ArevaEPRDCPEm Resource

From: WELLS Russell D (AREVA NP INC) [Russell.Wells@areva.com]
Sent: Thursday, June 18, 2009 6:07 PM
To: Tesfaye, Getachew
Cc: Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 82, FSAR Ch 6, Supplement 5
Attachments: RAI 82 Supplement 5 Response US EPR DC.pdf

Getachew,

AREVA NP Inc. provided responses to 3 of the 8 questions of RAI No. 82 on November 3, 2008. AREVA NP submitted Supplement 1 to the response on December 18, 2008 to address portions of 4 of the remaining questions. AREVA NP submitted Supplement 2 to the response on January 28, 2009 to address portions of 2 of the remaining questions. AREVA NP submitted Supplement 3 to the response on May 22, 2009 to address 2 of the remaining questions. AREVA NP submitted Supplement 4 to the response on June 10, 2009 to address 1 of the remaining questions. The attached file, "RAI 82 Supplement 5 Response US EPR DC.pdf" provides a technically correct and complete response to 1 of the remaining 2 questions, as committed.

Appended to this file is an affected page of the U.S. EPR Final Safety Analysis Report in redline-strikeout format which supports the response to RAI 82 Questions 06.02.01.04-1.h.

The following table indicates the respective pages in the response document, "RAI 82 Supplement 5 Response US EPR DC.pdf," that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 82 — 06.02.01.04-1.e	2	14
RAI 82 — 06.02.01.04-1.g	2	54
RAI 82 — 06.02.01.04-1.h	2	56

The schedule for a technically correct and complete response to the remaining question remains unchanged and is provided below.

Question #	Response Date
RAI 82 — 06.02.01-12	December 18, 2009

Sincerely,

(Russ Wells on behalf of)
Ronda Pederson
ronda.pederson@areva.com
Licensing Manager, U.S. EPR Design Certification
New Plants Deployment
AREVA NP, Inc.
An AREVA and Siemens company
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Phone: 434-832-3694
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From: Pederson Ronda M (AREVA NP INC)
Sent: Wednesday, June 10, 2009 2:10 PM
To: Getachew Tesfaye
Cc: BEELMAN Ronald J (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 82, FSAR Ch 6, Supplement 4

Getachew,

AREVA NP Inc. provided responses to 3 of the 8 questions of RAI No. 82 on November 3, 2008. AREVA NP submitted Supplement 1 to the response on December 18, 2008 to address portions of 4 of the remaining questions. AREVA NP submitted Supplement 2 to the response on January 28, 2009 to address portions of 2 of the remaining questions. AREVA NP submitted Supplement 3 to the response on May 22, 2009 to address 2 of the remaining questions. The attached file, "RAI 82 Supplement 4 Response US EPR DC.pdf" provides technically correct and complete responses to 1 of the remaining 3 questions, as committed.

The following table indicates the respective pages in the response document, "RAI 82 Supplement 4 Response US EPR DC.pdf" that contain AREVA NP's response to the subject portions of RAI 82, Question 06.02.01.05-1.

Question #	Start Page	End Page
RAI 82 — 06.02.01.05-1a	2	4
RAI 82 — 06.02.01.05-1f	2	22
RAI 82 — 06.02.01.05-1h	2	26

The schedule for technically correct and complete responses to the remaining 2 questions is unchanged and provided below:

Question #	Response Date
RAI 82 — 06.02.01-12	December 18, 2009
RAI 82 — 06.02.01.04-1	June 23, 2009

Sincerely,

Ronda Pederson
ronda.pederson@areva.com
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From: WELLS Russell D (AREVA NP INC)
Sent: Friday, May 22, 2009 5:07 PM
To: 'Getachew Tesfaye'
Cc: Pederson Ronda M (AREVA NP INC); BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); DUNCAN Leslie E (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 82, FSAR Ch 6, Supplement 3

Getachew,

The proprietary and non-proprietary versions of the response to RAI No. 82, Supplement 3 are submitted via AREVA NP Inc. letter, "Response Supplement 3 to U.S. EPR Design Certification Application RAI No. 82" NRC 09:060, dated May 22, 2009. The enclosure to that letter provides technically correct and complete responses to 2 of the 5 remaining questions in RAI No. 82. An affidavit to support withholding of information from public disclosure, per 10CFR2.390(b), is provided as an enclosure to that letter.

The following table indicates the respective pages in the response document, "RAI 82 Supplement 3 Response US EPR DC.pdf" that contain AREVA NP's response to the subject questions.

Question #	Start Page	End Page
RAI 82 — 06.02.01-12a.1	2	9
RAI 82 — 06.02.01-12a.2	2	9
RAI 82 — 06.02.01-12a.3	2	9
RAI 82 — 06.02.01-12c.1	2	10
RAI 82 — 06.02.01-12c.3	2	10
RAI 82 — 06.02.01-12c.3-1	2	11
RAI 82 — 06.02.01-12c.3-2	2	11
RAI 82 — 06.02.01-12c.3-3	2	14
RAI 82 — 06.02.01-12d.1	2	20
RAI 82 — 06.02.01-12d.2	2	15
RAI 82 — 06.02.01-12d.3	2	21
RAI 82 — 06.02.01.02-1a.2	22	24
RAI 82 — 06.02.01.02-1a.10	22	25
RAI 82 — 06.02.01.03-1c	26	32
RAI 82 — 06.02.01.03-1g	26	38
RAI 82 — 06.02.01.03-1h	26	42
RAI 82 — 06.02.01.04-1i	44	46
RAI 82 — 06.02.01.04-1j	44	46
RAI 82 — 06.02.01.05-1b	47	49
RAI 82 — 06.02.01.05-1c	47	50
RAI 82 — 06.02.01.05-1d	47	61
RAI 82 — 06.02.01.05-1e	47	62
RAI 82 — 06.02.01.05-1g	47	64

The schedule for the technically correct and complete response to the remaining questions in RAI No. 82 has been changed and is provided below:

Question #	Response Date
RAI 82 — 06.02.01-12	December 18, 2009
RAI 82 — 06.02.01.04-1	June 23, 2009
RAI 82 — 06.02.01.05-1	June 12, 2009

Sincerely,

(Russ Wells on behalf of)

Ronda Pederson

ronda.pederson@areva.com
Licensing Manager, U.S. EPR Design Certification
New Plants Deployment

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From: Pederson Ronda M (AREVA NP INC)
Sent: Wednesday, January 28, 2009 7:34 PM
To: Getachew Tesfaye
Cc: BENNETT Kathy A (OFR) (AREVA NP INC); DELANO Karen V (AREVA NP INC); BEELMAN Ronald J (AREVA NP INC)
Subject: Response to U.S. EPR Design Certification Application RAI No. 82, Supplement 2

Getachew,

AREVA NP Inc. provided responses to 3 of the 8 questions of RAI No. 82 on November 3, 2008. Supplement 1 response to RAI No. 82 was sent on December 18, 2008 to address portions of 4 of the remaining 5 questions.

The proprietary and non-proprietary versions of technical report, ANP-10299, are submitted via AREVA NP, Inc. letter, "Submittal of ANP-10299P, 'Applicability of AREVA NP Containment Response Evaluation Methodology to the U.S. EPR™ for Large Break LOCA Analysis Technical Report'," NRC:09:006, dated January 28, 2009.

The following table indicates the RAI No. 82 questions that are answered in the subject technical report.

