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ACCESSION NBR: 8308010367 DOC. DATE: 83/07/27 NOTARIZED: YES DOCKET #  
 FACIL: STN-50-528 Palo Verde Nuclear Station, Unit 1, Arizona Publi 05000528  
 STN-50-529 Palo Verde Nuclear Station, Unit 2, Arizona Publi 05000529  
 STN-50-530 Palo Verde Nuclear Station, Unit 3, Arizona Publi 05000530  
 AUTH. NAME AUTHOR AFFILIATION  
 VAN BRUNT, E.E. Arizona Public Service Co.  
 RECIP. NAME RECIPIENT AFFILIATION  
 KNIGHTON, G. Licensing Branch 3

SUBJECT: Forwards proprietary & nonproprietary versions of revised test repts re acceptable implementation of CPC software verification (ref SER NUREG-0857). Proprietary repts withheld (ref 10CFR2.790). Items closed.

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Arizona Public Service Company

P.O. BOX 21666 • PHOENIX, ARIZONA 85036

July 27, 1983

ANPP-27418 - WFQ/MSN

Director of Nuclear Reactor Regulation  
Attention: Mr. George Knighton, Chief  
Licensing Branch No. 3  
Division of Licensing  
U.S. Nuclear Regulatory Commission  
Washington, D.C. 20555

Subject: Palo Verde Nuclear Generating Station (PVNGS)  
Units 1, 2 and 3  
Docket Nos. STN-50-528/529/530  
File: 83-056-026; G.1.01.10

Reference: (A) NUREG-0857, "Safety Evaluation Report related to the operation of Palo Verde Nuclear Generating Station, Units 1, 2 and 3", dated November, 1981.  
(B) APS letter, ANPP-23163, from E. E. Van Brunt, Jr. to G. W. Knighton, NRC, dated March 3, 1983.

Dear Mr. Knighton:

Section 7.2.4 of Reference (A) requested plant specific data for the PVNGS Unit 1 Core Protection Calculators (CPC's) and the Control Element Assembly Calculators (CEAC's). Reference (B) submitted the plant specific reports on the CPC/CEAC software verification testing and the PVNGS Unit 1, Cycle 1 Data Base Document. Reference (B) stated that as a result of the Phase II testing, we had identified discrepancies between the CPC simulator and the actual software calculation of certain flow related variables. Reference (B) also stated that these discrepancies would be evaluated, that any related errors in the CPC's would be corrected, and that revised test reports demonstrating acceptable implementation would be provided. Attached are the revised test reports.

Due to the proprietary nature of the material contained in the enclosure, we request that it be withheld from public disclosure in accordance with the provisions of 10 CFR 2.790 and that this material be safeguarded. The reasons for the proprietary classification of this report are delineated in the enclosed affidavit.

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Mr. G. W. Knighton  
Page 2  
July 27, 1983  
ANPP-27418 - WFQ/MSN

We believe this closes the portion of Reference (A) confirmatory item (16) in Section 7.2.4 part (2), CPC software modifications.

Please contact us if you have any questions on this matter.

Very truly yours,

A handwritten signature in dark ink, appearing to read "E. E. Van Brunt, Jr.", with a stylized flourish at the end.

E. E. Van Brunt, Jr.  
APS Vice President  
Nuclear Projects Management  
ANPP Project Director

EEVB/MSN/sp  
Attachment

cc: E. A. Licitra  
A. C. Gehr  
T. G. Woods



Mr. G. W. Knighton  
Page 3  
July 27, 1983  
ANPP-27418 - WFQ/MSN

Enclosures:

Proprietary Affidavit

CPC/CEAC System Phase I Software Verification Test Report;  
CEN-217(V), Revision 01, June 1983;  
-P, Proprietary Version, Copies 0001-0025;  
-NP, Non-Proprietary Version, 15 copies

CPC/CEAC System Phase II Software Verification Test Report;  
CEN-219(V), Revision 01, June 1983;  
-P, Proprietary Version, Copies 0001-0025;  
-NP, Non-Proprietary Version, 15 copies

PVNGS-1 Cycle 1 CPC and CEAC Data Base Listing, CEN-251(V),  
Revision 00, June 1983;  
-P, Proprietary Version, Copies 0001-0025;  
-NP, Non-Proprietary Version, 15 Copies





July 27, 1983  
ANPP-27418 - WFQ/MSN

STATE OF ARIZONA    )  
                          ) ss.  
COUNTY OF MARICOPA)

I, Edwin E. Van Brunt, Jr., represent that I am Vice President Nuclear Projects of Arizona Public Service Company, that the foregoing document has been signed by me on behalf of Arizona Public Service Company with full authority so to do, that I have read such document and know its contents, and that to the best of my knowledge and belief, the statements made therein are true.

