

**Monthly Report of the NSLS-II Magnet Production Status and Schedule Mitigation Plan
Reporting Period of 9/10/2011 – 10/14/2011**

November 18, 2011

Status Report

Tesla Engineering has fixed the coil potting difficulty within the last three weeks, and has begun the production of coils and catching up on the lost days of the coil fabrication. However, due to the short supply of manpower the assembly and testing/measuring of the magnets is behind schedule, and the bulk shipment of the magnets has yet not begun. They plan to deliver 16 magnets during the month of December 2011, shipped by sea freight one by one as the magnets become ready for shipping.

In the recent acceptance test, it was found that one of the sextupole magnets delivered from IHEP was not acceptable because it failed to pass the field quality reproducibility test after re-assemblies. This magnet will be sent back by airfreight to IHEP for their root cause analyses at IHEP's expense. Although IHEP has more than 12 magnets ready to ship, the shipment is presently suspended, subject to their finding the root cause.

Production of the quadrupole magnet at BINP was slowed down, because significant capacity at their Plant #1 is now devoted to the machining of the NSLS-II Booster components.

Other than the above, the multipole magnet production has been on track from all other suppliers. As of November 11, 2011, 57 multipole magnets were in transit from the overseas suppliers.

Status of the 35 mm Dipole Magnet

Reasonable progress has been made in the production of the 35 mm dipole as noted by the report that Dipole #6 was stacked and being cured in the oven. However, the production is not on a relatively routine basis, and needs continuing intervention by our consultant, Luke Adamson, in Auckland. The situation, however, is not at the level that warrants an initiation of very expensive back-up measures. In fact, BSL has done well considering the fact that PRR approval was given only less than two months ago.

Status of the 90 mm Dipole Magnet

The fabrication of the stacking and bonding jig for the 90 mm dipole is almost complete. The laminations needed for the first production magnet are also on-hand. They forecast now that the bonding of the first unit will be done during this December.

Magnet Production Summary

	<i>Manufacturer</i>	<i>Units to be built</i>	<i>last updated</i>	<i>Yokes stacked</i>	<i>assemblies</i>	<i>received</i>	<i>accepted contractual</i>	<i>ready for girder</i>	<i>assembled on girder</i>	<i>% Complete</i>
Quad-SC-S-W	Budker	30	11/10/11	30	29	16	3	10	2	88.3%
Quad-SC-S-N	Budker	30	11/10/11	30	24	10	3	6	2	80.8%
Quad-DC-L-N	Budker	30	11/10/11	19	15	9	3	4	1	53.7%
Quad-DC-L-N	Budker	30	11/1/11	19	14	4	2	3	1	50.8%
Quad-DC-S-N	TESLA	90	11/9/11	23	6	5	3	5	2	16.1%
Quad-DC-S-W	TESLA	30	11/9/11	11	4	4	4	3	2	23.5%
Sext-S-S-N	Danfysik	169	10/28/11	102	90	71	53	27	5	53.4%
Sext-S-S-W	IHEP	75	11/10/11	69	38	30	15	9	4	66.5%
Quad-LA	Buckley	60	11/10/11	66	38	20	3	18	4	84.3%
Sext-LA	Buckley	30	11/10/11	34	18	7	2	6	2	79.5%
Dipol-35	Buckley	54	11/10/11	4	4	2	2	0	0	6.3%
Dipole 90	Buckley	6	11/10/11	1	1	1	1	0	0	15.0%
Corr-100	Everson	102	10/13/11	102	74	66	43	43	3	84.5%
Corr-100-SQ	Everson	30	10/13/11	16	12	12	12	2	2	43.7%
Corr-156	Everson	60	10/13/11	51	43	40	27	27	3	77.4%
SUMMARY		826	11/17/11	577	410	297	176	163	33	56.7%

