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U S Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555

PRAIRIE ISLAND NUCLEAR GENERATING PLANT

Docket Nos.	50-282	Licence Nos.	DPR-42
	50-306		DPR-60

**Additional Information on Proposed Revision to Main
Steam Line Break Methodology Dated June 26, 1997**

The information in the attachment to this letter is provided in response to an NRC staff request made in a teleconference on April 16, 1999, for additional information related to our proposed revision to the Main Steam Line Break Methodology Dated June 26, 1997.

In order to clarify what was adjusted in the decay heat sensitivity study (results attached) and what values of feedwater and auxiliary feedwater flows and enthalpies were used in the study (designated as "C990035"), the following is offered:

The methodology outlined in NSPNAD-97002-P (the topical) does not isolate feedwater at a predetermined time, e.g., at 10 seconds. It models the feedwater flow based on the speed of the feedwater pumps and the position of the valves, see page 12 of the topical.

NSPNAD-97002-P does not specify a given feedwater enthalpy that is to be used. This allows the analyst to 1) specify an initial feedwater enthalpy for the conditions being analyzed, e.g. full power vs. zero power, and let the code determine the needed feedwater flow to initialize, or 2) specify the initial feedwater flow, and let the code determine the needed feedwater enthalpy to initialize. The cases in NSPNAD-97002-P utilized the second option. For the core response case, i.e. C960083, this resulted in an initial feedwater flow of 3.63E4 lbm/hr, or approximately 1% of full power flow consistent with the assumed initial power level, and a feedwater enthalpy of 13.51 btu/lbm.

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PDR ADCK 05000282
P PDR

A001/1

The decay heat sensitivity case, C990035, assumed an initial power level of $1E-4\%$. If the initial feedwater flow was left at $3.63E4$ lbm/hr, the code would require a feedwater enthalpy of 805 btu/lbm to initialize. While this would have little effect on the overall cooldown and resulting MDNBR, it would lessen the cooldown during the first few seconds. To remove this effect, case C990035 was run setting the feedwater enthalpy to 13.51 btu/lbm and adjusting the feedwater valve position (and feedwater pump speed) as necessary to obtain the same feedwater flow as case C960083. Thus the cooling due to feedwater flow in C990035 was the same as that in C960083.

Case C990035 utilized the same auxiliary feedwater assumptions as C960083 consistent with the statements on page 12 of the topical. The auxiliary feedwater enthalpy was set to 70 btu/lbm. This corresponds to auxiliary feedwater water temperature higher than nominal. The auxiliary feedwater flow is modeled assuming the pumps start at full capacity (220 gpm at 3000 ft) with the flow being split between the SGs based on the system hydraulic characteristics.

Also, for your information, a discussion of the DYNODE code options that were used to perform the decay heat sensitivity studies is also provided:

In addition to the feedwater related changes discussed above, the following DNP input items were changed to remove decay heat from the base case C960083:

1. Input Variable IDH on card 2 was changed from "-13" to "0." IDH tells DNP the number of decay heat groups to use in the calculations. An input value of "-13" tells the code to use the default values including the actinides. Setting this variable to "0" turns off the decay heat calculations.
2. Input Variable ISUBCT on card 2 was changed from "1" to "0." When this variable is set to "1" it directs the code to initialize the reactor at a subcritical condition based on the information on card 11A. For this option to work properly, a reasonable initial total power (on card 11) must be used. When the variable is set to "0" the information on card 11A is omitted and the code initializes the reactor to a critical condition regardless of the initial total power. In order to remove all decay heat from the case, the initial power on card 11 must be set to approximately zero. Therefore case C990035 set ISUBCT to "0" and removed card 11A.
3. The base case assumed that the reactor was subcritical with an initial decay heat level corresponding to 1% of full power. This was accomplished via ISUBCT discussed above and setting the initial power on card 11 to 1% or 3.39535 w/cc. To remove decay heat from the case the initial power level was set to $3.39535E-4$ w/cc, or

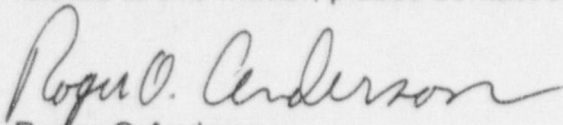
1E-4% or full power.

4. The base case (C960083) was set up such that the reactor was initially subcritical by 0.019608 delta K. For the reason given above, case C990035 had to be set up such that it would initialize with the reactor at a critical condition. To obtain the same reactivity starting point as the base case, a reactivity step change equivalent to 0.019608 delta K was input to case C990035 via the variable "RSTEP" on card 68.

In response to another question regarding the main steam non-return check valves: these valves are included as safety related in the Quality Assurance program and they are included in both the Inservice Inspection and the Inservice Testing programs.

Our July 29, 1999 response to a request for additional information referred to a report, Nuclear Services Corporation PI0-01-06, "Analysis Report - Structural Analyses of Main Steam Check & Isolation Valves for Prairie Island, Unit 1". This report is attached to this letter for your information.

In this submittal we have made no new NRC commitments. If you have any questions related to this matter, please contact Jack Leveille at 651-388-1121, Ext. 4142.



Roger O Anderson
Director
Nuclear Energy Engineering

Attachments:

1. Outline for Discussion with NRC on MSLB Submittal, 4/16/99
2. Responses to the questions asked during the MSLB NRC conference call on April 16th 1999
3. Mass and Energy Release Data
4. Nuclear Services Corporation PI0-01-06, "Analysis Report - Structural Analyses of Main Steam Check & Isolation Valves for Prairie Island, Unit 1"

c: Regional Administrator -- III, NRC
NRR Project Manager, NRC
Senior Resident Inspector, NRC
Kris Sanda, State of Minnesota
J E Silberg

ATTACHMENT 1

Outline for Discussion with NRC on MSLB Submittal, 4/16/99

(10 pages)

1) **Question relating to Modeling decay heat in core response cases.**

Re-ran the limiting core response case in NSPNAD-97002 turning off decay heat. **This resulted in an increase in the MDNBR of 0.096.** Generated comparison plots of following parameters versus time:

- Core inlet temperature (without decay heat, cools down faster)
- Keff (both peak at 1.004)
- RCS pressure (negligible change)
- Power due to just fission, modeling decay heat (max 24% FP)
- Power due to Fission and decay heat (i.e. Total) (max 26% FP)
- Power due to fission without modeling decay heat (max 25.5% FP)
- Heat Flux (53,000 btu/hr-ft² without DH vs. 54,000 btu/hr-ft² with DH)

Would the NRC like to see any other parameters and how should we send them the results?

2) **Demonstrate that entrainment curves in WCAP8822 are applicable for a 2-loop plant.**

A) Compare NSP generated M&E data to that in Appendix A of 8822.

The M&E curves in Appendix A of 8822 were generated for a hypothetical 3 – 4 loop plant. Appendix A contains information on how to adjust the calculated M&E data to account for main feedwater pumping, auxiliary feedwater addition and steam line piping blowdown. The appendix does not contain information on the adjustments needed to account for primary system differences between a 3 – 4 loop design and a 2-loop design. Therefore, comparing M&E release data generated per NSPNAD-97002 to that in Appendix A of 8822 will not address the NRC's question regarding the applicability of the entrainment curves to PI.

B) Feedwater assumptions

WCAP 8822 states that conservatively low feedwater flow rates were assumed to minimize the entrainment, section 2.2.3. Thus, for the 0% power case, no feedwater flow was assumed, Table 2.2.2-1. This obviously bounds the feedwater flow assumptions used for the limiting cases in NSPNAD-97002.

C) Utilizing Sensitivity data in WCAP 8822

Adjustments to the Fig 2.4-2 curves based on sensitivity information in 8822.

NSP has extrapolated some of the sensitivities in 8822 and developed an adjustment factor based on initial mass in the SG. This factor was used to adjust the zero power entrainment curve for a 1.4 sqft break in figure 2.4-5 to

an initial SG mass corresponding to the full power case. The resultant entrainment curve agreed extremely well with the data in figure 2.4-2. This demonstrates that the quality vs. time curves are not very sensitive to the RCS temperature response or initial SG pressure. Since the differences between a 3-4 loop design and a 2-loop design are much smaller than the differences between full power and zero power, this approach supports applying the entrainment curves to a 2-loop plant. The following outlines how these adjustments were made:

1. In WCAP-8822, Figures 2.4-2 & 2.4-5, represent the average effluent quality response for a 1.4 ft² DER at 102% power and Hot Standby, respectively (see attached figure 1).
2. Westinghouse ran three sensitivity cases – as documented in Table 2.2.1-1 – where the SG initial water level was varied (Cases 1, 6, & 7). By equating the water level differences to water mass differences, the incremental change in average effluent quality due to differences in initial SG water mass can be determined.
3. The incremental change in average effluent quality due to changes in initial SG water mass was then applied to the data in Figure 2.4-5.
4. By accounting for a reduction in the initial SG water mass for the Hot Standby case, the average effluent quality was increased by approximately 0.18.
5. Once the initial SG water mass is equivalent between the Full power case and the Hot Standby case, the average effluent quality response is quite similar. Hence, using sensitivities performed by Westinghouse in WCAP-8822, Table 2.2.1-1 demonstrate that the secondary effects of the RCS temperature profile do not contribute significantly to the average effluent quality for a 1.4 ft² break.
6. Additionally, the above Full power and the Hot Standby cases assumed different initial SG pressures, 980 psia and 1106 psia, respectively. Westinghouse did not perform sensitivities on initial SG pressure; therefore, the comparison in Figure 2 does not remove the difference. From the results, the initial SG pressure does not appear to have a significant influence on the average effluent quality.

Comparing Figure 2.2.1-2 and figure 2.4-5

WCAP 8822 talks about iterations between TRANSFLO and MARVEL while generating the entrainment curves. Thus, it is reasonable to conclude that, for figure 2.4-5, the primary system temperature was decreasing. In the generation of Figure 2.2.1-2 the primary system temperature, T_{hot} , was held constant.

Thus, comparing figure 2.2.1-2 to 2.4-5 may be as an indicator of how sensitive entrainment is to the primary side parameters. The quality vs. time data in these two figures is essentially identical, see attached figure 3, suggesting that entrainment is not sensitive to differences in the primary side parameters. This supports the use of entrainment curves generated based on a 3-4 loop for application to a 2-loop design.

D) Generating PI specific Entrainment curves for HOT Zero Power.

If C above is not sufficient to address the NRC's question on the applicability of the entrainment curves, then NSP will need to:

- a) develop the capability to model entrainment using RETRAN (probably RETRAN-3D) and run sensitivities. Since NSP does not have approval to model entrainment with RETRAN, this work would be viewed as independent engineering analyses and not as approved calculations,
- b) determine if Westinghouse has the capability to run sensitivities using TRANSFLO with PI specific inputs, or
- c) find another code/source of entrainment curves.

any of the above options would involve a significant amount of effort and would significantly delay the response to the NRC's question.

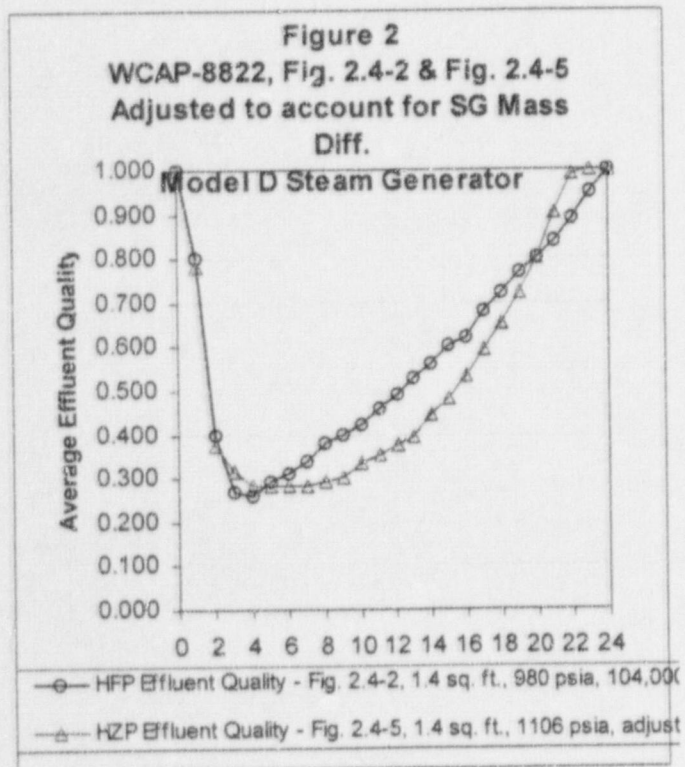
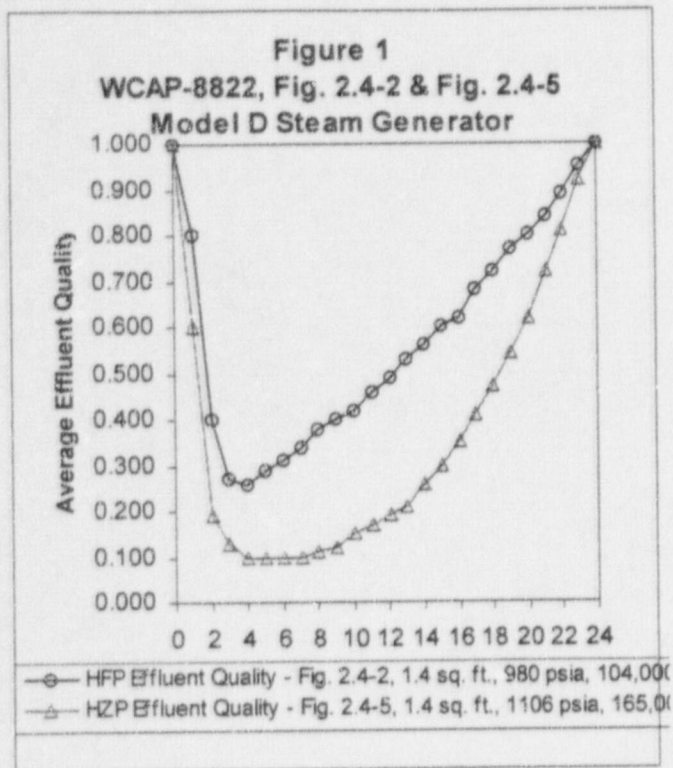
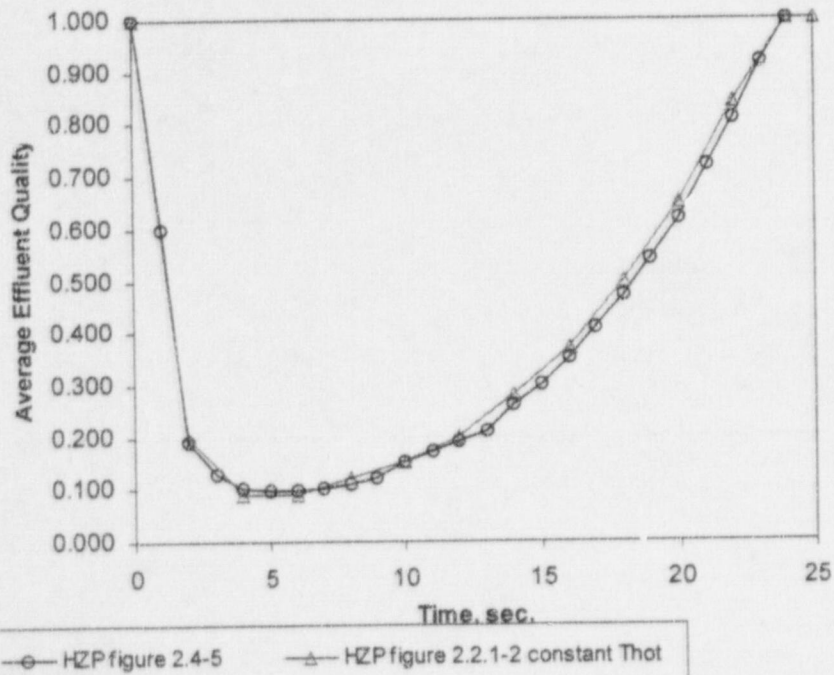
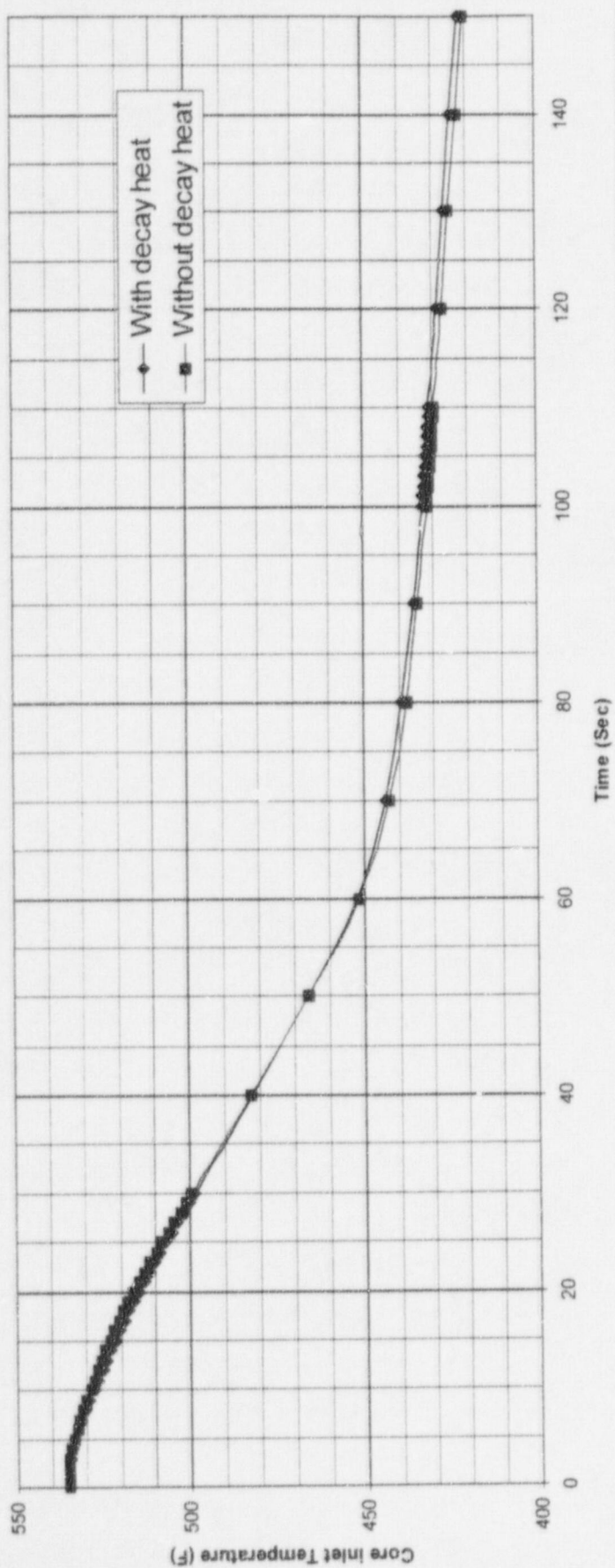


