

**RESPONSE TO FREEDOM OF
INFORMATION ACT (FOIA) / PRIVACY
ACT (PA) REQUEST**

2007-0255

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RESPONSE TYPE ☐ FINAL ☒ PARTIAL

REQUESTER

JAMES E. SCHEUERMANN, ESQ.

DATE

SEP 18 2007

PART I. -- INFORMATION RELEASED

- ☐ No additional agency records subject to the request have been located.
- ☐ Requested records are available through another public distribution program. See Comments section.
- ☒ **APPENDICES A** Agency records subject to the request that are identified in the listed appendices are already available for public inspection and copying at the NRC Public Document Room.
- ☐ **APPENDICES** Agency records subject to the request that are identified in the listed appendices are being made available for public inspection and copying at the NRC Public Document Room.
- ☐ Enclosed is information on how you may obtain access to and the charges for copying records located at the NRC Public Document Room, 11555 Rockville Pike, Rockville, MD 20852-2738.
- ☒ **APPENDICES A** 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.
- ☐ We are continuing to process your request.
- ☐ See Comments.

PART I.A -- FEES

AMOUNT *

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- ☐ You will be billed by NRC for the amount listed. ☐ None. Minimum 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 continuation page if required)

The incoming FOIA/PA-2007-0255-0255 is located in ADAMS at ML072040166.

SIGNATURE - FREEDOM OF INFORMATION ACT AND PRIVACY ACT OFFICER

Russell A. Nichols

APPENDIX A
RECORDS BEING RELEASED IN THEIR ENTIRETY
(If copyrighted identify with *)

<u>NO.</u>	<u>DATE</u>	<u>DESCRIPTION/(PAGE COUNT)</u>
1.	Undated	Beaver Valley EPU I&C Questions. (4 pages)
2.	Undated	Memo from J.E. Dyer, NRR to P. Norry, EDO on Communication Plan for Bulletin 2004-xx, "Use of Ultrasonic Flow Measurement Devices for Feedwater Flow Measurement in Light Water Reactors".(9 pages)
3.	03/04/03	Email from J. Zwolinski, NRR to E. Marinos, NRR and R. Barrett, NRR on Caldon. (1 page)
4.	04/18/03	Email from G. Cwalina, NRR to E. Marinos, NRR on Review of Caldon Submittal. (1 page)
5.	04/15/03	Email from G. Cwalina, NRR to E. Marinos, NRR on Caldon's March 7 th submittal. (1 page)
6.	06/16/03	Email from R. Shaffer, NRR to C. Antonescu, RES, C. Graham, D. Tift, RI, J. Calvert, S. Arndt, RES on The Nuclear Professional. (1 page)
7.	06/17/03	Email from G. Cwalina, NRR to E. Marinos, NRR on Other Caldon Issue. (1 page)
8.	06/19/03	Email from E. Marinos, NRR to G. Cwalina, NRR and H. Berkow, NRR on Caldon Allegation. (1 page)
9.	06/20/03	Email from E. Marinos, NRR to D. Thatcher, NRR, G. Cwalina, NRR and S. Alexander, NRR on Caldon Meeting. (2 pages)
10.	07/02/03	Email from E. Marinos, NRR to D. Thatcher, NRR on Flowmeter Allegations. (1 page)
11.	08/26/03	Email from E. Marinos, NRR to C. Grimes, NRR and J. Calvo on Lost Balls. (1 page)
12.	09/22/03	Email from S. Alexander, NRR to D. Thatcher, NRR, E. Marinos, NRR, G. Cwalina, NRR, I. Ahmed, NRR, J. Calvo, NRR, S.Arndt, RES and T. Quay, NRR on 2003-0003 CI Concerns Compilation. (3 pages)
13.	09/25/03	Email from S. Alexander, NRR to E. Marinos, NRR and I. Ahmed, NRR on 2003-03 & 07 CI Concerns Compilation. (3 pages)

