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**CoC Holder Perspective**

**Graded Approach for Regulating Spent Fuel Storage**

**NRC Regulatory Information Conference**

**Don Shaw**  
Licensing Manager – TN Americas LLC  
March 16, 2017

TN Americas LLC

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**Topics**

1. A Key Reality to Keep in Mind
2. How Big is the Elephant?
3. Having the Right Tech Specs Could have Saved Much Time / Effort / Money – an Example
4. Graded-Approach - Great Going Forward; What about Systems Already Loaded?
5. Examples of Other Advantages of this Graded-Approach Initiative
6. Progress of the TN Pilot

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### 1. A Key Reality to Keep in Mind

▶ **Part 50 licenses and Part 72 site specific licenses**

- ◆ Current license conditions and technical specifications (TS) supersede all previous versions.

▶ **Part 72 certificate of compliance (CoC) holders and general licensees (GLs)**

- ◆ ALL amendments are in effect and are NOT superseded by the next amendment.
  - GLs loading to different amendments must comply with the CoC conditions and TS for each amendment.
  - GLs can 'upgrade' to a newer amendment but they must demonstrate and document full compliance.

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### 2. How Big is the Elephant?

▶ **CoC 1004 Amendment 14 (to be effective 4/25/17)**

- ◆ CoC - four pages
- ◆ TS - 314 pages

▶ **Each amendment is independent**

▶ **TN also holds several other CoCs**

▶ **Total TN information to account for is ~ 2,500 pages**

▶ **Similarities, but not same; still a great deal of information**

▶ **Other CoC holders likely have same situation**

▶ **If the percent reduction is notable, applying across the board may be advisable**

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### 3.a Having the Right Tech Spec Could have Saved Much Time / Effort / Money - an Example

▶ **Late 90's**

- ◆ US nuclear units generally all operating
- ◆ Part 50 renewal being pioneered by Calvert Cliffs/Oconee
- ◆ Other waiting in the wings - 40 more years of operating (maybe more)

▶ **A Part 72 TS to return a dropped cask to the spent fuel pool (SFP) seemed logical and prudent**

▶ **That TS, and therefore that requirement that a SFP exists, is in all thirteen CoC 1004 amendments**

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**3.b Having the Right Tech Spec Could have Saved Much Time / Effort / Money – an Example**

- ▶ **Twenty years later**
  - ◆ Certain Part 50 units shutting down, dismantling
  - ◆ Can't dismantle the SFP because of this TS
- ▶ **Long story short:**
  - ◆ All amendments to be revised to remove this
  - ◆ All 18 GLs must comply, implement, and re-register (only one needed it)
  - ◆ Began in mid-2015; still not effective

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**3.c Having the Right Tech Spec Could have Saved Much Time / Effort / Money – an Example**

**Regarding Graded Approach, was this TS really needed?**

- ◆ **After loading, the need to move cask/canister**
  - Extremely remote
- ◆ **Nevertheless, chances of dropping the cask**
  - Also extremely remote
- ◆ **Nevertheless, if dropped, likelihood of breach**
  - Per FSAR analysis, chance of confinement breach is zero
- ◆ **Nevertheless, consequences if breached**
  - Realistically none
- ◆ **Seems obvious this TS was NOT needed**

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**4. Graded-Approach - Great Going Forward; What about Systems Already Loaded?**

- ▶ **CoC 1004 Amendment 16 for TN Graded Approach**
- ▶ **Systems loaded to 16 and after can take advantage**
- ▶ **For systems loaded to previous amendments, options to adopt graded approach:**
  - GLs demonstrate full compliance and re-register
  - Exemption – likely not feasible
  - Amendment revision(s) – all GLs affected
  - "Leapfrog" amendment (based solely on a 'distant past' amendment)
- ▶ **If we do graded approach well, these efforts will be minimized and much more cost-effective.**

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### 5. Examples of Other Advantages of this Graded Approach Initiative

- ▶ **TS incorporated by reference from the UFSAR**
  - ◆ Example – neutron absorber testing and acceptance
  - ◆ Part 72 UFSARs - challenge for GLs and CoC holders
  - ◆ For graded approach, opportunity for no incorporation-by-reference
- ▶ **Custom versus Standardized TS format, sometimes a mix for the amendments of the same CoC/GL**
  - ◆ Standardized format easier to use / preferred
  - ◆ At current level of detail, cost effective to change?
  - ◆ At reduced level of detail, certainly more cost effective

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### 6.a Progress of the TN Pilot

- Workshop 1 – 2016-08-08  
 Workshop 2 – 2016-10-28  
 Workshop 3 – 2016-11-21  
 Workshop 4 – 2017-03-24 (planned)
- Workshops Involved:
- ◆ Much energy, much interaction, much interest; lead by NRC
  - ◆ PRM criteria versus suggested NRC table
  - ◆ Risk considerations
    - High/Med/Low probability of occurrence
    - High/Med/Low consequence
  - ◆ Important-To-Safety SSC Classifications (A, B, C, NITS)

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### 6.b Progress of the TN Pilot

- Workshops Discussion (continued):
- ◆ Several actual TS examples presented; mixed reactions
  - ◆ My Workshop 1 opening statement - Agreement on the ground rules for format and for content must be established before the pilot application can proceed in earnest
  - ◆ TN understands that we are one of multiple key entities to make this happen
  - ◆ March 24<sup>th</sup> is our opportunity to get this done

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### 6.c Progress of the TN Pilot

- ▶ TN pilot commencement is dependent on the agreed-to decision criteria
- ▶ TN will examine every single CoC condition and TS item
- ▶ TN current planned submittal date is June 30, 2017

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### Conclusions

- ▶ Right-sizing the CoC and TS is worthwhile for multiple reasons
- ▶ If the percent reduction is notable, this could be applied 'across the board'
- ▶ TN and others are key to this initiative progressing
- ▶ TN pilot will commence once decision criteria are agreed to

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