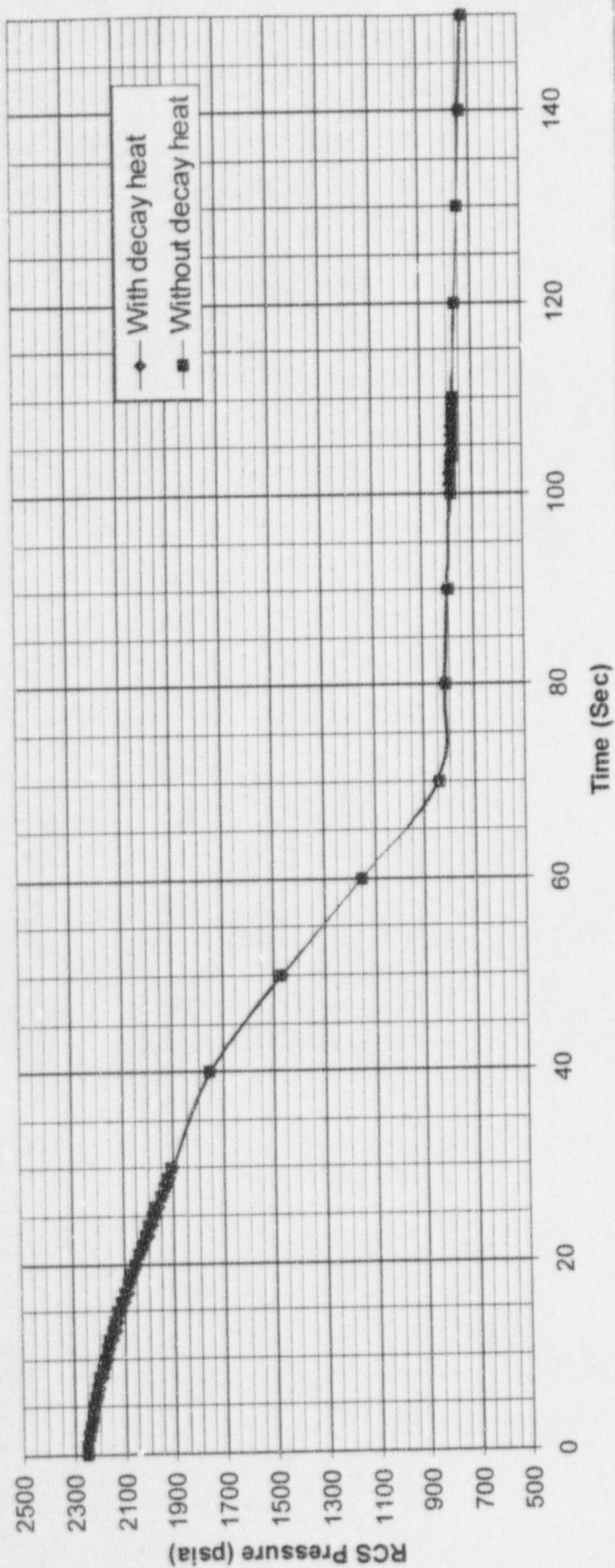
Figure 3
WCAP-8822, Fig. 2.4-5 & Fig. 2.2.1-2



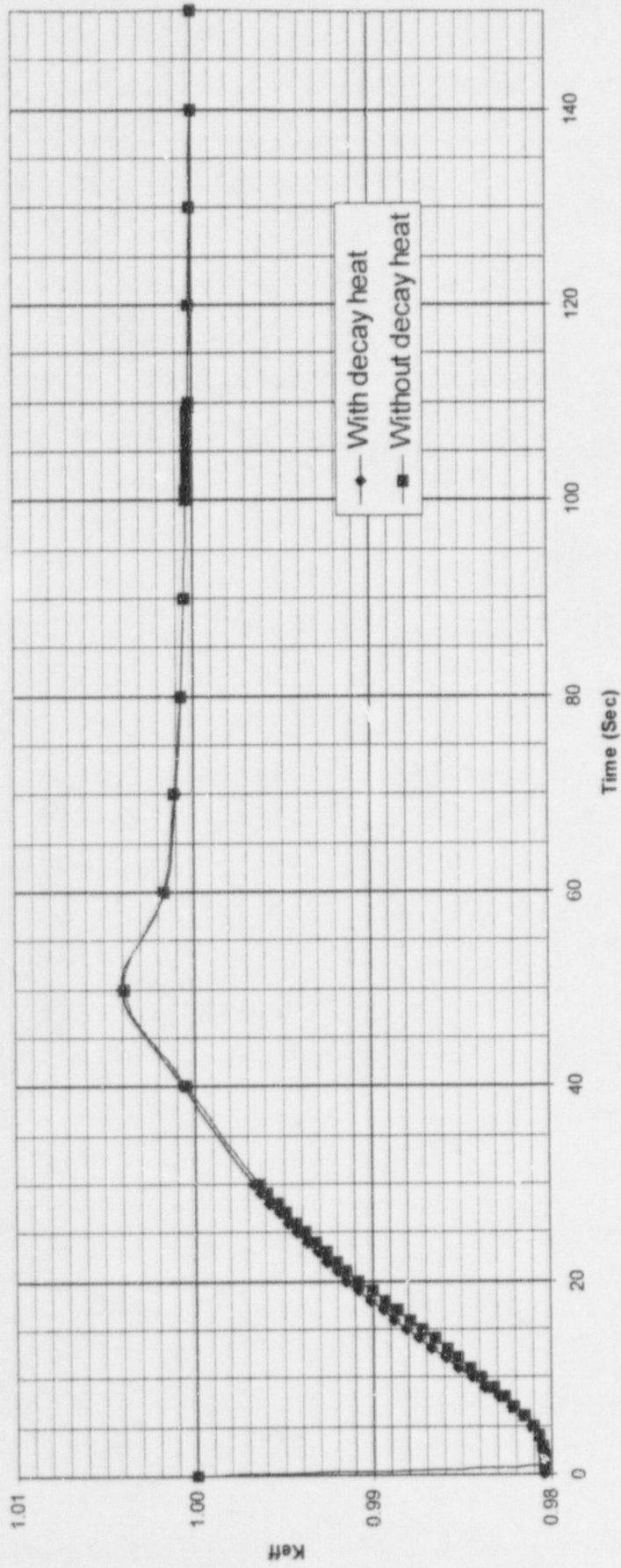
Core Response With & Without Decay Heat



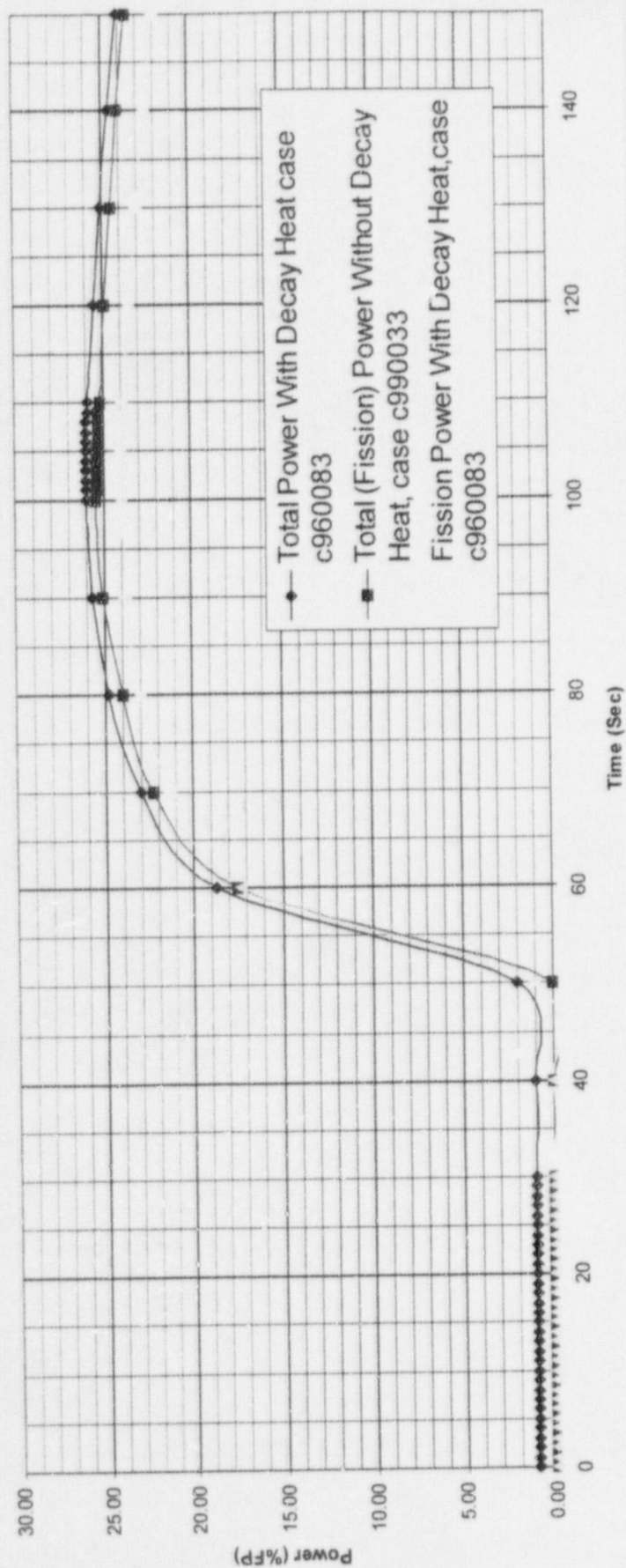
Core Response With & Without Decay Heat



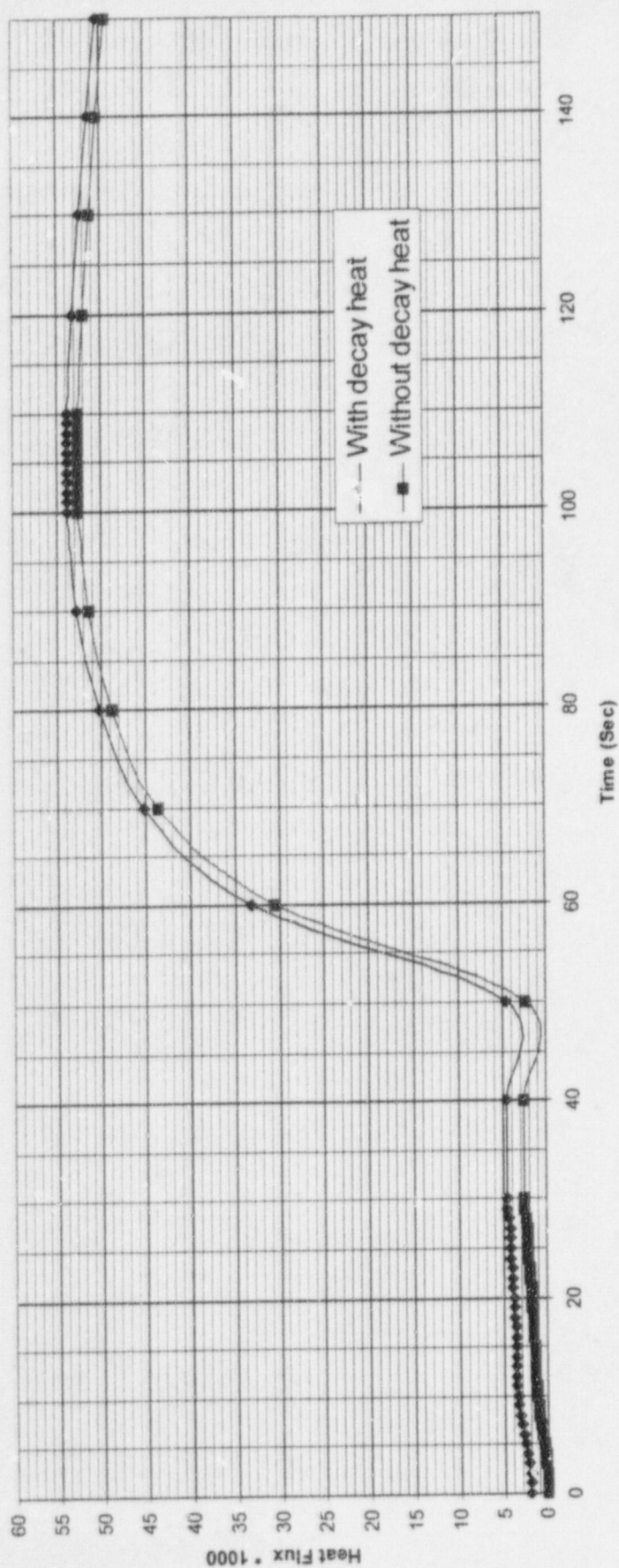
Core Response With & Without Decay Heat



Core Response With & Without Decay Heat



Core Response With & Without Decay Heat



ATTACHMENT 2

**Responses to the questions asked during the MSLB NRC conference
call on April 16th 1999**

(10 pages)

Responses to the questions asked during the MSLB NRC conference call on April 16th 1999.

What is the area of the steam pipes and the unisolated portion of the steam pipe?

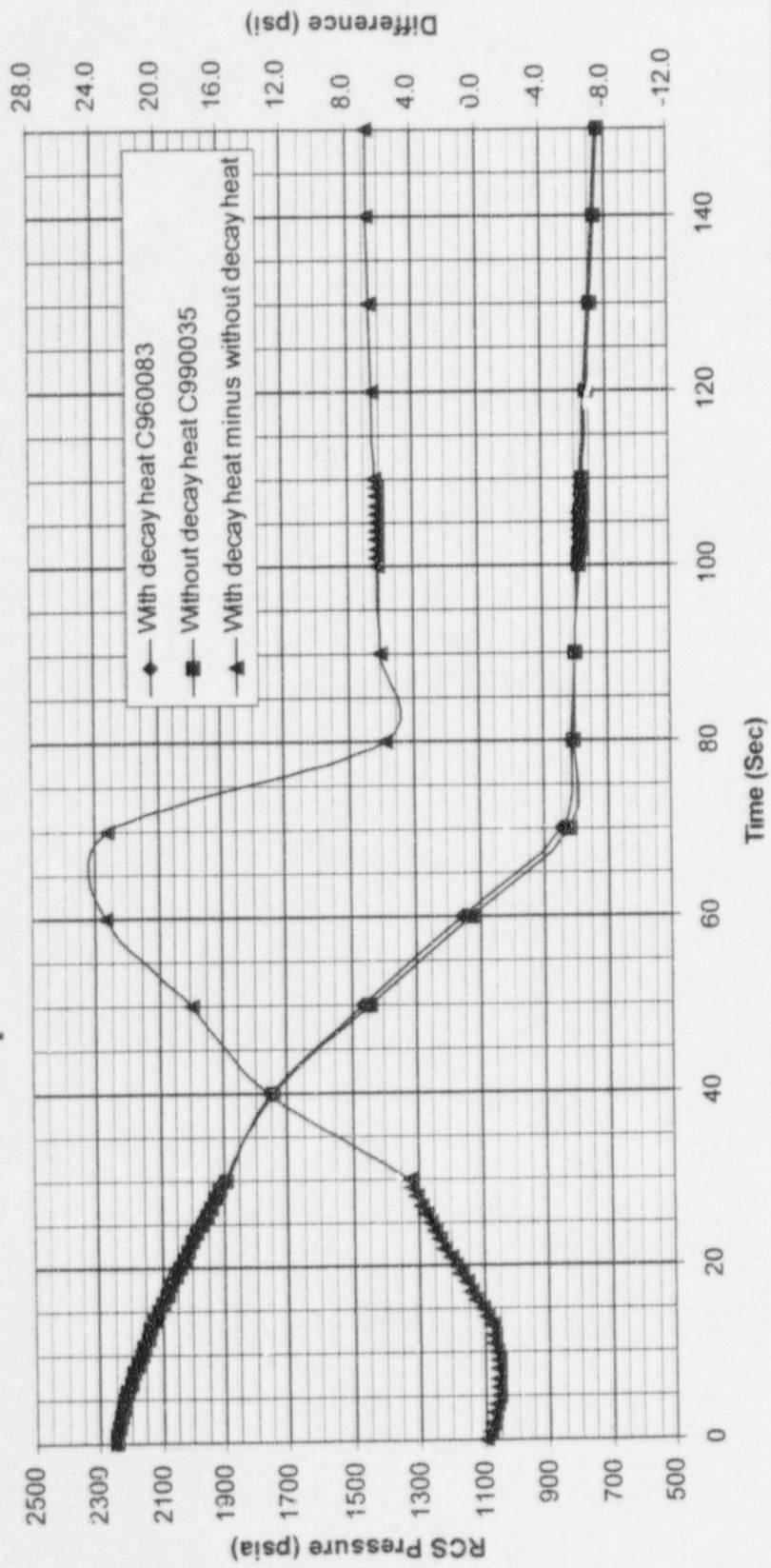
The inside diameter of Prairie Island's Steam Pipes is 27.951 inches.

The unisolated portion of the steam pipe is 556 cubic feet. The steam in this portion of the pipe is accounted for by increasing the volume of the steam generator by 556 cubic feet. Thus, contents of the unisolated portion are allowed to blow down to containment.

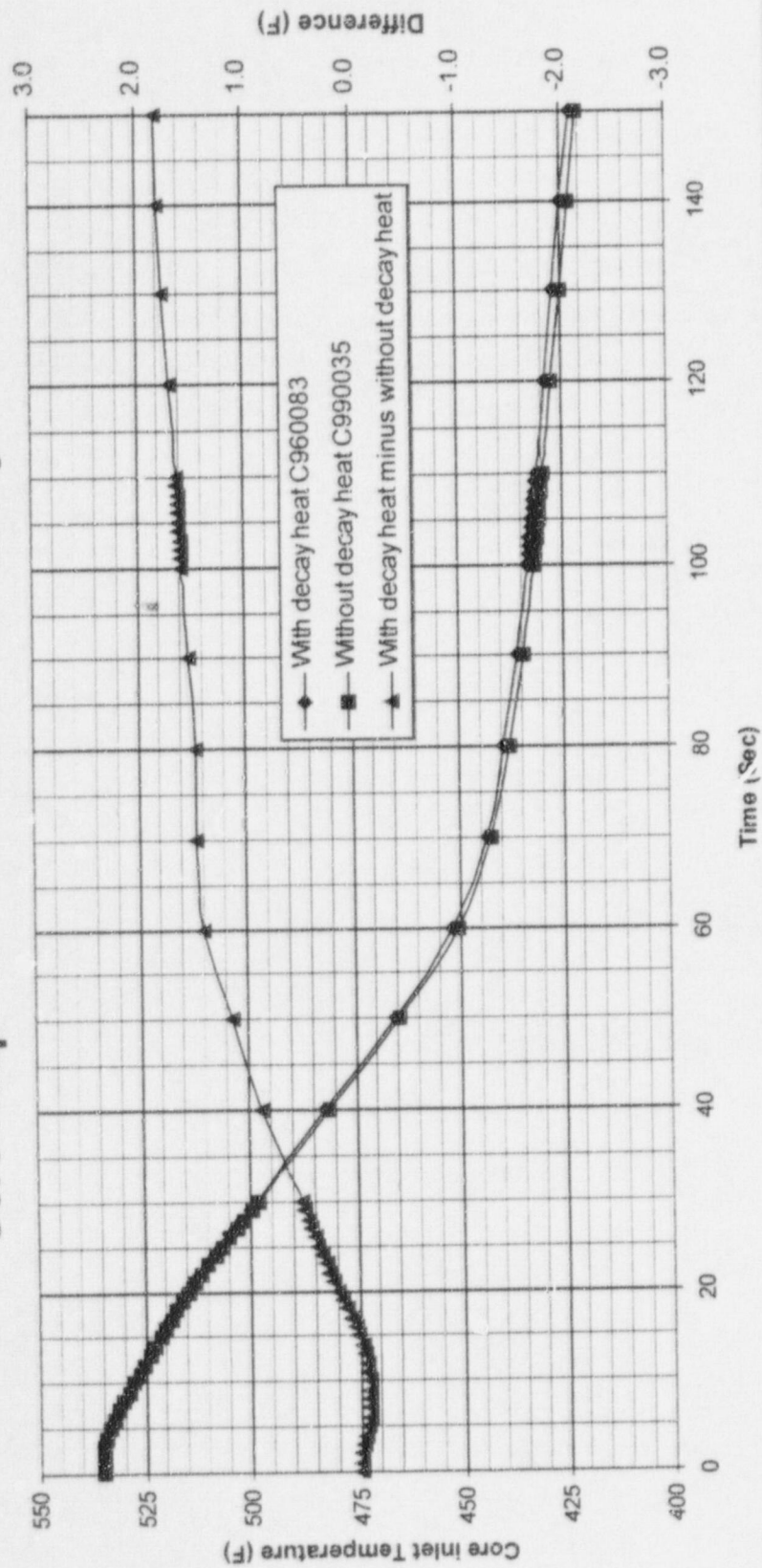
For the Core response cases with and without decay heat, please provide plots of the differences in parameters.

When the sensitivity case without decay heat was run, only the input parameters necessary to remove decay heat were changed. Because the feedwater flow inputs were not changed to correspond to the lower initial power, the code initialized the feedwater enthalpy to an extremely high value. This resulted in less cooling during the first few seconds of the transient, but had very little impact on the overall cooling and thus the MDNBR. However, the sensitivity was rerun adjusting the feedwater flow such that it provided the same cooling as the case that did model decay heat. The results of the new case was a MNDBR of 2.334 which is higher (i.e. less limiting) than the MNDBR when decay heat is modeled (2.232). This demonstrates that modeling decay heat is conservative. The attached are plots comparing the new case with that in NSPNAD-97002.

