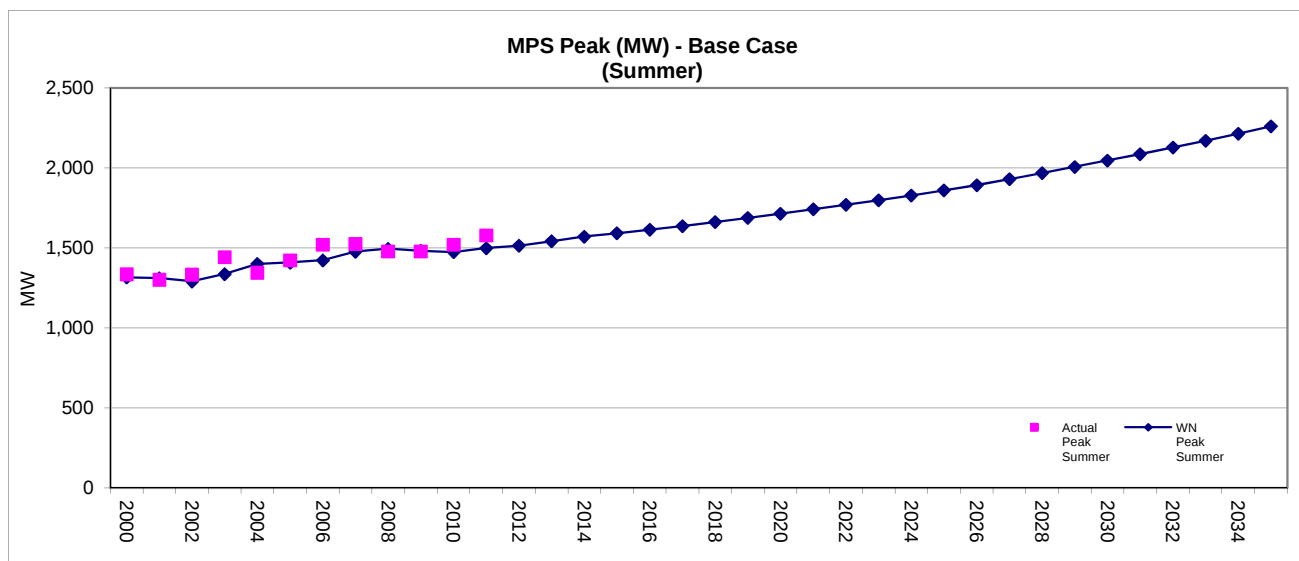
Year	Low NSI Summer Jun-Sep	Base NSI Summer Jun-Sep	High NSI Summer Jun-Sep	Low NSI Non-Summer Oct-May	Base NSI Non-Summer Oct-May	High NSI Non-Summer Oct-May	Low NSI Year Jun-Sep	Base NSI Year Jun-Sep	High NSI Year Jun-Sep
1995		-			-			-	
1996		-			-			-	
1997		-			-			-	
1998		-			-			-	
1999		-			-			-	
2000		2,844.7			4,421.7			7,266.3	
2001		2,856.7			4,507.6			7,364.3	
2002		2,860.3			4,601.4			7,461.7	
2003		2,893.3			4,724.6			7,617.9	
2004		3,000.1			4,873.5			7,873.6	
2005		3,057.2			4,985.5			8,042.7	
2006		3,051.7			5,211.2			8,262.9	
2007		3,195.3			5,356.1			8,551.4	
2008		3,217.3			5,482.5			8,699.8	
2009		3,179.8			5,464.5			8,644.3	
2010		3,203.3			5,542.6			8,745.8	
2011		3,230.0			5,471.8			8,701.8	
2012		3,205.7			5,541.1			8,746.7	
2013		3,258.3			5,626.1			8,884.4	
2014	3,266.3	3,313.7	3,371.1	5,651.5	5,728.3	5,821.7	8,917.8	9,042.0	9,192.8
2015	3,295.6	3,360.3	3,431.7	5,709.6	5,815.8	5,932.8	9,005.2	9,176.1	9,364.5
2016	3,328.1	3,410.2	3,496.1	5,795.6	5,931.8	6,074.2	9,123.6	9,342.0	9,570.3
2017	3,361.4	3,461.2	3,562.3	5,832.9	5,998.7	6,166.3	9,194.4	9,459.9	9,728.6
2018	3,400.2	3,518.3	3,635.4	5,903.2	6,100.0	6,294.8	9,303.4	9,618.3	9,930.2
2019	3,442.4	3,579.3	3,713.3	5,979.0	6,207.9	6,431.4	9,421.4	9,787.3	10,144.7
2020	3,482.9	3,639.1	3,790.5	6,078.7	6,341.5	6,595.9	9,561.5	9,980.5	10,386.4
2021	3,525.0	3,700.9	3,870.7	6,127.7	6,423.2	6,708.0	9,652.6	10,124.1	10,578.7
2022	3,567.2	3,763.3	3,952.4	6,202.9	6,533.0	6,850.8	9,770.1	10,296.3	10,803.2
2023	3,609.5	3,826.3	4,035.6	6,279.1	6,644.7	6,997.2	9,888.7	10,471.0	11,032.9
2024	3,655.0	3,893.2	4,123.7	6,387.6	6,791.8	7,182.5	10,042.6	10,685.0	11,306.2
2025	3,704.3	3,965.1	4,218.2	6,445.2	6,886.2	7,313.7	10,149.5	10,851.3	11,531.9
2026	3,754.7	4,038.8	4,315.4	6,536.4	7,017.8	7,486.0	10,291.1	11,056.6	11,801.4
