MDNR Company-Specific Contemporary Issues For KCP&L-GMO

MDNR includes the following contemporary issues for KCP&L-GMO that address items KCP&L-GMO agreed to in its last IRP stipulation and agreement to include in its next IRP filing.

Company-Specific (IRP Stipulation) Issue #1: Estimating Specific DSM Savings Portfolios.

Paragraph 28 of KCP&L-GMO's April 12, 2010 Stipulation and Agreement in File EE-2009-0237 states: "28. In what MDNR labels as "MDNR Deficiency #1," MDNR, citing 4 CSR 22.010(2), states that "the filing fails to treat demand-side management resources on an equivalent basis and fails to use minimization of long-run costs as the primary selection criteria." This issue is resolved by the combination of agreements set forth in paragraphs 27 and 31 of this Stipulation and Agreement and paragraphs 14-16, and 21 in the agreement to a stakeholder process and revised filing contained in Appendix 1. Collectively, these agreements address the issues with respect to equivalent treatment that are set forth on pages 2-4 and the issue of minimum NPVRR (net present value of revenue requirements) set forth on pages 4-12of Optimal Energy's Final Report on the Analysis of Demand Side Management filed on December 10, 2009 as an appendix to MDNR's comments in this case. For its next Chapter 22 compliance filing, GMO agrees to model and fully analyze at least one alternative DSM portfolio that annually achieves incremental electric energy and demand savings equivalent to 1% by 2015 and 2% by 2020 reductions in annual sales and peak requirements, respectively. "Fully analyze" means that the alternative portfolio(s) will be treated as resources that are available for selection in the determination of critical uncertain factors and in the identification of alternative resource plans and that at least one of the alternative portfolios will be included in an alternative resource plan that is included in the integration analysis. The demand-side resources included in these alternative portfolios will fully conform to the definition of "demand side resource" in 4 CSR 240-22.020(11). The alternative portfolio(s) will include energy efficiency programs to achieve energy savings from enduse measure that are not included in the DSM portfolio in GMO's current preferred resource plan. The alternative DSM portfolio(s) will also include energy efficiency programs to achieve increased energy savings from end-use measures that are already included in the DSM portfolio in its current preferred resource plan. For its next Chapter 22 compliance filing, GMO further agrees to perform a GMO service territory demandside market potential study, to consult with stakeholders on the design of the study and to incorporate the results of the potential study when developing the alternative DSM portfolios."

MDNR requests the Commission include this stipulation provision in resolution of a Deficiency as a GMO-specific contemporary issue.

Company Specific (IRP Stipulation) Issue #2: Monitoring Costs of Residential Solar Resources.

Paragraphs 10 and 30 of KCP&L-GMO's April 12, 2010 Stipulation and Agreement in File EE-2009-0237 state:

"10. In what MDNR labels as "MDNR Deficiency #4," MDNR, citing 4 CSR 240-22.040(1)(E) and 4 CSR 240-22.050(1), states that "GMO's analysis relies on inappropriately high costs for residential solar photovoltaic (PV) resource options." As resolution, GMO agrees to submit in a supplemental filing: the report, "A Renewable Energy System Performance Report", dated June 01, 2009, prepared by Bob Solgar, with The Energy Savings Store (TESS). GMO agrees to continue monitoring changes in costs for residential solar photovoltaic (PV) resource options for its next regularly scheduled IRP filing.

30. In what MDNR labels as "MDNR Deficiency #9," MDNR, citing 4 CSR 240-22.050(6)(C), states that "GMO's screening of solar hot water resources may be flawed." GMO agrees to submit in a supplemental filing: the report "A Renewable Energy System Performance Report", dated June 01, 2009, prepared by Bob Solgar, with The Energy Savings Store (TESS). GMO agrees to continue monitoring changes in costs for solar hot water resources for its next regularly scheduled IRP filing."

MDNR requests the Commission include this stipulation provision in resolution of a Deficiency as a GMO-specific contemporary issue.

Company Specific (IRP Stipulation) Issue #3: Analyzing Residential and Commercial/Industrial Demand Response Programs.

