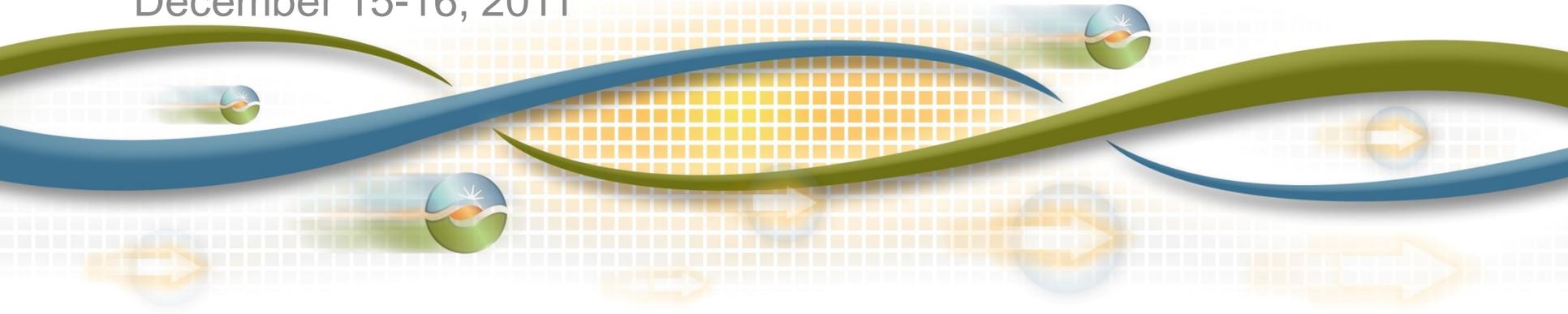


Decision Default Operations and Maintenance Costs

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The ISO has a made a commitment to review and update O&M values every three years.

- Utilicast performed a study including review and reconciliation of technical data, and benchmarking against other ISOs
- The study culminated in the recommendation of updated and more granular operations and maintenance values

Default O&M values are used in the following calculations:

Proxy minimum load costs

ISO calculated minimum load costs used in unit commitment decisions and bid cost recovery calculations

Default energy bids

Cost based bids used to replace energy bids when a resource is determined to have local market power

What are operations and maintenance costs?

- \$/MWh values intended to capture the variable, non-fuel costs associated with running a generating unit
 - raw water, waste and wastewater disposal expenses
 - demand charges and related utilities
 - chemicals, gases, and other such consumable materials and supplies
- Current values
 - \$4/MWh for combustion turbine and reciprocating engine resources
 - \$2/MWh for all other resources

Management recommends new default operations and maintenance cost values.

Generation Technology	Recommended O&M Cost Adder (\$/MWh)
Solar	\$0.00
Nuclear	\$1.00
Coal	\$2.00
Wind	\$2.00
Hydro	\$2.50
Combined Cycle, Steam	\$2.80
Geothermal	\$3.00
Landfill Gas	\$4.00
Combustion Turbine, Reciprocating Engine	\$4.80
Biomass	\$5.00

Stakeholders broadly support the proposal. Limited concerns about not including major maintenance costs.

- Major maintenance costs includes labor and parts associated with
 - Scheduled major overhauls
 - Plant maintenance that cannot be done while the unit is in commercial operation
- Some stakeholders posited that major maintenance be included in proxy start-up or proxy minimum load costs.
 - A stakeholder initiative to address this and other issues with commitment costs will start in January 2012

Management recommends that the updated operations and maintenance values be implemented.

- Stakeholders are supportive of the updated variable operations and maintenance cost adder values.
- The updated and more granular values better capture variable operations and maintenance costs used by the ISO.