

# NYISO SMD2 Executive Dashboard

Thursday, September 4, 2003

## Summary:

Factory Acceptance Tests (FAT) is in the 4th full week; all tracks are active with the exception of BMS and are proceeding according to plan with minor variations. The Business Management System (BMS) is in the scheduled last week of Pre-FAT, and will be evaluated to start FAT next week. Design processes for Phase II have initiated and the review cycle for those features will begin in September.

Task	Status	%	July				August				September				October				November				December				January				Issues, (Updates)
			7	14	21	28	4	11	18	25	1	8	15	22	29	6	13	20	27	3	10	17	24	1	8	15	22	29	5	12	
<b>RANGER Application Activities (Phase 1)</b>																															
1	NYISO Review and Approval of SDD	Green	10	[Gantt bar from July 7 to Sept 15]																											
2	Ranger Custom Development	Green	✓	[Gantt bar from July 7 to Sept 15]																											HMI issues persist.
<b>RTS Application Activities (Phase 1)</b>																															
3	NYISO Review and Approval of SDD (RTS)	Green	5	[Gantt bar from July 7 to Sept 15]																											
4	RTS Development	Yellow	✓	[Gantt bar from July 7 to Sept 15]																											HMI issues persist.
5	Port RTS to Ranger	Yellow	✓	[Gantt bar from July 7 to Sept 15]																											
<b>ABB Application Development (Phase 2)</b>																															
6	NYISO Review and Approval of FDS / STS	Green	20	[Gantt bar from July 7 to Sept 15]																											Phase II design review started.
7	ABB Build / Unit Test	Not Started		[Gantt bar from July 7 to Sept 15]																											
<b>NYISO Application Modifications</b>																															
8	Functional Requirement Development	Yellow	75	[Gantt bar from July 7 to Sept 15]																											Resource constraints.
9	Technical Design	Yellow	40	[Gantt bar from July 7 to Sept 15]																											Legacy development impact.
10	Build / Unit Test	Green	33	[Gantt bar from July 7 to Sept 15]																											
11	RT Load Forecasting Development (RER)	Green	65	[Gantt bar from July 7 to Sept 15]																											
<b>Project Hardware / Facility Activities</b>																															
12	Deliver / Accept PCC Hardware at NYISO	Green	✓	[Gantt bar from July 7 to Sept 15]																											Hardware being installed this week.
13	Install / Configure MIS/BAS Test HW	Green	✓	[Gantt bar from July 7 to Sept 15]																											Hardware being installed this week.
14	Deliver / Accept Phase 1 HW & SW	Not Started		[Gantt bar from July 7 to Sept 15]																											
15	Dispatcher Training Room Construction	Green	5	[Gantt bar from July 7 to Sept 15]																											
16	Telecomm. / Networking Activities	Green	40	[Gantt bar from July 7 to Sept 15]																											ICCP conversion to IP gating.
<b>EAI / Integration Activities</b>																															
17	Job Scheduling Design	Yellow	80	[Gantt bar from July 7 to Sept 15]																											
	Job Scheduling Implementation	Not Started		[Gantt bar from July 7 to Sept 15]																											
18	EAI Environment Setup / Configuration	Green	80	[Gantt bar from July 7 to Sept 15]																											Hardware received, awaiting setup.
<b>Project Test Planning</b>																															
19	Develop FAT (PI) Test Procedures	Green	95	[Gantt bar from July 7 to Sept 15]																											Most procedures approved.
20	Pre-FAT Test Activities at ABB	Yellow	95	[Gantt bar from July 7 to Sept 15]																											Rescheduled Pre-FAT started.
21	Develop / Accept MT/SAT Test Plans	Green	55	[Gantt bar from July 7 to Sept 15]																											
22	Develop Cut-over Test Plans	Green	15	[Gantt bar from July 7 to Sept 15]																											
<b>Factory Acceptance Tests - Phase I</b>																															
23	SCADA Applications FAT	Green	85	[Gantt bar from July 7 to Sept 15]																											
24	EMS Applications FAT	Green	60	[Gantt bar from July 7 to Sept 15]																											
25	BMS Applications FAT	Yellow	0	[Gantt bar from July 7 to Sept 15]																											
26	CIM / DB Maintenance FAT	Yellow	70	[Gantt bar from July 7 to Sept 15]																											DB Maintenance Testing lagging.
27	Simulator System (ISS) FAT	Green	50	[Gantt bar from July 7 to Sept 15]																											
28	Integrated Testing FAT	Not Started		[Gantt bar from July 7 to Sept 15]																											
29	Factory Acceptance Tests - Phase II	Not Started		[Gantt bar from July 7 to Sept 15]																											
30	Site Acceptance / Market Trials at NYISO	Not Started		[Gantt bar from July 7 to Sept 15]																											
<b>Legal / Tariff Activities</b>																															
31	Develop tariff language.	Yellow	50	[Gantt bar from July 7 to Sept 15]																											Power event will impact schedule.
32	Review rule changes with WGs / BIC	Yellow	60	[Gantt bar from July 7 to Sept 15]																											Target September BIC vote.
33	Review tariff language with MSWG	Yellow	30	[Gantt bar from July 7 to Sept 15]																											Target Sept. tariff review.
34	Obtain Management Committee Approval	Not Started		[Gantt bar from July 7 to Sept 15]																											Target October MC vote (Date TBD).
35	Obtain Board Approval	Not Started		[Gantt bar from July 7 to Sept 15]																											Target October BOD approval.
36	File with FERC; receive approval	Not Started		[Gantt bar from July 7 to Sept 15]																											Target October FERC filing.

