

<b>PPPL</b>	<b>PRINCETON PLASMA PHYSICS LABORATORY</b>	<b>PROCEDURE</b>	<b>No. MC-013, Rev 1 page 1 of 5</b>
	<b>Subject:</b>  <b>Export Control</b>	<b>Effective Date:</b> February 18, 2011	<b>Initiated by:</b>  Deputy Head, ES&H/Security
<b>Supersedes:</b> June 29, 2009		<b>Approved:</b>  Director	

## **1.0 Applicability**

This procedure is applicable to all PPPL employees, subcontractors, on-site collaborators, visitors, and students whose work pertains to any activity that involves a foreign country or foreign person in the United States.

## **2.0 Introduction**

Laboratory policy regarding export controls is articulated in Policy P-101, Export Control.

An export is the actual shipment or transmission of an item(s) subject to the EAR, ITAR, or OFAC regulations out of the United States, or the release of technology or software subject to these regulations to a Foreign Person in the United States. The latter are known as “deemed exports”.

All shipments of tangible items out of the United States are subject to an export control review by the Export Control Office. Deemed exports are also subject to review. Exports made contrary to US export laws and regulations are not permitted.

The transmission, transfer, or other release of non-tangible item(s) by written, verbal, electronic, or visual means may be export controlled if the item does not meet the requirements of the Fundamental Research exclusion of the EAR and ITAR. While Princeton University’s openness in research policy creates an atmosphere where most of PPPL’s research meets the fundamental research requirements, there may be instances when the fundamental research exclusion is lost due to project-specific conditions or controls.

An export control decision tree has been created on the PPPL Export Control web page (<http://material-control.pppl.gov/ECWeb/EXPORT%20CONTROL.htm>) to assist employees in determining applicable export control obligations under the EAR and ITAR regulations. A flow chart showing the decision tree is included as Attachment 1. Screening for compliance with OFAC regulations is performed by the Export Control Office.

**3.0 Reference Documents**

PPPL Policy P-101, *Export Control*  
 15 CFR 700-799, *Export Administration Regulations (EAR)*  
 22 CFR 120-130, *International Traffic in Arms Regulations (ITAR)*  
 31 CFR 500-599, *Office of Foreign Assets Control (OFAC)*  
 PPPL Procedure MC-005, *Shipment of Equipment/Material to Offsite Location*  
 U.S. Department of Commerce Export Licenses for ITER-Related Technology Exports

**4.0 Definitions**

Deemed Export	The release of technology or software, or the use of item(s) subject to the EAR or ITAR, to a foreign national in the United States. This release is deemed to be an export to the home country or countries of the foreign national. This rule does not apply to persons lawfully admitted for permanent residence in the United States, or persons who are protected individuals under the Immigration and Naturalization Act.
Empowered Official	U.S. person who: (1) Is directly employed by the applicant or a subsidiary in a position having authority for policy or management within the applicant organization; and (2) Is legally empowered in writing by the applicant to sign license applications or other requests for approval on behalf of the applicant; and (3) Understands the provisions and requirements of the various export control statutes and regulations, and the criminal liability, civil liability and administrative penalties for violating the Arms Export Control Act and the International Traffic in Arms Regulations; and (4) Has the independent authority to: (i) Enquire into any aspect of a proposed export or temporary import by the applicant, and (ii) Verify the legality of the transaction and the accuracy of the information to be submitted; and (iii) Refuse to sign any license application or other request for approval without prejudice or other adverse recourse. (22 CFR 120.25)
End Use	The ultimate purpose for which the item was exported.
End User	The person abroad that receives and ultimately uses the exported or re-exported item(s).
Foreign Person	A foreign person is an individual who is not a United States citizen, a permanent resident alien of the United States, or a protected individual as defined under the Immigration and Naturalization Act.
Fundamental Research	Basic and applied research in science and engineering, where the resulting information is ordinarily published and shared broadly within the scientific community. Fundamental Research can be distinguished from "proprietary research" and from industrial development, design, production, and product utilizations, the results of which ordinarily are restricted for proprietary reasons or for specific national security reasons. There must be no publication or dissemination restrictions, and any non disclosure or confidentiality agreements must not be central to the research and not affect the ability to publish the research results.

