

50-315

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TO:

Mr. Benard C. Rusche

FROM:

Indiana & Michigan Power Company
New York, N. Y.
John Tillinghast

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DESCRIPTION

Ltr. notorized 5/10/77.....trans the following:

PLANT NAME:

Cook

RJL

(3-P)

ENCLOSURE

Consists of corrected figures showing the proper valve nomenclature and line-up related to the auxiliary feedwater system...

(5-P)

ACKNOWLEDGED
DO NOT REMOVE

SAFETY

FOR ACTION/INFORMATION

ENVIRO

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NAT. LAB:

REG V. IE

LA PDR

CONSULTANTS:

BROOKHAVEN NAT. LAB.

ULRIKSON (ORNL)

CONTROL NUMBER

771360232

INDIANA & MICHIGAN POWER COMPANY

P. O. BOX 18
BOWLING GREEN STATION
NEW YORK, N. Y. 10004

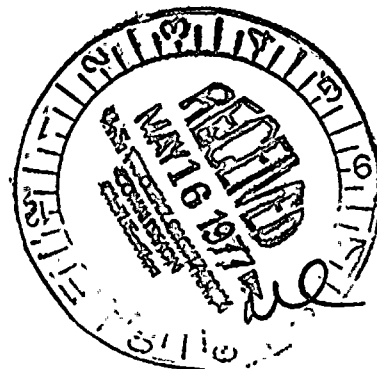
May 10, 1977

Donald C. Cook Nuclear Plant Unit No. 1
Docket No. 50-315
DPR No. 58

Regulatory

File Cy.

Mr. Benard C. Rusche, Director
Office of Nuclear Reactor Regulation
U.S. Nuclear Regulatory Commission
Washington, D.C. 20555



Dear Mr. Rusche:

This letter clarifies and amends our letter of April 6, 1977 regarding flushing or hot functional testing of Unit No. 2 using the auxiliary feedwater system while Unit 1 is in operation. A revision is necessary to the information transmitted in this previous letter regarding the identification of the valves and the safety requirements of the auxiliary feedwater system.

Corrected figures showing the proper valve nomenclature and line-up are attached to this letter. These figures show the valve alignment necessary to valve-out suction to the motor driven feedwater pumps from the Unit 1 condensate storage tank. In the unlikely event the auxiliary feedwater to Unit 1 is required while flushing or hot functional testing operations in Unit 2 are underway, water will be available to the motor driven feedwater pumps from the Unit 2 condensate storage tank. The auxiliary feedwater valves to Unit 2 will automatically close, and the valves from the motor-operated auxiliary feedwater pumps to Unit 1 will be opened by the operator from the control room. Further, during both flushing and hot functional testing operations, the Unit 2 condensate storage tank water volume will be maintained at a minimum of 175,000 gallons (the same as is currently required for the Unit 1 tank) by administrative control. Thus, this valve alignment replaces the Unit 2 condensate storage

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“E”

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]

| Condition | 10-12 | 13-15 | 16-18 |
|-----------|-------|-------|-------|
| a | ~85 | ~90 | ~95 |
| b | ~75 | ~80 | ~85 |
| c | ~65 | ~70 | ~75 |
| d | ~55 | ~60 | ~65 |
| e | ~45 | ~50 | ~55 |

[illegible]

1. The first step in the process of the development of a new product is the identification of a market need. This is often done through market research, which can be conducted in a variety of ways, including surveys, focus groups, and interviews. The goal of market research is to gather information about the needs and preferences of potential customers.

2. Once a market need has been identified, the next step is to develop a concept for a new product that meets that need. This involves brainstorming ideas and selecting the most promising one. The concept should be based on the information gathered during market research.

3. The third step is to create a prototype of the product. This is a physical model of the product that can be used to test the concept and gather feedback from potential customers. The prototype should be made of a material that is easy to work with and can be modified as needed.