14. 09/25/03 Email from S. Alexander, NRR to D. Thatcher, NRR, E. Marinos, NRR, G. Cwalina, NRR, I. Ahmed, NRR, J. Calvo, NRR and S. Arndt, RES on 2003-03 & 07 CI Concerns Compilation. (3 pages)
15. 10/01/03 Email from E. Marinos, NRR to C. Grimes, NRR and R. Barrett, NRR on 2003-03 & 07 CI Concerns Compilation. (1 page)
16. 10/16/03 Email from A. Norris, NRR to D. Holland, NRR on Explanation of Fees on MB4073 – Caldon. (1 page)
17. 10/23/03 Email from G. Cwalina, NRR to J. Calvo, NRR and T. Quay, NRR on Letter with questions to Westinghouse Concerning challenges to the Crossflow instrument design. (2 pages)
18. 11/06/03 Email from H. Berkow, NRR to, R. Barrett, NRR, R. Carlson, NRR and T. Rothschild, OGC on Caldon Response letter to Oct. 20th Meeting. (1 page)
19. 11/19/03 Byron and Braidwood Recent Potential Over Power Issues. (15 pages) ML033250144
20. 01/05/04 Email from D. Holland, NRR to D. Thatcher, NRR, E. Marinos, NRR G. Cwalina, NRR, H. Berkow, NRR, I. Ahmed, NRR, P. Rebstock, RES and S. Alexander, NRR on Briefing to Jim Dyer and Brian Sheron on Caldon Background. (1 page)
21. 02/06/04 Email from E. Marinos, NRR to C. Grimes, NRR, J. Calvo, NRR and R. Barrett, NRR on Allegation NRR-2003-A-0003 and 0007. (1 page)
22. 03/08/04 Email from J. Wermiel, NRR to E. Marinos, NRR on Flawed Instrument (Crossflow) used for Power Uprates. (1 page)
23. 04/19/04 Email from E. Marinos, NRR to J. Wermiel, NRR on comments on the UFM Task Group draft report. (4 pages)
24. 04/28/04 Email from G. Cwalina, NRR to J. Calvo, NRR, B. Sheron, NRR, and J. Wermiel, NRR on Crossflow Issue. (1 page)
25. 04/29/04 Email from B. Sheron, NRR to C. Grimes, NRR, J. Dyer, NRR, J. Calvo, NRR, R. Barrett, NRR and R. Borchardt, NRR on Caldon annual user group invitation. (1 page)

26. 05/12/04 Email from B. Sheron, NRR to G. Cwalina, NRR, J. Wermiel, NRR and J. Calvo, NRR on Phone call with Caldon. (page)
27. 05/17/04 Email from C. Grimes, NRR to G. Dick, NRR on W/AMAG issue. (1 page)
28. 05/30/04 Email from G. Dick, NRR to G. Shukla, NRR, G. Cwalina, NRR and W. Macon, NRR on UFM Bulletin. (1 page)
29. 06/04/04 Email from E. Marinos, NRR to C. Grimes, NRR on UFM Bulletin. (2 pages)
30. 06/09/04 Email from S. Dembek, NRR to I. Ahmend, NRR, J. Calvo, NRR, G. Cwalina, NRR, G. Dick, NRR, E. Marinos, NRR and J. Wermiel, NRR on External Caldon Flow Meter issue at Palo Verde. (1 page)
31. 06/16/04 Email from E. Hauser, Caldon to G. Cwalina, NRR on Comments on May 25, 2004 Westinghouse Meeting with NRC. (2 pages)
32. 06/22/04 Email from C. Grimes, NRR to J. Calvo, on Bulletin on Ultrasonic Flow Meters. (3 pages)
33. 06/28/04 Email from R. Mathew, NRR to A. Lee, NRR on EDO daily note – revised. (2 pages)
34. 07/02/04 Email from C. Santos, NRR to J. Calvo, NRR on Agenda for UFM. (2 pages)
35. 07/06/04 Email from J. Calvo, NRR to R. Rivera, OIG and V. Bucci, OIG on closed meeting with Caldon, Inc. on July 1, 2004 between 12:15 and 1:30 pm. (1 page)
36. 07/07/04 Email from C. Grimes, NRR to B. Sheron, NRR, E. Merschhoff, EDO, J. Dyer, NRR, L. Reyes, EDO, W. Dean, EDO on UFM Status. (2 pages)
37. 07/09/04 Email from C. Santos, NRR to G. Dick, NRR on Reports regarding UFM devices. (1 page)
38. 07/19/04 Email from S. Dembek, NRR to R. Barrett, NRR, H. Berkow, NRR, J. Calvo, NRR, G. Cwalina, NRR, G. Dick, NRR, C. Doult, NRR, M. Fields, NRR, W. Lyon, NRR, E. Marinos, NRR, T. Pruett, NRR, N. Salgado, NRR and J. Wermiel, NRR on FYI Palo Verde's UFM Problem. (2 pages)

