PROCEDURE: NCSX–PROC–006 Revision 4		Page: 1 of 10
Title **Control of NCSX Supplier and In-House Fabrication Information**	**Initiated by:** Bob Simmons Digitally signed by Bob Simmons DN: CN = Bob Simmons, C = US Reason: I am the author of this document Date: 2006.01.18 07:52:59 -05'00' NCSX Systems Engineering Support Manager	**Effective Date:** **1/18/2006**
Concurred by F. Malinowski Digitally signed by F. Malinowski DN: CN = F. Malinowski, C = US, O = PPPL, OU = QA Reason: Signing for J. Malsbury Date: 2006.01.19 16:42:07 -05'00' NCSX Quality Assurance Manager	**Approved by:** Wayne Reiersen Digitally signed by Wayne Reiersen DN: CN = Wayne Reiersen, C = US, O = PPPL Reason: I am approving this document Date: 2006.01.20 10:42:42 -05'00' NCSX Engineering Manager	**Supersedes:** **Revision 3** **July 1, 2005**

Record of Revisions

Revision	Date	Description of Changes
0	**5/1/2003**	**Initial Issue**
1	**2/13/2004**	**Revised introduction and several steps in the procedure to clarify responsibilities**
2	**4/21/2005**	**Added record of revisions table. Changed to a simplified flow chart format and updated to clarify the processes.**
3	**7/1/2005**	**Revised title of this procedure to include posting of information for in-house fabrications.**
4	**1/18/2006**	**Added section D to the Procedure Section to specifically address storage of supplier submittals. Clarified that PQA must approve posting of supplier generated NCRs.**

Applicability

This procedure is applicable to the entire NCSX Project.

Introduction

I. Supplier Information

It is essential for the configuration control of information provided to NCSX suppliers that the subcontract or purchase order information and the technical information provided to potential suppliers for Requests for Quote (RFQ) and Requests for Proposals (RFPs), and to suppliers awarded subcontract or purchase orders is correctly dispositioned and approved from a procurement and technical perspective.

For the NCSX Project, the Cognizant Engineer is typically also assigned as the Procurement Technical Representative (PTR), unless the Cognizant Engineer is not a PPPL Employee (e.g., ORNL personnel). In instances where the Cognizant Engineer is not a PPPL employee, a PPPL PTR will be assigned. *For the purposes of this procedure, the term Cognizant Engineer/PTR will be used.* In that instance, both the Cognizant Engineer and the PPPL PTR will report to the assigned Responsible Line Manager (RLM).

The PTR will be the technical contact for procurements and will be responsible for developing and assuring that the necessary administrative (e.g., approved statement of work, requisition, etc.) and technical (e.g., signed technical specifications and signed drawings) documentation is available for Procurement to facilitate the solicitation and award process. PPPL Procurement is then responsible for gathering this information into an approved procurement package for transmittal to potential suppliers or suppliers awarded subcontract or purchase orders.

The initial effort will be to develop the documentation package necessary for either RFQs/RFPs or recently awarded subcontract or purchase orders. Part A of this procedure describes the process for initially approving and posting procurement-related documentation for either RFQ/RFP, design basis for start of subcontract or purchase order work, or Release for Fabrication.

II. In-House Fabrications

For those components assigned for in-house fabrication, it is equally essential that the technical information provided to PPPL fabricators is up-to-date and accurate. The NCSX cognizant engineer is responsible for assuring that the necessary technical (e.g., signed technical specifications and signed drawings) documentation is available for the NCSX personnel assigned the responsibility for in-house fabrication of a component.

In addition, the NCSX Project utilizes a utility called *FroTools* to permit access to the NCSX model and drawing files via a INTRALINK users account. The cognizant engineer will normally utilize this method to view the latest electronic models and drawings and Part C of this procedure outlines the process. As an alternative, a special "In-House Fabrication" folder has been added to the Supplier FTP site in lieu of *FroTools*.

III. Configuration Control

As with any technical information that has been approved for fabrication, the information is under configuration control and the processes outlined in NCSX-PROC-002 will apply. For external procurements, it is essential for the that the information provided to NCSX suppliers that the subcontract or purchase order information and the technical information provided to potential suppliers for Requests for Quote (RFQ) and Requests for Proposals (RFPs), and to suppliers awarded subcontract or purchase orders, is correctly dispositioned and approved from a procurement and technical perspective. This is also true for the technical

information provided to PPPL in-house fabricators.

IV. Electronic Documentation

For the NCSX Project, wide use of electronic documentation will be the norm. This electronic information is posted one of the three electronic sites (i.e., the Procurement Web, the Manufacturing Web, and the Supplier FTP Site) and should be entirely self-consistent. As described in the NCSX Data Management Plan (NCSX_PLAN_DMP), the three related webs have slightly different but related purposes:

- **The Procurement Web** is an open access informational web site located at http://oorm-1.pppl.gov/public/procurement/. It is maintained by the PPPL Procurement Department and contains all documentation required for potential suppliers to develop proposals. *Once a contract is awarded, the information on that contract will be removed from this site*. This site is utilized primarily for large dollar procurements (e.g., in excess of $100,000).
- **The Manufacturing Web** is an open access informal information web site located at: http://ncsx.pppl.gov/NCSX_MFG/. It is maintained by WBS Managers. This open access web site contains project documentation of interest to potential suppliers and provides an overview look-ahead potential procurement actions coming in the near term. Links to the Supplier FTP site enable a viewer to get additional detailed information.
- **The Supplier FTP Web Site** is a multipurpose ftp site located at: ftp://ftp.pppl.gov/pub/ncsx/manuf/. FTP sites are the repository for large data files that may not be appropriate for web pages. It is maintained by the NCSX Design Integration Manager. This site:
  - Provides detailed information of an informational nature for potential supplier who desire additional information not available on the Manufacturing Web – a link is usually provided from the Manufacturing Web;
  - Provides the single source of contract administrative and technical information to the suppliers under contract. This site contains electronic drawings and models, statements of work, and specifications for use by suppliers under contract; and
  - Provides detailed technical information for PPPL in-house fabricators in a special "In-House Fabrication" folder on this site as an alternative to the *FroTools* database.
- **The *FroTools* Database** serves as a convenient source for posting the technical information (specifications and electronic models and drawings) necessary for completing the in-house fabrication tasks. Section C of this procedure covers use of this database. If not convenient, or the cognizant engineer does not have an INTRALINK account, the Supplier FTP may be used on a case-by-case basis to post technical information.

Both the Procurement and Manufacturing web pages are primarily **informational** in nature and are not part of this procedure. PPPL Procurement maintains the

material posted on the Procurement Web and WBS Managers maintain the subject content and material posted on the Manufacturing Web. However, once a contract is awarded, the Supplier FTP site is the sole source of contract and technical information for suppliers.

V. Storage of Supplier Submittals

The contract calls up for specific supplier deliverables (e.g., periodic status reports, process history (including test/verification results, etc.) that are to be delivered to PPPL in life of the contract. These submittals may be in an electronic media or hardcopy. In accordance with the DMP and DOC, there are two storage locations/project files for the storage of these documents. For electronic media, the NCSX Project maintains a secure NCSX Procurement folder with limited access that is maintained by the NCSX Engineering Administrator. Hardcopy supplier submittals are stored in the PPPL Operations Center. In either instance, it is the responsibility of the assigned NCSX Procurement Technical Representative (PTR) to ensure that this material is provided in a timely manner.

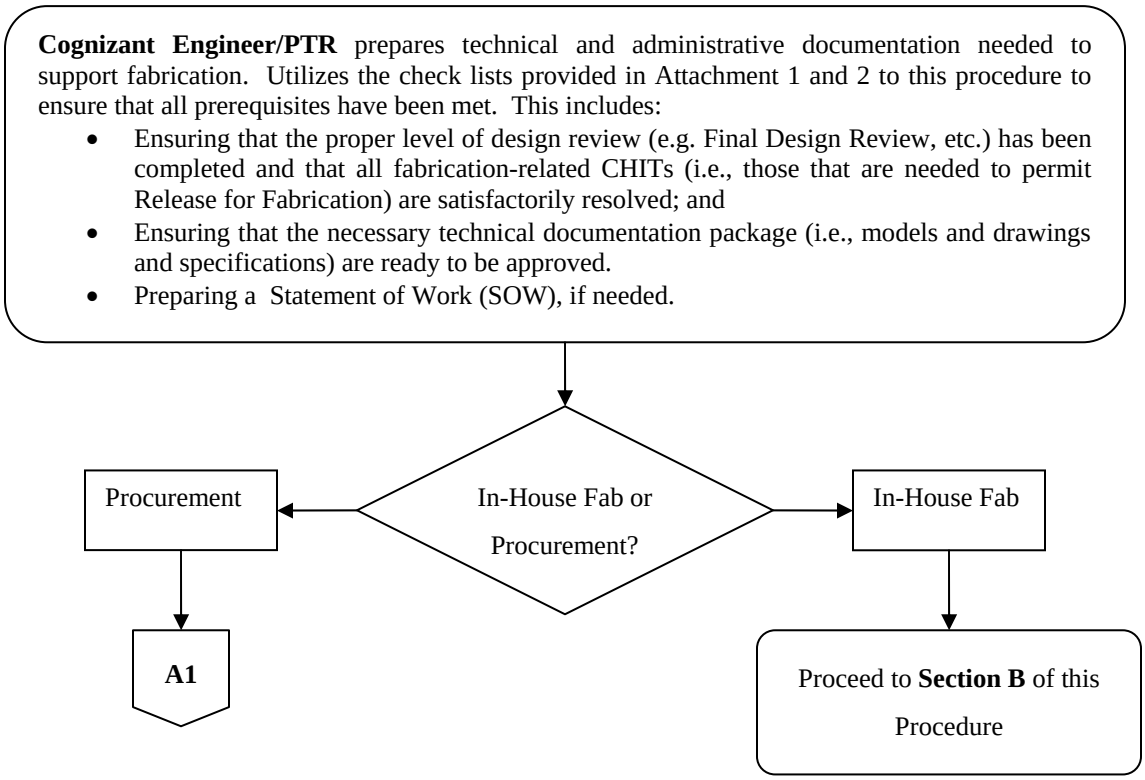
This procedure will focus on how subcontract and/or fabrication information (models/drawings, specifications, contract deliverables, and statements of work) are made available and/or stored.

