CHAIRMAN Resource

From: Dave Lochbaum <DLochbaum@ucsusa.org>
Sent: Friday, December 18, 2015 1:20 PM
To: Dave Lochbaum
Cc: CHAIRMAN Resource
Subject: [External_Sender] NRC provides Senator Markey with a short list
Attachments: 20151019-sen-markey-nrc-effects-changing-weather-ML15293A343.pdf; 20151210-nrc-sen-markey-response-effects-changing-weather-ML15331A082.pdf; 20151218-ucs-senator-markey-weather-related-events.pdf

Good Day:

Attached is a letter dated October 19, 2015, from Senator Edward J. Markey to NRC Chairman Stephen G. Burns asking the NRC for a list of every nuclear power reactor shutdown or power reduction due to weather-related causes over the past decade.

Attached is a letter dated December 10, 2015, from Chairman Burns to Senator Markey. Attachment 1 to the Chairman's letter lists 42 weather-related shutdowns and power reductions.

It is a short list. Very short.

It does not mention over 100 other weather-related power reductions at U.S nuclear power reactors caused by hot weather.

Attached is a letter dated December 18, 2015, from David A. Lochbaum (me) to Senator Markey listing these hot weather-related power reductions. The NRC failed to inform the Senator about this events.

My source of information on these events -- the monthly operating reports that nuclear plant owners are required to submit to the NRC. NRC places them into ADAMS, apparently without reading them.

Or maybe they do read them and opted to keep them secret from the Senator.

Or, maybe they forgot about them when responding, partially, to the Senator's request.

Maybe they tried their best and their best is not all that good.

Thanks,
Dave Lochbaum
UCS

EDWARD J. MARKEY
MASSACHUSETTS

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United States Senate

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1550 MAIN STREET, 4TH FLOOR
SPRINGFIELD, MA 01101
413-785-4610

October 19, 2015

The Honorable Stephen G. Burns
Chairman
U.S. Nuclear Regulatory Commission
Washington, DC 20555-0001

Dear Chairman Burns,

I write to request information about how extreme weather, higher water temperatures, and the effects of climate change may impact the U.S. nuclear power industry in light of the increase in the number of plant shutdowns and other events that have occurred at the Pilgrim Nuclear Power Station in Plymouth, Massachusetts and at other reactors across the country.

In January 2015, an unusually strong nor'easter that brought three feet of snow and hurricane-force winds to New England prompted an automatic shutdown of the Pilgrim Facility for twelve days due to electric grid reliability concerns[1]. Pilgrim was again shut down pre-emptively due to threats from another nor'easter in February[1]. These winter storms contributed to the record-breaking snowfall in Massachusetts this past winter, in line with the observed trend of increasing extreme precipitation in the United States, and especially the Northeast, from global warming.

Other extreme weather events have also threatened the safe operation of U.S. nuclear power plants, including tornado outbreaks, hurricanes, and droughts. Tornadoes have caused several nuclear plant shutdowns in the last five years, including the Browns Ferry plant in Alabama, the Surry Power Station in Virginia, and the Fermi 2 Plant in Michigan[2,3]. In 2011, the Wolf Creek nuclear power plant in southeastern Kansas was identified as being vulnerable to tornadoes just weeks before a deadly twister ravaged Joplin, Missouri, just 150 miles away[3]. Hurricane Irene threatened at least nine nuclear reactors from North Carolina to Massachusetts with damaging winds, loss of power, and flooding[4].

Rising water temperatures, exacerbated by global warming, have also directly impacted nuclear power plants[5,6]. For operational safety, the Nuclear Regulatory Commission (NRC) set the federally

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[1] http://www.capecod.com/newscenter/pilgrim-power-station-taken-line-storm/
[2] http://www.nrdc.org/nuclear/fallout/
[3] http://usatoday30.usatoday.com/news/nation/2011-05-28-tornadoes-nuclear-plant_n.htm
[4] http://www.markey.senate.gov/news/press-releases/august-29-2011-markey-hurricane-irene-exposes-holes-in-nuclear-plant-safety-regulations
[5] http://green.blogs.nytimes.com/2012/08/13/heat-shuts-down-a-coastal-reactor/?_r=0
[6] http://news.nationalgeographic.com/news/energy/2012/08/120817-record-heat-drought-pose-problems-for-electric-power-grid/

mandated maximum allowable temperature for nuclear power plant intake cooling water to 75 degrees Fahrenheit. If a plant's intake water exceeds this limit, the plant must shut-down or decrease power levels until the intake temperature returns to the compliance level. The Pilgrim Nuclear Power Station had to reduce power this summer due to high water temperatures of the Cape Cod Bay, from which the plant draws its cooling water. This was the fourth time Pilgrim had to take such action during the plant's 43-year operational life and all four instances have occurred in the last three years. An August 11, 2015 Boston Globe article[7] reported that the operators of the Pilgrim plant sent a request to the NRC for permission to increase the maximum allowable limit of the water intake temperature for that facility to 80 degrees Fahrenheit. This and past actions at other reactors may signal that plant operators believe that partial or full shutdowns may become regular occurrences. As the risk of elevated water temperatures continues to rise, so will the risk of nuclear power plant full or partial shutdowns or requests for regulatory relief that are related to high water intake temperatures.

