

Staff's Exhibit No. 3

Filed
August 17, 2011
Data Center
Missouri Public
Service Commission

**Materials related to Staff's Concern
for the Reduction in
Energy Savings and Demand Savings
From DSM Programs Included in
GMO's July 1, 2011 Filing
from GMO's January 18, 2011 Filing**

Public

Staff Exhibit No. 3
Date 8/1/11 Reporter JL
File No. EE-2009-0237

4. The Commission's resource planning regulations provide that if the Staff, Public Counsel or any intervenor finds deficiencies, they shall work with the electric utility and the other parties in an attempt to reach a joint agreement on a plan to remedy the identified deficiencies. 4 CSR 240-22.080(8). The Parties have worked together to develop a joint agreement on a plan. The Parties agree that a stakeholder process will serve as a productive means of planning and implementing remedies for certain identified deficiencies. This Stakeholder Process Agreement Appendix represents the fruits of those efforts.

5. The terms of this agreement provide unequivocally for GMO to make supplemental filings and to file a revised IRP, and GMO agrees to file supplements and a revised IRP consistent with the terms of and schedule outlined in this agreement. The parties agree that one of the objectives of the meetings described and scheduled herein is to discuss and attempt to come to terms regarding specific action items and elements to be addressed in the supplements and revised IRP to be filed by GMO.

6. The parties reserve the right to take any disputes concerning implementation or action items related to GMO's IRP, revised IRP or supplemental filings to the Commission for resolution, and parties do not otherwise waive their rights under 4 CSR 240-22.

SCOPE, TERMS AND TIMELINE OF STAKEHOLDERS PROCESS

TO REMEDY CONCERNS AND ALLEGED DEFICIENCIES

4 CSR 240-22.030 Load Analysis and Forecasting:

7. GMO commits to provide in a presentation to a stakeholder meeting a comparison of the new budget forecast and the forecast underlying the 2009 IRP on a total company basis (i.e. roll up both forecasts to the total company in order to see and

portfolio. This information will be included in a supplemental filing. The presentation and supplemental filing are intended to resolve inconsistencies in the estimates included in the August, 2009 IRP filing.

21. GMO agrees to include one or more portfolios of new DSM programs in addition to the all-DSM portfolio in the revised IRP scheduled to be filed December 17, 2010. At least one of these additional portfolio(s) of DSM programs will incorporate a more aggressive level of DSM implementation than the "all-DSM" portfolio. These additional portfolios will be treated as resources that are available for selection of alternative resource plans that are included in the integrated analysis. Agreement on criteria to be met by the additional, alternative portfolio will be discussed at the April and May 2010 stakeholder meetings and decided prior to the June 2010 stakeholder meeting.

DSM Programs/20 Year Plan

22. GMO states that it modeled DSM programs for the entire 20 year planning horizon. However, GMO's DSM programs in this IRP filing:

1. Were developed under the assumptions that there will be no future impact from: 1) smart grid technology, and/or 2) legislation to impose a federal or state EERS; and
2. Take credit for energy and demand reductions annually over the measure life, but takes no credit for energy and demand reductions annually as a result of either market transformation and/or replacement of measures with more efficient measures as a result of DSM program enhancements.

23. At the April 2010 stakeholder meeting, GMO will respond to the following two questions with respect to the 20-year DSM planning that is presented in Tables 73