Item	Any commodity, technology, or software that is subject to the regulations of the EAR or ITAR.
Non-tangible Item	An item that can't be touched.
Loan/ Collaboration Coordinator	Employee responsible for preparing, maintaining and documenting PPPL loans and collaborations with other research organizations, both foreign and domestic.
Export Control Office	Office responsible for conducting export control reviews, providing guidance to employees, preparing and submitting export license applications and export control records in accordance with U.S. export laws and regulations.
Shipping Office	Office responsible for managing the off-site shipment of materials and equipment.
Requestor	The individual who initiates an export control action or inquiry.
Tangible Item	An item that has physical existence; is capable of being touched.
U.S. Person	A citizen of the United States, a lawful permanent resident alien of the U.S., a refugee or someone here as a protected political asylee or under amnesty. A U.S. person may also include organizations and entities such as universities or companies incorporated in the United States.

**5.0 Procedure**

**Responsibility**

**Action**

- |                  |   |
|------------------|---|
| <b>Requestor</b> | <ol style="list-style-type: none"> <li>1. Follows the PPPL Export Control Decision Tree or flow chart (Attachment 1) until a "STOP" page is reached.               <ol style="list-style-type: none"> <li>A. If the item is not export controlled, proceeds to Step 2.</li> <li>B. If the "Fundamental Research Checklist and Certifications Required" STOP page/box is reached, proceeds to Step 3.</li> <li>C. If the "ITER Technology" STOP page/box is reached, proceed to Step 4.</li> <li>D. If the "Export Control Review Required" STOP page/box is reached, proceeds to Step 5.</li> </ol> </li> <li>2. Your proposed export is not subject to export controls. You may proceed with the proposed export.</li> <li>3. Completes the Fundamental Research Checklist &amp; Certification Form (Attachment 2).               <ol style="list-style-type: none"> <li>A. If you answered "Yes" to any of the checklist questions your proposed export is not considered Fundamental Research and will require further review. Contact the Export Control Office for assistance.</li> <li>B. If you answered "No" to all the checklist questions, your proposed export is considered to be covered by the Fundamental Research exemption. Complete the Certification portion of the form.</li> </ol> </li> </ol> |
|------------------|---|

- a. Submit completed Fundamental Research Checklist & Certification Form to the Export Control Office (MS04).
- b. Upon receipt of signed Export Control Determination Form (Attachment 5) from the Export Control Office, you may proceed with the proposed activity.

C.

**Requestor**

4. If the technology is within the currently-licensed PPPL US ITER Project Scope, the applicable export license issued to PPPL from the US Dept of Commerce may be used for the shipment with the following requirements. A list of current ITER export licenses is available at [http://material-control.pppl.gov/ECWeb/PPPL\\_ITER\\_Export\\_Licenses.htm](http://material-control.pppl.gov/ECWeb/PPPL_ITER_Export_Licenses.htm).
  - A. A copy of the ITER Destination Statement & Export License Conditions (Attachment 6) must be attached to the shipment.
  - B. The shipment must be coordinated through the PPPL ITER Project Office.
  - C. The shipment may only be consigned to an authorized ITER Project recipient.

**If the technology is not within the currently-licensed PPPL US ITER Project Scope, proceed to Step 5.**
5. Completes the Export Control Review Request Form (Attachment 3).
  - A. Submit completed Export Control Review Form to the Export Control Office.
  - B. Upon receipt of signed Export Control Determination Form (Attachment 5) from the Export Control Office, proceeds with the proposed export in accordance with instructions on the Export Control Determination Form.
  - C. If off-site shipment is required, completes and submits a PPPL Shipping Order to the Shipping Office.