4. The fourth step is to conduct a small-scale test of the product. This is often done by giving the product to a small group of people and asking them to provide feedback. This feedback can be used to make improvements to the product.

5. The fifth step is to conduct a larger-scale test of the product. This is often done by giving the product to a larger group of people and asking them to provide feedback. This feedback can be used to make further improvements to the product.

6. The sixth step is to launch the product into the market. This involves creating a marketing plan and promoting the product to potential customers. The marketing plan should include a budget and a timeline for the launch.

7. The seventh step is to monitor the product's performance in the market. This involves tracking sales and customer feedback. If the product is not performing well, it may be necessary to make further improvements or to discontinue the product.

8. The eighth step is to evaluate the overall success of the product development process. This involves comparing the results of the product launch to the original goals and objectives. This evaluation can be used to inform future product development efforts.

May 10, 1977

tank for the Unit 1 tank as the suction for the motor driven feedwater pumps. This assures that the same degree of system redundancy and reliability is maintained as is required under our current mode of operation.

In our April 6, 1977 letter we also stated that in the event auxiliary feedwater is required for Unit No. 1 during these operations, it would take 30 minutes to switch the motor driven feedpump to the Unit 1 tank. By tying into the Unit 2 condensate storage tank as described above, this reliance on a 30 minute switchover time is not required to assure auxiliary feedwater to Unit 1. A further statement is made that references the 30 minute time requirement for the accident analysis in FSAR Section 14.2.4, the steam generator tube rupture. Other analyses, such as the loss of feedwater, require auxiliary feedwater in shorter times.

As stated above, the intended mode of operation during flushing and hot functional testing will not significantly change the times associated with delivery of auxiliary feedwater, but will only change the source of water to the motor driven auxiliary feedwater pumps. Therefore, it is concluded that the technical specification interpretation in our April 6, 1977 letter does not change the mode of auxiliary feedwater operation as used in the safety analysis and therefore does not constitute an unreviewed safety problem nor will it adversely affect the health and safety of the public.


We will assume our interpretation of the Technical Specifications and reporting requirements to be correct with respect to our flushing and hot functional testing requirements unless we hear otherwise from you.

Very truly yours,


John Tillinghast
Vice President

JT:mam

Sworn and subscribed to before me
this 10th day of May 1977 in
New York County, New York


Notary Public

KATHLEEN BARRY
NOTARY PUBLIC, State of New York
No. 41-4606792
Qualified in Queens County
Certificate filed in New York County
Commission Expires March 30, 1979

cc: see next page

1

THE FIRST PART OF THE BOOK IS A HISTORY OF THE
CITY OF NEW YORK FROM ITS FOUNDATION TO THE
PRESENT TIME.

THE SECOND PART OF THE BOOK IS A HISTORY OF THE
CITY OF NEW YORK FROM ITS FOUNDATION TO THE
PRESENT TIME.

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PRESENT TIME.

Mr. B. C. Rusche

- 3 -

May 10, 1977

cc: R. C. Callen
P. W. Steketee
R. Walsh
G. Charnoff
R. W. Jurgensen - Bridgman
R. S. Hunter
K. R. Baker - Bridgman
R. J. Vollen

