

# REGULATORY INFORMATION DISTRIBUTION SYSTEM (RIDS)

ACCESSION NBR: 8504050151 DOC. DATE: 85/03/29 NOTARIZED: NO DOCKET #  
 FACIL: 50-315 Donald C. Cook Nuclear Power Plant, Unit 1, Indiana & 05000315  
 50-316 Donald C. Cook Nuclear Power Plant, Unit 2, Indiana & 05000316  
 AUTH. NAME: AUTHOR AFFILIATION  
 ALEXICH, M.P. Indiana & Michigan Electric Co.  
 RECIP. NAME: RECIPIENT AFFILIATION  
 DENTON, H.R. Office of Nuclear Reactor Regulation, Director

SUBJECT: Application for amend to Licenses DPR-58 & DPR-74, changing  
 Tech Specs 3/4.3.1, "Reactor Trip Sys Instrumentation" &  
 3/4.3.2, "ESF Actuation Sys Instrumentation."

DISTRIBUTION CODE: A001D COPIES RECEIVED: LTR 1 ENCL 1 SIZE: 9+16  
 TITLE: OR Submittal: General Distribution

NOTES: 05000315  
 OL: 10/25/74  
 OL: 12/23/72 05000316

	RECIPIENT		COPIES			RECIPIENT		COPIES	
	ID	CODE/NAME	LTTR	ENCL		ID	CODE/NAME	LTTR	ENCL
	NRR	ORB1 BC 01	7	7					
INTERNAL:	ACRS	09	6	6	ADM/LFMB			1	0
	ELD/HDS3		1	0	NRR/DE/MTEB			1	1
	NRR/DL DIR		1	1	NRR/DL/ORAB			1	0
	NRR/DL/TSRG		1	1	NRR/DSI/METB			1	1
	NRR/DSI/RAB		1	1	REG FILE	04		1	1
	RGN3		1	1					
EXTERNAL:	EG&G BRUSKE, S		1	1	LPDR	03		2	2
	NRC PDR	02	1	1	NSIC	05		1	1

THE  
OFFICE OF THE  
ATTORNEY GENERAL  
STATE OF NEW YORK  
ALBANY, N. Y.  
JANUARY 1, 1900

TO THE  
COMMISSIONERS OF THE  
LAND OFFICE  
ALBANY, N. Y.

SIR:

I have the honor to acknowledge the receipt of your letter of the 27th inst. in relation to the above matter.

I am, Sir, very respectfully,  
Yours very truly,  
J. B. CROSSLAND

RECEIVED  
JAN 2 1900  
LAND OFFICE

# INDIANA & MICHIGAN ELECTRIC COMPANY

P.O. BOX 16631  
COLUMBUS, OHIO 43216

March 29, 1985  
AEP:NRC:0659D

Donald C. Cook Nuclear Plant Unit Nos. 1 and 2  
Docket No. 50-315 and 50-316  
License No. DPR-58 and DPR-74  
Technical Specification Change Request: Reactor Trip System Instrumentation  
and Engineered Safety Features  
Actuation System Instrumentation

Mr. Harold R. Denton, Director  
Office of Nuclear Reactor Regulation  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Dear Mr. Denton:

This letter and its attachments constitute an application for amendment to the Technical Specifications for the Donald C. Cook Nuclear Plant Unit Nos. 1 and 2. We are requesting several changes to the "REACTOR TRIP SYSTEM INSTRUMENTATION" Technical Specification (T/S) 3/4.3.1 and to the "ENGINEERED SAFETY FEATURE ACTUATION SYSTEM INSTRUMENTATION" T/S 3/4.3.2 for both Units Nos. 1 and 2. Attachment Nos. 1 and 2 to this letter contain the reasons and 10 CFR 50.92 (no significant hazard considerations) justification for the proposed Technical Specification changes for Unit Nos. 1 and 2, respectively. Attachment Nos. 3 and 4 contain the revised T/S pages for Unit Nos. 1 and 2, respectively. All changes to the Technical Specification pages are indicated by vertical bars on the right hand margin of the pages.

The proposed changes should not result in (1) a significant change in the types of effluents or a significant increase in the amounts of any effluent that may be released offsite, and (2) a significant increase in individual or cumulative occupational radiation exposure.

These proposed changes have been reviewed by the Plant Nuclear Safety Review Committee (PNSRC) and will be reviewed by the Nuclear Safety and Design Review Committee (NSDRC) at their next regularly scheduled meeting.

