

Next Generation Nuclear Plant (NGNP) Project

Links to White Paper Assessment Reports and Key References

On February 15, 2012, the Division of Advanced Reactors and Rulemaking (DARR) in the Nuclear Regulatory Commission's (NRC) Office of New Reactors (NRO) issued a letter to the Department of Energy (DOE) about planning of remaining interactions on NGNP in 2012. See [ML120240682](#). The letter to DOE refers to NRO/DARR's concurrent issuance of two

assessment reports on five NGNP white papers submitted by Idaho National Laboratory (INL):
(1) Fuel Qualification (FQ) and Mechanistic Source Terms (MST)

(2) Defense-in-Depth Approach (DID); Licensing Basis Event Selection (LBE); Safety Classification of Systems, Structures, and Components (SSC). These three white papers collectively describe the risk-informed, performance based (RIPB) licensing framework proposed for NGNP.

See Package [ML120240671](#):

- Transmittal Letter to INL – [ML120240651](#)
- FQ-MST Assessment Report - [ML120240669](#)
- RIPB(DID-LBE-SSC) Assessment Report – [ML120170084](#) .

On May 9, 2012, NRO/DARR issued an assessment report on INL's High Temperature Materials (HTM) White Paper:

- HTM Assessment Report - [ML120810453](#)

For reference, see also INL's associated white papers and responses to NRC requests for additional information (RAIs):

- FQ White Paper - [ML102040261](#)
- MST White Paper - [ML102040260](#)
- DID White Paper - [ML093480191](#)
- LBE White Paper - [ML102630246](#)
- SSC White Paper - [ML102660144](#)
- HTM White Paper - [ML101800221](#)
- FQ-MST RAI responses - [ML11224A060](#), [ML11266A133](#)
- DID RAI responses - [ML102590481](#)
- RIPB RAI responses - [ML11290A188](#)
- HTM RAI responses - [ML11272A067](#)

INL also issued a white paper on Probabilistic Risk Assessment (PRA) in September 2011:

- PRA White Paper – [ML11265A082](#)

Other key background documents include:

- DOE/INL's paper on Modular HTGR Safety Basis and Approach: [ML11251A169](#)
- DOE/INL's [NGNP Project Regulatory Gap Analysis for Modular HTGRs](#) (external)

Additional NGNP public documents on the safety and technology of modular high temperature gas-cooled reactors (HTGRs) can be found in the NRC's [Agencywide Documents Access and Management System \(ADAMS\)](#) by using the Advanced Search tab with the following selections under Document Properties: Docket Number is equal to PROJ0748.