## WM2017 Conference Panel Report

## PANEL SESSION 80: Challenges in Package Certification – International Perspectives

Co-Chairs: James Shuler, US DOE Anna Wikmark, Swedish Nuclear Fuel and Waste Management, Co. (Sweden)

Panel Reporter: Paul Jones, Ameriphysics, LLC

## Panelists:

- 1. Jack Edlow, President, Edlow International
- 2. Jamie Adam, Senior VP, Site and Transportation Services, NAC International
- 3. Jayant Bondre, TN Americas LLC. (AREVA TN)
- 4. John Mulkern, Secretary General. World Nuclear Transport Institute (United Kingdom)

About 60 people attended this panel session which focused on the challenges in package certification worldwide. The session started with the co-chairs and the four panelists introducing themselves. In addition, Jim Shuler added that there were over 200 years of experience between the panelists and that the format of the panel would focus on 3 categories of challenges to the certification process; Technical Challenges, Political Challenges, and Bureaucratic Challenges. Jim Shuler began the discussion with an example from the US Department of Energy Perspective. The speaker content is list below and includes the questions and answers in each of their sections.

## Summary of Presentations (including Q&A)

**Jack Edlow** discussed that a great way to help the less knowledgeable authority is to use the IAEA. We have a lot of experience in shipping and can use the IAEA to help the less knowledgeable authorities in approval of certifications. **Mr. Edlow** gave the example of even after over a dozen reviews by other countries and iron cask (castor cask), required a lot of additional review by a potential heavily regulated country. This review can take years and should be more readily accepted between authorities. Sometimes bureaucracy occurs because in some 3rd world countries (like in Africa) because they don't want to make a decision because they are not knowledgeable. This is a case where using the IAEA can help.

Jamie Adam gave a Political example that some of the well approved casks have been built and they may not be used in some of the countries because the authority did not watch the construction, however you can't use them anymore and you must build a new one, so the authority can watch. He also gave a Technical Challenge example; that it is very difficult and time consuming when a content change is needed because a material can go from a liquid to a solid from freezing. In one of his examples they got the content change however it was with a very lengthy process. He also gave a Political Challenge that for a return of material from one authority to another it was held up for 4 years. As soon as an individual retired, it was approved one month later.

**Jayant Bondre** discussed how expensive the validation and recertification process of a package is in a foreign country. The process needs to be simplified. He also gave a brief discussion on design of a transporter overpack. He gave a Political Challenge example of in Taiwan, they are running out of storage space and the political climate is holding up the go ahead for approval.

**John Mulkern** discussed the biggest Challenge is that we need to keep adding younger (newblood) engineers in the industry because we cannot run this industry with what we have now. He included in a question from the audience the political example that no matter how low the activity, Plutonium cannot be transported by air commercially. This is merely political since there is no small amount permissible.