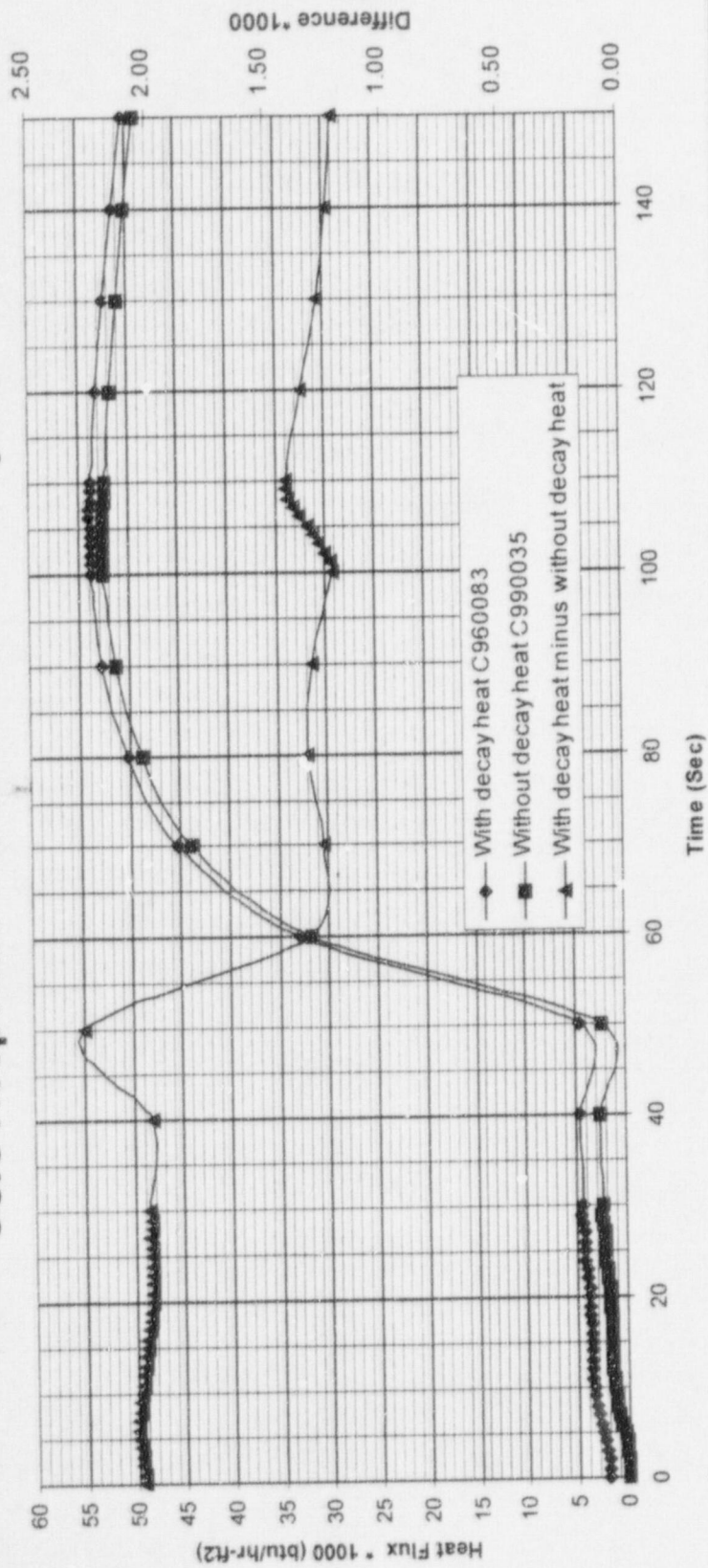
Core Response With & Without Decay Heat



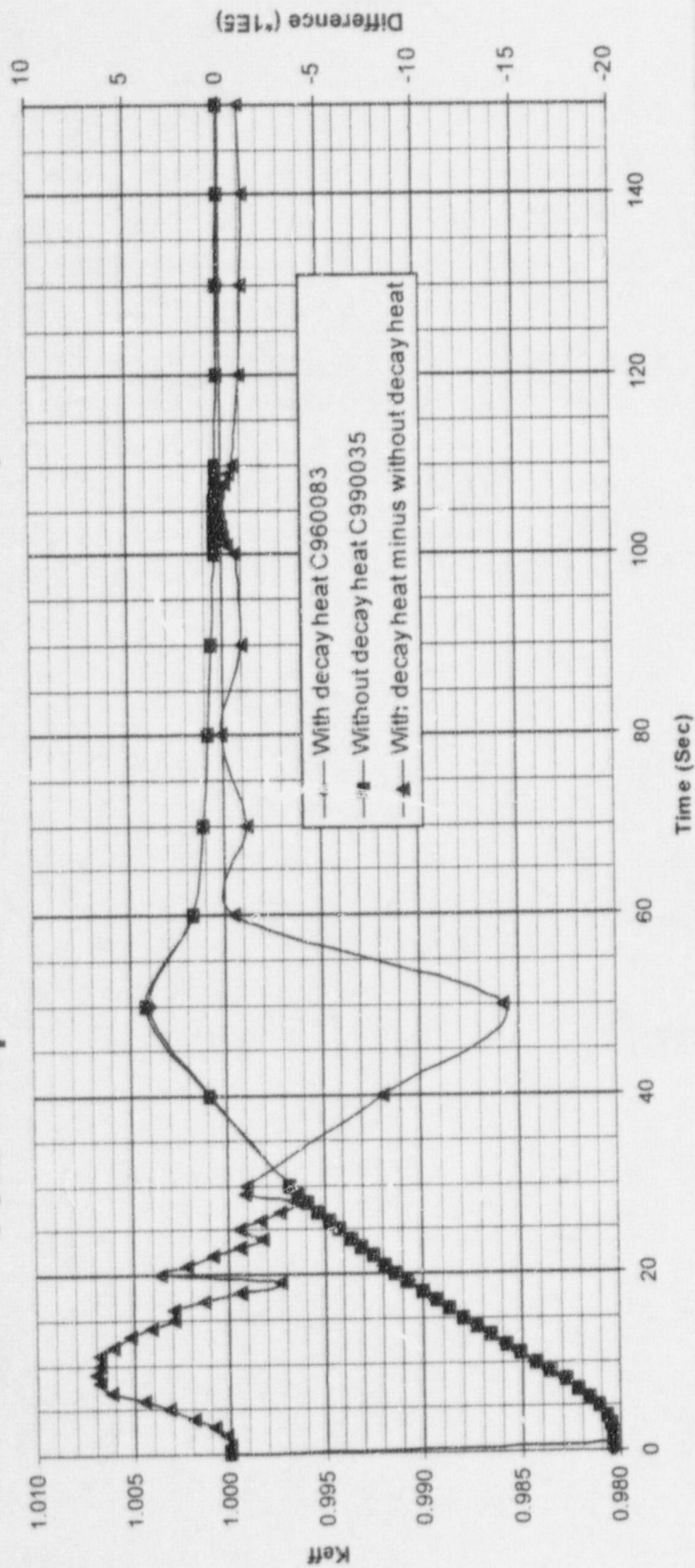
Core Response With & Without Decay Heat



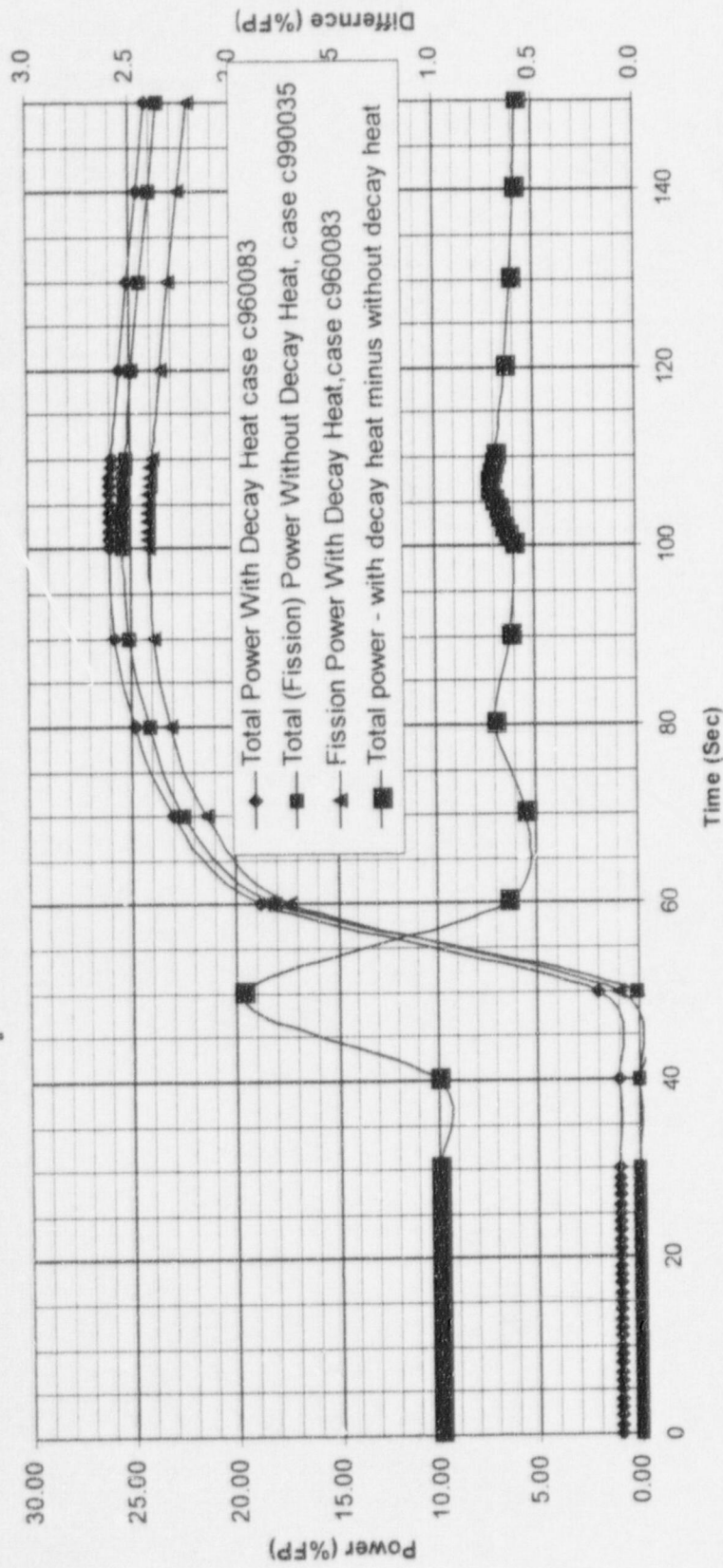
Core Response With & Without Decay Heat



Core Response With & Without Decay Heat



Core Response With & Without Decay Heat



Please provide a copy of the CNP input deck.

Attached is a copy of the CNP input deck for case C960028, which is the limiting containment pressure case in NSPNAD-970002.

B

*
= cnp press limit cont case - 0de2nyy - c960028 - NSPNAD-95004 Rev. 1

* mass and energy releases are from dnp case c960081

*
* CALC TIME= 0.1 HR = 360 SEC

*
* OMIT 11000: BRITISH UNITS

*
11001 0.1 19.0 80.0 14.7 0.3 80.0 0.0 0.0 0.0 0.0 1.0 0.92

*
10031 1.32E6 50.0 120.0 120.0 16.85 0.2500 8659.0 0.0 0.0 *DRYWELL

10041 3.74E5 0.0 120.0 120.0 16.85 0.2500 173.18 0.0 0.0 *DUAL

*
9000 SEC

9001 30.0 0.1 1000 10

9002 150.0 0.1 1000 50

9003 300.0 0.1 1000 100

9004 2700.0 1.0 1000 100

9005 3700.0 1.0 1000 50

9006 28800.0 1.0 1000 100

*
300 HR LBM/HR BTU/LBM YES YES

*
* ADDITIONAL M&E TO CONTAINMENT ATMOSPHERE

* FROM AUX FW TO FAULTED LOOP

* STARTS AT 200 SEC WHEN DNP INPUT STOPS AND

* AND ENDS AT 10 MINUTES WHEN AFW ISOLATION IS ASSUMED

*
* HR LB/HR BTU/HR

501 0.0 0.0 0.0

502 0.0555 0.0 0.0

503 0.0556 2.5254E5 2.9734E8

504 0.1667 2.5254E5 2.9734E8

505 0.1668 0.0 0.0

506 10.0 0.0 0.0

*
* SPRAY DATA

*
* SPRAYS ACTIVATED AT 80.0 SECONDS AND ISOLATED AT 45 MINUTES

*
800 0 100.0 10.0 95.0 345.64 0.0 0.0

801 0.0 0.0 1.0 1.0 0.0 0.0 0.0 0.0 0.0 120.0

802 0.0222222 0.0 1.0 1.0 0.0 0.0 0.0 0.0 0.0 120.0

803 0.0222223 6.44E5 1.0 1.0 0.0 0.0 0.0 0.0 0.0 120.0

804 0.75 6.44E5 1.0 1.0 0.0 0.0 0.0 0.0 0.0 120.0

805 0.75001 0.0 1.0 1.0 0.0 0.0 0.0 0.0 0.0 120.0

806 10.0 0.0 1.0 1.0 0.0 0.0 0.0 0.0 0.0 120.0

*
* FAN COOLERS ACTIVATED AT 9.0 hours

* this effectively disables the focus

*

2000 9.000000 10.0

*

* A DATA POINT AT 600 F IS ADDED TO PERVENT
* PREMATURE STOPS.

*

2001 600.0 -98.50E+6

2002 270.0 -98.50E+6 265.0 -96.50E+6 260.0 -90.00E+6

2003 250.0 -80.50E+6 240.0 -71.50E+6 230.0 -64.00E+6

2004 220.0 -57.00E+6 210.0 -50.50E+6 200.0 -44.50E+6 *FAN COOLER TABLE

2005 190.0 -39.00E+6 180.0 -34.00E+6 170.0 -29.50E+6

2006 160.0 -25.00E+6 150.0 -21.00E+6 140.0 -18.00E+6

2007 130.0 -14.00E+6 120.0 -8.000E+6

*

* MESH (NS) IN 1YY101 CHANGED

* (SEE SENSITIVITY IN CALC FILE)

* N=NS+1 IN 1YY001

*

101000 'CONTAINMENT VESSEL SHELL CYLINDER-PAINTED'

101001 6 2 0 0.0 1.0 0.0 41300. 3 4

101101 2 0.0009167 3 0.1259167

101201 1 2

101300 0 0.0

101400 2 2 52 2 0 0.0 0.0 0.0 -18 120.0 0.0 1.0

*

102000 'CONTAINMENT VESSEL SHELL DOME-PAINTED'

102001 6 2 0 0.0 1.0 0.0 17300. 3 4

102101 2 0.0009167 3 0.0634167

102201 1 2

102300 0 0.0

102400 2 2 52 2 0 0.0 0.0 0.0 -19 120.0 0.0 1.0

*

103000 'REMAINDER 0.75 IN STEEL-PAINTED'

103001 6 2 0 0.0 1.0 0.0 14700. 3 0

103101 2 0.0009167 3 0.0321667

103201 1 2

103300 0 0.0

103400 2 2 0 0

*

104000 '12 IN LINED CONCRETE-0.25 IN STEEL-UNPAINTED'

104001 29 3 0 0.0 1.0 0.0 6600. 3 3

104101 3 0.0208333 1 0.0209873 24 1.0209873

104201 4 5 3

104300 0 0.0

104400 2 2 2 2

*

105000 '0.375 IN STEEL-PAINTED'

105001 6 2 0 0.0 1.0 0.0 6800. 3 0

105101 2 0.0009167 3 0.0165417

105201 1 2

105300 0 0.0

105400 2 2 0 0

*

106000 '0.250 IN STEEL-UNPAINTED'

106001 4 1 0 0.0 1.0 0.0 32000. 3 0

106101 3 0.0104167

106201 2

106300 0 0.0

106400 2 2 0 0

*

107000 '0.50 IN STEEL-PAINTED'

107001 6 2 0 0.0 1.0 0.0 44000. 3 0

107101 2 0.0009167 3 0.0217500

107201 1 2

107300 0 0.0

107400 2 2 0 0

*

108000 '0.145 IN STEEL-PAINTED'

108001 6 2 0 0.0 1.0 0.0 1695. 3 0

108101 2 0.0009167 3 0.0069583

108201 1 2

108300 0 0.0

108400 2 2 0 0

*

109000 '0.090 IN STEEL-UNPAINTED'

109001 4 1 0 0.0 1.0 0.0 12400. 3 0

109101 3 0.00375

109201 2

109300 0 0.0

109400 2 2 0 0

*

110000 '0.100 IN STEEL-UNPAINTED'

110001 4 1 0 0.0 1.0 0.0 6000. 3 0

110101 3 0.0041667

110201 2

110300 0 0.0

110400 2 2 0 0

*

111000 '0.1875 IN STEEL-UNPAINTED'

111001 4 1 0 0.0 1.0 0.0 22000. 3 0

111101 3 0.0078125

111201 2

111300 0 0.0

111400 2 2 0 0

*

112000 '0.1875 IN STEEL-PAINTED'

112001 6 2 0 0.0 1.0 0.0 13125. 3 0

112101 2 0.0009167 3 0.0087293

112201 1 2

112300 0 0.0

112400 2 2 0 0

*

113000 '1.440 IN STEEL-PAINTED'

113001 9 2 0 0.0 1.0 0.0 2200. 3 0

113101 2 0.0009167 6 0.1209167

113201 1 2

113300 0 0.0

113400 2 2 0 0

*

114000 '12 IN CONCRETE-UNPAINTED'

114001 31 1 0 0.0 1.0 0.0 36720.0 3 0

114101 30 0.5000
114201 3
114300 0 0.0
114400 2 2 0 0
*

115000 '12 IN CONCRETE-PAINTED'
115001 34 2 0 0.0 1.0 0.0 4080. 3 0
115101 3 0.0015 30 0.5015
115201 1 3
115300 0 0.0
115400 2 2 0 0
*

116000 '6 IN CONCRETE-PAINTED'
116001 34 2 0 0.0 1.0 0.0 25070. 3 0
116101 3 0.0015 30 0.2515
116201 1 3
116300 0 0.0
116400 2 2 0 0
*

117000 '3 IN CONCRETE-PAINTED'
117001 34 2 0 0.0 1.0 0.0 7570. 3 0
117101 3 0.0015 30 0.1265
117201 1 3
117300 0 0.0
117400 2 2 0 0
*

118000 'SHIELD BUILDING CYLINDER'
118001 61 1 0 0.0 1.0 0.0 64810. 4 0
118101 60 2.5
118201 3
118300 0 0.0
118400 52 2 50 0 1 120.0 0.0 1.0
*

119000 'SHIELD BUILDING DOME'
119001 49 1 0 0.0 1.0 0.0 12250. 4 0
119101 48 2.0
119201 3
119300 0 0.0
119400 52 2 50 0 2 120.0 0.0 1.0
*

410001 0.29 28.0
410002 26.0 56.2
410003 0.80 32.0
410004 9.4 60.12
410005 0.0154 0.01704
*

*END INPUT

ATTACHMENT 3

Mass and Energy Release Data

(17 pages)

26Mar-97 MICROFICHE-TITLE**** BE452

0.