39. 07/21/04 Email from E. Marinos, NRR to C. Grimes, NRR, J. Wermiel NRR and J. Calvo on UFM Bulletin Status. (22 pages)
40. 07/21/04 Email from E. Marinos, NRR to S. Dembek, NRR on UFM Presentation to CRGR. (1 page)
41. 07/23/04 Email from C. Grimes, NRR to M. Knapik, Platts on UFM. (1 page)
42. 07/26/04 Memorandum from J.E. Dyer, NRR to P. Norry, EDO on Communication Plan for Bulletin 2004-XX, "use of Ultrasonic Flow Measurement Devices for Feedwater Flow Measurement in Light Water Reactors" (9 pages) (ML041680557)
43. 07/27/04 Email from M. Sykes, RI to G. Dick, NRR on ACRS meeting on Proposed UFM Bulletin. (1 page)
44. 08/03/04 Email from E. Merschoff, EDO to E. Marinos, NRR on UFM. (1 page)
45. 09/15/04 Email from C. Grimes, NRR to E. Merschoff, EDO on UFM Meeting. (2 pages)
46. 09/24/04 Email from C. Grimes, NRR to J. Calvo, NRR on UFM Allegations. (1 page)
47. 09/27/04 Email from R. Barrett, NRR to J. Calvo, NRR and E. Marinos, NRR on UFM Allegations. (2 pages)
48. 10/06/04 Email from G. Cwalina, NRR to C. Grimes, NRR on URM End Game Meeting. (1 page)
49. 11/09/04 Email from E. Marinos, NRR to C. Grimes, NRR and E. Merschoff, EDO on UFM Bulletin. (2 pages)
50. 11/12/04 Email from C. Grimes, NRR to B. Boger, NRR, E. Marinos, NRR, J. Wermiel, NRR, J. Calvo, NRR, S. Alexander, NRR, S. Black, NRR, T. Quay, NRR and W. Lyon, NRR on URM End Game. (2 pages)
51. 11/16/04 Email from E. Marinos, NRR to B. Boger, NRR, C. Grimes, NRR, J. Wermiel, NRR, J. Calvo, NRR, S. Alexander, NRR, S. Black, NRR, T. Quay, NRR and W. Lyon, NRR on URM End Game. (2 pages)
52. 11/24/04 Email from C. Grimes, NRR to E. Marinos, NRR on UFM End Game. (4 pages)

53.	11/30/04	Email from E. Marinos, NRR to J. Dyer, NRR on Allegation Closure Letter on Crossflow UFM. (9 pages)
54.	12/02/04	Email from G. Cwalina, NRR to J. Crutchley, J. Petrosino, NRR on UFM Issues (NRR-2003-A-0003, 0007) (1 page)
55.	12/02/04	Email from E. Marinos, NRR to G. Cwalina, NRR on UFM Issues. (1 page)
56.	12/03/04	Email from G. Cwalina, NRR to E. Marinos, NRR on UFM Issues. (10 pages)
57.	12/06/04	Email from E. Marinos, NRR to G. Cwalina, NRR on UFM Issues. (2 pages)
58.	12/08/04	Email from C. Grimes, NRR to T. Liu, NRR on Q&A for UFM. (2 pages)
59.	12/10/04	Email from C. Grimes, NRR to J. Wermiel, NRR and J. Calvo, NRR on UFM Restart. (1 page)
60.	12/13/04	Email from J. Wermiel, NRR to C. Grimes, NRR on UFM Restart. (2 pages)
61.	12/28/04	Email from C. Grimes, NRR to G. Cwalina, NRR on UFM Restart. (3 pages)
62.	12/29/04	Facsimile of Caldon Legal Complaint. (17 pages)
63.	01/05	Caldon Experience in Nuclear Feedwater Flow Measurement. (23 pages)
64.	01/24/05	Email from G. Cwalina, NRR to C. Grime, NRR, S. Lee, NRR on Caldon Green Ticket visit with Ellis. (1 page)
65.	01/27/05	Email from E. Marinos, NRR to C. Grimes, NRR on LT Meeting on UFM, Feb. 1. (21 pages)
66.	02/04/05	Email from J. Trapp, NMSS to J. Kramer, NRR on LEFM – Nine Mile Unit 2. (1 page)
67.	02/25/05	Email from J. Calvo, NRR to B. Boger, NRR on Non-Concurrence on Proposed Resolution of UFM Allegations. (20 pages)
68.	03/09/05	Email from C. Grimes, NRR to E. Marinos, NRR and J. Calvo, NRR on fwd: Wog Crossflow task force meeting. (1 page)
69.	03/10/05	Email from C. Grimes, NRR to B. Sheron, NRR on UFM Closure. (1 page)

