Hector's Plan

A Data Management Plan created using DMPonline

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Project abstract:

This is a collaborative with EDF, Westinghouse, the University of Sheffield and STFC, managed by Fraser-Nash. The work proposed is the product of extensive discussions among the partners and in line with the BEIS prescriptive requirements. Our contibution will be to carry out research and also produce a technical volume and a case study for the CFD modelling of passive cooling loops of nuclear reactors.

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Manchester Data Management Outline

- No

BEIS

- No (please provide details of the lead institution below and your role in the project)

Fraser-Nash Consultancy

- Acquire new data

Our simulations will generate numerical data

- University of Manchester Research Data Storage Service (Isilon)
- < 1 TB
- Not applicable
- 5 - 10 years
- No sensitive or personal data

Not applicable

- Not applicable
- No
- Not applicable
- No

H. Iacovides

15-2-2019

Project details

The purpose of this project is to advance our understanding of the operation of passive cooling loops in nuclear reactors, through numerical simulations.

The data generated are simlpy numerical data sets which represent the computed performance of passive cooling loops. The intention is to disseminate this information as widely as possible.

Responsibilities and Resources

The named PDRA on the project, Dr Dean Wilson

The storage space identified earlier.

Data Collection

Will create numerical solutions of flow and thermal fields, ins ASCI format.

The data will be the outcome of time dependent CFD simulations of 2- and 3-Dimensional cooling loops.

Documentation and Metadata

Documentation on the content and format of each file, on loop geometry and on operating conditions.

Ethics and Legal Compliance

There are no ethical issues involved.

No IPR issues involved

Storage and backup

We will ain to use Research Data Storage

No confidentiality issues involved

Selection and Preservation

We expect to produce a large numer of animations which present the temporal development of the each of the cooling loop studied at different operating conditions. These will need to be maintained and made accessible on-line.
The data from some of the high-Fidelity simulations will also need to be preserved to enable further validation studies.

We will aim to upload the important data sets to recognised sites which archive datasets for CFD validation test cases

Data Sharing

See earlier reply

No