**PPPL Loan Coordinator**

6. If an international loan agreement is requested, obtains a copy of the Export Control Determination Form and appropriate documentation from the Export Control Office. Include copies of these documents with the loan agreement request for DOE review and approval.
7. If an export control review has not been completed, directs Requestor to the Export Control Office for completion of an export control review.

**Export Control Office**

8. Reviews Export Control Review Request Form for completeness and obtains additional information or clarification as necessary.
9. Researches the export licensing requirements applicable to the proposed export and completes the Export Control Review Checklist (Attachment 4).
10. Upon determination of export licensing requirements, completes and signs the Export Control Determination (Attachment 5).
11. Sends copy of completed Export Control Determination to Requestor.

12. Retains original Export Control Determination and associated export control review documentation in Export Control Office files.
  13. If proposed export is related to the ITER Project, sends a copy of Export Control Determination to PPPL ITER Project Office.
  14. Upon receipt of Fundamental Research Checklist & Certification Form from Requestor, reviews form for completeness, completes Export Control Determination Form, and sends copy to Requestor. Files original checklist and determination forms in Export Control Office files.
- PPPL Shipping Office**
15. Upon receipt of Shipping Order from Requestor, obtains a copy of the Export Control Determination and applicable documentation from the Export Control Office.
  16. Completes required export documentation for the requested shipment.
  17. Includes the ITER Destination Statement and Export License Riders and Conditions (Attachment 6) in all ITER-related shipments.

## **6.0 Records**

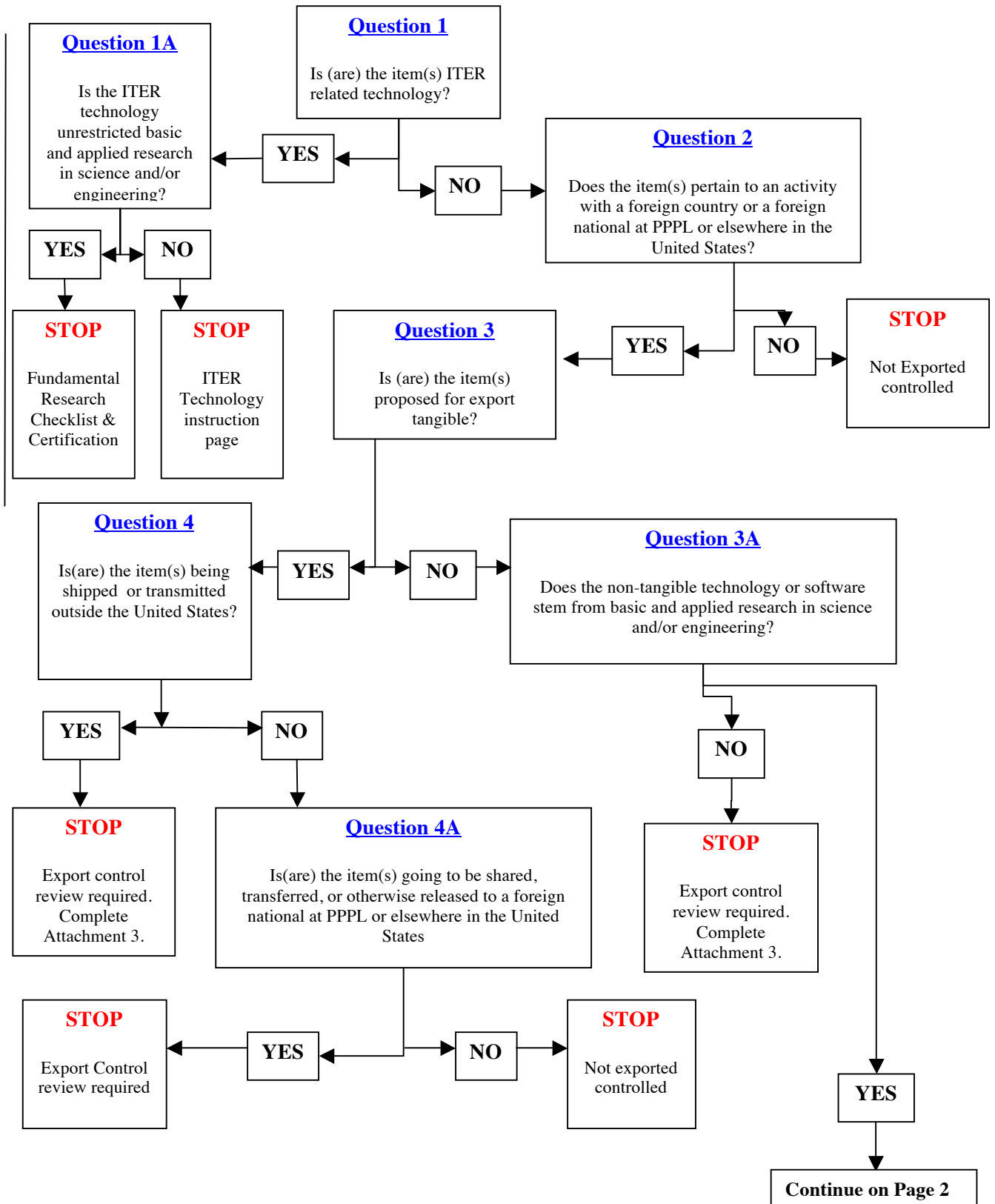
Original copies of all export, re-export or deemed export documentation are retained by the Export Control Office for a minimum of five (5) years from the date of the export, re-export or deemed export. Convenience copies are retained by the applicable project or program office for a minimum of five (5) years.

