

Comments on CNSC Discussion Paper DIS-16-04 Small Modular Reactors: Regulatory Strategy, Approaches and Challenges

Moltex Energy has reviewed the discussion paper issued by CNSC. We have also familiarised ourselves with the Canadian regulatory system and we are of the opinion that the regulatory regime is suitable for licensing the activities associated with the construction and operation of the Moltex Energy Stable Salt Reactor. We have no specific comments to make on the CNSC Discussion paper DIS-16-04.

We would like to request that Moltex Energy are listed in Appendix A as one of the vendors in dialogue with CNSC.

We would also like to bring to the attention of CNSC that we are planning to build one or several reactors in Canada. The reactor operates in the fast spectrum and can burn fuel with a high level of lanthanide contamination. Due to this fact we have developed a simplified pyroprocessing technology that could radically change the economic case for reprocessing spent CANDU fuel. Early estimates show that it may be more cost effective to reprocess spent CANDU fuel into fresh SSR fuel than to process new fuel from mined uranium.

The reactor transmutes long lived actinides to more stable short lived isotopes. The quantity of and radiotoxicity of the waste that would need to be disposed in deep repositories would be reduced by several orders of magnitude. This would be of benefit to Canadians and would reduce the risk of radioactive release to the environment.

It is noted that there is no guidance on reprocessing or enrichment facilities in the CNSC documentation. Moltex Energy requests that CNSC does not implement any new legislation in a way that could obstruct our development of this technology and bears it in mind when planning future licensing guidelines.