a

b

Issue
1. Updated MARS version (fix Study Year issue)
2. Modeling Energy Storage Resources
a. Use new capability to Model Gilboa and Lewiston pump storage
b. Other ESR integration into the model using this new MARS feature
3. Resource Adequacy with Substantial Quantities of Non-Dispatchable Resources
4. Load Shape Review
5. External Area Modeling
6. Modeling Behind-the-Meter Solar PV
7. Enhancing Intermittent Resource Modeling
a. Alignment of On-shore wind and Solar production years
b. Need to study correlation of off shore wind and other intermittent resources.
8. "NEW" Load Forecast Uncertainty
a. Verify existing procedure. Could minor adjustment address concern?
b. Develop alternative LFU method, if warranted.

Grandfathering of External Contracts
NERC Calculation of required Reserve Margin
RAM – 8/8/2019
PSC Case 19-E-0530
Safeguarding reliability WRT(Not sure what this is) DER
Model Load Shapes

Model load forecast uncertainty (LFU)
External Area Modeling
Economic IRM and LCRs
RNA model changes
Study Year Change
Energy Storage Resources

Comment (gsd)	For 2021	Beyond 2021
Would need to use last year's alternative modeling if GE revision is not timely	x	
Would need to use current modeling if GE revision is not timely	x	
Need to understand impacts of continued growth of intermittents.		x
This is a continuation of the High Renewable IRM Analysis, which is on a separate timeline from other IRM whitepapers.	N/A	
Concern from last year "2002 shape is 17 years old and potentially no longer representative" was addressed by Arthur's presentation that found current years that replicated 2002, indicating that 2002 is relevant.	None	
Immediate concern was addressed through last year's paper. A paper on simplified external area representations may indicate that EA can be more stable.		x
Need to examine RNA methodology. Modeling direct impacts on load could be the best approach.	x	
Can be done with current model. GE is also working on a more direct approach.	x	
Correlation unclear for other intermittents. Should use item 3 paper as starting point		x
Last year showed how as few as two new data points can move the IRM by over 1%. Need to understand if this is appropriate.		
Is there more (past) data that suggests saturation or a trend of it.	x	
Is there a statistically significant number of data points needed to change LFU.		x

Our open market has given it all to HQUS to the potential detriment of the other surrounding Control Areas.
They mix UCAP and ICAP and tell us (NYISO?) we don't meet the requirement
Just like to talk about it and get your reaction, mainly to the seven resource adequacy matters highlighted.

Both operations and planning concerns. What do you see as the NYSRC role?
Are we getting more pushback from PSC or others? Should this be tabled for now? Nature of pushback?

Last year we saw a dramatic jump in IRM impact with the update. I believe the model should not be so sensitive to so few (2-3) new data points on the temp-load curves. I believe the current approach over states the impact of the LFU
Even the 3500 MW limit has not stopped swings in our IRM from neighbors. Are these swings acceptable or are there other options? Maybe we need a better understanding of the year to year swings to answer the question?
Want your thoughts
Need to understand what options are available due to the planning group's work. Also, I believe ICS should be more involved with incorporations of model and assumption changes.
GE seems to be making software changes to resolve this.
The new GE model and incorporation of these resources.

White Paper (WP) or Issue Resolution Document (IRD)
IRD
IRD
WP
WP

needed

WP
IRD

IRD
WP

IRD
WP