**Status Legend:** ■ On-track ■ Some issues ■ Critical ■ Not started ■ Delayed ■ Delayed w/some risk ■ Delayed and Critical ◆ Contract Milestone ◆ Payment Milestone

## Project Risks

Risk	Prob.	Severity	Mitigation
1 ABB HMI Development / Delivery at Risk	Medium	Medium	Tracking progress of other customers, early delivery.
2 Resource Conflicts with Other Projects	Medium	Medium	Maintain Resource Limited Schedule
3 Scope Management Concerns	Medium	Medium	Utilize Design Implementation Task Force
4 Market Disruptions from Cutover Activities	Medium	Medium	Detailed Cutover Planning, Trials.
5 Construction Delays, NYISO Facilities	Low	Medium	Close project tracking, leveraging alternate sites.
6 RTS Design Unproven, Potential for Failure	Medium	High	Detailed Factory and Site Testing.

## Project Milestones

Completed	Missed
PCC Hardware Accepted	
MIS / BAS hardware installed	

## Hot Issues

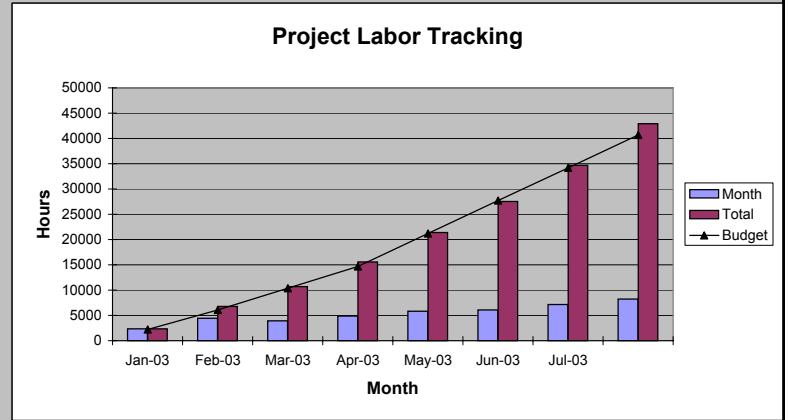
Urgency	Description	Responsible	Due date
■	<p><b>Phase II Resource Constraints</b></p> <p>Design review processes for Phase II features are scheduled to take place in conjunction with Phase I Factory Acceptance Testing (FAT). There are resource conflicts between these tasks that need to be resolved to keep both phases moving forward. Both the design review processes and FAT exercises need to be done more efficiently and scheduled carefully.</p> <p><b>Next Step:</b> Develop detailed Phase II document review schedule; reconcile with FAT plan and training schedule and adjust as required.</p>	Rich Dewey Dick Mills	5-Sep
■	<p><b>Business Management System Readiness</b></p> <p>The Business Management System (BMS) has already experienced a 2 week delay to the start of FAT, and continues to be ABB's high risk item. Display completeness and stability has improved significantly, but concerns exist about the integration of the BMS with the EMS. Continued effort is required to monitor ABB progress, and be attentive to data consistency concerns.</p> <p><b>Next Step:</b> Continue committing manpower to monitor and support ABB development efforts on BMS. <b>Recent progress is promising; situation still being monitored.</b></p>	Operations SMD2 Team	5-Sep
■	<p><b>AMP Project Progress</b></p> <p>The AMP project is critical path for the SMD2 deliverable. Recent design changes have increased work scope and prohibited the requirements from being finalized. No significant progress has been made to date towards initiating the coding. This presents a significant risk to the SMD2 timeline.</p> <p><b>Next Step:</b> Commit resources to finalize requirements (and don't change them) and commit development resources to start making progress.</p>	Diane Peluso John Hickey Rich Dewey	12-Sep