Question #
RAI 82 — 06.02.01-12.c.2
RAI 82 — 06.02.01.03-1.d
RAI 82 — 06.02.01.03-1.f
RAI 82 — 06.02.01.03-1.i
RAI 82 — 06.02.01.03-1.j
RAI 82 — 06.02.01.03-1.k
RAI 82 — 06.02.01.03-1.l
RAI 82 — 06.02.01.03-1.m
RAI 82 — 06.02.01.03-1.n
RAI 82 — 06.02.01.03-1.o

The schedule for technically correct and complete responses to the remaining questions has been revised as provided below:

Question #	Response Date
RAI 82 — 06.02.01-12	May 22, 2009
RAI 82 — 06.02.01-12.c.1	May 22, 2009
RAI 82 — 06.02.01-12.c.3	May 22, 2009
RAI 82 — 06.02.01-12.c.3-3	May 22, 2009
RAI 82 — 06.02.01.02-1	May 22, 2009
RAI 82 — 06.02.01.03-1	June 23, 2009
RAI 82 — 06.02.01.03-1.c	June 23, 2009
RAI 82 — 06.02.01.04-1	June 23, 2009
RAI 82 — 06.02.01.05-1	June 12, 2009

Sincerely,

Ronda Pederson
ronda.pederson@areva.com
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From: WELLS Russell D (AREVA NP INC)
Sent: Thursday, December 18, 2008 2:49 PM
To: 'Getachew Tesfaye'
Cc: Pederson Ronda M (AREVA US); BENNETT Kathy A (OFR) (AREVA US); DELANO Karen V (AREVA US); SLIVA Dana (EXT); 'John Rycyna'
Subject: Response to U.S. EPR Design Certification Application RAI No. 82, FSAR Ch 6, Supplement 1

Getachew,

The proprietary and non-proprietary versions of the response to RAI No. 82, Supplement 1 are submitted via AREVA NP Inc. letter, "Response Supplement 1 to U.S. EPR Design Certification Application RAI No. 82," NRC 08:098, dated December 17, 2008. The enclosure to that letter provides technically correct and complete responses to portions of 4 of the 5 remaining questions in RAI No. 82. An affidavit to support withholding of information from public disclosure, per 10CFR2.390(b), is provided as an enclosure to that letter.

The schedule for technically correct and complete responses to the remaining RAI No. 82 questions, is provided below and remains unchanged.

Question #	Response Date
RAI 82 — 06.02.01-12	May 22, 2009
RAI 82 — 06.02.01.02-1	May 22, 2009
RAI 82 — 06.02.01.03-1	May 22, 2009
RAI 82 — 06.02.01.04-1	June 23, 2009
RAI 82 — 06.02.01.05-1	June 12, 2009

Sincerely,

(Russ Wells on behalf of)
Ronda Pederson
ronda.pederson@areva.com
Licensing Manager, U.S. EPR Design Certification
New Plants Deployment
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From: WELLS Russell D (AREVA NP INC)
Sent: Monday, November 03, 2008 8:48 PM

To: 'Getachew Tesfaye'
Cc: 'John Rycyna'; Pederson Ronda M (AREVA US); BENNETT Kathy A (OFR) (AREVA US); DELANO Karen V (AREVA US)
Subject: Response to U.S. EPR Design Certification Application RAI No. 82, FSAR Ch 6

Getachew,

The proprietary and non-proprietary versions of the response to RAI No. 82 are submitted via AREVA NP Inc. letter, "Response to U.S. EPR Design Certification Application RAI No. 82" NRC 08:085, dated November 3, 2008. The enclosure to that letter provides technically correct and complete responses to 3 of the 8 questions in RAI No. 82. An affidavit to support withholding of information from public disclosure, per 10CFR2.390(b), is provided as an enclosure to that letter.

The schedule for technically correct and complete responses to the remaining 5 questions in RAI No. 82 is provided below:

Question #	Response Date
RAI 82—06.02.01-12	May 22, 2009
RAI 82—06.02.01.02-1	May 22, 2009
RAI 82—06.02.01.03-1	May 22, 2009
RAI 82—06.02.01.04-1	June 23, 2008
RAI 82—06.02.01.05-1	June 23, 2008

Sincerely,

(Russ Wells on behalf of)
Ronda Pederson

ronda.pederson@areva.com
Licensing Manager, U.S. EPR Design Certification
New Plants Deployment
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From: Getachew Tesfaye [mailto:Getachew.Tesfaye@nrc.gov]
Sent: Friday, October 03, 2008 3:29 PM
To: ZZ-DL-A-USEPR-DL
Cc: Walton Jensen; Anne-Marie Grady; Michael Miernicki; Joseph Colaccino; John Rycyna
Subject: U.S. EPR Design Certification Application RAI No. 82(1082,1096,1107,1113,1125,1151,1098,1097), FSAR Ch 6

Attached please find the subject requests for additional information (RAI). A draft of the RAI was provided to you on September 15, 2008, and discussed with your staff on October 2, 2008. Draft RAI Questions 06.02.01-12 (a)(3) and 06.02.01.03-1(a) were modified as a result of that discussion. The schedule we have established for review of your application assumes technically correct and complete responses within 30 days of receipt of RAIs. For any RAIs that cannot be answered within 30 days, it is expected that a date for receipt of this information will be provided to the staff within the 30 day period so that the staff can assess how this information will impact the published schedule.

Thanks,
Getachew Tesfaye
Sr. Project Manager

NRO/DNRL/NARP
(301) 415-3361

Hearing Identifier: AREVA_EPR_DC_RAIs
Email Number: 591

Mail Envelope Properties (1F1CC1BBDC66B842A46CAC03D6B1CD41019BC51E)

Subject: Response to U.S. EPR Design Certification Application RAI No. 82, FSAR Ch 6, Supplement 5
Sent Date: 6/18/2009 6:06:58 PM
Received Date: 6/18/2009 6:07:02 PM
From: WELLS Russell D (AREVA NP INC)

Created By: Russell.Wells@areva.com

Recipients:
"Pederson Ronda M (AREVA NP INC)" <Ronda.Pederson@areva.com>
Tracking Status: None
"BENNETT Kathy A (OFR) (AREVA NP INC)" <Kathy.Bennett@areva.com>
Tracking Status: None
"DELANO Karen V (AREVA NP INC)" <Karen.Delano@areva.com>
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Tracking Status: None

Post Office: AUSLYNCMX02.adom.ad.corp

Files	**Size**	**Date & Time**
MESSAGE	13061	6/18/2009 6:07:02 PM
RAI 82 Supplement 5 Response US EPR DC.pdf	367397	

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Priority: Standard
Return Notification: No
Reply Requested: No
Sensitivity: Normal
Expiration Date:
Recipients Received:

Response to

Request for Additional Information No. 82, Supplement 5

10/03/2008

U. S. EPR Standard Design Certification
AREVA NP Inc.
Docket No. 52-020
SRP Section: 06.02.01 - Containment Functional Design
SRP Section: 06.02.01.02 - Subcompartment Analysis
SRP Section: 06.02.01.03 - Mass and Energy Release Analysis for Postulated Loss-of-Coolant Accidents (LOCAs)
SRP Section: 06.02.01.04 - Mass and Energy Release Analysis for Postulated Secondary System Pipe Ruptures
SRP Section: 06.02.01.05 - Minimum Containment Pressure Analysis for Emergency Core Cooling System Performance Capability Studies
SRP Section: 06.02.02 - Containment Heat Removal Systems
SRP Section: 06.02.04 - Containment Isolation System
SRP Section: 06.02.06 - Containment Leakage Testing
Application Section: FSAR Ch. 6
SPCV Branch

Question 06.02.01.04-1:

RAI - 6.2.1.4, Conservativeness of the Secondary System Break Mass and Energy Release Calculations (Relates to FSAR Section 6.2.1.4 and SRP Section 6.2.1.4)

e. So that the NRC staff may perform additional confirmatory containment analyses provide mass and energy release data for the double ended steam line break cases with 20% and 80% power.

g. For the postulated double ended break of a steam line at 50% power provide the energy and mass content of the primary system metal and fluid and the secondary system metal and fluid at the beginning of the accident and at the end of the blowdown.

h. FSAR Section 6.2.1.4.3.3 states that the volume of water in the unisolated section of main feedwater piping is considered small and is not significant for containment analysis and therefore not considered. Provide additional justification such as comparing the unisolated feedwater mass to the total mass of the affected steam generator.

Response to Question 06.02.01.04-1.e:

e. Mass and Energy Release

The mass and energy release data for the double ended steam line break from 20% power and 80% power are provided in Table 06.02.01.04-1.e-1 and Table 06.02.01.04-1.e-2, respectively.

FSAR Impact:

The U.S. EPR FSAR will not be changed as a result of this question.

