

Outline & Prospect of IRID

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What is IRID ?

IRID

- Research and development consortium consisting of 17 Japanese organizations, including TEPCO
- Approved by Japan's Minister of Economic, Trade and Industry on August 1, 2013
- Founding members are 11 nuclear power plant operators, 1 nuclear fuel cycle company, 2 research institutions, and 3 plant manufacturers.

Our Mission & Vision

IRID

- To help TEPCO with integrated management of R&D, necessary to optimize & accelerate Fukushima Daiichi decommissioning projects
- Also to advance scientific & technological basis, with potential for a giant leap toward new era of safer, stronger, and more robust Japan through overcoming one of the toughest challenges ever

Our Policy

IRID

- Our policy is to facilitate open platform to develop interactive knowledge-networks, and to function as catalyst for emergence of break-through technologies
- We believe aggregated knowledge and wisdom of international community can settle difficult problems at Japan's Fukushima Daiichi NPS

“Promote alliance for collective wisdom”

How we plan to do it

Flagship projects by solicitation

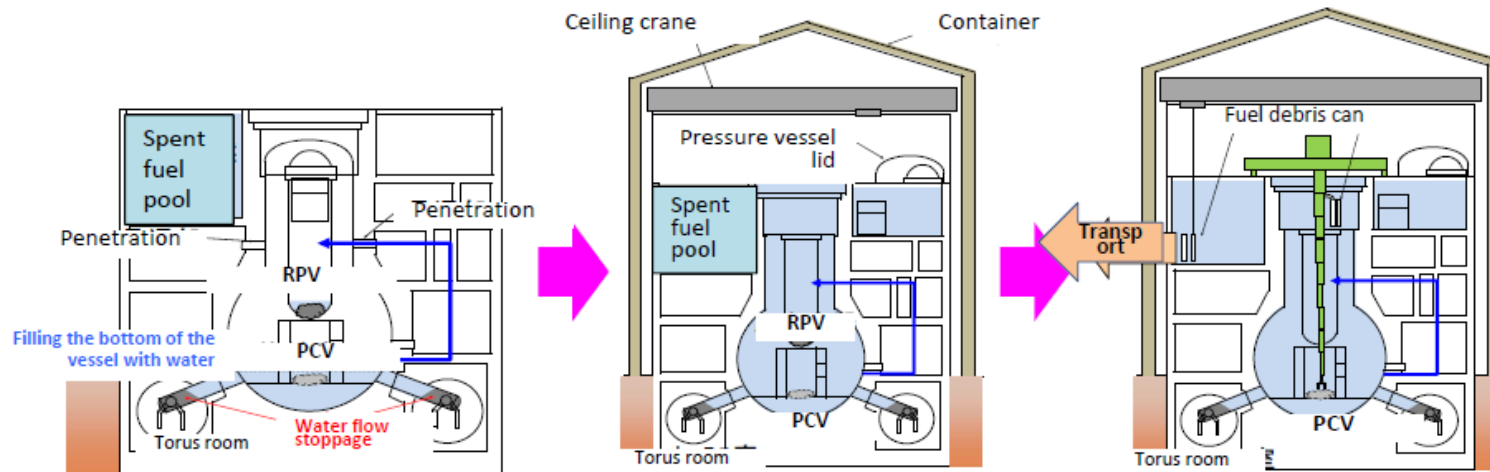
- ◇ *Solicitation for open & voluntary proposals as regards **alternative concepts other than submerged method for fuel debris retrieval***
- ◇ *Solicitation for proposals as regards **countermeasures for contaminated water issues***

Current concepts for fuel debris retrieval

Concepts for fuel debris retrieval (excerpted from mid to long term roadmap for decommissioning

Steps until fuel debris retrieval (unit#1, #2 and #3)

- *To reduce workers exposures, most secure approach is to retrieve fuel debris while submerged in water
- *To align with steps, promote technology development as required for fuel debris retrieval/containment/storage, in addition to survey and repair works for PCV submerge as well as investigating fuel debris.



Rough picture of the process from repairing the bottom of the RCV (water flow stoppage) to filling the bottom of the vessel with water

Rough picture indicating the process of removing the fuel debris

Alternative concepts for fuel debris retrieval

IRID

- Opportunity to exhibit uniqueness & brightness worldwide
- No award nor funding for this FY, still we share with Japan's government the importance of the alternative concepts, and proposals with good feasibility will have better chances to be adopted by Japanese government for further feasibility study
- IRID promises to do its best so that applicants whose concepts are adopted can get involved in feasibility studies
- Besides, applicants would have chances to interact with others to shape up their concepts jointly to develop ideas with much greater values.

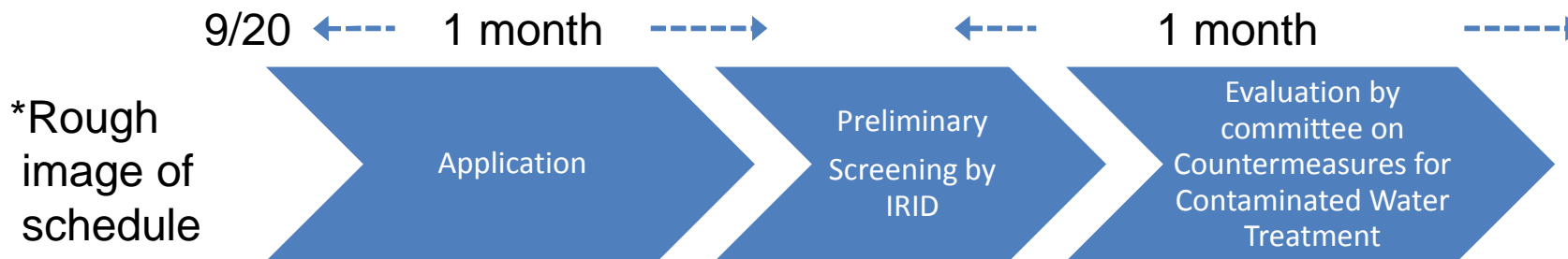
Countermeasures for contaminated water treatment

IRID

- Opportunity to participate in urgent important challenge
- Good chance to exhibit high level of expertise associated with R&D
- Wide range of technologies are involved for wide range of companies, industries, countries, and so forth
- Official procedures are existent to assess technological proposals and advices, which are, after IRID's preliminary evaluation, to be forwarded for reviewing by governmental committee
- Extensive and large scale of operations

Schedule for our solicitation

1. Alternative concepts for fuel debris retrieval
 - ✓ To be officially announced by late October with available specs
 - ✓ Briefings and workshops are to be held around the world (examples: US, Canada, UK, France, Russia, Germany, Japan)
2. Countermeasures for contaminated water
 - ✓ Web site will be available from around 1800 J.S.T., Sept 20 for proposal details. Please access <http://irid.or.jp/infoos>



Particular request for radiochemical analysis

IRID

Not in handout

To deal with impending problems associated with contaminated water issues, such as the delay in getting the results, we need a quick on-site analysis method or device to judge if there is any contamination or not in the drain in the tanks surrounding area.

A special focus is put on the quantification of Sr-90 and H-3.

We appreciate any proposals that are easily adoptable.

Please contact IRID to kentaro-funaki@irid.or.jp.

**Thank you for your attention
We are serious about working
with international colleagues**

International Research Institute for Nuclear Decommissioning