As the Ranking Member of the Subcommittee on Superfund, Waste Management, and Regulatory Oversight, I would like to better understand the safety and reliability concerns of nuclear power plants that may be associated with extreme weather and global warming. Please provide the following information:

During the last 10 years, please list every reactor shutdown, or power generation reduction that occurred entirely or in part due to:

1. Increased cooling water intake temperatures
2. Tornadoes
3. Hurricanes
4. Blizzards
5. Other extreme weather events
6. Flooding (other than flooding caused by any of the events listed above)
7. Wildfires
8. Low water levels of water intake sources
9. Combination of above factors

For each occurrence identified above, please also provide the following information:

A. Facility name, location, operator, and owner
B. The dates and duration of shutdown or power generation reduction
C. The generating capacity that was affected

In addition, please provide a list of every time during the last ten years:

I. The NRC received a request for permission to increase the water intake temperature at a facility including the justification of the request and any data on the intake temperature at that facility.

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[7] https://www.bostonglobe.com/metro/2015/08/11/high-water-temperatures-forced-power-cut-pilgrim-nuclear-plant/fMgG6VtRmadnVcuacbPpGI/story.html

II. The NRC's response to the request, the justification and analysis used to make the decision, the new limit (if any), and information used to assure safe operations if a higher limit was permitted.

Thank you for your consideration of this request. Please provide a full and complete response to this request as soon as possible and no later than close of business on November 20, 2015. If you have questions or concerns, please contact Briana Tomboulian or Michal Freedhoff at 202-224-2742.

Sincerely,

Edward J. Markey

Senator Edward J. Markey
Ranking Member Subcommittee on Superfund,
Waste Management, and Regulatory Oversight

December 10, 2015

The Honorable Edward J. Markey
United States Senate
Washington, DC 20510

Dear Senator Markey:

On behalf of the U.S. Nuclear Regulatory Commission (NRC), I am responding to your letter of October 19, 2015, requesting information on the effects of extreme weather, higher water temperatures, and climate change on nuclear power plants over the past decade. Information responsive to your request is enclosed.

In compiling a list of power reactor shutdowns and power reductions, NRC staff searched through events that were required to be reported to the NRC and also met the conditions described in your request. NRC's reporting criteria generally require power reactor licensees to report reactor trips and the completion of technical specifications-required shutdowns. These criteria require licensees to report the state of the plant at the time the event becomes reportable, but do not require a discussion of the duration of a shutdown or power reduction. Therefore, durations provided in Enclosure 1 represent conservative NRC staff estimates for each listed shutdown or power reduction based on other information sources available to the NRC. It is likely that the Federal Energy Regulatory Commission, as the Federal agency responsible for monitoring reliability of the grid, also would have data regarding power plant changes induced by weather effects.

Licensees' capability to respond safely to extreme weather events is examined through the NRC's baseline inspection program. Structures, systems, and components important to safety at nuclear power plants are required to be designed to withstand the effects of natural phenomena without loss of capability to perform their intended safety functions. The design bases for these structures, systems, and components reflect consideration of the most severe of the natural phenomena that have been historically reported for the site and surrounding area. The design bases also reflect margin to account for the limited accuracy, quantity, and period of time in which the historical data have been accumulated. Additional protection is provided through analysis, procedures, and maintenance practices. Together, these protections provide reasonable assurance of the continued safe operation of nuclear power plants under extreme environmental conditions.

In addition to a list of shutdowns and power reductions, you also requested a list of requests for permission to increase the water intake temperature, as well as the NRC's justifications for approving or denying those requests. The NRC requires nuclear power plants to have an ultimate heat sink (UHS), a source of cooling water that is available under both normal and accident conditions, to remove heat from structures, systems, and components important to safety. It is the temperature of this UHS that limits the ability of the facility to remove heat from the plant.

Enclosure 2 lists approved license amendments that changed the temperature limits of the UHS, as well as license amendment requests that were denied. License amendment requests that did not change the temperature limits, but are otherwise related to your request, as well as notices of enforcement discretion related to UHS temperatures, are also listed. Due to the volume of the correspondence associated with the listed actions, the accession numbers in the NRC's Agencywide Documents Access and Management System for these materials are provided.

If you need any additional information, please contact me or Eugene Dacus, Director of the Office of Congressional Affairs, at (301) 415-1776.

