

Commitment Cost Enhancements Phase 2 – Transition Costs

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Purpose of today's session

- State why changes to current business processes are necessary
- Discuss changes to the Master File generator resource data template for Multi-Stage-Generators
- Discuss new Scheduling Infrastructure Business Rules (SIBR) for transition costs

Why changes are necessary

- Existing process can cause inefficient resource dispatching due to volatility in natural gas pricing

Master File

RES_ID	FROM_CONFIG_ID	TO_CONFIG_ID	TRANS_COST	TRANS_TIME	NOTIFICATION_TIME	TRANS_FUEL	TRANS_ENERGY	MAX_DAILY_TRANS
RSOURC_2_CC1X3	RSOURC_2_CC1X3_1X1	RSOURC_2_CC1X3_1X1DF	0	5	15	0	0	10
RSOURC_2_CC1X3	RSOURC_2_CC1X3_1X1	RSOURC_2_CC1X3_2X1	0	60	75	0	0	1
RSOURC_2_CC1X3	RSOURC_2_CC1X3_1X1DF	RSOURC_2_CC1X3_1X1	0	5	10	0	0	10
RSOURC_2_CC1X3	RSOURC_2_CC1X3_2X1	RSOURC_2_CC1X3_1X1	0	20	40	0	0	1
RSOURC_2_CC1X3	RSOURC_2_CC1X3_2X1	RSOURC_2_CC1X3_2X1DF	0	5	10	0	0	10
RSOURC_2_CC1X3	RSOURC_2_CC1X3_2X1DF	RSOURC_2_CC1X3_2X1	0	5	10	0	0	10

Master File

1	A	B	C	D	E	F	G	H	I	J	K	L	M
	Configuration ID	Segment Type	Segment Number	Registered Cooling Time	Start-Up Time	Start-Up Cost	Start-Up Aux	Start-Up Fuel	Startable?*				
2	RSOURC_2_CC1X3_1X1	STRT	1	0	90		2	1300	Y				
3	RSOURC_2_CC1X3_1X1	STRT	2	240	180		2	2200	Y				
4	RSOURC_2_CC1X3_1X1	STRT	3	2100	240		2	2400	Y				
5	RSOURC_2_CC1X3_1X1DF	STRT	1	0	120		2	1300	N				
6	RSOURC_2_CC1X3_1X1DF	STRT	2	240	220		2	2200	N				
7	RSOURC_2_CC1X3_1X1DF	STRT	3	2100	280		2	2400	N				
8	RSOURC_2_CC1X3_2X1	STRT	1	0	120		2	1320	Y				
9	RSOURC_2_CC1X3_2X1	STRT	2	2100	300		2	3100	Y				
10	RSOURC_2_CC1X3_2X1DF	STRT	1	0	160		2	1320	N				
11	RSOURC_2_CC1X3_2X1DF	STRT	2	2100	360		2	3100	N				
12													
13													
14													
15	*NOTE: The Startable column is added here for illustrative purposes. This flag can be found on the CONFIGURATION tab of the RDT.												
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2: Siemens JSDK Test Application - Windows Internet Explorer

