

Meeting Notes

	Item	Respon.	Due Date	Status	Status Date	Status / Notes
▼ 0. New						
	New Apr 29					
	<ul style="list-style-type: none"> Priniski has laid out the TVPS duct from the NB duct and it indicates an interference with existing turnbuckle will 				Apr 29, 2009	
	<ul style="list-style-type: none"> Initial run of the NB duct modification indicates loads are a factor of 3-4 times higher than before. 				Apr 29, 2009	Could possibly add gusset inside existing adjacent port to reinforce the area. Sri will rerun data with a gusset in the adjacent port. Dudek to discuss with Priniski
	<ul style="list-style-type: none"> HAN has developed a model of the TF Turn with cooling 				Apr 29, 2009	Need to have Neumeyer verify the currents that HAN is using in the model
	<ul style="list-style-type: none"> The first concept of the NSTX TF Outer Leg has no insulating breaks. Do we need to insulate?? 				Apr 29, 2009	Menard can calculate the impact once he gets the resistance of the structure
	<ul style="list-style-type: none"> OH Coil designer is ready to proceed with concept. If there are any changes we 				Apr 29, 2009	
	<ul style="list-style-type: none"> Statement of Work for power systems PSCAD simulation tool outsourcing 	Neumeyer		Working	Apr 29, 2009	
▼ 1. Project						
	<ul style="list-style-type: none"> Chrzanowski to ramp up designers to meet the project resource requirements 	Chrzanowski	Ongoing	Working	Apr 29, 2009	Last electrical designer starts tomorrow, 4/30. New Engineer, Danny Mangra starts tomorrow.
▼ 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	Apr 15, 2009	Working	Apr 29, 2009	Next step is to modify the PF1a, PF1b, PF1c details to find a compromise between J Chrz's space limitations and J Menard's equilibrium specifications. This exercise will account for the fact that the recent requirements which exceed the prior ones are all for cases where loh is not equal to zero, meaning that they do not have to be sustained for 5 seconds. Hopefully the available copper cross section is compatible with Jon's requirements when this is factored in. If not, Jon will have to revise his requirements because there is simply no more space available.
	<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 5/1	Working	Apr 8, 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"> JIM- Conductor drawing has been changed to make it easier to mfr. Shorten pointed section to simplify extrusion. Will be sent out for quotes. 	Chrzanowski	May 5, 2009		Apr 15, 2009	Drawings completed.
	<ul style="list-style-type: none"> OH Coil Cooling/Conductor needs to be optimized 	Dudek	May 15, 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"> 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	Working	Apr 23, 2009	Rerunning with new data, about half way through runs. Look pretty good. Then need to benchmark the model against existing configuration.
	<ul style="list-style-type: none"> Titus to provide input data (R, z) along flex joints to Ron Hatcher for Opera runs 	Chrzanowski	May 1, 2009		Apr 23, 2009	Jim to get data from Bruce Paul.
▼ 4. TF Bundle Joint Connection						
	<ul style="list-style-type: none"> Pete working on a flexible version of the connection and look at wedge pressure in the hub. 	Titus		Working	Apr 29, 2009	First iteration of analysis submitted in email on 4/20/09. Need to check HAN's model to see if the torque becomes an issue in the bundle with a slip plane in the insulation at the high stress region.
	<ul style="list-style-type: none"> Develop concept #4 including fastener details and design of outer loop with adequate cross section so that it can be analyzed using ANSYS 	Heitzenroeder		working	Apr 23, 2009	Pete to work out a plan for the global and detailed models and how they relate to each other. Assignments for the various pieces.
	<ul style="list-style-type: none"> Archetype (bolted joint consultant) will be contacted to review joint design 	Hetzenroeder	May 15, 2009		Apr 8, 2009	Need to complete joint detail
	<ul style="list-style-type: none"> Document OOP and IP loading 	Woolley	Feb 18, 2009	Working		
▼ 5. Umbrella & Outer TF Leg						
	<ul style="list-style-type: none"> Han working on one turn model 	Zhang			Apr 15, 2009	Should have some results in a couple weeks. Will add cooling analysis of the outer leg.
	<ul style="list-style-type: none"> Need to develop method to seal existing leaks in Outer TF Leg cooling passages 	Chrzanowski			Apr 15, 2009	Tom Meighan working with Ace Duraflo. Ace Duraflo estimate is approx . \$75k to develop epoxy and leak repair. Would have vendor develop epoxy and demonstrate method first as separate procurement. Would be desirable to perform the leak repair this fall to eliminate this risk. Work is being assigned to T. Meighan to follow up with.
	<ul style="list-style-type: none"> Use borescope to view the inside of the leak in the TF Outer leg cooling passage (during the outage). 	Chrzanowski	TBD		Apr 8, 2009	Plan on doing this during an outage.
	<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	Working	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"> New NBI duct: Winkleman needs to get model to CSU analysts (Sri) to incorporate VV modifications into the plan 	Priniski			Apr 15, 2009	Working
	<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. 				Apr 8, 2009	Working with Han on the one turn model. Making good progress on the analysis list. A 2 msec disruption yields factor of less than 0.5, a 5 msec disruption is about 1.0.
	<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 look at the strength of the vv with ports (Global Model) Need to rerun with 360 degree model to refine the analysis.
▼ 8. Completed						
	Martinez and Turek is interested in TF Bundle conductor fabrication (E-beam welding and Machining)	TBD			Apr 1, 2009	
	Pricing of the TF Bundle conductors	Chrzanowski	3/15/09 12:00 A	Complete	Apr 8, 2009	Cancelled contract see new path forward above
	EWI interested in doing a friction stir weld for the TF bundle. Have 3 FSW machines. Would be able to perform tests on the weld. Plan on sending out sample drawing with SOW to review legal boilerplate.	Hetzenroeder		Complete	Apr 23, 2009	RFQ is out to EWI.
	Get TF joint #4 ANSYS analysis underway	Heitzenroeder		Complete	Apr 6, 2009	Titus memo 4/7.
	Need analysis of current diffusion, temperature rise on bundle (Titus)	Titus	TBD (waiting for BOA)	Complete	Apr 1, 2009	Issued memo for in plane loads concludes heating, and stresses are not of concern. Needs to be checked.