sec	lbm/sec	btu/lbm	lbm	btu
0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00	0.00000E+00
0.10000E-01	0.52577E+04	0.11960E+04	0.47332E+02	0.56609E+05
0.30000E-01	0.52511E+04	0.11961E+04	0.15242E+03	0.18229E+06
0.70000E-01	0.52380E+04	0.11961E+04	0.36218E+03	0.43320E+06
0.15000E+00	0.52124E+04	0.11963E+04	0.78015E+03	0.93317E+06
0.31000E+00	0.51648E+04	0.11965E+04	0.16100E+04	0.19261E+07
0.63000E+00	0.53808E+04	0.11487E+04	0.32965E+04	0.39027E+07
0.98000E+00	0.57273E+04	0.10852E+04	0.52428E+04	0.60717E+07
0.13300E+01	0.37196E+04	0.90156E+03	0.65518E+04	0.73286E+07
0.16800E+01	0.43885E+04	0.80609E+03	0.79748E+04	0.85350E+07
0.20300E+01	0.54040E+04	0.71002E+03	0.96933E+04	0.98267E+07
0.23800E+01	0.55799E+04	0.69385E+03	0.11622E+05	0.11178E+08
0.27300E+01	0.57364E+04	0.67878E+03	0.13605E+05	0.12537E+08
0.30800E+01	0.58838E+04	0.66459E+03	0.15643E+05	0.13904E+08
0.34300E+01	0.59385E+04	0.65660E+03	0.17713E+05	0.15270E+08
0.37800E+01	0.59962E+04	0.64867E+03	0.19802E+05	0.16633E+08
0.41300E+01	0.60747E+04	0.64190E+03	0.21918E+05	0.17997E+08
0.44800E+01	0.60918E+04	0.63817E+03	0.24048E+05	0.19359E+08
0.48300E+01	0.61072E+04	0.63445E+03	0.26183E+05	0.20718E+08
0.51800E+01	0.60981E+04	0.63187E+03	0.28321E+05	0.22070E+08
0.55300E+01	0.60560E+04	0.63087E+03	0.30447E+05	0.23413E+08
0.58800E+01	0.60138E+04	0.62989E+03	0.32559E+05	0.24744E+08
0.62300E+01	0.59607E+04	0.62947E+03	0.34654E+05	0.26063E+08
0.65800E+01	0.58994E+04	0.62951E+03	0.36728E+05	0.27369E+08
0.69300E+01	0.58384E+04	0.62955E+03	0.38782E+05	0.28661E+08
0.72800E+01	0.57521E+04	0.63100E+03	0.40810E+05	0.29939E+08
0.76300E+01	0.56596E+04	0.63304E+03	0.42805E+05	0.31200E+08
0.79800E+01	0.55695E+04	0.63510E+03	0.44768E+05	0.32446E+08
0.83300E+01	0.54879E+04	0.63674E+03	0.46702E+05	0.33675E+08
0.86800E+01	0.54086E+04	0.63832E+03	0.48607E+05	0.34890E+08
0.90300E+01	0.53303E+04	0.63991E+03	0.50485E+05	0.36091E+08
0.93800E+01	0.52241E+04	0.64325E+03	0.52330E+05	0.37275E+08
0.97300E+01	0.51193E+04	0.64662E+03	0.54139E+05	0.38441E+08
0.10000E+02	0.50406E+04	0.64932E+03	0.55509E+05	0.39329E+08
0.10270E+02	0.49572E+04	0.65264E+03	0.56857E+05	0.40207E+08
0.10540E+02	0.48729E+04	0.65606E+03	0.58183E+05	0.41075E+08
0.10810E+02	0.47886E+04	0.65948E+03	0.59486E+05	0.41932E+08
0.11080E+02	0.47014E+04	0.66314E+03	0.60767E+05	0.42779E+08
0.11350E+02	0.46016E+04	0.66775E+03	0.62021E+05	0.43614E+08
0.11620E+02	0.45020E+04	0.67238E+03	0.63249E+05	0.44437E+08
0.11890E+02	0.44027E+04	0.67702E+03	0.64450E+05	0.45248E+08
0.12160E+02	0.42987E+04	0.68206E+03	0.65623E+05	0.46045E+08
0.12430E+02	0.41897E+04	0.68752E+03	0.66768E+05	0.46829E+08
0.12700E+02	0.40881E+04	0.69300E+03	0.67883E+05	0.47600E+08
0.12970E+02	0.40030E+04	0.69849E+03	0.68974E+05	0.48359E+08
0.13240E+02	0.39094E+04	0.70524E+03	0.70041E+05	0.49108E+08
0.13510E+02	0.38160E+04	0.71233E+03	0.71083E+05	0.49847E+08
0.13780E+02	0.37232E+04	0.71943E+03	0.72100E+05	0.50575E+08
0.14050E+02	0.36295E+04	0.72671E+03	0.73091E+05	0.51292E+08
0.14320E+02	0.35221E+04	0.73564E+03	0.74055E+05	0.51997E+08
0.14590E+02	0.34170E+04	0.74460E+03	0.74991E+05	0.52690E+08
0.14860E+02	0.33135E+04	0.75359E+03	0.75898E+05	0.53370E+08
0.15130E+02	0.32121E+04	0.76253E+03	0.76777E+05	0.54037E+08
0.15400E+02	0.31273E+04	0.77137E+03	0.77631E+05	0.54693E+08
0.15670E+02	0.30470E+04	0.78024E+03	0.78464E+05	0.55339E+08
0.15940E+02	0.29672E+04	0.78913E+03	0.79275E+05	0.55975E+08
0.16210E+02	0.28765E+04	0.79996E+03	0.80063E+05	0.56602E+08
0.16480E+02	0.27821E+04	0.81171E+03	0.80825E+05	0.57217E+08
0.16750E+02	0.26934E+04	0.82350E+03	0.81563E+05	0.57820E+08

0.17020E+02	0.26076E+04	0.83532E+03	0.82278E+05	0.58413E+08
0.17290E+02	0.25317E+04	0.84757E+03	0.82970E+05	0.58996E+08
0.17560E+02	0.24592E+04	0.85987E+03	0.83643E+05	0.59571E+08
0.17830E+02	0.23876E+04	0.87220E+03	0.84296E+05	0.60137E+08
0.18100E+02	0.23143E+04	0.88516E+03	0.84930E+05	0.60695E+08
0.18370E+02	0.22368E+04	0.89980E+03	0.85544E+05	0.61243E+08
0.18640E+02	0.21641E+04	0.91447E+03	0.86136E+05	0.61781E+08
0.18910E+02	0.20990E+04	0.92919E+03	0.86711E+05	0.62311E+08
0.19180E+02	0.20301E+04	0.94533E+03	0.87268E+05	0.62833E+08
0.19450E+02	0.19586E+04	0.96257E+03	0.87805E+05	0.63346E+08
0.19720E+02	0.18915E+04	0.97984E+03	0.88324E+05	0.63850E+08
0.20000E+02	0.18303E+04	0.99773E+03	0.88844E+05	0.64365E+08
0.20280E+02	0.17678E+04	0.10171E+04	0.89347E+05	0.64872E+08
0.20560E+02	0.17056E+04	0.10366E+04	0.89832E+05	0.65371E+08
0.20840E+02	0.16460E+04	0.10562E+04	0.90301E+05	0.65861E+08
0.21000E+02	0.16139E+04	0.10683E+04	0.90561E+05	0.66138E+08
0.21160E+02	0.15834E+04	0.10802E+04	0.90816E+05	0.66413E+08
0.21345E+02	0.15485E+04	0.10939E+04	0.91107E+05	0.66728E+08
0.21556E+02	0.15092E+04	0.11095E+04	0.91428E+05	0.67083E+08
0.21767E+02	0.14697E+04	0.11253E+04	0.91742E+05	0.67433E+08
0.22000E+02	0.14315E+04	0.11427E+04	0.92079E+05	0.67816E+08
0.22233E+02	0.13995E+04	0.11571E+04	0.92409E+05	0.68196E+08
0.22466E+02	0.13684E+04	0.11711E+04	0.92731E+05	0.68571E+08
0.22700E+02	0.13376E+04	0.11852E+04	0.93047E+05	0.68943E+08
0.22933E+02	0.13073E+04	0.11993E+04	0.93355E+05	0.69310E+08
0.23000E+02	0.12966E+04	0.12044E+04	0.93442E+05	0.69415E+08
0.23067E+02	0.12940E+04	0.12048E+04	0.93529E+05	0.69520E+08
0.23202E+02	0.12899E+04	0.12048E+04	0.93703E+05	0.69730E+08
0.23401E+02	0.12838E+04	0.12048E+04	0.93959E+05	0.70038E+08
0.23632E+02	0.12768E+04	0.12048E+04	0.94255E+05	0.70395E+08
0.23864E+02	0.12698E+04	0.12048E+04	0.94550E+05	0.70750E+08
0.24000E+02	0.12655E+04	0.12048E+04	0.94723E+05	0.70958E+08
0.24136E+02	0.12616E+04	0.12048E+04	0.94895E+05	0.71166E+08
0.24305E+02	0.12570E+04	0.12048E+04	0.95107E+05	0.71421E+08
0.24505E+02	0.12514E+04	0.12048E+04	0.95358E+05	0.71723E+08
0.24732E+02	0.12451E+04	0.12047E+04	0.95641E+05	0.72065E+08
0.24959E+02	0.12388E+04	0.12047E+04	0.95923E+05	0.72404E+08
0.25000E+02	0.12371E+04	0.12047E+04	0.95974E+05	0.72466E+08
0.25041E+02	0.12361E+04	0.12047E+04	0.96025E+05	0.72527E+08
0.25124E+02	0.12341E+04	0.12047E+04	0.96127E+05	0.72651E+08
0.25290E+02	0.12301E+04	0.12047E+04	0.96332E+05	0.72897E+08
0.25511E+02	0.12244E+04	0.12047E+04	0.96603E+05	0.73224E+08
0.25763E+02	0.12178E+04	0.12047E+04	0.96910E+05	0.73593E+08
0.26000E+02	0.12116E+04	0.12047E+04	0.97198E+05	0.73941E+08
0.26237E+02	0.12053E+04	0.12047E+04	0.97485E+05	0.74286E+08
0.26475E+02	0.11991E+04	0.12047E+04	0.97770E+05	0.74630E+08
0.26712E+02	0.11931E+04	0.12047E+04	0.98054E+05	0.74972E+08
0.26950E+02	0.11871E+04	0.12047E+04	0.98337E+05	0.75312E+08
0.27000E+02	0.11854E+04	0.12047E+04	0.98396E+05	0.75384E+08
0.27050E+02	0.11842E+04	0.12047E+04	0.98456E+05	0.75456E+08
0.27151E+02	0.11821E+04	0.12047E+04	0.98575E+05	0.75600E+08
0.27350E+02	0.11777E+04	0.12046E+04	0.98809E+05	0.75882E+08
0.27602E+02	0.11718E+04	0.12046E+04	0.99106E+05	0.76238E+08
0.27854E+02	0.11658E+04	0.12046E+04	0.99400E+05	0.76593E+08
0.28000E+02	0.11621E+04	0.12046E+04	0.99570E+05	0.76798E+08
0.28146E+02	0.11589E+04	0.12046E+04	0.99740E+05	0.77003E+08
0.28326E+02	0.11549E+04	0.12046E+04	0.99948E+05	0.77253E+08
0.28539E+02	0.11503E+04	0.12046E+04	0.10019E+06	0.77549E+08
0.28783E+02	0.11449E+04	0.12046E+04	0.10047E+06	0.77887E+08
0.29000E+02	0.11402E+04	0.12046E+04	0.10072E+06	0.78185E+08
0.29217E+02	0.11360E+04	0.12046E+04	0.10097E+06	0.78481E+08

0.29433E+02	0.11318E+04	0.12046E+04	0.10121E+06	0.78777E+08
0.29650E+02	0.11276E+04	0.12045E+04	0.10146E+06	0.79072E+08
0.29866E+02	0.11235E+04	0.12045E+04	0.10170E+06	0.79365E+08
0.30000E+02	0.11208E+04	0.12045E+04	0.10185E+06	0.79546E+08
0.30134E+02	0.11184E+04	0.12045E+04	0.10200E+06	0.79727E+08
0.30306E+02	0.11154E+04	0.12045E+04	0.10219E+06	0.79958E+08
0.30518E+02	0.11116E+04	0.12045E+04	0.10243E+06	0.80243E+08
0.30766E+02	0.11072E+04	0.12044E+04	0.10270E+06	0.80573E+08
0.31046E+02	0.11022E+04	0.12044E+04	0.10301E+06	0.80946E+08
0.31326E+02	0.10972E+04	0.12044E+04	0.10332E+06	0.81317E+08
0.31606E+02	0.10922E+04	0.12044E+04	0.10363E+06	0.81686E+08
0.31886E+02	0.10874E+04	0.12044E+04	0.10393E+06	0.82053E+08
0.32166E+02	0.10826E+04	0.12043E+04	0.10424E+06	0.82419E+08
0.32446E+02	0.10779E+04	0.12043E+04	0.10454E+06	0.82784E+08
0.32726E+02	0.10732E+04	0.12043E+04	0.10484E+06	0.83146E+08
0.33006E+02	0.10687E+04	0.12043E+04	0.10514E+06	0.83508E+08
0.33286E+02	0.10642E+04	0.12043E+04	0.10544E+06	0.83867E+08
0.33602E+02	0.10592E+04	0.12042E+04	0.10577E+06	0.84270E+08
0.33952E+02	0.10537E+04	0.12042E+04	0.10614E+06	0.84716E+08
0.34302E+02	0.10483E+04	0.12042E+04	0.10651E+06	0.85158E+08
0.34652E+02	0.10430E+04	0.12042E+04	0.10688E+06	0.85599E+08
0.35002E+02	0.10378E+04	0.12042E+04	0.10724E+06	0.86037E+08
0.35352E+02	0.10326E+04	0.12041E+04	0.10760E+06	0.86474E+08
0.35702E+02	0.10276E+04	0.12041E+04	0.10796E+06	0.86908E+08
0.36052E+02	0.10226E+04	0.12041E+04	0.10832E+06	0.87339E+08
0.36402E+02	0.10177E+04	0.12041E+04	0.10868E+06	0.87769E+08
0.36752E+02	0.10129E+04	0.12040E+04	0.10904E+06	0.88197E+08
0.37102E+02	0.10082E+04	0.12040E+04	0.10939E+06	0.88623E+08
0.37452E+02	0.10036E+04	0.12040E+04	0.10974E+06	0.89047E+08
0.37802E+02	0.99924E+03	0.12040E+04	0.11009E+06	0.89469E+08
0.38152E+02	0.99509E+03	0.12040E+04	0.11044E+06	0.89889E+08
0.38502E+02	0.99102E+03	0.12039E+04	0.11079E+06	0.90307E+08
0.38852E+02	0.98701E+03	0.12039E+04	0.11113E+06	0.90724E+08
0.39202E+02	0.98305E+03	0.12039E+04	0.11148E+06	0.91139E+08
0.39552E+02	0.97916E+03	0.12038E+04	0.11182E+06	0.91552E+08
0.39902E+02	0.97532E+03	0.12038E+04	0.11216E+06	0.91964E+08
0.40000E+02	0.97400E+03	0.12038E+04	0.11226E+06	0.92079E+08
0.40098E+02	0.97304E+03	0.12038E+04	0.11235E+06	0.92194E+08
0.40271E+02	0.97144E+03	0.12038E+04	0.11252E+06	0.92396E+08
0.40533E+02	0.96883E+03	0.12037E+04	0.11278E+06	0.92702E+08
0.40876E+02	0.96530E+03	0.12037E+04	0.11311E+06	0.93101E+08
0.41219E+02	0.96169E+03	0.12037E+04	0.11344E+06	0.93498E+08
0.41561E+02	0.95814E+03	0.12037E+04	0.11377E+06	0.93894E+08
0.41904E+02	0.95464E+03	0.12036E+04	0.11410E+06	0.94289E+08
0.42246E+02	0.95119E+03	0.12036E+04	0.11442E+06	0.94681E+08
0.42589E+02	0.94779E+03	0.12036E+04	0.11475E+06	0.95073E+08
0.42932E+02	0.94442E+03	0.12036E+04	0.11507E+06	0.95463E+08
0.43274E+02	0.94110E+03	0.12035E+04	0.11539E+06	0.95852E+08
0.43617E+02	0.93782E+03	0.12035E+04	0.11572E+06	0.96239E+08
0.43959E+02	0.93458E+03	0.12035E+04	0.11604E+06	0.96625E+08
0.44302E+02	0.93138E+03	0.12035E+04	0.11636E+06	0.97009E+08
0.44645E+02	0.92821E+03	0.12034E+04	0.11667E+06	0.97393E+08
0.44987E+02	0.92508E+03	0.12034E+04	0.11699E+06	0.97775E+08
0.45330E+02	0.92199E+03	0.12034E+04	0.11731E+06	0.98155E+08
0.45672E+02	0.91893E+03	0.12034E+04	0.11762E+06	0.98535E+08
0.46015E+02	0.91591E+03	0.12033E+04	0.11794E+06	0.98913E+08
0.46358E+02	0.91291E+03	0.12033E+04	0.11825E+06	0.99290E+08
0.46700E+02	0.90995E+03	0.12033E+04	0.11856E+06	0.99666E+08
0.47043E+02	0.90702E+03	0.12033E+04	0.11887E+06	0.10004E+09
0.47385E+02	0.90412E+03	0.12032E+04	0.11918E+06	0.10041E+09
0.47717E+02	0.90321E+03	0.12032E+04	0.11926E+06	0.10051E+09

0.47557E+02	0.90257E+03	0.12032E+04	0.11934E+06	0.10060E+09
0.47670E+02	0.90175E+03	0.12032E+04	0.11944E+06	0.10072E+09
0.47810E+02	0.90071E+03	0.12032E+04	0.11957E+06	0.10087E+09
0.47969E+02	0.89948E+03	0.12032E+04	0.11971E+06	0.10105E+09
0.48128E+02	0.89821E+03	0.12032E+04	0.11985E+06	0.10122E+09
0.48288E+02	0.89694E+03	0.12032E+04	0.12000E+06	0.10139E+09
0.48447E+02	0.89567E+03	0.12032E+04	0.12014E+06	0.10156E+09
0.48607E+02	0.89440E+03	0.12032E+04	0.12028E+06	0.10173E+09
0.48766E+02	0.89312E+03	0.12032E+04	0.12043E+06	0.10191E+09
0.48926E+02	0.89185E+03	0.12031E+04	0.12057E+06	0.10208E+09
0.49085E+02	0.89058E+03	0.12031E+04	0.12071E+06	0.10225E+09
0.49245E+02	0.88931E+03	0.12031E+04	0.12085E+06	0.10242E+09
0.49404E+02	0.88804E+03	0.12031E+04	0.12099E+06	0.10259E+09
0.49564E+02	0.88678E+03	0.12031E+04	0.12113E+06	0.10276E+09
0.49723E+02	0.88551E+03	0.12031E+04	0.12128E+06	0.10293E+09
0.49882E+02	0.88425E+03	0.12031E+04	0.12142E+06	0.10310E+09
0.50000E+02	0.88329E+03	0.12031E+04	0.12152E+06	0.10322E+09
0.50118E+02	0.88239E+03	0.12031E+04	0.12162E+06	0.10335E+09
0.50254E+02	0.88136E+03	0.12031E+04	0.12175E+06	0.10349E+09
0.50409E+02	0.88016E+03	0.12031E+04	0.12188E+06	0.10366E+09
0.50564E+02	0.87895E+03	0.12030E+04	0.12202E+06	0.10382E+09
0.50719E+02	0.87773E+03	0.12030E+04	0.12215E+06	0.10399E+09
0.50874E+02	0.87651E+03	0.12030E+04	0.12229E+06	0.10415E+09
0.51029E+02	0.87530E+03	0.12030E+04	0.12243E+06	0.10431E+09
0.51184E+02	0.87409E+03	0.12030E+04	0.12256E+06	0.10448E+09
0.51340E+02	0.87288E+03	0.12030E+04	0.12270E+06	0.10464E+09
0.51495E+02	0.87167E+03	0.12030E+04	0.12283E+06	0.10480E+09
0.51650E+02	0.87047E+03	0.12030E+04	0.12297E+06	0.10496E+09
0.51805E+02	0.86927E+03	0.12030E+04	0.12310E+06	0.10513E+09
0.51960E+02	0.86807E+03	0.12030E+04	0.12324E+06	0.10529E+09
0.52115E+02	0.86687E+03	0.12030E+04	0.12337E+06	0.10545E+09
0.52270E+02	0.86569E+03	0.12029E+04	0.12351E+06	0.10561E+09
0.52425E+02	0.86448E+03	0.12029E+04	0.12364E+06	0.10577E+09
0.52580E+02	0.86330E+03	0.12029E+04	0.12377E+06	0.10593E+09
0.52735E+02	0.86211E+03	0.12029E+04	0.12391E+06	0.10610E+09
0.52890E+02	0.86093E+03	0.12029E+04	0.12404E+06	0.10626E+09
0.53045E+02	0.85976E+03	0.12029E+04	0.12417E+06	0.10642E+09
0.53200E+02	0.85870E+03	0.12029E+04	0.12431E+06	0.10658E+09
0.53355E+02	0.85765E+03	0.12029E+04	0.12444E+06	0.10674E+09
0.53511E+02	0.85660E+03	0.12029E+04	0.12457E+06	0.10690E+09
0.53666E+02	0.85555E+03	0.12028E+04	0.12471E+06	0.10706E+09
0.53821E+02	0.85450E+03	0.12028E+04	0.12484E+06	0.10722E+09
0.53976E+02	0.85346E+03	0.12028E+04	0.12497E+06	0.10738E+09
0.54131E+02	0.85241E+03	0.12028E+04	0.12510E+06	0.10753E+09
0.54286E+02	0.85137E+03	0.12028E+04	0.12524E+06	0.10769E+09
0.54441E+02	0.85033E+03	0.12028E+04	0.12537E+06	0.10785E+09
0.54596E+02	0.84929E+03	0.12028E+04	0.12550E+06	0.10801E+09
0.54751E+02	0.84826E+03	0.12027E+04	0.12563E+06	0.10817E+09
0.54906E+02	0.84722E+03	0.12027E+04	0.12576E+06	0.10833E+09
0.55061E+02	0.84619E+03	0.12027E+04	0.12589E+06	0.10848E+09
0.55216E+02	0.84516E+03	0.12027E+04	0.12603E+06	0.10864E+09
0.55371E+02	0.84414E+03	0.12027E+04	0.12616E+06	0.10880E+09
0.55526E+02	0.84312E+03	0.12027E+04	0.12629E+06	0.10896E+09
0.55681E+02	0.84209E+03	0.12027E+04	0.12642E+06	0.10911E+09
0.55837E+02	0.84107E+03	0.12027E+04	0.12655E+06	0.10927E+09
0.55992E+02	0.84006E+03	0.12026E+04	0.12668E+06	0.10943E+09
0.56147E+02	0.83904E+03	0.12026E+04	0.12681E+06	0.10958E+09
0.56302E+02	0.83803E+03	0.12026E+04	0.12694E+06	0.10974E+09
0.56457E+02	0.83702E+03	0.12026E+04	0.12707E+06	0.10990E+09
0.56612E+02	0.83602E+03	0.12026E+04	0.12720E+06	0.11005E+09
0.56767E+02	0.83501E+03	0.12026E+04	0.12733E+06	0.11021E+09