6.3 ALTERNATIVE PLAN PLOTS

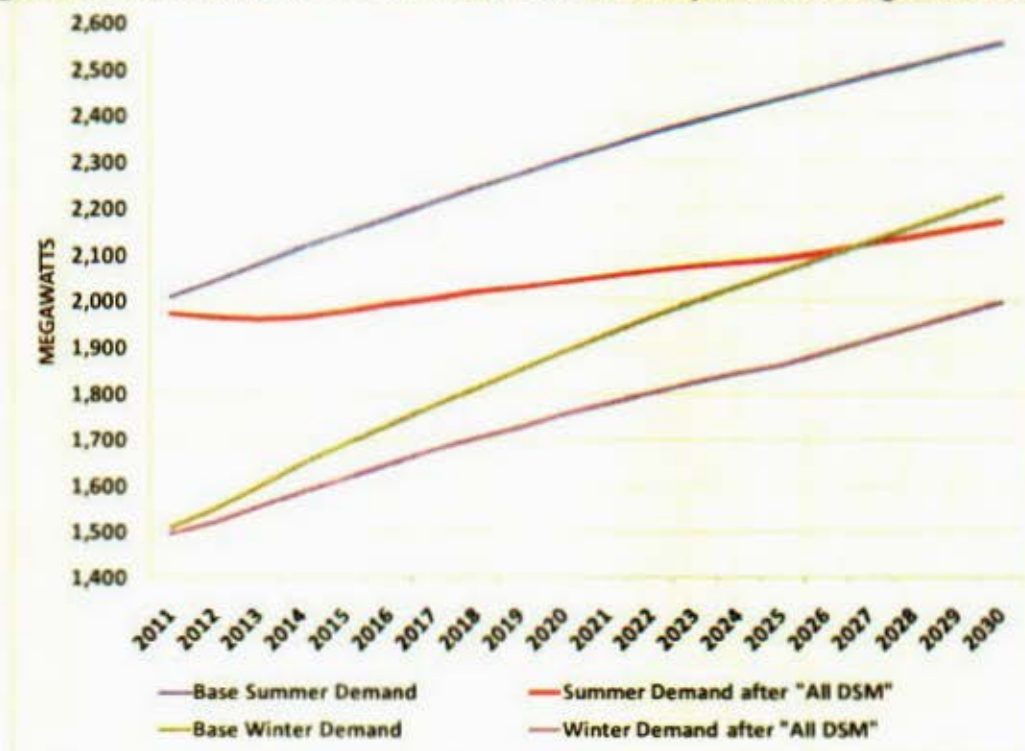
(C) For each alternative resource plan, a plot of each of the following over the planning horizon:

6.3.1 DSM IMPACT

1. The combined impact of all demand-side resources on the base-case forecast of summer and winter peak demands;

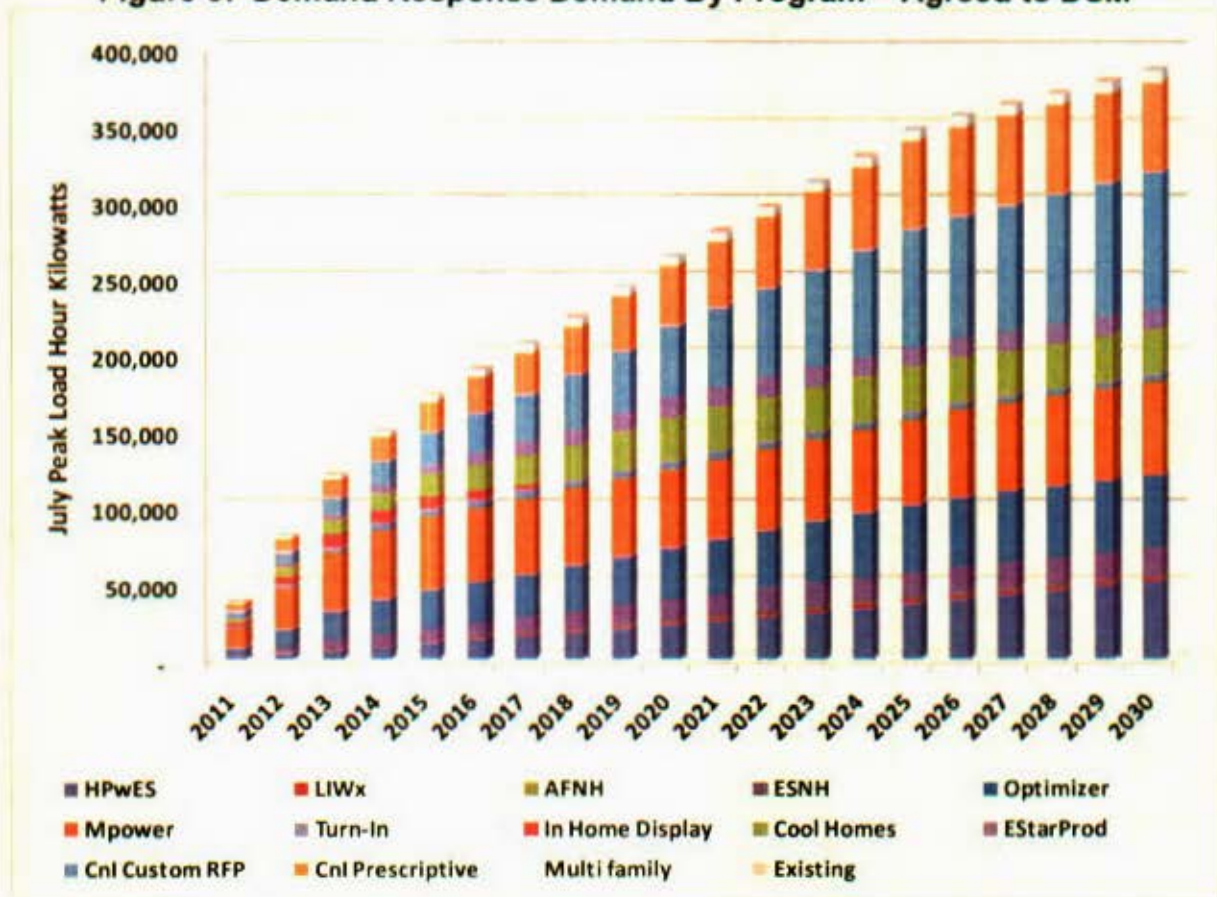
All alternative resource plans in the revised integrated analysis developed within the Stakeholder Process utilize the DSM portfolio of programs provided to the Process participants on July 21, 2010, [referred to as the "Agreed to DSM" portfolio]. The plans developed within the Process are Plans Nos. 01 through 09. Plan 10 also utilizes this level of DSM. Summer and Winter peak demand impact for these plans are provided in Figure 1 below. Tabular data that created Figure 1 is provided on the work paper disc in an Excel file entitled "Figure240-22.060(6)(C)(1)Summer and Winter DSM Peak Impact Agreed to DSM.xlsx".