Sincerely,

/RA/

Stephen G. Burns

Enclosures:
As stated

Facility	Location	Owner/Operator	Weather Event	Date of Event**	Impact	Duration of Impact	Rated Electrical Output (MW)
Braidwood 2	Braceville, IL	Exelon	Severe Weather	08/23/2007	Scram	1 day	1160
Arkansas Nuclear One 1	London, AR	Entergy Nuclear Operations	Tornado	02/06/2008	Power Reduction	19 days	836
Arkansas Nuclear One 2	London, AR	Entergy Nuclear Operations	Tornado	02/06/2008	Power Reduction	15 days	993
Saint Lucie 1	Jensen Beach, FL	Florida Power & Light	Flooding	08/21/2008	Scram	4 days	982
River Bend	St. Francisville, LA	Entergy Nuclear Operations	Hurricane	09/01/2008	Shutdown	24 day	967
Waterford	Killona, LA	Entergy Nuclear Operations	Hurricane	09/01/2008	Shutdown	10 days	1168
Pilgrim	Plymouth, MA	Entergy Nuclear Operations	Winter Storm	12/19/2008	Scram	3 days	677
Salem 2	Hancock's Bridge, NJ	PSEG Nuclear	Cold/Icing	01/03/2010	Scram	1 day	1158
Palo Verde 1	Wintersburg, AZ	Arizona Public Service Co.	Severe Weather	03/07/2010	Scram	3 days	1311
Fermi	Newport, MI	DTE Electric Co	Tornado	06/06/2010	Scram	9 days	1122
Turkey Point 3	Homestead, FL	Florida Power & Light	Severe Weather	09/23/2010	Scram	2 days	802
LaSalle 1	Marseilles, IL	Exelon	Winter Storm	02/01/2011	Scram	8 days	1137
Surry 1	Surry, VA	Dominion Generation	Tornado	04/16/2011	Scram	6 days	838
Surry 2	Surry, VA	Dominion Generation	Tornado	04/16/2011	Scram	6 days	838
Browns Ferry 1	Athens, AL	Tennessee Valley Authority	Tornado	04/27/2011	Scram	26 days	1101
Browns Ferry 2	Athens, AL	Tennessee Valley Authority	Tornado	04/27/2011	Scram	27 days	1104
Browns Ferry 3	Athens, AL	Tennessee Valley Authority	Tornado	04/27/2011	Scram	35 days	1105
Prairie Island 2	Welch, MN	Xcel Energy	Severe Weather	05/09/2011	Scram	1 day	518
Calvert Cliffs 1	Lusby, MD	Exelon	Hurricane	08/27/2011	Shutdown	4 days	866
Millstone 2	Waterford, CT	Dominion Generation	Ultimate Heat Sink (UHS) Temp	08/12/2012	Shutdown	11 days	869
Waterford	Killona, LA	Entergy Nuclear Operations	Hurricane	08/29/2012	Shutdown	5 days	1168
Indian Point 3	Buchanan, NY	Entergy Nuclear Operations	Hurricane	10/29/2012	Scram	4 days	1085
Nine Mile Point 1	Scriba, NY	Exelon	Hurricane	10/29/2012	Scram	4 days	621
Salem 1	Hancock's Bridge, NJ	PSEG Nuclear	Hurricane	10/30/2012	Scram	3 days	1168
Pilgrim	Plymouth, MA	Entergy Nuclear Operations	Winter Storm	02/08/2013	Scram	8 days	677
Pilgrim	Plymouth, MA	Entergy Nuclear Operations	UHS Temp	07/17/2013	Power Reduction	5.5 hours	677
Beaver Valley 1	Shippingport, PA	First Energy Nuclear Operating Co.	Cold/Icing	01/06/2014	Scram	22 days	921
Fort Calhoun	Fort Calhoun, NE	Omaha Public Power District	Cold/Icing	01/10/2014	Scram	3 days	482
Calvert Cliffs 1	Lusby, MD	Exelon	Winter Storm	01/21/2014	Scram	4 days	866
Calvert Cliffs 2	Lusby, MD	Exelon	Winter Storm	01/21/2014	Scram	4 days	850
Arkansas Nuclear One 1	London, AR	Entergy Nuclear Operations	Severe Weather	04/27/2014	Power Reduction	1 day	836
Arkansas Nuclear One 2	London, AR	Entergy Nuclear Operations	Severe Weather	04/27/2014	Scram	17 days	993
Fort Calhoun	Fort Calhoun, NE	Omaha Public Power District	Flooding	06/20/2014	Power Reduction	2 days	482
Turkey Point 3	Homestead, FL	Florida Power & Light	UHS Temp	07/20/2014	Power Reduction	up to 8 hours on 5 separate days*	802
Turkey Point 4	Homestead, FL	Florida Power & Light	UHS Temp	07/20/2014	Power Reduction	up to 8 hours on 5 separate days*	802
Donald C. Cook 1	Bridgman, MI	Indiana Michigan Power Company	Severe Weather	11/01/2014	Scram	3 days	1030
Donald C. Cook 2	Bridgman, MI	Indiana Michigan Power Company	Severe Weather	11/01/2014	Scram	5 days	1077
Indian Point 3	Buchanan, NY	Entergy Nuclear Operations	Cold/Icing	01/08/2015	Power Reduction	3 hours	1085
Pilgrim	Plymouth, MA	Entergy Nuclear Operations	Winter Storm	01/27/2015	Scram	12 days	677
Pilgrim	Plymouth, MA	Entergy Nuclear Operations	Winter Storm	02/15/2015	Shutdown	3 days	677
Byron 1	Byron, IL	Exelon	Cold/Icing	03/03/2015	Scram	6 days	1164
Pilgrim	Plymouth, MA	Entergy Nuclear Operations	UHS Temp	08/09/2015	Power Reduction	26 minutes	677

*July 20, 26, 27, 28 and August 7
**There were no events that met the criteria between October 25, 2005 and August 2007

Enclosure 1

Ultimate Heat Sink Amendments Issued Since January 1, 2005

Table 1-License Amendments Issued Changing UHS Temperature

Facility	Incoming/ Supplements Date	Incoming Accession No.	Issuance Date	Issuance Accession No.
Nine Mile Point-1	08/08/05 08/11/05	ML052280274 ML052300230	08/12/05	ML052230428
Hope Creek	08/04/05 02/09/06 07/18/06 08/01/06	ML052280207 ML060520633 ML062080518 ML062210232	08/01/06	ML062130006
Catawba-1 and 2	07/25/05 07/28/05	ML052160033 ML052220088	09/25/06	ML062420502
LaSalle-1 and 2	06/29/07 08/01/07 08/02/07 08/02/07	ML071830436 ML072140249 ML072140562 ML072140578	08/02/07	ML072140838
Sequoyah-1 and 2	07/12/06 12/07/06 01/26/07 05/08/07 08/14/07 08/22/07	ML062140102 ML063470029 ML070530142 ML071350246 ML072290326 ML072360294	09/28/07	ML072420051
Surry-1 and 2	06/25/07 11/14/07 01/10/08 04/11/08	ML071840169 ML073190271 ML080160070 ML081020691	06/17/08	ML081420040
Millstone-2	07/12/12 08/09/12 08/09/12	ML12202A040 ML122270543 ML12227A362	08/10/12	ML12222A350
Millstone-2	05/03/13 06/27/13 07/19/13 07/30/13 08/1/13 10/02/13	ML13133A033 ML13198A269 ML13204A035 ML13213A029 ML13219A109 ML13281A809	04/18/14	ML14037A408
Callaway*	12/13/12 06/11/13 01/16/14 04/09/14	ML12349A321 ML13163A008 ML14016A337 ML14099A205	06/17/14	ML14149A164
Millstone-3	05/03/13 07/02/13 10/02/13 01/15/14 04/23/14 05/28/14	ML13133A032 ML13198A270 ML13281A804 ML14023A646 ML14119A187 ML14154A091	07/11/14	ML14178A599