Original records of ITER transactions involving technology transfers under current Department of Commerce export licenses are retained by the PPPL ITER Project Office. Copies will be made available to the Export Control Office upon request.

## **Attachments**

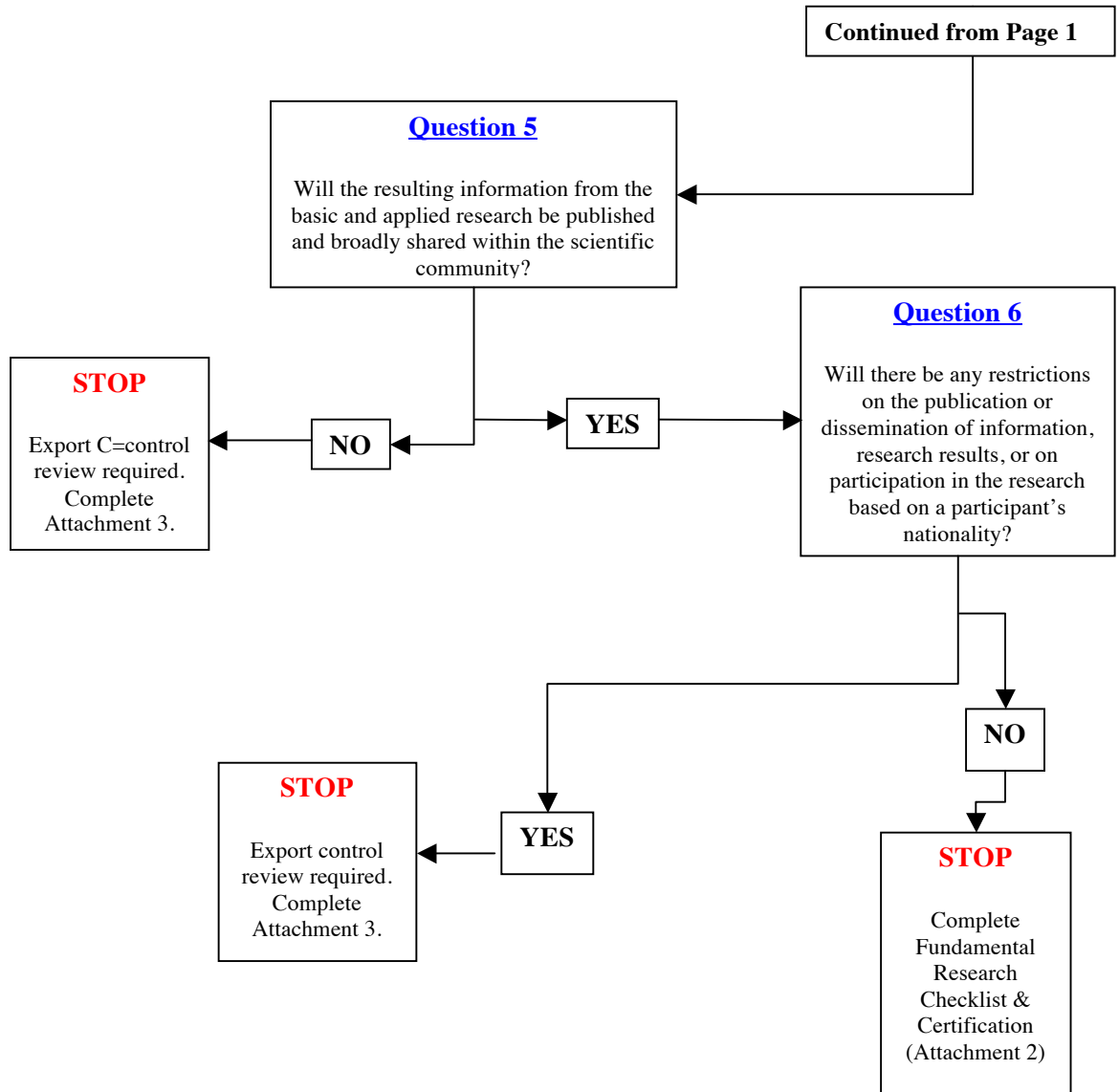
1. Export Control Decision Tree Flow Chart
2. Fundamental Research Checklist & Certification Form
3. Export Control Review Request Form
4. Export Control Review Checklist
5. Export Control Determination Form
6. ITER Destination Statement and Export License Riders and Conditions

Export Control Decision Tree Flow Chart



Export Control Decision Tree Flow Chart

Attachment 1



**Fundamental Research Checklist and Certification**

Use this check list when reviewing project documents to assure that they do not impose access, dissemination, or participation restrictions on the conduct, products, or results of the research that would eliminate the fundamental research exclusion.

Examples of documents subject to review are:

- requests for proposals or project solicitations,
- Collaboration agreements,
- Work For Others (WFO) agreements,
- Cooperative Research and Development Agreements (CRADA),
- Program Award Notices,
- Non-Disclosure Agreements (NDA’s) or Confidentiality Agreements, and
- Other documents related to research proposals, contracts, cooperative agreements, and other arrangements for sponsored research projects.

<b>PROJECT TITLE &amp; DESCRIPTION:</b>
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<b>Does this project scope or agreement:</b>	<b>YES</b>	<b>NO</b>
Contain information that is not or will not become publically available		
Contain information that is not basic and applied research in science and engineering?		
Contain information that is not going to be published and shared broadly within the scientific community?		
Contain any proprietary restrictions that cannot be removed in order that the resulting information may be freely published?		
Grant the sponsor a right of prepublication review for matters other than the inclusion of patent and/or proprietary sponsor information?		
Contain any “side deals” between the researcher and the sponsor, although not mentioned in the agreement, that would restrict publication or broadly sharing the results?		

