#### Welcome to the

# Open PSA 7<sup>th</sup> Workshop

Dec. 10<sup>th</sup> & 11<sup>th</sup> 2012

Organized & Sponsored



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## The Open PSA Initiative

**Statement of Purpose:** We hope to provide an open and transparent public forum to disseminate information, independently review new ideas, and spread the word. We want to emphasize an openness which will lead to methods and software with higher quality, lead to better understanding of PSA models, encourage peer review, and allow the transportability of models and methods.

- Workshop Goesgen, 2007, (KKG)
- Working Group Paris, 2007, (EdF)
- Hearing ACRS/NRC, Washington DC, 2007
- Workshop Washington DC, 2007, (EPRI)
- Workshop Osaka, 2007, (NEL)
- Workshop Vienna, 2007, (IAEA)
- Workshop Madrid, 2008 (CSN)
- Workshop Paris, 2008, (Dassault Systèmes)





### Open PSA Model Exchange Format

### Validated it through an IMdR project ...





# Eventually...

The Open PSA project is more than ever of interest and importance, The Open PSA Model Exchange Format is more than ever needed, So back we are



# Agenda

#### **Monday**

09:00 Welcome address

10:00-12:00 Session 1

12:00-13:00 Lunch at Cafeteria EdF

13:30-15:00 Session 2

15:00-15:30 Coffee Break

15:30-19:00 Session Open PSA Model Exchange Format Standard

20:00 Diner at Pizzeria Mezza Luna

#### **Tuesday**

09:00-10:30 Session 3

10:30-11:00 Coffee Break

11:00-12:30 Session 4

12:30-14:00 Lunch at Cafeteria EdF

14:00-15:30 Invited Conference : Akira Yamaguchi (Osaka University)

15:30-16:00 Break

16:00-17:30 Wrap-Up and Future Actions

### **Talks**

- 1. Günter Becker (Risa, Germany): Requirements For A Post-Fukushima PSA Method
- 2. Cyrille Folleau (Satodev, France): Extensions and Improvements to Open PSA Model Exchange Format
- 3. Thomas Friedlhuber (EdF & Ecole Polytechnique, France): Andromeda: A new Open PSA Worbench
- 4. Joachim Herb (GRS, Germany): Tools and procedures at GRS to automatically compare and modify fault and event trees
- 5. Mohamed Hibti (EdF, France): Embedding Event Sequence Diagrams within the Open PSA Model Exchange Format
- **6. Enrique Meléndez-Asensio (CSN, Spain):** On the evolution of Dynamic PSA tools and methodology: applications of the Open PSA Model Exchange Format at CSN
- 7. Olivier Nusbaumer (KKL, Switzerland): Fault Tree Linking versus Event Tree Linking in PSA
- **8. John Obama (IMdR, France):** Contribution to a risk-informed assessment of the technical specifications of a nuclear power plant
- 9. Antoine Rauzy (Ecole Polytechnique, France): XFTA: An Open PSA calculation engine
- 10. Ashraf El-Shanawany (Imperial College, England): Incorporating Success Criteria Uncertainty into PSA
- 11. Zineb Simeu-Abazi (G-SCOP/CNRS, France): Dynamic fault trees with application to diagnosis of embedded systems
- **12. Johan Sörman (Relcon Scandpower, Sweden):** Developments of RiskSpectrum: what has been done in the past two years and what is forecasted
- 13. Yann Stempfel (KKL, Switzerland): Automation of the KKL PSA 'Results and Insights' Documentation
- **14. Yann Stempfel (KKL, Switzerland):** Automatic Implementation of the KKL Seismic PSA what we learned from this exercise for the development of new PSA Software
- **15. Tero Tyrväinen (VTT, Finland):** I&C modeling in FinPSA software.
- 16. Jirina Vitázková (SNUS, Slovakia): Risk measure Large Early Release Frequency (LERF) for Severe Nuclear Accidents

## **Tentative Program (Monday)**

Session 1: Monday 10:00-12:00

- Olivier Nusbaumer (KKL, Switzerland): Fault Tree Linking versus Event Tree Linking
- Ashraf El-Shanawany (Imperial College, England): Incorporating Success Criteria Uncertainty into PSA
- Yann Stempfel (KKL, Switzerland): Automatic Implementation of the KKL Seismic PSA what we learned from this exercise for the development of new PSA Software

Session 2: Monday 13:30-15:00

- Jirina Vitázková (SNUS, Slovakia): Risk measure Large Early Release Frequency (LERF) for Severe Nuclear Accidents
- Joachim Herb (GRS, Germany): Tools and procedures at GRS to automatically compare and modify fault and event trees
- Zineb Simeu-Abazi (G-SCOP/CNRS, France): Dynamic fault trees with application to diagnosis of embedded systems

Session Open PSA Model Exchange Format (OPSA MEF): Monday 15:30-19:00

- Antoine Rauzy (Ecole Polytechnique, France): Brief overview of the Format
- Enrique Meléndez-Asensio (CSN, Spain): On the evolution of Dynamic PSA tools and methodology: applications of the Open PSA Model Exchange Format at CSN
- Thomas Friedlhuber (EdF & Ecole Polytechnique, France): Andromeda: A new Open PSA Worbench
- Cyrille Folleau (Satodev, France): Extensions and Improvements to the format
- Mohamed Hibti (EdF, France): Embedding Event Sequence Diagrams within the format

## **Tentative Program (Tuesday)**

#### Session 3 Tuesday 09:00-10:30

- Yann Stempfel (KKL, Switzerland): Automation of the KKL PSA 'Results and Insights'
  Documentation
- Tero Tyrväinen (VTT, Finland): I&C modeling in FinPSA software.
- John Obama (IMdR, France): Contribution to a risk-informed assessment of the technical specifications of a nuclear power plant

#### Session 4 Tuesday 11:00-12:30

- Günter Becker (Risa, Germany): Requirements For A Post-Fukushima PSA Method
- Johan Sörman (Relcon Scandpower, Sweden): Developments of RiskSpectrum: what has been done in the past two years and what is forecasted
- Antoine Rauzy (Ecole Polytechnique, France): XFTA: An Open PSA calculation engine

# **Tonight Diner**

Pizzeria Mezza Luna 18, rue de Versailles 92140 Clamart from 7:30 PM





We shall organize transportation by car from EdF to Hotels, then to the restaurant and back to hotels or metro/RER after the diner.

In case, my cell phone number is 06 89 98 95 06