Ultimate Heat Sink Amendments Issued Since January 1, 2005

Facility	Incoming/ Supplements Date	Incoming Accession No.	Issuance Date	Issuance Accession No.
Turkey Point-3 and 4	07/10/14 07/17/14 07/22/14 07/22/14 07/24/14 07/26/14 07/28/14 07/29/14 08/04/14	ML14196A006 ML14202A392 ML14204A367 ML14204A368 ML14206A853 ML14210A374 ML14211A507 ML14211A508 ML14217A341	08/08/14	ML14199A107
LaSalle-1 and 2	07/12/12 09/17/12 01/18/13 02/11/13 10/04/13 12/04/14 04/15/15	ML12200A330 ML122690041 ML13022A476 ML13042A405 ML13282A339 ML14352A319 ML15113B115	11/19/15	M15202A578

*License Amendment Request for Callaway placed more restrictive limits on temperature and level of Ultimate Heat Sink

Table 2 – Other License Amendments Issued Regarding UHS

Facility	Incoming/ Supplements Date	Incoming Accession No.	Issuance Date	Issuance Accession No.
Vogtle-1 and 2	04/26/04 04/18/05 07/22/05	ML041190306 ML051110207 ML052060211	12/02/05	ML053420004
Waterford-3**	11/05/04	ML043150218	09/28/06 **09/28/06	ML062570486 **ML062580159
Nine Mile Point-2	01/04/07 04/27/07 05/22/07 07/23/07	ML070170453 ML071280517 ML071500063 ML072130020	09/04/07	ML072470621
Duane Arnold	12/20/07	ML080020649	12/03/08	ML083190108
Shearon Harris-1	04/30/08 12/03/08 06/30/09	ML081270089 ML083500364 ML091890780	10/14/09	ML092640247

Ultimate Heat Sink Amendments Issued Since January 1, 2005

Facility	Incoming/ Supplements Date	Incoming Accession No.	Issuance Date	Issuance Accession No.
Byron-1 and 2	06/30/09 01/25/10 07/01/10 11/08/10 01/31/11 03/16/11 05/04/11	ML091831253 ML100280553 ML101830041 ML103120556 ML110310612 ML110750587 ML111240290	06/14/11	ML111310633
Waterford-3	10/13/11 11/25/11 01/18/12 04/03/12 05/22/12 07/17/12	ML11290A009 ML113290070 ML120230200 ML12095A308 ML12144A135 ML12201A069	10/31/12	ML12250A435
Vogtle-1 and 2	09/01/11 02/10/12 04/30/12 12/18/12 02/27/13 06/14/13 08/07/13 08/30/13	ML112450171 ML12045A285 ML121220296 ML12354A463 ML13059A502 ML13165A370 ML13220A160 ML13246A179	09/18/13	ML13231A054
Hatch-1 and 2	07/05/12 11/13/12 11/30/12 02/22/13	ML12188A721 ML12319A054 ML12338A029 ML13053A493	05/13/14	ML14042A465
Columbia	08/22/14 12/23/14	ML14251A032 ML15006A032	04/15/15	ML15076A122

**License Amendment Request for Waterford-3 was partially denied

Table 3 – License Amendment Requests Withdrawn or Denied

Facility	Incoming/ Supplements Date	Incoming Accession No.	Withdrawal/ Denial Date	Accession No.
LaSalle-1 and 2***	03/13/06 07/13/06 08/04/06	ML060720507 ML061950096 ML062160395	11/03/06***	ML062760617

Ultimate Heat Sink Amendments Issued Since January 1, 2005

Facility	Incoming/ Supplements Date	Incoming Accession No.	Withdrawal/ Denial Date	Accession No.
Watts Bar-1	05/08/06 12/29/06 02/16/07 06/20/07	ML061310178 ML070100381 ML070640084 ML072040115	07/26/07	ML072050403
Fort Calhoun	03/04/11 01/04/12	ML110680093 ML120040400	02/02/12	ML120270182
LaSalle-1 and 2	05/06/11 09/14/11	ML111290197 ML112580030	09/27/11	ML112590343
Waterford-3	10/08/12 10/18/12	ML12284A515 ML12293A099	10/26/12	ML12298A401
Sequoyah-1 and 2	10/02/13 12/11/13 08/14/14 06/19/15 10/22/15	ML13280A267 ML13354A715 ML14231B294 ML15173A466 ML15295A427	10/28/2015	ML15300A400
River Bend-1	02/10/14 05/29/14 07/07/14	ML14051A170 ML14157A037 ML14212A398	07/23/14	ML14190B134

***License Amendment Request for LaSalle was denied

Table 4 – License Amendment Requests Under Review

Facility	Incoming/ Supplements Date	Incoming Accession No.
LaSalle-1 and 2	07/12/12 09/17/12 01/18/13 02/11/13 10/04/13 02/20/14 12/04/14 12/18/14 01/23/15 01/23/15 04/15/15	ML12200A330 ML122690041 ML13022A476 ML13042A405 ML13282A339 ML14066A250 ML14352A319 ML14352A189 ML15023A459 ML15035A091 ML15113B115

