

Markets Gateway Combined Cycle Configurations Parameters, Limits, and Start Costs

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- From Item 11 on the Package Matrix
 - Every operating mode/configuration has the same parameters that a market unit has.
 - PJM can startup or shut down into/out of any valid configuration

- Transition costs and timing would be on a separate Markets Gateway page.
 - Transition costs would be similar to a start cost.
 - Transition timing would be similar to start time.



Markets Gateway – Unit Tab Today

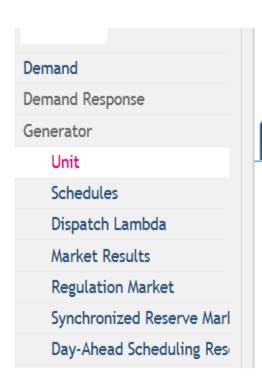
IntraDay Opt Out

Demand	Market Day	1/19	/2018 Por	tfolio	
Demand Response					
Generator	Hourly Updates	Detail	Energy Ramp Rates	Synchronized Reserve Ramp Rates	١
Unit					
Schedules					
Dispatch Lambda					
Market Results					
Regulation Market					
Synchronized Reserve Marl					
Day-Ahead Scheduling Res					

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Unit Tab Proposed with CC Modeling







Unit Details Limits & Startup Costs – Today and with CC Modeling

Economic & Emergency	
Emergency Min Economic Min	Emergency Max Economic Max
Cost	
Use Cost Based Startup 1 No Load Cost 1 Cold Startup Cost 1 Intermediate Startup Cost 1 Hot Startup Cost 1 Minimum Runtime Limit	Use Cost Based Startup 2 No Load Cost 2 Cold Startup Cost 2 Intermediate Startup Cost 2 Hot Startup Cost 2 Maximum Runtime (Hours)
Minimum Downtime Minimum Downtime Limit	Maximum Runtime Limit



Unit Detail Parameter Limits – Today and with CC Modeling

Parameter Limit		
Description	Turndown Ratio	
Max Daily Starts	Max Weekly Starts	
Min Runtime	Min Downtime	
Max Runtime	Cold Notification Time	
Cold Startup Time	Inter Notification Time	
Inter Startup Time	Hot Notification Time	
Hot Startup Time		



Regulation Market

Synchronized Reserve Marl

Day-Ahead Scheduling Res

Markets Gateway Schedules Tab Today

	Market Day 1/19/20)18 Portfolio	Location	V	
Demand	Schedule	V			
Demand Response					
Generator	Offers Offer Updates D	Petail Detail Updates Manager	Selection Availability Update	Restriction Information	TPS Schedule Switch
Unit					
Schedules					
Dispatch Lambda					
Market Results					

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Schedule Tab Proposed with CC Modeling

Demand
Demand Response
Generator
Unit
Schedules
Dispatch Lambda
Market Results
Regulation Market
Synchronized Reserve Marl
Day-Ahead Scheduling Res

Market	Day 1/	19/2018	Portfolio		•	Location	~	
Sche	dule		Configuration	n	[V		
Offers	Offer Updates	Detail	Detail Updates	Manager	Selection	Availability Update	Restriction Information	TPS Schedule Switch



Schedule Detail Costs & Time – Today and with CC Modeling

Costs	
Cold Startup Intermediate Startup Hot Startup	No Load Opportunity
Time	
Cold Notification Cold Notification Limit Intermediate Notification Intermediate Notification Limit Hot Notification Hot Notification Limit	Cold Startup Cold Startup Limit Intermediate Startup Intermediate Startup Limit Hot Startup Hot Startup Limit
Hot-To-Cold	Hot-To-Intermediate



Schedule Detail Limits – Today and with CC Modeling

Economic & Emergency	
Economic Min	Emergency Min
Economic Min Default	Emergency Min Default
Economic Max	Emergency Max
Economic Max Default	Emergency Max Default
Limits	
Maximum Daily Starts	Maximum Weekly Energy
Maximum Daily Starts Limit	Maximum Weekly Starts
Minimum Runtime	Maximum Weekly Starts Limit
Minimum Runtime Limit	Maximum Runtime (Hours)
Minimum Downtime	Maximum Runtime Limit
Minimum Downtime Limit	



7.2 Which Web Pages Do I Use?

The following web pages are used to view and modify Startup and No Load data:

- Unit Detail Use this web page to view and modify Startup and No Load prices for price-based units.
- Schedule Detail Use this web page to view and modify Startup and No Load costs for cost-based schedules
 and to set the Start-up/No Load switch for price-based units.
- Schedule Detail Updates Use this web page to view and modify Startup and No Load costs on an hourly basis for cost-based schedules and price-based schedules with cost-based Startup and No Load costs. *New page for Intraday Offers*
- Schedule Selection Use this web page to view and modify Startup and No Load costs on multiple schedules simultaneously.