4

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UNIT No 1

UNIT No 2

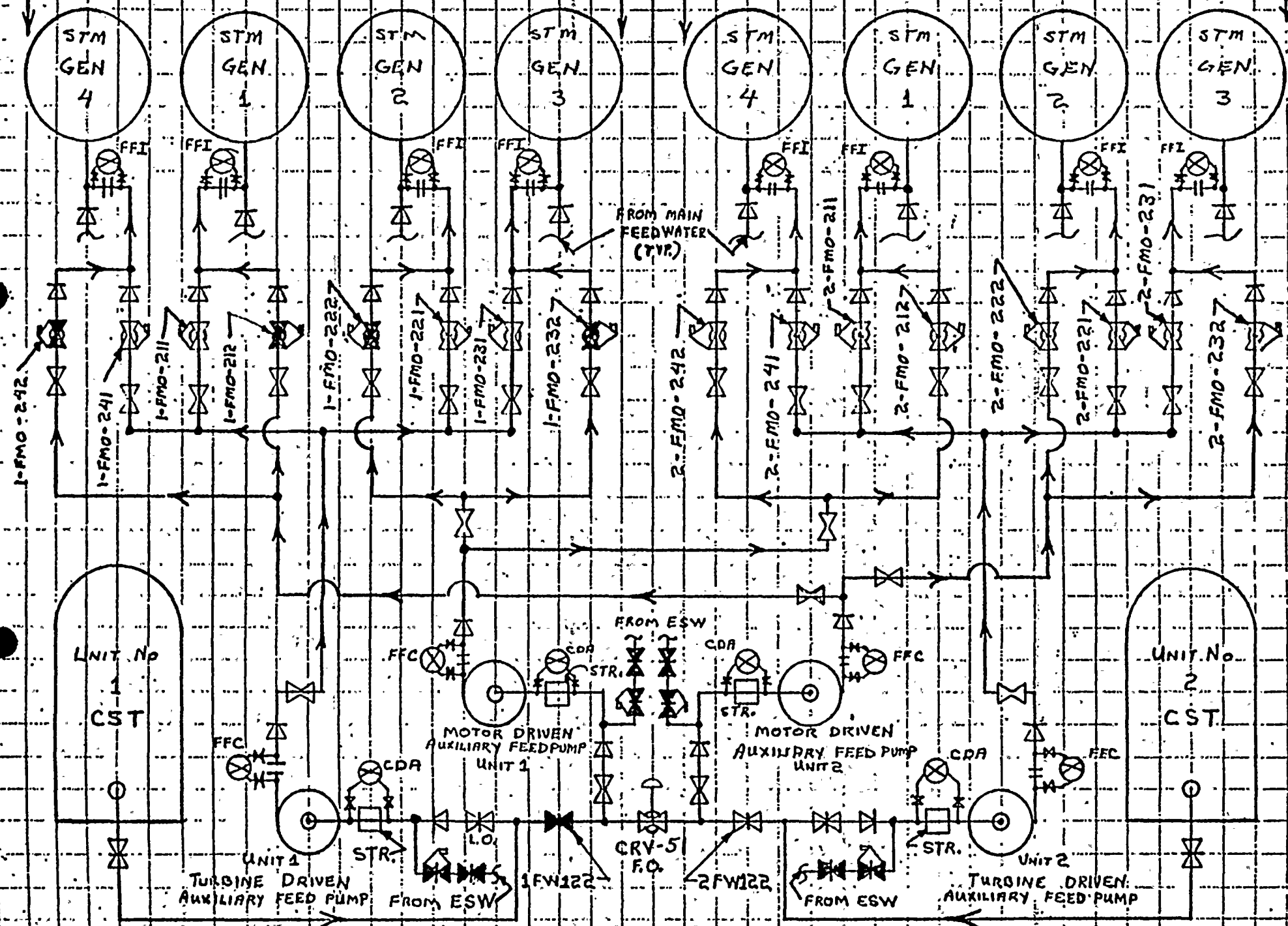


FIGURE 2 UNIT 2 HOT FUNCTIONAL TESTING OR INITIAL STARTUP
