

EIPC Gas-Electric System Interface Study

Sensitivities in Set #1 for Analysis Prior to SSC Mid-Point Meeting with Set#2 to be Discussed Further at that Meeting

4/4/2014

Requested =>	Discuss as part of Set #2
Approved =>	Approved as part of Set #1

<<All sensitivities run on #0 (prime) cases

#	Sensitivity Case Short-Description	Reference Gas Demand Scenario	High Gas Demand Scenario	Low Gas Demand Scenario	Comments
0	Adjust for significant changes since the Roll-up Case creation	RGD'	HGD'	LGD'	All subsequent sensitivities start from these cases
1	Adjust the basis adder for the natural gas prices to reflect market pricing on a peak day				
2	Remove incremental/decremental gas price changes from the High & Low Gas Demand Scenarios				May not be needed based on Scenario assumptions and results of sensitivity #1
3	Significantly lower delivered natural gas prices		in HGD		Webinar feedback was higher priority
4	Deactivation of additional coal and nuclear - add gas fired resources		in HGD		
5a	Deactivation of additional coal and nuclear - add wind and				Webinar feedback was higher priority
5b	Deactivation of additional coal and nuclear - Quebec hydro				Webinar feedback was higher priority
5c	Deactivation of additional coal and nuclear - add EE/DR				Webinar feedback was higher priority
6	Increased electric and gas EE/DR, including potential increase in dispatchable gas-side DR during the Peak Heating Season			in LGD	
7	Combination of #5 and #6	same as #5		same as #5	Already included in LGD Scenario - not needed
8	Extend nuclear licenses				Counterpose to #9
9	All Ontario nuclear units to-be-refurbished reach the end of life after 2018 and before 2023 + retirement of Indian Point 2/3 by end of 2015				Webinar feedback was higher priority

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#	Sensitivity Case Short-Description	Reference Gas Demand Scenario	High Gas Demand Scenario	Low Gas Demand Scenario	Comments
10	Inclusion of new transmission build-out sensitivity – interconnection queue (?)	included in each sensitivity			Not Needed
11	Energy East pipeline does not proceed	defer to second set			Would decrease gas delivery in Ontario
12	Significantly higher natural gas prices, including significant new environmental regulations that raise prices in shale producing basins	in LGD		in LGD	
13	Increased infrastructure to enable additional Marcellus/Utica flows to neighboring PPAs				May require a follow-up sensitivity depending on results
14	Increased gas storage availability				2014 experience shows additional storage could be worthwhile
15	Increased electric storage availability				Is this really viable? Will it make a difference? Need guidance on inputs.
16	Increased LNG deliveries to Canaport and Distagas LNG import terminals		would need higher gas prices		Regional stakeholder request
17	Backup fuel inventory sensitivity (applicable to dual fuel units), high and low (e.g. 30-day backup fuel inventory, 5-day				Needs further definition of possible impact

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#	Sensitivity Case Short-Description	Reference Gas Demand Scenario	High Gas Demand Scenario	Low Gas Demand Scenario	Comments
18	High electric load growth		in HGD		Running in Set #1 may reduce additional sensitivities
19	High industrial natural gas demand (Should be combined with high electric growth?) – How to determine locations for additional demand?		in HGD		May address #28 which came up on the March 21 webinar
20	#4 + #18 + #19 – will require information on locations of LDC increased demand – active coordination with LDCs needed		in HGD		May not be needed based on results from #18 and #19
21	Low electric load growth (economic stagnation)			in LGD	May not be needed based on results from #18 and #19
22	Low industrial natural gas demand (Should be combined with low electric growth?) – How to determine locations for additional demand?			in LGD	May not be needed based on results from #18 and #19
23	High/Increased LNG exports, e.g., along the Gulf of Mexico or Atlantic Seaboard			does not fit scenario	Needs further discussion and results of #16 may help in the discussion
24	Extreme weather – higher priority due to recent experience (cold snap)		in HGD		
25	Delayed restart of Ontario nuclear units and no nuclear refurbishment – The nuclear units reach end of life and are retired		moved to new #9		
26	Additional coal and nuclear retirements + oil retirements in New England + the postponement / cancellation of certain proposed transmission projects including Northern Pass Transmission (Run same case as #4 + remove transmission?)		in HGD		
27	Additional coal retirements + retirement of Indian Point 2/3 + significant delay in the restart of nuclear units in Ontario		in HGD		
28	Increased RCI Gas Demand				Placeholder added during March 21, 2014 Webinar
29	System restoration after a blackout event under high gas demand				Submitted after webinar - needs further discussion. May not be a sensitivity but a standalone study.