Figure 1: Summer and Winter Peak Demand Impact From Agreed to DSM



Each demand-side management (DSM) program has been evaluated to determine its capacity impact on peak system load. Peak system load occurs in the MIDAS™ simulation in July. The July peak load hour impact by program for the Agreed to DSM portfolio of programs is shown in Figure 3 below. Tabular data that created Figure 3 is provided on the work paper disc in an Excel file entitled "Figure240-22.060(6)(C)(2)DSM Program Peak Impact Agree to DSM.xlsx"

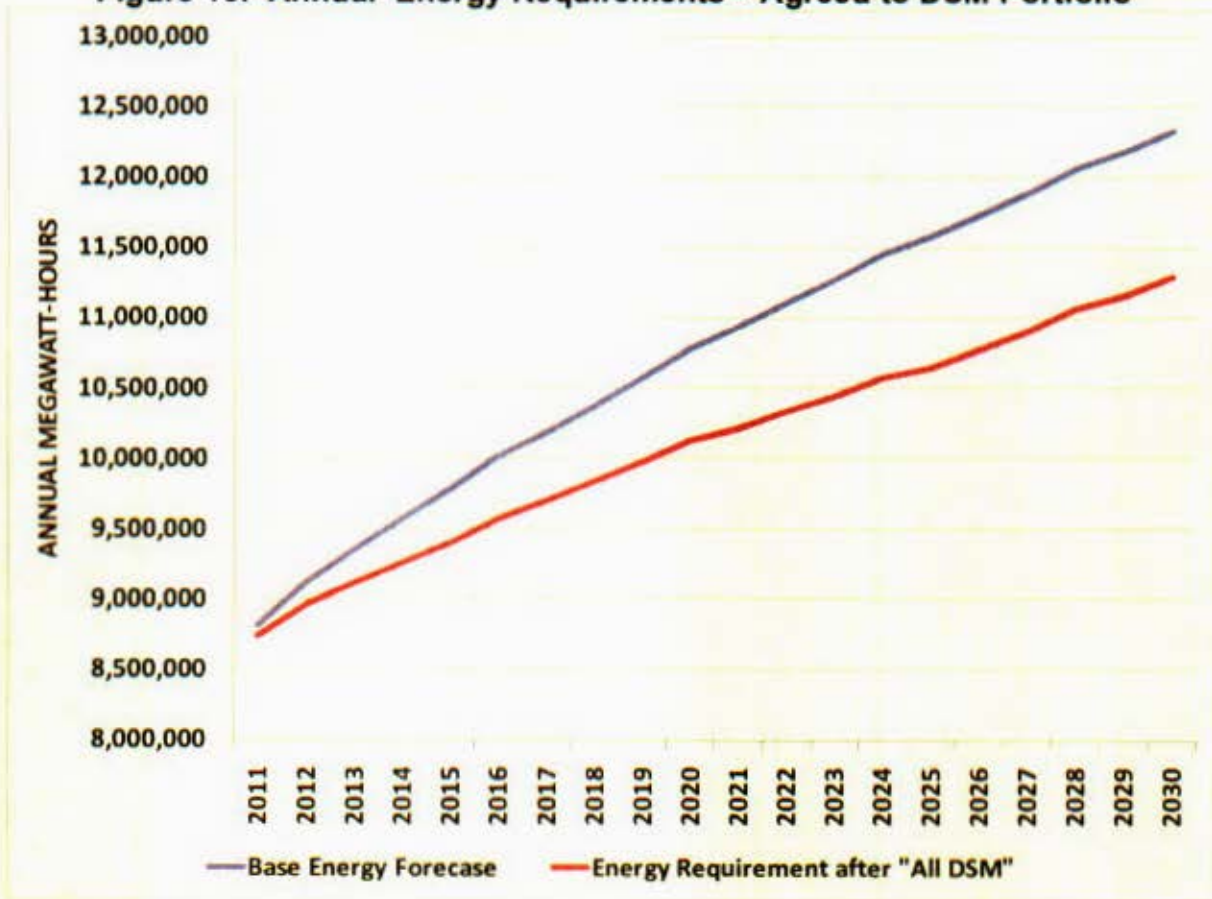
Figure 3: Demand Response Demand By Program – Agreed to DSM