**Financial Status:**

Project financials continue to track to plan. There have been no new scope items added since the 2nd contract amendment signed in July. The next contract payment milestones are for the completion of the BMS Pre-FAT on September 1st, and completion of Factory Acceptance Testing (FAT) and system acceptance currently tracking for early October.

**Project Labor Reporting**

Month	Actual Hours				Budget Hours			
	Internal	Ranger	EAI	Total	Internal	Ranger	EAI	Total
Jan-03	628	1710	16	2354	900	1100	200	2200
Feb-03	1766	2630	11	4407	1800	1900	200	3900
Mar-03	1661	2211	39	3911	2000	2100	400	4500
Apr-03	1969	2714	211	4894	2000	2100	400	4500
May-03	2555	2868	426	5849	3000	3100	400	6500
Jun-03	2794	3106	207	6107	3000	3100	400	6500
Jul-03	2931	3894	343	7168	3000	3100	400	6500
Aug-03	3202	4676	337	8215	3000	3100	400	6500
Sep-03					3000	3100	400	6500
Oct-03					3000	3100	400	6500
Nov-03					3000	3100	400	6500
Dec-03					3000	3100	400	6500
Jan-04					3000	3100	200	6300
Feb-04					3000	3100	200	6300
Mar-04					3000	3100	200	6300
Apr-04					3000	3100	200	6300
May-04					2000	2100	200	4300
Jun-04					2000	2100	100	4200
<b>Totals</b>	<b>17506</b>	<b>23809</b>	<b>1590</b>	<b>42905</b>	<b>46700</b>	<b>48600</b>	<b>5500</b>	<b>100800</b>

