

Bi-Weekly Report on NSLS-II Magnet Production Status and Schedule Mitigation Plan
Reporting Period of 8/15/2011 – 9/9/2011

September 14, 2011

Status Report

The multipole production is progressing well; and all suppliers are in the production phase. As of September 9, 2011 the period ending of this report, 37 magnets are in transit from the overseas suppliers.

There is still a need for close supervision of the manufacturing. The recent difficulty is in the potting of the coil at Tesla, which is holding up the completion of many quadruples.

Status of the 35 mm Dipole Magnet

The first dipole that was manufactured using the modified and strengthened stacking jig was completed, measured and delivered to BNL last week. The second magnet was bonded with a somewhat reduced compression for bonding, in order to bring the compression closer to that which was recommended by the lamination material manufacturer, and machined. It was reported by BSL that the bonding was successful, and the core behaves as a solid unit, but there were somewhat more micro-fissures. With these successes in mind, a PRR is being scheduled for September 23, 2011 at BSL, (September 22 New York time). Prior to this, our technical representative, Frank DePaola, and our Chief Engineer, Sushil Sharma will visit BSL beginning on Monday September 19, 2011 to monitor the activities at BSL's plant and their subcontractors, and also lead the PRR from New Zealand, and will be linked to BNL through Skype. Frank will remain at BSL for two weeks while Sushil will return shortly after the PRR.

Status of the 90 mm Dipole Magnet

The fabrication of the stacking and bonding jig for the 90 mm dipole is now in progress. Consultative discussions are in progress on the compression rods arrangement, in order to optimize the pressure distribution on the laminations.

Magnet Production Summary

	<i>Manufacturer</i>	<i>Units to be built</i>	<i>last updated</i>	<i>units Laminations</i>	<i>yokes stacked</i>	<i>machining</i>	<i>coils sets</i>	<i>assemblies</i>	<i>final measurements</i>	<i>ship-ped</i>	<i>received</i>	<i>accepted (contractually)</i>	<i>complete</i>
Quad-SC-S-W	Budker	30	9/9/11	30	30	29	30	29	21	12	3	2	84.2%
Quad-SC-S-N	Budker	30	9/9/11	30	30	24	30	24	12	7	3	2	77.0%
Quad-DC-L-N	Budker	30	9/9/11	19	19	10	19	9	8	5	3	2	44.8%
Quad-DC-L-N	Budker	30	9/9/11	18	18	8	18	7	5	5	4	2	41.0%
Quad-DC-S-N	TESLA	90	9/7/11	28	18	17	6	4	4	4	4	2	13.1%
Quad-DC-S-W	TESLA	30	9/7/11	10	11	9	6	2	2	2	3	0	20.5%
Sext-S-S-N	Danfysik	169	9/1/11	80	77	74	64	61	57	56	52	53	39.4%
Sext-S-S-W	IHEP	75	9/9/11	75	56	37	50	36	35	19	13	7	56.8%
Quad-LA	Buckley	60	9/8/11	66	66	60	29	25	24	20	13	3	68.2%
Sext-LA	Buckley	30	9/8/11	36	34	16	14	5	4	3	4	2	52.5%
Dipol-35	Buckley	54	9/8/11	3	3	3	2	2	2	2	1	0	4.3%
Dipole 90	Buckley	6	9/8/11	1	1	1	1	1	1	1	1	1	15.0%
Corr-100	Everson	102	8/17/11	67	67	53	55	52	52	43	43	37	54.7%
Corr-100-SQ	Everson	30	8/17/11	16	16	14	12	12	12	12	12	12	43.7%
Corr-156	Everson	60	8/17/11	50	45	36	32	30	28	27	27	20	59.8%
SUMMARY		826		529	491	391	368	299	267	218	186	145	44.3%

