

# REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8008120419 DOC. DATE: 80/08/07 NOTARIZED: NO DOCKET #  
 FACIL: 50-244 Robert Emmet Ginna Nuclear Plant, Unit 1, Rochester G 05000244  
 AUTH. NAME AUTHOR AFFILIATION  
 WHITE, L.D. Rochester Gas & Electric Corp.  
 RECIP. NAME RECIPIENT AFFILIATION  
 CRUTCHFIELD, D. Operating Reactors Branch 5

SUBJECT: Responds to NRC 800624 request for review of SEP Topic  
 III-5.B, "Pipe Break Outside Containment" & for schedule of  
 implementation of NRC positions. Alternative diesel generator  
 cooling method test to be conducted by June 1981.

DISTRIBUTION CODE: A035S COPIES RECEIVED: LTR 1 ENCL 0 SIZE: 3  
 TITLE: SEP Topics

NOTES: 1 copy: SEP Sect. Ldr.

05000244

ACTION:	RECIPIENT ID CODE/NAME	COPIES		RECIPIENT ID CODE/NAME	COPIES	
		LTTR	ENCL		LTTR	ENCL
	CRUTCHFIELD	7				
INTERNAL:	A/D MATL&QUAL 16	1		CONT SYS A 13	1	
	D/DIR, HUM FAC S	1		DIR, HUM FAC SFY	1	
	HYD/GEO BR 17	1		I&E 08	2	
	NRC PDR 02	1		OR ASSESS BR 15	1	
	REG FILE 01	1		SEP BR 04	3	
EXTERNAL:	ACRS 23	16	16	LPDR 03	1	
	NSIC 07	1				

AJG 15 1980

TOTAL NUMBER OF COPIES REQUIRED: LTTR 39 ENCL 0





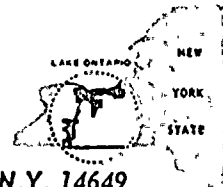




ROCHESTER GAS AND ELECTRIC CORPORATION • 89 EAST AVENUE, ROCHESTER, N.Y. 14649

LEON D. WHITE, JR.  
VICE PRESIDENT

TELEPHONE  
AREA CODE 716 546-2700



August 7, 1980

Director of Nuclear Reactor Regulation  
Attention: Mr. Dennis M. Crutchfield, Chief  
Operating Reactors Branch #5  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: SEP Topic III-5.B, "Pipe Break Outside Containment"  
R.E. Ginna Nuclear Power Plant  
Docket No. 50-244

Dear Mr. Crutchfield:

This letter is provided in response to your June 24, 1980 request for a review of the NRC's SEP assessment of this topic, and for an RG&E implementation schedule for the five staff positions resulting from that assessment.

Comments:

- 1) Reference is made on p. 3 to an NRC evaluation of SEP Topic III-4.C, "Internally Generated Missiles". We would appreciate receiving this evaluation.
- 2) It is stated, on p. 7, that the Intermediate Building basement elevation could be flooded to 30 inches. No reference is given for this value. The RG&E evaluation of this scenario states that the maximum water level above the basement floor due to a complete feedwater line break is 7.2 inches (Nuclear Services Corporation report, "Thermal Hydraulic Analysis of Pipe Rupture Outside Containment for Robert E. Ginna Plant", Section 5.2 dated June 13, 1973).
- 3) In the second paragraph on p. 9, third sentence, "Turbine Building" should be "Intermediate Building".
- 4) On the bottom of p. 11, it should be noted that a pressure diaphragm wall has also been installed between the turbine building and the mechanical equipment room.
- 5) At the bottom on p. 13, Auxiliary ... of the IB, it is stated that the AFW lines are high energy lines which could result in pipe whip and jet impingement on cable trays and electrical penetrations. It was pointed out during the Ginna site visit on this subject that there are check valves located in this line, immediately adjacent to the feedwater line.

8008120419

A035  
S  
1/0



001, 1, 30000

1. The first part of the document is a letter from the President of the United States to the Congress, dated March 1, 1861. It is a copy of the original letter, and is signed by the President.

1. The following information was obtained from the records of the Department of the Interior, Bureau of Land Management, regarding the land owned by the United States in the State of Nevada:

[illegible]

...that the ...  
...that the ...  
...that the ...  
...that the ...  
...that the ...