Paragraph 23 of KCP&L-GMO's April 12, 2010 Stipulation and Agreement in File EE-2009-0237 states: "23. Staff's Deficiency 2 states: No identification of, development of or screening, of the technical potential of end-use measures for the Energy Optimizer program or for the MPower program – 4 CSR 240-22.050(1), 22.050(3), 22.050(6)(C), and 22.050(4). GMO agrees to identify, develop or screen the technical potential of end-use measures for the Energy Optimizer program and for the MPower program and to report to the stakeholder group as described in Appendix 1 whether this deficiency will be corrected in the revised filing or in the next Chapter 22 compliance filing."

MDNR requests the Commission include this stipulation provision in resolution of a Deficiency as a GMO-specific contemporary issue.

Company Specific (IRP Stipulation) Issue #4: Analyzing Municipal Street Lighting and Combined Heat and Power Retrofits.

Paragraph 26 of KCP&L-GMO's April 12, 2010 Stipulation and Agreement in File EE-2009-0237 states: "26. OPC's Deficiency 1 4 CSR 240-22.050 (3) and (7) – GMO failed to analyze street lighting (and other outdoor lighting) retrofits, alternative rate structures and combined heat and power (CH&P) on the customer side of the meter as end use measures and as Demand-Side programs. *GMO agrees to analyze street lighting and*

CH&P as potential demand-side resources in its the next full compliance filing. GMO agrees to include alternative rate structures, including, but not limited to, time-of-use (TOU) and peak pricing (critical peak pricing and/or peak time rebates) rates for small and medium sized customers, as demand-side resources in the revised filing.

MDNR requests the Commission include this stipulation provision in resolution of a Deficiency as a GMO-specific contemporary issue.

Company Specific (IRP Stipulation) Issue #5: Use of Experts in Determining Subjective Probabilities.

Paragraph 6 of KCP&L-GMO's April 12, 2010 Stipulation and Agreement in File EE-2009-0237 states: "Staff's Concern B states: GMO only consulted one expert when determining the subjective probabilities assigned to its high-case, base-case and low-case load forecasts. This concern is resolved in the agreement to a stakeholder process and revised filing contained in Appendix 1. It is addressed in the "Load Analysis and Forecasting" section of Appendix 1. Further, GMO agrees to use three or more decision-makers when assigning probabilities to the high-case, base-case and low-case load forecasts for the next Chapter 22 compliance filing."

This analysis was not conducted in the stakeholder process accompanying File EE-2009-0237.

MDNR requests the Commission include this stipulation provision in resolution of a Deficiency as a GMO-specific contemporary issue.

MDNR General Contemporary Issues

General Issue 1: Coal Plant Retirements

Analyze, rank and document existing coal plant fleet as retirement candidates. This is an important contemporary issue in light of environmental regulation, rising coal prices and maintenance costs.

<u>General Issue 2: Aggressive Demand Side Management (DSM) Portfolios without</u> Constraints

Analyze and document aggressive DSM portfolios without constraints. Include analysis and documentation of demand side investment mechanisms necessary to implement each DSM portfolio.

General Issue 3: DSM, Combined Heat and Power (CHP) and Distributed Generation (DG)

Analyze and document the impacts of opportunities to implement distributed generation, DSM programs and CHP projects in collaboration with municipal water treatment plants and other local waste or agricultural/industrial processes with on-site electrical and thermal load requirements, especially in targeted areas where there may be transmission or distribution line constraints.

General Issue 4: Low Probability Risk Assessment

Analyze and document low probability outcomes with extremely high or low values (such as natural or man-made disasters which would result in energy emergency events including significant loss of load and equipment outages) as a part of risk assessment.

General Issue 5: Interdependence of Uncertain Factors

Analyze and document relationships between uncertain factors when making a determination of whether uncertain factors are entirely independent or if they should be analyzed with covariant risk analysis.

General Issue 6: Agricultural DSM

Analyze and document analysis of DSM programs targeted to achieve energy efficiency savings in the agricultural sector. Based on MDNR's experience in administering American Recovery and Reinvestment Act funding for energy projects, energy efficiency in the agriculture sector is an area of emerging interest and importance.

General Issue 7: Customer Information/Behavior Modification DSM Programs

Analyze and document alternative customer information/behavior modification program options to increase customer awareness and encourage more efficient use of energy.