



Foreign Obligations Case Study

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Background

- On several occasions, we have been asked to participate in some discussion on tracking and reporting of nuclear materials
- Some of the discussions have included speaking with working staff in other countries



Export observations

- Variations in how export data is reported to NMMSS by U.S. industry



Simple case, #1

- Exporter statement
 - one fuel assembly #0001
 - 350 kgs EU / 15kgs U-235
 - No foreign obligations exported
- Importer view
 - One fuel assembly #0001
 - 350 kgs EU / 15 kgs U-235
 - No foreign obligations on material



Simple case, #2

- Exporter statement
 - One fuel assembly, #0002
 - 350 kgs EU / 15kgs U-235
 - 15 kgs U-235 Obligated to Australia (#31)
- Importer view
 - One fuel assembly, #0002
 - 350 kgs EU / 15 kgs U-235
 - 15 kgs U-235 Obligated to Australia (#31)



Simple case, #3

- Exporter statement
 - 3,500 kgs EU / 150 kgs U-235
 - 150 kgs U-235 Obligated to Australia (#31)
- Importer view
 - Fuel Assemblies, #0003 - #0012, each ??
 - 350 kgs EU / 15 kgs U-235
 - 15 kgs U-235 Obligated to Australia (#31)



Case, #4

- Exporter statement
 - 700 kgs EU / 31 kgs U-235
 - 16 kgs U-235 Obligated to Australia (#31)
 - 15 kgs U-235 no foreign obligations
 - 15 kgs U-235 “WR”
- Importer view
 - Fuel assembly #0301 ??
 - 350 kgs EU / 15.5 kgs U-235
 - 15.5 kgs U-235 Obligated to Australia (#31) ??
 - 15 kgs U-235 “WR” ??
 - Fuel assembly #0302 ??
 - 350 kgs EU / 15.5 kgs U-235
 - 0.5 kgs U-235 Obligated to Australia (#31) ??
 - 15 kgs U-235 no foreign obligations ??



Constraints on nuclear materials

- Terms and conditions in U.S. Agreement for Cooperation language,
- Possible additional constraints
 - Limits on quantity of uranium imported from a specific country or supplier
 - Requirement that uranium only be imported from country that has signed “Additional Protocol”



Observations

- 2003 switch from “CCN” to “Obligation Codes”
- Assistance of matching “CCN” information to “Obligation Codes”
- No tracking and reporting of “WR” once exported required



Observations, continued

- Knowledgeable facility staff seldom involved in communications
- Documenting foreign obligations contained in each fuel assemblies
 - Partially obligated fuel assembly
 - Partial Pu production
- Corrections to documents
- Terminology / communications



Follow on activities

- Answer follow-on questions
- Share with NMMSS Users what we observed