UNIT 1 OPERATIONAL - WORST CASE - USING BOTH MDFPS

UNIT No 1

UNIT No 2

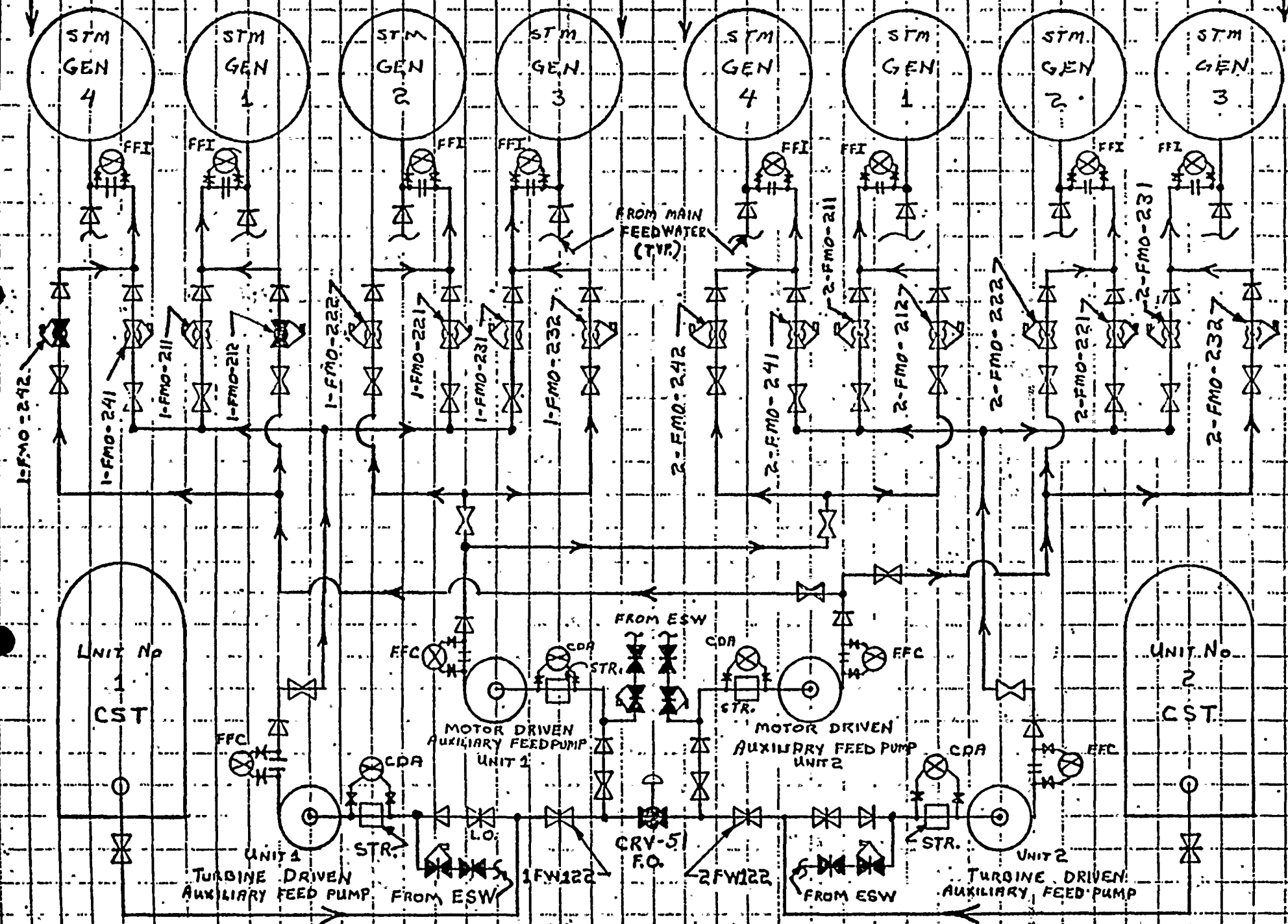


FIGURE 3 FLUSHING UNIT 2 USING UNIT 2 MDFP