Note that certain programs do not impact peak load on the peak hour and are not included in this chart of peak hour impacts. The energy savings derived from each of these programs is included over the full life of the program.

The July peak load hour impact by program for the Contingency DSM portfolio of programs is shown in Figure 4 below. Tabular data that created Figure 4 is provided

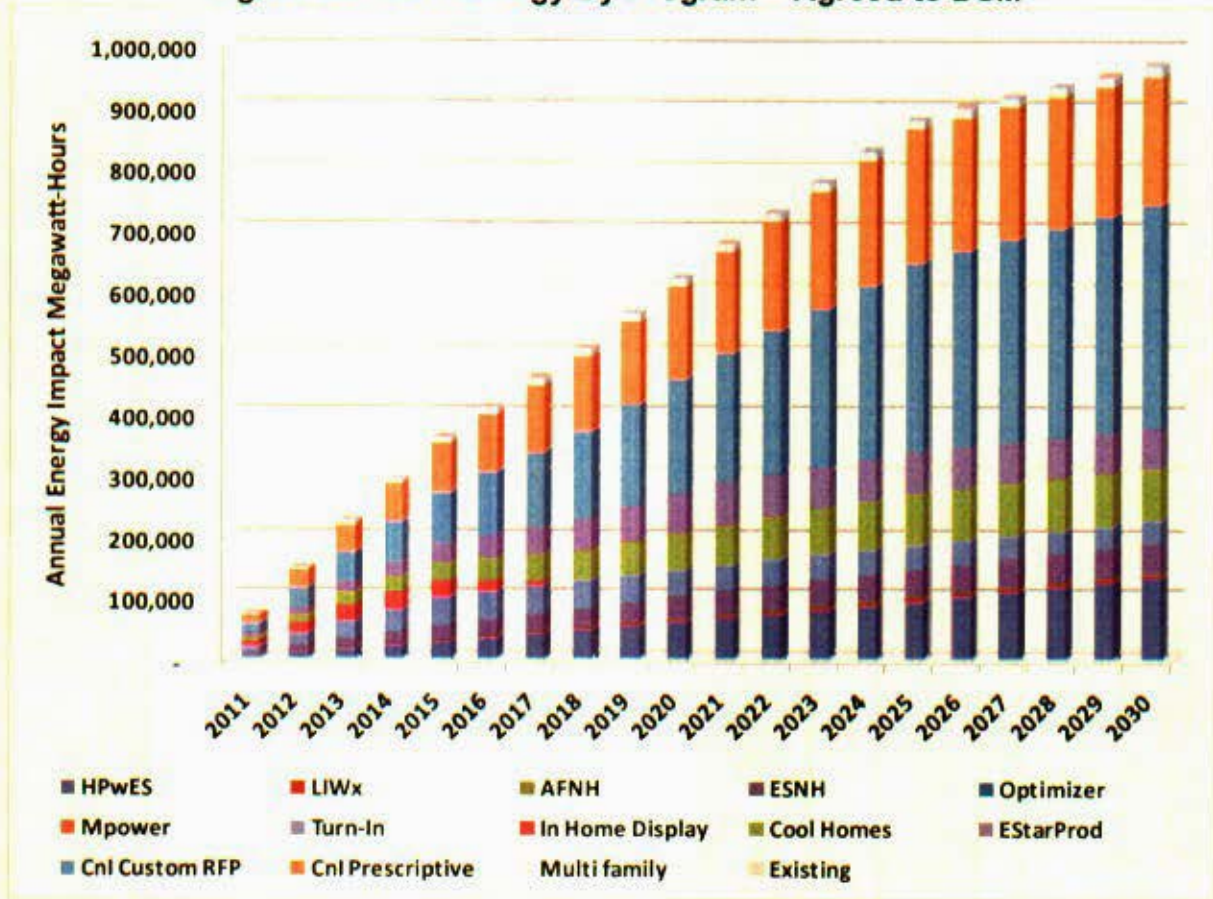
Figure 16: Annual Energy Requirements – Agreed to DSM Portfolio