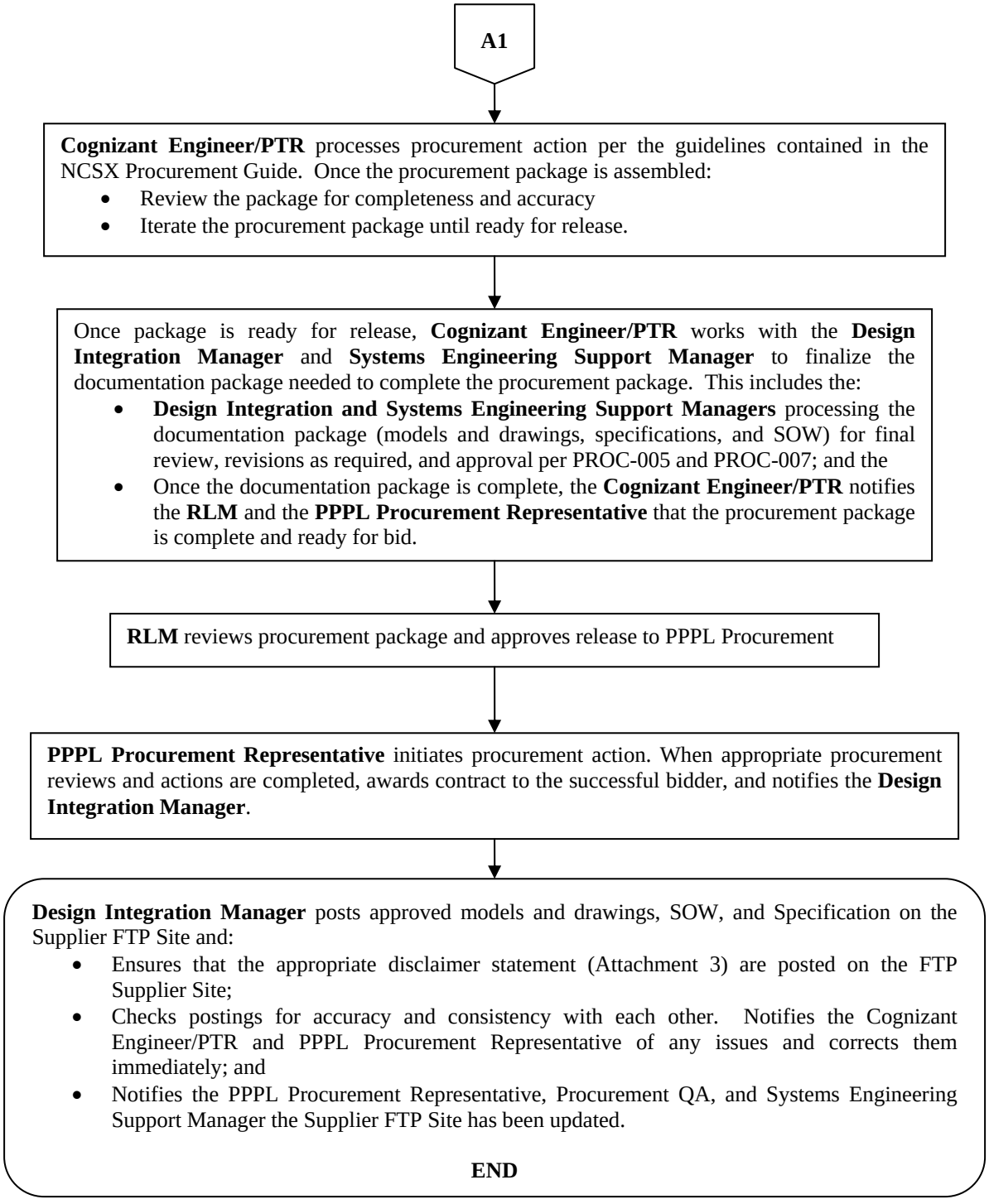
Referenced Documents

NCTX-PLAN-CMP	NCSX Configuration Management Plan
NCSX-PLAN-DMP	NCSX Date Management Plan
NCSX-PLAN-DOC	NCSX Document and Records Plan
NCSX-PROC-002	NCSX Configuration Control
NCSX-PROC-009	NCSX Requests for Deviation (RFD)
NCSX-GUID-PROCURE	NCSX Procurement Guide
PPPL Engineering Procedure 010	Control of Drawings, Software, and Firmware
PPPL Engineering Procedure 032	Work Planning
PPPL Engineering Procedure 033	Design Verification