Ultimate Heat Sink Amendments Issued Since January 1, 2005

Facility	Incoming/ Supplements Date	Incoming Accession No.
Braidwood-1 and 2	08/19/14 01/20/15 03/31/15 04/30/15 08/24/15 10/09/15	ML14231A902 ML15020A246 ML15090A604 ML15128A186 ML15236A144 ML15282A345

Table 5 – UHS Notices of Enforcement Discretion Issued

Facility	Incoming/ Supplements Date	Incoming Accession No.	Issuance Date	Issuance Accession No.
Braidwood-1 and 2	07/10/12	ML12192A637	07/12/12	ML12194A681
Turkey Point-3 and 4	07/21/14	ML14204A083	07/23/14	ML14204A652
Turkey Point-3 and 4	07/29/14 07/29/14	ML14211A509 ML14212A520	07/31/14	ML14213A069

Union of Concerned Scientists
ucsusa.org Two Brattle Square, Cambridge, MA 02138-3780 t 617.547.5552 f 617.864.9405
1825 K Street NW, Suite 800, Washington, DC 20006-1232 t 202.223.6133 f 202.223.6162
2397 Shattuck Avenue, Suite 203, Berkeley, CA 94704-1567 t 510.843.1872 f 510.843.3785
One North LaSalle Street, Suite 1904, Chicago, IL 60602-4064 t 312.578.1750 f 312.578.1751

December 18, 2015

The Honorable Edward J. Markey
United States Senate
Washington, DC 20510

Dear Senator Markey:

I read the December 10, 2015, response from Nuclear Regulatory Commission Chairman Stephen G. Burns to your October 19 letter requesting information related to weather effects on nuclear power plants over the past decade. You asked the NRC to "list every reactor shutdown, or power generation reduction that occurred entirely or in part due to … increased cooling water intake temperatures…".

Attachment 1 to Chairman Burns' response listed 42 events of weather-related nuclear plant shutdowns and power reductions. The NRC's response is woefully incomplete for reasons I cannot fathom.

Nuclear power plant owners are required to submit monthly reports to the NRC. This requirement is currently being met by the Institute for Nuclear Power Operations (INPO) compiling the reports from owners and submitting packages to the NRC every quarter. The NRC puts these quarterly compilations into ADAMS, its online digital library. For example, the monthly reports for the second quarter of 2015 are in ADAMS under ML15203A007.

I do not know what the NRC staff does with the monthly reports, other than sticking them into ADAMS. I actually read each and every monthly report and extract information about performance that I enter into an Access database. I do this in order to be able to cover, rather than duck, questions like those you asked.

Attached is a 12-page listing of over 100 times when U.S. nuclear power reactors reduced power due to hot weather. The NRC did not inform you about these events, which are responsive to your question. Since the source of my information is their records system. I do not understand why the NRC was unaware of it, or if aware of it, withheld it from you. Maybe that response reflects their best effort.

Sincerely,

David Lochbaum
Director, Nuclear Safety Project
Union of Concerned Scientists
PO Box 15316
Chattanooga, TN 37415
423-468-9272, office

Hot Weather Events

Date	Facility / Description			
20150623	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level to 97.2 percent due to high condensate temperature caused by high ambient temperatures. The operators restored the reactor power level to 100 percent about 5 1/2 hours later.			
20150623	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 95.3 percent due to high condensate temperature caused by high ambient temperatures. The operators restored the reactor power level to 100 percent about 7 1/2 hours later.			
20150612	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 96 percent due to high condensate temperature caus by high ambient temperatures. The operators restored the reactor power level to 100 percent about 8 hours later.			
20130911	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level fto 97 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent seven and a half hours later after ambient temperatures decreased.			
20130911	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level fto 95 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent nine hours later after ambient temperatures decreased.			
20130903	Hope Creek	Unit 1	Salem	NJ
	The operators returned the reactor power level to 100 percent.			
20130901	Dresden	Unit 2	Morris	IL
	The operators returned the reactor power level to 100 percent.			
20130831	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level to 93 percent due to high ambient temperature condition causing condenser vacuum to decrease.			
20130829	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to 89 percent due to warm weather.			
20130725	Pilgrim	Unit 1	Plymouth	MA
	The operators reduced the reactor power level for 8 hours and 7 minutes because high ambient temperature conditions caused the seawater inlet temperature to reach its 75F maximum limit. The minimum power level during the downpower was 90 percent.			
20130720	Limerick	Unit 1	Pottstown	PA
	The operators returned the reactor power level to 100 percent.			
20130720	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level fto 97 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent eight and a half hours later after ambient temperatures decreased.			

Date	Facility / Description			
20130719	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level fto 93 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent eight and a half hours later after ambient temperatures decreased.			
20130718	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level fto 96 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent sixteen and a half hours later after ambient temperatures decreased.			
20130718	Pilgrim	Unit 1	Plymouth	MA
	The operators reduced the reactor power level for 5 hours and 6 minutes because high ambient temperature conditions caused the seawater inlet temperature to reach its 75F maximum limit. The minimum power level during the downpower was 93 percent.			
20130717	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level fto 92 percent due to high condensate system temperatu caused by high ambient temperature conditions.			
20130717	Pilgrim	Unit 1	Plymouth	MA
	The operators reduced the reactor power level for 13 hours and 37 minutes because high ambient temperature conditions caused the seawater inlet temperature to reach its 75F maximum limit. The minimum power level during the downpower was 85 percent.			
20130715	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level fto 98 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent ten hours later after ambient temperatures decreased.			
20130715	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level fto 97 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent five and a half hours later after ambient temperatures decreased.			
20130707	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level fto 98 percent due to high condensate system temperatu caused by high ambient temperature conditions.			
20130707	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level fto 98 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent an hour and a half later after ambient temperatures decreased.			
20130706	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level fto 98 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent eight hours later after ambient temperatures decreased.			
20130705	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level fto 98 percent due to high condensate system temperatu caused by high ambient temperature conditions. The operators returned the reactor power level to 100 percent seven hours later after ambient temperatures decreased.			

