NRC FORM 464 Part I
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#### U.S. NUCLEAR REGULATORY COMMISSION

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FOIA/PA	2003-0032	1

RESPONSE NUMBER

3



# **RESPONSE TO FREEDOM OF**

AED!	ACT (PA) REQUEST	RESPONSE FINAL PARTIAL			
REQUE	STER	DATE JAN 0 9 2003			
	James Riccio	OAN 0 3 2883			
-	PART I INFORMATION RELEASED (See che	cked boxes)			
	No additional agency records subject to the request have been located.				
	Requested records are available through another public distribution program.	See Comments section.			
$\mathbf{V}$	Agency records subject to the request that are identified in the public inspection and copying at the NRC Public Document Ro	listed appendices are already available for om.			
$\mathbf{V}$	Agency records subject to the request that are identified in the public inspection and copying at the NRC Public Document Ro	om.			
	Enclosed is information on how you may obtain access to and the charges for of Document Room, 2120 L Street, NW, Washington, DC.	opying records located at the NRC Public			
V	Agency records subject to the request are enclosed.				
	Records subject to the request that contain information originated by or of interest to another Federal agency have been referred to that agency (see comments section) for a disclosure determination and direct response to you.				
V					
	This completes NRC's action on your request.				
	PART I.A FEES				
AMOU	You will be billed by NRC for the amount listed.	None. Mınimum fee threshold not met.			
\$	You will receive a refund for the amount listed.	Fees waived.			
* See comments for details					
PART I.B INFORMATION NOT LOCATED OR WITHHELD FROM DISCLOSURE					
No agency records subject to the request have been located.					
	Certain information in the requested records is being withheld from disclosure pursuant to the exemptions described in and for the reasons stated in Part II.				
	This determination may be appealed within 30 days by writing to the FOIA/PA Officer, U.S. Nuclear Regulatory Commission, Washington, DC 20555-0001. Clearly state on the envelope and in the letter that it is a "FOIA/PA Appeal."				
	PART I.C COMMENTS (Use attached Comments continu	ation page if required)			

The records identified on enclosed Appendix I are copyrighted and are, therefore, not included in this response. Please contact the NRC Public Document Room on (301) 415-4737 if you would like to review the records.

SIGNATURE - FREEDOM OF INFORMATION ACT AND PRIVACY ACT OFFICER Carol Ann Reed

#### APPENDIX G RECORDS BEING RELEASED IN THEIR ENTIRETY

<u>NO.</u>	<u>DATE</u>	DESCRIPTION/(PAGE COUNT)
1.	Undated	SRXB Input to RAI Related to "Control of Chemical Attack in the PBMR Presentation to USNRC In Support of PBMR Pre-Application Activities" (9 pages)
2.	Undated	SECY Related to Exelon Legal and Financial Issues (5 pages)
3.	Undated	PBMR Fact Sheet (2 pages)
4.	Undated	Discussion on Regulatory Framework for 6/12 Meeting With Exelon (3 pages)
5.	Undated	Notes taken by J. Wilson, NRR, Re: PBMR - Proposed Preapplication Interactions and Inter-Offices Coordination (4 pages)
6.	Undated	Draft Proposed EMCB RAI for Pre-Licensing Review of PBMR Design - W.H. Koo (7 pages)
7.	Undated	PBMR Fuel Qualification Pre-Meeting (2 pages)
8.	Undated	Handwritten notes (U. Shoop) (1 page)
9.	Undated	Handwritten notes on EPRI Graphite report (U. Shoop) (1 page)
10.	Undated ·	Undines Comments & Yuri Comments (j'4 pages)
11.	Undated	PBMR Pre-application Review Technical and Programmatic Topics presented and documented by Exelon (2 pages)
12.	Undated	Handwritten notes on technical issues on PBMR (U. Shoop) (1 page)
13.	Undated	Air Ingress (2 pages)
14.	01/10/01	Summary of January 10, 2001, Drop-in Visit with Exelon (A. Cubbage) (1 page)
15.	01/30/01	E-mail R. Wood, NRR, to B. Zalcman, NRR, et al. Re: Pebblized Bed Reactor (1 page)
16.	01/31/01	Slides: Fuel Element Design for PBMR w/handwritten notes (3 pages)
17.	01/31/01	Handwritten notes by J. Wilson, NRR, Re: Exelon on PBMR (3 pages)