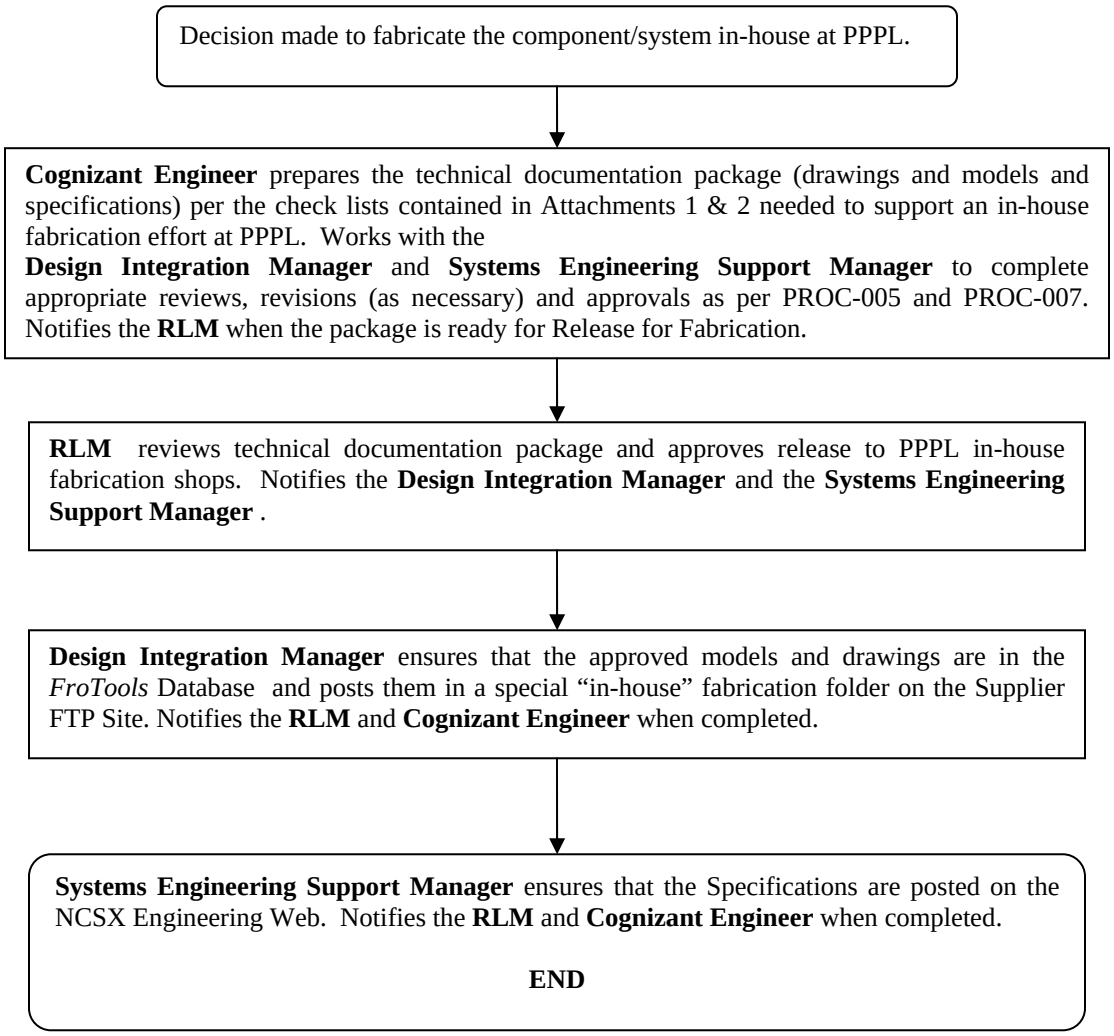
Procedure

A. Development of Fabrication-Related Information (External Procurement)

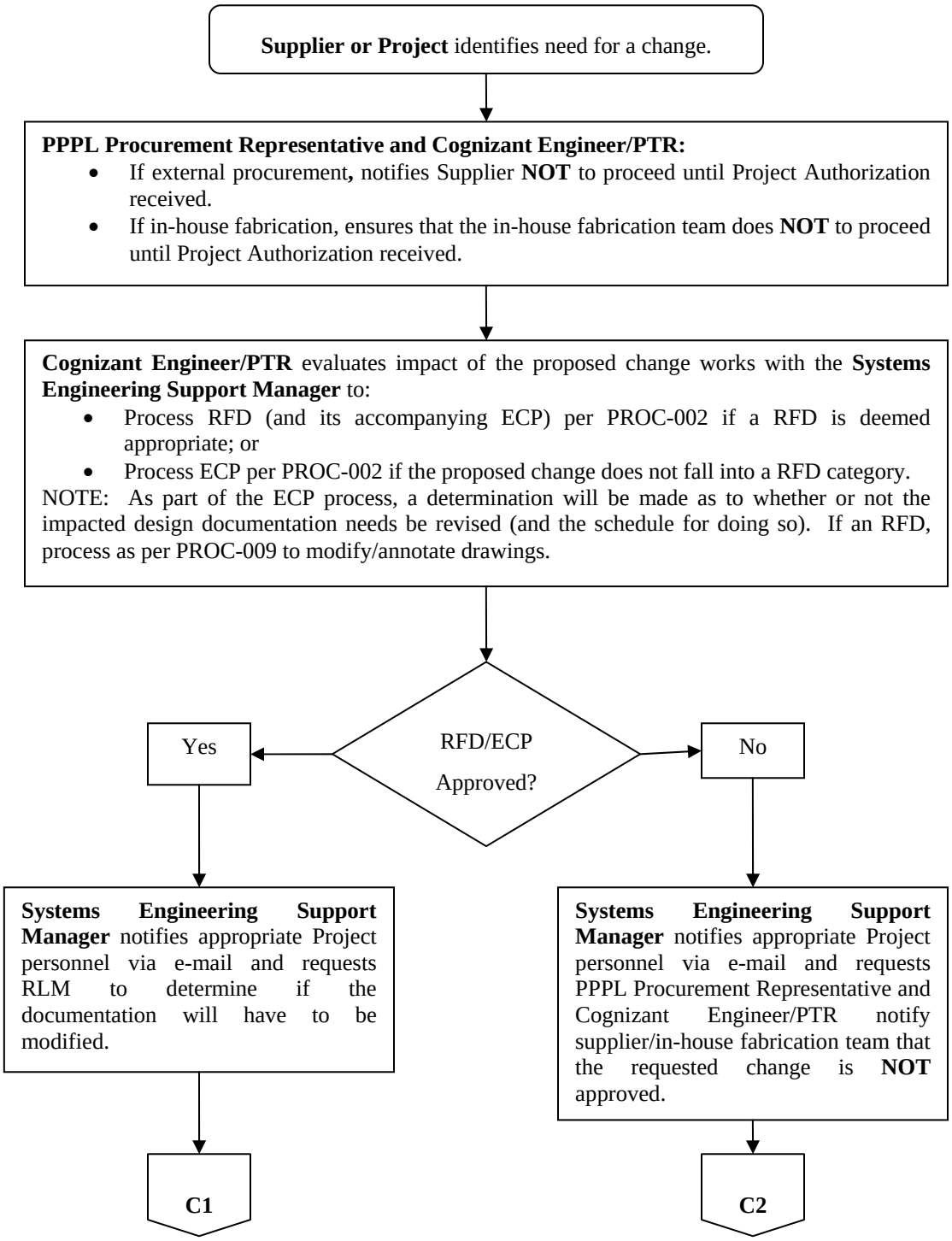


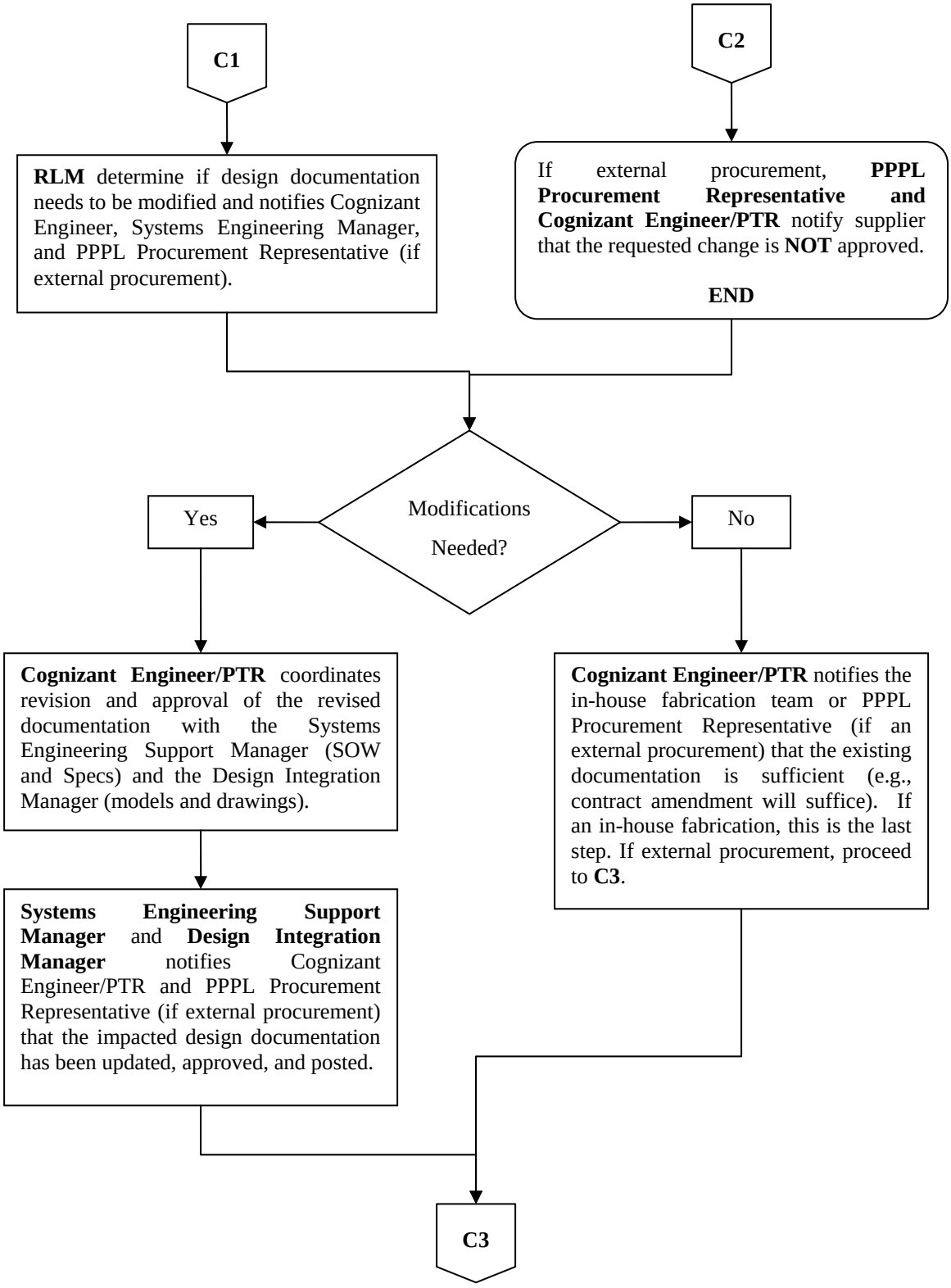

A1
Cognizant Engineer/PTR processes procurement action per the guidelines contained in the NCSX Procurement Guide. Once the procurement package is assembled:
Review the package for completeness and accuracy
Iterate the procurement package until ready for release.
Once package is ready for release, Cognizant Engineer/PTR works with the Design Integration Manager and Systems Engineering Support Manager to finalize the documentation package needed to complete the procurement package. This includes the:
Design Integration and Systems Engineering Support Managers processing the documentation package (models and drawings, specifications, and SOW) for final review, revisions as required, and approval per PROC-005 and PROC-007; and the
Once the documentation package is complete, the Cognizant Engineer/PTR notifies the RLM and the PPPL Procurement Representative that the procurement package is complete and ready for bid.
RLM reviews procurement package and approves release to PPPL Procurement
PPPL Procurement Representative initiates procurement action. When appropriate procurement reviews and actions are completed, awards contract to the successful bidder, and notifies the Design Integration Manager.
Design Integration Manager posts approved models and drawings, SOW, and Specification on the Supplier FTP Site and:
Ensures that the appropriate disclaimer statement (Attachment 3) are posted on the FTP Supplier Site;
Checks postings for accuracy and consistency with each other. Notifies the Cognizant Engineer/PTR and PPPL Procurement Representative of any issues and corrects them immediately; and
Notifies the PPPL Procurement Representative, Procurement QA, and Systems Engineering Support Manager the Supplier FTP Site has been updated.
END

B. Initial Development/Revision of In-House Fabrication -Related Documentation



C. Processing Changes to Subcontract/Purchase Order or In-House Fabrication Information




C1
C2
RLM determine if design documentation needs to be modified and notifies Cognizant Engineer, Systems Engineering Manager, and PPPL Procurement Representative (if external procurement).
If external procurement, PPPL Procurement Representative and Cognizant Engineer/PTR notify supplier that the requested change is NOT approved.
END
Modifications Needed?
Yes
No
Cognizant Engineer/PTR coordinates revision and approval of the revised documentation with the Systems Engineering Support Manager (SOW and Specs) and the Design Integration Manager (models and drawings).
Cognizant Engineer/PTR notifies the in-house fabrication team or PPPL Procurement Representative (if an external procurement) that the existing documentation is sufficient (e.g., contract amendment will suffice). If an in-house fabrication, this is the last step. If external procurement, proceed to C3.