2027	3,811.9	4,120.9	4,422.8	6,635.2	7,159.1	7,670.8	10,447.1	11,280.0	12,093.6
2028	3,869.5	4,204.0	4,532.4	6,767.1	7,337.9	7,897.9	10,636.6	11,541.8	12,430.3
2029	3,929.5	4,290.8	4,647.5	6,843.1	7,457.5	8,063.5	10,772.6	11,748.3	12,711.0
2030	3,991.2	4,380.2	4,766.6	6,952.9	7,615.4	8,272.8	10,944.0	11,995.7	13,039.4
2031	4,051.2	4,468.5	4,885.4	7,059.5	7,771.1	8,481.2	11,110.7	12,239.5	13,366.6
2032	4,112.8	4,559.3	5,008.1	7,201.8	7,967.7	8,736.9	11,314.5	12,527.1	13,745.0
2033	4,176.5	4,653.6	5,136.2	7,283.8	8,099.6	8,924.0	11,460.2	12,753.2	14,060.2
2034	4,242.1	4,751.3	5,269.5	7,402.3	8,274.0	9,160.7	11,644.4	13,025.3	14,430.2
2035	4,312.3	4,855.4	5,411.8	7,525.5	8,456.1	9,408.7	11,837.7	13,311.5	14,820.4
00-'10	1.2%	1.2%	1.2%	2.3%	2.3%	2.3%	1.9%	1.9%	1.9%
10-'15	0.6%	1.0%	1.4%	0.6%	1.0%	1.4%	0.6%	1.0%	1.4%
15-'20	1.1%	1.6%	2.0%	1.3%	1.7%	2.1%	1.2%	1.7%	2.1%
20-'25	1.2%	1.7%	2.2%	1.2%	1.7%	2.1%	1.2%	1.7%	2.1%
25-'30	1.5%	2.0%	2.5%	1.5%	2.0%	2.5%	1.5%	2.0%	2.5%
30-'35	1.6%	2.1%	2.6%	1.6%	2.1%	2.6%	1.6%	2.1%	2.6%
10-'35	1.3%	1.7%	2.1%	1.2%	1.7%	2.1%	1.2%	1.7%	2.1%

Note: Energy MWH (NSI) Includes annual system losses



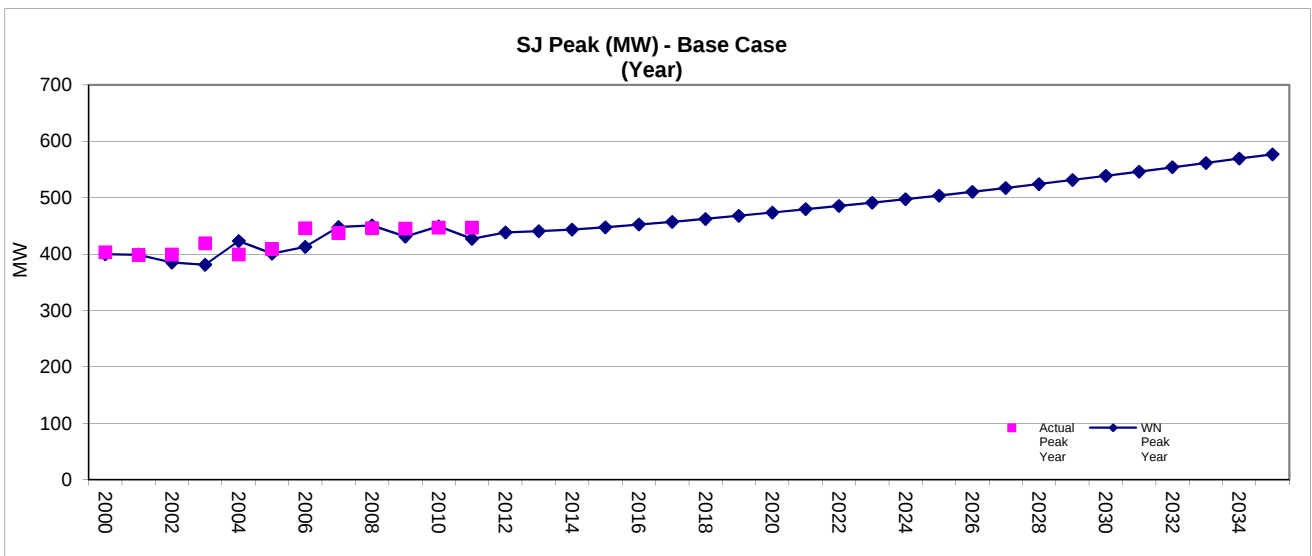
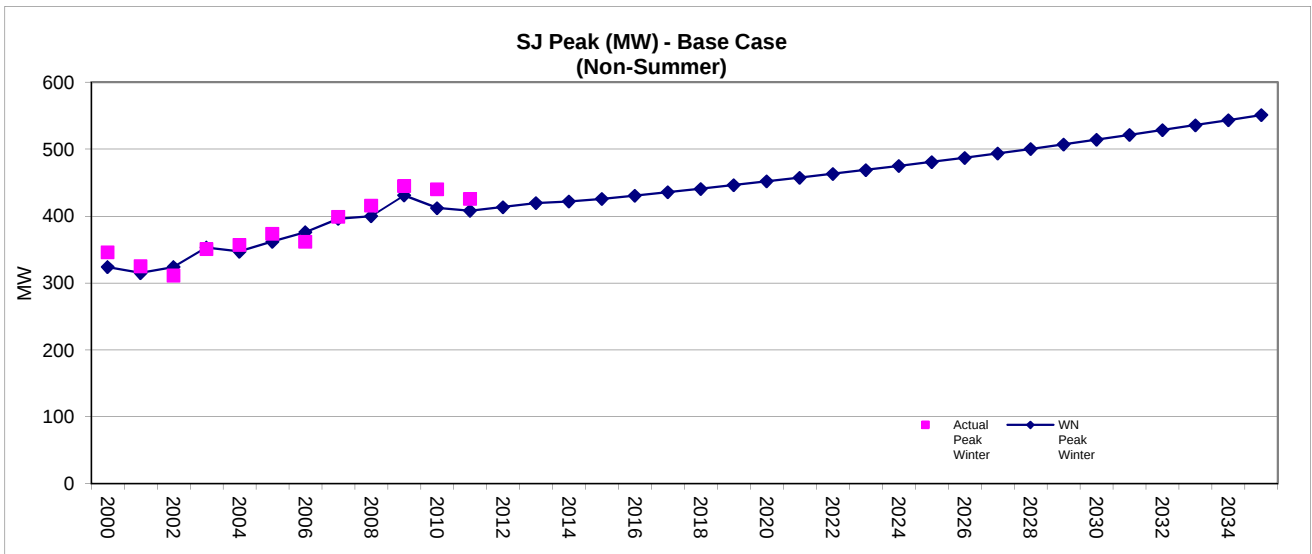
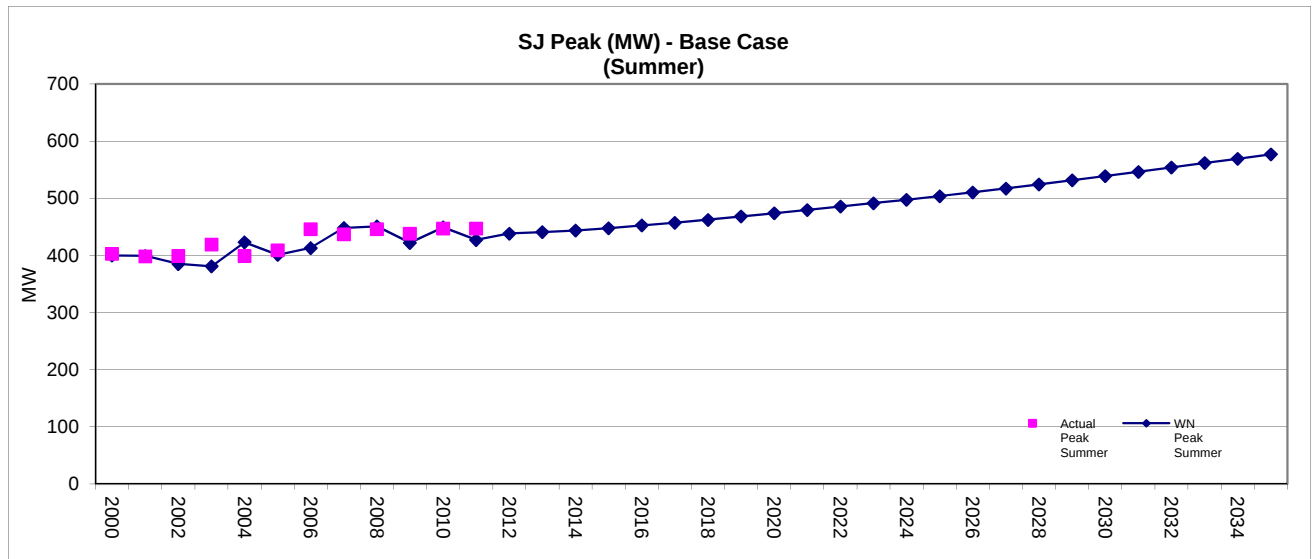
**Plot 3D-7 Missouri Public Service Peak Forecast (MW) - Base Case
(Actual vs. Weather Normalized)**

Year	Actual Peak Summer	WN Peak Summer	Actual Peak Winter	WN Peak Winter	Actual Peak Year	WN Peak Year
1995	1,064	-	681	-	1,064	-
1996	1,091	-	750	-	1,091	-
1997	1,131	-	760	-	1,131	-
1998	1,197	-	824	-	1,197	-
1999	1,276	-	822	-	1,276	-
2000	1,335	1,316	937	883	1,335	1,316
2001	1,300	1,311	856	864	1,300	1,311
2002	1,333	1,291	851	880	1,333	1,291
2003	1,443	1,337	933	929	1,443	1,337
2004	1,344	1,400	957	945	1,344	1,400
2005	1,422	1,409	1,048	1,016	1,422	1,409
2006	1,521	1,423	1,028	1,041	1,521	1,423
