

**Environmental Defense Institute**  
**Summary of Advanced Test Reactor Shutdowns**  
**1973 Through 3/27/12**  
**September 20, 2012 <sup>1</sup>**

Year	Shutdown/ Scrams Dates	Power Restricted Dates	Total Shutdowns Power Restrictions	Comments DOE Document Citation
1973	Feb. 2			Foot Note (FN) <sup>2</sup>
1974	Jan. 15			FN <sup>3</sup> + FN 6
	June 5			FN 3 + FN 6
	Sept. 12			FN 3 + FN 6
1977	Feb. 9			FN <sup>4</sup> + FN 6
1980	11			FN <sup>5</sup> + FN 6
	Total 16	?	Total 16	

1991	4			FN <sup>6</sup>
1992	1			FN 6
1993	1			FN 6
1996	1			FN 6
1998	2			FN 6
1999	1			FN 6
	Total 10	?	Total 10	
2000-	Jan. 2			NE-ID-BBWI-ATR-2000-0003
	Jan. 11			NE-ID-BBWI-ATR-2000-0004
	Feb. 1			FN 6
	Sept. 27			NE-ID-BBWI-ATR-2000-0020
2001	Feb. 6			NE-ID-BBWI-ATR-2001-0004
2002	Nov. 1 +			Internal Office Memo 11/18/02
	1			NE-ID-BBWI-ATR-2002-0008 + FN 6
2003	Aug. 21			NE-ID-BBWI-ATR-2003-0012
2004	July 10			NE-ID-BBWI-ATR-2004-0007
	Total 9	?	Total 9	
2005	1			NE-BEA-ATR-2005-0004
2006		Sept. 14		NE-BEA-ATR-2006-0019
	Total -1	Total 1	Total 2	

<sup>1</sup> DOE Occurrence Reports database (<https://orpspublic.hhs.doe.gov/orps/>)

<sup>2</sup> Incident Report, Aerojet Nuclear Co., ANC-73-11, ATR, 2/2/73; "A scram was received ...for run startup. **A second scram** received at 0906 hours, Feb. 2, 1973."

<sup>3</sup> Incident Reports, Aerojet Nuclear Co., ANC-73-11, 2/2/73; ANC-74-5 (ATR-74-1) 1/15/74.  
Aerojet Nuclear Co., Unusual Occurrence Reports (UCR), ANC-74-60 (ATR-74-27), 6/5/74.  
UCR, Aerojet Nuclear Co., ANC-74-64, (ATR-74-31), 9/10/74.

<sup>4</sup> Unusual Occurrence Reports (UCR), EG&G-77-26 (ATR-77-19), 3/9/77.

<sup>5</sup> Advanced Test Reactor Capabilities and Future Operating Plans, F. Marshall, INL, pg. 3.  
"The number of unplanned scrams decreased from 11 in 1980 to 1 in 2004."

<sup>6</sup> DOE Freedom of Information documents provided to EDI.

Year	Shutdown/ Scrams Dates	Power Restricted Set backs	Total Shutdowns Power Rest.	Comments/ DOE Document Citation
2007	June 25 Dec. 13  Total 2	June 17  Total 1	Total 3	NE-ID-BEA-ATR-2007-0013 FN 6+NE-ID- BEA-ATR-2007-0014 Reported in 2008; NE-ID- BEA- ATR-2008-0001
2008	Jan. 9 Feb.7 Feb. 11  April 1 May 1 May 13 June 3 Aug. 5 Aug. 11  Oct.16 Nov.21  Total 11	April 30         Oct. 15  Total 2	Total 13	NE-ID- BEA ATR-2008-0001 NE-ID- BEA ATR-2008-0003 FN 6 NE-ID- BEA -ATR-2008-0007 NE-ID- BEA -ATR-2008-0008 NE-ID- BEA ATR-2008-0009 FN 5 NE-ID- BEA ATR-2008-0010 NE-ID- BEA ATR-2008-0019 FN 6 FN 7 (water power alarm) FN 7 NE-ID- BEA-ATR-2008-0028 FN <sup>7</sup> (PCS activity RERTR)
2009	Jan. 19 Mar. 8  Mar. 10 May 31  Sept. 29 Oct. 8 Oct. 12 Oct. 14 Nov. 6  Dec. 1  Total 10	Mar. 17         Nov. 22  Total 2	Total 12	FN 7 (outer shim control) FN 6 +NE-ID-ATR-2009-0003 FN 7 (regulator rod #2 failure) FN 6 FN 7 (high neutron level) + ATR-CR-5-31-09 FN 7 + NE-BEA-ATR-2009-0022 FN 7 + 6+ NE-ID-ATR-2009-0023 FN <sup>8</sup> (loss diesel power) +FN 7 FN <sup>9</sup> + FN 6 FN <sup>10</sup> + FN 7 FN 6+NE-ID-BEA-ATR-2009-0024 FN 7+NE-ID-BEA-ATR-2009-0025