Date	Facility / Description			
20120918	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 96 percent at 1:16 pm due to high condensate system temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about seven hours later.			
20120908	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 94 percent at 11:29 am due to high condensate syste temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about six hours later.			
20120905	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser backpressure less than 5 inches Mercury due to high ambient temperatures.			
20120904	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 96 percent at 3:39 pm due to high condensate system temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about twenty seven hours later.			
20120828	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser backpressure less than 5 inches Mercury due to high ambient temperatures.			
20120824	Millstone	Unit 2	Waterford	CT
	The reactor was connected to the electrical grid at 5:16 am to end a 279.5 hour forced outage.			
20120817	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 97 percent at 2:30 pm due to high condensate system temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about six hours later.			
20120817	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser backpressure less than 5 inches Mercury due to high ambient temperatures.			
20120812	Millstone	Unit 2	Waterford	CT
	The operators shut down the reactor to comply with technical specifications when the ultimate heat sink temperature increased above 75F.			
20120812	Oyster Creek		Forked River	NJ
	The operators reduced the reactor power level due to condenser backpressure problems caused by hig ambient temperature.			
20120809	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 95 percent at 10:50 am due to high condensate syste temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about seven hours later.			
20120807	Oyster Creek		Forked River	NJ
	The operators reduced the reactor power level due to condenser backpressure problems caused by hig ambient temperature.			
20120806	Limerick	Unit 2	Pottstown	PA
	The operators returned the reactor power level to 100 percent at 2:05 am.			

Date	Facility / Description			
20120806	Oyster Creek		Forked River	NJ
	The operators reduced the reactor power level due to condenser backpressure problems caused by hig ambient temperature.			
20120805	Dresden	Unit 3	Morris	IL
	The operators returned the reactor power level to 100 percent at approximately 4 pm.			
20120805	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level to 97 percent due to high condensate system temperatu caused by high ambient temperature. The operators returned the reactor power level to 100 percent ab six and a half hours later.			
20120805	Oyster Creek		Forked River	NJ
	The operators reduced the reactor power level due to condenser backpressure problems caused by hig ambient temperature.			
20120804	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 86 percent at 10:45 am due to high condensate syste temperature caused by high ambient temperature.			
20120804	Oyster Creek		Forked River	NJ
	The operators reduced the reactor power level due to condenser backpressure problems caused by hig ambient temperature.			
20120804	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser backpressure less than 5 inches Mercury due to high ambient temperatures.			
20120803	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to 98 percent to maintain condenser vacuum because o high ambient temperatures.			
20120803	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 94 percent at 10:45 am due to high condensate syste temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about twelve and a half hours later.			
20120803	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser backpressure less than 5 inches Mercury due to high ambient temperatures.			
20120802	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 96 percent at 2:12 pm due to high condensate system temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about nine and a half hours later.			
20120801	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser backpressure less than 5 inches Mercury due to high ambient temperatures.			
20120731	Duane Arnold		Palo	IA
	The operators reduced the reactor power level three times during July due to condenser backpressure caused by high ambient temperatures.			

Date	Facility / Description			
20120729	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser backpressure less than 5 inches Mercury due to high ambient temperatures.			
20120726	Beaver Valley	Unit 1	Shippingport	PA
	The operators reduced the reactor power level to 92 percent due to high condenser backpressure caus by high ambient weather conditions.			
20120726	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level to 96 percent due to high condensate system temperatu caused by high ambient temperature. The operators returned the reactor power level to 100 percent ab four hours later.			
20120726	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 86 percent at 1:53 pm due to high condensate systen temperature caused by high ambient temperature.			
20120726	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser backpressure less than 5 inches Mercury due to high ambient temperatures.			
20120724	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 86 percent at 8:54 am due to high condensate systen temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about fifteen hours later.			
20120724	Quad Cities	Unit 1	Cordova	IL
	The operators reduced the reactor power level for several hours due to high river water temperature.			
20120724	Quad Cities	Unit 2	Cordova	IL
	The operators reduced the reactor power level for several hours due to high river water temperature.			
20120723	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 92 percent at noon due to high condensate system temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about fifteen and a half hours later.			
20120720	Dresden	Unit 3	Morris	IL
	The operators returned the reactor power level to 100 percent at approximately 8 am.			
20120718	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 87 percent at 9:24 am due to high condensate systen temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about sixteen and a half hours later.			
20120717	Beaver Valley	Unit 1	Shippingport	PA
	The operators reduced the reactor power level to 98 percent due to high condenser backpressure caus by high ambient weather conditions.			
20120717	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 86 percent at 11:34 am due to high condensate syste temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about twenty one hours later.			

