

Meeting Notes

Respon.	Item	Due Date	Notes
	New Items March 4th		
Heitzenroeder	<ul style="list-style-type: none"> Latest results from the analysis 	Ongoing	Updated 3/4: 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.
Chrzanowski	<ul style="list-style-type: none"> Four TF Joint concepts that were presented last week have been modeled by Bruce Paul 	Ongoing	Updated 3/4: Refinement will continue
Irv Zatz	<ul style="list-style-type: none"> To look into the work needed to run the 360 deg model on the Cluster to accelerate the results 	Mar 12, 2009	Updated 3/4: Phil suggested that using the cluster computer system might speed up analysis turnarounds especially once the 360 model is completed.
Dudek	<ul style="list-style-type: none"> Will need additional office space for new engineers 	Mar 21, 2009	
Chrzanowski	<ul style="list-style-type: none"> Pricing of the TF Bundle conductors 	Mar 15, 2009	Updated 3/4: Lavada to give us price on the 80 TF Conductors, Extruded and machined. Also looking into getting machined conductors from Zenex precision (price this week or early next week
Perry	<ul style="list-style-type: none"> Running short on workstations for drafting and possibly ANSYS licernss to support analysis 	Mar 12, 2009	Updated 3/4: Perry to get approval for additional Workstations and ANSYS Licenses
	1. Project		
Chrzanowski	<ul style="list-style-type: none"> Status of designer assignments 	Ongoing	Updated 3/4: New ProE designer for NB upgrade work required. Updated , Have 6 resumes to review for electrical designers, interviews next week hire on or about 3/20
	2. Design Requirements		
Neumeyer	<ul style="list-style-type: none"> A more limited OH and PF operating envelope needs to be developed for the design basis assumption 	GRD updt: 2/28 Menard equilibria: 3/15	2/25: Latest version has been posted.
Neumeyer	<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. 	Plan by 3/15	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		
Hatcher	<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. 	Mar 22, 2009	Updated 3/4 Should know by the end of the week if this is going to be a schedule problem. 2/25: NSTX startup has had an impact on this, Ron using opera to develop model.
Woolley	<ul style="list-style-type: none"> Preliminary results suggest that the turn-turn insulation shear in the TF bundle is within the allowable stress limit even without the implementation of a torque collar below the TF joint, above the OH coil. <ul style="list-style-type: none"> Further analysis is needed to confirm this finding <ul style="list-style-type: none"> <i>Additional analysis should be performed to determine if the same is true without any torsional restraint at the ends of the TF bundle, i.e. if the spline/umbrella load path is eliminated</i> 	Feb 18, 2009	Updated 3/4 Memo to be published later this week. Memo documenting results in a couple weeks.
	4. TF Bundle Joint Connection		
Woolley	<ul style="list-style-type: none"> Are bolts below the flex accessible? 	TBD	
	<ul style="list-style-type: none"> What design and fabrication method is appropriate for the flex connector, providing the necessary IP and OOP flexibility, while being able to withstand the forces without fatigue failure? <ul style="list-style-type: none"> <i>braid connection</i> <i>cable connection</i> <i>water-jet connection</i> 		Requires concept to determine
Woolley	<ul style="list-style-type: none"> What joint/flag flexibility is appropriate, in-plane (IP)? 	Feb 11, 2009	
Woolley	<ul style="list-style-type: none"> What joint/flag flexibility is appropriate, out-of-plane (OOP)? 	Feb 11, 2009	
Woolley	<ul style="list-style-type: none"> How does the OOP of flexibility relate to the gap between the flex connector and the OOP support structure? 	Feb 11, 2009	
woolley	<ul style="list-style-type: none"> Options for the female side of the bolting need to be assessed, including use of inserts versus the use of bolting plates embedded in the copper <ul style="list-style-type: none"> <i>It would be desirable for the bolts to provide both contact pressure and a reaction against shear loading due to the vertical force on the flex</i> 		
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Woolley	<ul style="list-style-type: none"> Document OOP and IP loading 	Feb 18, 2009	
	5. Umbrella Structure & Outer TF Leg		
Heitzenroeder	<ul style="list-style-type: none"> Need to develop a plan to deal with the items below 	Feb 11, 2009	
Heitzenroeder	<ul style="list-style-type: none"> Enhance the umbrella structure to reduce stresses due to twist and bulge by adding welded or bolted material in configuration TBD. 	Ongoing	Updated 2/11-Sri is finishing up a model of the umbrella with mechanical enhancements.
Heitzenroeder	<ul style="list-style-type: none"> Enhance the existing turnbuckle system to improve its strength and stiffness but without relocation or modification which would exceed the present physical envelope 	Ongoing	Updated 2/25: Han has model running, there appear to be some inconsistencies in the model that need troubleshooting
Perry	<ul style="list-style-type: none"> Can diamond cross braces as shown on Hans model be installed on the machine? If Not which bays could receive the upgrade? 	Mar 3, 2009	Updated 3/4: Joe Winston has dimensions form Han Zhang model to mockup structural shapes and try to fit around the machine during access periods. Photos of the fitups will be taken to illustrate fitup
	6. Vacuum Vessel Structure		
Heitzenroeder	<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. 	Ongoing	2/25: Sri presented first cut at 360 deg. midplane model. peak stresses look good at < 30ksi.
	7. Cooling Water		
Dudek	<ul style="list-style-type: none"> Need to assign engineer to perform this work 	Feb 28, 2009	2/15: New personnel requisition or BOA will be used to fill.
	COMPLETED ITEMS		
Egebo	<ul style="list-style-type: none"> Progress on the Primivera entry of the plan 	Completed	Updated 3/4 Schedule is out, Raki input is available will begin statusing against the schedule
Neumeyer	<ul style="list-style-type: none"> General Requirements Document - DRAFT (Signed off by?) 	Feb 28, 2009	2/25: Masa and Jon have it for approval. On track.