0.56922E+02	0.83401E+03	0.12026E+04	0.12746E+06	0.11036E+09
0.57077E+02	0.83301E+03	0.12026E+04	0.12759E+06	0.11052E+09
0.57232E+02	0.83201E+03	0.12025E+04	0.12772E+06	0.11068E+09
0.57387E+02	0.83102E+03	0.12025E+04	0.12784E+06	0.11083E+09
0.57542E+02	0.83003E+03	0.12025E+04	0.12797E+06	0.11099E+09
0.57697E+02	0.82904E+03	0.12025E+04	0.12810E+06	0.11114E+09
0.57852E+02	0.82805E+03	0.12025E+04	0.12823E+06	0.11129E+09
0.58007E+02	0.82706E+03	0.12025E+04	0.12836E+06	0.11145E+09
0.58163E+02	0.82608E+03	0.12025E+04	0.12849E+06	0.11160E+09
0.58318E+02	0.82510E+03	0.12025E+04	0.12861E+06	0.11176E+09
0.58473E+02	0.82412E+03	0.12024E+04	0.12874E+06	0.11191E+09
0.58628E+02	0.82315E+03	0.12024E+04	0.12887E+06	0.11206E+09
0.58783E+02	0.82217E+03	0.12024E+04	0.12900E+06	0.11222E+09
0.58938E+02	0.82120E+03	0.12024E+04	0.12913E+06	0.11237E+09
0.59093E+02	0.82023E+03	0.12024E+04	0.12925E+06	0.11252E+09
0.59248E+02	0.81927E+03	0.12024E+04	0.12938E+06	0.11268E+09
0.59403E+02	0.81831E+03	0.12024E+04	0.12951E+06	0.11283E+09
0.59558E+02	0.81734E+03	0.12024E+04	0.12963E+06	0.11298E+09
0.59713E+02	0.81639E+03	0.12023E+04	0.12976E+06	0.11313E+09
0.59868E+02	0.81543E+03	0.12023E+04	0.12989E+06	0.11329E+09
0.60000E+02	0.81461E+03	0.12023E+04	0.12999E+06	0.11342E+09
0.60132E+02	0.81381E+03	0.12023E+04	0.13010E+06	0.11354E+09
0.60263E+02	0.81302E+03	0.12023E+04	0.13021E+06	0.11367E+09
0.60395E+02	0.81223E+03	0.12023E+04	0.13032E+06	0.11380E+09
0.60527E+02	0.81145E+03	0.12023E+04	0.13042E+06	0.11393E+09
0.60659E+02	0.81066E+03	0.12023E+04	0.13053E+06	0.11406E+09
0.60790E+02	0.80987E+03	0.12023E+04	0.13064E+06	0.11419E+09
0.60922E+02	0.80909E+03	0.12022E+04	0.13074E+06	0.11431E+09
0.61054E+02	0.80830E+03	0.12022E+04	0.13085E+06	0.11444E+09
0.61185E+02	0.80752E+03	0.12022E+04	0.13096E+06	0.11457E+09
0.61317E+02	0.80674E+03	0.12022E+04	0.13106E+06	0.11470E+09
0.61449E+02	0.80596E+03	0.12022E+04	0.13117E+06	0.11483E+09
0.61580E+02	0.80518E+03	0.12022E+04	0.13127E+06	0.11495E+09
0.61712E+02	0.80440E+03	0.12022E+04	0.13138E+06	0.11508E+09
0.61844E+02	0.80363E+03	0.12022E+04	0.13149E+06	0.11521E+09
0.61975E+02	0.80285E+03	0.12022E+04	0.13159E+06	0.11534E+09
0.62107E+02	0.80208E+03	0.12022E+04	0.13170E+06	0.11546E+09
0.62239E+02	0.80130E+03	0.12022E+04	0.13180E+06	0.11559E+09
0.62371E+02	0.80053E+03	0.12021E+04	0.13191E+06	0.11572E+09
0.62502E+02	0.79976E+03	0.12021E+04	0.13201E+06	0.11584E+09
0.62634E+02	0.79899E+03	0.12021E+04	0.13212E+06	0.11597E+09
0.62766E+02	0.79823E+03	0.12021E+04	0.13222E+06	0.11610E+09
0.62897E+02	0.79746E+03	0.12021E+04	0.13233E+06	0.11622E+09
0.63029E+02	0.79670E+03	0.12021E+04	0.13243E+06	0.11635E+09
0.63161E+02	0.79593E+03	0.12021E+04	0.13254E+06	0.11647E+09
0.63292E+02	0.79517E+03	0.12021E+04	0.13264E+06	0.11660E+09
0.63424E+02	0.79441E+03	0.12021E+04	0.13275E+06	0.11673E+09
0.63556E+02	0.79365E+03	0.12021E+04	0.13285E+06	0.11685E+09
0.63688E+02	0.79289E+03	0.12020E+04	0.13296E+06	0.11698E+09
0.63819E+02	0.79214E+03	0.12020E+04	0.13306E+06	0.11710E+09
0.63951E+02	0.79138E+03	0.12020E+04	0.13317E+06	0.11723E+09
0.64083E+02	0.79063E+03	0.12020E+04	0.13327E+06	0.11735E+09
0.64214E+02	0.78988E+03	0.12020E+04	0.13337E+06	0.11748E+09
0.64346E+02	0.78912E+03	0.12020E+04	0.13348E+06	0.11760E+09
0.64478E+02	0.78837E+03	0.12020E+04	0.13358E+06	0.11773E+09
0.64609E+02	0.78762E+03	0.12020E+04	0.13369E+06	0.11785E+09
0.64741E+02	0.78688E+03	0.12020E+04	0.13379E+06	0.11798E+09
0.64873E+02	0.78613E+03	0.12020E+04	0.13389E+06	0.11810E+09
0.65004E+02	0.78539E+03	0.12019E+04	0.13400E+06	0.11823E+09
0.65136E+02	0.78464E+03	0.12019E+04	0.13410E+06	0.11835E+09
0.65268E+02	0.78390E+03	0.12019E+04	0.13420E+06	0.11848E+09

0.65400E+02	0.78316E+03	0.12019E+04	0.13431E+06	0.11860E+09
0.65531E+02	0.78242E+03	0.12019E+04	0.13441E+06	0.11872E+09
0.65663E+02	0.78168E+03	0.12019E+04	0.13451E+06	0.11885E+09
0.65795E+02	0.78094E+03	0.12019E+04	0.13462E+06	0.11897E+09
0.65926E+02	0.78020E+03	0.12019E+04	0.13472E+06	0.11909E+09
0.66058E+02	0.77947E+03	0.12019E+04	0.13482E+06	0.11922E+09
0.66190E+02	0.77874E+03	0.12019E+04	0.13492E+06	0.11934E+09
0.66321E+02	0.77800E+03	0.12019E+04	0.13503E+06	0.11946E+09
0.66453E+02	0.77727E+03	0.12018E+04	0.13513E+06	0.11959E+09
0.66585E+02	0.77654E+03	0.12018E+04	0.13523E+06	0.11971E+09
0.66717E+02	0.77581E+03	0.12018E+04	0.13533E+06	0.11983E+09
0.66848E+02	0.77508E+03	0.12018E+04	0.13544E+06	0.11996E+09
0.66980E+02	0.77436E+03	0.12018E+04	0.13554E+06	0.12008E+09
0.67112E+02	0.77363E+03	0.12018E+04	0.13564E+06	0.12020E+09
0.67243E+02	0.77291E+03	0.12018E+04	0.13574E+06	0.12032E+09
0.67375E+02	0.77218E+03	0.12018E+04	0.13584E+06	0.12045E+09
0.67507E+02	0.77146E+03	0.12018E+04	0.13594E+06	0.12057E+09
0.67638E+02	0.77074E+03	0.12018E+04	0.13605E+06	0.12069E+09
0.67770E+02	0.77002E+03	0.12018E+04	0.13615E+06	0.12081E+09
0.67902E+02	0.76930E+03	0.12017E+04	0.13625E+06	0.12093E+09
0.68033E+02	0.76859E+03	0.12017E+04	0.13635E+06	0.12105E+09
0.68165E+02	0.76787E+03	0.12017E+04	0.13645E+06	0.12118E+09
0.68297E+02	0.76716E+03	0.12017E+04	0.13655E+06	0.12130E+09
0.68429E+02	0.76644E+03	0.12017E+04	0.13665E+06	0.12142E+09
0.68560E+02	0.76573E+03	0.12017E+04	0.13675E+06	0.12154E+09
0.68692E+02	0.76502E+03	0.12017E+04	0.13685E+06	0.12166E+09
0.68824E+02	0.76431E+03	0.12017E+04	0.13696E+06	0.12178E+09
0.68955E+02	0.76360E+03	0.12017E+04	0.13706E+06	0.12190E+09
0.69087E+02	0.76289E+03	0.12017E+04	0.13716E+06	0.12202E+09
0.69219E+02	0.76218E+03	0.12017E+04	0.13726E+06	0.12215E+09
0.69350E+02	0.76148E+03	0.12016E+04	0.13736E+06	0.12227E+09
0.69482E+02	0.76077E+03	0.12016E+04	0.13746E+06	0.12239E+09
0.69614E+02	0.76007E+03	0.12016E+04	0.13756E+06	0.12251E+09
0.69746E+02	0.75936E+03	0.12016E+04	0.13766E+06	0.12263E+09
0.69877E+02	0.75866E+03	0.12016E+04	0.13776E+06	0.12275E+09
0.70000E+02	0.75800E+03	0.12016E+04	0.13785E+06	0.12286E+09
0.70123E+02	0.75736E+03	0.12016E+04	0.13794E+06	0.12297E+09
0.70261E+02	0.75664E+03	0.12016E+04	0.13805E+06	0.12310E+09
0.70400E+02	0.75590E+03	0.12016E+04	0.13815E+06	0.12322E+09
0.70539E+02	0.75516E+03	0.12016E+04	0.13826E+06	0.12335E+09
0.70677E+02	0.75442E+03	0.12016E+04	0.13836E+06	0.12347E+09
0.70816E+02	0.75368E+03	0.12015E+04	0.13847E+06	0.12360E+09
0.70954E+02	0.75295E+03	0.12015E+04	0.13857E+06	0.12372E+09
0.71093E+02	0.75222E+03	0.12015E+04	0.13868E+06	0.12385E+09
0.71232E+02	0.75149E+03	0.12015E+04	0.13878E+06	0.12398E+09
0.71370E+02	0.75076E+03	0.12015E+04	0.13888E+06	0.12410E+09
0.71509E+02	0.75003E+03	0.12015E+04	0.13899E+06	0.12423E+09
0.71648E+02	0.74930E+03	0.12015E+04	0.13909E+06	0.12435E+09
0.71786E+02	0.74857E+03	0.12015E+04	0.13920E+06	0.12448E+09
0.71925E+02	0.74785E+03	0.12015E+04	0.13930E+06	0.12460E+09
0.72063E+02	0.74712E+03	0.12015E+04	0.13940E+06	0.12472E+09
0.72202E+02	0.74640E+03	0.12015E+04	0.13951E+06	0.12485E+09
0.72341E+02	0.74568E+03	0.12014E+04	0.13961E+06	0.12497E+09
0.72479E+02	0.74496E+03	0.12014E+04	0.13971E+06	0.12510E+09
0.72618E+02	0.74424E+03	0.12014E+04	0.13982E+06	0.12522E+09
0.72756E+02	0.74352E+03	0.12014E+04	0.13992E+06	0.12534E+09
0.72895E+02	0.74281E+03	0.12014E+04	0.14002E+06	0.12547E+09
0.73034E+02	0.74209E+03	0.12014E+04	0.14013E+06	0.12559E+09
0.73172E+02	0.74138E+03	0.12014E+04	0.14023E+06	0.12572E+09
0.73311E+02	0.74066E+03	0.12014E+04	0.14033E+06	0.12584E+09
0.73450E+02	0.73995E+03	0.12014E+04	0.14043E+06	0.12596E+09

0.73588E+02	0.73924E+03	0.12014E+04	0.14054E+06	0.12609E+09
0.73727E+02	0.73853E+03	0.12014E+04	0.14064E+06	0.12621E+09
0.73865E+02	0.73782E+03	0.12013E+04	0.14074E+06	0.12633E+09
0.74004E+02	0.73711E+03	0.12013E+04	0.14084E+06	0.12645E+09
0.74143E+02	0.73641E+03	0.12013E+04	0.14095E+06	0.12658E+09
0.74281E+02	0.73570E+03	0.12013E+04	0.14105E+06	0.12670E+09
0.74420E+02	0.73500E+03	0.12013E+04	0.14115E+06	0.12682E+09
0.74559E+02	0.73429E+03	0.12013E+04	0.14125E+06	0.12694E+09
0.74697E+02	0.73359E+03	0.12013E+04	0.14135E+06	0.12707E+09
0.74836E+02	0.73289E+03	0.12013E+04	0.14145E+06	0.12719E+09
0.74974E+02	0.73219E+03	0.12013E+04	0.14156E+06	0.12731E+09
0.75113E+02	0.73149E+03	0.12013E+04	0.14166E+06	0.12743E+09
0.75252E+02	0.73079E+03	0.12013E+04	0.14176E+06	0.12755E+09
0.75390E+02	0.73010E+03	0.12012E+04	0.14186E+06	0.12768E+09
0.75529E+02	0.72940E+03	0.12012E+04	0.14196E+06	0.12780E+09
0.75667E+02	0.72871E+03	0.12012E+04	0.14206E+06	0.12792E+09
0.75806E+02	0.72801E+03	0.12012E+04	0.14216E+06	0.12804E+09
0.75945E+02	0.72732E+03	0.12012E+04	0.14226E+06	0.12816E+09
0.76083E+02	0.72663E+03	0.12012E+04	0.14237E+06	0.12828E+09
0.76222E+02	0.72594E+03	0.12012E+04	0.14247E+06	0.12840E+09
0.76361E+02	0.72525E+03	0.12012E+04	0.14257E+06	0.12852E+09
0.76499E+02	0.72456E+03	0.12012E+04	0.14267E+06	0.12864E+09
0.76638E+02	0.72387E+03	0.12012E+04	0.14277E+06	0.12877E+09
0.76776E+02	0.72319E+03	0.12012E+04	0.14287E+06	0.12889E+09
0.76915E+02	0.72250E+03	0.12011E+04	0.14297E+06	0.12901E+09
0.77054E+02	0.72182E+03	0.12011E+04	0.14307E+06	0.12913E+09
0.77192E+02	0.72113E+03	0.12011E+04	0.14317E+06	0.12925E+09
0.77331E+02	0.72045E+03	0.12011E+04	0.14327E+06	0.12937E+09
0.77469E+02	0.71976E+03	0.12011E+04	0.14337E+06	0.12949E+09
0.77608E+02	0.71912E+03	0.12011E+04	0.14347E+06	0.12961E+09
0.77746E+02	0.71843E+03	0.12011E+04	0.14357E+06	0.12973E+09
0.77885E+02	0.71779E+03	0.12011E+04	0.14367E+06	0.12985E+09
0.78023E+02	0.71715E+03	0.12011E+04	0.14377E+06	0.12997E+09
0.78163E+02	0.71651E+03	0.12011E+04	0.14387E+06	0.13008E+09
0.78301E+02	0.71587E+03	0.12010E+04	0.14397E+06	0.13020E+09
0.78440E+02	0.71525E+03	0.12010E+04	0.14406E+06	0.13032E+09
0.78578E+02	0.71462E+03	0.12010E+04	0.14416E+06	0.13044E+09
0.78717E+02	0.71402E+03	0.12010E+04	0.14426E+06	0.13056E+09
0.78855E+02	0.71340E+03	0.12010E+04	0.14436E+06	0.13068E+09
0.78994E+02	0.71280E+03	0.12010E+04	0.14446E+06	0.13080E+09
0.79132E+02	0.71219E+03	0.12010E+04	0.14456E+06	0.13092E+09
0.79272E+02	0.71159E+03	0.12010E+04	0.14466E+06	0.13104E+09
0.79410E+02	0.71099E+03	0.12009E+04	0.14476E+06	0.13116E+09
0.79549E+02	0.71040E+03	0.12009E+04	0.14485E+06	0.13127E+09
0.79687E+02	0.70982E+03	0.12009E+04	0.14495E+06	0.13139E+09
0.79826E+02	0.70922E+03	0.12009E+04	0.14505E+06	0.13151E+09
0.80000E+02	0.70866E+03	0.12009E+04	0.14517E+06	0.13166E+09
0.80174E+02	0.70809E+03	0.12009E+04	0.14530E+06	0.13180E+09
0.80348E+02	0.70759E+03	0.12009E+04	0.14541E+06	0.13192E+09
0.80474E+02	0.70709E+03	0.12009E+04	0.14551E+06	0.13206E+09
0.80549E+02	0.70659E+03	0.12009E+04	0.14556E+06	0.13212E+09
0.80624E+02	0.70609E+03	0.12009E+04	0.14562E+06	0.13219E+09
0.80775E+02	0.70542E+03	0.12008E+04	0.14572E+06	0.13231E+09
0.80905E+02	0.70479E+03	0.12008E+04	0.14583E+06	0.13243E+09
0.81075E+02	0.70429E+03	0.12008E+04	0.14593E+06	0.13257E+09
0.81150E+02	0.70390E+03	0.12008E+04	0.14599E+06	0.13263E+09
0.81225E+02	0.70363E+03	0.12008E+04	0.14604E+06	0.13269E+09
0.81375E+02	0.70312E+03	0.12008E+04	0.14614E+06	0.13282E+09
0.81500E+02	0.70259E+03	0.12008E+04	0.14624E+06	0.13294E+09
0.81675E+02	0.70199E+03	0.12008E+04	0.14636E+06	0.13307E+09
0.81751E+02	0.70159E+03	0.12008E+04	0.14641E+06	0.13314E+09
0.81826E+02	0.70133E+03	0.12008E+04	0.14646E+06	0.13320E+09
0.81976E+02	0.70082E+03	0.12007E+04	0.14657E+06	0.13333E+09
0.82276E+02	0.69970E+03	0.12007E+04	0.14678E+06	0.13358E+09
0.82351E+02	0.69930E+03	0.12007E+04	0.14683E+06	0.13364E+09
0.82426E+02	0.69903E+03	0.12007E+04	0.14688E+06	0.13371E+09
0.82576E+02	0.69853E+03	0.12007E+04	0.14699E+06	0.13383E+09
0.82777E+02	0.69741E+03	0.12007E+04	0.14720E+06	0.13408E+09
0.82952E+02	0.69702E+03	0.12007E+04	0.14725E+06	0.13415E+09
0.83027E+02	0.69676E+03	0.12007E+04	0.14730E+06	0.13421E+09
0.83177E+02	0.69626E+03	0.12007E+04	0.14741E+06	0.13434E+09
0.83477E+02	0.69514E+03	0.12006E+04	0.14761E+06	0.13459E+09
0.83552E+02	0.69475E+03	0.12006E+04	0.14767E+06	0.13465E+09