Date	Facility / Description			
20120717	Quad Cities	Unit 1	Cordova	IL
	The operators reduced the reactor power level for several hours due to high river water temperature.			
20120717	Quad Cities	Unit 2	Cordova	IL
	The operators reduced the reactor power level for several hours due to high river water temperature.			
20120716	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to 94 percent to maintain condenser vacuum because o high ambient temperatures.			
20120716	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 95 percent at 1:53 pm due to high condensate systen temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about twelve hours later.			
20120715	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to 88 percent to maintain condenser vacuum because o high ambient temperatures. The operators returned the reactor power level to 100 percent about two ho later.			
20120715	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 91 percent at 10:59 am due to high condensate syste temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about twelve hours later.			
20120710	Dresden	Unit 3	Morris	IL
	The operators returned the reactor power level to 100 percent at approximately 6 am.			
20120710	Quad Cities	Unit 1	Cordova	IL
	The operators reduced the reactor power level for several hours due to high river water temperature.			
20120710	Quad Cities	Unit 2	Cordova	IL
	The operators reduced the reactor power level for several hours due to high river water temperature.			
20120708	Dresden	Unit 2	Morris	IL
	The operators returned the reactor power level to 100 percent at approximately 1 am.			
20120707	Beaver Valley	Unit 1	Shippingport	PA
	The operators reduced the reactor power level to 92 percent due to high condenser backpressure caus by high ambient weather conditions.			
20120707	Beaver Valley	Unit 2	Shippingport	PA
	The operators reduced the reactor power level to 98 percent due to high condenser backpressure caus by high ambient weather conditions.			
20120707	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level to 96 percent due to high condensate system temperatu caused by high ambient temperature. The operators returned the reactor power level to 100 percent ab five hours later.			

Date	Facility / Description			
20120707	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 85 percent at 9:35 am due to high condensate system temperature caused by high ambient temperature. The operators returned the reactor power level to 10 percent about fourteen hours later.			
20120707	Limerick	Unit 2	Pottstown	PA
	The operators returned the reactor power level to 98 percent at 9:10 am.			
20120706	Limerick	Unit 2	Pottstown	PA
	The operators returned the reactor power level to 100 percent at 1:14 am.			
20120706	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 92 percent at 2:53 pm due to high condensate system temperature caused by high ambient temperature.			
20120705	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to 83 percent to maintain discharge canal effluent temperature within the limit in the state's NPDES permit.			
20120704	Beaver Valley	Unit 1	Shippingport	PA
	The operators reduced the reactor power level to 97 percent due to high condenser backpressure caus by high ambient weather conditions.			
20120704	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to 80 percent to maintain discharge canal effluent temperature within the limit in the state's NPDES permit.			
20120704	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 88 percent due to high condensate system temperatu caused by high ambient temperature.			
20120701	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 91 percent due to high condensate system temperatu caused by high ambient temperature. The operators returned the reactor power level to 100 percent ab ten and a half hours later.			
20120629	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level to 95 percent due to condenser pressure reaching the turbine design limit due to extreme environmental conditions.			
20120629	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 91 percent when the condensate temperature limit wa reached due to high ambient temperatures.			
20120622	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 93 percent when the condensate temperature limit wa reached due to high ambient temperatures.			
20120621	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level to 99 percent due to condenser pressure reaching the turbine design limit due to extreme environmental conditions. The operators returned the reactor power level to 100 percent that evening.			

Date	Facility / Description			
20120620	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 92 percent when the condensate temperature limit wa reached due to high ambient temperatures.			
20120113	Millstone	Unit 2	Waterford	CT
	The operators reduced the reactor power level to 77 percent due to degrading condenser vacuum caus by wind and wave action from a storm that deposited debris at the intake structure.			
20120113	Millstone	Unit 3	Waterford	CT
	The operators reduced the reactor power level to 85 percent due to degrading condenser vacuum caus by wind and wave action from a storm that deposited debris at the intake structure.			
20111016	Millstone	Unit 2	Waterford	CT
	The operators reduced the reactor power level to 89 percent to prevent exceeding the station differentia temperature limit of 32F. The high effluent temperatures were caused by a total circulating water sytem outage on Unit 3 during its refueling outage.			
20110928	Millstone	Unit 2	Waterford	CT
	The operators reduced the reactor power level to 79 percent due to increasing condenser pressure afte circulating water pump 2A failed.			
20110924	Calvert Cliffs	Unit 1	Lusby	MD
	The operators reduced the reactor power level to 88 percent to limit condenser differential temperature.			
20110901	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to 81 percent to maintain the discharge canal effluent temperatures below 90F to comply with the National Pollutant Discharge Elimination System permit.			
20110723	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level to 97 percent at 4:12 pm due to high condensate temperature caused by high ambient temperature.			
20110721	Limerick	Unit 1	Pottstown	PA
	The operators reduced the reactor power level to 93 percent at 12:53 pm due to high condensate temperature caused by high ambient temperature.			
20110720	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to 78 percent due to low condenser vacuum caused by prolonged high intake water temperature.			
20110718	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to 78 percent due to low condenser vacuum caused by prolonged high intake water temperature.			
20110609	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 92 percent due to high condensate temperature caus by high ambient temperatures.			
20110608	Fermi	Unit 2	Newport	MI
	The operators reduced the reactor power level to 94 percent to control condenser backpressure caused high ambient temperature.			
20110601	Fermi	Unit 2	Newport	MI
	The operators reduced the reactor power level to 97 percent due to condenser backpressure caused by high ambient temperatures. The operators returned the reactor power level to 100 percent later that day			