UNIT 1 OPERATION

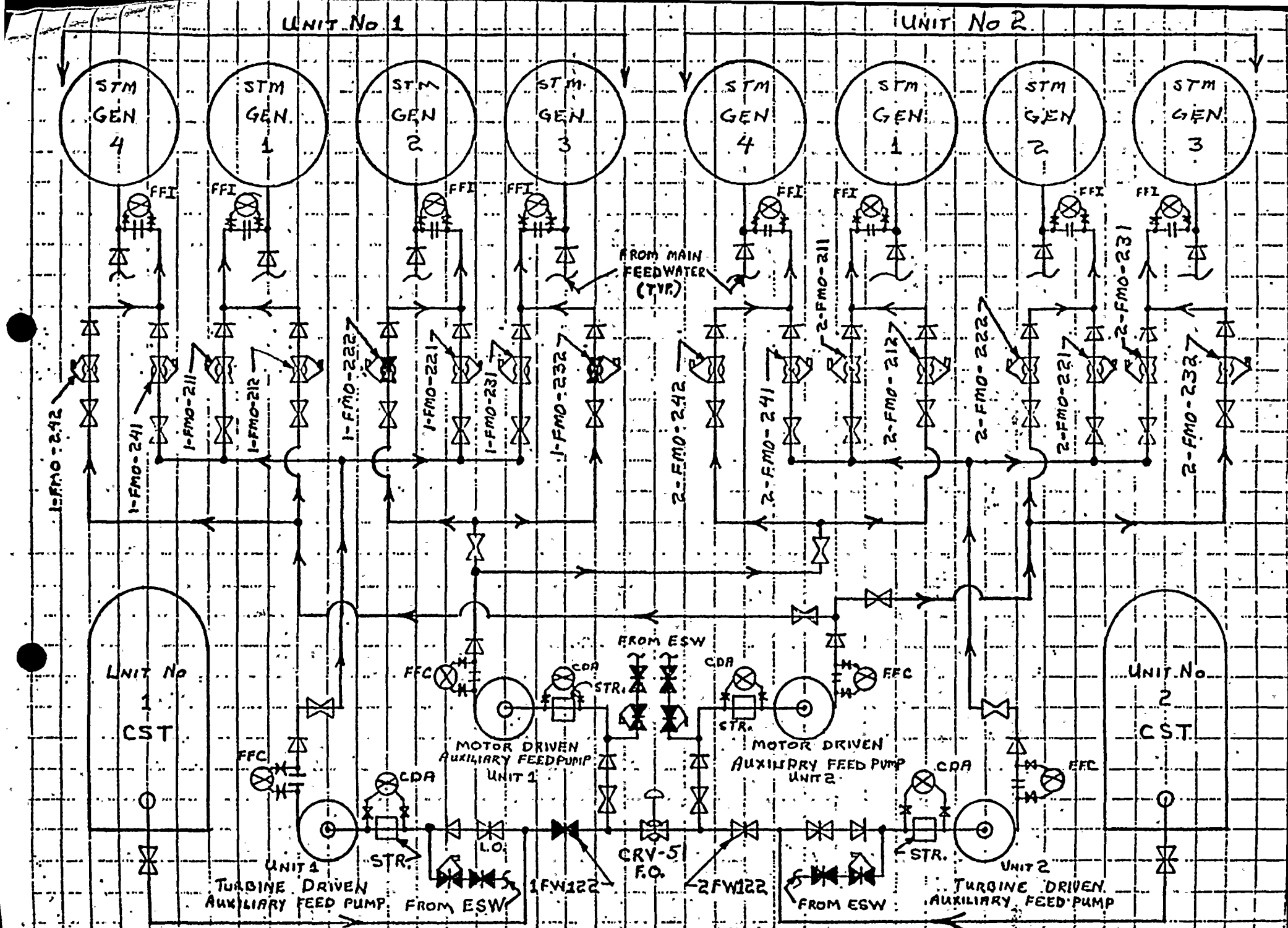


FIGURE 4 FLUSHING UNIT 2 USING UNIT 1 MDPF
UNIT 1 OPERATIONAL

UNIT No 1

UNIT No 2