Table 06.02.01.04-1.e-1
Double Ended Steam Line Break from 20% Power — Mass and Energy Release Data (4 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
0.0	0.0	0.0	0.0	0.0
0.0	3761.3	1187.5	0.1	589.5
0.5	8733.6	1233.4	832.2	458.7
1.0	7866.2	1237.0	739.6	452.1
1.5	7982.9	1239.0	2041.2	521.1
2.0	7711.2	1241.6	4934.0	545.5
2.5	7071.2	1243.1	6809.2	550.1
3.0	6720.2	1244.2	7566.0	551.9
3.5	6572.8	1244.7	7785.8	551.9
4.0	6363.8	1245.4	8150.8	551.7
4.5	6174.2	1245.9	8428.8	551.3
5.0	6051.0	1246.1	8523.9	550.5
5.5	5929.6	1245.8	8503.7	549.5
6.0	5763.3	1244.8	8386.9	548.2
6.5	5378.6	1242.0	8173.0	546.4
7.0	4970.2	1238.6	7917.6	544.5
7.5	12338.7	1235.6	0.0	542.4
8.0	11862.9	1232.7	0.0	540.1
8.5	11474.7	1229.6	0.0	538.2
9.0	11118.1	1227.0	0.0	536.6
9.5	10766.2	1224.7	0.0	535.2
10.0	10441.8	1222.8	0.0	533.9
10.5	10155.6	1221.1	0.0	533.0
11.0	9898.0	1219.4	0.0	532.1
11.5	9674.1	1217.8	0.0	531.3
12.0	9481.4	1216.3	0.0	530.5

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
12.5	9307.0	1214.8	0.0	529.6
13.0	9144.4	1213.5	0.0	528.7
13.5	8989.5	1212.2	0.0	527.5
14.0	8845.7	1211.0	0.0	525.8
14.5	8624.1	1210.4	0.0	524.4
15.0	8337.5	1210.4	0.0	523.1
15.5	8054.6	1210.7	0.0	521.6
16.0	7797.7	1211.0	0.0	519.9
16.5	7575.6	1213.0	0.0	517.9
17.0	7387.0	1215.0	0.0	515.8
17.5	7231.1	1216.0	0.0	513.9
18.0	7090.2	1216.9	0.0	511.9
18.5	6972.9	1217.5	0.0	510.0
19.0	6870.3	1218.1	0.0	508.0
19.5	6781.8	1218.6	0.0	506.2
20.0	6706.0	1219.0	0.0	504.4
20.5	6641.6	1219.3	0.0	502.7
21.0	6588.0	1219.6	0.0	501.1
21.5	6548.7	1219.8	0.0	499.5
22.0	6521.1	1219.9	0.0	498.0
22.5	6504.9	1220.0	0.0	496.5
23.0	6503.5	1219.9	0.0	495.0
23.5	6499.5	1219.9	0.0	493.6
24.0	6415.0	1220.2	0.0	492.1
24.5	6258.0	1220.7	0.0	490.6
25.0	6013.3	1221.7	0.0	489.0

Table 06.02.01.04-1.e-1
Double Ended Steam Line Break from 20% Power — Mass and Energy Release Data (4 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
25.5	5726.2	1222.6	0.0	487.3
26.0	5435.2	1223.5	0.0	485.7
26.5	5160.2	1224.6	0.0	483.6
27.0	4778.6	1226.0	0.0	478.8
27.5	4353.1	1227.5	0.0	474.0
28.0	3910.4	1228.5	0.0	469.2
28.5	3528.3	1229.3	0.0	464.9
29.0	3231.5	1229.9	0.0	461.0
29.5	2976.6	1230.0	0.0	457.9
30.0	2764.7	1229.9	0.0	455.7
32.5	2371.4	1229.3	0.0	453.3
35.0	1993.3	1228.3	0.0	451.3
37.5	1841.1	1226.5	0.0	454.5
40.0	1525.9	1224.7	0.0	447.6
42.5	1288.7	1223.0	0.0	441.2
45.0	1187.2	1222.6	0.0	445.2
47.5	1111.2	1222.6	0.0	416.0
50.0	1044.1	1224.4	0.0	431.1
52.5	978.8	1226.6	0.0	421.7
55.0	916.0	1228.5	0.0	0.0
57.5	849.6	1229.0	0.0	0.0
60.0	777.1	1226.9	0.0	0.0
62.5	702.3	1227.5	0.0	0.0
65.0	644.1	1228.4	0.0	0.0
67.5	599.1	1229.1	0.0	0.0
70.0	585.6	1229.7	0.0	0.0
72.5	578.9	1229.5	0.0	0.0

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
75.0	588.9	1228.2	0.0	0.0
77.5	589.0	1227.4	0.0	0.0
80.0	586.0	1227.5	0.0	0.0
82.5	580.7	1227.1	0.0	0.0
85.0	569.1	1227.0	0.0	0.0
87.5	543.3	1226.0	0.0	0.0
90.0	507.3	1225.0	0.0	0.0
92.5	455.7	1223.7	0.0	0.0
95.0	412.0	1223.3	0.0	0.0
97.5	376.7	1222.3	0.0	0.0
100.0	345.4	1223.7	0.0	0.0
102.5	311.7	1223.5	0.0	0.0
105.0	316.5	1225.4	0.0	0.0
107.5	328.4	1223.5	0.0	0.0
110.0	344.6	1224.0	0.0	0.0
112.5	343.6	1222.0	0.0	0.0
115.0	336.6	1221.5	0.0	0.0
117.5	315.7	1220.3	0.0	0.0
120.0	290.5	1219.4	0.0	0.0
122.5	285.5	1220.7	0.0	0.0
125.0	295.4	1218.5	0.0	321.0
127.5	294.5	1217.5	0.0	310.6
130.0	273.1	1215.1	0.0	314.0
132.5	246.7	1218.1	0.0	0.0
135.0	230.2	1216.2	0.0	0.0
137.5	217.7	1215.6	0.0	0.0
140.0	206.4	1215.0	0.0	0.0

Table 06.02.01.04-1.e-1
Double Ended Steam Line Break from 20% Power — Mass and Energy Release Data (4 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
142.5	196.4	1215.1	0.0	0.0
145.0	187.1	1214.9	0.0	0.0
147.5	180.7	1216.5	0.0	0.0
150.0	176.8	1219.8	0.0	0.0
152.5	170.3	1221.7	0.0	0.0
155.0	164.2	1221.8	0.0	0.0
157.5	157.6	1221.3	0.0	0.0
160.0	152.0	1222.1	0.0	0.0
162.5	145.6	1225.2	0.0	0.0
165.0	140.6	1226.6	0.0	0.0
167.5	135.8	1226.1	0.0	0.0
170.0	132.2	1225.6	0.0	0.0
172.5	128.6	1225.2	0.0	0.0
175.0	125.5	1224.7	0.0	0.0
177.5	122.6	1224.3	0.0	0.0
180.0	120.1	1224.0	0.0	0.0
182.5	117.7	1223.7	0.0	0.0
185.0	115.6	1223.5	0.0	0.0
187.5	113.5	1223.1	0.0	0.0
190.0	112.0	1223.0	0.0	0.0
192.5	110.4	1222.8	0.0	0.0
195.0	108.9	1222.6	0.0	0.0
197.5	107.6	1222.6	0.0	0.0
200.0	106.2	1222.4	0.0	0.0
202.5	105.0	1222.2	0.0	0.0
205.0	103.9	1222.2	0.0	0.0
207.5	102.7	1222.1	0.0	0.0