[illegible]

10

... ..  
... ..

1. 2. 3. 4. 5. 6. 7. 8. 9. 10. 11. 12. 13. 14. 15. 16. 17. 18. 19. 20. 21. 22. 23. 24. 25. 26. 27. 28. 29. 30. 31. 32. 33. 34. 35. 36. 37. 38. 39. 40. 41. 42. 43. 44. 45. 46. 47. 48. 49. 50. 51. 52. 53. 54. 55. 56. 57. 58. 59. 60. 61. 62. 63. 64. 65. 66. 67. 68. 69. 70. 71. 72. 73. 74. 75. 76. 77. 78. 79. 80. 81. 82. 83. 84. 85. 86. 87. 88. 89. 90. 91. 92. 93. 94. 95. 96. 97. 98. 99. 100. 101. 102. 103. 104. 105. 106. 107. 108. 109. 110. 111. 112. 113. 114. 115. 116. 117. 118. 119. 120. 121. 122. 123. 124. 125. 126. 127. 128. 129. 130. 131. 132. 133. 134. 135. 136. 137. 138. 139. 140. 141. 142. 143. 144. 145. 146. 147. 148. 149. 150. 151. 152. 153. 154. 155. 156. 157. 158. 159. 160. 161. 162. 163. 164. 165. 166. 167. 168. 169. 170. 171. 172. 173. 174. 175. 176. 177. 178. 179. 180. 181. 182. 183. 184. 185. 186. 187. 188. 189. 190. 191. 192. 193. 194. 195. 196. 197. 198. 199. 200. 201. 202. 203. 204. 205. 206. 207. 208. 209. 210. 211. 212. 213. 214. 215. 216. 217. 218. 219. 220. 221. 222. 223. 224. 225. 226. 227. 228. 229. 230. 231. 232. 233. 234. 235. 236. 237. 238. 239. 240. 241. 242. 243. 244. 245. 246. 247. 248. 249. 250. 251. 252. 253. 254. 255. 256. 257. 258. 259. 260. 261. 262. 263. 264. 265. 266. 267. 268. 269. 270. 271. 272. 273. 274. 275. 276. 277. 278. 279. 280. 281. 282. 283. 284. 285. 286. 287. 288. 289. 290. 291. 292. 293. 294. 295. 296. 297. 298. 299. 300. 301. 302. 303. 304. 305. 306. 307. 308. 309. 310. 311. 312. 313. 314. 315. 316. 317. 318. 319. 320. 321. 322. 323. 324. 325. 326. 327. 328. 329. 330. 331. 332. 333. 334. 335. 336. 337. 338. 339. 340. 341. 342. 343. 344. 345. 346. 347. 348. 349. 350. 351. 352. 353. 354. 355. 356. 357. 358. 359. 360. 361. 362. 363. 364. 365. 366. 367. 368. 369. 370. 371. 372. 373. 374. 375. 376. 377. 378. 379. 380. 381. 382. 383. 384. 385. 386. 387. 388. 389. 390. 391. 392. 393. 394. 395. 396. 397. 398. 399. 400. 401. 402. 403. 404. 405. 406. 407. 408. 409. 410. 411. 412. 413. 414. 415. 416. 417. 418. 419. 420. 421. 422. 423. 424. 425. 426. 427. 428. 429. 430. 431. 432. 433. 434. 435. 436. 437. 438. 439. 440. 441. 442. 443. 444. 445. 446. 447. 448. 449. 450. 451. 452. 453. 454. 455. 456. 457. 458. 459. 460. 461. 462. 463. 464. 465. 466. 467. 468. 469. 470. 471. 472. 473. 474. 475. 476. 477. 478. 479. 480. 481. 482. 483. 484. 485. 486. 487. 488. 489. 490. 491. 492. 493. 494. 495. 496. 497. 498. 499. 500. 501. 502. 503. 504. 505. 506. 507. 508. 509. 510. 511. 512. 513. 514. 515. 516. 517. 518. 519. 520. 521. 522. 523. 524. 525. 526. 527. 528. 529. 530. 531. 532. 533. 534. 535. 536. 537. 538. 539. 540. 541. 542. 543. 544. 545. 546. 547. 548. 549. 550. 551. 552. 553. 554. 555. 556. 557. 558. 559. 560. 561. 562. 563. 564. 565. 566. 567. 568. 569. 570. 571. 572. 573. 574. 575. 576. 577. 578. 579. 580. 581. 582. 583. 584. 585. 586. 587. 588. 589. 590. 591. 592. 593. 594. 595. 596. 597. 598. 599. 600. 601. 602. 603. 604. 605. 606. 607. 608. 609. 610. 611. 612. 613. 614. 615. 616. 617. 618. 619. 620. 621. 622. 623. 624. 625. 626. 627. 628. 629. 630. 631. 632. 633. 634. 635. 636. 637. 638. 639. 640. 641. 642. 643. 644. 645. 646. 647. 648. 649. 650. 651. 652. 653. 654. 655. 656. 657. 658. 659. 660. 661. 662. 663. 664. 665. 666. 667. 668. 669. 670. 671. 672. 673. 674. 675. 676. 677. 678. 679. 680. 681. 682. 683. 684. 685. 686. 687. 688. 689. 690. 691. 692. 693. 694. 695. 696. 697. 698. 699. 700. 701. 702. 703. 704. 705. 706. 707. 708. 709. 710. 711. 712. 713. 714. 715. 716. 717. 718. 719. 720. 721. 722. 723. 724. 725. 726. 727. 728. 729. 730. 731. 732. 733. 734. 735. 736. 737. 738. 739. 740. 741. 742. 743. 744. 745. 746. 747. 748. 749. 750. 751. 752. 753. 754. 755. 756. 757. 758. 759. 760. 761. 762. 763. 764. 765. 766. 767. 768. 769. 770. 771. 772. 773. 774. 775. 776. 777. 778. 779. 780. 781. 782. 783. 784. 785. 786. 787. 788. 789. 790. 791. 792. 793. 794. 795. 796. 797. 798. 799. 800. 801. 802. 803. 804. 805. 806. 807. 808. 809. 810. 811. 812. 813. 814. 815. 816. 817. 818. 819. 820. 821. 822. 823. 824. 825. 826. 827. 828. 829. 830. 831. 832. 833. 834. 835. 836. 837. 838. 839. 840.