2007	1,525	1,477	1,042	1,017	1,525	1,477
2008	1,478	1,495	1,152	1,092	1,478	1,495
2009	1,478	1,482	1,117	1,098	1,478	1,482
2010	1,521	1,474	1,213	1,134	1,521	1,474
2011	1,579	1,499	1,159	1,096	1,579	1,499
2012		1,514		1,133		1,514
2013		1,543		1,158		1,543
2014		1,571		1,180		1,571
2015		1,592		1,197		1,592
2016		1,614		1,216		1,614
2017		1,636		1,234		1,636
2018		1,661		1,254		1,661
2019		1,688		1,275		1,688
2020		1,714		1,296		1,714
2021		1,742		1,318		1,742
2022		1,770		1,340		1,770
2023		1,798		1,362		1,798
2024		1,827		1,386		1,827
2025		1,860		1,410		1,860
2026		1,893		1,437		1,893
2027		1,930		1,467		1,930
2028		1,967		1,497		1,967
2029		2,007		1,527		2,007
2030		2,047		1,559		2,047
2031		2,086		1,590		2,086
2032		2,128		1,624		2,128
2033		2,170		1,658		2,170
2034		2,214		1,694		2,214
2035		2,261		1,731		2,261
00-'10	1.3%	1.1%	2.6%	2.5%	1.3%	1.1%
10-'15		1.6%		1.1%		1.6%
15-'20		1.5%		1.6%		1.5%
20-'25		1.6%		1.7%		1.6%
25-'30		1.9%		2.0%		1.9%
30-'35		2.0%		2.1%		2.0%
10-'35		1.7%		1.7%		1.7%



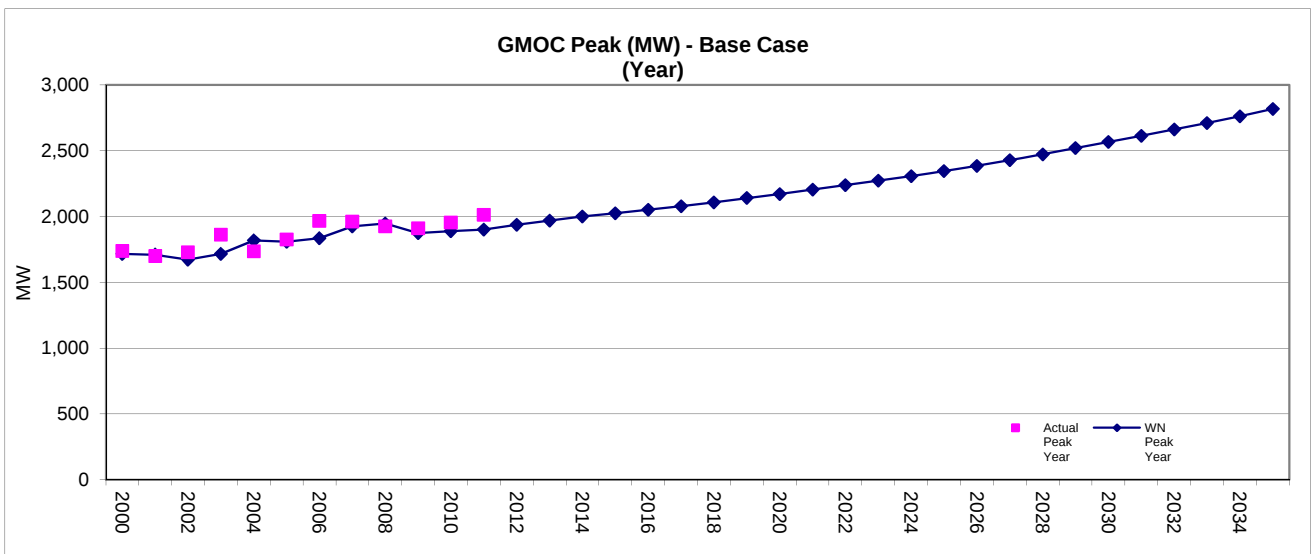
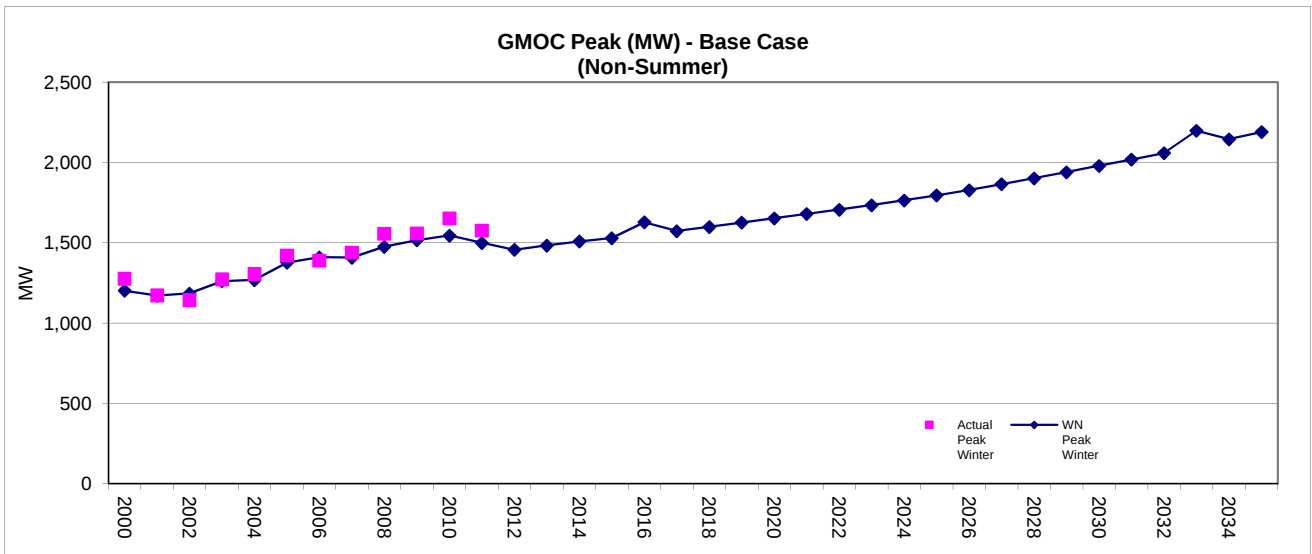
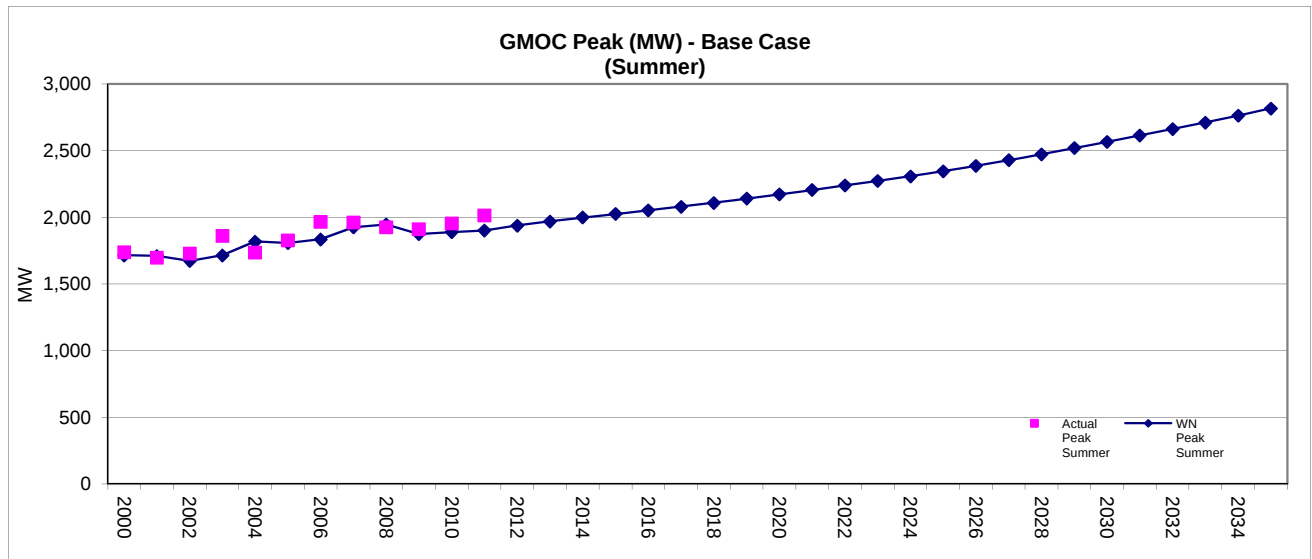
**Plot 3D-8 St. Joseph Peak Forecast (MW) - Base Case
(Actual vs. Weather Normalized)**

Year	Actual Peak Summer	WN Peak Summer	Actual Peak Winter	WN Peak Winter	Actual Peak Year	WN Peak Year
1995	345	-	279	-	345	-
1996	346	-	300	-	346	-
1997	350	-	311	-	350	-
1998	376	-	301	-	376	-
1999	388	-	316	-	388	-
2000	403	400	346	324	403	400
2001	398	399	325	315	398	399
2002	399	385	311	324	399	385
2003	419	381	351	353	419	381
2004	399	423	357	347	399	423
2005	409	401	374	362	409	401
2006	446	413	362	376	446	413
2007	437	448	399	396	437	448
2008	446	451	416	400	446	451
2009	438	422	445	431	445	431
2010	447	449	440	412	447	449
2011	447	427	426	408	447	427
2012		438		414		438
2013		441		419		441
2014		443		422		443
2015		447		426		447