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
210.0	101.6	1222.0	0.0	0.0
212.5	100.8	1222.0	0.0	0.0
215.0	99.7	1221.8	0.0	0.0
217.5	98.9	1221.7	0.0	0.0
220.0	98.0	1221.8	0.0	0.0
222.5	97.3	1221.7	0.0	0.0
225.0	96.3	1221.5	0.0	0.0
227.5	95.8	1221.7	0.0	0.0
230.0	94.9	1221.6	0.0	0.0
232.5	94.4	1221.5	0.0	0.0
235.0	93.4	1221.3	0.0	0.0
237.5	93.2	1221.7	0.0	0.0
240.0	92.3	1221.2	0.0	0.0
242.5	92.0	1221.5	0.0	0.0
245.0	91.1	1221.2	0.0	0.0
247.5	91.0	1221.6	0.0	0.0
250.0	90.1	1221.2	0.0	0.0
252.5	90.0	1221.4	0.0	0.0
255.0	89.1	1221.1	0.0	0.0
257.5	89.0	1221.4	0.0	0.0
260.0	88.3	1221.2	0.0	0.0
262.5	88.3	1221.6	0.0	0.0
265.0	87.4	1220.9	0.0	0.0
267.5	87.6	1221.9	0.0	0.0
270.0	86.6	1222.8	0.0	0.0
272.5	86.7	1223.3	0.0	0.0
275.0	86.0	1223.0	0.0	0.0

Table 06.02.01.04-1.e-1
Double Ended Steam Line Break from 20% Power — Mass and Energy Release Data (4 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
277.5	86.2	1223.3	0.0	0.0
280.0	85.4	1222.7	0.0	0.0
282.5	85.6	1223.2	0.0	0.0
285.0	84.8	1222.7	0.0	0.0
287.5	85.0	1223.2	0.0	0.0
290.0	84.3	1222.5	0.0	0.0
292.5	84.6	1223.1	0.0	0.0
295.0	83.9	1222.5	0.0	0.0
297.5	84.1	1222.8	0.0	0.0
300.0	83.5	1222.3	0.0	0.0
302.5	83.7	1222.8	0.0	0.0
305.0	83.1	1222.2	0.0	0.0
307.5	83.3	1222.6	0.0	0.0
310.0	82.7	1222.2	0.0	0.0
312.5	83.0	1222.4	0.0	0.0
315.0	82.5	1222.0	0.0	0.0
317.5	82.7	1222.4	0.0	0.0
320.0	82.2	1221.9	0.0	0.0
322.5	82.3	1222.1	0.0	0.0
325.0	81.9	1221.8	0.0	0.0
327.5	82.0	1222.0	0.0	0.0
330.0	81.6	1221.7	0.0	0.0
332.5	81.8	1221.9	0.0	0.0
335.0	81.4	1221.6	0.0	0.0
337.5	81.5	1221.7	0.0	0.0

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
340.0	81.2	1221.4	0.0	0.0
342.5	81.3	1221.6	0.0	0.0
345.0	81.0	1221.3	0.0	0.0
347.5	81.1	1221.4	0.0	0.0
350.0	80.8	1221.1	0.0	0.0
352.5	81.0	1221.4	0.0	0.0
355.0	80.7	1221.1	0.0	0.0
357.5	80.8	1221.1	0.0	0.0
360.0	80.5	1220.9	0.0	0.0
362.5	80.7	1221.1	0.0	0.0
365.0	80.4	1220.9	0.0	0.0
367.5	80.5	1221.0	0.0	0.0
370.0	80.3	1220.7	0.0	0.0
372.5	80.4	1220.8	0.0	0.0
375.0	80.2	1220.6	0.0	0.0
377.5	80.3	1220.7	0.0	0.0
380.0	80.1	1220.5	0.0	0.0
382.5	80.2	1220.5	0.0	0.0
385.0	80.0	1220.3	0.0	0.0
387.5	80.1	1220.5	0.0	0.0
390.0	79.9	1220.3	0.0	0.0
392.5	80.0	1220.3	0.0	0.0
395.0	79.8	1220.1	0.0	0.0
397.5	79.9	1220.2	0.0	0.0
399.1	79.7	1219.9	0.0	0.0

Table 06.02.01.04-1.e-2
Double Ended Steam Line Break from 80% Power — Mass and Energy Release Data (8 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
0.0	0.0	0.0	0.0	0.0
0.0	4296.3	1194.8	0.0	571.0
0.5	8364.8	1232.8	0.0	433.7
1.0	7564.6	1235.6	0.0	426.8
2.0	8276.7	1239.8	0.0	470.5
3.0	11098.8	1242.7	0.0	533.7
4.0	12181.9	1243.8	0.0	536.4
5.0	12995.2	1244.6	0.0	536.8
6.0	13118.4	1244.2	0.0	536.4
7.0	12192.4	1239.1	0.0	534.8
8.0	11244.0	1233.3	0.0	533.8
9.0	10260.0	1228.1	0.0	532.8
10.0	9406.8	1223.7	0.0	531.1
11.0	8786.5	1220.1	0.0	528.7
12.0	8336.1	1217.5	0.0	525.7
13.0	7991.8	1215.4	0.0	523.0
14.0	7735.8	1213.7	0.0	520.1
15.0	7508.0	1213.5	0.0	516.8
16.0	7127.6	1216.1	0.0	513.3
17.0	6683.5	1218.2	0.0	509.8
18.0	6293.9	1219.9	0.0	506.1
19.0	6028.9	1221.1	0.0	502.6
20.0	5817.1	1222.2	0.0	499.3
21.0	5587.5	1223.1	0.0	495.9
22.0	5367.2	1224.0	0.0	492.6
23.0	5155.3	1224.8	0.0	489.4

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
24.0	4930.1	1225.6	0.0	486.3
25.0	4585.7	1226.6	0.0	481.3
26.0	3948.5	1228.1	0.0	474.7
27.0	3353.9	1229.1	0.0	469.7
28.0	2915.6	1229.2	0.0	465.8
29.0	2609.9	1228.9	0.0	463.2
30.0	2390.7	1228.5	0.0	461.6
31.0	2216.2	1227.9	0.0	460.5
32.0	2081.6	1227.3	0.0	459.4
33.0	1966.2	1226.7	0.0	458.2
34.0	1873.6	1226.3	0.0	456.9
35.0	1772.2	1225.7	0.0	455.3
36.0	1657.4	1225.0	0.0	452.8
37.0	1526.7	1224.4	0.0	448.9
38.0	1452.6	1224.2	0.0	447.7
39.0	1411.8	1223.6	0.0	447.1
40.0	1366.2	1223.2	0.0	446.3
41.0	1331.2	1222.8	0.0	444.4
42.0	1307.3	1222.8	0.0	448.0
43.0	1291.7	1222.8	0.0	455.2
44.0	1261.6	1222.6	0.0	432.0
45.0	1237.2	1222.7	0.0	443.7
46.0	1221.0	1222.7	0.0	410.3
47.0	1195.0	1222.6	0.0	436.7
48.0	1167.0	1222.6	0.0	430.5
49.0	1138.1	1222.8	0.0	424.8

Table 06.02.01.04-1.e-2
Double Ended Steam Line Break from 80% Power — Mass and Energy Release Data (8 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
50.0	1111.9	1223.2	0.0	438.9
51.0	1092.9	1224.0	0.0	438.9
52.0	1074.4	1224.1	0.0	448.0
53.0	1044.1	1223.7	0.0	416.0
54.0	1020.7	1224.5	0.0	455.2
55.0	1012.3	1226.1	0.0	383.4
56.0	993.1	1228.0	0.0	512.8
57.0	963.5	1226.4	0.0	0.0
58.0	948.0	1229.1	0.0	0.0
59.0	928.5	1231.9	0.0	0.0
60.0	902.0	1228.5	0.0	0.0
61.0	888.3	1229.0	0.0	0.0
62.0	862.4	1230.7	0.0	0.0
63.0	843.9	1229.2	0.0	0.0
64.0	825.0	1231.4	0.0	0.0
65.0	806.6	1232.4	0.0	0.0
66.0	796.7	1233.9	0.0	0.0
67.0	780.9	1234.1	0.0	0.0
68.0	773.4	1234.5	0.0	0.0
69.0	763.4	1234.5	0.0	0.0
70.0	768.2	1235.7	0.0	0.0
71.0	760.5	1234.9	0.0	0.0
72.0	761.9	1234.9	0.0	0.0
73.0	754.1	1234.7	0.0	0.0
74.0	749.1	1234.8	0.0	0.0
75.0	761.4	1230.9	0.0	0.0
76.0	772.5	1228.4	0.0	0.0
77.0	782.2	1227.9	0.0	0.0
78.0	782.4	1227.8	0.0	0.0
79.0	780.8	1227.5	0.0	0.0
80.0	771.7	1228.1	0.0	0.0
81.0	755.5	1228.8	0.0	0.0
82.0	748.6	1229.9	0.0	0.0
83.0	736.5	1230.1	0.0	0.0
84.0	725.5	1230.6	0.0	0.0
85.0	715.9	1230.9	0.0	0.0
86.0	707.0	1231.0	0.0	0.0
87.0	694.3	1231.0	0.0	0.0
88.0	680.8	1230.8	0.0	0.0
89.0	665.2	1230.0	0.0	0.0
90.0	652.4	1228.0	0.0	0.0
91.0	636.6	1227.3	0.0	0.0
92.0	617.6	1226.9	0.0	0.0
93.0	600.0	1227.0	0.0	0.0
94.0	582.2	1226.6	0.0	0.0
95.0	560.8	1225.8	0.0	0.0
96.0	540.3	1225.7	0.0	0.0
97.0	520.3	1225.6	0.0	0.0
98.0	502.5	1225.7	0.0	0.0
99.0	482.4	1225.4	0.0	0.0
100.0	461.4	1225.2	0.0	0.0
101.0	442.3	1225.0	0.0	0.0

