NLC TARGET DESIGN ISSUES

Existing Target Design Issues

1. What are the vacuum requirements
2. What is the gas load from the target and L-band section
3. What is the design of the vacuum system (manifolding etc.)
4. What is the target housing and floor plan layout
5. How is the target connected/disconnected; flanges or welds
6. Reliability of the rotating seal and the associated turbopumps, and water and power connections
7. What remote handling facility are needed and can be designed
8. What is the "philosophy" of the target repair
9. What instrumentation is needed in the target station and is there room for optimal placement
10. Re-calculate the optimal thickness of target and optimal width/size of target
11. Does cooling on the inside AND outside help
12. Does cladding the target help
13. Are windows feasibile

Possible Re-Design Issues

1. Do we need a purely rotating target , can varying the beam intensity deal with eddy currents and if so what range of targets are allowed
2. Can we put windows to help with design to isolate the target, where is the minimum power density after the target
3. What is the optimal target size
4. Can we improve the cooling design
5. What is the "philosophy" of the target design, repair
6. Do we need calculations on "exotic" target configurations