

Meeting Notes

	Item	Respon.	Due Date	Date Closed	Status Date	Status / Notes
▼ 0. New						
	New Apr 1				Mar 26, 2009	
	<ul style="list-style-type: none"> Martinez and Turek is interested in TF Bundle conductor fabrication (ebeam welding and Machining) 	TBD			Apr 1, 2009	
	<ul style="list-style-type: none"> HM Has all of the structure modeled and ran a dynamic analysis with the old pulse data. Initial results indicate a damping of the forces.(per Phil H.) 				Apr 1, 2009	
	<ul style="list-style-type: none"> Statusing of the CDR Plan has begun 					
▼ 1. Project						
	<ul style="list-style-type: none"> Chrzanowski to ramp up designers to meet the project resource requirements 	Chrzanowski	Ongoing		Apr 1, 2009	LLD has electrical designers until mid April. They will then move to CSU. L. Morris is now on the VV interfaces. Have selected 2 mechanical designers, 1 Electrical designer started on monday on NBI electrical. Upcavage to join in April on outer TF Leg structures.
	<ul style="list-style-type: none"> Will need additional office space for new engineers 	Dudek	Mar 21, 2009		Apr 1, 2009	Work order issued, work in progress
▼ 2. Design Requirements						
	<ul style="list-style-type: none"> A more limited OH and PF operating envelope needs to be developed for the design basis assumption 	Neumeyer	Still need Menard equilibria: 3/15		Mar 25, 2009	Need someone to work with Menard to develop another set of equilibria at different scenario. (Ron Hatcher?)
	<ul style="list-style-type: none"> A coil protection system needs to be incorporated into the project plans to ensure that the envelope is suitably constrained. 	Neumeyer	Plan by 4/15		Mar 18, 2009	In progress. Not included in the current plans, but will be estimated into the CDR plan. RIS replacement? Initiated Neumeyer to come up with a plan Action:Neumeyer
▼ 3. TF Bundle						
	<ul style="list-style-type: none"> Need a memo to document the mechanical electrical and thermal properties of the epoxy glass composite 	Chrzanowski	Apr 2, 2009		Apr 1, 2009	In process
	<ul style="list-style-type: none"> Pricing of the TF Bundle conductors 	Chrzanowski	Mar 15, 2009		Apr 1, 2009	Major Tool, Hollis Line Machine and Paramount to provide estimates. Latest idea is to extrude to "near" final shape and machine to final shape. Looks like cost will be higher than what is in estimate.
	<ul style="list-style-type: none"> OH Coil Cooling needs to be optimized 	Dudek	Apr 2, 2009		Mar 18, 2009	Can cooling time be reduced from 20 minutes to 15 minutes or 10 minutes? (Brooks)
	<ul style="list-style-type: none"> Need analysis of current diffusion, temperature rise on bundle (Titus) 	Titus	Apr 2, 2009		Apr 1, 2009	In process
	<ul style="list-style-type: none"> 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. 	Hatcher	Apr 2, 2009		Apr 1, 2009	Should have output by mid April. Trying to incorporate comments and data from Stefan. Running transient cases for Neumeyer. Need guidance on required output.
▼ 4. TF Bundle Joint Connection						
	<ul style="list-style-type: none"> Document OOP and IP loading 	Woolley	Feb 18, 2009			
	<ul style="list-style-type: none"> Need to develop TF turn to turn scheme 	TBD			Mar 18, 2009	Made some progress, need layouts after downselect to address
▼ 5. Umbrella & Outer TF Leg						
	<ul style="list-style-type: none"> Need to develop method to seal existing leaks in Outer TF Leg cooling passages 	Chrzanowski			Mar 18, 2009	In process. Outside company has sealing method. http://www.aceduraflo.com/fixmypipes.html
	<ul style="list-style-type: none"> Investigate possibility of using borescope to view the inside of the leak in the TF Outer leg cooling passage (during the outage). 	Chrzanowski	TBD			
	<ul style="list-style-type: none"> Han presented the latest outer TF leg support analysis. Looks like cross bracing is only needed in four locations. 	Zhang	Mar 25, 2009		Apr 1, 2009	(This analysis still needs to be checked) The latest analysis shows that with some simple "ring" reinforcement at the TB level and diagonal bracing at four bays we reduce the outer TF connection reactions to manageable levels. Han, just need loads in ring and cross brace members. Dudek provided cross section information of stainless steel members for next step analysis
▼ 6. VV Structure						
	<ul style="list-style-type: none"> Look into the work needed to run the 360 deg model on the Cluster to accelerate the results 	Irv Zatz	Mar 12, 2009		Apr 1, 2009	Zatz reported that the Cluster will be ready to run models within a week (by 4/2)