2016		452		431		452
2017		457		436		457
2018		462		441		462
2019		468		446		468
2020		474		452		474
2021		480		458		480
2022		486		463		486
2023		491		469		491
2024		497		475		497
2025		504		481		504
2026		510		487		510
2027		517		494		517
2028		524		500		524
2029		532		507		532
2030		539		514		539
2031		546		521		546
2032		554		529		554
2033		562		536		562
2034		569		543		569
2035		577		551		577
00-'10	1.0%	1.2%	2.4%	2.4%	1.0%	1.2%
10-'15		-0.1%		0.7%		-0.1%
15-'20		1.1%		1.2%		1.1%
20-'25		1.2%		1.3%		1.2%
25-'30		1.4%		1.3%		1.4%
30-'35		1.4%		1.4%		1.4%
10-'35		1.0%		1.2%		1.0%



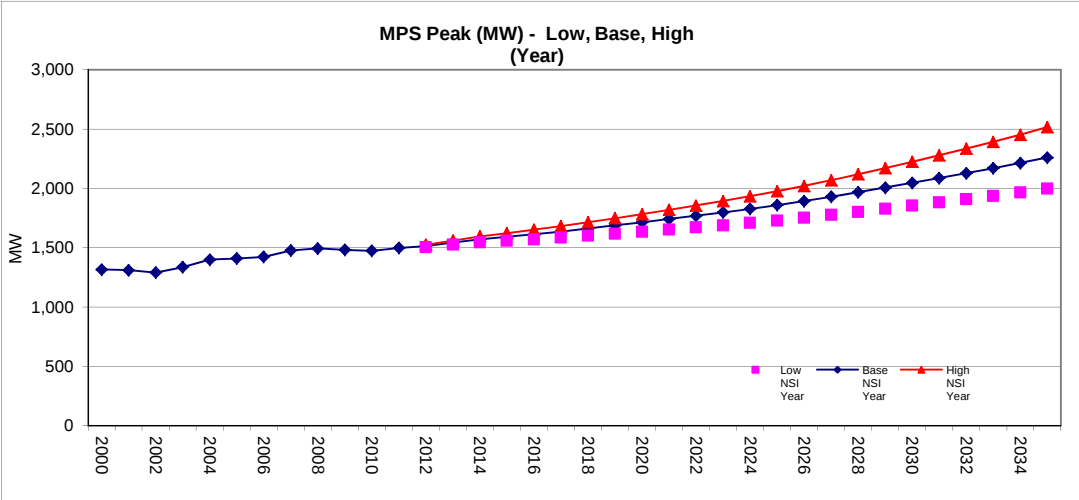
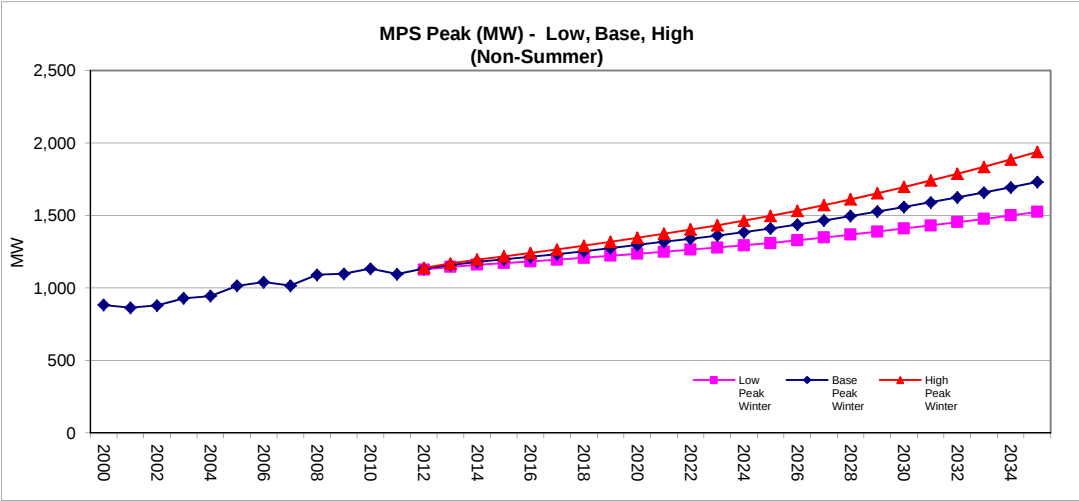
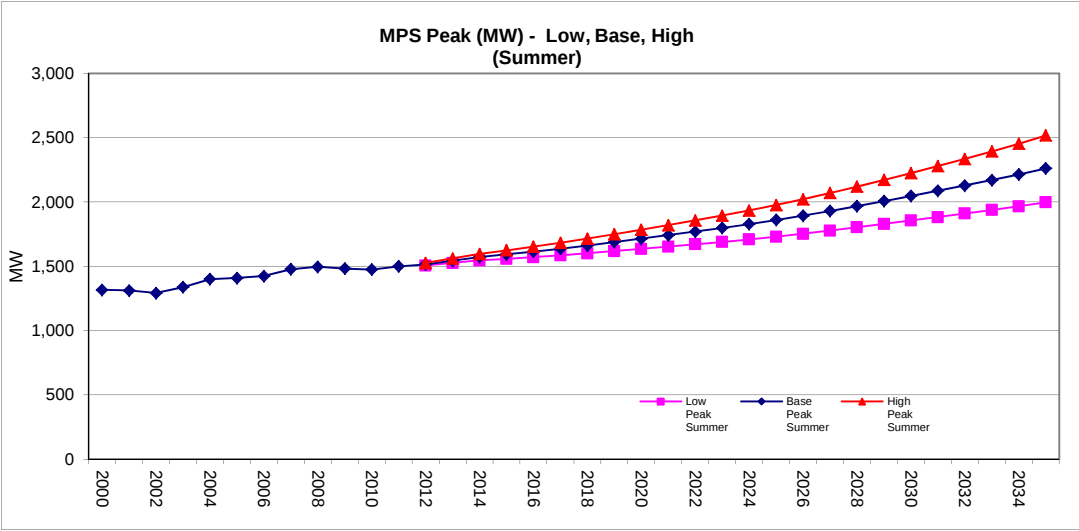
**Plot 3D-9 Greater Missouri Operation Company (GMOC) Peak Forecast (MW) - Base Case
(Actual vs. Weather Normalized)**

Year	Actual Peak Summer	WN Peak Summer	Actual Peak Winter	WN Peak Winter	Actual Peak Year	WN Peak Year
1995	1,406	-	960	-	-	-
1996	1,433	-	1,043	-	-	-
1997	1,477	-	1,065	-	-	-
1998	1,566	-	1,125	-	-	-
1999	1,660	-	1,136	-	-	-
2000	1,738	1,715	1,277	1,202	1,738	1,715
2001	1,698	1,710	1,173	1,171	1,698	1,710
2002	1,729	1,672	1,144	1,185	1,729	1,672
2003	1,861	1,715	1,272	1,262	1,861	1,715
2004	1,735	1,818	1,307	1,269	1,735	1,818
2005	1,826	1,808	1,422	1,378	1,826	1,808
2006	1,967	1,835	1,390	1,410	1,967	1,835
2007	1,961	1,925	1,439	1,409	1,961	1,925
2008	1,924	1,946	1,558	1,476	1,924	1,946
2009	1,911	1,874	1,560	1,517	1,911	1,874
2010	1,953	1,889	1,653	1,546	1,953	1,889
2011	2,013	1,901	1,578	1,500	2,013	1,901
2012		1,938		1,458		1,938
2013		1,969		1,484		1,969
2014		2,000		1,509		2,000
2015		2,025		1,530		2,025
2016		2,051		1,628		2,051
2017		2,078		1,574		2,078
2018		2,108		1,600		2,108
2019		2,140		1,627		2,140
2020		2,171		1,653		2,171
2021		2,205		1,680		2,205
2022		2,238		1,708		2,238
2023		2,272		1,735		2,272