Date	Facility / Description			
20100831	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level numerous times during the month due to high condense backpressure caused by high river water temperature at the intake structure.			
20100831	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level numerous times during the month due to high river wate temperature at the intake structure.			
20100813	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level from 100 percent to 94 percent due to high condensate demineralizer temperatures. The high condensate system temperatures resulted from prolonged high water temperatures at the intake structure.			
20100812	LaSalle County	Unit 1	Seneca	IL
	The operators reduced the reactor power level to 72 percent due to high lake water temperature at the intake structure.			
20100812	LaSalle County	Unit 2	Seneca	IL
	The operators reduced the reactor power level to 78 percent due to high lake water temperature at the intake structure.			
20100810	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level from 95 percent to 88 percent due to high condenser backpressure caused by high river water temperature at the intake structure.			
20100809	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level to 91 percent due to high condenser backpressure caus by high river water temperature at the intake structure.			
20100805	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level from 95 percent to 90 percent due to high condenser backpressure caused by high river water temperature at the intake structure.			
20100804	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level from 94 percen to 89 percent due to high condenser backpressure caused by high river water temperature at the intake structure.			
20100803	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level to 94 percent due to high condenser backpressure caus by high river water temperature at the intake structure.			
20100630	Edwin I. Hatch	Unit 1	Baxley	GA
	The operators reduced the reactor power on numerous occasion during the month to maintain the condensate water temperature below 130F due to high river water temperature at the intake structure.			
20100630	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level numerous times during the month due to high river wate temperature at the intake structure.			
20100526	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to 97 percent for about 5 hours due to high intake temperature.			
20100525	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to 92 percent due to high intake water temperature.			

Date	Facility / Description			
20090820	Edwin I. Hatch	Unit 1	Baxley	GA
	The operators reduced the reactor power level to 94 percent to maintain condensate temperature belov 130F.			
20090818	Edwin I. Hatch	Unit 1	Baxley	GA
	The operators reduced the reactor power level to 94 percent to maintain condensate temperature belov 130F.			
20090816	Edwin I. Hatch	Unit 1	Baxley	GA
	The operators reduced the reactor power level to 94 percent to maintain condensate temperature belov 130F.			
20090729	Hope Creek	Unit 1	Salem	NJ
	The operators reduced the reactor power level to 98 percent at 3:01 pm due to degraded condenser vacuum.			
20080708	Edwin I. Hatch	Unit 1	Baxley	GA
	The operators reduced the reactor power level in response to decreasing condenser vacuum pressure increasing circulating water differential temperature caused by high ambient temperature and a 12 mile hour prevailing wind from the south.			
20080609	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 96 percent due to high condensate temperature caus by high ambient temperature conditions.			
20080607	Limerick	Unit 2	Pottstown	PA
	The operators reduced the reactor power level to 97 percent due to high condensate temperature caus by high ambient temperature conditions.			
20070804	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to 88 percent to maintain the plant's discharge temperat within environmental limits.			
20070803	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser vacuum pressure due to low river flow.			
20070802	Vermont Yankee		Vernon	VT
	The operators reduced the reactor power level to maintain condenser vacuum pressure due to low river flow.			
20060729	Prairie Island	Unit 1	Red Wing	MN
	The operators reduced the reactor power level to comply with the National Pollutant Dischage Eliminati System Permit. The applicable requirement limited blow down of water from the plant when temperatur the Mississippi River measured at a point down stream of the plant reached 86F. The power reduction lasted 40 hours.			
20060729	Prairie Island	Unit 2	Red Wing	MN
	The operators reduced the reactor power level to comply with the National Pollutant Dischage Eliminati System Permit. The applicable requirement limited blow down of water from the plant when temperatur the Mississippi River measured at a point down stream of the plant reached 86F. The power reduction lasted 50 hours.			
20050801	Monticello		Monticello	MN
	The operators reduced the reactor power level to 95 percent for about 12 hours due to environmental limitations (river and discharge canal water temperatures approached limits).			

Date	Facility / Description			
20050731	Monticello		Monticello	MN
	The operators reduced the reactor power level to 67 percent for about 19.5 hours due to environmental limitations (river and discharge canal water temperatures approached limits).			
20050730	Monticello		Monticello	MN
	The operators reduced the reactor power level to 82 percent for about 12 hours due to environmental limitations (river and discharge canal water temperatures approached limits).			
20050729	Monticello		Monticello	MN
	The operators reduced the reactor power level to 85 percent for about 11 hours due to environmental limitations (river and discharge canal water temperatures approached limits).			
20000901	Duane Arnold		Palo	IA
	The operators reduced the reactor power level to 96 percent for 4 hours due to high condenser backpressure caused by hot weather conditions.			
20000811	Virgil C. Summer		Parr	SC
	The operators reduced the reactor power level to 99 percent due to high circulating water discharge temperature caused by high lake water temperature.			
20000710	Callaway	Unit 1	Fulton	MO
	The operators reduced the reactor power level to 96 percent for about 4 hours due to high condenser backpressure caused by high ambient air and water temperatures.			
20000512	Beaver Valley	Unit 2	Shippingport	PA
	The operators reduced the reactor power level to 94 percent due to decreasing condenser vacuum presssure caused by unusually warm and humid atmosphereic conditions reducing the heat transfer capability of the cooling tower.			
19940101	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to prevent exceeding the thermal discharge tempature t the Illinois River.			
19930819	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to prevent exceeding the thermal discharge tempature t the Illinois River.			
19930819	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to prevent exceeding the thermal discharge tempature t the Illinois River.			
19930725	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to prevent exceeding the thermal discharge tempature t the Illinois River.			
19930725	Dresden	Unit 3	Morris	IL
	The operators reduced the reactor power level to prevent the temperature of water discharged to the Illinois River from exceeding limits. A lightning strike caused a fire on motor control center MCC51, whi caused Units 2 and 3 to be placed in lake bypass mode of operation.			
19910621	Dresden	Unit 2	Morris	IL
	The operators reduced the reactor power level to avoid exceeding the limit on discharge temperature t Illinois River.			

Date	Facility / Description			
19890211	Salem	Unit 2	Salem	NJ
	The operators reduced the reactor power level to comply with thermal discharge limits.			
19880618	Fort Calhoun	Unit 1	Fort Calhoun	NE
	The operators reduced the reactor power level when high river water temperature caused condenser backpressure to rise.			