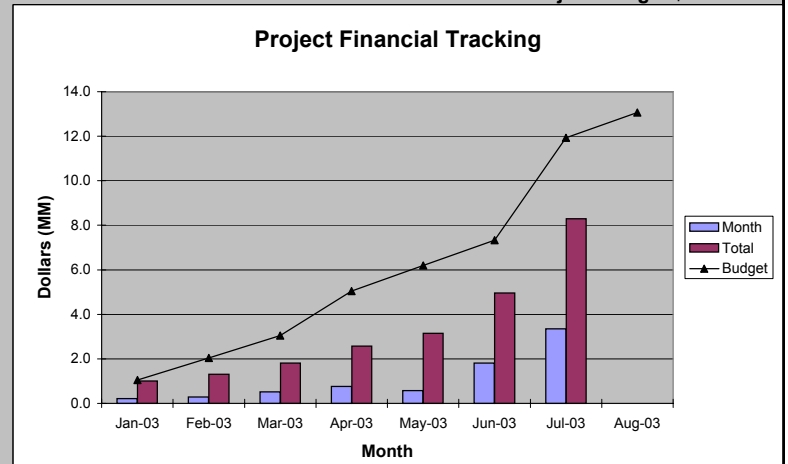


**Project Financial Status**

**\*\* Total Project Budget \$52.4M**

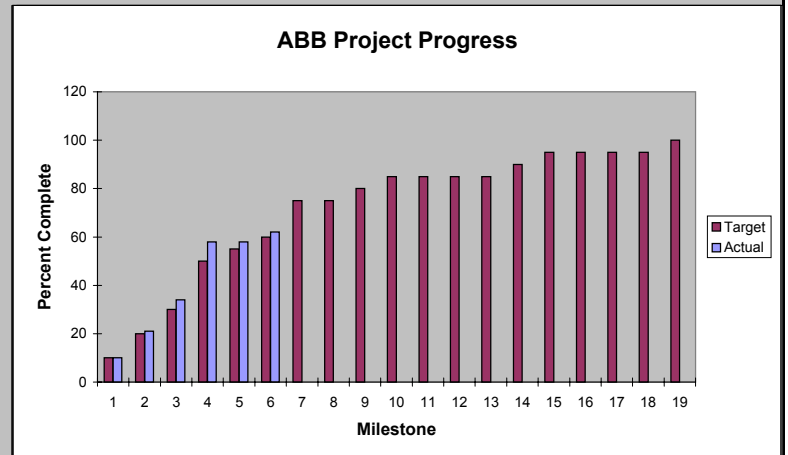
Month	SMD Project Costs (\$000)						
	Labor		Consultancy		Hardware		Month Total
	Month	Budget	Month	Budget	Month	Budget	
Dec-02	\$0.0	\$0.0	\$796.8	\$792.8	\$0.0	\$0.0	\$796.8
Jan-03	\$121.7	\$148.5	\$94.0	\$125.0	\$0.0	\$0.0	\$215.7
Feb-03	\$233.1	\$263.2	\$57.0	\$125.0	\$0.0	\$0.0	\$290.1
Mar-03	\$212.9	\$290.0	\$224.9	\$275.0	\$77.0	\$0.0	\$514.8
Apr-03	\$276.7	\$290.0	\$347.4	\$300.0	\$130.7	\$999.9	\$754.8
May-03	\$346.0	\$325.0	\$189.0	\$600.0	\$39.0	\$345.0	\$574.0
Jun-03	\$367.5	\$500.0	\$490.4	\$600.0	\$952.5	\$300.0	\$1,810.4
Jul-03	\$419.6	\$500.0	\$2,787.1	\$4,092.9	\$135.4	\$750.0	\$3,342.1
Aug-03		\$500.0		\$750.0		\$400.0	
Sep-03		\$500.0		\$4,250.8		\$500.0	
Oct-03		\$500.0		\$3,364.2		\$250.0	
Nov-03		\$500.0		\$1,500.0		\$500.0	
Dec-03		\$500.0		\$4,720.7		\$250.0	
Jan-04		\$500.0		\$750.0		\$7,586.1	
Feb-04		\$500.0		\$2,244.9		\$200.0	
Mar-04		\$500.0		\$600.0		\$200.0	
Apr-04		\$500.0		\$3,086.1		\$0.0	
May-04		\$500.0		\$500.0		\$0.0	
<b>Totals</b>	<b>\$1,977.5</b>	<b>\$7,316.7</b>	<b>\$4,986.6</b>	<b>\$28,677.4</b>	<b>\$1,334.6</b>	<b>\$12,281.0</b>	<b>\$8,298.7</b>

**\*\* Costs do NOT include Wolf Road construction.**



**ABB Project Progress Tracking**

Milestone	Date	Target Percent	Actual
Quick Start	12/31/2002	10	10
Requirements	3/31/2003	20	21
Requirements (RTS)	4/18/2003	30	34
Dev. Complete	7/21/2003	50	58
ACC Hardware	8/1/2003	55	58
PCC Hardware	9/2/2003	60	62
Phase 1 FAT	9/15/2003	75	
QA Hardware	10/15/2003	75	
Market Trial Start	11/1/2003	80	
Phase 2 FAT	11/14/2003	85	
Training Complete	12/31/2003	85	
Mkt. Trial 2 Month	12/31/2003	85	
Mkt. Trial 3 Month	2/15/2004	85	
Cut-over Test	2/25/2004	90	
Go Live	4/1/2004	95	
Availability Test	5/13/2004	95	
Phase 3 SAT	8/20/2004	95	
Phase 3 Integration	10/1/2004	95	
Final Acceptance	11/1/2004	100	