[illegible]



This piping system is therefore not pressurized during normal operation, and should not be categorized as a high energy line.

- 6) The final sentence on p. 16 is not clear. Why is the NRC continuing this SEP reevaluation of pipe breaks outside containment? Was this not the full review? If additional review is planned in this area, we believe that the review should be conducted before any commitments are required of RG&E to perform modifications.
- 7) In Table 1, reference is made to two SEP Topic evaluations for Ginna, "Station Service and Cooling Water Systems" and "Safe Shutdown Systems". We would appreciate receiving these reviews.

Implementation Schedule:

Staff Position 1 - It is planned to conduct the alternative diesel generator cooling method test by June 1981.

Staff Position 2 - Based on RG&E's review of this scenario, we find the proposed solution to be unnecessary. Present routine walk-through inspections of the Intermediate Building would detect a pipe leak long before there were any danger of flooding safety-related equipment. If the postulated leak occurred at a level above the sub-basement, leakage into the sub-basement via the floor drains would be obvious during the routine once-per-shift walk-throughs. And even a large secondary side break would result in only a 2-foot depth in the sub-basement. If the leak were in the Service Water piping located in the sub-basement of the Intermediate Building, there would be a significant time interval between the initiation of the crack and the flooding of safety-related equipment. The Intermediate Building sub-basement has a volume of approximately 50,000 ft.<sup>3</sup>. With a service water leak rate of about 585 gpm (as calculated on p.13 of the NRC assessment), it would take over 10 1/2 hours to begin flooding the basement level. It does not seem conceivable that a sizeable leak rate such as this would not be detected, visibly or audibly, by personnel during the walk-throughs, or by personnel monitoring the control board (the 585 gpm leak would be a significant fraction - >10% - of the Service Water pump flow).

