Advisors’ Comments Regarding Milestone 2 of the 2015 ENO IRP – January 28, 2015

The Milestone 2 deliverables of the ENO 2015 IRP included the following three areas:

1. Preliminary results for the 2015 DSM Potential Study
2. Key inputs and assumptions to the IRP Modeling phase (i.e. Milestone 3)
3. Proposal to identify reasonably quantifiable Non-Energy Impacts

The Advisors comments regarding Milestone 2 address each of those three areas.

I. Preliminary results for the 2015 DSM Potential Study

While the 2015 DSM Potential Study met its objective to develop electric and gas achievable program savings, cost projections and hourly load shapes for the low, reference, and high levels of achievable DSM over the 20 year planning period, several details of the preliminary results will require monitoring as the IRP process develops further.

Hourly load shapes are to be provided for each program for each scenario rather than the 2012 IRP approach of bundling according to like Program Administrator Cost Test (“PAC”) result and program type. The DSM supply curves and corresponding costs are an important input to the IRP optimization of resources. The 12 residential DSM programs being evaluated are in compliance with Council directives and are generally compatible with the Energy Smart programs proposed for the period April 1, 2015 to March 31, 2017 when the DSM results of the 2015 IRP would be implemented. However, we note that for the more cost effective DSM programs, direct load control was limited to residential air conditioning and dynamic pricing was limited to “non-technology enabled.” Additional residential loads and direct load control of commercial/industrial loads would have provided more information for long range DSM planning. Similarly, since 50% of the industry residential meters are expected to be Advanced Metering Infrastructure (“AMI”) by the end of 2015, the DSM potential of technology-enabled dynamic pricing should have been evaluated. The seven commercial/industrial programs encompass a wide range of individual measures, and the hourly load shapes should reflect that diversity. The screening test results for the Energy Smart programs proposed to be implemented until March 31, 2017 indicate that commercial/industrial programs are the most cost effective of the proposed programs. Also 673 of the 767 total DSM measures to be evaluated in the 2015 IRP are commercial/industrial, so the commercial/industrial hourly load shapes and costs represent important IRP DSM inputs and should be monitored closely.

Some concern was raised concerning ENO’s estimation process for the DSM programs market acceptance rate, which is the percent of applicable customers who participate in a program in a given year. An important component of estimating the participating customers is the customer payback acceptance curve. While different payback acceptance curves will be used for each sector (residential, commercial, and industrial), the listed data sources to develop each curve had not given permission to use such data as of the Milestone 2 presentation. The Company should provide the sources after they finalize which curves will be applied in the IRP.

Regarding the EPA proposal for controlling GHG emissions under §111(d) of the CAA, ENO was still evaluating the ramifications of §111(d), since it was released a little over 2 months prior to Milestone 2. While there is still significant uncertainty regarding the structure of the final rule, the Company should provide updates in the IRP process regarding any changes due to §111(d).
Some questions were raised concerning the derivation of the cost of equity for the high and low cases under the financing assumptions. The Company should provide supporting details in response to the questions regarding the cost of equity estimates.

Milestone 2 provided the following anticipated timeline for deliverables: (i) finalize achievable potential estimates (Nov-Dec 2014); (ii) develop IRP inputs (Feb-Mar 2015); and (iii) draft Potential Study Report (June 2015). The finalized achievable potential estimates should be provided, and the progress toward the other deliverables should be included at the February 2015 Milestone 3 presentation.

II. Key inputs and assumptions to the IRP Modeling phase

The Advisors understand that the Company’s 2015 ENO IRP Capacity Price Forecast was developed in early 2014 prior to MISO completing its Annual Planning Resource Auction (PRA) for the Planning Year 2014-2015. In the Auction, Local Resource Zone (LRZ) 8 and 9 cleared at $16.44 per MW-Day. LRZs 2 through 7 cleared at $16.75 per MW-Day. In the previous PRA for the Planning Year 2013-2014, LRZs 2 through 7 cleared at $1.05 per MW-Day. This represents a significant sixteen fold year-to-year increase. While not disclosing ENO’s IRP Capacity Price Forecast, the Advisors are concerned that ENO’s IRP Capacity Price Forecast did not consider the April 14, 2014 auction results and may need to be adjusted higher in light of the results. Accordingly, ENO’s current IRP Capacity Price Forecast may undervalue the capacity benefits associated with demand-side and supply-side resources. The Company should review their current forecast and adjust as necessary the values or provide information to the Council as to why it would be inappropriate to revise the forecast.

In a similar vein, recent reductions in the price of oil and natural gas may also need to be taken into consideration with respect to the near-term fuel forecasts utilized for the IRP. As shown in the figure below, currently the Henry Hub Natural gas price is less than $2.95/MMBTU.
NYMEX futures suggest Henry Hub Natural gas prices will remain below $4.00/MMBTU through 2018. These values are below the values presented in the Milestone 2 Public Technical Conference with respect to the BP 15 Reference Case Forecast\(^1\). While it is recognized that the IRP process must rely on a long-term fuel forecast and contains a Low, High, and Reference case forecast for fuel to account for a variety of different possible futures, it appears that current natural gas prices are more in line with the BP 15 Low Case Forecast and not the BP 15 Reference Case Forecast. In the Company’s forecast, we note that the Company states years 1-3 are based on NYMEX forward prices without modification. Accordingly, either a near term adjustment of the forecast or a higher weighting of the BP 15 Low case near-term IRP modelling results may be appropriate. Further, given the demonstrable recent relative lows in oil and gas prices, the Companies should confer with the leading consultants that developed the forecasts upon which the Company’s consensus forecast is based to ascertain if long-term expectations remain consistent with forecast utilized for the IRP. Subsequent to conferring with its consultants and reviewing its fuel forecasts, the Company should report to Council with its recommendations regarding any changes or revisions to the fuels forecast. To be clear, the Advisors understand that it is impossible to, continually update fuel forecasts to reflect all changes in the marketplace. However, the Council needs to be certain that the High and Low forecasts represent a range of possible futures that adequately bound reasonable expectations.

\(^1\) Slide 9 of the Portfolio Design Analytics (Scenarios and Sensitivities) AURORA Documentation presentation in the 2015 ENO Integrated Resource Plan Milestone 2 Public Technical Conference, October 28, 2014