<sup>7</sup> DOE/ATR Unplanned Shutdowns Slow Setbacks Reductions in Power FY-09-2010 (October 1, 2008 –September 31, 2010 (FOIA).

<sup>8</sup> INL Initial Notification Report. FOIA Doc.# 9, 13 October 2009, Shutdown 10/12/09. Critique Rpt. ATR-CR-10-13-2009

<sup>9</sup> INL Initial Notification Report. FOIA Doc, 15 October 2009, Scram, 14 October 2009.

<sup>10</sup> INL Initial Notification Report. FOIA Doc.#10, Shutdown, 6 November 2009.

Year	Shutdown/ Scrams Dates	Power Restricted Limiting Conditions Dates	Total Shutdowns Power Rest. Limiting Conditions	Comments/ DOE Document Citation
2010	Feb. 14 May 27-30  July 23  July 26 Oct.12 Oct. 26 Nov. 17  Total 7	Jan. 12  July 13  July 25  Total 3	Total 10	NE-ID-ATR-2010-0001 FN 7+ FN <sup>11</sup> (Channel A vent failure) FN 7+FN <sup>12</sup> (Increase Rad. PCS/Stack) FN 7 (quad IV flow inst. Failure) + INL Initial Not. Rpt. 14/7/10 FN 7 (M-6 PC pump lub. Failure) + NE-ID-BEA-ATR-2010-0013 FN <sup>13</sup> + FN 7 FN <sup>14</sup> (low coolant flow) FN <sup>15</sup> + NE-ID-BEA-ATR-2010-0019 FN <sup>16</sup> + FN 6 + INR 26 Oct. 2010 FN <sup>17</sup> INR 11/17/10
2012*	Mar. 22 Mar. 27  Total 2	Mar. 6-26  May 9  June 5  Total 3	Total 5	NE-ID-BEA-ATR-2012-0007 + 0008 +0010+0014 NE-ID-BEA-ATR-2012-0013 NE-ID-BEA-ATR-2010-0015 NE-ID-BEA-ATR-2012-0017 (fire water pump failure) NE-ID-BEA-ATR-2012-0021 (fire water pump failure)
Totals 1973 to 3/27/12	Total 67	Total 12	Total 79	

\*Through 3/27/12

Additional References:

1. Advanced Test Reactor Outage Risk Assessment, July 9, 1998, INEEL/Con-97-0463; Conf-980616
2. INL Reactor Outage, 2/5/08, DOP-7-7.2.7, Rev.24.

<sup>11</sup> INL Initial Notification Report (INR). FOIA Doc.#14, 15 February 2010, Shutdown 2/14/2010.

DOE/ATR Unplanned Shutdowns Slow Setbacks Reductions in Power FY-09-2010 (FOIA)

<sup>12</sup> INL Initial Not. Rpt. FOIA Doc.D-3-#15, 30 May 2010, Shutdown 5/27/10. DOE/ATR Unplanned Shutdowns Slow Setbacks Reductions in Power FY-09-2010 (FOIA). ATR stack effluent 105 Ci/day.

<sup>13</sup> INL Initial Not. Rpt. FOIA Doc., 26 July 2010, Reduced power 25 July 2010.

<sup>14</sup> INL Initial Not. Rpt. FOIA Doc., October 2010

<sup>15</sup> INL Initial Not. Rpt. FOIA Doc. E-1 13 October 2010, Scram 12 October 2010.

<sup>16</sup> INL Initial Not. Rpt. FOIA Doc. #18 , 26 Oct 2010

<sup>17</sup> INL Initial Not. Rpt. FOIA Doc. 17 November 2010, Shutdown 17 November 2010.