<b>Does this project scope or agreement:</b>	<b>YES</b>	<b>NO</b>
Contain language referring to or mandating compliance with export laws or regulations?		
Restrict researcher participation (faculty, student, others) based on country of origin or citizenship?		
Require researcher participation in US-citizen-only meetings?		
Prohibit the hiring of non-US citizens to be involved in the proposed research?		
Provide that any part of the sponsoring, granting, or establishing documents may not be disclosed?		
Limit access to confidential data so centrally related to the research that a member of the research group who was not privy to the confidential data would be unable to participate fully in all intellectually significant portions of the project?		
Include encryption source code or software?		
Contain a Non-Disclosure or Confidentiality Agreement requested by the party supplying the information or materials for the research?		
Contain an End-Use/End-User statement or similar certification requested by the party supplying the information or materials for the research?		

If you have answered “**YES**” to any of these questions, your project or agreement will require further review by the PPPL Export Control Office. Please contact Jerry Siminoff (x3572, [jsiminoff@pppl.gov](mailto:jsiminoff@pppl.gov)) or Rob Sheneman (x3392, [rsheneman@pppl.gov](mailto:rsheneman@pppl.gov)).

If you have answered “**NO**” to all of these questions, complete the Fundamental Research Certification (page 3). Retain a copy in the project/program files and send the original Checklist & Certification Form to the Export Control Office.

**FUNDAMENTAL RESEARCH CERTIFICATION**

I \_\_\_\_\_ by my signature below certify that to the best of my knowledge all of the answers to the above questions are true.

The original copy of this document must be sent to the PPPL Export Control Office. Copies of this checklist and certification will be retained in the project, program or department files by:

Name: \_\_\_\_\_ Position:

\_\_\_\_\_

Telephone: \_\_\_\_\_ E-mail:

\_\_\_\_\_

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Signed

*(Principal Researcher)*

Title

Date

---

Concur

*(Project or Department Head)*

Title

Date

**Export Control Review Request Form**

*Please complete the following information in order that the PPPL Export Control Office may conduct an export control review to determine the possible export licensing requirements of your item. Please attach additional pages if necessary.*

**Requestor Name:** \_\_\_\_\_**Phone:** \_\_\_\_\_**E-Mail:** \_\_\_\_\_**Office Location:** \_\_\_\_\_

1. Is (are) the item(s) being exported from the United States?

Yes \_\_\_\_\_  
(go on to question #3)No \_\_\_\_\_  
(go to question #2)

2. If the item(s) is being transferred, shared, or otherwise released to a foreign national at PPPL or a foreign person else-where in the United States, what is that person's last known country of citizenship or permanent residence?

\_\_\_\_\_  
(go to question #4)

3. What is the item(s) ultimate destination country?

\_\_\_\_\_

4. What is the full name(s) of the ultimate End User(s)?

\_\_\_\_\_

5. What is the name and full address (**no postal codes**) of the ultimate end user's company, university, institution, etc?

\_\_\_\_\_

6. If there are any intermediate End User(s) or destinations, please list them here.

\_\_\_\_\_

7. Provide a detailed description of the item(s) you wish to export. Please including manufacturers name, model number, and value in US dollars. Also provide applicable specifications, drawings, websites, etc. that you believe may be helpful in identifying the item(s) for export classification. If the item is intangible technical information or software, please provide a full description of the project it relates to, and the tangible item(s) it applies to. This could include proposals, work scopes, etc. Please attach additional pages if necessary.

8.	Describe in appropriate detail the ultimate End Use of the item(s):
9.	Are there uses for the item(s) other than the stated End Use? <input type="checkbox"/> No <input type="checkbox"/> Yes (Please describe below)
10.	Are there possible military uses for this item? <input type="checkbox"/> No <input type="checkbox"/> Yes (Please describe below)
11.	Are there any possible uses for the item concerning nuclear explosives, nuclear fuel cycles, or unsafeguarded (per the IAEA) nuclear activities? <input type="checkbox"/> No <input type="checkbox"/> Yes (Please describe below)
12.	Are there any possible uses for the item(s) concerning missile production or technology? <input type="checkbox"/> No <input type="checkbox"/> Yes (Please describe below)
13.	Are there any possible uses for the item(s) concerning rocket or satellite systems or space related equipment or technology? <input type="checkbox"/> No <input type="checkbox"/> Yes (Please describe below)
14.	Are there any possible uses for the item(s) concerning chemical or biological weapons? <input type="checkbox"/> No <input type="checkbox"/> Yes (Please describe below)

