IRP Modeling Advisory Group

Office Hours #2: 10/10/2017

Background

During the month of October, Energy Division staff will host one 90 minute "Office Hours" webinar each Tuesday from 1:00 pm to 2:30 pm to address technical questions from parties related to RESOLVE and/or the staff proposal "Production Cost Modeling Process to Review Integrated Resource Plan Portfolios." During the webinar, staff and technical consultants will provide verbal responses to questions submitted in writing by 4:30 pm on the Friday preceding the webinar. Following each question or topic, parties will have an opportunity to pose additional clarifying questions. In general, staff does not anticipate preparing presentation material, but may do so on occasion. Any materials prepared, as well as audio recordings of each webinar, will be available from the IRP Events and Materials page. The expectations and ground rules documented in the Modeling Advisory Group charter apply.

For more information, please contact Patrick Young at Patrick.Young@cpuc.ca.gov or (415) 703-5357 or Forest Kaser at Forest.Kaser@cpuc.ca.gov or (415) 703-1445.

Questions Submitted

CEJA

1. We found a reference to a "nogas" case within one of the spreadsheets. It is not listed on Attachment C, but it interestingly has the lowest number of starts of any of the 42 MMT sensitivities. Do you know what that case is?

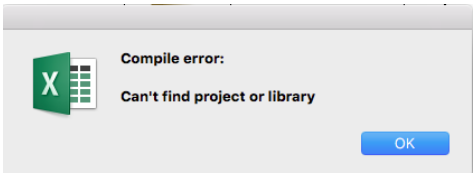
ORA

1. Under the outputs for "Operating Cost Breakdown" please explain what costs are captured under "variable operating costs for CAISO resources," "market purchases" and "market revenues."
    a. Are the "variable operating costs for CAISO resources" essentially the energy market costs (as opposed to capacity costs)?
    b. Is the cost of procuring energy, which may actually see a reduction due to use of more renewables, captured under "market purchases?"
2. In the SYS_Baseline_Costs tab of the User Interface, the model includes 2016 Bilateral Contract Costs for the three utilities (lines135-137). It looks like line 161 Total IOUs simply includes these

exact costs through 2050. Does the model apply any additional changes to the cost when it's running or is it assumed that these pre-2016 contract costs are static?

The Nature Conservancy

1. Is it possible to disaggregate the reported MW of selected candidate capacity of renewables for each RESOLVE resource/transmission zone into specific resource IDs? I read from the Inputs and Assumptions documentation that generation classes are aggregated (pg. 49), and I have examined the capacity outputs, which are reported at the transmission zone level with no further specificity.
2. Is it possible to force more than three resources into a portfolio?
3. I can't run the Excel User Interface on OSX and I suspect that this is the case for all Mac users. It might be due to differences in the way that paths are specified in Mac vs. PC (see this stack overflow discussion: https://stackoverflow.com/questions/16631503/path-working-on-pc-but-not-mac). I tried modifying the viewable paths in the VB script, but don't think I managed to get all of them, so I still get the following error when clicking any button on the dashboard (including just the save scenario button):



When running run_opt.py in directly in terminal with the full_run and glpk arguments, I got the following error (after "compiling" load_data.py and model_formulation.py): "RuntimeError: Cannot iterate over abstract Set 'NEW_BUILD_RESOURCES' before it has been constructed (initialized)."

4. Does a supply curve exist that combines the NGO 1&2 environmental screens with the SJV/DRECP screens? We believe that the "minimum" case capture this; please confirm.
5. Please confirm that the 2016 B&V environmental screen updates were captured for out of state resources. In particular sage grouse habitat updates in WY. Believe lesser prairie chicken to be an issue for New Mexico wind as well; likely not currently captured in environmental screens.