0.83627E+02	0.69449E+03	0.12006E+04	0.14772E+06	0.13471E+09
0.83777E+02	0.69400E+03	0.12006E+04	0.14782E+06	0.13484E+09
0.84078E+02	0.69289E+03	0.12006E+04	0.14803E+06	0.13509E+09
0.84153E+02	0.69250E+03	0.12006E+04	0.14808E+06	0.13515E+09
0.84228E+02	0.69223E+03	0.12006E+04	0.14813E+06	0.13521E+09
0.84378E+02	0.69174E+03	0.12006E+04	0.14824E+06	0.13534E+09
0.84678E+02	0.69064E+03	0.12005E+04	0.14845E+06	0.13559E+09
0.84753E+02	0.69025E+03	0.12005E+04	0.14850E+06	0.13565E+09
0.84828E+02	0.68999E+03	0.12005E+04	0.14855E+06	0.13571E+09
0.84979E+02	0.68950E+03	0.12005E+04	0.14865E+06	0.13583E+09
0.85279E+02	0.68840E+03	0.12005E+04	0.14886E+06	0.13608E+09
0.85354E+02	0.68802E+03	0.12005E+04	0.14891E+06	0.13614E+09
0.85429E+02	0.68776E+03	0.12005E+04	0.14896E+06	0.13621E+09
0.85579E+02	0.68727E+03	0.12005E+04	0.14907E+06	0.13633E+09
0.85879E+02	0.68617E+03	0.12005E+04	0.14927E+06	0.13658E+09
0.85955E+02	0.68579E+03	0.12005E+04	0.14932E+06	0.13664E+09
0.86030E+02	0.68553E+03	0.12004E+04	0.14938E+06	0.13670E+09
0.86180E+02	0.68505E+03	0.12004E+04	0.14948E+06	0.13682E+09
0.86480E+02	0.68395E+03	0.12004E+04	0.14968E+06	0.13707E+09
0.86555E+02	0.68357E+03	0.12004E+04	0.14974E+06	0.13713E+09
0.86630E+02	0.68331E+03	0.12004E+04	0.14979E+06	0.13719E+09
0.86780E+02	0.68283E+03	0.12004E+04	0.14989E+06	0.13732E+09
0.87081E+02	0.68174E+03	0.12004E+04	0.15009E+06	0.13756E+09
0.87381E+02	0.68053E+03	0.12003E+04	0.15030E+06	0.13781E+09
0.87456E+02	0.68014E+03	0.12003E+04	0.15035E+06	0.13787E+09
0.87531E+02	0.67989E+03	0.12003E+04	0.15040E+06	0.13793E+09
0.87681E+02	0.67942E+03	0.12003E+04	0.15050E+06	0.13805E+09
0.87982E+02	0.67834E+03	0.12003E+04	0.15071E+06	0.13830E+09
0.88282E+02	0.67714E+03	0.12003E+04	0.15091E+06	0.13854E+09
0.88357E+02	0.67676E+03	0.12003E+04	0.15096E+06	0.13860E+09
0.88432E+02	0.67651E+03	0.12003E+04	0.15101E+06	0.13867E+09
0.88582E+02	0.67605E+03	0.12003E+04	0.15111E+06	0.13879E+09
0.88882E+02	0.67498E+03	0.12002E+04	0.15132E+06	0.13903E+09
0.89183E+02	0.67379E+03	0.12002E+04	0.15152E+06	0.13927E+09
0.89258E+02	0.67341E+03	0.12002E+04	0.15157E+06	0.13933E+09
0.89333E+02	0.67316E+03	0.12002E+04	0.15162E+06	0.13939E+09
0.89483E+02	0.67270E+03	0.12002E+04	0.15172E+06	0.13952E+09
0.89783E+02	0.67164E+03	0.12002E+04	0.15192E+06	0.13976E+09
0.90000E+02	0.67077E+03	0.12002E+04	0.15207E+06	0.13993E+09
0.90217E+02	0.66995E+03	0.12001E+04	0.15221E+06	0.14011E+09
0.90477E+02	0.66897E+03	0.12001E+04	0.15239E+06	0.14032E+09
0.90738E+02	0.66797E+03	0.12001E+04	0.15256E+06	0.14053E+09
0.90999E+02	0.66697E+03	0.12001E+04	0.15274E+06	0.14073E+09
0.91260E+02	0.66598E+03	0.12001E+04	0.15291E+06	0.14094E+09
0.91520E+02	0.66500E+03	0.12000E+04	0.15308E+06	0.14115E+09
0.91781E+02	0.66402E+03	0.12000E+04	0.15326E+06	0.14136E+09
0.92042E+02	0.66304E+03	0.12000E+04	0.15343E+06	0.14157E+09
0.92303E+02	0.66207E+03	0.12000E+04	0.15360E+06	0.14177E+09
0.92563E+02	0.66110E+03	0.12000E+04	0.15378E+06	0.14198E+09
0.92824E+02	0.66013E+03	0.11999E+04	0.15395E+06	0.14219E+09
0.93085E+02	0.65916E+03	0.11999E+04	0.15412E+06	0.14239E+09
0.93346E+02	0.65820E+03	0.11999E+04	0.15429E+06	0.14260E+09
0.93606E+02	0.65724E+03	0.11999E+04	0.15446E+06	0.14281E+09
0.93867E+02	0.65628E+03	0.11999E+04	0.15463E+06	0.14301E+09
0.94128E+02	0.65533E+03	0.11999E+04	0.15481E+06	0.14322E+09
0.94389E+02	0.65437E+03	0.11998E+04	0.15498E+06	0.14342E+09
0.94649E+02	0.65342E+03	0.11998E+04	0.15515E+06	0.14363E+09
0.94910E+02	0.65247E+03	0.11998E+04	0.15532E+06	0.14383E+09
0.95171E+02	0.65153E+03	0.11998E+04	0.15549E+06	0.14403E+09
0.95431E+02	0.65058E+03	0.11998E+04	0.15566E+06	0.14424E+09
0.95692E+02	0.64964E+03	0.11997E+04	0.15583E+06	0.14444E+09

0.95953E+02	0.64870E+03	0.11997E+04	0.15600E+06	0.14464E+09
0.96214E+02	0.64776E+03	0.11997E+04	0.15616E+06	0.14485E+09
0.96474E+02	0.64682E+03	0.11997E+04	0.15633E+06	0.14505E+09
0.96735E+02	0.64589E+03	0.11997E+04	0.15650E+06	0.14525E+09
0.96996E+02	0.64495E+03	0.11996E+04	0.15667E+06	0.14545E+09
0.97257E+02	0.64402E+03	0.11996E+04	0.15684E+06	0.14566E+09
0.97517E+02	0.64309E+03	0.11996E+04	0.15701E+06	0.14586E+09
0.97778E+02	0.64216E+03	0.11996E+04	0.15717E+06	0.14606E+09
0.98039E+02	0.64124E+03	0.11996E+04	0.15734E+06	0.14626E+09
0.98300E+02	0.64031E+03	0.11996E+04	0.15751E+06	0.14646E+09
0.98560E+02	0.63939E+03	0.11995E+04	0.15767E+06	0.14666E+09
0.98821E+02	0.63847E+03	0.11995E+04	0.15784E+06	0.14686E+09
0.99082E+02	0.63755E+03	0.11995E+04	0.15801E+06	0.14706E+09
0.99342E+02	0.63663E+03	0.11995E+04	0.15817E+06	0.14726E+09
0.99603E+02	0.63571E+03	0.11995E+04	0.15834E+06	0.14746E+09
0.99864E+02	0.63480E+03	0.11994E+04	0.15850E+06	0.14765E+09
0.10000E+03	0.63429E+03	0.11994E+04	0.15859E+06	0.14776E+09
0.10014E+03	0.63386E+03	0.11994E+04	0.15868E+06	0.14786E+09
0.10041E+03	0.63301E+03	0.11994E+04	0.15885E+06	0.14807E+09
0.10068E+03	0.63205E+03	0.11994E+04	0.15902E+06	0.14828E+09
0.10095E+03	0.63108E+03	0.11994E+04	0.15919E+06	0.14848E+09
0.10122E+03	0.63012E+03	0.11994E+04	0.15936E+06	0.14869E+09
0.10150E+03	0.62916E+03	0.11993E+04	0.15954E+06	0.14889E+09
0.10177E+03	0.62820E+03	0.11993E+04	0.15971E+06	0.14910E+09
0.10204E+03	0.62725E+03	0.11993E+04	0.15988E+06	0.14930E+09
0.10231E+03	0.62630E+03	0.11993E+04	0.16005E+06	0.14951E+09
0.10258E+03	0.62536E+03	0.11993E+04	0.16022E+06	0.14971E+09
0.10286E+03	0.62442E+03	0.11992E+04	0.16039E+06	0.14991E+09
0.10313E+03	0.62348E+03	0.11992E+04	0.16056E+06	0.15012E+09
0.10340E+03	0.62254E+03	0.11992E+04	0.16073E+06	0.15032E+09
0.10367E+03	0.62161E+03	0.11992E+04	0.16090E+06	0.15052E+09
0.10395E+03	0.62067E+03	0.11992E+04	0.16107E+06	0.15073E+09
0.10422E+03	0.61975E+03	0.11992E+04	0.16124E+06	0.15093E+09
0.10449E+03	0.61882E+03	0.11991E+04	0.16140E+06	0.15113E+09
0.10476E+03	0.61790E+03	0.11991E+04	0.16157E+06	0.15133E+09
0.10503E+03	0.61698E+03	0.11991E+04	0.16174E+06	0.15153E+09
0.10531E+03	0.61607E+03	0.11991E+04	0.16191E+06	0.15174E+09
0.10558E+03	0.61516E+03	0.11991E+04	0.16208E+06	0.15194E+09
0.10585E+03	0.61425E+03	0.11990E+04	0.16224E+06	0.15214E+09
0.10612E+03	0.61335E+03	0.11990E+04	0.16241E+06	0.15234E+09
0.10639E+03	0.61246E+03	0.11990E+04	0.16258E+06	0.15254E+09
0.10667E+03	0.61157E+03	0.11990E+04	0.16274E+06	0.15274E+09
0.10694E+03	0.61069E+03	0.11990E+04	0.16291E+06	0.15294E+09
0.10721E+03	0.60982E+03	0.11990E+04	0.16307E+06	0.15314E+09
0.10748E+03	0.60896E+03	0.11989E+04	0.16324E+06	0.15333E+09
0.10775E+03	0.60810E+03	0.11989E+04	0.16341E+06	0.15353E+09
0.10803E+03	0.60726E+03	0.11989E+04	0.16357E+06	0.15373E+09
0.10830E+03	0.60643E+03	0.11989E+04	0.16374E+06	0.15393E+09
0.10857E+03	0.60561E+03	0.11989E+04	0.16390E+06	0.15413E+09
0.10884E+03	0.60480E+03	0.11989E+04	0.16407E+06	0.15432E+09
0.10911E+03	0.60401E+03	0.11988E+04	0.16423E+06	0.15452E+09
0.10939E+03	0.60323E+03	0.11988E+04	0.16439E+06	0.15472E+09
0.10966E+03	0.60247E+03	0.11988E+04	0.16456E+06	0.15491E+09
0.10993E+03	0.60172E+03	0.11988E+04	0.16472E+06	0.15511E+09
0.11000E+03	0.60148E+03	0.11988E+04	0.16476E+06	0.15516E+09
0.11007E+03	0.60133E+03	0.11988E+04	0.16481E+06	0.15521E+09
0.11021E+03	0.60105E+03	0.11988E+04	0.16489E+06	0.15531E+09
0.11048E+03	0.60041E+03	0.11988E+04	0.16505E+06	0.15551E+09
0.11076E+03	0.59968E+03	0.11988E+04	0.16522E+06	0.15571E+09
0.11103E+03	0.59897E+03	0.11987E+04	0.16538E+06	0.15590E+09
0.11131E+03	0.59826E+03	0.11987E+04	0.16555E+06	0.15610E+09

0.11158E+03	0.59760E+03	0.11987E+04	0.16571E+06	0.15630E+09
0.11186E+03	0.59695E+03	0.11987E+04	0.16588E+06	0.15649E+09
0.11213E+03	0.59631E+03	0.11987E+04	0.16604E+06	0.15669E+09
0.11241E+03	0.59569E+03	0.11987E+04	0.16620E+06	0.15689E+09
0.11268E+03	0.59508E+03	0.11987E+04	0.16637E+06	0.15708E+09
0.11296E+03	0.59448E+03	0.11987E+04	0.16653E+06	0.15728E+09
0.11323E+03	0.59390E+03	0.11986E+04	0.16669E+06	0.15748E+09
0.11351E+03	0.59333E+03	0.11986E+04	0.16686E+06	0.15767E+09
0.11378E+03	0.59278E+03	0.11986E+04	0.16702E+06	0.15787E+09
0.11406E+03	0.59223E+03	0.11986E+04	0.16718E+06	0.15806E+09
0.11433E+03	0.59169E+03	0.11986E+04	0.16735E+06	0.15826E+09
0.11461E+03	0.59117E+03	0.11986E+04	0.16751E+06	0.15845E+09
0.11488E+03	0.59065E+03	0.11986E+04	0.16767E+06	0.15865E+09
0.11516E+03	0.59014E+03	0.11986E+04	0.16783E+06	0.15884E+09
0.11543E+03	0.58964E+03	0.11986E+04	0.16800E+06	0.15904E+09
0.11571E+03	0.58914E+03	0.11986E+04	0.16816E+06	0.15923E+09
0.11598E+03	0.58865E+03	0.11985E+04	0.16832E+06	0.15942E+09
0.11626E+03	0.58816E+03	0.11985E+04	0.16848E+06	0.15962E+09
0.11653E+03	0.58768E+03	0.11985E+04	0.16864E+06	0.15981E+09
0.11681E+03	0.58721E+03	0.11985E+04	0.16881E+06	0.16000E+09
0.11708E+03	0.58674E+03	0.11985E+04	0.16897E+06	0.16020E+09
0.11736E+03	0.58627E+03	0.11985E+04	0.16913E+06	0.16039E+09
0.11763E+03	0.58581E+03	0.11985E+04	0.16929E+06	0.16058E+09
0.11791E+03	0.58535E+03	0.11985E+04	0.16945E+06	0.16078E+09
0.11818E+03	0.58489E+03	0.11985E+04	0.16961E+06	0.16097E+09
0.11846E+03	0.58443E+03	0.11985E+04	0.16977E+06	0.16116E+09
0.11873E+03	0.58398E+03	0.11985E+04	0.16993E+06	0.16136E+09
0.11901E+03	0.58353E+03	0.11984E+04	0.17009E+06	0.16155E+09
0.11928E+03	0.58308E+03	0.11984E+04	0.17025E+06	0.16174E+09
0.11956E+03	0.58263E+03	0.11984E+04	0.17041E+06	0.16193E+09
0.11983E+03	0.58218E+03	0.11984E+04	0.17057E+06	0.16212E+09
0.12000E+03	0.58190E+03	0.11984E+04	0.17067E+06	0.16224E+09
0.12017E+03	0.58165E+03	0.11984E+04	0.17077E+06	0.16236E+09
0.12025E+03	0.58151E+03	0.11984E+04	0.17082E+06	0.16242E+09
0.12034E+03	0.58140E+03	0.11984E+04	0.17087E+06	0.16248E+09
0.12051E+03	0.58119E+03	0.11984E+04	0.17097E+06	0.16260E+09
0.12059E+03	0.58106E+03	0.11984E+04	0.17102E+06	0.16266E+09
0.12068E+03	0.58094E+03	0.11984E+04	0.17107E+06	0.16271E+09
0.12085E+03	0.58072E+03	0.11984E+04	0.17117E+06	0.16283E+09
0.12093E+03	0.58058E+03	0.11984E+04	0.17121E+06	0.16289E+09
0.12102E+03	0.58047E+03	0.11984E+04	0.17126E+06	0.16295E+09
0.12119E+03	0.58025E+03	0.11984E+04	0.17136E+06	0.16307E+09
0.12127E+03	0.58010E+03	0.11984E+04	0.17141E+06	0.16313E+09
0.12136E+03	0.57999E+03	0.11984E+04	0.17146E+06	0.16319E+09
0.12153E+03	0.57976E+03	0.11984E+04	0.17156E+06	0.16330E+09
0.12161E+03	0.57962E+03	0.11984E+04	0.17161E+06	0.16336E+09
0.12169E+03	0.57950E+03	0.11984E+04	0.17166E+06	0.16342E+09
0.12186E+03	0.57927E+03	0.11984E+04	0.17175E+06	0.16354E+09
0.12195E+03	0.57913E+03	0.11984E+04	0.17180E+06	0.16360E+09
0.12203E+03	0.57901E+03	0.11984E+04	0.17185E+06	0.16366E+09
0.12220E+03	0.57878E+03	0.11983E+04	0.17195E+06	0.16377E+09
0.12229E+03	0.57863E+03	0.11983E+04	0.17200E+06	0.16383E+09
0.12237E+03	0.57851E+03	0.11983E+04	0.17205E+06	0.16389E+09
0.12254E+03	0.57828E+03	0.11983E+04	0.17215E+06	0.16401E+09
0.12263E+03	0.57813E+03	0.11983E+04	0.17220E+06	0.16407E+09
0.12271E+03	0.57801E+03	0.11983E+04	0.17224E+06	0.16413E+09
0.12288E+03	0.57778E+03	0.11983E+04	0.17234E+06	0.16424E+09
0.12297E+03	0.57764E+03	0.11983E+04	0.17239E+06	0.16430E+09
0.12305E+03	0.57752E+03	0.11983E+04	0.17244E+06	0.16436E+09
0.12322E+03	0.57729E+03	0.11983E+04	0.17254E+06	0.16448E+09
0.12330E+03	0.57714E+03	0.11983E+04	0.17259E+06	0.16454E+09

