FEEDBACK EXPERIENCE OF THE ATALANTE FACILITY REFURBISHED INFRASTRUCTURES

CEA MARCOULE - H. LAGRAVE, G. RANC, T. MASSIA
CEA Marcoule

The CEA reference center for research on:

- The fuel cycle from front-end to back-end, including waste
- Cleaning up and dismantling of nuclear facilities after shutdown

It also assumes missions of:

- Industrial development (technology transfer platforms)
- Training in nuclear energy
- Regional integration: a unique scientific center in the Languedoc-Roussillon region

Finally, it is a major participant in the local economy of Region Languedoc Roussillon
Main facilities at Marcoule site

- **PHENIX**
- **CELESTINS**
- **HERA**
- **ICSM**
- **VITRIFICATION**
- **R&D facilities**
- **Currently under dismantling**
- **To be dismantled**
- **Nuclear services**
- **G1**
- **CDS**
- **UP1 plant & workshops**
- **MAR 400**
- **APM**
- **DIADEM**
- **ATALANTE**
- **MOX fuel plant (AREVA)**
The Facilities and Casks Projects Department

RJH Reactor Building

Agate
Partitioning and recycling: Closing the fuel cycle allows France to develop sustainable nuclear energy and prepare for the future.

The closed cycle is “sustainable”: Saves resources and reduces ultimate waste.

**CEA Marcoule conducts R&D** to allow AREVA La Hague to process new fuels and develop “plants for the future”

**Tomorrow’s reprocessing-recycling** could extract the minor actinides to be burnt in Gen IV reactors

**The ICSM, inaugurated in 2009,** further strengthens Marcoule’s potential in separation chemistry.
The Atalante Complex key figures

C7/C8 lines

CBP line

LN1 lab
Atalante major refurbishment’s projects

New goal for 3 workstations in the C7 shielded line

Reorganization of the whole C8 network for liquid radioactive waste
C7 stakes: amount of waste in the facility

Amont of drums in lines

- First campaign
- Workstations cleaning, works and operating in staggered hours & Phase 2 tests
- Phase 3 tests

Congestion

Traffic jam

Dec-11 Apr-12 Jul-12 Oct-12 Jan-13 May-13
Stakes

- Interface management
- Maintenance of existing and new Equipment during tests, and for the coming years

Key points

- To gather design studies and safety assessment
- To build a scale 1 mockup for partial acceptance
- To anticipate qualification phase of handled equipment
Stakes

- Features of works; dismantling, new network, concurrent activities
- High level radioactive network, nodes in restricted area
- Safety improvement

Key points

- Industrial policy; “make or buy” choice, project management and contractors
- Further checking of the network
- Future operators involvement
The same industrial organization will be deployed for new facilities, like the future interim storage Diadem
Diadem, the movie!
Thank you for your attention
... and now time for questions!