In compliance with the requirements of 10 CFR 50.91(b)(1), a copy of this letter and its attachments have been transmitted to Mr. R. C. Callen of the Michigan Public Service Commission and Mr. G. Bruchmann of the Michigan Department of Public Health.

Pursuant to 10 CFR 170.12(c), we have enclosed an application fee of \$150.00 for the proposed amendments.

8504050151 850329  
PDR ADDCK 05000315  
P PDR

A001  
1/1

1944

1. The first part of the report deals with the general situation in the country. It is noted that the country is in a state of economic crisis, and that the government is unable to meet its obligations. The report also mentions that the population is suffering from food shortages and that the government is unable to provide adequate medical care.

2. The second part of the report deals with the political situation. It is noted that the government is unable to maintain order, and that there is a widespread feeling of hopelessness among the population. The report also mentions that the government is unable to carry out its policies, and that the country is in a state of political chaos.

3. The third part of the report deals with the military situation. It is noted that the government is unable to maintain its army, and that there is a widespread feeling of fear among the population. The report also mentions that the government is unable to carry out its military operations, and that the country is in a state of military chaos.

4. The fourth part of the report deals with the social situation. It is noted that the government is unable to provide adequate social services, and that there is a widespread feeling of despair among the population. The report also mentions that the government is unable to carry out its social policies, and that the country is in a state of social chaos. The report also mentions that the government is unable to provide adequate medical care, and that the population is suffering from food shortages.

5. The fifth part of the report deals with the economic situation. It is noted that the government is unable to maintain its economy, and that there is a widespread feeling of hopelessness among the population. The report also mentions that the government is unable to carry out its economic policies, and that the country is in a state of economic chaos. The report also mentions that the government is unable to provide adequate medical care, and that the population is suffering from food shortages.

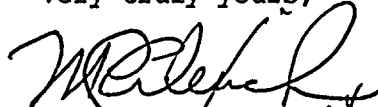
6. The sixth part of the report deals with the cultural situation. It is noted that the government is unable to provide adequate cultural services, and that there is a widespread feeling of despair among the population. The report also mentions that the government is unable to carry out its cultural policies, and that the country is in a state of cultural chaos. The report also mentions that the government is unable to provide adequate medical care, and that the population is suffering from food shortages.

7. The seventh part of the report deals with the international situation. It is noted that the government is unable to maintain its international relations, and that there is a widespread feeling of hopelessness among the population. The report also mentions that the government is unable to carry out its international policies, and that the country is in a state of international chaos. The report also mentions that the government is unable to provide adequate medical care, and that the population is suffering from food shortages.

8. The eighth part of the report deals with the future of the country. It is noted that the government is unable to provide adequate future plans, and that there is a widespread feeling of despair among the population. The report also mentions that the government is unable to carry out its future policies, and that the country is in a state of future chaos. The report also mentions that the government is unable to provide adequate medical care, and that the population is suffering from food shortages.

This document has been prepared following Corporate procedures which incorporate a reasonable set of controls to insure its accuracy and completeness prior to signature by the undersigned.

Very truly yours,

  
M. P. Alexich  
Vice President  
EBK  
3/29/85

MPA/tc

Attachments

cc: John E. Dolan  
W. G. Smith, Jr. - Bridgman  
G. Bruchmann  
R. C. Callen  
G. Charnoff  
NRC Resident Inspector - Bridgman

[illegible]

2

100

[illegible]

1. *Chlorophyll a* (Chl *a*)

Figure 1: A schematic diagram of a 2D lattice system. It shows a central square unit cell with a smaller square inside it. The central square is labeled 'a' and the inner square is labeled 'b'. The lattice is composed of many such unit cells arranged in a grid. The diagram is labeled 'Figure 1' at the bottom.

10

1

[illegible]

1980

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. 84

$\frac{1}{2} \pi$

bc: J. G. Feinstein/P. A. Barrett/M. S. Ackerman/P. E. Infanger  
H. N. Scherer, Jr.  
S. H. Horowitz/T. O. Argenta/R. C. Carruth  
J. J. Markowsky/S. H. Steinhart/J. A. Kobyra  
R. W. Jurgensen  
R. F. Kroeger  
T. P. Beilman - Bridgman  
J. F. Stietzel - Bridgman  
F. S. VanPelt, Jr.  
J. B. Shinnock  
D. Wigginton, NRC - Washington, D.C.  
AEP:NRC:0659D  
DC-N-6500.1