0.12339E+03	0.57702E+03	0.11983E+04	0.17264E+06	0.16460E+09
0.12356E+03	0.57679E+03	0.11983E+04	0.17273E+06	0.16471E+09
0.12364E+03	0.57664E+03	0.11983E+04	0.17276E+06	0.16477E+09
0.12373E+03	0.57652E+03	0.11983E+04	0.17283E+06	0.16483E+09
0.12390E+03	0.57628E+03	0.11983E+04	0.17293E+06	0.16495E+09
0.12398E+03	0.57615E+03	0.11983E+04	0.17298E+06	0.16501E+09
0.12407E+03	0.57604E+03	0.11983E+04	0.17303E+06	0.16506E+09
0.12424E+03	0.57584E+03	0.11983E+04	0.17312E+06	0.16518E+09
0.12432E+03	0.57572E+03	0.11983E+04	0.17317E+06	0.16524E+09
0.12441E+03	0.57561E+03	0.11983E+04	0.17322E+06	0.16530E+09
0.12458E+03	0.57541E+03	0.11983E+04	0.17332E+06	0.16541E+09
0.12466E+03	0.57528E+03	0.11983E+04	0.17337E+06	0.16547E+09
0.12474E+03	0.57518E+03	0.11983E+04	0.17342E+06	0.16553E+09
0.12491E+03	0.57498E+03	0.11983E+04	0.17351E+06	0.16565E+09
0.12500E+03	0.57485E+03	0.11983E+04	0.17356E+06	0.16571E+09
0.12508E+03	0.57475E+03	0.11983E+04	0.17361E+06	0.16577E+09
0.12525E+03	0.57455E+03	0.11982E+04	0.17371E+06	0.16588E+09
0.12534E+03	0.57442E+03	0.11982E+04	0.17376E+06	0.16594E+09
0.12542E+03	0.57431E+03	0.11982E+04	0.17381E+06	0.16600E+09
0.12559E+03	0.57411E+03	0.11982E+04	0.17390E+06	0.16612E+09
0.12568E+03	0.57399E+03	0.11982E+04	0.17395E+06	0.16617E+09
0.12576E+03	0.57388E+03	0.11982E+04	0.17400E+06	0.16623E+09
0.12593E+03	0.57368E+03	0.11982E+04	0.17410E+06	0.16635E+09
0.12602E+03	0.57355E+03	0.11982E+04	0.17415E+06	0.16641E+09
0.12610E+03	0.57345E+03	0.11982E+04	0.17420E+06	0.16646E+09
0.12627E+03	0.57325E+03	0.11982E+04	0.17429E+06	0.16658E+09
0.12635E+03	0.57312E+03	0.11982E+04	0.17434E+06	0.16664E+09
0.12644E+03	0.57301E+03	0.11982E+04	0.17439E+06	0.16670E+09
0.12661E+03	0.57281E+03	0.11982E+04	0.17449E+06	0.16681E+09
0.12669E+03	0.57268E+03	0.11982E+04	0.17454E+06	0.16687E+09
0.12678E+03	0.57258E+03	0.11982E+04	0.17458E+06	0.16693E+09
0.12695E+03	0.57237E+03	0.11982E+04	0.17468E+06	0.16705E+09
0.12703E+03	0.57224E+03	0.11982E+04	0.17473E+06	0.16710E+09
0.12712E+03	0.57214E+03	0.11982E+04	0.17478E+06	0.16716E+09
0.12729E+03	0.57194E+03	0.11982E+04	0.17488E+06	0.16728E+09
0.12737E+03	0.57181E+03	0.11982E+04	0.17492E+06	0.16734E+09
0.12746E+03	0.57170E+03	0.11982E+04	0.17497E+06	0.16739E+09
0.12763E+03	0.57150E+03	0.11982E+04	0.17507E+06	0.16751E+09
0.12771E+03	0.57137E+03	0.11982E+04	0.17512E+06	0.16757E+09
0.12779E+03	0.57126E+03	0.11981E+04	0.17517E+06	0.16763E+09
0.12796E+03	0.57106E+03	0.11981E+04	0.17526E+06	0.16774E+09
0.12805E+03	0.57093E+03	0.11981E+04	0.17531E+06	0.16780E+09
0.12813E+03	0.57083E+03	0.11981E+04	0.17536E+06	0.16786E+09
0.12830E+03	0.57062E+03	0.11981E+04	0.17546E+06	0.16797E+09
0.12839E+03	0.57049E+03	0.11981E+04	0.17550E+06	0.16803E+09
0.12847E+03	0.57039E+03	0.11981E+04	0.17555E+06	0.16809E+09
0.12864E+03	0.57018E+03	0.11981E+04	0.17565E+06	0.16821E+09
0.12873E+03	0.57005E+03	0.11981E+04	0.17570E+06	0.16826E+09
0.12881E+03	0.56995E+03	0.11981E+04	0.17575E+06	0.16832E+09
0.12898E+03	0.56975E+03	0.11981E+04	0.17584E+06	0.16844E+09
0.12907E+03	0.56961E+03	0.11981E+04	0.17589E+06	0.16850E+09
0.12915E+03	0.56951E+03	0.11981E+04	0.17594E+06	0.16855E+09
0.12932E+03	0.56931E+03	0.11981E+04	0.17604E+06	0.16867E+09
0.12940E+03	0.56918E+03	0.11981E+04	0.17608E+06	0.16873E+09
0.12949E+03	0.56907E+03	0.11981E+04	0.17613E+06	0.16878E+09
0.12966E+03	0.56887E+03	0.11981E+04	0.17623E+06	0.16890E+09
0.12974E+03	0.56874E+03	0.11981E+04	0.17628E+06	0.16896E+09
0.12983E+03	0.56863E+03	0.11981E+04	0.17633E+06	0.16902E+09
0.13000E+03	0.56842E+03	0.11981E+04	0.17642E+06	0.16913E+09
0.13017E+03	0.56818E+03	0.11981E+04	0.17652E+06	0.16925E+09
0.13026E+03	0.56804E+03	0.11981E+04	0.17657E+06	0.16931E+09

0.13034E+03	0.56794E+03	0.11980E+04	0.17662E+06	0.16936E+09
0.13051E+03	0.56774E+03	0.11980E+04	0.17671E+06	0.16948E+09
0.13060E+03	0.56761E+03	0.11980E+04	0.17676E+06	0.16954E+09
0.13068E+03	0.56750E+03	0.11980E+04	0.17681E+06	0.16960E+09
0.13085E+03	0.56730E+03	0.11980E+04	0.17691E+06	0.16971E+09
0.13094E+03	0.56717E+03	0.11980E+04	0.17696E+06	0.16977E+09
0.13102E+03	0.56706E+03	0.11980E+04	0.17700E+06	0.16983E+09
0.13119E+03	0.56686E+03	0.11980E+04	0.17710E+06	0.16994E+09
0.13128E+03	0.56673E+03	0.11980E+04	0.17715E+06	0.17000E+09
0.13136E+03	0.56662E+03	0.11980E+04	0.17720E+06	0.17006E+09
0.13154E+03	0.56642E+03	0.11980E+04	0.17729E+06	0.17018E+09
0.13162E+03	0.56628E+03	0.11980E+04	0.17734E+06	0.17023E+09
0.13171E+03	0.56618E+03	0.11980E+04	0.17739E+06	0.17029E+09
0.13188E+03	0.56597E+03	0.11980E+04	0.17749E+06	0.17041E+09
0.13196E+03	0.56584E+03	0.11980E+04	0.17753E+06	0.17047E+09
0.13205E+03	0.56574E+03	0.11980E+04	0.17758E+06	0.17052E+09
0.13222E+03	0.56553E+03	0.11980E+04	0.17768E+06	0.17064E+09
0.13230E+03	0.56540E+03	0.11980E+04	0.17773E+06	0.17070E+09
0.13239E+03	0.56529E+03	0.11980E+04	0.17778E+06	0.17075E+09
0.13256E+03	0.56509E+03	0.11980E+04	0.17787E+06	0.17087E+09
0.13264E+03	0.56496E+03	0.11980E+04	0.17792E+06	0.17093E+09
0.13273E+03	0.56485E+03	0.11980E+04	0.17797E+06	0.17098E+09
0.13290E+03	0.56465E+03	0.11979E+04	0.17807E+06	0.17110E+09
0.13299E+03	0.56452E+03	0.11979E+04	0.17811E+06	0.17116E+09
0.13307E+03	0.56441E+03	0.11979E+04	0.17816E+06	0.17122E+09
0.13324E+03	0.56421E+03	0.11979E+04	0.17826E+06	0.17133E+09
0.13333E+03	0.56407E+03	0.11979E+04	0.17831E+06	0.17139E+09
0.13341E+03	0.56397E+03	0.11979E+04	0.17835E+06	0.17145E+09
0.13358E+03	0.56376E+03	0.11979E+04	0.17845E+06	0.17156E+09
0.13367E+03	0.56363E+03	0.11979E+04	0.17850E+06	0.17162E+09
0.13375E+03	0.56352E+03	0.11979E+04	0.17855E+06	0.17168E+09
0.13392E+03	0.56332E+03	0.11979E+04	0.17864E+06	0.17179E+09
0.13401E+03	0.56319E+03	0.11979E+04	0.17869E+06	0.17185E+09
0.13409E+03	0.56308E+03	0.11979E+04	0.17874E+06	0.17191E+09
0.13426E+03	0.56288E+03	0.11979E+04	0.17883E+06	0.17202E+09
0.13435E+03	0.56275E+03	0.11979E+04	0.17888E+06	0.17208E+09
0.13444E+03	0.56264E+03	0.11979E+04	0.17893E+06	0.17214E+09
0.13461E+03	0.56244E+03	0.11979E+04	0.17903E+06	0.17225E+09
0.13469E+03	0.56231E+03	0.11979E+04	0.17907E+06	0.17231E+09
0.13478E+03	0.56220E+03	0.11979E+04	0.17912E+06	0.17237E+09
0.13495E+03	0.56200E+03	0.11979E+04	0.17922E+06	0.17248E+09
0.13503E+03	0.56186E+03	0.11979E+04	0.17927E+06	0.17254E+09
0.13512E+03	0.56176E+03	0.11979E+04	0.17931E+06	0.17260E+09
0.13529E+03	0.56156E+03	0.11979E+04	0.17941E+06	0.17271E+09
0.13537E+03	0.56142E+03	0.11979E+04	0.17946E+06	0.17277E+09
0.13546E+03	0.56132E+03	0.11978E+04	0.17951E+06	0.17283E+09
0.13563E+03	0.56112E+03	0.11978E+04	0.17960E+06	0.17294E+09
0.13571E+03	0.56098E+03	0.11978E+04	0.17965E+06	0.17300E+09
0.13580E+03	0.56088E+03	0.11978E+04	0.17970E+06	0.17306E+09
0.13597E+03	0.56068E+03	0.11978E+04	0.17979E+06	0.17317E+09
0.13606E+03	0.56054E+03	0.11978E+04	0.17984E+06	0.17323E+09
0.13614E+03	0.56044E+03	0.11978E+04	0.17989E+06	0.17328E+09
0.13631E+03	0.56024E+03	0.11978E+04	0.17998E+06	0.17340E+09
0.13640E+03	0.56010E+03	0.11978E+04	0.18003E+06	0.17346E+09
0.13648E+03	0.56000E+03	0.11978E+04	0.18008E+06	0.17351E+09
0.13665E+03	0.55980E+03	0.11978E+04	0.18018E+06	0.17363E+09
0.13674E+03	0.55967E+03	0.11978E+04	0.18022E+06	0.17368E+09
0.13682E+03	0.55956E+03	0.11978E+04	0.18027E+06	0.17374E+09
0.13699E+03	0.55936E+03	0.11978E+04	0.18037E+06	0.17386E+09
0.13708E+03	0.55923E+03	0.11978E+04	0.18041E+06	0.17391E+09
0.13716E+03	0.55912E+03	0.11978E+04	0.18046E+06	0.17397E+09

0.13734E+03	0.55892E+03	0.11978E+04	0.18056E+06	0.17408E+09
0.13742E+03	0.55879E+03	0.11978E+04	0.18060E+06	0.17414E+09
0.13751E+03	0.55868E+03	0.11978E+04	0.18065E+06	0.17420E+09
0.13768E+03	0.55848E+03	0.11978E+04	0.18075E+06	0.17431E+09
0.13776E+03	0.55835E+03	0.11978E+04	0.18080E+06	0.17437E+09
0.13785E+03	0.55825E+03	0.11978E+04	0.18084E+06	0.17443E+09
0.13802E+03	0.55805E+03	0.11977E+04	0.18094E+06	0.17454E+09
0.13810E+03	0.55792E+03	0.11977E+04	0.18099E+06	0.17460E+09
0.13819E+03	0.55781E+03	0.11977E+04	0.18103E+06	0.17466E+09
0.13836E+03	0.55761E+03	0.11977E+04	0.18113E+06	0.17477E+09
0.13844E+03	0.55748E+03	0.11977E+04	0.18118E+06	0.17483E+09
0.13853E+03	0.55737E+03	0.11977E+04	0.18122E+06	0.17488E+09
0.13870E+03	0.55717E+03	0.11977E+04	0.18132E+06	0.17500E+09
0.13879E+03	0.55704E+03	0.11977E+04	0.18137E+06	0.17505E+09
0.13887E+03	0.55694E+03	0.11977E+04	0.18141E+06	0.17511E+09
0.13904E+03	0.55674E+03	0.11977E+04	0.18151E+06	0.17522E+09
0.13913E+03	0.55661E+03	0.11977E+04	0.18156E+06	0.17528E+09
0.13921E+03	0.55651E+03	0.11977E+04	0.18160E+06	0.17534E+09
0.13938E+03	0.55631E+03	0.11977E+04	0.18170E+06	0.17545E+09
0.13947E+03	0.55618E+03	0.11977E+04	0.18175E+06	0.17551E+09
0.13955E+03	0.55607E+03	0.11977E+04	0.18179E+06	0.17557E+09
0.13972E+03	0.55587E+03	0.11977E+04	0.18189E+06	0.17568E+09
0.14000E+03	0.55548E+03	0.11977E+04	0.18204E+06	0.17586E+09
0.14028E+03	0.55504E+03	0.11977E+04	0.18220E+06	0.17605E+09
0.14055E+03	0.55463E+03	0.11976E+04	0.18235E+06	0.17623E+09
0.14083E+03	0.55422E+03	0.11976E+04	0.18250E+06	0.17641E+09
0.14111E+03	0.55383E+03	0.11976E+04	0.18265E+06	0.17660E+09
0.14138E+03	0.55344E+03	0.11976E+04	0.18281E+06	0.17678E+09
0.14166E+03	0.55306E+03	0.11976E+04	0.18296E+06	0.17696E+09
0.14194E+03	0.55268E+03	0.11976E+04	0.18311E+06	0.17715E+C9
0.14221E+03	0.55230E+03	0.11976E+04	0.18327E+06	0.17733E+09
0.14249E+03	0.55193E+03	0.11976E+04	0.18342E+06	0.17751E+09
0.14276E+03	0.55156E+03	0.11976E+04	0.18357E+06	0.17770E+09
0.14304E+03	0.55120E+03	0.11975E+04	0.18372E+06	0.17788E+09
0.14332E+03	0.55083E+03	0.11975E+04	0.18388E+06	0.17806E+09
0.14359E+03	0.55047E+03	0.11975E+04	0.18403E+06	0.17824E+09
0.14387E+03	0.55011E+03	0.11975E+04	0.18418E+06	0.17842E+09
0.14415E+03	0.54975E+03	0.11975E+04	0.18433E+06	0.17861E+09
0.14442E+03	0.54940E+03	0.11975E+04	0.18448E+06	0.17879E+09
0.14470E+03	0.54904E+03	0.11975E+04	0.18464E+06	0.17897E+09
0.14498E+03	0.54869E+03	0.11975E+04	0.18479E+06	0.17915E+09
0.14525E+03	0.54834E+03	0.11975E+04	0.18494E+06	0.17933E+09
0.14553E+03	0.54798E+03	0.11974E+04	0.18509E+06	0.17952E+09
0.14581E+03	0.54763E+03	0.11974E+04	0.18524E+06	0.17970E+09
0.14608E+03	0.54729E+03	0.11974E+04	0.18539E+06	0.17988E+09
0.14636E+03	0.54694E+03	0.11974E+04	0.18555E+06	0.18006E+09
0.14663E+03	0.54659E+03	0.11974E+04	0.18570E+06	0.18024E+09
0.14691E+03	0.54625E+03	0.11974E+04	0.18585E+06	0.18042E+09
0.14719E+03	0.54590E+03	0.11974E+04	0.18600E+06	0.18060E+09
0.14746E+03	0.54556E+03	0.11974E+04	0.18615E+06	0.18078E+09
0.14774E+03	0.54521E+03	0.11974E+04	0.18630E+06	0.18096E+09
0.14802E+03	0.54487E+03	0.11974E+04	0.18645E+06	0.18114E+09
0.14829E+03	0.54452E+03	0.11973E+04	0.18660E+06	0.18132E+09
0.14857E+03	0.54418E+03	0.11973E+04	0.18675E+06	0.18150E+09
0.14885E+03	0.54384E+03	0.11973E+04	0.18690E+06	0.18168E+09
0.14912E+03	0.54350E+03	0.11973E+04	0.18705E+06	0.18186E+09
0.14940E+03	0.54316E+03	0.11973E+04	0.18720E+06	0.18204E+09
0.14968E+03	0.54282E+03	0.11973E+04	0.18735E+06	0.18222E+09
0.14995E+03	0.54248E+03	0.11973E+04	0.18750E+06	0.18240E+09
0.15000E+03	0.54239E+03	0.11973E+04	0.18753E+06	0.18243E+09
0.15005E+03	0.54236E+03	0.11973E+04	0.18756E+06	0.18247E+09

0.15015E+03	0.54230E+03	0.11973E+04	0.18761E+06	0.18253E+09
0.15034E+03	0.54212E+03	0.11973E+04	0.18771E+06	0.18265E+09
0.15064E+03	0.54175E+03	0.11973E+04	0.18787E+06	0.18285E+09
0.15093E+03	0.54136E+03	0.11972E+04	0.18803E+06	0.18304E+09
0.15123E+03	0.54097E+03	0.11972E+04	0.18820E+06	0.18323E+09
0.15153E+03	0.54059E+03	0.11972E+04	0.18836E+06	0.18342E+09
0.15182E+03	0.54021E+03	0.11972E+04	0.18852E+06	0.18362E+09
0.15212E+03	0.53984E+03	0.11972E+04	0.18868E+06	0.18381E+09
0.15242E+03	0.53947E+03	0.11972E+04	0.18884E+06	0.18400E+09
0.15272E+03	0.53911E+03	0.11972E+04	0.18900E+06	0.18419E+09
0.15301E+03	0.53874E+03	0.11972E+04	0.18916E+06	0.18438E+09
0.15331E+03	0.53838E+03	0.11972E+04	0.18932E+06	0.18457E+09
0.15361E+03	0.53801E+03	0.11971E+04	0.18948E+06	0.18477E+09
0.15390E+03	0.53765E+03	0.11971E+04	0.18964E+06	0.18496E+09
0.15420E+03	0.53729E+03	0.11971E+04	0.18980E+06	0.18515E+09
0.15450E+03	0.53692E+03	0.11971E+04	0.18996E+06	0.18534E+09
0.15479E+03	0.53656E+03	0.11971E+04	0.19011E+06	0.18553E+09
0.15509E+03	0.53620E+03	0.11971E+04	0.19027E+06	0.18572E+09
0.15539E+03	0.53584E+03	0.11971E+04	0.19043E+06	0.18591E+09
0.15568E+03	0.53548E+03	0.11971E+04	0.19059E+06	0.18610E+09
0.15598E+03	0.53513E+03	0.11971E+04	0.19075E+06	0.18629E+09
0.15628E+03	0.53477E+03	0.11971E+04	0.19091E+06	0.18648E+09
0.15658E+03	0.53441E+03	0.11970E+04	0.19107E+06	0.18667E+09
0.15687E+03	0.53405E+03	0.11970E+04	0.19123E+06	0.18686E+09
0.15717E+03	0.53370E+03	0.11970E+04	0.19139E+06	0.18705E+09
0.15747E+03	0.53334E+03	0.11970E+04	0.19154E+06	0.18724E+09
0.15776E+03	0.53299E+03	0.11970E+04	0.19170E+06	0.18743E+09
0.15806E+03	0.53263E+03	0.11970E+04	0.19186E+06	0.18762E+09
0.15836E+03	0.53228E+03	0.11970E+04	0.19202E+06	0.18781E+09
0.15865E+03	0.53193E+03	0.11970E+04	0.19218E+06	0.18800E+09
0.15895E+03	0.53157E+03	0.11970E+04	0.19234E+06	0.18819E+09
0.15925E+03	0.53122E+03	0.11969E+04	0.19249E+06	0.18838E+09
0.15954E+03	0.53087E+03	0.11969E+04	0.19265E+06	0.18857E+09
0.15984E+03	0.53052E+03	0.11969E+04	0.19281E+06	0.18875E+09
0.16000E+03	0.53032E+03	0.11969E+04	0.19289E+06	0.18885E+09
0.16016E+03	0.53017E+03	0.11969E+04	0.19298E+06	0.18896E+09
0.16048E+03	0.52985E+03	0.11969E+04	0.19314E+06	0.18916E+09
0.16055E+03	0.52973E+03	0.11969E+04	0.19319E+06	0.18921E+09
0.16063E+03	0.52967E+03	0.11969E+04	0.19323E+06	0.18926E+09
0.16079E+03	0.52954E+03	0.11969E+04	0.19331E+06	0.18936E+09
0.16111E+03	0.52919E+03	0.11969E+04	0.19348E+06	0.18956E+09
0.16119E+03	0.52906E+03	0.11969E+04	0.19352E+06	0.18961E+09
0.16127E+03	0.52899E+03	0.11969E+04	0.19356E+06	0.18966E+09
0.16143E+03	0.52886E+03	0.11969E+04	0.19365E+06	0.18976E+09
0.16174E+03	0.52849E+03	0.11969E+04	0.19381E+06	0.18996E+09
0.16182E+03	0.52836E+03	0.11969E+04	0.19386E+06	0.19001E+09
0.16190E+03	0.52829E+03	0.11969E+04	0.19390E+06	0.19006E+09
0.16206E+03	0.52816E+03	0.11969E+04	0.19398E+06	0.19016E+09
0.16238E+03	0.52779E+03	0.11968E+04	0.19415E+06	0.19036E+09
0.16246E+03	0.52765E+03	0.11968E+04	0.19419E+06	0.19041E+09
0.16254E+03	0.52758E+03	0.11968E+04	0.19423E+06	0.19046E+09
0.16269E+03	0.52745E+03	0.11968E+04	0.19432E+06	0.19056E+09
0.16301E+03	0.52707E+03	0.11968E+04	0.19448E+06	0.19076E+09
0.16309E+03	0.52694E+03	0.11968E+04	0.19453E+06	0.19081E+09
0.16317E+03	0.52687E+03	0.11968E+04	0.19457E+06	0.19086E+09
0.16333E+03	0.52673E+03	0.11968E+04	0.19465E+06	0.19096E+09
0.16364E+03	0.52635E+03	0.11968E+04	0.19482E+06	0.19116E+09
0.16372E+03	0.52622E+03	0.11968E+04	0.19486E+06	0.19121E+09
0.16380E+03	0.52615E+03	0.11968E+04	0.19490E+06	0.19126E+09
0.16396E+03	0.52601E+03	0.11968E+04	0.19498E+06	0.19136E+09
0.16428E+03	0.52563E+03	0.11968E+04	0.19515E+06	0.19156E+09

