

Required Generator Modeling Data for MAPS	Unit of Measure	Variable	Example Combined Cycle Plant	Repowering Plant Type				
				Dunkirk				
				Combined Cycle	Gas Retrofit	Gas Retrofit	Gas Retrofit	Peakers
				D1	Unit 2	Unit 3	Unit 4	D3
# Units	#	-	4	1x1	1	1	1	6
Unit Max Rated Power (Winter)	MW	UNT-YTHD	250	466 (fired), 441 (unfired)	75	190	190	313 (52 MW/turbine)
Unit Operating Power Points	MW	UNT-POPT	150, 250	466 (fired) 441 (unfired) 261 (min)	75 (max), 60, 45, 35 (min)	185 (max), 140, 100, 60 (min)	185 (max), 140, 100, 60 (min)	47.5/unit (full) 42.8/unit (part) 35.6/unit (min)
Summer Max Rating	MW	UNT-YTHD	225	382 (fired), 348 (unfired)	75	185	185	245 (40.8 MW/turbine)
Incremental Heat Rate @ Each Power Point	Btu/kWh	UNT-POPT	8000, 0					
SO2 & NOx Emission Rates @ Each Power Point	lbs/MWh	UNT-EMRT	SO2: 0.01, 0.01 NOx: 0.10, 0.10	SO2: 0.00006 lb/hr NOx: 0.056 lb/mwh	SO2: 0.002 lb/mwh NOx: 0.409 lb/mwh	SO2: 0.002 lb/mwh NOx: 0.409 lb/mwh	SO2: 0.002 lb/mwh NOx: 0.409 lb/mwh	SO2: 0.00204 lb/mwh NOx: 9.553 lb/mwh
Variable O&M Cost	\$/MWh	MNT-COST	3					
Forced Outage Rate @ Each Power Point	%	UNT-POPT	6	5.00%	capacity-only contract	capacity-only contract	capacity-only contract	5.00%
Maintenance Period	Dates	MNT-FIXD	Unit 1 & 3: 1/15-2/15 Unit 2 & 4: 11/15-12/15					
Minimum Up/Down Times	Hours	UNT-MISC	8/8	4/1	24/48	24/48	24/48	1/1
Fuel Type(s)	Name	UNT-FUEL	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas	Natural Gas
Startup Energy	MBTU	UNT-FUEL	12000	432 mmbtu to full CT load 3,766 mmbtu to full load (cold, 3 hrs to full load) 2,394 mmbtu to full load (warm, 1.5 hrs to full load) 2,126 mmbtu (hot, 45 min to full load)				
Fuel Input @ Minimum Power	MBTU/HR	UNT-YTHD	1200	1827				
Fuel Switching?	Y/N	UNT-FLSW	N	N (dual fuel capability available but not offered in current design)	N	N	N	N
Quick Start Reserve and Spinning Reserve Capability	% of Pmax	ORP-UNIT	10, 20	CCGT units can be 10 minute start, but the configuration as priced does not include fast-start.	N/A	N/A	N/A	10-min start
Required Generator Modeling Data for Powerflow								
Unit Max Rated Power	MW	PMAX	250	CTG 320 STG 143	100	200	200	58
Maximum Reactive Power Output	MVAr	QMAX	120	CTG 169 (@ .85 lagging) STG 75 (@ .85 lagging)	74	126	126	31 (@ .85 lagging)
Maximum Reactive Power Absorbtion	MVAr	QMIN	-120	CTG 100 (@ .95 leading) STG 45 (@ .95 leading)	-16	-13	-13	18 (@ .95 leading)

Please explain what "Maintenance Period" is meant to capture.