ATTACHMENT NO. 1 TO AEP:NRC:0895B

DONALD C. COOK NUCLEAR PLANT UNIT NOS. 1 AND 2  
REASONS AND 10 CFR 50.92 JUSTIFICATION FOR THE  
PROPOSED TECHNICAL SPECIFICATION CHANGES



For purposes of clarity, we have grouped the proposed changes into four distinct packages. The first package, designated "A" below, is to make the Unit 1 T/S similar to the Westinghouse Standard Technical Specification (STS) (NUREG 0452, Revision 4) or Unit 2 Technical Specifications. The second group, designated "B," are purely for clarification of wording. The third group designated "C," requests an extension to the period of time for which one channel can be bypassed. The fourth group, designated "D," is an administrative change.

The paragraphs below briefly summarize the nature of the changes and our justification for the changes. We have also included references to the Unit 2 T/S and the STS where appropriate.

- A) The first group of changes refers to items concerning instrumentation where the Unit 1 Technical Specifications are being updated to correspond to either Unit 2, the STS, or both. Each change in this group has one of the following three purposes: (1) to provide criteria for when a channel needs to be adjusted following a heat balance, (2) to suspend the requirements of Technical Specification 3.0.4 on certain instrumentation, or (3) to change the Action Statement when operable instrument channels are one less than the total number of available channels. This group of changes is summarized and appropriate references given on Table 1 of this attachment. All cases represent situations where the change may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, but the results of the change are clearly within all acceptable criteria with respect to the component specified in the STS. Therefore we believe that these changes do not involve significant hazards considerations as defined in 10 CFR 50.92.
- B) The second group of proposed changes to the Unit 1 T/S are editorial changes to T/S 4.3.1.1.1 (page 3/4 3-1) and T/S 4.3.2.1.1 (page 3/4 3-15). More specifically, we would like the phrase "during the modes" to be changed to "for the MODES." This change will make the wording of the Unit 1 Specifications parallel the Unit 2 Specifications more closely. In addition, the word "MODES" should be in capital letters since it is defined in Section 1.0 of the T/S. These changes are purely administrative in nature and are being requested to help achieve consistency throughout the Technical Specifications. Therefore, we believe these changes do not involve significant hazard considerations as defined by 10 CFR 50.92.
- C) The third group of proposed changes to the Unit 1 T/S requests an extension to the period of time in which one channel of the reactor solid state protection system can be bypassed for surveillance testing. Specifically, we are requesting that the one-hour time limit be extended to two hours in Action Statement 13 of Table 3.3-3 (page 3/4 3-22) when surveillance testing is being performed as per T/S 4.3.2.1.1. This change is needed to allow completion of surveillances that have been added since the T.S was originally issued. Although this is a change which may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin,

the results of the change are clearly within all acceptable criteria with respect to the system specified in the STS. Therefore, we believe this change does not involve a significant hazards consideration as defined in 10 CFR 50.92.

Page References: STS 3/4 3-29. (Action Statement 14)

- D) The fourth proposed change to the Unit 1 T/S is an editorial change to page 3/4 3-10 which makes the footnote identical to the Unit 2 T/S (page 3/4 3-9) and the STS (page 3/4 3-10). This change is purely administrative in nature and is intended to achieve consistency with the Unit 2 T/S and with the STS. Therefore, we believe this change does not involve significant hazards considerations as defined by 10 CFR 50.92.

