

## **Monthly Report of the NSLS-II Magnet Production Status and Schedule Mitigation Plan Reporting Period of 12/18/2011 – 1/13/2012**

**January 19, 2012**

### **Status of Multipole Magnets**

The quadrupole magnet manufacturing at Tesla Engineering has reached a quasi-series production, improved by a coil production with two new potting molds, a potting procedure, an enhanced magnet assembly manpower, and the validation of the back-up machining subcontractor. We anticipate that Tesla will complete 10 to 11 magnets before the end of January 2012, which is a reasonable number of magnets, considering the fact that the first week in January 2012 was not as productive as other weeks.

A delegation from the NSLS-II staff, which included the Head of the NSLS-II Procurement visited IHEP in Beijing to resolve the payment issue that had arisen from the inflexible Chinese export regulations, and also to confirm that the mating surfaces of the yoke with the side spaces are and will be properly machined for the present and future magnet yokes. Mutually agreed upon resolutions were established on both issues, and the delivery of magnets from IHEP should be resumed shortly.

The magnet production at BINP is back to normal.

As of January 13, 2012, 43 multipole magnets were in transit from the overseas suppliers.

### **Status of Corrector Magnets**

It is anticipated that the delivery of 100mm and 156mm X/Y Correctors will be completed during this calendar month. The issue we had with a very large a4 (skew octupole) term required a design modification to the skew quadrupole coils. Redesign is complete and contract modification will be made soon. A prototype of the new design will be available in six weeks after the contract modification is signed and production and modification of the Skew Corrector already delivered will follow soon after.

### **Status of the 35 mm Dipole Magnet**

Dipole Yoke No.10 has been bonded during this reporting period.

### **Status of the 90 mm Dipole Magnet**

The 90 mm Dipole Yoke No. 2 was bonded, the first machining was completed and the final machining is to begin very soon.

## 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	1/13/12	30	29	19	3	13	12	91.2%
Quad-SC-S-N	Budker	30	1/13/12	30	24	16	3	11	12	86.3%
Quad-DC-L-N	Budker	30	1/13/12	30	24	14	3	7	3	83.3%
Quad-DC-L-N	Budker	30	1/13/12	30	24	13	2	8	5	83.3%
Quad-DC-S-N	TESLA	90	1/13/12	44	14	9	3	9	9	27.6%
Quad-DC-S-W	TESLA	30	1/13/12	15	6	5	4	5	5	30.9%
Sext-S-S-N	Danfysik	169	1/5/12	125	118	100	53	43	28	69.8%
Sext-S-S-W	IHEP	75	1/5/12	69	40	32	15	12	21	68.7%
Quad-LA	Buckley	60	1/13/12	67	51	41	3	21	27	94.1%
Sext-LA	Buckley	30	1/13/12	36	23	15	2	11	13	93.3%
Dipol-35	Buckley	54	1/13/12	9	6	3	2	1	2	12.3%
Dipole 90	Buckley	6	1/13/12	2	1	1	1	0	0	20.0%
Corr-100	Everson	102	1/5/12	102	85	91	43	71	15	89.3%
Corr-100-SQ	Everson	30	1/5/12	16	12	12	12	2	1	43.7%
Corr-156	Everson	60	1/5/12	51	48	53	27	47	5	83.3%
SUMMARY		826	1/19/12	656	505	424	176	261	158	67.0%