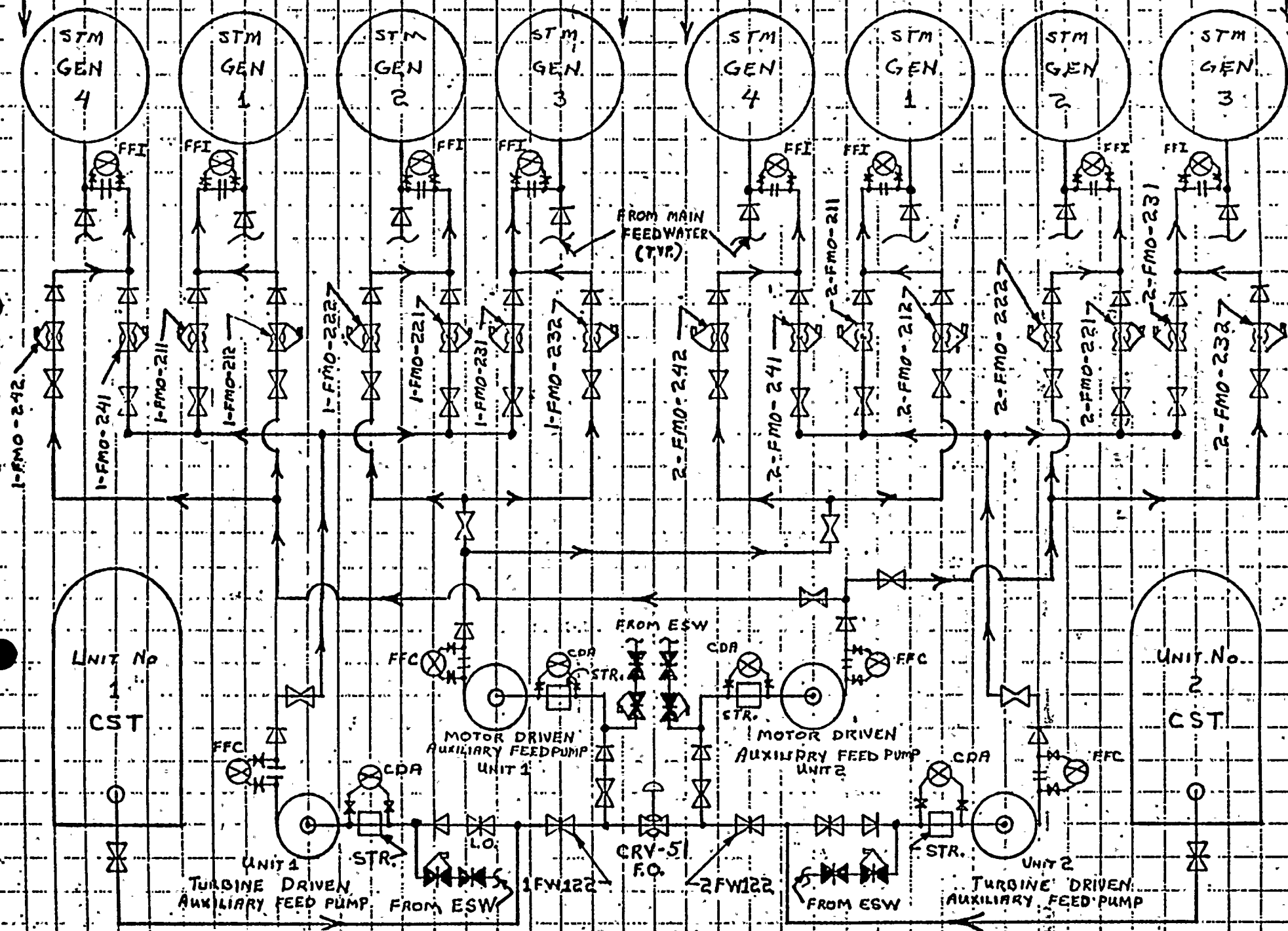


FIGURE 5 TWO UNIT OPERATION NORMAL VALVE LINEUP

1977 MAY 16 AM 8 48

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