

WIR SCHAFFEN WISSEN – HEUTE FÜR MORGEN



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# Fusion work: Status and plans

JEFF meeting, Fusion working group, April 26, 2017, OECD Headquarters, Paris, France

- PPPT Task specifications 2017
- Status and plans

1. Integrate the latest reported cross section improvements from NRG into the latest TENDL library for the isotopes and activation reactions of interest for fusion applications. Such integration will be performed using the set of new TALYS parameters for the adjustments of such cross sections, after verification of the physics consistency for the competing channels.
2. V&V analyses for the new TENDL library will be performed in collaboration with CCFE (Task WPSAE-2.28.1 running in the SAE project) on activation cross-section data relevant for fusion inventory calculations.
3. As part of the TENDL release of general-purpose ENDF-6 files, a dedicated activation data library will be produced, following the EAF format standards

1. Integrate the latest reported cross section improvements from NRG into the latest TENDL library for the isotopes and activation reactions of interest for fusion applications. Such integration will be performed using the set of new TALYS parameters for the adjustments of such cross sections, after verification of the physics consistency for the competing channels.
  - The latest TALYS input files from NRG are being tested (about 70% done),
  - They are integrated into the T6 system for file production,
  - If everything goes as planned, TENDL-2017 will include these updates

2. V&V analyses for the new TENDL library will be performed in collaboration with CCFE (Task WPSAE-2.28.1 running in the SAE project) on activation cross-section data relevant for fusion inventory calculations.
  - This is to be discussed with CCFE,
  - We need to produce TENDL-2017 first,

3. As part of the TENDL release of general-purpose ENDF-6 files, a dedicated activation data library will be produced, following the EAF format standards
  - The current plan is to release TENDL-2017 by the end of this year,
  - Including full ENDF-6 files and activation files.

# Conclusions

- A lot of efforts are being made now at PSI, IAEA and CCFE to produce TENDL-2017,
- NRG latest files will be included,
- Activation files will also be produced,