Systems Engineering Support Manager and Design Integration Manager notifies Cognizant Engineer/PTR and PPPL Procurement Representative (if external procurement) that the impacted design documentation has been updated, approved, and posted.
C3

C3

If an external procurement, **PPPL Procurement Representative** modifies subcontract or purchase order as appropriate (using the latest approved versions of the SOW, Spec, and models and drawings) and:

- Reviews changes with the Cognizant Engineer/PTR before forwarding to the Supplier;
- Negotiates changes with the Supplier as appropriate; and
- Notifies the Cognizant Engineer/PTR, Design Integration Manager, Systems Engineering Support Manager, and Procurement QA Representative of any necessary modifications due to negotiations.

Cognizant Engineer/PTR, Design Integration Manager, and **Systems Engineering Support Manager**, if necessary, revises subcontract or purchase order documents to reflect the results of supplier negotiations and processes for final approval and notifies the PPPL Procurement Representative when the documents are revised and approved.

Design Integration Manager:

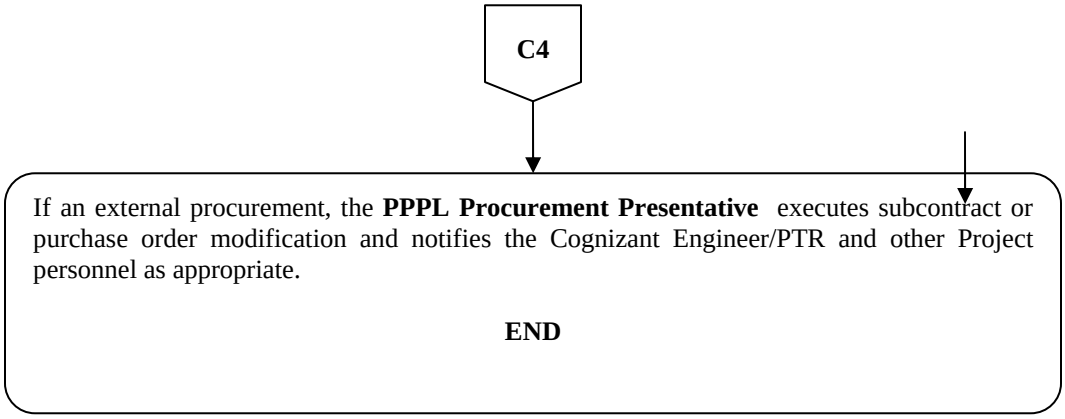
- In an external procurement, posts updated documentation (models and drawings, SOW, and Spec) the Supplier FTP Site and notifies the Cognizant Engineer/PTR and PPPL Procurement Representative.
- If an in-house fabrication, informs the Cognizant Engineer/PTR that the drawings are available on the *FroTools* database.