0.16436E+03	0.52549E+03	0.11968E+04	0.19519E+06	0.19161E+09
0.16444E+03	0.52542E+03	0.11968E+04	0.19523E+06	0.19166E+09
0.16459E+03	0.52529E+03	0.11968E+04	0.19532E+06	0.19176E+09
0.16491E+03	0.52490E+03	0.11968E+04	0.19548E+06	0.19196E+09
0.16499E+03	0.52477E+03	0.11968E+04	0.19553E+06	0.19201E+09
0.16507E+03	0.52470E+03	0.11967E+04	0.19557E+06	0.19206E+09
0.16523E+03	0.52457E+03	0.11967E+04	0.19565E+06	0.19216E+09
0.16555E+03	0.52418E+03	0.11967E+04	0.19582E+06	0.19235E+09
0.16562E+03	0.52404E+03	0.11967E+04	0.19586E+06	0.19240E+09
0.16570E+03	0.52397E+03	0.11967E+04	0.19590E+06	0.19245E+09
0.16586E+03	0.52384E+03	0.11967E+04	0.19598E+06	0.19255E+09
0.16618E+03	0.52345E+03	0.11967E+04	0.19615E+06	0.19275E+09
0.16626E+03	0.52331E+03	0.11967E+04	0.19619E+06	0.19280E+09
0.16634E+03	0.52324E+03	0.11967E+04	0.19623E+06	0.19285E+09
0.16650E+03	0.52311E+03	0.11967E+04	0.19631E+06	0.19295E+09
0.16681E+03	0.52272E+03	0.11967E+04	0.19648E+06	0.19315E+09
0.16689E+03	0.51518E+03	0.11965E+04	0.19652E+06	0.19320E+09
0.16697E+03	0.49070E+03	0.11957E+04	0.19656E+06	0.19325E+09
0.16713E+03	0.45299E+03	0.11946E+04	0.19664E+06	0.19333E+09
0.16745E+03	0.40440E+03	0.11926E+04	0.19677E+06	0.19350E+09
0.16749E+03	0.39688E+03	0.11922E+04	0.19679E+06	0.19351E+09
0.16753E+03	0.41242E+03	0.11930E+04	0.19680E+06	0.19353E+09
0.16761E+03	0.46975E+03	0.11951E+04	0.19684E+06	0.19358E+09
0.16776E+03	0.48537E+03	0.11956E+04	0.19691E+06	0.19367E+09
0.16803E+03	0.41828E+03	0.11932E+04	0.19703E+06	0.19381E+09
0.16830E+03	0.37864E+03	0.11913E+04	0.19714E+06	0.19394E+09
0.16857E+03	0.35700E+03	0.11903E+04	0.19724E+06	0.19406E+09
0.16884E+03	0.34861E+03	0.11899E+04	0.19733E+06	0.19417E+09
0.16911E+03	0.38770E+03	0.11918E+04	0.19743E+06	0.19429E+09
0.16938E+03	0.37892E+03	0.11913E+04	0.19754E+06	0.19441E+09
0.16965E+03	0.31471E+03	0.11883E+04	0.19763E+06	0.19452E+09
0.16992E+03	0.28313E+03	0.11863E+04	0.19771E+06	0.19461E+09
0.17000E+03	0.27745E+03	0.11858E+04	0.19773E+06	0.19464E+09
0.17008E+03	0.27932E+03	0.11860E+04	0.19776E+06	0.19467E+09
0.17025E+03	0.39640E+03	0.11922E+04	0.19781E+06	0.19474E+09
0.17034E+03	0.40826E+03	0.11928E+04	0.19785E+06	0.19478E+09
0.17042E+03	0.37369E+03	0.11911E+04	0.19788E+06	0.19482E+09
0.17059E+03	0.31760E+03	0.11884E+04	0.19794E+06	0.19489E+09
0.17063E+03	0.30375E+03	0.11877E+04	0.19795E+06	0.19490E+09
0.17067E+03	0.29642E+03	0.11874E+04	0.19796E+06	0.19492E+09
0.17075E+03	0.28552E+03	0.11865E+04	0.19799E+06	0.19494E+09
0.17092E+03	0.26954E+03	0.11850E+04	0.19803E+06	0.19500E+09
0.17096E+03	0.26557E+03	0.11847E+04	0.19804E+06	0.19501E+09
0.17101E+03	0.26342E+03	0.11845E+04	0.19806E+06	0.19503E+09
0.17109E+03	0.25984E+03	0.11841E+04	0.19808E+06	0.19505E+09
0.17126E+03	0.25405E+03	0.11836E+04	0.19812E+06	0.19510E+09
0.17130E+03	0.25248E+03	0.11835E+04	0.19813E+06	0.19512E+09
0.17134E+03	0.25151E+03	0.11834E+04	0.19814E+06	0.19513E+09
0.17142E+03	0.24981E+03	0.11832E+04	0.19816E+06	0.19515E+09
0.17159E+03	0.24674E+03	0.11829E+04	0.19820E+06	0.19520E+09
0.17163E+03	0.24576E+03	0.11828E+04	0.19821E+06	0.19521E+09
0.17168E+03	0.24507E+03	0.11828E+04	0.19822E+06	0.19523E+09
0.17176E+03	0.24377E+03	0.11826E+04	0.19825E+06	0.19525E+09
0.17193E+03	0.24124E+03	0.11824E+04	0.19829E+06	0.19530E+09
0.17197E+03	0.24036E+03	0.11823E+04	0.19830E+06	0.19531E+09
0.17201E+03	0.23970E+03	0.11823E+04	0.19831E+06	0.19532E+09
0.17209E+03	0.23843E+03	0.11822E+04	0.19833E+06	0.19535E+09
0.17226E+03	0.23589E+03	0.11819E+04	0.19837E+06	0.19539E+09
0.17230E+03	0.23499E+03	0.11818E+04	0.19838E+06	0.19540E+09
0.17235E+03	0.23430E+03	0.11818E+04	0.19839E+06	0.19542E+09
0.17243E+03	0.23299E+03	0.11817E+04	0.19841E+06	0.19544E+09

0.17260E+03	0.23036E+03	0.11814E+04	0.19844E+06	0.19549E+09
0.17264E+03	0.22943E+03	0.11813E+04	0.19845E+06	0.19550E+09
0.17268E+03	0.22873E+03	0.11813E+04	0.19846E+06	0.19551E+09
0.17276E+03	0.22738E+03	0.11811E+04	0.19848E+06	0.19553E+09
0.17293E+03	0.22470E+03	0.11809E+04	0.19852E+06	0.19558E+09
0.17297E+03	0.22375E+03	0.11808E+04	0.19853E+06	0.19559E+09
0.17302E+03	0.22304E+03	0.11807E+04	0.19854E+06	0.19560E+09
0.17310E+03	0.22168E+03	0.11806E+04	0.19856E+06	0.19562E+09
0.17327E+03	0.21898E+03	0.11804E+04	0.19859E+06	0.19566E+09
0.17331E+03	0.21804E+03	0.11803E+04	0.19860E+06	0.19567E+09
0.17336E+03	0.21724E+03	0.11802E+04	0.19861E+06	0.19569E+09
0.17345E+03	0.21572E+03	0.11801E+04	0.19863E+06	0.19571E+09
0.17364E+03	0.21269E+03	0.11798E+04	0.19867E+06	0.19576E+09
0.17396E+03	0.20770E+03	0.11793E+04	0.19874E+06	0.19584E+09
0.17404E+03	0.20601E+03	0.11792E+04	0.19876E+06	0.19586E+09
0.17412E+03	0.20473E+03	0.11791E+04	0.19877E+06	0.19588E+09
0.17428E+03	0.20230E+03	0.11789E+04	0.19881E+06	0.19591E+09
0.17460E+03	0.19754E+03	0.11784E+04	0.19887E+06	0.19599E+09
0.17468E+03	0.19591E+03	0.11783E+04	0.19889E+06	0.19601E+09
0.17476E+03	0.19468E+03	0.11782E+04	0.19890E+06	0.19603E+09
0.17491E+03	0.19236E+03	0.11780E+04	0.19893E+06	0.19606E+09
0.17523E+03	0.18781E+03	0.11776E+04	0.19899E+06	0.19613E+09
0.17531E+03	0.18627E+03	0.11774E+04	0.19901E+06	0.19615E+09
0.17539E+03	0.18510E+03	0.11773E+04	0.19902E+06	0.19617E+09
0.17555E+03	0.18290E+03	0.11771E+04	0.19905E+06	0.19620E+09
0.17587E+03	0.17861E+03	0.11767E+04	0.19911E+06	0.19627E+09
0.17595E+03	0.17715E+03	0.11766E+04	0.19912E+06	0.19629E+09
0.17603E+03	0.17605E+03	0.11765E+04	0.19914E+06	0.19630E+09
0.17619E+03	0.17399E+03	0.11763E+04	0.19917E+06	0.19634E+09
0.17651E+03	0.16995E+03	0.11760E+04	0.19922E+06	0.19640E+09
0.17659E+03	0.16859E+03	0.11758E+04	0.19923E+06	0.19642E+09
0.17667E+03	0.16756E+03	0.11757E+04	0.19925E+06	0.19643E+09
0.17683E+03	0.16563E+03	0.11756E+04	0.19927E+06	0.19646E+09
0.17714E+03	0.16185E+03	0.11752E+04	0.19933E+06	0.19652E+09
0.17722E+03	0.16058E+03	0.11751E+04	0.19934E+06	0.19654E+09
0.17730E+03	0.15962E+03	0.11750E+04	0.19935E+06	0.19655E+09
0.17746E+03	0.15781E+03	0.11749E+04	0.19938E+06	0.19658E+09
0.17778E+03	0.15429E+03	0.11746E+04	0.19943E+06	0.19664E+09
0.17786E+03	0.15310E+03	0.11745E+04	0.19944E+06	0.19666E+09
0.17794E+03	0.15221E+03	0.11744E+04	0.19945E+06	0.19667E+09
0.17810E+03	0.15052E+03	0.11742E+04	0.19947E+06	0.19670E+09
0.17842E+03	0.14730E+03	0.11739E+04	0.19952E+06	0.19675E+09
0.17850E+03	0.14622E+03	0.11738E+04	0.19953E+06	0.19677E+09
0.17858E+03	0.14542E+03	0.11738E+04	0.19955E+06	0.19678E+09
0.17874E+03	0.14390E+03	0.11736E+04	0.19957E+06	0.19681E+09
0.17905E+03	0.14094E+03	0.11734E+04	0.19961E+06	0.19686E+09
0.17913E+03	0.13994E+03	0.11733E+04	0.19962E+06	0.19688E+09
0.17921E+03	0.13919E+03	0.11732E+04	0.19964E+06	0.19689E+09
0.17937E+03	0.13778E+03	0.11731E+04	0.19966E+06	0.19691E+09
0.17969E+03	0.13503E+03	0.11728E+04	0.19970E+06	0.19697E+09
0.18000E+03	0.13239E+03	0.11726E+04	0.19974E+06	0.19701E+09
0.18031E+03	0.12987E+03	0.11724E+04	0.19978E+06	0.19706E+09
0.18062E+03	0.12744E+03	0.11721E+04	0.19982E+06	0.19711E+09
0.18093E+03	0.56862E+02	0.11721E+04	0.19985E+06	0.19714E+09
0.18124E+03	0.57684E+02	0.11721E+04	0.19987E+06	0.19716E+09
0.18154E+03	0.57683E+02	0.11721E+04	0.19988E+06	0.19718E+09
0.18185E+03	0.57683E+02	0.11721E+04	0.19990E+06	0.19720E+09
0.18216E+03	0.57679E+02	0.11721E+04	0.19992E+06	0.19722E+09
0.18247E+03	0.57679E+02	0.11721E+04	0.19994E+06	0.19724E+09
0.18278E+03	0.57679E+02	0.11721E+04	0.19996E+06	0.19726E+09
0.18309E+03	0.57675E+02	0.11721E+04	0.19997E+06	0.19728E+09

0.18340E+03	0.57675E+02	0.11721E+04	0.19999E+06	0.19731E+09
0.18371E+03	0.57675E+02	0.11721E+04	0.20001E+06	0.19733E+09
0.18401E+03	0.57672E+02	0.11721E+04	0.20003E+06	0.19735E+09
0.18432E+03	0.57671E+02	0.11721E+04	0.20004E+06	0.19737E+09
0.18463E+03	0.57671E+02	0.11721E+04	0.20006E+06	0.19739E+09
0.18494E+03	0.57668E+02	0.11721E+04	0.20008E+06	0.19741E+09
0.18525E+03	0.57671E+02	0.11721E+04	0.20010E+06	0.19743E+09
0.18556E+03	0.57667E+02	0.11721E+04	0.20012E+06	0.19745E+09
0.18587E+03	0.57667E+02	0.11721E+04	0.20013E+06	0.19747E+09
0.18618E+03	0.57665E+02	0.11721E+04	0.20015E+06	0.19749E+09
0.18648E+03	0.57667E+02	0.11721E+04	0.20017E+06	0.19751E+09
0.18679E+03	0.57664E+02	0.11721E+04	0.20019E+06	0.19753E+09
0.18710E+03	0.57664E+02	0.11721E+04	0.20021E+06	0.19756E+09
0.18741E+03	0.57661E+02	0.11721E+04	0.20022E+06	0.19758E+09
0.18772E+03	0.57663E+02	0.11721E+04	0.20024E+06	0.19760E+09
0.18803E+03	0.57658E+02	0.11721E+04	0.20026E+06	0.19762E+09
0.18834E+03	0.57660E+02	0.11721E+04	0.20028E+06	0.19764E+09
0.18865E+03	0.57660E+02	0.11721E+04	0.20029E+06	0.19766E+09
0.18896E+03	0.57658E+02	0.11721E+04	0.20031E+06	0.19768E+09
0.18926E+03	0.57659E+02	0.11721E+04	0.20033E+06	0.19770E+09
0.18957E+03	0.57655E+02	0.11721E+04	0.20035E+06	0.19772E+09
0.18988E+03	0.57656E+02	0.11721E+04	0.20037E+06	0.19774E+09
0.19000E+03	0.57656E+02	0.11721E+04	0.20037E+06	0.19775E+09
0.19012E+03	0.57655E+02	0.11721E+04	0.20038E+06	0.19776E+09
0.19036E+03	0.57657E+02	0.11721E+04	0.20039E+06	0.19778E+09
0.19063E+03	0.57655E+02	0.11721E+04	0.20041E+06	0.19779E+09
0.19091E+03	0.57655E+02	0.11721E+04	0.20042E+06	0.19781E+09
0.19118E+03	0.57653E+02	0.11721E+04	0.20044E+06	0.19783E+09
0.19146E+03	0.57654E+02	0.11721E+04	0.20046E+06	0.19785E+09
0.19174E+03	0.57650E+02	0.11721E+04	0.20047E+06	0.19787E+09
0.19201E+03	0.57652E+02	0.11721E+04	0.20049E+06	0.19789E+09
0.19229E+03	0.57652E+02	0.11721E+04	0.20050E+06	0.19791E+09
0.19257E+03	0.57650E+02	0.11721E+04	0.20052E+06	0.19792E+09
0.19284E+03	0.57651E+02	0.11721E+04	0.20054E+06	0.19794E+09
0.19312E+03	0.57647E+02	0.11721E+04	0.20055E+06	0.19796E+09
0.19339E+03	0.57649E+02	0.11721E+04	0.20057E+06	0.19798E+09
0.19367E+03	0.57649E+02	0.11721E+04	0.20058E+06	0.19800E+09
0.19395E+03	0.57647E+02	0.11721E+04	0.20060E+06	0.19802E+09
0.19422E+03	0.57648E+02	0.11721E+04	0.20062E+06	0.19804E+09
0.19450E+03	0.57645E+02	0.11721E+04	0.20063E+06	0.19806E+09
0.19478E+03	0.57646E+02	0.11721E+04	0.20065E+06	0.19807E+09
0.19505E+03	0.57646E+02	0.11721E+04	0.20066E+06	0.19809E+09
0.19533E+03	0.57644E+02	0.11721E+04	0.20068E+06	0.19811E+09
0.19560E+03	0.57646E+02	0.11721E+04	0.20070E+06	0.19813E+09
0.19588E+03	0.57642E+02	0.11721E+04	0.20071E+06	0.19815E+09
0.19616E+03	0.57643E+02	0.11721E+04	0.20073E+06	0.19817E+09
0.19643E+03	0.57643E+02	0.11721E+04	0.20074E+06	0.19819E+09
0.19671E+03	0.57642E+02	0.11721E+04	0.20076E+06	0.19820E+09
0.19698E+03	0.57643E+02	0.11721E+04	0.20078E+06	0.19822E+09
0.19726E+03	0.57639E+02	0.11721E+04	0.20079E+06	0.19824E+09
0.19754E+03	0.57641E+02	0.11721E+04	0.20081E+06	0.19826E+09
0.19781E+03	0.57641E+02	0.11721E+04	0.20082E+06	0.19828E+09
0.19809E+03	0.57639E+02	0.11721E+04	0.20084E+06	0.19830E+09
0.19837E+03	0.57640E+02	0.11721E+04	0.20085E+06	0.19832E+09
0.19864E+03	0.57637E+02	0.11721E+04	0.20087E+06	0.19834E+09
0.19892E+03	0.57638E+02	0.11721E+04	0.20089E+06	0.19835E+09
0.19919E+03	0.57638E+02	0.11721E+04	0.20090E+06	0.19837E+09
0.19947E+03	0.57636E+02	0.11721E+04	0.20092E+06	0.19839E+09
0.19975E+03	0.57638E+02	0.11721E+04	0.20093E+06	0.19841E+09
0.20000E+03	0.57634E+02	0.11721E+04	0.20095E+06	0.19843E+09

ATTACHMENT 4

Nuclear Services Corporation PI0-01-06, "Analysis Report - Structural Analyses of Main
Steam Check & Isolation Valves for Prairie Island, Unit 1"

(112 pages total)