18.	02/02/01	E-mail J. Wilson, NRR, to S. Black, NRR, et al., Re: PBMR Meeting Summary w/attachment from G. Bagchi, NRR, to J. Strosnider, NRR, Re: PBMR Meeting Highlights (4 pages)
19.	04/30/01	Discussion Paper - Proposed HTGR Licensing Framework Approach for the PBMR (12 pages)
20.	05/10/01	E-mail G. Bagchi, NRR, to N. Gilles, NRR, Re: Assignments: Future Licensing (2 pages)
21.	05/16/01	E-mail Edward Throm, NRR, to N. Gilles, NRR, Re: Preliminary Input for Report (3 pages)
22.	05/22/01	E-mail A. Cubbage, NRR, to U. Shoop, NRR, Re: file's to download (1 page)
23.	06/11/01	E-mail A. Cubbage, NRR, to D. Carlson, RES, et al., Re: Agenda for June 12 and 13 meeting with Exelon (3 pages)
24.	06/19/01	E-mail R. Caruso, NRR, to N. Gilles, NRR, Re: Draft FLIRA Report Outline (3 pages)
25.	06/21/01	Exelon Call - S. Rubin, RES; D. Jackson and A. Cubbage, NRR; J. Muntz, Exelon, et al. (3 pages)
26.	07/10/01	E-mail A. Cubbage, NRR, to F. Akstulewicz, NRR, et al., Re: Fwd: Exelon agenda (2 pages)
27.	07/11/01	E-mail W. Lyon, NRR, to U. Shoop, NRR, Re: PBMR thoughts (1 page)
28.	07/12/01	E-mail A. Cubbage, NRR, to D. Carlson, RES, et al., Re: PBMR stateholder comments (2 pages)
29.	07/17/01	E-mail A. Ulses, NRR, to A. Cubbage, NRR, et al., Re: PBMR Physics Issues - Short, Short List! (1 page)
30.	07/18/01	E-mail A. Cubbage, NRR, to P. Birmingham, NRR, Re: Chinese HTR-10 SER (1 page)
31.	08/07/01	E-mail A. Cubbage, NRR, to N. Gilles, NRR, Re: Fwd: PBMR Pre- Application Resources w/att 8/07/01 e-mail A. Cubbage, NRR, to J. Williams, NRR (2 pages)
32.	08/14/01	E-mail J. Sebrosky, NRR, to A. Cerne, ORA, et al., Re: PBMR Inspection Schedule (2 pages)
33.	08/18/01	Fax V. Nilekani, Exelon, to A. Cubbage and J. Lyons, NRR, Re: List of PBMR Engineering Systems (4 pages)

34.	08/20/01	E-mail G. Bagchi, NRR, to N. Gilles, NRR, Re: Fwd: Re: PBMR Pre-application Review (2 pages)
35.	10/10/01	Handwritten notes on HTG Rx Mtg (U. Shoop) (3 pages)
36.	11/30/01	Handwritten notes (U. Shoop) (1 page)
37.	12/04/01	E-mail A. Cubbage, NRR, to Bill Gleaves, NMSS, et al., Re: Exelon plans for new enrichment plant (1 page)
38.	12/19/01	E-mail F. Akstulewicz, NRR, to A. Cubbage, NRR, et al. Re: Review of white papers from Exelon on PBMR (1 page)
39.	01/03/02	E-mail R. Caruso, NRR, to A. Cubbage, NRR, Re: PBMR Roles and Responsibilities (1 page)
40.	01/03/02	PBMR Pre-Application Review of Exelon's Technical White Papers (2 pages)
41.	01/06/02	PBMR Fuel Testing Meeting (U. Shoop handwritten notes) (1 page)
42.	01/08/02	E-mail R. Caruso, NRR, to Y. Orechwa, NRR, et al., Re: Strawman for graphite core vs. structure classification (2 pages)
43.	01/09/02	E-mail Y. Orechwa, NRR, to A. Cubbage, NRR, et al., Re: PBMR Chemical Attack White Paper RAIs (3 pages)
44.	01/10/02	E-mail A. Cubbage, NRR, to Bill Bateman, NRR, et al., Re: Rescheduled Meeting to discuss PBMR core structures (2 pages)
45.	01/14/02	E-mail A. Cubbage, NRR, to R. Caruso, NRR, et al., Re: Fwd: 23 Jan 02 Meeting on PBMR Fuel Qualification (1 page)
46.	01/25/02	E-mail Y. Orechwa, NRR, to A. Cubbage, NRR, et al., Re: Fwd: RAIs - High-Temperature Materials Graphite (3 pages)
47.	01/29/02	Handwritten notes on PBMR meeting (U. Shoop) (8 pages)
48.	01/31/02	Handwritten notes on Graphite/Chem Attack (U. Shoop) (1 page)
49.	02/06/02	Email F. Grubelich, NRR, to D. Terao, NRR, Re: PBMR Pre-Application White Paper RAIs (3 pages)
50.	02/13/02	Email K. Manoly, NRR, to A. Cubbage, NRR, Re: PBMR Review Assignments (2 pages)
51.	02/19/02	E-mail A. Cubbage, NRR, to R. Caruso, NRR, et al., Re: Next meeting (1 page)
52.	03/06/02	E-mail A. Cubbage, NRR, to U. Shoop, NRR, et al., Re: RAIs (4 pages)