2024		2,308		1,765		2,308
2025		2,346		1,796		2,346
2026		2,385		1,829		2,385
2027		2,429		1,865		2,429
2028		2,473		1,903		2,473
2029		2,519		1,940		2,519
2030		2,566		1,980		2,566
2031		2,613		2,018		2,613
2032		2,661		2,059		2,661
2033		2,711		2,198		2,711
2034		2,762		2,145		2,762
2035		2,816		2,190		2,816
00-'10	1.2%	1.0%	2.6%	2.5%	1.2%	1.0%
10-'15		1.4%		-0.2%		1.4%
15-'20		1.4%		1.6%		1.4%
20-'25		1.6%		1.7%		1.6%
25-'30		1.8%		2.0%		1.8%
30-'35		1.9%		2.0%		1.9%
10-'35		1.6%		1.4%		1.6%



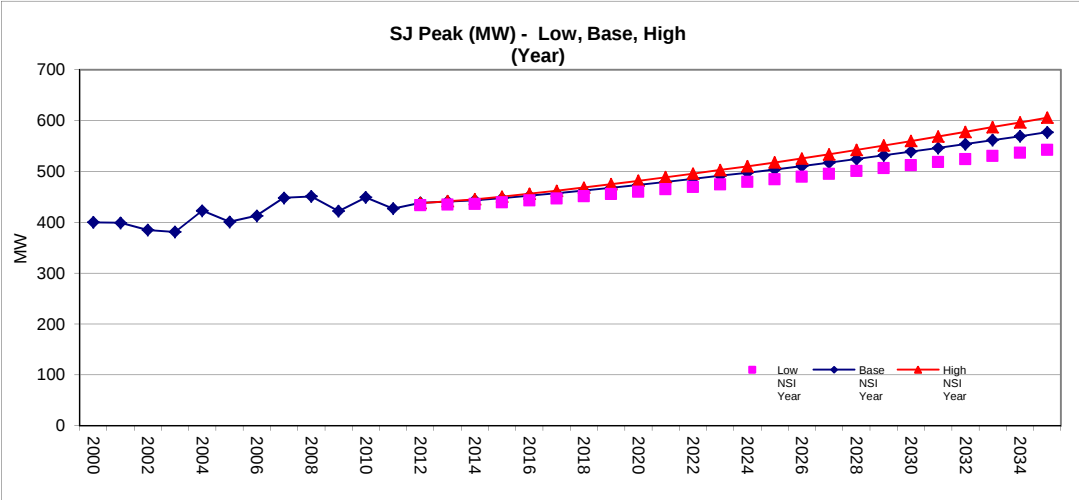
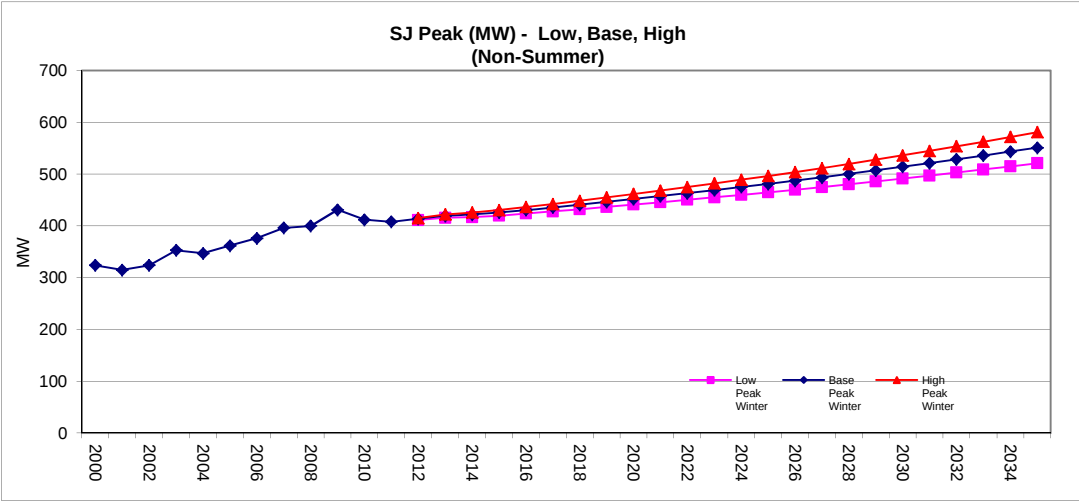
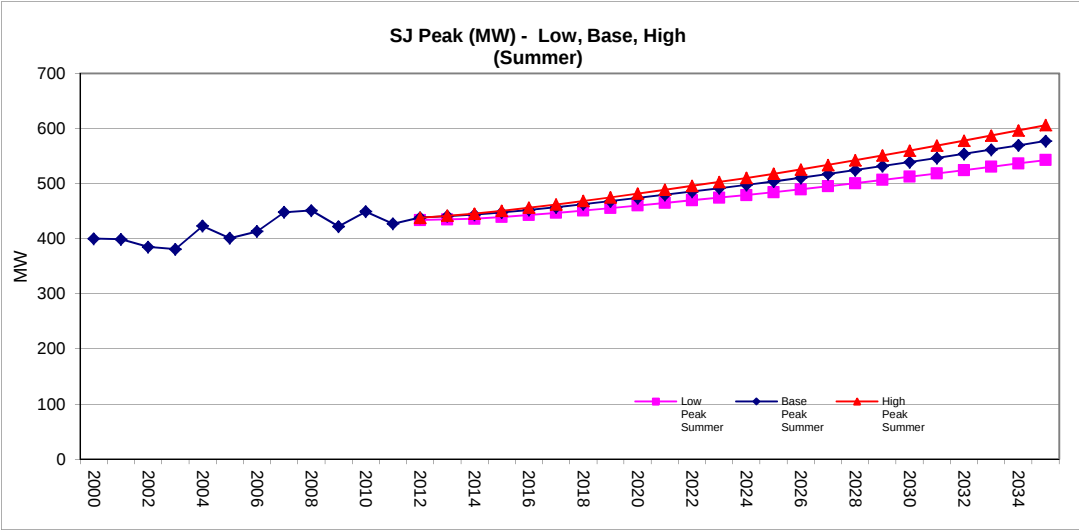
Plot 3D-10 Missouri Public Service Peak Forecast (MW)
(Low Case, Base Case, High Cast)

Year	Low Peak Summer	Base Peak Summer	High Peak Summer	Low Peak Winter	Base Peak Winter	High Peak Winter	Low NSI Year	Base NSI Year	High NSI Year
1995		-			-			-	
1996		-			-			-	
1997		-			-			-	
1998		-			-			-	
1999		-			-			-	
2000		1,316			883			1,316	
2001		1,311			864			1,311	
2002		1,291			880			1,291	
2003		1,337			929			1,337	
2004		1,400			945			1,400	
2005		1,409			1,016			1,409	
2006		1,423			1,041			1,423	
2007		1,477			1,017			1,477	
2008		1,495			1,092			1,495	
2009		1,482			1,098			1,482	
2010		1,474			1,134			1,474	
2011		1,499			1,096			1,499	
2012	1,506	1,514	1,526	1,127	1,133	1,139	1,506	1,514	1,526
2013	1,525	1,543	1,561	1,146	1,158	1,169	1,525	1,543	1,561
2014	1,545	1,571	1,595	1,161	1,180	1,196	1,545	1,571	1,595
2015	1,558	1,592	1,623	1,172	1,197	1,218	1,558	1,592	1,623
2016	1,571	1,614	1,652	1,183	1,216	1,242	1,571	1,614	1,652
2017	1,584	1,636	1,681	1,195	1,234	1,265	1,584	1,636	1,681
2018	1,601	1,661	1,714	1,208	1,254	1,291	1,601	1,661	1,714
2019	1,618	1,688	1,749	1,223	1,275	1,319	1,618	1,688	1,749
2020	1,634	1,714	1,783	1,236	1,296	1,346	1,634	1,714	1,783
2021	1,653	1,742	1,819	1,251	1,318	1,375	1,653	1,742	1,819
