

LIU-PSB Cabling Requests Status & Power Requirements

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ENGINEERING
DEPARTMENT

1. LIU-PSB Cabling for Linac4 connection and LS2

Description of task	Responsible	Cables to be removed	DEC	N0 cables to be removed	Cables to be pulled	DIC	N0 cables to be pulled
BI line							
BI corrector magnets (power)	D. Nisbet	tbx (?)	Not received	?	tbx (?)	Not received	?
BI corrector magnet interlocks	P. Dahlen	yes (1)	Not received	?	yes	Not received	?
BI quadrupoles (power)	D. Nisbet	yes	Not received	?	yes	Not received	?
BI quadrupole interlocks	P. Dahlen	yes	Not received	?	yes	Not received	?
BI.BVT (power)	D. Nisbet	yes	Not received	?	yes	Not received	?
BI.BVT interlocks	P. Dahlen	yes	Not received	?	yes	Not received	?
BI.DIS	R. Barlow	yes	Not received	?	yes	Not received	?
BI.SMV: 3 transformers	J-M. Cravero	yes	Not received	?	yes	Not received	3 DC cables specified
BI.SMV position monitors	E. Bravin	yes	Not received	?	yes	Not received	?
BLMs in BI line and injection region	C. Zamantzas	no? (yes if done in LS2)	Not received	?	yes	Not received	?
Diamond BLMs in injection region	C. Zamantzas	no	N/A	N/A	yes	Not received	?
Head-/Tail Dumps (at BI.SMV)	C. Maglioni	no	N/A	N/A	yes	Not received	?
H0/H- Dumps (at BI.BSW4)	C. Maglioni	no	N/A	N/A	yes	Not received	?
BI.KSW: control cables	G. Grawer	no?	?	?	yes	Not received	?
BI.KSW: power cables	G. Grawer	yes	Not received	?	yes	Not received	?
BI.SMH	J. Borburgh	yes	Not received	?	no	N/A	N/A
BI.BSW controls	E. Carlier	no	N/A	N/A	yes	Not received	?
BI.BSW power	D. Aguglia	no	N/A	N/A	yes	Not received	18 DC cables specified
Charge exchange foil	E. Carlier	no	N/A	N/A	yes	Not received	?
H0/H- monitor	F. Roncarolo	no	N/A	N/A	yes	Received	28
Stripping foil camera	S. Burger	no	N/A	N/A	yes	Received	24
Vacuum equipment	P. Bellorini	no	N/A	N/A	yes	Received	132
BR (Booster Ring)							
Q-strip converters (QDE3+14)	D. Nisbet	no	Not received	?	yes	Not received	?
New RF cavities	M. Haase	yes	Received	2240 LS2	yes	Received	855 LS2
Finemet Test Cavity	M. Haase	yes	Received	115 LS2	no	N/A	N/A
BTKRF	M. Haase	yes	Received	15 LS2	no	Received	140 LS2
RF power interlocks	A. Blas	no?	?	?	yes	Not received	?
Transverse damper kickers	A. Blas	yes	Not received	?	yes	Not received	?
Transverse damper pickup	A. Blas	yes	Not received	?	yes	Not received	?
Ring pickups	J. Belleman	yes	Not received	?	yes	Received	224
Watchdog BR.TMD8L1	P. Odier	yes	Not received	?	yes	Received	24
BLMs (2 FLAT-ICs per section)	C. Zamantzas	no? (yes if done in LS2)	Not received	?	yes	Not received	?
Matching monitor	M. Duraffourg	no	N/A	N/A	yes	Received	67
Shottky monitor	J. Tan	no	Not received	?	yes	Not received	?
New wire scanners	B. Dehning	no	N/A	N/A	yes	Not received	?
Transfer lines (BT, BTP, BTM)							
Wide-band pickup (BTP PS side)	J. Belleman	no	Not received	?	yes	Not received	?
Magnets power (number still tbd)	A. Newborough	yes	Not received	?	yes	Not received	?
Interlocks (WICs) for new magnets	P. Dahlen	no	Not received	?	yes	Not received	?
BLMs	C. Zamantzas	no? (yes if done in LS2)	Not received	?	yes	Not received	?
Surface							
Beam Interlock System	C. Martin, S. Gabourin	yes (8)	Not received	?	yes (57)	Not received	?

2. EN/EL Electrical Infrastructure works associated with LIU-PSB

- 1) Power requirements for Installation of new control racks for Linac 4 connection. Power requirements to be defined.
- 2) Building 245 – New MPS. Power requirements estimated for machine loads and general services within the building. Detailed design ongoing.
- 3) Upgrade of LV General Services Distribution – Currently refurbishment of 3 switchboards is planned: ERD16*25A, ERD17*25A, ERD18*25A, with additional supplies for the RF Racks 15C to 17A, 58C to 59C and 250 to 257. This plan has to be revised to include all power requirements for the PSB.
- 4) Installation of new racks for 2 GeV Upgrade – power requirements for significant number of additional racks (TE-EPC) currently undefined. Once defined this can be incorporated into 3.



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THANK YOU!