Table 06.02.01.04-1.e-2
Double Ended Steam Line Break from 80% Power — Mass and Energy Release Data (8 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
102.0	425.0	1225.0	0.0	0.0
103.0	410.9	1224.1	0.0	0.0
104.0	396.6	1223.2	0.0	0.0
105.0	382.6	1223.0	0.0	0.0
106.0	369.6	1223.6	0.0	0.0
107.0	355.4	1224.0	0.0	0.0
108.0	337.7	1223.9	0.0	0.0
109.0	321.7	1224.2	0.0	0.0
110.0	308.0	1223.8	0.0	0.0
111.0	297.1	1223.2	0.0	0.0
112.0	288.0	1222.2	0.0	0.0
113.0	278.1	1221.4	0.0	0.0
114.0	269.0	1221.0	0.0	0.0
115.0	258.5	1220.0	0.0	0.0
116.0	245.7	1218.9	0.0	0.0
117.0	235.9	1219.0	0.0	0.0
118.0	227.9	1219.1	0.0	0.0
119.0	222.4	1219.2	0.0	256.4
120.0	217.9	1217.9	0.0	288.0
121.0	213.9	1218.7	0.0	254.8
122.0	210.3	1219.2	0.0	0.0
123.0	206.3	1218.8	0.0	0.0
124.0	202.3	1218.5	0.0	0.0
125.0	197.8	1218.0	0.0	0.0
126.0	193.2	1217.9	0.0	0.0
127.0	189.3	1217.7	0.0	0.0
128.0	185.2	1217.5	0.0	0.0
129.0	181.8	1217.5	0.0	0.0
130.0	178.8	1217.7	0.0	0.0
131.0	176.7	1218.0	0.0	0.0
132.0	175.7	1218.6	0.0	0.0
133.0	175.5	1219.3	0.0	0.0
134.0	175.9	1220.7	0.0	0.0
135.0	175.9	1221.8	0.0	0.0
136.0	175.3	1224.4	0.0	0.0
137.0	174.1	1226.7	0.0	0.0
138.0	173.0	1227.5	0.0	0.0
139.0	171.8	1227.7	0.0	0.0
140.0	170.5	1227.6	0.0	0.0
141.0	168.8	1227.5	0.0	0.0
142.0	167.0	1227.6	0.0	0.0
143.0	164.9	1227.8	0.0	0.0
144.0	162.8	1229.2	0.0	0.0
145.0	160.9	1231.1	0.0	0.0
146.0	158.8	1231.6	0.0	0.0
147.0	156.7	1231.5	0.0	0.0
148.0	154.7	1231.2	0.0	0.0
149.0	153.0	1230.8	0.0	0.0
150.0	151.3	1230.8	0.0	0.0
151.0	149.6	1230.4	0.0	0.0
152.0	147.8	1230.4	0.0	0.0
153.0	146.0	1230.0	0.0	0.0

Table 06.02.01.04-1.e-2
Double Ended Steam Line Break from 80% Power — Mass and Energy Release Data (8 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
154.0	144.2	1229.6	0.0	0.0
155.0	142.8	1229.8	0.0	0.0
156.0	141.4	1229.6	0.0	0.0
157.0	139.7	1229.5	0.0	0.0
158.0	138.1	1229.1	0.0	0.0
159.0	136.6	1229.1	0.0	0.0
160.0	135.4	1228.9	0.0	0.0
161.0	134.2	1228.8	0.0	0.0
162.0	132.8	1228.8	0.0	0.0
163.0	131.6	1228.4	0.0	0.0
164.0	130.3	1228.0	0.0	0.0
165.0	129.2	1228.2	0.0	0.0
166.0	128.3	1228.1	0.0	0.0
167.0	127.2	1227.8	0.0	0.0
168.0	126.2	1227.9	0.0	0.0
169.0	125.1	1227.3	0.0	0.0
170.0	124.3	1227.3	0.0	0.0
171.0	123.3	1227.3	0.0	0.0
172.0	122.3	1227.3	0.0	0.0
173.0	121.6	1227.1	0.0	0.0
174.0	120.6	1227.0	0.0	0.0
175.0	119.9	1226.9	0.0	0.0
176.0	119.1	1226.8	0.0	0.0
177.0	118.1	1226.6	0.0	0.0
178.0	117.3	1226.7	0.0	0.0
179.0	116.5	1226.4	0.0	0.0
180.0	116.0	1226.5	0.0	0.0
181.0	115.4	1226.5	0.0	0.0
182.0	114.4	1226.2	0.0	0.0
183.0	113.7	1226.0	0.0	0.0
184.0	112.9	1226.0	0.0	0.0
185.0	112.5	1225.9	0.0	0.0
186.0	112.1	1226.1	0.0	0.0
187.0	111.4	1226.0	0.0	0.0
188.0	110.7	1225.7	0.0	0.0
189.0	110.0	1225.6	0.0	0.0
190.0	109.5	1225.7	0.0	0.0
191.0	109.1	1225.8	0.0	0.0
192.0	108.5	1225.5	0.0	0.0
193.0	108.0	1225.5	0.0	0.0
194.0	107.5	1225.6	0.0	0.0
195.0	106.9	1225.4	0.0	0.0
196.0	106.6	1225.4	0.0	0.0
197.0	106.0	1225.3	0.0	0.0
198.0	105.3	1225.2	0.0	0.0
199.0	104.8	1225.2	0.0	0.0
200.0	104.5	1225.2	0.0	0.0
201.0	104.3	1225.5	0.0	0.0
202.0	103.7	1225.3	0.0	0.0
203.0	103.1	1225.1	0.0	0.0
204.0	102.6	1225.0	0.0	0.0
205.0	102.2	1225.1	0.0	0.0