**NYISO SMD2 Executive Dashboard**

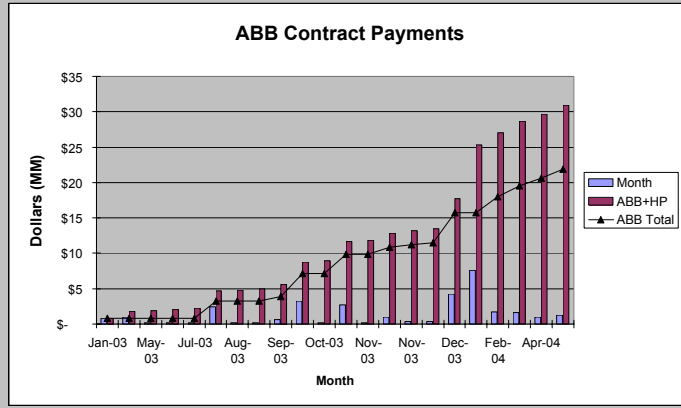
**Thursday, September 4, 2003**

**ABB Project Status:**

Factory Acceptance Testing (FAT) at ABB has been successful in execution of the planned procedures and the generation of System Problem Records (SPRs). ABB staff has been engaged in the support of the testing process, although the parallel testing schedule has resulted periodic support concerns on the test floor. Resolution of SPRs has started to occur, and is expected to improve over the next 2 weeks. Retesting is scheduled to start during the week of September 8. The stability of the Human Machine Interface (HMI) is greatly improved and the availability of displays for testing of the BMS has increased. The BMS is scheduled to enter FAT on September 2; preliminary assessments indicate that it is in high risk of meeting that target.

**Project Payment Milestones**

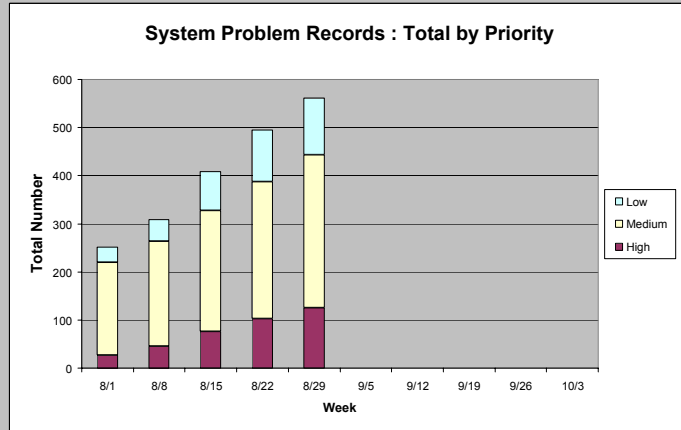
Milestone	Payment	Amount	Payee
12/31/2002	1/17/2003	\$792,836	ABB
3/1/2003	4/1/2003	\$999,992	HP (Hardware)
3/1/2003	5/1/2003	\$142,859	HP (Hardware)
3/1/2003	6/1/2003	\$142,859	HP (Hardware)
3/1/2003	7/1/2003	\$142,859	HP (Hardware)
7/21/2003	7/31/2003	\$2,460,000	ABB
3/1/2003	8/1/2003	\$142,859	HP (Hardware)
3/1/2003	9/15/2003	\$142,859	HP (Hardware)
9/1/2003	9/1/2003	\$615,000	ABB
9/15/2003	9/30/2003	\$3,232,898	ABB
3/1/2003	10/1/2003	\$142,859	HP (Hardware)
10/15/2003	10/31/2003	\$2,721,369	ABB
3/1/2003	11/1/2003	\$142,859	HP (Hardware)
11/1/2003	11/30/2003	\$1,000,000	ABB
11/1/2003	11/15/2003	\$375,000	ABB
11/15/2003	11/30/2003	\$317,500	ABB
12/31/2003	12/31/2003	\$4,220,728	ABB
3/1/2003	1/1/2004	\$7,586,105	HP (Hardware)
1/31/2004	2/15/2004	\$2,255,109	ABB
4/1/2004	4/30/2004	\$1,586,144	ABB
4/1/2004	4/30/2004	\$1,000,000	ABB
11/1/2004	12/1/2004	\$1,290,000	ABB



**Factory Acceptance Testing Defect Tracking**  
System Problem Records by Priority by Track

Week ending 8/15	System	High	Medium	Low	Total
	Base	2	26	11	39
BMS	2	7	2	11	
Database	46	74	24	144	
EMS	32	85	30	147	
Integration	31	94	37	162	
Simulator	12	32	15	59	
<b>Total</b>	<b>125</b>	<b>318</b>	<b>119</b>	<b>562</b>	

Change	System	High	Medium	Low	Total
	Base	1	9	5	15
BMS	0	0	0	0	
Database	2	4	1	7	
EMS	7	12	1	20	
Integration	4	-4	3	3	
Simulator	8	13	1	22	
<b>Total</b>	<b>22</b>	<b>34</b>	<b>11</b>	<b>67</b>	



**Factory Acceptance Testing Defect Aging**  
System Problem Records by Priority by Age

Old	Priority	>=60 Days	59-30	29-22
	High	50	15	11
Medium	31	72	37	
Low	11	18	8	
<b>Sub-Total</b>	<b>92</b>	<b>105</b>	<b>56</b>	