*Edwin E. Van Brunt*  
Edwin E. Van Brunt, Jr.

Sworn to before me this 27th day of July, 1983.

*Nora E. Mendler*  
Notary Public

My Commission expires:

My Commission Expires April 6, 1987





21 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 99 100 101 102 103 104 105 106 107 108 109 110 111 112 113 114 115 116 117 118 119 120 121 122 123 124 125 126 127 128 129 130 131 132 133 134 135 136 137 138 139 140 141 142 143 144 145 146 147 148 149 150 151 152 153 154 155 156 157 158 159 160 161 162 163 164 165 166 167 168 169 170 171 172 173 174 175 176 177 178 179 180 181 182 183 184 185 186 187 188 189 190 191 192 193 194 195 196 197 198 199 200 201 202 203 204 205 206 207 208 209 210 211 212 213 214 215 216 217 218 219 220 221 222 223 224 225 226 227 228 229 230 231 232 233 234 235 236 237 238 239 240 241 242 243 244 245 246 247 248 249 250 251 252 253 254 255 256 257 258 259 260 261 262 263 264 265 266 267 268 269 270 271 272 273 274 275 276 277 278 279 280 281 282 283 284 285 286 287 288 289 290 291 292 293 294 295 296 297 298 299 300 301 302 303 304 305 306 307 308 309 310 311 312 313 314 315 316 317 318 319 320 321 322 323 324 325 326 327 328 329 330 331 332 333 334 335 336 337 338 339 340 341 342 343 344 345 346 347 348 349 350 351 352 353 354 355 356 357 358 359 360 361 362 363 364 365 366 367 368 369 370 371 372 373 374 375 376 377 378 379 380 381 382 383 384 385 386 387 388 389 390 391 392 393 394 395 396 397 398 399 400 401 402 403 404 405 406 407 408 409 410 411 412 413 414 415 416 417 418 419 420 421 422 423 424 425 426 427 428 429 430 431 432 433 434 435 436 437 438 439 440 441 442 443 444 445 446 447 448 449 450 451 452 453 454 455 456 457 458 459 460 461 462 463 464 465 466 467 468 469 470 471 472 473 474 475 476 477 478 479 480 481 482 483 484 485 486 487 488 489 490 491 492 493 494 495 496 497 498 499 500 501 502 503 504 505 506 507 508 509 510 511 512 513 514 515 516 517 518 519 520 521 522 523 524 525 526 527 528 529 530 531 532 533 534 535 536 537 538 539 540 541 542 543 544 545 546 547 548 549 550 551 552 553 554 555 556 557 558 559 560 561 562 563 564 565 566 567 568 569 570 571 572 573 574 575 576 577 578 579 580 581 582 583 584 585 586 587 588 589 590 591 592 593 594 595 596 597 598 599 600 601 602 603 604 605 606 607 608 609 610 611 612 613 614 615 616 617 618 619 620 621 622 623 624 625 626 627 628 629 630 631 632 633 634 635 636 637 638 639 640 641 642 643 644 645 646 647 648 649 650 651 652 653 654 655 656 657 658 659 660 661 662 663 664 665 666 667 668 669 670 671 672 673 674 675 676 677 678 679 680 681 682 683 684 685 686 687 688 689 690 691 692 693 694 695 696 697 698 699 700 701 702 703 704 705 706 707 708 709 710 711 712 713 714 715 716 717 718 719 720 721 722 723 724 725 726 727 728 729 730 731 732 733 734 735 736 737 738 739 740 741 742 743 744 745 746 747 748 749 750 751 752 753 754 755 756 757 758 759 760 761 762 763 764 765 766 767 768 769 770 771 772 773 774 775 776 777 778 779 780 781 782 783 784 785 786 787 788 789 790 791 792 793 794 795 796 797 798 799 800 801 802 803 804 805 806 807 808 809 810 811 812 813 814 815 816 817 818 819 820 821 822 823 824 825 826 827 828 829 830 831 832 833 834 835 836 837 838 839 840 841 842 843 844 845 846 847 848 849 850 851 852 853 854 855 856 857 858 859 860 861 862 863 864 865 866 867 868 869 870 871 872 873 874 875 876 877 878 879 880 881 882 883 884 885 886 887 888 889 890 891 892 893 894 895 896 897 898 899 900 901 902 903 904 905 906 907 908 909 910 911 912 913 914 915 916 917 918 919 920 921 922 923 924 925 926 927 928 929 930 931 932 933 934 935 936 937 938 939 940 941 942 943 944 945 946 947 948 949 950 951 952 953 954 955 956 957 958 959 960 961 962 963 964 965 966 967 968 969 970 971 972 973 974 975 976 977 978 979 980 981 982 983 984 985 986 987 988 989 990 991 992 993 994 995 996 997 998 999 1000 1001 1002 1003 1004 1005 1006 1007 1008 1009 1010 1011 1012 1013 1014 1015 1016 1017 1018 1019 1020 1021 1022 1023 1024 1025 1026 1027 1028 1029 1030 1031 1032 1033 1034 1035 1036 1037 1038 1039 1040 1041 1042 1043 1