Table 06.02.01.04-1.e-2
Double Ended Steam Line Break from 80% Power — Mass and Energy Release Data (8 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
206.0	101.9	1225.2	0.0	0.0
207.0	101.5	1225.1	0.0	0.0
208.0	101.0	1225.1	0.0	0.0
209.0	100.7	1225.1	0.0	0.0
210.0	100.3	1225.0	0.0	0.0
211.0	100.1	1224.9	0.0	0.0
212.0	99.7	1225.2	0.0	0.0
213.0	99.2	1224.9	0.0	0.0
214.0	98.7	1224.8	0.0	0.0
215.0	98.3	1224.8	0.0	0.0
216.0	98.2	1225.0	0.0	0.0
217.0	98.0	1225.1	0.0	0.0
218.0	97.5	1224.8	0.0	0.0
219.0	97.1	1224.9	0.0	0.0
220.0	96.7	1224.6	0.0	0.0
221.0	96.6	1224.9	0.0	0.0
222.0	96.4	1224.9	0.0	0.0
223.0	95.9	1224.8	0.0	0.0
224.0	95.5	1224.7	0.0	0.0
225.0	95.1	1224.6	0.0	0.0
226.0	95.0	1224.9	0.0	0.0
227.0	95.0	1224.9	0.0	0.0
228.0	94.6	1224.7	0.0	0.0
229.0	94.2	1224.6	0.0	0.0
230.0	93.8	1224.5	0.0	0.0
231.0	93.7	1224.7	0.0	0.0
232.0	93.6	1224.5	0.0	0.0
233.0	93.2	1224.5	0.0	0.0
234.0	92.8	1224.6	0.0	0.0
235.0	92.5	1224.2	0.0	0.0
236.0	92.3	1224.5	0.0	0.0
237.0	92.3	1224.8	0.0	0.0
238.0	91.9	1224.5	0.0	0.0
239.0	91.6	1224.6	0.0	0.0
240.0	91.3	1224.6	0.0	0.0
241.0	91.2	1224.6	0.0	0.0
242.0	91.2	1224.7	0.0	0.0
243.0	90.9	1224.6	0.0	0.0
244.0	90.5	1224.2	0.0	0.0
245.0	90.3	1224.5	0.0	0.0
246.0	90.2	1224.4	0.0	0.0
247.0	90.1	1226.0	0.0	0.0
248.0	89.8	1226.6	0.0	0.0
249.0	89.4	1227.0	0.0	0.0
250.0	89.2	1226.8	0.0	0.0
251.0	89.0	1227.0	0.0	0.0
252.0	89.0	1227.1	0.0	0.0
253.0	88.9	1226.9	0.0	0.0
254.0	88.5	1227.1	0.0	0.0
255.0	88.3	1227.0	0.0	0.0
256.0	88.1	1226.9	0.0	0.0
257.0	88.2	1227.1	0.0	0.0

Table 06.02.01.04-1.e-2
Double Ended Steam Line Break from 80% Power — Mass and Energy Release Data (8 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
258.0	88.0	1227.0	0.0	0.0
259.0	87.7	1227.0	0.0	0.0
260.0	87.5	1227.0	0.0	0.0
261.0	87.3	1226.8	0.0	0.0
262.0	87.3	1227.2	0.0	0.0
263.0	87.3	1226.9	0.0	0.0
264.0	87.0	1226.9	0.0	0.0
265.0	86.8	1226.8	0.0	0.0
266.0	86.5	1226.8	0.0	0.0
267.0	86.6	1226.9	0.0	0.0
268.0	86.6	1227.2	0.0	0.0
269.0	86.3	1226.8	0.0	0.0
270.0	86.1	1226.7	0.0	0.0
271.0	85.8	1226.8	0.0	0.0
272.0	85.9	1226.8	0.0	0.0
273.0	86.0	1226.9	0.0	0.0
274.0	85.7	1227.0	0.0	0.0
275.0	85.5	1226.7	0.0	0.0
276.0	85.3	1226.5	0.0	0.0
277.0	85.2	1226.9	0.0	0.0
278.0	85.3	1226.7	0.0	0.0
279.0	85.1	1226.8	0.0	0.0
280.0	84.9	1226.7	0.0	0.0
281.0	84.7	1226.6	0.0	0.0
282.0	84.7	1226.8	0.0	0.0
283.0	84.8	1226.5	0.0	0.0
284.0	84.6	1226.9	0.0	0.0
285.0	84.4	1226.4	0.0	0.0
286.0	84.2	1226.6	0.0	0.0
287.0	84.1	1226.5	0.0	0.0
288.0	84.3	1226.5	0.0	0.0
289.0	84.2	1226.7	0.0	0.0
290.0	83.9	1226.3	0.0	0.0
291.0	83.7	1226.4	0.0	0.0
292.0	83.7	1226.7	0.0	0.0
293.0	83.8	1226.4	0.0	0.0
294.0	83.7	1226.6	0.0	0.0
295.0	83.5	1226.3	0.0	0.0
296.0	83.3	1226.4	0.0	0.0
297.0	83.2	1226.5	0.0	0.0
298.0	83.3	1226.3	0.0	0.0
299.0	83.3	1226.4	0.0	0.0
300.0	83.1	1226.3	0.0	0.0
301.0	83.0	1226.1	0.0	0.0
302.0	82.8	1226.1	0.0	0.0
303.0	83.0	1226.5	0.0	0.0
304.0	82.9	1226.4	0.0	0.0
305.0	82.7	1226.3	0.0	0.0
306.0	82.6	1226.0	0.0	0.0
307.0	82.5	1226.0	0.0	0.0
308.0	82.6	1226.3	0.0	0.0
309.0	82.6	1226.2	0.0	0.0

Table 06.02.01.04-1.e-2
Double Ended Steam Line Break from 80% Power — Mass and Energy Release Data (8 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
310.0	82.4	1226.3	0.0	0.0
311.0	82.3	1226.0	0.0	0.0
312.0	82.1	1225.8	0.0	0.0
313.0	82.2	1226.2	0.0	0.0
314.0	82.3	1226.3	0.0	0.0
315.0	82.1	1226.0	0.0	0.0
316.0	82.0	1226.0	0.0	0.0
317.0	81.8	1225.8	0.0	0.0
318.0	81.9	1225.9	0.0	0.0
319.0	82.0	1226.0	0.0	0.0
320.0	81.8	1226.0	0.0	0.0
321.0	81.7	1225.8	0.0	0.0
322.0	81.5	1225.8	0.0	0.0
323.0	81.6	1226.0	0.0	0.0
324.0	81.7	1225.9	0.0	0.0
325.0	81.6	1225.8	0.0	0.0
326.0	81.5	1225.9	0.0	0.0
327.0	81.3	1225.6	0.0	0.0
328.0	81.3	1225.8	0.0	0.0
329.0	81.4	1225.8	0.0	0.0
330.0	81.3	1225.8	0.0	0.0
331.0	81.2	1225.7	0.0	0.0
332.0	81.0	1225.6	0.0	0.0
333.0	81.1	1225.7	0.0	0.0
334.0	81.2	1225.8	0.0	0.0
335.0	81.1	1225.9	0.0	0.0
336.0	81.0	1225.5	0.0	0.0
337.0	80.8	1225.7	0.0	0.0
338.0	80.8	1225.5	0.0	0.0
339.0	81.0	1225.7	0.0	0.0
340.0	80.9	1225.7	0.0	0.0
341.0	80.7	1225.5	0.0	0.0
342.0	80.6	1225.4	0.0	0.0
343.0	80.6	1225.6	0.0	0.0
344.0	80.8	1225.6	0.0	0.0
345.0	80.7	1225.4	0.0	0.0
346.0	80.6	1225.5	0.0	0.0
347.0	80.5	1225.4	0.0	0.0
348.0	80.4	1225.2	0.0	0.0
349.0	80.6	1225.5	0.0	0.0
350.0	80.6	1225.7	0.0	0.0
351.0	80.4	1225.1	0.0	0.0
352.0	80.3	1225.5	0.0	0.0
353.0	80.3	1225.1	0.0	0.0
354.0	80.4	1225.5	0.0	0.0
355.0	80.4	1225.3	0.0	0.0
356.0	80.3	1225.2	0.0	0.0
357.0	80.2	1225.4	0.0	0.0
358.0	80.1	1225.4	0.0	0.0
359.0	80.3	1225.2	0.0	0.0
360.0	80.3	1225.4	0.0	0.0
361.0	80.1	1225.2	0.0	0.0

Table 06.02.01.04-1.e-2
Double Ended Steam Line Break from 80% Power — Mass and Energy Release Data (8 Sheets)