All alternative resource plans in the revised integrated analysis developed as a contingency as defined in Paragraph 30 from Appendix 1 Stakeholder Process Agreement to the Non-unanimous Stipulation and Agreement for Case No. EE-2009-0237 utilize the DSM portfolio of programs identified as "Contingent DSM". The plan developed within this contingency process is Plan 11. The estimated impacts of these programs on the base case energy requirement for Plan 11 are shown in Figure 17 below. Tabular data that created Figure 17: Annual Energy Requirements – Contingency DSM Portfolio is provided on the work paper disc in an Excel file entitled "Figure240-22.060(6)(C)(4)DSM Energy Requirement Impact Contingent DSM.xlsx".

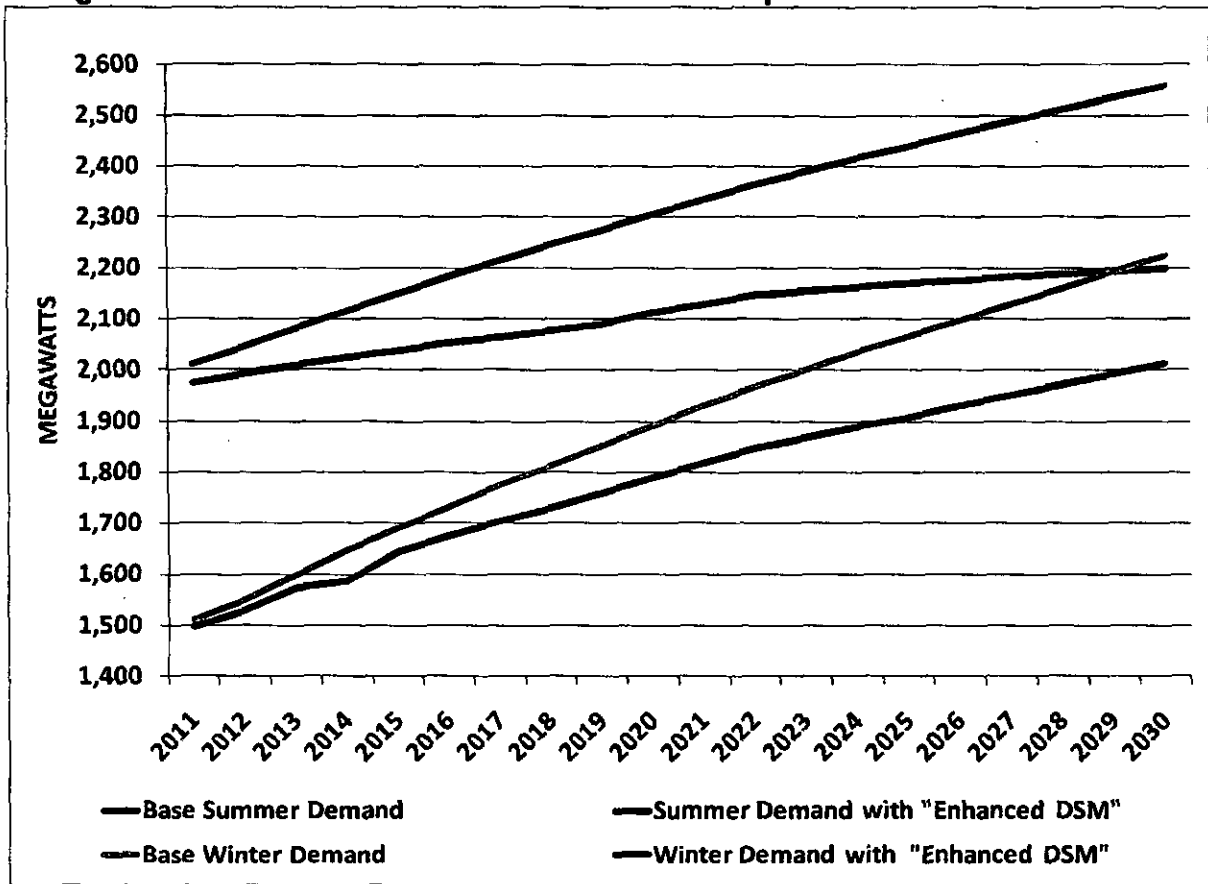
level of DSM. The estimated energy impacts of these individual programs for Plans Nos. 01 through 10 are shown in Figure 18 below. Tabular data that created Figure 18: DSM Energy By Program – Agreed to DSM is provided on the work paper disc in an Excel file entitled "Figure240-22.060(6)(C)(5)DSM Program Energy Impact Agreed to DSM.xlsx".