Systems Engineering Support Manager posts updated documents (SOW/Spec) on the NCSX Engineering Web page

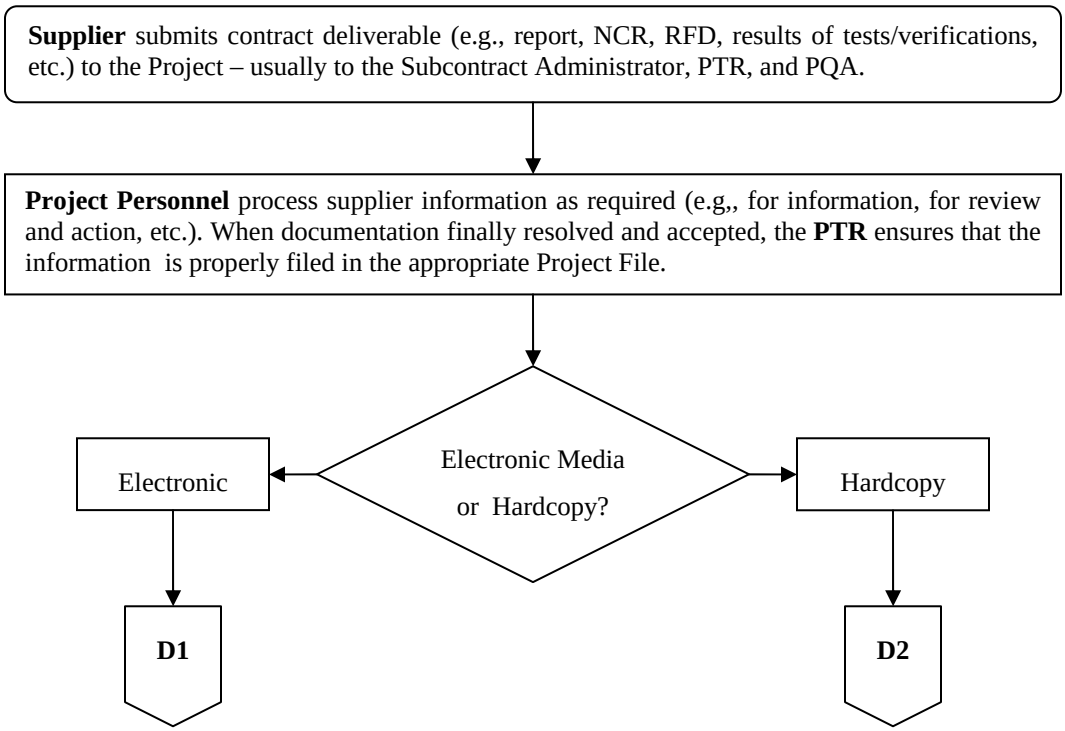
Cognizant Engineer/PTR checks postings for accuracy and consistency:

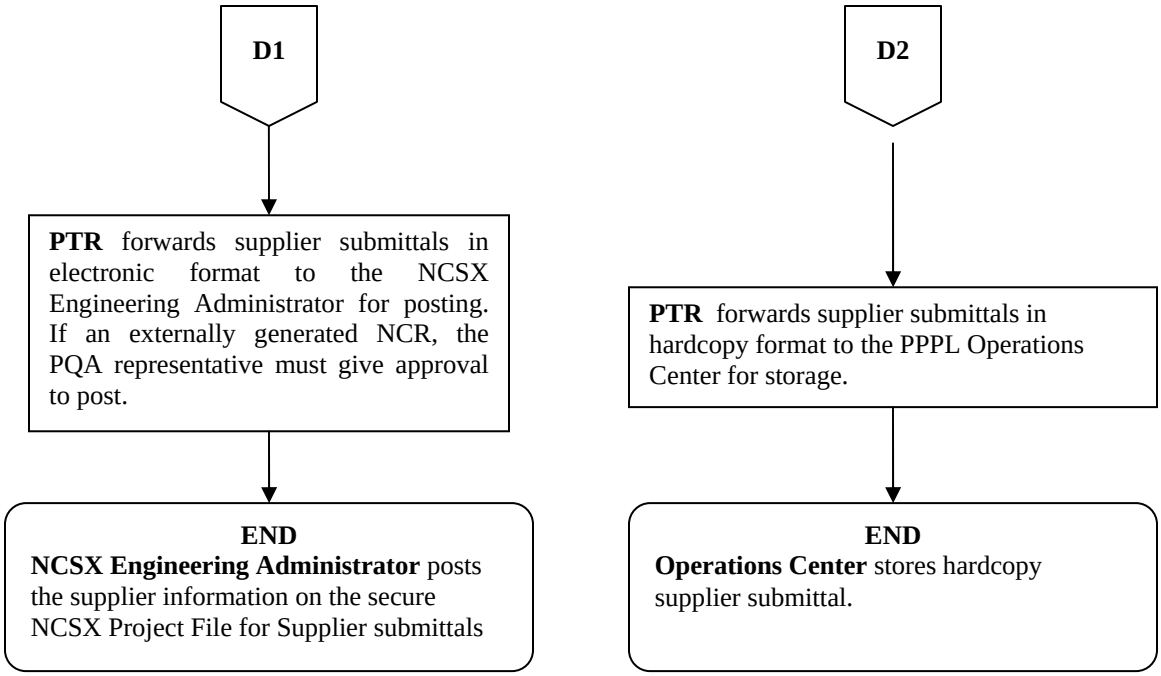
- If not correct, notifies the Design Integration Manager and Systems Engineering Support Manager of the inconsistencies and works with them to correct them immediately.
- If correct, or when corrected, and an external procurement, notifies the PPPL Procurement Representative, Procurement QA Representative, Design Integration Manager, and Systems Engineering Support Manager that the postings are correct and that the amendment to contract or purchase order may be processed. If an in-house fabrication, notifies the in-house fabrication team where the updated documents may be found.