Staff Position 3 - Protection from the effects of the Turbine Building/Intermediate Building cinder block wall failure on the atmospheric dump valves and main steam safety valves will be integrated into the modification program resulting from RG&E's review of I&E Bulletin 80-11, "Masonry Wall Design". Our initial response to this bulletin is contained in a July 7, 1980 letter from L.D. White, Jr. (RG&E) to Mr. Boyce H. Grier (NRC Region I Director).



[illegible]

1. 1990-1991 2. 1992-1993 3. 1994-1995 4. 1996-1997 5. 1998-1999 6. 2000-2001 7. 2002-2003 8. 2004-2005 9. 2006-2007 10. 2008-2009 11. 2010-2011 12. 2012-2013 13. 2014-2015 14. 2016-2017 15. 2018-2019 16. 2020-2021 17. 2022-2023 18. 2024-2025 19. 2026-2027 20. 2028-2029 21. 2030-2031 22. 2032-2033 23. 2034-2035 24. 2036-2037 25. 2038-2039 26. 2040-2041 27. 2042-2043 28. 2044-2045 29. 2046-2047 30. 2048-2049 31. 2050-2051 32. 2052-2053 33. 2054-2055 34. 2056-2057 35. 2058-2059 36. 2060-2061 37. 2062-2063 38. 2064-2065 39. 2066-2067 40. 2068-2069 41. 2070-2071 42. 2072-2073 43. 2074-2075 44. 2076-2077 45. 2078-2079 46. 2080-2081 47. 2082-2083 48. 2084-2085 49. 2086-2087 50. 2088-2089 51. 2090-2091 52. 2092-2093 53. 2094-2095 54. 2096-2097 55. 2098-2099 56. 2100-2101 57. 2102-2103 58. 2104-2105 59. 2106-2107 60. 2108-2109 61. 2110-2111 62. 2112-2113 63. 2114-2115 64. 2116-2117 65. 2118-2119 66. 2120-2121 67. 2122-2123 68. 2124-2125 69. 2126-2127 70. 2128-2129 71. 2130-2131 72. 2132-2133 73. 2134-2135 74. 2136-2137 75. 2138-2139 76. 2140-2141 77. 2142-2143 78. 2144-2145 79. 2146-2147 80. 2148-2149 81. 2150-2151 82. 2152-2153 83. 2154-2155 84. 2156-2157 85. 2158-2159 86. 2160-2161 87. 2162-2163 88. 2164-2165 89. 2166-2167 90. 2168-2169 91. 2170-2171 92. 2172-2173 93. 2174-2175 94. 2176-2177 95. 2178-2179 96. 2180-2181 97. 2182-2183 98. 2184-2185 99. 2186-2187 100. 2188-2189 101. 2190-2191 102. 2192-2193 103. 2194-2195 104. 2196-2197 105. 2198-2199 106. 2200-2201 107. 2202-2203 108. 2204-2205 109. 2206-2207 110. 2208-2209 111. 2210-2211 112. 2212-2213 113. 2214-2215 114. 2216-2217 115. 2218-2219 116. 2220-2221 117. 2222-2223 118. 2224-2225 119. 2226-2227 120. 2228-2229 121. 2230-2231 122. 2232-2233 123. 2234-2235 124. 2236-2237 125. 2238-2239 126. 2240-2241 127. 2242-2243 128. 2244-2245 129. 2246-2247 130. 2248-2249 131. 2250-2251 132. 2252-2253 133. 2254-2255 134. 2256-2257 135. 2258-2259 136. 2260-2261 137. 2262-2263 138. 2264-2265 139. 2266-2267 140. 2268-2269 141. 2270-2271 142. 2272-2273 143. 2274-2275 144. 2276-2277 145. 2278-2279 146. 2280-2281 147. 2282-2283 148. 2284-2285 149. 2286-2287 150. 2288-2289 151. 2290-2291 152. 2292-2293 153. 2294-2295 154. 2296-2297 155. 2298-2299 156. 2300-2301 157. 2302-2303 158. 2304-2305 159. 2306-2307 160. 2308-2309 161. 2310-2311 162. 2312-2313 163. 2314-2315 164. 2316-2317 165. 2318-2319 166. 2320-2321 167. 2322-2323 168. 2324-2325 169. 2326-2327 170. 2328-2329 171. 2330-2331 172. 2332-2333 173. 2334-2335 174. 2336-2337 175. 2338-2339 176. 2340-2341 177. 2342-2343 178. 2344-2345 179. 2346-2347 180. 2348-2349 181. 2350-2351 182. 2352-2353 183. 2354-2355 184. 2356-2357 185. 2358-2359 186. 2360-2361 187. 2362-2363 188. 2364-2365 189. 2366-2367 190. 2368-2369 191. 2370-2371 192. 2372-2373 193. 2374-2375 194. 2376-2377 195. 2378-2379 196. 2380-2381 197. 2382-2383 198. 2384-2385 199. 2386-2387 200. 2388-2389 201. 2390-2391 202. 2392-2393 203. 2394-2395 204. 2396-2397 205. 2398-2399 206. 2400-2401 207. 2402-2403 208. 2404-2405 209. 2406-2407 210. 2408-2409 211. 2410-2411 212. 2412-2413 213. 2414-2415 214. 2416-2417 215. 2418-2419 216. 2420-2421 217. 2422-2423 218. 2424-2425 219. 2426-2427 220. 2428-2429 221. 2430-2431 222. 2432-2433 223. 2434-2435 224. 2436-2437 225. 2438-2439 226. 2440-2441 227. 2442-2443 228. 2444-2445 229. 2446-2447 230. 2448-2449 231. 2450-2451 232. 2452-2453 233. 2454-2455 234. 2456-2457 235. 2458-2459 236. 2460-2461 237. 2462-2463 238. 2464-2465 239. 2466-2467 240. 2468-2469 241. 2470-2471 242. 2472-2473 243. 2474-2475 244. 2476-2477 245. 2478-2479 246. 2480-2481 247. 2482-2483 248. 2484-2485 249. 2486-2487 250. 2488-2489 251. 2490-2491 252. 2492-2493 253. 2494-2495 254. 2496-2497 255. 2498-2499 256. 2500-2501 257. 2502-2503 258. 2504-2505 259. 2506-2507 260. 2508-2509 261. 2510-2511 262. 2512-2513 263. 2514-2515 264. 2516-2517 265. 2518-2519 266. 2520-2521 267. 2522-2523 268. 2524-2525 269. 2526-2527 270. 2528-2529 271. 2530-2531 272. 2532-2533 273. 2534-2535 274. 2536-2537 275. 2538-2539 276. 2540-2541 277. 2542-2543 278. 2544-2545 279. 2546-2547 280. 2548-2549