Figure 18: DSM Energy By Program – Agreed to DSM



All alternative resource plans in the revised integrated analysis developed as a contingency as defined in Paragraph 30 from Appendix 1 Stakeholder Process Agreement to the Non-unanimous Stipulation and Agreement for Case No. EE-2009-0237 utilize the DSM portfolio of programs identified as "Contingent DSM". The plan developed within this contingency process is Plan 11. The estimated energy impacts of these individual programs for Plan 11 are shown in Figure 19 below. Tabular data that created Figure 19: DSM Energy By Program - Contingency DSM is provided on

Figure 1: Summer and Winter Peak Demand Impact From Enhanced DSM

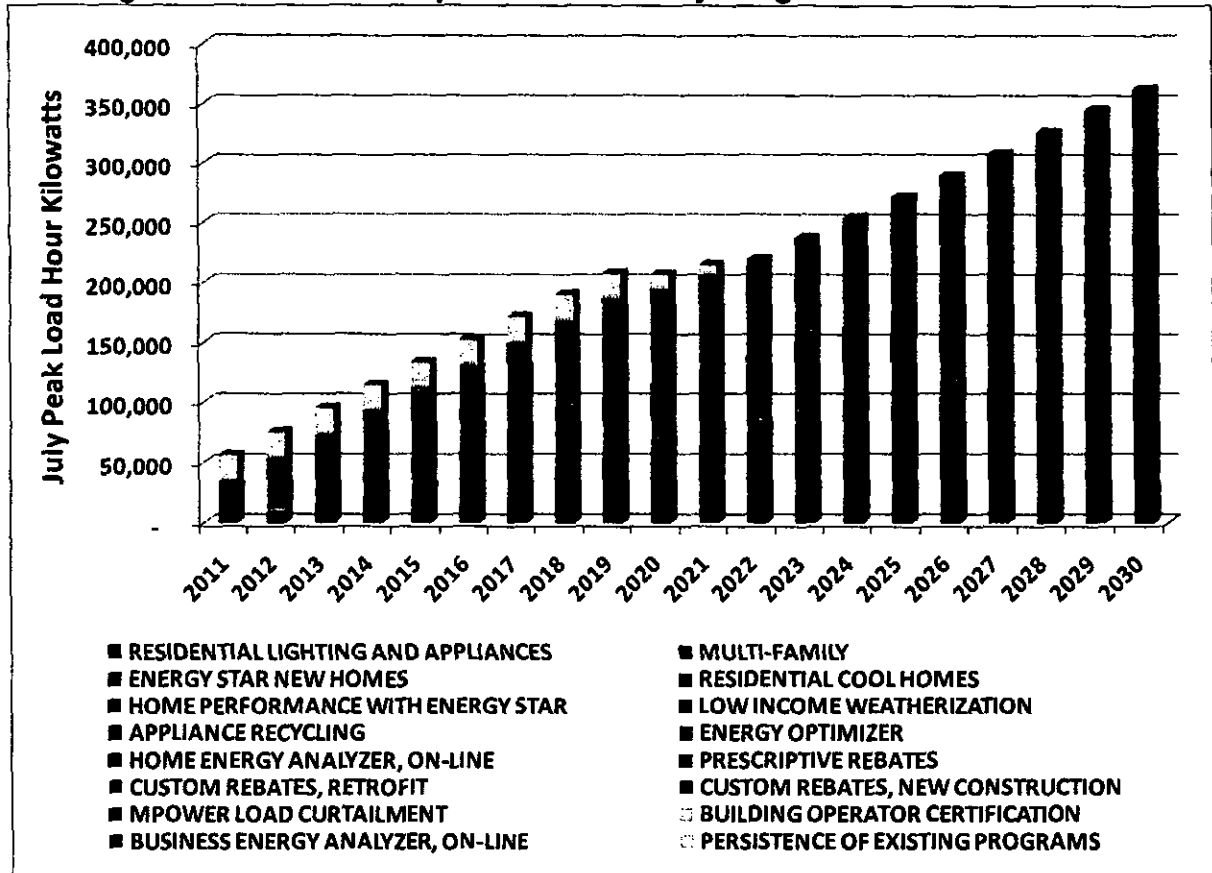


6.3.2 DSM PROGRAMS

2. The composition, by program, of the capacity provided by demand-side resources;

Each demand-side management (DSM) program has been evaluated to determine its capacity impact on peak system load. Peak system load occurs in the MIDAS™ simulation in July. The July peak load hour impact by program for the Enhanced DSM portfolio of programs is shown in Figure 2 below. Tabular data that created Figure 2 is provided on the work paper disc in an Excel file entitled "Figure240-22.060(6)(C)(2)DSM Program Peak Impact Enhanced DSM_GMO.xlsx"