Mr. G. W. Knighton  
Page 4  
July 27, 1983  
ANPP-27418 - WFQ/MSN

bcc:

A. C. Rogers  
W. F. Quinn  
T. F. Quan  
K. E. Jones  
E. C. Sterling  
J. Y. Morita  
M. A. Jones  
R. J. Pinkerton  
G. C. Andognini  
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E. L. Lewis  
P. F. Crawley  
W. H. Wilson  
W. G. Bingham  
S. Shepherd  
C. Ferguson  
M. Barnoski



AFFIDAVIT PURSUANT

TO 10 CFR 2.790

Combustion Engineering, Inc. )  
State of Connecticut )  
County of Hartford ) SS.:

I. P. L. McGill, depose and say that I am the Vice President, Commercial, of Combustion Engineering, Inc., duly authorized to make this affidavit, and have reviewed or caused to have reviewed the information which is identified as proprietary and referenced in the paragraph immediately below. I am submitting this affidavit in conformance with the provisions on 10 CFR 2.790 of the Commission's regulations and in conjunction with the application of the Arizona Public Service Company for withholding this information.

The information for which proprietary treatment is sought is contained in the following documents:

CEN-217(V)-P Revision 01, CPC/CEAC System Phase I Software Verification Test Report, June 1983

CEN-219(V)-P Revision 01, CPC/CEAC System Phase II Software Verification Test Report, June 1983

CEN-251(V)-P Revision 00, PVNGS-1 Cycle 1 CPC and CEAC Data Base Listing, June 1983

These documents have been appropriately designated as proprietary.



I have personal knowledge of the criteria and procedures utilized by Combustion Engineering in designating information as a trade secret, privileged, or as confidential commercial or financial information.

Pursuant to the provisions of paragraph (b)(4) of Section 2.790 of the Commission's regulations, the following is furnished for consideration by the Commission in determining whether the information sought to be withheld from public disclosure, included in the above referenced documents, should be withheld.

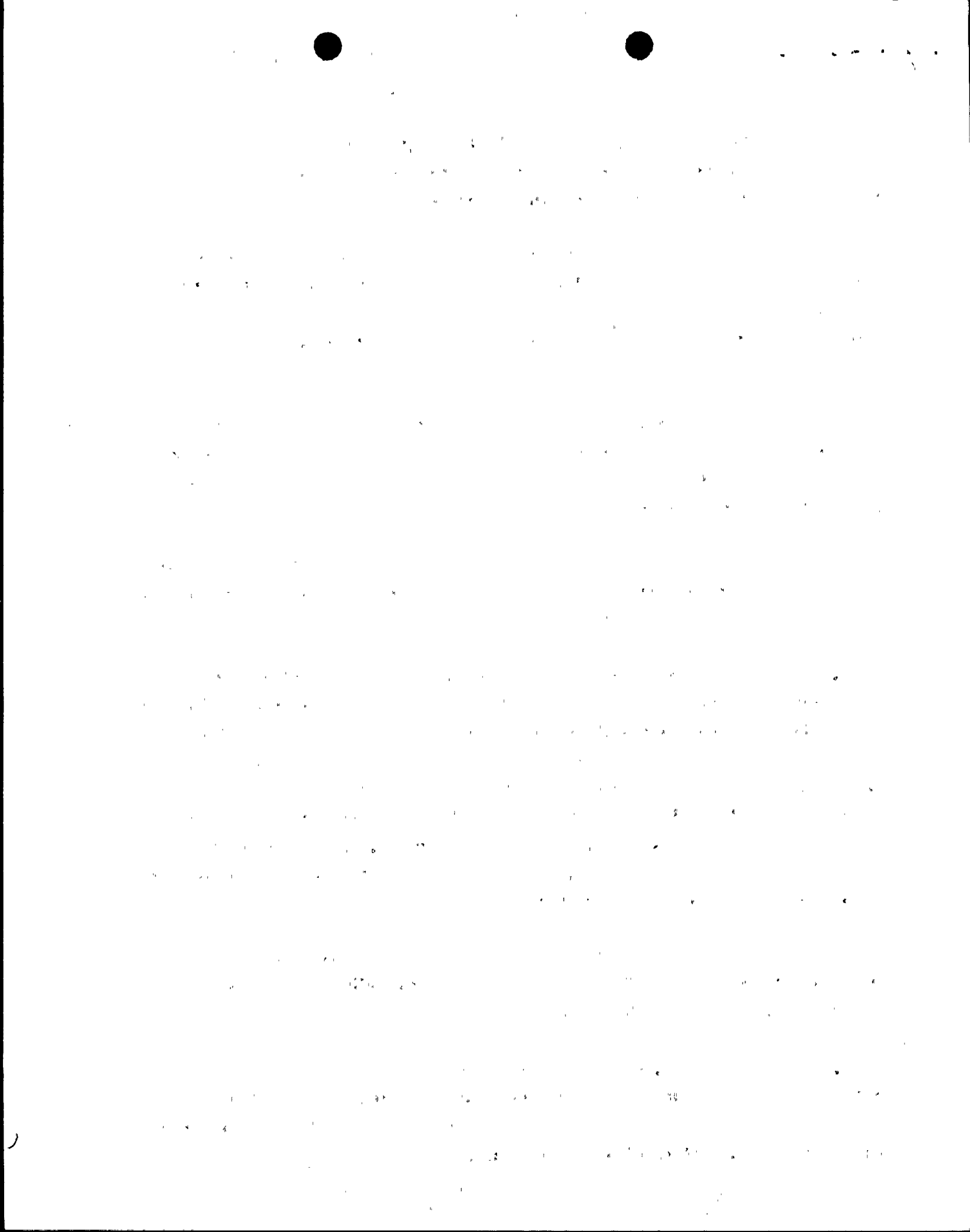
1. The information sought to be withheld from public disclosure is a description of the testing, quantitative data, test evaluation and acceptance criteria for the CPC/CEAC system software, which is owned and has been held in confidence by Combustion Engineering.