[illegible]

8/10/10 11:10 AM

1. 在 1980 年 12 月 31 日以前，凡在本公司工作过的员工，其工龄按其在该公司工作的实际时间计算。如该员工在该公司工作期间曾中断过工作，其工龄亦按其在该公司工作的实际时间计算。

[illegible][illegible]



Staff Position 4 - It is presently planned to separate the battery rooms from the mechanical equipment room, where the source of Service Water leakage exists, by replacing the doorway with a watertight wall. This modification should be completed by June 1981.

Staff Position 5 - RG&E is performing an evaluation to determine the effects of a CVCS Letdown or steam heating line break in the Auxiliary Building in the vicinity of safety-related equipment. The results of this study, and proposed modifications, will be submitted to the NRC for review in January 1981. Pending the resolution of any noted concerns, present once-per-shift inspections, together with the procedures available for isolation of the steam heating line, should provide adequate protection against the effects of significant adverse environment damaging safety-related equipment.

Very truly yours,

*L.D. White, Jr.*

L.D. White, Jr.



Staff Position 4 - It is presently planned to copy the floor plan from the mechanical equipment room, where the house service water tanks exist, by replacing the floor plan with a water tank wall. This modification should be completed by January 1981.

Staff Position 5 - RCB is performing an evaluation to determine the effects of a GWC below or above heating line level in the auxiliary building in the vicinity of safety-related equipment. The results of this study, and proposed modifications, will be submitted to the RCB for review in January 1981. Pending resolution of any noted concerns, present operations will continue together with the procedure available for isolation of the heating line, should provide adequate protection against the effects of significant adverse environment during a safety evaluation.

Very truly yours,

L.D. White, Jr.