

# Comments on Waveguide Layout / Reply to E-mails

J. Leibfritz

# General Comments

- Final Waveguide Layout for RDR?
  - I think we have come to agreement on layout (drawings are in other .ppt file)
  - It is at the 95% level - will always be some fine-tuning and refining to be done.
  - Good enough to lock-in for RDR and move on to cost estimating.
  - Following slides address e-mail questions and concerns.

# Cable Size

- Cable Between Klystron and P.T.
  - Details unknown - Lug locations? Cable Size? Bend Radius?
  - Just a Cartoon for now. - Space Between devices seems reasonable.
  - Model of Cable (and Klystron) will be updated when more is known about actual design.

# Klystron Waveguide Layout

- Klystron and Pulse Transformer model seems reasonable until detailed info. is known.
- This Layout works with current civil design and is probably good for RDR cost estimating.
- T-Junction Flange can be bolted as long as it is installed before hybrids. Assembly of components should occur in order from penetration towards klystron.

# Penetration Size

- Should be determined by Radiation studies.
  - 43 cm - minimum size
  - 48 cm - if no radiation or construction issues.

# Change in Circulator Dimensions

- If Circulator Dimensions Change (because of addition of directional coupler) It should not be a problem.
  - Sufficient room in beamline direction to extend ports.
  - If port towards cavity needs to extend significantly, we can move the flexible waveguide to other side of bend (so it will be coming directly out of cryomodule). This will give us plenty of vertical space, if necessary.

# Cryomodule Height

- Cryomodule Group has determined height as 80cm from center of module to floor. Civil group has accepted this.
- DESY was going to confirm, but no answer yet - Bring this up at DESY?
- I feel 80 cm. is too low for installation concerns and it should be raised. How much?

# DESY Meeting Comments

- We seem to be in agreement on waveguide layout model to 95% level - only small details remaining.
- I will send latest .pdf files of model to the regular list of people for use in talks.
- I will not be at DESY, but will try to phone in when possible. Also, can be reached via e-mail if specific questions come up.
- I will generate component list and send out - probably on Monday (I will not be at work tomorrow.)
- If there are any other changes from video meeting, let me know ASAP and I can revise model.