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53.	03/07/02	Email G. Bagchi, NRR, to PBMR Re: PBMR One Year Delay (1 page)
54.	03/11/02	Memo E. Imbro, NRR, to J. Lyons, NRR, Re: Request for Additional Information on PBMR prepared by EMCB (16 pages)
55.	03/13/02	E-mail A. Cubbage, NRR, to NRR, NRLPO, et al., Re: Meeting notice for March 28 Exelon mtg (1 page)
56.	03/19/02	E-mail R. Caruso, NRR, to John Flack, RES, et al., Re: PBMR fuel testing (1 page)
57.	03/20/02	E-mail R. Caruso, NRR, to A. Cubbage, NRR, Re: fuel RAl's (1 page)
58.	03/21/02	E-mail A. Cubbage, NRR, to M. Srinivasan, RES, Re: graphite (1 page)
59.	03/25/02	E-mail S. Lu, NRR, to U. Shoop, NRR, et al., Re: PBMR RAIs (2 pages)
60.	03/25/02	E-mail Y. Orechwa, NRR, R. Caruso, NRR, Re: RAIs (5 pages)
61.	03/26/02	Handwritten notes on Core Design and Heat (U. Shoop) (1 page)
62.	04/10/02	E-mail A. Cubbage, NRR, to R. Caruso, NRR, et al., Re: PBMR RAIs (1 page)
63.	04/16/02	E-mail A. Cubbage, NRR, to R. Caruso, NRR, Re: Fwd: Exelon press release (3 pages)
64.	04/18/02	E-mail A. Cubbage, NRR, to R Caruso, NRR, Re: Fuel RAIs (1 page)
65.	05/07/02	Email A. Cubbage, NRR, to R. Caruso, NRR, Re: Fwd. PBMR RAIs (10 pages)
66.	08/01/02	Handwritten notes, M. Gamberoni, NRR, Re: PBMR (1 page)
67.	08/15/02	Handwritten notes taken by J. Lyons, NRR, Re: Exelon - PBMR (2 pages)
68.	09/12/02	Email D. Terao, NRR, to A. Cubbage, NRR, Re: PBMR Requests for N-499 and N201 (2 pages)

Re: FOIA-2003-0032

### APPENDIX H RECORDS BEING RELEASED IN ENTIRETY

<u>NO.</u>	<u>DATE</u>	DESCRIPTION/(PAGE COUNT)
1.	Undated	Comments on Modular Reactor paper - August 2002. (3 pages)
2.	Undated	Slides - Pebble Bed Modular Reactor Design and Operation. (38 pages)
3.	02/13/01	Memo from J. Craig to Commissioner Assistants, subject: summary of Pebble Bed Modular Reactor Design Meeting. (1 page)
4.	04/17/02	E-mail from T. Bergman to J. Shea and S. Morris re PBMR Dead for Now? (1 page)
5.	04/17/02	E-mail from T. Bergman to J. Shea re Telephone Call Schedules. (1 page)
6.	05/16/02	Slides - Proposed Closure of Pre-application Review Activities for the PBMR. (5 pages)
7.	05/16/02	Slides - NRC Plans for Concluding PBMR Pre-application Review Activities. (7 pages)
8.	05/31/02	E-mail from T. Bergman to A. Markley; D. Matthews, R. Correia and T. Dietz regarding corrections to Budget Writeup. (1 page)
9.	11/7/00	E-mail from J. Craig to Commissioner Assistants regarding Modular Pebble ed Reactor Concept, with attachment. (1 page) NOTE: Attachment identified in Appendix I.

