MSG-specific Model limitations

- Lack of multiple ramp rates within configurations
- Inability to offer ancillary services beyond configuration
- Inability to self commit RT in an alternate configuration with AS capability if there are IFM AS awards on a configuration
- Inconsistency of transition costs with startup costs
- Inability to re-rate pmin
Lack of multiple ramp rates within configurations: possible resolution

- Allow at least two ramp rates within configuration in IFM/RTD (or at least RTD)
Inability to offer AS beyond configuration: possible resolution

• Consistency in SIBR and IFM between MSG and non-MSG resources (ability to offer nonspin above configuration pmax if certified)
RT self commitment prevented by IFM awards – possible resolutions

• Modify SIBR rules to accept RT self commitment that satisfies capability to provide IFM AS awards
Inconsistency of transition/startup costs – possible resolution

- Enable submission of LTSA cycling cost data to Potomac, ISO-validated $ adder on cycling and transition costs
Inability to re-rate pmin

• Allow ambient re-rating of pmin only, in SLIC and subject to consistency rules
Market Model limitations

• STUC/RTPD lookahead (5 hours) inconsistent with transition times (6 hours +), resulting in ISO violations of IFM schedules

• Because all state transitions occur in RTPD rather than RTD, MSG is inherently unresponsive to RT interval price spikes (except as load following capability is maintained through uneconomic marginal pricing) and state transitions are inherently untransparent to SCs and resource operators
STUC/RTPD lookahead resulting in ISO RT violations of IFM schedules

• Constrain solutions based on conservative assumptions (i.e., don’t allow decommitment if it is possible solution will be infeasible)

• Capture RT value in RUC (possible benefit of 72 hour RUC) – but this requires that AS awards in IFM not constrain RUC commitment of MSG in higher configurations
MSG is inherently unresponsive to price spikes – possible resolutions

- Relax MSG model in RTD
- Allow state changes in RTD when price spikes are outside a stated range
- “Flexible ramping capability” constraint could assist or exacerbate, depending on how MSG configurations are treated (i.e., is dispatching into a higher configuration seen as relieving ramping capability constraint)
Perspectives on MSG Initiative

• Parameters have had to be “optimized” on the fly – there is a need for a reliable simulation of how the ISO will use a given resource’s MSG model.

• Current ISO treatment of operational issues has been incremental and ad hoc (as required by urgency), whereas we would like to see model deficiencies exposed and addressed at a more fundamental level.

• Neither the ISO nor its vendor has revealed its preferred (or even expected) mapping of physical characteristics to market parameters.