Figure 2: Demand Response Demand By Program – Enhanced DSM



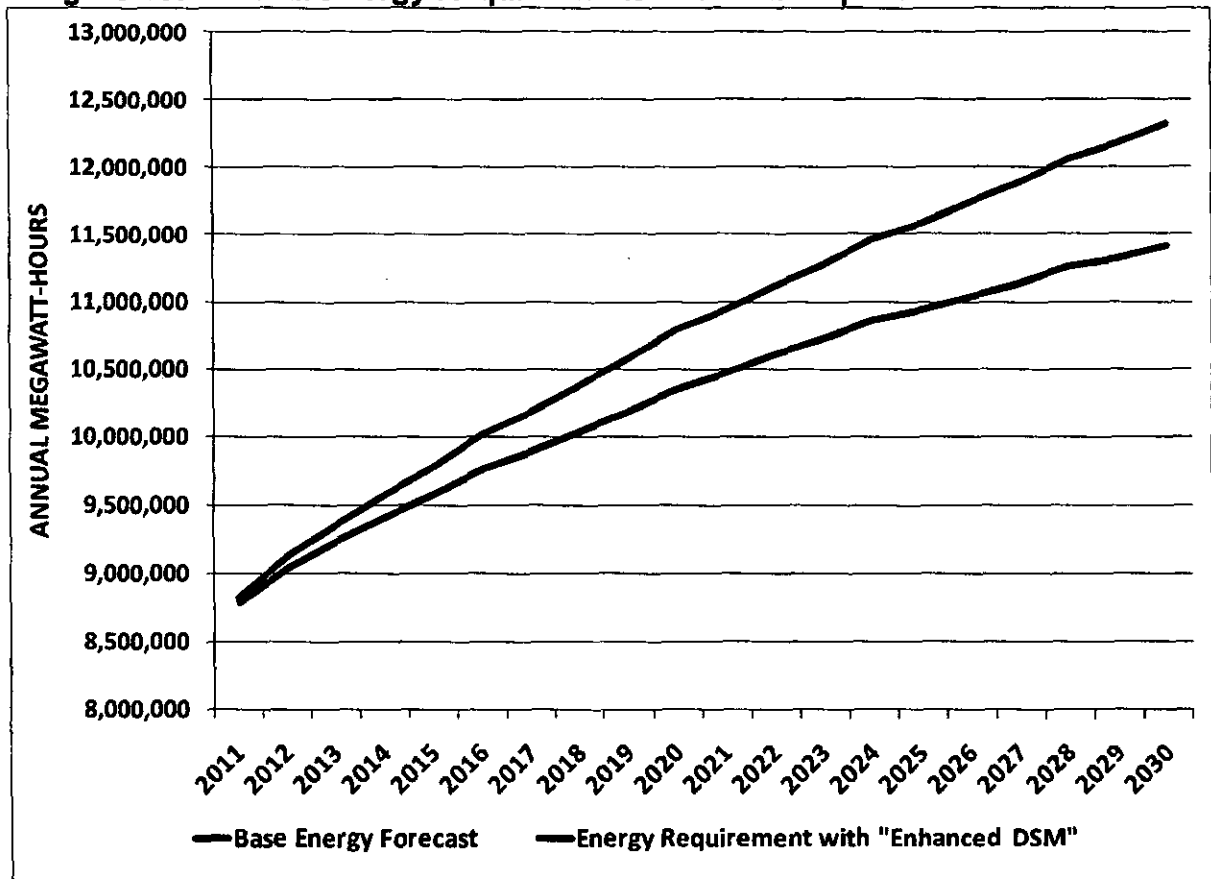
Note that certain programs do not impact peak load on the peak hour and are not included in this chart of peak hour impacts. The energy savings derived from each of these programs is included over the full life of the program.

6.3.3 SUPPLY RESOURCES

3. The composition, by supply resource, of the capacity (including reserve margin) provided by supply resources. Existing supply-side resources may be shown as a single resource;

The supply-side composition for each of the thirteen alternative resource plans are shown in the figures below with superimposed forecasts of reserve margins.