2022	1,671	1,770	1,856	1,264	1,340	1,403	1,671	1,770	1,856
2023	1,689	1,798	1,894	1,279	1,362	1,433	1,689	1,798	1,894
2024	1,708	1,827	1,933	1,294	1,386	1,464	1,708	1,827	1,933
2025	1,730	1,860	1,976	1,310	1,410	1,497	1,730	1,860	1,976
2026	1,751	1,893	2,020	1,328	1,437	1,533	1,751	1,893	2,020
2027	1,777	1,930	2,069	1,349	1,467	1,572	1,777	1,930	2,069
2028	1,802	1,967	2,119	1,369	1,497	1,611	1,802	1,967	2,119
2029	1,829	2,007	2,171	1,389	1,527	1,653	1,829	2,007	2,171
2030	1,856	2,047	2,225	1,411	1,559	1,698	1,856	2,047	2,225
2031	1,882	2,086	2,278	1,431	1,590	1,741	1,882	2,086	2,278
2032	1,909	2,128	2,334	1,454	1,624	1,788	1,909	2,128	2,334
2033	1,937	2,170	2,392	1,477	1,658	1,836	1,937	2,170	2,392
2034	1,966	2,214	2,452	1,500	1,694	1,886	1,966	2,214	2,452
2035	1,997	2,261	2,516	1,525	1,731	1,938	1,997	2,261	2,516
00-'10	1.1%	1.1%	1.1%	2.5%	2.5%	2.5%	1.1%	1.1%	1.1%
10-'15	1.1%	1.6%	1.9%	0.7%	1.1%	1.4%	1.1%	1.6%	1.9%
15-'20	1.0%	1.5%	1.9%	1.1%	1.6%	2.0%	1.0%	1.5%	1.9%
20-'25	1.1%	1.6%	2.1%	1.2%	1.7%	2.1%	1.1%	1.6%	2.1%
25-'30	1.4%	1.9%	2.4%	1.5%	2.0%	2.5%	1.4%	1.9%	2.4%
25-'30	1.5%	2.0%	2.5%	1.6%	2.1%	2.7%	1.5%	2.0%	2.5%
10-'35	1.2%	1.7%	2.2%	1.2%	1.7%	2.2%	1.2%	1.7%	2.2%



Plot 3D-11 St. Joseph Peak Forecast (MW)
(Low Case, Base Case, High Cast)

Year	Low Peak Summer	Base Peak Summer	High Peak Summer	Low Peak Winter	Base Peak Winter	High Peak Winter	Low NSI Year	Base NSI Year	High NSI Year
1995		-			-			-	
1996		-			-			-	
1997		-			-			-	
1998		-			-			-	
1999		-			-			-	
2000		400			324			400	
2001		399			315			399	
2002		385			324			385	
2003		381			353			381	
2004		423			347			423	
2005		401			362			401	
2006		413			376			413	
2007		448			396			448	
2008		451			400			451	
2009		422			431			422	
2010		449			412			449	
2011		427			408			427	
2012	434	438	438	411	414	415	434	438	438
2013	435	441	441	416	419	422	435	441	441