If you have any questions or need assistance in completing this form, please contact the Export Control Office (x3572 or [jminoff@pppl.gov](mailto:jminoff@pppl.gov)). Please return the completed form to:  
Jerry Siminoff, Export Control Office, MS04

**Export Control Review Checklist****Attachment 4****Export Control Review Checklist****Requestor Name:** \_\_\_\_\_**Description of  
Item(s):****Destination Country:****Freight  
Forwarder(s):****Intermediate  
Consignee(s):****End User(s) Name:****Company:****Address:****Intended End Use:****Other Possible Uses:****Items Reviewed****ECCN****Schedule B #**

1.

2.

3.

4.

**RELATED TECHNOLOGY OR SOFTWARE CONCERN:**Yes  No **HIGH RISK REVIEW COMPLETE:**Yes  No **COPY ATTACHED:**Yes  No

**Export Control Review Checklist** **Attachment 4**

<p><b>GENERAL PROHIBITIONS REVIEWED:</b> (15 CFR 736.1)</p>	1 <input type="checkbox"/> Exports and Re-exports	6 <input type="checkbox"/> Embargo
	2 <input type="checkbox"/> U.S. Content Re-exports	7 <input type="checkbox"/> U.S. Person Proliferation Activity
	3 <input type="checkbox"/> Foreign-Produced Direct Product Re-exports.	8 <input type="checkbox"/> In transit
	4 <input type="checkbox"/> Denial Orders	9 <input type="checkbox"/> Orders, Terms, and Conditions
	5 <input type="checkbox"/> End-Use End-User	10 <input type="checkbox"/> Knowledge Violation to Occur

**RED FLAG INDICATORS**

Yes  No  Reluctance to offer information about the end use.

Yes  No  Item’s capabilities do not fit end users line of business.

Yes  No  Item is beyond destination country’s technical level.

Yes  No  End User has little or no traceable background.

Yes  No  End User is unfamiliar with item’s capabilities.

Yes  No  Routine installation, training, or maintenance is declined.

Yes  No  Delivery is requested other than end user’s address.

Yes  No  Delivery date is vague.

Yes  No  Requested shipping method or route is abnormal for destination.

Yes  No  Requested packaging and/or labeling is inconsistent with stated method of shipment or destination.

Yes  No  End user is evasive about item use, re-export, etc.

Yes  No  P.O. Box or inappropriate address used as final destination.

Yes  No  End user is related to or under the control of the military.

**END USER PROFILE SCREENING REVIEW:**  
(Includes any forwarders or intermediate consignees)  
(See attached *Visual Compliance* screening summary) Yes  No

**ENTITY SCREENING REVIEW:**  
(See attached *Visual Compliance* screening summary) Yes  No

**NUCLEAR SCREENING REVIEW:**  
(Review EAR 744.2) Yes  No  N/A

**MISSILE SCREENING REVIEW:**  
(Review EAR 744.3) Yes  No  N/A

**CHEMICAL & BIOLOGICAL WEAPONS REVIEW:**  
(Review EAR 744.4) Yes  No  N/A

**COMMENTS:**

<b>PPPL EXPORT CONTROL OFFICE</b>	
<p><b>DETERMINATION:</b> I have reviewed the applicable Export Administration Regulations(EAR)for the above listed item(s) and have determined, to the best of my knowledge, that:</p> <p><input type="checkbox"/> An export license under the Export Administration regulations is not required. They may be shipped under the NLR (No License Required) provisions of the regulations.</p> <p><input type="checkbox"/> Export license exception _____ may be used.</p> <p><input type="checkbox"/> An export license is required for this shipment.</p> <p><input type="checkbox"/> The item(s) are not subject to the EAR or any other U. S. Government department or agency</p>	
Name:	_____
Signature:	_____
Date:	_____