70. 03/15/05 Note from C. Grimes, NRR to A. Marinos, NRR and I. Ahmed, NRR on Comments on the X-Beam SER. (2 pages)
71. 03/28/05 Email from E. Marinos, NRR to C. Grimes, NRR on fwd: X-Beam SER. (6 pages)
72. 06/06/05 Email from G. Cwalina, NRR to J. Crutchley, NRR and J. Petrosino, NRR on UFM Issue. (1 page)
73. 10/20/05 Draft Questions pertaining to Flow Profile Considerations for Plant UFM Uncertainty Applications. (4 pages)
74. 10/26/05 Memorandum to Biweekly Notice Coordinator from G. Miller, NRR on Request for Publication in Biweekly FR Notice – Notice of Consideration of Issuance of Amendment to Facility Operating License, proposed No Significant Hazards Consideration Determination and Opportunity for a Hearing. (4 pages) (ML052850019)
75. 11/07/05 W. Lyons, NRR notes on UFM. (1 page)
76. 11/15/05 UFM Review Status and Anticipated Resolution Process. (2 pages)
77. 11/22/05 Email from M. King, NRR to E. Benner, NRR on Watts Bar Fuel Damage Issue–Request for COMM support. (1 page)
78. 11/22/05 Topical Areas of Concern, Highlighting Flow Profile Considerations, for Plant UFM Uncertainty Applications. (4 pages)
79. 12/12/05 Email from M. King, NRR to J. Isom, NRR on Info on Non-conservative LEFM correction factor/100% exceeded. (1 page)
80. 12/16/05 Trip Report #1770 NRC/Seabrook Meeting. (5 pages)
81. 12/16/05 Caldon non-proprietary Information package for Seabrook/NRC Meeting on December 16, 2005. (174 pages)
82. 12/16/05 Measurement Uncertainty Recapture FP/LE/Caldon – NRC Meeting. (77 pages)
83. 01/17/06 Uncertainty Analysis of Flow Measurement 100,000 LB. weigh tank. (23 pages)
84. 01/18/06 Graphs on MF vs. FR. (2 pages)

