

TO: P. Heitzenroeder
FROM: L. Dudek

SUBJECT: WBS 1431 Modular Coil Interface Hardware

Date: August 11, 2008

Scope

This job covers the procurement of the hardware used to connect the modular coils. These materials consist of the stud kits, G-10 and metal core shims, alumina coated shims, shear plates and puck materials. Also included the procurement of the inflatable FEP wing support bladders.

Status

All of the stud kits for all 18 modular coils have been purchased except for approximately 40 new studs for the new holes on the inboard edge of the C to C joint. All of the metal cores for the first field period assembly have been purchased. New procurements for the shims on the remaining two Field Periods and the alumina coated shims for the C to C joint need to be initiated.

Interfaces

No physical interfaces are required for the procurement work.

Specifications

None

Schematics and PIDs

None

Models

None

Drawings

None

Analyses

None

Testing

Only receiving inspection and testing as required by the CSPECs provided from Engineering.

Costs

No Pending cost updates

Remaining Work

Procurement of the alumina shims for the C-C joints and 40 stud kits mentioned above.

Lessons Learned:

When obtaining budgetary quotes and guidance from vendors regarding capability the specific requirements, more importantly the combination of requirements must be considered when generating estimates. For example the vendor asked for guidance on alumina coatings assured us that a tolerance of ± 0.001 " alumina film thickness was easily achievable. However when combined with our film thickness requirement of 0.025" thick he was unable to achieve the quoted tolerance.

Conclusion:

The alumina coating is still the most significant challenge to the remaining procurements. The vendor qualified (White Engineering) was late in delivering sample runs. Suggest trying to qualify another vendor (Praxair) which would help insure a timely delivery of the alumina coated shims for the C to C joints.

Procurement List

JOB	PO/SC Number	REQ Number	Description	REQ Amount	REQ Date	Date to Buyer	Award Date	Award Amount	Supplier	Promised Delivery
1431	BPA-7824-W	405859	Apply Flame Spray to NCSX MC Shims	0	26-11-07	12-Mar-07	12-Mar-07	NA	White Engrg	12/3/07-11/30/09
1421	cancelled	405017	NCSX Flange Stud kits	40500	10-Mar-11	21-Mar-11	cancelled	cancelled	cancelled	cancelled
1431	cancelled	405982	Flame Spray NCSX Outboard Shims	6660	22-01-08	22-01-08	cancelled	cancelled	cancelled	cancelled
1431	cancelled	406120	316SS Round Stock for Inboard Shim Pucks	4000	28-02-08	29-02-08	cancelled	cancelled	cancelled	cancelled
1421	PE7308-W	405018	Insulating Washer for MCWF Stud Kits	650	10-Mar-11	20-Mar-11	27-Mar-11	1281	Zenex Precision	4/12/11 12:00 AM
1421	PE7308-W	405073	Insulating Washer for MCWF Stud Kits	5100	31-Mar-11	10-Apr-11	12-Apr-11	4455	Zenex	4/24/11 12:00 AM
1421	PE7330-W	405056	NCSX Flange Stud Kits	99000	24-Mar-11	28-Mar-11	13-Apr-11	77575	Bitec	6/9/11 12:00 AM
1421	PE7330-W	405183	NCSX Flange Stud kits	99000	8-May-11	10-May-11	12-May-11	7106	Bitec	6/9/11 12:00 AM
1431	PE7332-W	405067	Supernuts	112500	29-Mar-11	5-Apr-11	13-Apr-11	113050	Superbolt	6/1/11 12:00 AM
1421	PE7381-W	405115	Prototype NCSX Coil Shim Bladders	2800	14-Apr-11	20-Apr-11	12-May-11	4705	Amer.Fluoroseal	6/23/11 12:00 AM
1431	PE7677-W	405443	Apply Flame Spray to NCSX MC Shims	20972	31-Jul-11	14-Aug-11	4-Oct-11	17712	Wlwhite Engr	12/1/07 12:00 AM
1431	PE7706-W	405423	NCSX Mod Coil Load Washers	38000	26-07-07	10-Jan-07	15-10-07	41150	MechanicalPrec	11/29/07 12:00 AM
1431	PE7717-W	405425	MCWF Flange Studs	63270	26-07-07	28-08-07	23-10-07	65539	Zenex	12/18/07 12:00 AM
1431	PE7766-W	405763	NCSX Inboard Shims Material 316LN	45000	18-10-07	26-10-07	11-Dec-07	36398	Advanced Metal	11/19/07 12:00 AM
1421	PE7810-W	405847	NCSX Outboard Shims	20383	19-11-07	28-11-07	12-Apr-07	20383	Zenex	1/31/08 12:00 AM
1431	PE7860-W	405941	Inconel Plate for Inboard Shim	20000	1-Apr-08	1-Apr-08	1-Jul-08	14469	Moor Metals	14-01-08
1421	PE7946-W	406094	NCSX Plasma Spray Shim Samples	675	22-02-08	26-02-08	3-Feb-08	675	Praxair	28-03-08
1431	PE7965-W	406039	Change order to add Additional Shims	52625	2-Aug-08	2-Dec-08	18-03-08	49650	#VALUE!	30-04-08
1431	PE7965-W	406225	Change order to add sandblasting to PE007965-W	5625	31-03-08	30-04-08	5-Feb-08	5625	Zenex	16-05-08
1431	PE7976-W	406112	NCSX FEP Shim Bladders	5550	27-02-08	14-03-08	21-03-08	6300	Amer.Fluoroseal	25-04-08
1431	PE8090-W	406322	Lot # 3 NCSX Outboard Shims	13875	25-04-08	28-04-08	5-Jun-08	12546	ZENEX	30-06-08