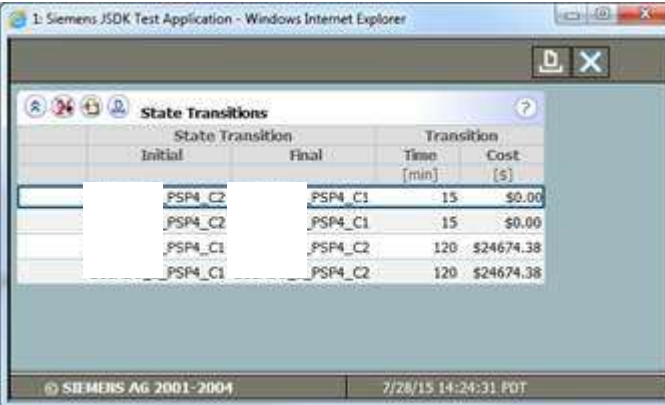
Message Viewer

26-31/31

Product	Rule#	Level	Message
Energy	41802	6] Bid is accepted - processed for - For the State, a Distribution Bid Component has been generated with the applicable Distribution Pairs from the GDF Library.
[None]	41986	6	Bid is accepted - processed for - The State Transition Cost submitted was greater than the calculated Proxy State Transition Cost and was replaced using the Proxy State Transition Cost multiplied by the Relative Proxy State Transition Ceiling.
[None]	41989	6	Bid is accepted - processed for - The State Transition Cost was set to 0 for the downward state transition.
[None]	41612	6	Bid is accepted - processed for - Miscellaneous Bid generation.
[None]	41616	6	Bid is accepted - processed for - Capacity Limit generated equal to the Maximum capacity (for MSG, highest among configurations).
[None]	40001	6	TV bid processed - and is market accepted (Valid, MF Insert, Conditionally Valid, Modified, Conditionally Modified)

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7/28/15 14:23:36 PDT



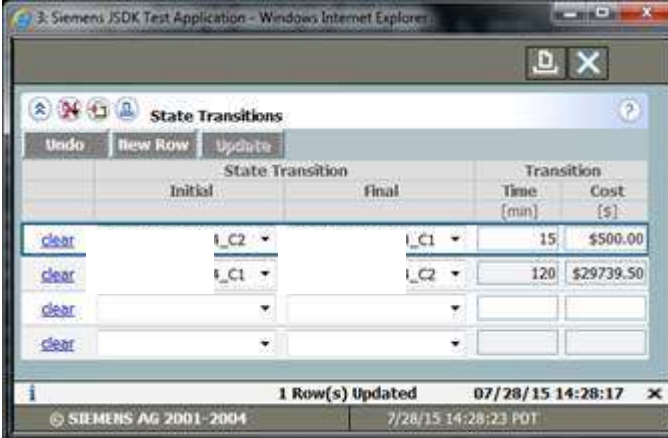
1: Siemens JSOK Test Application - Windows Internet Explorer

State Transitions

State Transition		Transition	
Initial	Final	Time [min]	Cost [s]
PSP4_C2	PSP4_C1	15	\$0.00
PSP4_C2	PSP4_C1	15	\$0.00
PSP4_C1	PSP4_C2	120	\$24674.38
PSP4_C1	PSP4_C2	120	\$24674.38

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SIBR



The screenshot shows a web browser window titled "3: Siemens JSDK Test Application - Windows Internet Explorer". The application interface includes a toolbar with "Undo", "New Row", and "Update" buttons. Below the toolbar is a table titled "State Transitions". The table has columns for "Initial", "Final", "Time [min]", and "Cost [\$]". The first row shows a transition from "I_C2" to "I_C1" with a time of 15 minutes and a cost of \$500.00. The second row shows a transition from "I_C1" to "I_C2" with a time of 120 minutes and a cost of \$29739.50. The table also includes "clear" links for each row. At the bottom of the application, a status bar indicates "1 Row(s) Updated" and the date/time "07/28/15 14:28:17". The footer of the browser window shows "© SIEMENS AG 2001-2004" and "7/28/15 14:28:23 PDT".

State Transition		Transition	
Initial	Final	Time [min]	Cost [\$]
clear I_C2	I_C1	15	\$500.00
clear I_C1	I_C2	120	\$29739.50
clear			
clear			

SIBR

State Transition		Transition	
Initial	Final	Time [min]	Cost [\$]
I_C2	I_C1	15	\$0.00
I_C1	I_C2	120	\$24674.38

[clear](#)

State Transitions State Transitions Display Called Up 07/28/15 14:30:12

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Additional information

- <http://www.caiso.com/informed/Pages/StakeholderProcesses/CommitmentCostEnhancementsPhase2.aspx>