



Major

Tool & Machine, Inc.

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March 21, 2005

Larry L. Sutton
Senior Subcontract Administrator
Plasma Physics Laboratory
James Forrestal Campus
Princeton, N.J. 08543

Subject: Subcontract S005243-F
For NCSX Project Vacuum Vessel Sub Assembly Production

Dear Mr. Sutton:

MTM appreciates PPPL's effort in your consideration of our suggested design change for the field spacer. On Friday of last week we began reinstalling the original spacer design into our manufacturing outline. Even though the decisions took a couple of months, this did not have a negative effect on delivery.

However, the unexpected difference in geometry from the Proto Type Segment to the Production Assemblies has had an impact on delivery. A revised Gantt Chart is attached to this letter (MTM 65678 VVSA Schedule 20050321 w_spacer). The project delays created by this unfortunate circumstance are more than can be absorbed by schedule contingencies. The first 120 deg segment delivery has moved out just under four weeks to the middle of November 2005. Deliveries of the next two segments will follow in late December 2005 and late January 2006.

The shipment of spacers at a later date has no effect on the delivery of the 120 deg segments. The largest schedule impact from the original spacer design comes from the flanges on the ends of each 120 deg segment. Knowing the spacers can ship at a later date than the segments, does offer some flexibility in the schedule for possible unknowns.

Unfortunately, one item remains open for resolution. Regarding your letter dated February 23rd 2005, it is unacceptable that PPPL offers to pay only half the costs associated with details laid out in our quote and letters pertaining to the more than expected change in geometry. MTM has and always will have an open relationship with PPPL which may have allowed this situation to come to this since we did not stop the project until this issue was resolved. However we now request a resolution by April 8th 2005.



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There's no question that MTM had the same set of data during the quoting time and when it learned the Geometry differences were more than anticipated by MTM and PPPL. Nevertheless knowing the extent of the difference during the quoting period would have been very difficult when considering the long time interval between having the data and fully understanding the impact from the change. This emphasizes the complexity of the change.

The fact is that the vessel now costs more than what we quoted because we based our quote on the knowledge we built during the prototype stage. MTM was asked to quote a firm fixed price in a very short time. If PPPL would have told MTM the profile had changed so dramatically we would have insisted on more time to quote and would have taken weeks longer, which consequently would have added more cost to the prototype project.

The contingencies spelled out in the PPPL letter dated February 23rd 2005 are unacceptable for many different reasons. They have the potential of placing the delivery at risk when waiting for contract updates but mainly because we view this cost as being directly related to a change in our workscope created by a change made by PPPL.

The workscope to reuse the dies from the prototype and use a total of nine panels per 60 deg segment was in our workscope for the prototype and in the quote for this project. The reuse of the dies was clearly based on a minimal profile change.

Summary:

- 1) Cost Impact - more than expected changes to geometry \$ 431,644
- 2) Delivery Impact - 1st 120 deg 11/15/05, 2nd 12/22/05, 3rd & Spacers 1/26/06
- 3) No contingencies that forfeit payment after we deliver.

Thank You

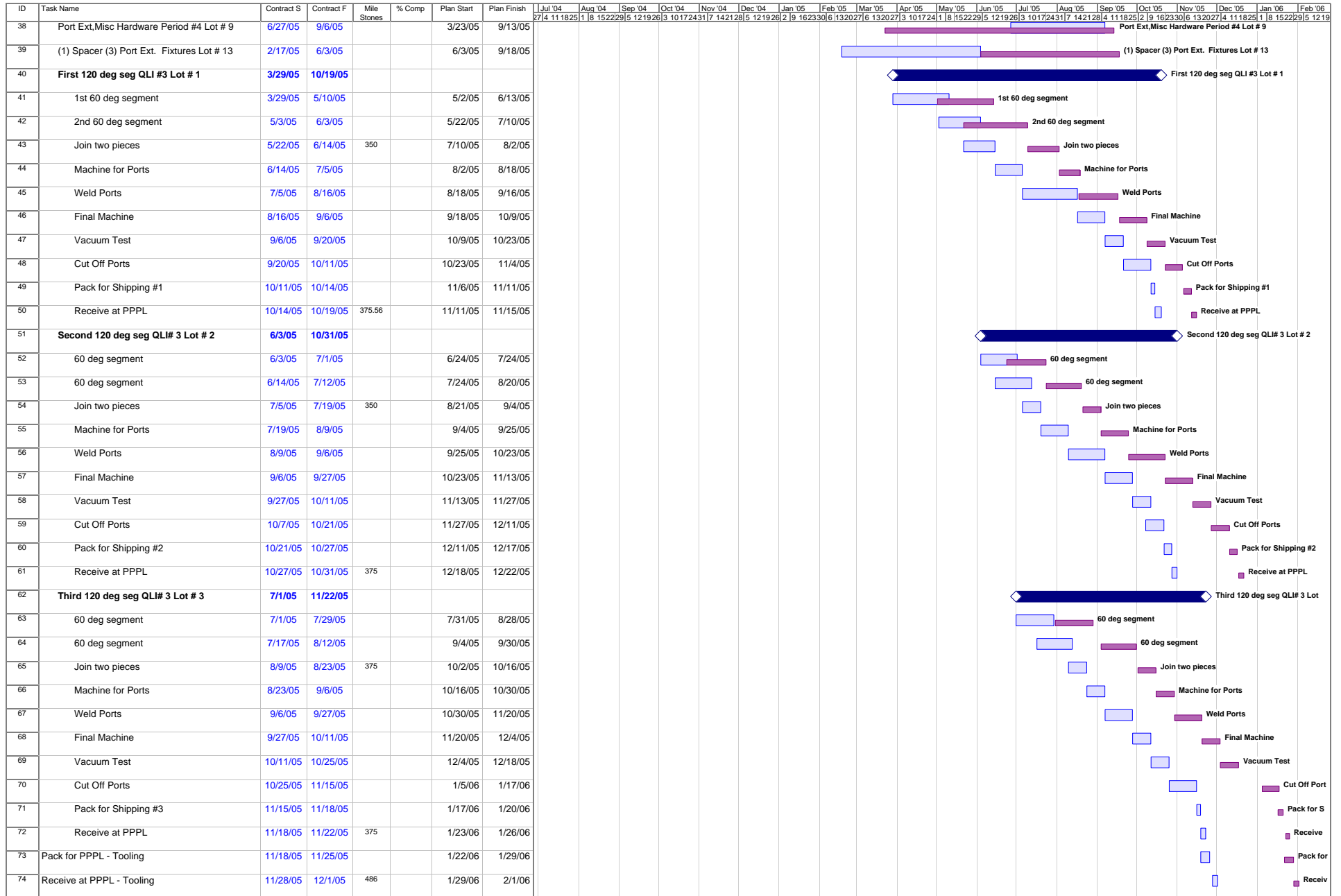
Mike Manuel
Program Manager
317-917-2631