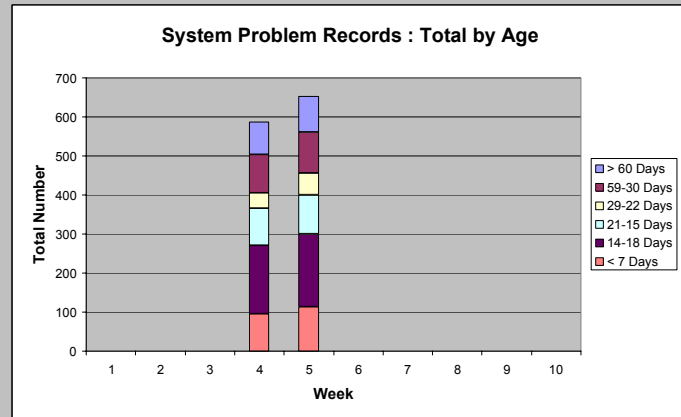
New	Priority	21-15	14-8	<=7 Days
	High	25	44	29
Medium	67	94	50	
Low	8	49	34	
<b>Sub-Total</b>	<b>100</b>	<b>187</b>	<b>113</b>	

Closed	Total
High	36
Medium	65
Low	18
<b>Total</b>	<b>119</b>

Fixed	Total
High	30
Medium	45
Low	15
<b>Total</b>	<b>90</b>

Open	Total
High	174
Medium	351
Low	128
<b>Total</b>	<b>653</b>

Data represents defect status as of August 29, 2003  
 Closed : Fix completed and verified by customer.  
 Fixed : Fix completed, but not verified by customer.  
 Open : Includes SPRs labeled as fixed.



**Overall Project Status:**

Factory Acceptance Tests (FAT) is in the 4th full week; all tracks are active with the exception of BMS and are proceeding according to plan with minor variations. The Business Management System (BMS) is in the scheduled last week of Pre-FAT, and will be evaluated to start FAT next week. Design processes for Phase II have initiated and the review cycle for those features will begin in September.

**Project Financial Status:**

Project financials continue to track to plan. There have been no new scope items added since the 2nd contract amendment signed in July. The next contract payment milestones are for the completion of the BMS Pre-FAT on September 1st, and completion of Factory Acceptance Testing (FAT) and system acceptance currently tracking for early October.

**ABB Development Status:**

Factory Acceptance Testing (FAT) at ABB has been successful in execution of the planned procedures and the generation of System Problem Records (SPRs). ABB staff has been engaged in the support of the testing process, although the parallel testing schedule has resulted periodic support concerns on the test floor. Resolution of SPRs has started to occur, and is expected to improve over the next 2 weeks. Retesting is scheduled to start during the week of September 8. The stability of the Human Machine Interface (HMI) is greatly improved and the availability of displays for testing of the BMS has increased. The BMS is scheduled to enter FAT on September 2; preliminary assessments indicate that it is in high risk of meeting that target.

**NYISO Development Status:**

Additional resources have been applied to address the backlog of work to create the requirement specifications documents that define the changes needed to the NYISO software. Progress is being made to get the effort back on track, but it is still behind schedule. Development activities on the existing NYISO systems and subsequent project delays are creating additional resource constraints on this effort.

The Design & Implementation task force continues to meet to reconcile changes to the existing NYISO project schedule with the collateral work necessary to incorporate the new SMD2 system. There is a remains a moderate level of concern that NYISO resources are over-committed.

**Project Integration Status:**

Test planning activities for Factory Acceptance Tests (FAT) are nearly complete. Test procedure documents are either approved by the NYISO, in the latter stages of review. All test planning activities will be complete prior to the commencement of any testing activities to which they apply. FAT schedules are locked down; team assignments for both IT and business owner functions are finalized for the exercise.

Hardware integration activities continue to track to plan. The system for the ACC has been received and accepted. The PCC systems have been received at the NYISO facilities. The additional server hardware required to complete the full test environments has been received and installation is in progress.

**Other Project Information:**

The SMD2 transition planning team is making significant progress. The individuals involved in the transition planning process are a cross-functional team from all departments within the NYISO. The goal of the group is the identification and planning for all the activities that will be required at the departmental level to ensure that internal and external business processes are ready for the transition to the new market system.