2014	436	443	445	417	422	426	436	443	445
2015	439	447	450	420	426	430	439	447	450
2016	443	452	456	424	431	436	443	452	456
2017	447	457	462	428	436	442	447	457	462
2018	451	462	468	432	441	448	451	462	468
2019	456	468	475	437	446	455	456	468	475
2020	460	474	482	441	452	462	460	474	482
2021	465	480	489	446	458	468	465	480	489
2022	470	486	496	450	463	475	470	486	496
2023	474	491	503	455	469	482	474	491	503
2024	479	497	510	460	475	489	479	497	510
2025	484	504	518	465	481	496	484	504	518
2026	489	510	525	470	487	504	489	510	525
2027	495	517	534	475	494	511	495	517	534
2028	501	524	542	480	500	520	501	524	542
2029	506	532	551	486	507	528	506	532	551
2030	512	539	560	491	514	536	512	539	560
2031	518	546	569	497	521	545	518	546	569
2032	524	554	578	503	529	554	524	554	578
2033	530	562	587	509	536	562	530	562	587
2034	536	569	596	515	543	572	536	569	596
2035	542	577	606	521	551	581	542	577	606
00-'10	1.2%	1.2%	1.2%	2.4%	2.4%	2.4%	1.2%	1.2%	1.2%
10-'15	-0.4%	-0.1%	0.1%	0.4%	0.7%	0.9%	-0.4%	-0.1%	0.1%
15-'20	0.9%	1.1%	1.4%	1.0%	1.2%	1.4%	0.9%	1.1%	1.4%
20-'25	1.0%	1.2%	1.5%	1.0%	1.3%	1.5%	1.0%	1.2%	1.5%
25-'30	1.1%	1.4%	1.6%	1.1%	1.3%	1.6%	1.1%	1.4%	1.6%
25-'30	1.2%	1.4%	1.6%	1.2%	1.4%	1.6%	1.2%	1.4%	1.6%
10-'35	0.8%	1.0%	1.2%	0.9%	1.2%	1.4%	0.8%	1.0%	1.2%



Plot 3D-12 Greater Missouri Operation Company (GMOC) Peak Forecast (MW)
(Low Case, Base Case, High Cast)

Year	Low Peak Summer	Base Peak Summer	High Peak Summer	Low Peak Winter	Base Peak Winter	High Peak Winter	Low Peak Year	Base Peak Year	High Peak Year
1995		-			-			-	
1996		-			-			-	
1997		-			-			-	
1998		-			-			-	
1999		-			-			-	
2000		1,715			1,202			1,715	
2001		1,710			1,171			1,710	
2002		1,672			1,185			1,672	
2003		1,715			1,262			1,715	
2004		1,818			1,269			1,818	
2005		1,808			1,378			1,808	
2006		1,835			1,410			1,835	
2007		1,925			1,409			1,925	
2008		1,946			1,476			1,946	
