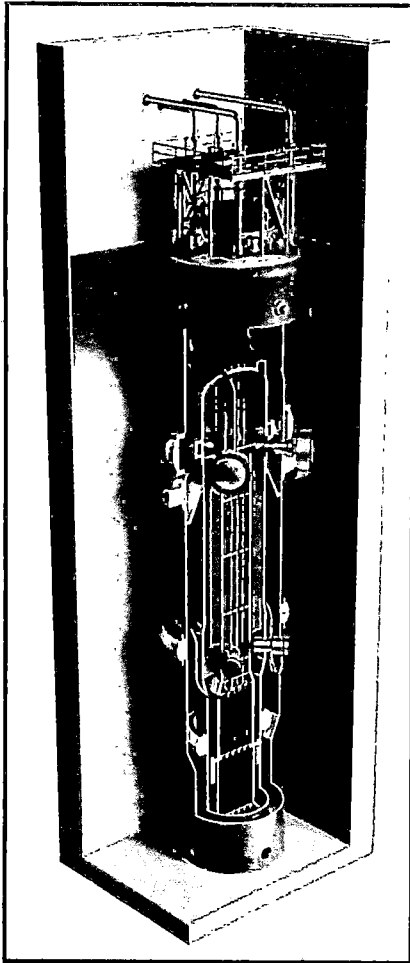


Enclosure 2:

"ECCS Valve DCA Demonstration Testing," PM-0119-64160-NP, Revision 0, nonproprietary version

NuScale Nonproprietary

ECCS Valve DCA Demonstration Testing



NRC Update 1/23/19

Dan Lassiter - Engineering

Greg Myers - Licensing

PM-0119-64160-NP
Revision: 0

Copyright 2019 by NuScale Power, LLC.



Template #: 0000-21727-F01 R4

Acknowledgement & Disclaimer

This material is based upon work supported by the Department of Energy under Award Number DE-NE0008820.

This report was prepared as an account of work sponsored by an agency of the United States Government. Neither the United States Government nor any agency thereof, nor any of their employees, makes any warranty, express or implied, or assumes any legal liability or responsibility for the accuracy, completeness, or usefulness of any information, apparatus, product, or process disclosed, or represents that its use would not infringe privately owned rights. Reference herein to any specific commercial product, process, or service by trade name, trademark, manufacturer, or otherwise does not necessarily constitute or imply its endorsement, recommendation, or favoring by the United States Government or any agency thereof. The views and opinions of authors expressed herein do not necessarily state or reflect those of the United States Government or any agency thereof.

ECCS Valve DCA Demonstration Test

- **Objectives:**

- **Demonstrate main valve functionality at operating temperature and pressure fluid conditions**
 - Criteria: Moving to fully open position when actuated below IAB release
- **Demonstrate IAB functionality at operating temperature and pressure fluid conditions**
 - Criteria: Block main valve actuation above threshold pressure, permit main valve actuation below release pressure
- **Demonstrate IAB and trip line functionality at operating chemistry fluid conditions (boric acid solutions)**
 - Criteria: Negligible IAB and trip line performance compared to water only tests

ECCS Valve DCA Demonstration Test

{{

}}^{2(a),(c)}

ECCS Valve DCA Demonstration Test

{{

}}2(a),(c)

ECCS Valve DCA Demonstration Test

{{

}}2(a),(c)

Main Valve and IAB Actuation Tests

{{

}}^{2(a),(c)}

ECCS Valve DCA Demonstration Test

{{

}}2(a),(c)

ECCS Valve DCA Demonstration Test

{{

}}^{2(a),(c)}

Boric Acid Effects Test

{{

}}2(a),(c)

Schedule 2019

{{

}}2(a),(c)

Portland Office

6650 SW Redwood Lane,
Suite 210
Portland, OR 97224
971.371.1592

Corvallis Office

1100 NE Circle Blvd., Suite 200
Corvallis, OR 97330
541.360.0500

Rockville Office

11333 Woodglen Ave., Suite 205
Rockville, MD 20852
301.770.0472

Charlotte Office

2815 Coliseum Centre Drive,
Suite 230
Charlotte, NC 28217
980.349.4804

Richland Office

1933 Jadwin Ave., Suite 130
Richland, WA 99354
541.360.0500

Arlington Office

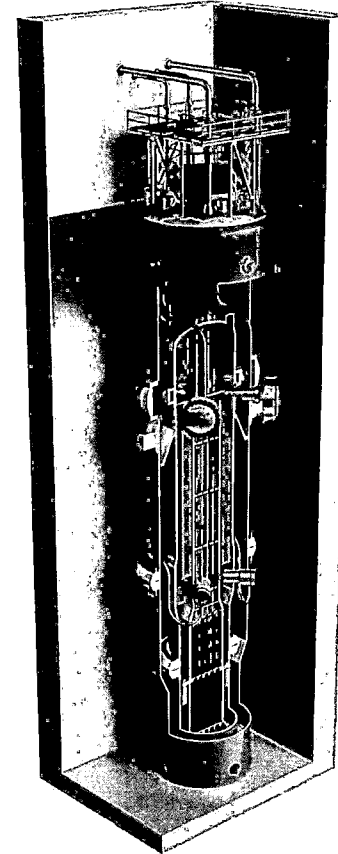
2300 Clarendon Blvd., Suite 1110
Arlington, VA 22201

London Office

1st Floor Portland House
Bressenden Place
London SW1E 5BH
United Kingdom
+44 (0) 2079 321700

<http://www.nuscalepower.com>

Twitter: @NuScale_Power



NUSCALE™
Power for all humankind