Time (Seconds)	Steam Mass Flow Rate (lbm/sec)	Steam Enthalpy (BTU/lbm)	Liquid Mass Flow Rate (lbm/sec)	Liquid Enthalpy (BTU/lbm)
362.0	80.1	1225.2	0.0	0.0
363.0	80.0	1224.9	0.0	0.0
364.0	80.1	1225.4	0.0	0.0
365.0	80.2	1225.3	0.0	0.0
366.0	80.0	1224.9	0.0	0.0
367.0	80.0	1225.3	0.0	0.0
368.0	79.9	1224.8	0.0	0.0
369.0	79.9	1225.2	0.0	0.0
370.0	80.1	1225.2	0.0	0.0
371.0	79.9	1225.0	0.0	0.0
372.0	79.8	1225.0	0.0	0.0
373.0	79.8	1224.8	0.0	0.0
374.0	79.8	1225.2	0.0	0.0
375.0	79.9	1225.0	0.0	0.0
376.0	79.8	1225.1	0.0	0.0
377.0	79.7	1224.9	0.0	0.0
378.0	79.6	1224.8	0.0	0.0
379.0	79.7	1224.9	0.0	0.0
380.0	79.8	1224.9	0.0	0.0
381.0	79.7	1225.1	0.0	0.0
382.0	79.6	1224.9	0.0	0.0
383.0	79.5	1224.6	0.0	0.0
384.0	79.5	1224.5	0.0	0.0
385.0	79.7	1224.9	0.0	0.0
386.0	79.7	1224.9	0.0	0.0
387.0	79.5	1224.7	0.0	0.0
388.0	79.5	1224.7	0.0	0.0
389.0	79.4	1224.4	0.0	0.0
390.0	79.6	1225.0	0.0	0.0
391.0	79.6	1224.7	0.0	0.0
392.0	79.4	1224.4	0.0	0.0
393.0	79.4	1224.5	0.0	0.0
394.0	79.4	1224.4	0.0	0.0
395.0	79.5	1224.8	0.0	0.0
396.0	79.6	1224.9	0.0	0.0
397.0	79.4	1224.3	0.0	0.0
398.0	79.3	1224.7	0.0	0.0
399.0	79.3	1224.0	0.0	0.0
400.0	79.4	1224.8	0.0	0.0

Response to Question 06.02.01.04-1.g:

g. Mass and Energy Content of Metal and Fluid

Blowdown ends at approximately 100 seconds. The summary of the primary and secondary system mass and energy content is in Table 06.02.01.04-1.g-1. The detailed mass and energy for each control volume and heat structure is in Table 06.02.01.04-1.g-2 through Table 06.02.01.04-1.g-5 for time zero and in Table 06.02.01.04-1.g-6 through Table 06.02.01.04-1.g-9 for 100 seconds.

FSAR Impact:

The U.S. EPR FSAR will not be changed as a result of this question.

Table 06.02.01.04-1.g-1: Summary of Mass and Energy

	Beginning of Accident (0s)	End of Blowdown (100s)
Primary System Liquid Mass (lbm)	6.73E+05	6.73E+05
Primary System Liquid Energy (BTU)	4.03E+08	3.62E+08
Primary System Metal Mass (lbm)	3.48E+06	3.48E+06
Primary System Metal Energy (BTU)	1.70E+08	1.52E+08
Secondary System Liquid Mass(lbm)	1.12E+06	8.29E+05
Secondary System Liquid Energy (BTU)	6.52E+08	4.68E+08
Secondary System Metal Mass (lbm)	3.45E+06	3.45E+06
Secondary System Metal Energy (BTU)	1.66E+08	1.58E+08

Table 06.02.01.04-1.g-2: Primary System Metal Mass and Energy (t = 0 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity (BTU/ ft^3-°F)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
1001-001	100-010000	0-000000	496.50	63.89	47.37	2.35E+04	6.07E+02	1.20E+06
1001-002	105-010000	0-000000	496.50	63.89	47.37	2.35E+04	6.07E+02	1.20E+06
1001-003	110-010000	0-000000	496.50	63.89	38.32	1.90E+04	6.07E+02	9.68E+05
1001-004	115-010000	0-000000	496.50	63.89	42.06	2.09E+04	6.07E+02	1.06E+06
1251-001	125-010000	730-010000	506.30	64.31	30.68	1.55E+04	5.89E+02	7.45E+05
1251-002	125-020000	730-020000	506.30	64.29	30.68	1.55E+04	5.89E+02	7.43E+05
1251-003	125-030000	730-030000	506.30	64.28	30.68	1.55E+04	5.88E+02	7.41E+05
1251-004	125-040000	730-040000	506.30	64.27	30.68	1.55E+04	5.87E+02	7.40E+05
1251-005	125-050000	730-050000	506.30	64.25	46.02	2.33E+04	5.86E+02	1.11E+06
1251-006	125-060000	730-060000	506.30	64.23	61.36	3.11E+04	5.85E+02	1.47E+06
1251-007	125-070000	730-070000	506.30	64.21	61.36	3.11E+04	5.84E+02	1.46E+06
1251-008	125-080000	732-010000	506.30	64.19	61.36	3.11E+04	5.83E+02	1.46E+06
1251-009	125-090000	734-010000	506.30	64.17	61.36	3.11E+04	5.82E+02	1.46E+06
1251-010	125-100000	736-010000	506.30	64.15	53.64	2.72E+04	5.81E+02	1.27E+06
1251-011	125-110000	737-010000	506.30	64.15	53.64	2.72E+04	5.81E+02	1.27E+06
1251-012	125-120000	735-010000	506.30	64.14	61.36	3.11E+04	5.80E+02	1.45E+06
1251-013	125-130000	733-010000	506.30	64.14	61.36	3.11E+04	5.80E+02	1.45E+06
1251-014	125-140000	731-070000	506.30	64.12	61.36	3.11E+04	5.79E+02	1.45E+06
1251-015	125-150000	731-060000	506.30	64.10	61.36	3.11E+04	5.78E+02	1.44E+06
1251-016	125-160000	731-050000	506.30	64.06	46.02	2.33E+04	5.76E+02	1.07E+06
1251-017	125-170000	731-040000	506.30	64.01	30.68	1.55E+04	5.73E+02	7.09E+05
1251-018	125-180000	731-030000	506.30	63.96	30.68	1.55E+04	5.70E+02	7.03E+05
1251-019	125-190000	731-020000	506.30	63.90	30.68	1.55E+04	5.67E+02	6.96E+05
1251-020	125-200000	731-010000	506.30	63.82	30.68	1.55E+04	5.63E+02	6.86E+05
1401-001	135-010000	0-000000	496.50	63.45	21.91	1.09E+04	5.75E+02	5.05E+05
1401-002	140-010000	0-000000	496.50	63.45	26.02	1.29E+04	5.75E+02	6.00E+05
1401-003	145-010000	0-000000	496.50	63.45	49.30	2.45E+04	5.75E+02	1.14E+06
1401-004	150-010000	0-000000	496.50	63.45	43.35	2.15E+04	5.75E+02	1.00E+06
1401-005	155-010000	0-000000	496.50	63.45	46.04	2.29E+04	5.75E+02	1.06E+06
1401-006	160-010000	0-000000	496.50	63.45	174.56	8.67E+04	5.76E+02	4.03E+06
1701-001	165-010000	0-000000	496.50	63.46	44.42	2.21E+04	5.76E+02	1.03E+06
1701-002	170-010000	0-000000	496.50	63.46	44.42	2.21E+04	5.76E+02	1.03E+06
1701-003	175-010000	0-000000	496.50	63.46	57.40	2.85E+04	5.76E+02	1.33E+06
1701-004	180-010000	0-000000	496.50	63.46	49.31	2.45E+04	5.76E+02	1.14E+06
2001-001	200-010000	0-000000	496.50	63.89	15.79	7.84E+03	6.07E+02	3.99E+05
2001-002	205-010000	0-000000	496.50	63.89	15.79	7.84E+03	6.07E+02	3.99E+05
2001-003	210-010000	0-000000	496.50	63.89	12.77	6.34E+03	6.07E+02	3.23E+05
2001-004	215-010000	0-000000	496.50	63.89	14.02	6.96E+03	6.07E+02	3.54E+05
2201-001	220-010000	0-000000	484.10	66.46	19.36	9.37E+03	6.08E+02	5.09E+05
2211-001	221-010000	221-010000	484.10	66.46	94.20	4.56E+04	6.08E+02	2.48E+06
2251-001	225-010000	630-010000	506.30	64.31	10.23	5.18E+03	5.90E+02	2.48E+05
2251-002	225-020000	630-020000	506.30	64.30	10.23	5.18E+03	5.89E+02	2.48E+05
2251-003	225-030000	630-030000	506.30	64.28	10.23	5.18E+03	5.88E+02	2.47E+05
2251-004	225-040000	630-040000	506.30	64.27	10.23	5.18E+03	5.87E+02	2.47E+05
2251-005	225-050000	630-050000	506.30	64.25	15.34	7.77E+03	5.86E+02	3.69E+05

