

HLRF Meeting Agenda

10-19-06

- Reducing cost of LCW system with cast iron pipe instead of SS, and it's implications to the heat capacity of the water and other issues (galvanic corrosion?)
- ACD Charger System
- Clay's Transformer
- Adolphsen's Oct 17 email about proposed changes

Adolphsen's Proposed Changes

- 1) At the Caltech meeting, the RDR managers reviewed the cost cutting changes that have been proposed throughout the machine. For the linac, the ones they thought would be defensible on the time scale of Valencia are the nine cavity cryomodule, eliminating the 3.5% rf unit overhead, and eliminating cryoplant overhead for uncertainty in the static cryogenic heat loads. For the first of these, one variation would be to have only 8 cavities in the cryomodule with the quad so the shafts that will be used to lower in the cryomodules into the tunnel would not have to be made wider. With 27 (26) cavities driven by a single 10 MW klystron, the rf overhead at 33.5 MV/m would be 6% (10%) - in the BCD it is about 11%. To minimize the impact on the linac layout/operation, I suggest adopting the 9/8/9 scheme, so there would be 2/26 less rf units and the effective maximum gradient would be 33.5 MV/m. The total linac cost savings with these three changes will be about 5%. Are there any objections to going ahead with such a change request.