## 2018 ENO IRP- Responses to Public Questions

Question	Response
Why does the IRP evaluate over a 20-year period?	Supply resource alternatives can require three or more years to permit and construct, in addition to the time required to plan, market test when necessary, and secure approval and regulatory certification. Many of these resource alternatives have long life expectancies – some are expected to remain viable for 30 years or more. A 20-year evaluation period for the IRP provides an adequate time period to: 1) assess and compare the cost, performance, and risks of supply resource alternatives and combinations of alternatives, 2) formulate long-term strategic plans, and 3) allow sufficient time to procure the needed supply resources.
Are modern batteries easily recycled?	Lithium Ion Batteries, which were evaluated in the IRP, can be recycled through specific processing currently. In addition, the Department of Energy has announced plans to invest in Lithium Ion Battery Recycling. As future battery units near deactivation, ENO will further analyze the process of recycling Lithium Ion batteries.
Why not evaluate water-based storage? For example, hydro pumped-storage?	Due to the extreme reliance on location to determine benefit and large environmental impacts, Hydro Pumped Storage is not a viable IRP assumption for ENO. ENO evaluated Lithium Ion Batteries based on current supply chain and capital cost trends. If ENO identifies energy storage resources as economic options to meet its needs, pumped hydro could be considered to fill that need if there is a viable project available to invest in.
Is it possible to generate electricity from the Mississippi River flow here in New Orleans?	Generating power from the Mississippi River in New Orleans is not a feasible resource alternative given the infrastructure required, amount of loose debris in the river, and the commercial shipping traffic on the river.
Why build very small plants such as 'Grand Gulf ELMP' at a mere 3 MW?	The small amounts shown on Table 2 in the IRP report, such as the 3 MW Grand Gulf entry noted, represent fractional shares of generators that ENO receives through power purchase agreements.
Is it true that Union Power Block 1 came online in 2016?	ENO completed the acquisition of Union PB1 in 2016. The unit's original COD is 2003. Because the operating life for the unit is assumed to be 30 years, it is assumed to deactivate in 2033 in the IRP analysis.
When referring to "this software" are you using more than one software package?  Why do you want to smooth out volatility?	Yes. MetrixND (licensed from Itron) is used to forecast sales while MetrixLT (also licensed from Itron) is used to incorporate those sales to create an hourly load forecast  The volatility referred to in the IRP document is with regard to temperatures including those experienced during unusually hot
voiatility:	summer months or unusually cold winter months. Extreme

Why are transmission and	weather periods such as those do occur, but using those extremes as a reference point for a forecast would overstate the load requirements. By using a 20-year average of temperatures, volatility for extreme periods is smoothed out.  For developing the load forecast, the T & D losses are applied
distribution losses computed by class?	to the energy by class in order to more accurately estimate the amount of energy needed to be produced to serve each class of customer, as each class of customer has its own estimated level of T&D losses.
Is EPRI guidance regarding the longevity of generating assets not available for solar and onshore wind?	ENO assumes a 30-year useful life for solar PV and 25-year useful life for wind generating resources.
Why is ENO part of MISO in the first place?	MISO's substantial scale and established markets lead to the more efficient dispatch of power plants on the transmission grid and cheaper energy prices for customers.
It is important to note that the load in the region just after sunset is often only slightly less than the peak load for the day. Is this the case year-round?	This is mostly the case during summer months (May-September), and in fact during winter months (November-February) ENO's load often peaks after sunset.
Does MISO obligate ENO to a PRMR on top of the 12% reserve margin?	MISO's resource adequacy construct requires ENO to meet an annual reserve margin that is recalculated each year. This construct is independent of ENO's long-term planning process which uses a 12% long-term planning reserve margin to help determine necessary reserves.
Does the 12% reserve margin cover power production units down time for maintenance?	<ul> <li>Yes, the planning reserve margin is intended to cover:</li> <li>Planned maintenance outages</li> <li>Unplanned or forced generator outages</li> <li>Deratings in generation capacity</li> <li>Load forecast uncertainty and variations in weather</li> </ul>
Why use 12% as opposed to say 8% for your long-term planning reserve margin?  Will every utility pole have its	Upon joining MISO ENO sought to identify a planning reserve margin that provided a reasonable and stable basis for meeting long-term planning objectives while also considering the following factors:  • Generating unit forced outages • Extreme high temperatures • Load forecast deviation • Potential variability in MISO Resource Adequacy requirements • Uncertainty regarding the long-term resource portfolio • Future load uncertainty.  Given these factors ENO performed analysis and determined the 12% was a reasonable reserve margin.  Yes, each pole's unique identifier will be entered and logged

own specific identifier like the	into GIS.
City's catch basins?	
Do your AMI meters send data via wireless or via some type of modulation that uses the power line power electric wave as the carrier wave?	The AMI communications network will transmit data wirelessly.
Why limit EnergySmart to New Orleans? Why not offer it statewide?	Energy Smart was developed by the Council for the City of New Orleans for customers in Orleans Parish and is administered by Entergy New Orleans. Investor-owned utilities and electric cooperatives regulated by the Louisiana Public Service Commission offer other programs for customers in other locations throughout the State.
Where does the 200% of federal poverty standard come from?	The 200% of Federal Poverty Line standard is closely aligned with others in use throughout the utility industry and allows a reasonable number of households in New Orleans to participate in Energy Smart programs.
Does the AURORA software allow for the information flow to be reversed? I.e. for a given portfolio would your software tell you which of the input parameters this resource mix optimizes?	The AURORA software can project the variable supply cost for a given portfolio of resources based on assumptions for uncontrollable variables, such as natural gas prices, which is used to compare the variable supply cost performance of resource portfolio alternatives. Alternatively, the AURORA software can select a portfolio of resources subject to constraints that best meets specified objectives based on assumptions for uncontrollable variables, such as natural gas prices. In each instance, the portfolio of resources, which can be controlled is allowed to vary while the uncontrollable variables, such as natural gas prices are held constant. Since the uncontrollable variables cannot be selected or chosen, the AURORA software is not designed or capable of optimizing the uncontrollable variables for a given portfolio of resources.