

Bid Solicitation 87055-13-0160  
Amendment #2

R550.1 Survey of Design and Regulatory Requirements  
for New Small Reactors

1) The closing date is changed as follows:

Delete: October 4, 2013

Insert: October 16, 2013

2) The Statement of Work has been revised as follows:

a) 3.0 Scope of Work as been updated (changes in bold):

**3.0 Scope of Work**

The scope of work includes:

- collecting high-level design information, including claimed safety innovations, for new small reactors specified in Task 4.1;
- collecting and reviewing regulatory design requirement documents from Russia, Korea, Argentina, China and the United States to assess their approach and methodology used to review the design of new small reactors;
- **identifying research and development activities that support new small reactor design;**
- **identifying new small reactor vendor response to Fukushima; and**
- identifying any potential technical and licensing challenges for new small reactors.

b) 4.0 Tasks to be Performed as been updated (changes in bold):

**4.0 Tasks to be Performed**

4.1 Assess the key safety features and claimed technological innovation for the following new small reactors:

- 1) UNITHERM (under development);
- 2) VBER-300 (licensing stage);
- 3) SMART (licensed);
- 4) CAREM (licensing stage);
- 5) StarCore (under development);
- 6) NHR-200 (under development); and
- 7) mPower (under development).

4.2 Identify the regulatory approach and methodology used to review the design of new small reactors in the following countries: Russia, Korea, Argentina, China and the United States. This task requires a review of regulatory design requirement documents that are relevant to small reactors for the aforementioned countries. Exempt from this task is analysis for StarCore from Canada.

**4.3 Respond to the following items:**

- 1) Identify research and development activities that support new small reactor design, including claimed technological innovations and key safety features.**
  - 2) Identify new small reactor vendor responses to the event encountered at the Fukushima Dai-ichi nuclear site.**
- 4.4 Based on the completion of **Tasks 4.1 through 4.3**, identify any potential technical or licensing challenges related to new small reactors in the aforementioned countries. Summarize the (regulatory/vendor) approach to address these technical or licensing challenges.