Figure 15: Annual Energy Requirements and DSM Impact – Enhanced DSM



It should be noted that the Annual Energy Requirement are inclusive of the effects of reduced line losses.

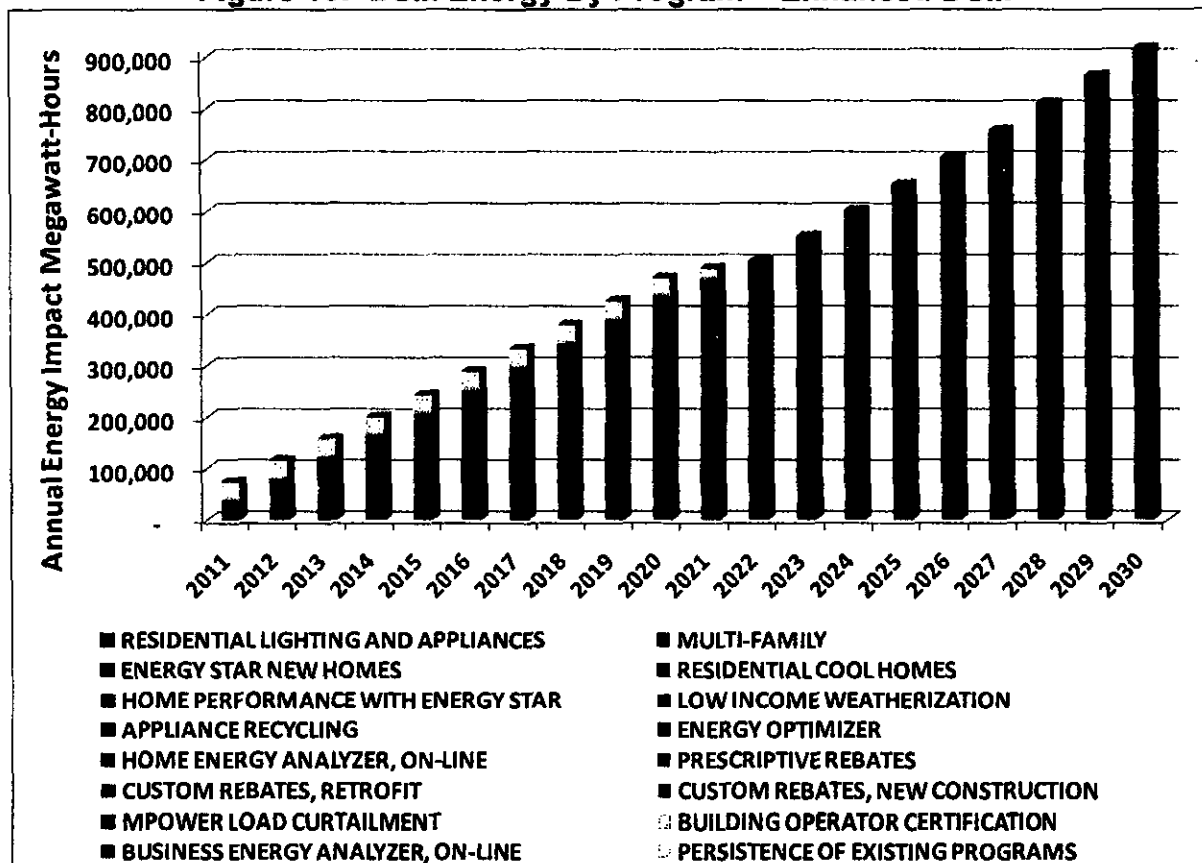
6.3.5 DSM ENERGY BY PROGRAM

5. The composition, by program, of the annual energy provided by demand-side resources;

All alternative resource plans in this filing utilize the Enhanced DSM portfolio of programs with the exception of Plan XAB00. The estimated energy impacts of these individual programs are shown in Figure 16 below. Tabular data that created Figure 16: DSM Energy By Program – Enhanced DSM is provided on the work paper disc in

an Excel file entitled "Figure240-22.060(6)(C)(5)DSM Program Energy Impact Enhanced DSM_GMO.xlsx".

Figure 16: DSM Energy By Program – Enhanced DSM



6.3.6 ENERGY SUPPLY BY RESOURCE

6. The composition, by supply resource, of the annual energy (including losses) provided by supply resources. Existing supply-side resources may be shown as a single resource;

Energy supplied by resource for each plan is plotted in the following charts beginning with Figure 17 below.