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| **Name of Meeting**: XFEL Working Group for LINAC operations |   | **Date:** | 19.01.2012 |
|  |  |  | **Location:** | 362/30b |
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| **Meeting Chair:** | **Participants** | **Distribution List:** |
| H. Schlarb | Kay Rehlich, Wolf-Dietrich Moeller, Matthias Clausen, Lutz Lilje, Julien Branlard,Holger Schlarb, Brunhilde Racky, Tobias Schnautz, Richard WagnerMissing: Jorg Eckholdt | Wolf-Dietrich Moeller, Bernd Petersen, Stefan Choroba,Holger Schlarb, Lutz Lilje, Kay Rehlich, Brunhilde Racky, Richard Wagner, Hans-Joerg Eckoldt, Markus Huening, Winfried Decking, Torsten Limberg, Michael Dressel  |
| **Minutes taken by:** |
| H. Schlarb / J. Branlard |
| **Review by:** |
|  |
| **Status:** draft  |
|  |  |  |
| Topic: | 4th Meeting of working group for XFEL linac operationsPersonnel Interlock System |
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| Agenda: | Approval of last meeting minutesPersonnel Interlock System presentationDiscussion |
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| No | Action Item | Due | Responsible | Ref. |
| 1 | Review of minutes from last meeting: a few corrections have been done, mostly about the order of events during installation and commissioning. The updated minutes are on the web. |  |  |  |
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| **No** |  | **Keyword** | **Description** | **Responsible** | **Date** | **Status** |
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| 1 |  | Personnel Interlock  | Presentation of the Personnel Interlock System | Brunhilde Racky |  |  |
| 2 | I | MPS and RF  | - the hardware of personnel interlock system is installed in XHM- there is a single operation permission for each klystron- the HV modulators are switched off in case of dangerous operations- two waveguide switches are used to guide the RF power to the cryomodule or to the (movable) absorbers for klystron commissioning. 25 klystrons x 2 arms x 2 contacts = 100 pairs for all RF stations- MPS surveys status of the cryomodules and the status of the RF filter. Three states are considered : 1) the tunnel is open and RF goes to the load 2) the tunnel is open and RF goes to warm modules 3) the tunnel is closed and RF goes to cold modules- Switching of the modulator is realized by two independent contacts on mains (NetzSchuetze)- The status of the RF switch (included or bypassed) is sent to MPS. These LLRF filters should be available and installed as soon as warm operations start.- MPS only checks that no ionizing radiation can be produced due to RF power and controls if the RF power is switched to the absorber.  |  |  |  |
|  | I |  | - Open question: should the 3.9GHz module (ACC3H1) be interlocked for warm coupler conditioning (low power). This should be checked with Markus Huenning- Open question: who is providing the logic and electronics for processing the temperature sensor data which is provided by WP13- Open question: how is the RF filter activated (bypassed or not). Presently the MPS reads out the filter status, but does not control it. |  |  | O |
| 3 | I | Commissioning | - Earliest possible RF operation date is 5/2013- This date conflicts with FLASH2 commissioning- Potential-free contacts only are used (opto couplers) 60 V techniques- Prerequisite for RF without beam 1) network in XHM, WP38 uses its own private network (installed and managed by IT) 2) contacts for absorbers installed 3) LLRF filters installed and status cable to XHM 4) the cryo interlock can be bypassed (as long as cryogenics are not installed) |  |  |  |
|  | I |  | - Discussion point: reduce to one absorber instead of two per RF station.🡪 after discussion, it turns out this is not possible.- Open point: the cables from XHM to the RF station (klystron in tunnel) are not yet planned. The responsible group for cabling has to be finally defined. This decision should come out of the cabling meetings- Open point: it has to be clarified if a connection in series of the absorber is allowed🡪 after discussion, the answer is no. |  |  | O |
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|  |  | Additional remarks brought up during follow up meeting | - It should be possible to start commissioning klystron + load without personnel interlocks. This implies special arrangement with radiation protection group. |  |  |  |