



Contribution ID: 168

Type: **Wedge Participant**

Japanese SSAC contribution to the International Target Values (ITVs)

ITV is now widely implemented for safeguards purposes not only for the verification view but also for the facility quality control. Japan has participated in the discussions since the first version (ITV1993) through that of the 2010. With various kinds of nuclear facilities (enrichment, fabrication, reactor, reprocessing, MOX fuel fabrication, etc.) and with the condition of being subject to full scope safeguards by both IAEA and the SSAC (JSGO/NMCC), a large amount of source data for the ITV can be obtained from the inspection activities in Japan. There are three main features of SSAC contributions:

- 1\ Both for Uranium and for Plutonium facilities, many measurements are included for bulk, NDA and DA techniques. This includes statistical evaluation by IAEA and SSAC independently evaluating the performance of each measurement technique comparable to those considered in the ITV.
- 2\ Latest measurement techniques are always to be applied, including LSD spike for IDMS first to reprocessing plant, then to MOX facilities. Joint (IAEA and SSAC) on-site laboratory was set up at the large scale reprocessing (RRP), which is the first trial of large scale Pu handling plant under the full scope IAEA safeguards. Latest neutron counting techniques are implemented for both U and Pu measurement to enhance the efficient inspection activity, and the obtained results have been presented at the review meeting of ITV.
- 3\ There are regular meetings among NMCC, operators, JSGO and even IAEA, where result of paired comparison (IAEA/Operator, SSAC/Operator, IAEA/SSAC—so-called “three laboratory evaluation”) and the results obtained from Japanese Round robin analysis for U and Pu by DA are also used. The results are based on real process materials and the results will contribute to establish the updated ITV values.

The situation mentioned above illustrates the Japanese contribution to the updating of ITV to the version of 2020.

Which “Key Question” does your Abstract address?

SGI1.1

Topics

SGI1

Which alternative “Key Question” does your Abstract address? (if any)

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