TABLE 1

| <u>Page Changed:</u>                   | <u>Description and Page Reference</u>  |            |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
|--|--|------------|--------|-----|------|------|------|------|----|------------|------|----|------|------|------|------|------|------------|------------|
| Unit 1 3/4 3-14                        | Puts in criteria when the channel needs to be adjusted following a heat balance. This change makes the Unit 1 T/S identical to the Unit 2 T/S and the STS.<br>Ref: Unit 2 p. 3/4 3-13<br>STS p. 3/4 3-15   |            |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
| Unit 1 3/4 3-16, 3-17, 3-18, 3-20 3-21 | Asterisks are (*) added to denote that the provisions of T/S 3.0.4 are not applicable. This change makes the Unit 1 T/S more like the Unit 2 T/S and/or the STS.   |            |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
|  | <table><tr><td>Unit 1</td><td>Unit 2</td><td>STS</td></tr><tr><td>3-16</td><td>3-15</td><td>3-17</td></tr><tr><td>3-17</td><td>--</td><td>3-18, 3-19</td></tr><tr><td>3-18</td><td>--</td><td>3-20</td></tr><tr><td>3-20</td><td>3-19</td><td>3-23</td></tr><tr><td>3-21</td><td>3-19, 3-20</td><td>3-24, 3-25</td></tr></table> | Unit 1     | Unit 2 | STS | 3-16 | 3-15 | 3-17 | 3-17 | -- | 3-18, 3-19 | 3-18 | -- | 3-20 | 3-20 | 3-19 | 3-23 | 3-21 | 3-19, 3-20 | 3-24, 3-25 |
| Unit 1                                 | Unit 2   | STS        |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
| 3-16                                   | 3-15   | 3-17       |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
| 3-17                                   | --   | 3-18, 3-19 |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
| 3-18                                   | --   | 3-20       |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
| 3-20                                   | 3-19   | 3-23       |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
| 3-21                                   | 3-19, 3-20   | 3-24, 3-25 |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
| Unit 1 3/4 3-22                        | Applies to Action Statement 14. This change makes the Unit 1 T/S identical to Unit 2 T/S and similar to the STS.<br>Ref: Unit 2 p. 3/4 3-21<br>STS p. 3/4 3-29 (Action Statement 15)   |            |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |
| Unit 1 3/4 3-22,3-23                   | Change to Action Statement 16 to correspond to the STS.<br>Ref. STS p. 3/4 3-29 (Action Statement 17)  |            |        |     |      |      |      |      |    |            |      |    |      |      |      |      |      |            |            |

ATTACHMENT NO. 2 TO AEP:NRC:0659D

DONALD C. COOK NUCLEAR PLANT UNIT NO. 2

REASONS AND 10 CFR 50.92 JUSTIFICATIONS FOR THE

PROPOSED TECHNICAL SPECIFICATION CHANGES

For clarity the Unit 2 T/S proposed changes are grouped into several categories. Many of these changes are to achieve consistency with the Unit 1 T/S and the STS. Page references to these documents are given where appropriate..

- A) The purpose of the first group of proposed changes is to make the Unit 2 Action Statements 2 and 6 like the Unit 1 T/S and the STS. Specifically we would like to change the phrase "one additional" to "the inoperable." This change is one that constitutes an additional restriction not presently included in the T/S. Therefore this change does not involve a significant hazards consideration as defined in 10 CFR 50.92.

Page References:

Action Statement 2; Unit 2 3/4 3-5  
Unit 1 3/4 3-6  
STS 3/4 3-7

Action Statement 6; Unit 2 3/4 3-6  
Unit 1 3/4 3-7  
STS 3/4 3-8

- B) The second group of proposed changes to Unit 2 T/S requests an extension to the period of time in which one channel of our solid state protection system can be bypassed for surveillance testing. Specifically, we are requesting the one-hour time limit be extended to two hours in Action Statement 1 and Action Statement 13. The reasons for these changes are the same as those proposed for Unit 1 Category C. Although the changes may result in some increase to the probability or consequences of a previously analyzed accident or may reduce in some way a safety margin, the results of the change are clearly within all acceptable criteria with respect to the systems specified in the STS. Therefore, we believe that these changes do not involve significant hazards considerations as defined by 10 CFR 50.92.

Page References:

Action Statement 1; Unit 2 3/4 3-5  
STS 3/4 3-9 (Action Statement 12)

Action Statement 13; Unit 2 3/4 3-21  
STS 3/4 3-29 (Action Statement 14)

- C) The third proposed change to the Unit 2 T/S is an editorial change to Action Statement 2, part C on page 3/4 3-5. This change adds a reference clearly defining the specification by which the quadrant power tilt ratio is to be measured. This change is purely administrative in nature and is intended to achieve consistency with the Unit 1 T/S and with the STS. Therefore, we believe this change does not involve significant hazards consideration as defined in 10 CFR 50.92.

Page References: Unit 1 3/4 3-6  
STS 3/4 3-7

- D) The fourth proposed change to the Unit 2 T/S is a change to Action Statement 16 on page 3/4 3-21. This change updates the T/S regarding the conditions under which operation may proceed with the number of operable channels less than total number of channels. The proposed change will achieve consistency with the STS. Although it is a change which may result in some increase to the probability or consequence of a previously analyzed accident or may reduce in some way a safety margin, the result of the change is clearly within all acceptable criteria with respect to the systems specified in the STS. Therefore, we believe that this change does not involve significant hazard consideration as defined by 10 CFR 50.92.

Page Reference: STS 3/4 3-29 (Action 17)