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	<ul style="list-style-type: none"> Enhance the VV midplane strength by welding a band of material around the inner surface of the midplane, where interferences are relatively minor. 	Heitzenroeder	Ongoing		Mar 25, 2009	Need to rerun with 360 degree model to refine the analysis.
▼ 7. Cooling Water						
	<ul style="list-style-type: none"> Need to assign engineer to perform Cooling Water work 	Dudek	Feb 28, 2009		Mar 25, 2009	BOA should be in place in 1-2 weeks
▼ 8. Completed						
	Four TF Joint concepts that were presented last week have been modeled by Bruce Paul	Chrzanowski		Apr 2, 2009	Completed	Titus reviewed the latest updates to his concept
	Would an OH Coil wound on the TF Bundle give more space for more copper (or larger cooling hole) in the OH coil?			Apr 1, 2009	Completed	Jim C. Idea
	Tom Egebo has completed the CS Upgrade CDR Plan. Copy attached, will begin tracking status against this plan next week.			Apr 1, 2009	Completed	Status meetings scheduled 3/27
	Titus TF Flex Concept			Mar 11, 2009	Completed	Titus reviewed the latest updates to his concept, improved to provide better access, IP Flexibility and OOP support.
	Simmons reported new docs have been posted to the website including the CD-0 docs and meeting notes				Completed	
	New data indicates PFC's and Divertor may require more analysis to determine requirements. Heat load on the CS Tiles may require water cooling which is a significant cost impact.	Neumeyer		Apr 1, 2009	Completed	Meeting held to discuss. Will eliminate DND scenarios from high power conditions. May need to add active cooling just from the inner divertor area between pulses.
	Joint Down select meeting has been set for Monday, 3/23 @ 2:30	Neumeyer			Completed	
	TF Outer Leg Bracing: Neumeyer requested moving the location of the cross members vertically on the legs (ring to turnbuckle elev.) to determine if the benefit improves. Also try the supports in only 4 bays.	Zhang	Mar 19, 2009		Completed	The latest analysis shows that with some simple "ring" reinforcement at the TB level and diagonal bracing at four bays we reduce the outer TF connection reactions to manageable levels. Han, just need loads in ring and cross brace members
	TF Conductor thermal resistance calculation to provide total terminal to terminal voltage drop. The purpose being for Raki to be able to better specify what the PS need to supply.	Heitzenroeder	TBD	3/25/09 12:00 A	Completed	Neumeyer and Raki have resolved this using existing spreadsheet.
	Need to Enhance the umbrella structure to reduce stresses due to twist and bulge by adding welded or bolted material	Heitzenroeder	Ongoing		Completed	Looks like the VV stresses have improved with the latest refinements to the model. An error in the application of the EM load was found on the turnbuckle inputs, with the proper inputs maximum stress in the vacuum vessel of the NB port sector was reduced to 58.6 ksi, a decrease of 32% from the previous calculation.
	Need to Enhance the existing turnbuckle system to improve its strength and stiffness	Heitzenroeder	Ongoing		Completed	Han to modify model to move TF Leg support ring at the level of the existing turnbuckles and to run
	Photos of TF Outer Leg Support Mockups	Perry	Completed		Completed	New 3/1: Reviewed photos of the Outer TF leg mockups. Looks like the members as modeled would fit in almost all of the locations around the machine except for the busswork tower bay.