

**Meeting Notes**

	Item	Status / Notes	Date Assigned	Due Date	Status Date
▼ Ali Z	<ul style="list-style-type: none"> <li>Ali , Fred D - Working on OH Coil Optimization</li> <li>Ali Z working on the OH Cooling analysis. Expect to be done by end of June</li> </ul>	Initial results show longer cooling times with .188 dia and 400 psig. Will look at effect of taking into account the turn to turn heat transfer.	Jun 30, 2009		Jun 10, 2009
▼ Chrzanowski	<ul style="list-style-type: none"> <li>New PF1A, B &amp; C dimensions are being laid out by Lew Morris for review by Neumeyer, Menard, et al.</li> <li>Leak repair requisition has been issued to vendor for the R&amp;D work. Should have samples back by the CDR.</li> <li>Meighan working on Keystone tests of the OH conductor to verify as extruded shape</li> <li>HAN needs to run confirmation of hoop tension by adding in the vertical field from Hatcher once he gets the coil dimensions from Bruce Paul (Jim C. to take action)</li> <li>Need to develop method to seal existing leaks in Outer TF Leg cooling passages</li> <li>Use borescope to view the inside of the leak in the TF Outer leg cooling passage (during the outage).</li> </ul>	<p>Machining samples. Working setting up for tests. Ordering material.</p> <p>Hatcher just iterating data with designer to develop the model. Han to run stress pass to compare with Titus's results in same area. (Looking for maximum vertical field)</p> <p>Procurement placed for the leak repair samples</p> <p>Plan on doing this during an outage.</p>	Jun 10, 2009		Jun 10, 2009
▼ Denault	<ul style="list-style-type: none"> <li>Martin to look at where the pump is in it's performance curve and whether it can be modified for 600 psig head</li> </ul>		Jun 24, 2009		Jun 10, 2009
▼ Han	<ul style="list-style-type: none"> <li>OTF Structure: Han is adding radius rods and quantifying loads, Truss design &amp; analysis,</li> <li>Inplane, Axisym OOP, Non-axisym OOP</li> <li>Electromagnetic Thermal Current Diffusion – Will provide Tom with temp and current densities</li> <li>PF 3 +/- 480 may be driving the stresses in the ring. Need to check the stresses in the TF Coil. Han will add tangential tension spokes to restrict the rotation of the ring assembly. Dudek to set up tour of the machine with Titus and Han to look for best locations for restraints (during maint weeks)</li> <li>HAN has developed a model of the TF Turn with cooling</li> </ul>	Need to have Neumeyer verify the currents that HAN is using in the model	Jun 10, 2009		Jun 10, 2009
▼ Hatcher	<ul style="list-style-type: none"> <li>Disruption loads have not yet been factored in. The application of a dynamic load factor less than 1.0 seems appropriate due to the impulse nature of the disruption loading.</li> <li>Need to run influence coefficients for all of the coils. Worst case current scenarios based on power supply outputs..</li> </ul>	Results were distributed waiting for feedback and confirmation before distributing further	-	Apr 2, 2009	Jun 17, 2009
▼ Menard	<ul style="list-style-type: none"> <li>The first concept of the NSTX TF Outer Leg support system has no insulating breaks. Do we need to insulate??</li> </ul>	Menard can calculate the impact once he gets the resistance of the structure			Apr 29, 2009
▼ Neumeyer	<ul style="list-style-type: none"> <li>A more limited OH and PF operating envelope needs to be developed for the design basis assumption</li> </ul>	Made a lot of progress need one more meeting.	Mar 1, 2009	Apr 15, 2009	May 6, 2009
▼ Perry	<ul style="list-style-type: none"> <li>Han now has the latest set of currents, displacements of the outer TF Legs are on the order of 16-17mm. Is that a concern for the machine access? What is allowable?</li> </ul>		Jun 10, 2009		Jun 10, 2009
▼ Raki	<ul style="list-style-type: none"> <li>Statement of Work for power systems PSCAD simulation tool outsourcing</li> </ul>	This work is about 50% complete			Jun 24, 2009
▼ Sri	<ul style="list-style-type: none"> <li>Disruption Analysis of Vessel and Internals using 3d 360° model of VV.</li> <li>SRI ran the OH Hoop stress model. Stresses are high at more than 160 Mpa.</li> <li>SRI has started on the bolting analysis.</li> </ul>	<p>The plan is to take Sri's 3D model of the vessel, and first impose a vertical Bdot - for this he can calculate the AZ components. If that looks OK we will work on adding the passive plate structures. and apply the vertical Bdot. - This will be a check of the current paths and maybe a sanity check on loads if you can give us an estimate of an appropriate vertical Bdot to apply. Then we will do the proper ANSYS parametric design coding to map your AZ's to the 3D vessel model, and then use your tabulated loads/ currents to check the method.</p> <p>May extract a few more things from the model but this work will be complete with writeup. New Run indicates stresses that are acceptable with the insulation between the OH and TF bundle.</p> <p>Need to coordinate with Willard work</p>			Jun 10, 2009
▼ Titus	<ul style="list-style-type: none"> <li>Global Model, Running, not merged well, corrections being made.</li> <li>TF Bundle conductor stub corner analysis:</li> <li>Document OOP and IP loading</li> </ul>	<p>HM -Passive Plates &amp; Upper and Lower VV, Han - TF Loop Geometry, Sri - Mid Plane Ports, HM/Sri - VV Support Structure</p> <p>Still showing high stress above stub at inner radius</p>			
▼ Willard	<ul style="list-style-type: none"> <li>Tom Willard is working on the local mechanical details of the bolted connection, flag. Using .3 Tesla field from Hatcher.</li> </ul>		Jun 10, 2009		Jun 17, 2009
▼ Woolley	<ul style="list-style-type: none"> <li>A coil protection system needs to be incorporated into the project plans to ensure that the envelope is suitably constrained.</li> </ul>	Reassigned to Woolley	Jun 10, 2009	Jun 30, 2009	Jun 10, 2009