2. The information consists of test data or other similar data concerning process, method or component, the application of which results in a substantial competitive advantage to Combustion Engineering.

3. The information is of a type customarily held in confidence by Combustion Engineering and not customarily disclosed to the public. Combustion Engineering has a rational basis for determining the types of information customarily held in confidence by it and, in that connection, utilizes a system to determine when and whether to hold certain types of information in confidence. The details of the aforementioned system were provided to the Nuclear Regulatory Commission via letter DP-537 from F. M. Stern to Frank Schroeder, dated December 2, 1974. This system was applied in determining that the subject documents herein are proprietary.

4. The information is being transmitted to the Commission in confidence under the provisions of 10 CFR 2.790 with the understanding that it is to be received in confidence by the Commission.

5. The information, to the best of my knowledge and belief, is not available in public sources, and any disclosure to third parties has been made pursuant to regulatory provisions or proprietary agreements which provide for maintenance of the information in confidence.





6. Public disclosure of the information is likely to cause substantial harm to the competitive position of Combustion Engineering because:

a. A similar product is manufactured and sold by major pressurized water reactors competitors of Combustion Engineering.

b. Development of this information by C-E required tens of thousands of man-hours of effort and hundreds of thousands of dollars. To the best of my knowledge and belief, a competitor would have to undergo similar expense in generating equivalent information.

c. In order to acquire such information, a competitor would also require considerable time and inconvenience related to the development of CPC/CEAC data base and testing of CPC/CEAC software.

d. The information required significant effort and expense to obtain the licensing approvals necessary for application of the information. Avoidance of this expense would decrease a competitor's cost in applying the information and marketing the product to which the information is applicable.

e. The information consists of a description of the testing, quantitative data, test evaluation, and acceptance criteria for CPC/CEAC system software, the application of which provides a competitive economic advantage. The availability of such information to competitors would enable them to modify their product to better compete with Combustion Engineering, take marketing or other actions to improve their product's position, or impair the position of Combustion Engineering's product, and avoid developing similar data and analyses in support of their processes, methods or apparatus.

f. In pricing Combustion Engineering's products and services, significant research, development, engineering, analytical, manufacturing, licensing, quality assurance, and other costs and expenses must be included. The ability of Combustion Engineering's competitors to utilize such information without similar expenditure of resources may enable them to sell at prices reflecting significantly lower costs.



g. Use of the information by competitors in the international marketplace would increase their ability to market nuclear steam supply systems by reducing the costs associated with their technology development. In addition, disclosure would have an adverse economic impact on Combustion Engineering's potential for obtaining or maintaining foreign licensees

Further the deponent sayeth not.



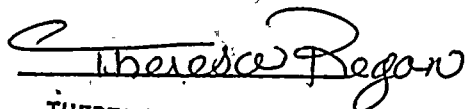
P. L. McGill

Vice President

Commerical

Sworn to before me

this 8<sup>th</sup> day of July '83



THERESA M. REGAN, NOTARY PUBLIC  
S. T. OF CALIFORNIA NO. 66097  
COMMISSION EXPIRES MARCH 31, 1988

55