2009		1,874			1,517			1,874	
2010		1,889			1,546			1,889	
2011		1,901			1,500			1,901	
2012	1,927	1,938	1,951	1,430	1,458	1,456	1,927	1,938	1,951
2013	1,948	1,969	1,990	1,449	1,484	1,488	1,948	1,969	1,990
2014	1,969	2,000	2,028	1,466	1,509	1,519	1,969	2,000	2,028
2015	1,984	2,025	2,061	1,479	1,530	1,545	1,984	2,025	2,061
2016	2,001	2,051	2,095	1,567	1,628	1,652	2,001	2,051	2,095
2017	2,018	2,078	2,130	1,508	1,574	1,603	2,018	2,078	2,130
2018	2,038	2,108	2,168	1,525	1,600	1,635	2,038	2,108	2,168
2019	2,060	2,140	2,209	1,543	1,627	1,669	2,060	2,140	2,209
2020	2,081	2,171	2,250	1,561	1,653	1,703	2,081	2,171	2,250
2021	2,104	2,205	2,293	1,579	1,680	1,738	2,104	2,205	2,293
2022	2,126	2,238	2,337	1,598	1,708	1,773	2,126	2,238	2,337
2023	2,149	2,272	2,381	1,616	1,735	1,810	2,149	2,272	2,381
2024	2,173	2,308	2,428	1,636	1,765	1,848	2,173	2,308	2,428
2025	2,199	2,346	2,477	1,657	1,796	1,889	2,199	2,346	2,477
2026	2,226	2,385	2,529	1,679	1,829	1,931	2,226	2,385	2,529
2027	2,257	2,429	2,586	1,704	1,865	1,978	2,257	2,429	2,586
2028	2,287	2,473	2,644	1,730	1,903	2,027	2,287	2,473	2,644
2029	2,320	2,519	2,705	1,755	1,940	2,086	2,320	2,519	2,705
2030	2,352	2,566	2,767	1,782	1,980	2,138	2,352	2,566	2,767
2031	2,384	2,613	2,828	1,808	2,018	2,189	2,384	2,613	2,828
2032	2,417	2,661	2,893	1,835	2,059	2,243	2,417	2,661	2,893
2033	2,451	2,711	2,960	1,954	2,198	2,299	2,451	2,711	2,960
2034	2,485	2,762	3,029	1,893	2,145	2,357	2,485	2,762	3,029
2035	2,522	2,816	3,102	1,923	2,190	2,418	2,522	2,816	3,102
00-'10	1.0%	1.0%	1.0%	2.5%	2.5%	2.5%	1.0%	1.0%	1.0%
10-'15	1.0%	1.4%	1.8%	-0.9%	-0.2%	0.0%	1.0%	1.4%	1.8%
15-'20	1.0%	1.4%	1.8%	1.1%	1.6%	2.0%	1.0%	1.4%	1.8%
20-'25	1.1%	1.6%	1.9%	1.2%	1.7%	2.1%	1.1%	1.6%	1.9%
25-'30	1.4%	1.8%	2.2%	1.5%	2.0%	2.5%	1.4%	1.8%	2.2%
25-'30	1.4%	1.9%	2.3%	1.5%	2.0%	2.5%	1.4%	1.9%	2.3%
10-'35	1.2%	1.6%	2.0%	0.9%	1.4%	1.8%	1.2%	1.6%	2.0%