85. 02/06/06 Draft of Trip Report at Alden Research Laboratory on January 17 and 18, 2006. (9 pages).
86. 05/09/06 Review of Scope for Caldon/Seabrook. (1 page)
87. 05/22/06 Memo from G. Miller, NRR to Biweekly Notice Coordinator On Request for Publication in Biweekly FR Notice – Notice Of Issuance of Amendment to Facility OL. (3 pages) (ML061360053)
88. 06/01/06 ET/LT Brief on the Status of the Measurement Uncertainty Recapture Issue. (10 pages)
89. 06/05/06 W. Lyon's notes on Review and Scope. (2 pages)
90. 06/05/06 Viewgraphs of Use of Ultrasonic Flow Measurement to Determine Reactor Power. (21 pages)
91. 06/05/06 Viewgraphs of Use of Ultrasonic Flow Measurement to Determine Reactor Power. (18 pages)
92. 06/05/06 Sketch of W/AMAG and Caldon. (1 page)
93. 06/06/06 Viewgraphs of Use of Ultrasonic Flow Measurement to Determine Reactor Power (12 pages)
94. 06/22/06 Email from M. King, NRR to V. Gaddy, RIV on Leading Edge Flow Measurement OpE Search info. (13 pages)
95. 07/27/06 Email from E. Marinos, NRR to M. Mendoza, NRR on Question concerning UFM's and LEFM's. (1 page)
96. 08/29/06 Email from E. Marinos, NRR to J. Dyer, NRR on Concerns On the Direction the Staff is Leading Management on the Crossflow UFM. (3 pages)
97. 09/25/06 Email from G. Cwalina, NRR to J. Crutchley, NRR on Greg. (2 pages)
98. 10/03/06 Email from E. Marinos, NRR to T. Martin, NRR on Comments on your proposed withdrawal of approval Of the Westinghouse Crossflow UFM. (2 pages)
99. 12/18/06 Differing Professional Opinion from E. Marinos, NRR. (2 pages)
100. 02/06/07 Email from Venturaml to W. Lyon, NRR et al. on Caldon LEFM User Group. (5 pages)
101. 02/27/07 Email from T. Alexion, NRR to W. Lyon, NRR on Question on UFM Operating Experience. (1 page)

- 102. 02/27/07 Email from T. Alexion, NRR to W. Lyon, NRR on Question on UFM Operating Experience – one follow-up. (1 page)
- 103. 02/27/07 Email from M. King, NRR to J. Thorp, NRR on Region 1 And 3 Morning Call Plant Status Notes for Tuesday, 2/27/07. (2 pages).
- 104. 02/27/07 Email from M. King, NRR to S. Freeman, RII and W. Lyon, NRR on OpE concerns related to operation "Over the Core power Thermal Limit" (2 pages)
- 105. 03/2007 Cameron Engineering Report: ER-551NP Rev. 1. (12 pages)
- 106. 04/02/07 Email from J. Craig, NRR to various Rids boxes and W. Lyon on 4/11/07 Forthcoming Closed meeting with Caldon, Inc. to Respond to NRC Questions regarding Linear Elastic Fracture Mechanics Transducer Replacement Uncertainty. (1 page) (ML070890359)
- 107. 04/05/07 Transducer Installation Uncertainty Summary. (1 page)
- 108. 04/11/07 Email from J. Thompson, NRR to W. Lyon, NRR on INFO TAC fro Caldon Interactions on UFM. (1 page)
- 109. 04/20/07 Email from M. Ventura, Cameron to W. Lyons, NRR on Caldon Cameron User Group Reminder. (1 page)
- 110. 04/20/07 Email from M. Ventura, Cameron to W. Lyons, NRR on Caldon Cameron User Group Reminder. (2 pages)
- 111. 04/30/07 Email from J. Thompson, NRR to E. Hauser, Caldon on Public Meeting. (1 page)
- 112. 04/30/07 Email from J. Thompson, NRR to E. Hauser, Caldon on Directions to 6003 Executive Blvd. (2 pages)
- 113. 04/30/07 Email from J. Thompson, NRR to e. Hauser, Caldon on Errata to Directions. (1 page)
- 114. 05/10/07 Email from G. Cranston, NRR to Reactor Systems on Branch Hot Topics. (3 pages)
- 115. 05/17/07 Ultrasonic Flow Meter (UFM) Assessment. (3 pages)
- 116. 05/23/07 Email from W. Lyon, NRR to T. Alexion, NRR on Caldon UFM and 50.59. (1 page)
- 117. 05/31/07 Email from M. King, NRR to A. Malliakos, RES on Request

- For compilation of data – on Power Upgrades. (4 pages)
118. 06/06/07 Email from G. Cranston, NRR to W. Lyon, NRR on Hot Topics. (1 page)
119. 06/14/07 Ultrasonic Flow Meter (UFM) Assessment. (2 pages)
120. 07/18/07 Differing Professional Opinion – Appeal from E. Marinos, NRR. (2 pages)
121. 07/25/07 Email from G. Cranston, NRR to Reactors Systems. (3 pages)
122. 08/22/07 NRR Communication on Fuel Cladding Failure at Watts Bar, Unit 1. (1 page)