<b>PPPL EXPORT CONTROL OFFICE</b>	
Has the Export Control Review form been complete?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Has the export documentation been completed?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Packing List	Yes <input type="checkbox"/> No <input type="checkbox"/>
Commercial Invoice	Yes <input type="checkbox"/> No <input type="checkbox"/>
SED (EEI)	Yes <input type="checkbox"/> No <input type="checkbox"/>
Other: _____	Yes <input type="checkbox"/> No <input type="checkbox"/>
Is an Export Restriction notice included with the shipment?	Yes <input type="checkbox"/> No <input type="checkbox"/>
Name:	_____
Signature:	_____
Date:	_____

**Export Control Determination**

Requestor Name: \_\_\_\_\_

Description of  
Item(s)

I have reviewed the applicable U.S Export Regulations and have determined that:

- The item(s) are not subject to the EAR or any other US Government department or agency.  
*No further export control action is required. You may proceed with the transaction. If the item(s) is to be shipped offsite, please prepare and submit a shipping order to the PPPL Shipping Office.*
- An export license is not required. The item(s) may be classified under the NLR (No License Required) provisions of the export control regulations.  
*No further export control action is required. You may proceed with the transaction. If the item(s) is to be shipped offsite, please prepare and submit a shipping order to the PPPL Shipping Office.*
- The item(s) have been determined to be export controlled; however, in this case export license exception \_\_\_\_\_ may be used.  
*No further export control action is required. You may proceed with the transaction. If the item(s) is to be shipped offsite, please prepare and submit a shipping order to the PPPL Shipping Office.*
- An export license is required for this shipment.  
*Do not proceed until an export license application is submitted to and approved by the appropriate U.S. government agency. This may take several weeks. The Export Control Office may need to contact you for additional information during this process.*

Comments:

**PPPL Export Control Office:**

Name: \_\_\_\_\_

Signature: \_\_\_\_\_

Date: \_\_\_\_\_

## ITER Destination Statement and Export License Conditions

The following destination statement must appear on all bills of lading, airway bills and commercial invoices associated with this work.

### Destination Control Statement:

**It is understood and acknowledged that items and the associated technology identified in the scope Department of Commerce Licenses D409677, D421608, and D443329 cannot be re-exported, resold, or transferred outside the ITER organization, its duly ratified member nations and their technical representatives without prior authorization by the U.S. Government in accordance with the Department of Commerce regulations 15 CFR 730 - 774.**

All work associated with the ITER Project must comply with the following export license conditions.

### **Riders and Conditions:**

1. Not for use in missiles, space launch vehicle, unmanned air vehicles, research, development, production or any missile related end uses;

Authorization is for items controlled under EAR 99 only. Any further request for access to controlled items subject to the Export Administration Regulations (EAR) not authorized under this license would require the prior approval of the Department of Commerce's Bureau of Industry and Security (BIS); with the exception of the ITER organization, its duly ratified member nations and their technical representatives, no re-export, resale, or transfer of the Items listed on this license is authorized without prior U.S. Government approval;

To be used only for the stated end use – for use by the ITER International Organization for distribution between and among duly ratified member nations and their technical representatives. The technical information will be used to design and build a device to demonstrate the scientific and technological feasibility of fusion energy for peaceful purposes located in Cadarache, France. The ultimate objective is to develop commercial fusion energy plants.

USIPO will provide an annual paper report on progress and a presentation report to the Subgroup on Nuclear Export Coordination (SNEC) every two years, as stated in the license application

The validity period of this license is limited to ten (10) years from the date of issuance.

2. The items authorized for export are not to be used in any of the Sensitive Nuclear Activities described in Part 744.2 of the Export Administration Regulations.
3. Applicant must inform consignee of all license conditions.
4. No Military End-Users or Uses.