Re: FOIA-2003-0032

### APPENDIX I COPYRIGHTED DOCUMENTS

NO.	<u>DATE</u>	DESCRIPTION/(PAGE COUNT)
1.	02/28/01	Pebble Bed Reactor Technology, from Eskom website. (5 pages)
2.	09/29/98	Slides: The Modular Pebble Bed Reactor Concept - a Presentation of the 22.33/.033 Design Course for University of Cincinnati/Ohio State University. (74 pages)

Re: FOIA-2003-0032

## APPENDIX J RECORDS ALREADY AVAILABLE IN THE PDR

<u>NO.</u>	DATE	ACCESSION NUMBER	DESCRIPTION/(PAGE COUNT)
1.	10/31/00	ML003765590	Memorandum to Chairman Meserve and Commissioners from Jeffrey Merrifield on Staff Readiness for New Nuclear Plant Construction and the Pebble Bed Reactor. (2 pages)
2.	02/12/01	ML010430292	Memorandum from Thomas King to Ashok Thadani on Meeting with Exelon Generation Company and Other Interested Stakeholders Regarding the Pebble Bed Modular Reactor. (5 pages)
3.	04/25/01	ML011010424	Secy Paper 01-0070 on Plan for Preapplication Activities on the Pebble Bed Modular Reactor (PBMR). (17 pages)
4.	04/30/01	ML011340379	Exelon Slides on PBMR Pre-application Meeting. (39 pages)
5.	04/30/01	ML011340459	NRC Staff Slides on Proposed PBMR Pre-application Review Plan (Project 713). (9 Pages)
6.	04/30/01	ML011340464	Discussion Paper on Proposed HTGR Licensing Framework Approach for the PBMR. (12 pages)
7.	05/01/01	ML011080144	Memorandum from William Travers to the Commission on Staff Readiness for Future Licensing Activities. (10 pages)
8.	05/10/01	ML011420393	Letter from James Muntz, Exelon to

Thomas King, NRC on Regulatory
Issues Related to the Pebble Bed
Modular Reactor. (45 pages)

9.	05/14/01	ML011340094	Memorandum from Thomas King, RES to Ashok Thadani, RES on Meeting with Exelon Generation Company, DOE and other interested Stakeholders regarding the Pebble Bed Modular Reactor. (4 pages)
10.	07/26/01	ML012110067	Letter from Dennis Rathbun, NRC to Senator Frank Murkowski enclosing NRC's response to hearing questions on the Price-Anderson Act. (4 pages)
11.	07/26/01	ML012130057	Letter from Dennis Rathbun, NRC to Senator Jeff Bingaman enclosing NRC's response to hearing questions on the Price-Anderson Act. (3 pages)
12.		**************************************	Challenger Westerness (Contains)
13.	08/22/01	ML012390352	Summary of Meeting with Exelon Corporation from Eric Benner, NRC. (13 pages)
14.	10/12/01	ML012350040	Secy Paper 01-0188 on Future Licensing and Inspection Readiness Assessment. (92 pages)
15.	11/01/01	ML013110436	Memorandum from Dennis Rathbun, NRC to the Commission on Markup of Price-Anderson Act, 10/31/01, Afternoon Session. (12 pages)
16.	11/20/01	ML012850139	Secy Paper 01-0207 on Legal and Financial Issues Related to Exelon's Pebble Bed Modular Reactor. (33 pages)

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18.	03/12/02	ML020710709	Memorandum from Stuart Rubin, RES to Farouk Eltawila, RES on Notice of Meeting with DOE, Exelon and other Interested Stakeholders regarding Fuel Irradiation Program Plan and Preapplication Activities for the Pebble Bed Modular Reactor. (5 pages)
19.	05/08/02	ML020980176	Secy Paper 02-0076 on Semi-Annual Update of the Future Licensing and Inspection Readiness Assessment. (14 pages)
20.	07/22/02	ML021790610	Secy Paper 02-0139 on Plan for Resolving Policy Issues Related to Licensing Non-Light Water Reactor Designs. (25 pages)