

Scope of work for additional IRP model runs (for Ventyx cost estimate)

The additional analysis recommended by the Office of the Public Counsel (OPC) will be based on re-running the existing RAP+ and RAP++ cases from Empire's 2013 IRP data set with Riverton 12 remaining simple cycle instead of converting to a combined cycle (CC) unit. This analysis will also require re-running the Ventyx Capacity Expansion Model (CEM) to forecast the change in the timing of the need for new supply-side capacity and the type of capacity additions that would be needed in the later years of the planning horizon. Since the IRP also has a risk component, Empire will also need to create a couple scenarios around these cases that would study the implications of not converting Riverton to CC and study the impacts of not being able to achieve the more aggressive DSM levels of RAP+ and RAP++. Midas runs would need to be conducted for each new plan to calculate net present value of revenue requirements (NPVRR) in order to compare to the other 2013 IRP plans.

- This will require the time for Ventyx to un-archive the EDE 2013 IRP data set and any testing
- Empire will supply the penalty costs in the EPC contract to stop construction on the Riverton 12 conversion
- The deliverables would include the NPVRR, resource build out descriptions and capacity balance reports for each plan
- A simple one to two page report summarizing the results of the analysis is also required