ID	Task Name	Contract S	Contract F	Mile Stones	% Comp	Plan Start	Plan Finish	Jul '04	Aug '04	Sep '04	Oct '04	Nov '04	Dec '04	Jan '05	Feb '05	Mar '05	Apr '05	May '05	Jun '05	Jul '05	Aug '05	Sep '05	Oct '05	Nov '05	Dec '05	Jan '06	Feb '06
1	Submit Proposal	7/22/04	7/22/04		100	NA	NA	7/22																			
2	Teleconference to discuss Proposal	7/26/04	7/30/04		100	NA	NA																				
3	Receive Order	9/24/04	9/24/04		100	NA	NA																				
4	WO# 65678 PPPL VVSA Lot # 14	9/2/04	11/22/05			NA	NA																				
5	Start Up/Engineering QLI#1	9/24/04	12/30/04																								
6	Process Order	9/24/04	12/30/04		75	12/30/04	4/29/05																				
7	Sect 5.1 Segmentation Scheme	11/4/04	11/19/04	75	100	NA	NA																				
8	Sect 5.1.2 Fiducials	11/29/04	12/17/04	55	98	1/17/05	2/19/05																				
9	Sect 5.1.3 Proc Outline & Asc Proc.	9/24/04	12/10/04	95	87	12/10/04	4/29/05																				
10	Special Tooling QLI# 2	9/2/04	5/20/05																								
11		9/2/04	2/25/05																								
12	Engineering	9/2/04	12/1/04		100	12/1/04	1/28/05																				
13	Procure Materials (10 sets was 4)	11/15/04	1/7/05	215	100	1/7/05	3/13/05																				
14	Machine Complete	12/1/04	1/28/05		75	2/21/05	3/28/05																				
15	Deburr	12/10/04	2/4/05		60	2/28/05	3/31/05																				
16	Inspection	12/17/04	2/11/05	239	50	3/1/05	4/8/05																				
17	Development Panels	12/27/04	2/25/05			3/21/05	4/20/05																				
18	Fixtures (2) 60 degree Lot # 11	10/25/04	3/9/05																								
19	Engineering	10/25/04	12/17/04		98	12/17/04	3/4/05																				
20	Procure Materials	12/17/04	1/14/05		65	3/6/05	3/30/05																				
21	Fab & Machine Complete	1/14/05	2/17/05		10	3/13/05	4/17/05																				
22	Assemble	2/18/05	2/24/05			3/28/05	4/30/05																				
23	Deburr	2/25/05	3/3/05			4/12/05	5/7/05																				
24	Inspection	3/4/05	3/9/05			4/22/05	5/14/05																				
25	Fixture (3) 120 degree Lot # 12	1/6/05	5/20/05																								
26	Engineering	1/6/05	2/4/05		10	1/30/05	4/15/05																				
27	Procure Materials	1/19/05	2/4/05	220		4/1/05	5/13/05																				
28	Fab & Machine Complete	2/7/05	4/27/05			4/27/05	6/23/05																				
29	Assemble	4/28/05	5/4/05			5/4/05	7/24/05																				
30	Deburr	5/5/05	5/12/05			5/12/05	8/7/05																				
31	Inspection	5/13/05	5/20/05			7/4/05	7/14/05																				
32	Procure Vessel Material	10/29/04	2/25/05	290	80	2/25/05	4/22/05																				
33	Production Panels Period #1 Lot # 4	2/25/05	4/26/05	260		4/22/05	5/23/05																				
34	Production Panels Period #2 Lot # 5	4/22/05	6/3/05	200		5/23/05	6/24/05																				
35	Production Panels Period #3 Lot # 6	5/17/05	6/28/05	200		5/29/05	7/5/05																				
36	Port Ext,Misc Hardware Period #1 Lot # 7	4/11/05	7/5/05			3/23/05	7/12/05																				
37	Port Ext,Misc Hardware Period # 2 Lot # 8	5/30/05	8/9/05			3/23/05	8/16/05																				

Summary Contract Milestone Planned Completed



NCSX VVSA for PPPL
Subcontract S005243-F
MTM WO# 65678



Summary Contract Milestone Planned Completed