C4



D. Receipt and Storage of Supplier Submittals





Attachments

1 – Procurement/In-Housed Fabrication Package Check List

2 – Technical and Administrative Documentation Needed for a Procurement Package

3 – Storage of Supplier Information

4 - Disclaimer Statements

Attachment 1

Procurement/In-House Fabrication Package Checklist

The following checklist can be utilized to ensure that the necessary pre-requisite administrative and technical procurement documentation is completed.

Pre-Requisite Documentation	Completed? (Yes or No)	Comments
FDR Report finalized and **ALL** procurement and fabrication - related CHITs resolved?		
Approved SOW (Procurement only) available and ready to be posted?		
Approved Specification available and ready to be posted?		
Approved and properly annotated drawing package available and ready to be posted?		
Pre-requisite supplier/in-house fabrication deliverables received and approved?		
Funded and approved requisition for Procurement action (including any JCNP or other supporting documentation) available?		
Other?		

Attachment 2

Documentation Needed for a Procurement Package

In addition to ensuring that the proper level of design review (e.g. Final Design Review, etc.) has been completed and that all procurement-related CHITs (i.e., those that are needed to permit issuance of a RFQ or Release for Fabrication) are satisfactorily resolved, the following administrative and technical documentation is required to complete the procurement package:

- **Administrative documentation required**:

  a. Statement of Work (SOW) prepared per ENG-006 and NCSX format requirements and approved and posted. *(Note: for simple fabrication contracts, the Cognizant Engineer/PTR, in consultation with the PPPL Procurement Representative, may decide that a requisition and drawing is sufficient.)*
  b. Requisition prepared and approved.

- **Technical documentation required**:

  - Specification (Product Spec/CSPEC) prepared per ENG-006 and NCSX format requirements. Specifications must be approved and posted. *(Note: for simple fabrication contracts, the Cognizant Engineer/PTR, in consultation with the PPPL Procurement Representative, may decide that a requisition and drawing is sufficient.)*
  - Drawing(s) developed, checked, and approved and posted per the PPPL Drawing Standards and the NCSX Pro/INTRALINK Users Guide at the appropriate level for *RFQ* (proposal stage) or *Release for Fabrication* (authorization to start fabrication).

- **Other documentation that may be required:**

  - Any pre-requisite suppler deliverables received and approved ;
  - Funded and approved requisition (including any JNCP or other supporting documentation) available; and
  - Any other documentation deemed necessary by PPPL Procurement to support this procurement effort.

  NOTE: Guidelines for NCSX SOWs and Specifications are posted on the NCSX Engineering Web page:

  http://www.pppl.gov/me/NCSX_Engineering/

Attachment 3

Storage of Supplier Information

The NCSX Procurement Technical Representative is solely responsible for ensuring that the proper Supplier submittals are dispositioned and stored in the proper NCSX Project File System. Since the supplier information may be provided in either hardcopy or electronic media, it is imperative that the PTR follow the procedure outlined in Section D of this procedure to ensure that all required supplier submittals and important correspondence is properly filed in the NCSX Project File System. For hardcopy format, the PPPL Operations Center is the proper final storage site and for electronic media, the secure electronic site titled, "NCSX-Secure."

For NCRs generated by suppliers, the Project will follow the general guidelines contained in PPPL procedure QA-005 ("**Control of Nonconformances**"). The PTR should forward dispositioned supplier generated NCR's to the PQA representative to verify completeness and accuracy. On satisfactory review, PQA will forward the NCR to Procurement for transmittal to the supplier and to the NCSX Engineering Administrator for posting on the NCSX Engineering Web.

SUPPLIER FTP SERVER VERSION:

DISCLAIMER

Unless specifically incorporated by reference in a subcontract or purchase order issued by the Procurement Division of Princeton Plasma Physics Laboratory (PPPL), the files available on this ftp server are provided for information purposes only, and shall not be used for fabrication or otherwise employed in subcontract performance.

NCSX MANUFACTURING WEB PAGE VERSION:

DISCLAIMER

Unless specifically incorporated by reference in a subcontract or purchase order issued by the Procurement Division of Princeton Plasma Physics Laboratory (PPPL), the files available on this site are provided for information purposes only, and shall not be used for fabrication or otherwise employed in subcontract performance.