Table 06.02.01.04-1.g-2: Primary System Metal Mass and Energy (t = 0 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
2251-006	225-060000	630-060000	506.30	64.23	20.45	1.04E+04	5.85E+02	4.90E+05
2251-007	225-070000	630-070000	506.30	64.21	20.45	1.04E+04	5.84E+02	4.88E+05
2251-008	225-080000	632-010000	506.30	64.19	20.45	1.04E+04	5.83E+02	4.87E+05
2251-009	225-090000	634-010000	506.30	64.17	20.45	1.04E+04	5.82E+02	4.85E+05
2251-010	225-100000	636-010000	506.30	64.15	17.88	9.05E+03	5.81E+02	4.23E+05
2251-011	225-110000	637-010000	506.30	64.15	17.88	9.05E+03	5.81E+02	4.23E+05
2251-012	225-120000	635-010000	506.30	64.15	20.45	1.04E+04	5.80E+02	4.83E+05
2251-013	225-130000	633-010000	506.30	64.14	20.45	1.04E+04	5.80E+02	4.83E+05
2251-014	225-140000	631-070000	506.30	64.13	20.45	1.04E+04	5.79E+02	4.82E+05
2251-015	225-150000	631-060000	506.30	64.11	20.45	1.04E+04	5.78E+02	4.80E+05
2251-016	225-160000	631-050000	506.30	64.06	15.34	7.77E+03	5.76E+02	3.58E+05
2251-017	225-170000	631-040000	506.30	64.01	10.23	5.18E+03	5.73E+02	2.36E+05
2251-018	225-180000	631-030000	506.30	63.96	10.23	5.18E+03	5.70E+02	2.35E+05
2251-019	225-190000	631-020000	506.30	63.90	10.23	5.18E+03	5.67E+02	2.32E+05
2251-020	225-200000	631-010000	506.30	63.82	10.23	5.18E+03	5.63E+02	2.29E+05
2291-001	229-010000	229-010000	484.10	65.54	85.64	4.15E+04	5.76E+02	2.04E+06
2301-001	230-010000	0-000000	484.10	65.54	19.36	9.37E+03	5.76E+02	4.61E+05
2401-001	235-010000	0-000000	496.50	63.45	7.30	3.63E+03	5.76E+02	1.68E+05
2401-002	240-010000	0-000000	496.50	63.45	8.67	4.31E+03	5.76E+02	2.00E+05
2401-003	245-010000	0-000000	496.50	63.45	16.43	8.16E+03	5.76E+02	3.79E+05
2401-004	250-010000	0-000000	496.50	63.45	14.45	7.17E+03	5.76E+02	3.33E+05
2401-005	255-010000	0-000000	496.50	63.45	15.35	7.62E+03	5.76E+02	3.54E+05
2401-006	260-010000	0-000000	496.50	63.45	58.19	2.89E+04	5.76E+02	1.34E+06
2701-001	265-010000	0-000000	496.50	63.46	14.81	7.35E+03	5.76E+02	3.42E+05
2701-002	270-010000	0-000000	496.50	63.46	14.81	7.35E+03	5.76E+02	3.42E+05
2701-003	275-010000	0-000000	496.50	63.46	19.13	9.50E+03	5.76E+02	4.42E+05
2701-004	280-010000	0-000000	496.50	63.46	16.44	8.16E+03	5.76E+02	3.80E+05
3001-001	300-010000	0-000000	486.58	65.15	107.63	5.24E+04	5.77E+02	2.56E+06
3011-001	301-010000	0-000000	486.58	65.14	322.88	1.57E+05	5.76E+02	7.66E+06
3021-001	302-010000	0-000000	486.58	65.14	124.61	6.06E+04	5.76E+02	2.96E+06
3031-001	303-010000	0-000000	486.58	65.14	373.84	1.82E+05	5.76E+02	8.87E+06
3041-001	304-010000	0-000000	486.58	65.14	76.93	3.74E+04	5.76E+02	1.83E+06
3041-002	306-010000	0-000000	486.58	65.14	76.93	3.74E+04	5.76E+02	1.83E+06
3041-003	308-010000	0-000000	486.58	65.14	23.09	1.12E+04	5.76E+02	5.48E+05
3051-001	305-010000	0-000000	486.58	65.14	230.78	1.12E+05	5.76E+02	5.48E+06
3051-002	307-010000	0-000000	486.58	65.14	230.78	1.12E+05	5.76E+02	5.48E+06
3051-003	309-010000	0-000000	486.58	65.14	69.22	3.37E+04	5.76E+02	1.64E+06
3101-001	310-010000	0-000000	486.58	65.14	38.26	1.86E+04	5.76E+02	9.08E+05
3101-002	311-010000	0-000000	486.58	65.14	114.78	5.59E+04	5.76E+02	2.72E+06
3111-001	310-010000	0-000000	496.50	63.46	3.96	1.96E+03	5.76E+02	9.15E+04
3111-002	311-010000	0-000000	496.50	63.46	11.87	5.89E+03	5.76E+02	2.74E+05
3121-001	312-010000	0-000000	496.50	63.46	36.42	1.81E+04	5.76E+02	8.42E+05
3121-002	313-010000	0-000000	496.50	63.46	109.27	5.43E+04	5.76E+02	2.53E+06
3141-001	0-000000	314-010000	406.00	33.07	8.59	3.49E+03	5.76E+02	1.03E+05
3141-002	0-000000	315-010000	406.00	33.07	25.77	1.05E+04	5.76E+02	3.10E+05
3161-001	0-000000	316-010000	524.37	37.66	27.96	1.47E+04	6.90E+02	5.03E+05

Table 06.02.01.04-1.g-2: Primary System Metal Mass and Energy (t = 0 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
3161-002	0-000000	318-010000	524.37	39.04	27.96	1.47E+04	8.90E+02	7.40E+05
3161-003	0-000000	320-010000	524.37	39.73	27.96	1.47E+04	1.01E+03	8.91E+05
3161-004	0-000000	322-010000	524.37	39.77	27.96	1.47E+04	1.02E+03	9.00E+05
3161-005	0-000000	324-010000	524.37	39.16	27.96	1.47E+04	9.11E+02	7.65E+05
3161-006	0-000000	326-010000	524.37	37.88	27.96	1.47E+04	7.19E+02	5.37E+05
3171-001	0-000000	317-010000	524.37	37.66	83.89	4.40E+04	6.90E+02	1.51E+06
3171-002	0-000000	319-010000	524.37	39.04	83.89	4.40E+04	8.90E+02	2.22E+06
3171-003	0-000000	321-010000	524.37	39.73	83.89	4.40E+04	1.01E+03	2.67E+06
3171-004	0-000000	323-010000	524.37	39.77	83.89	4.40E+04	1.02E+03	2.70E+06
3171-005	0-000000	325-010000	524.37	39.16	83.89	4.40E+04	9.11E+02	2.30E+06
3171-006	0-000000	327-010000	524.37	37.88	83.89	4.40E+04	7.19E+02	1.61E+06
3301-001	0-000000	330-010000	406.00	33.33	15.58	6.32E+03	6.08E+02	2.06E+05
3301-002	0-000000	331-010000	406.00	33.33	46.74	1.90E+04	6.08E+02	6.18E+05
3401-001	316-010000	340-010000	496.50	63.47	14.23	7.07E+03	5.77E+02	3.30E+05
3401-002	318-010000	340-010000	496.50	63.49	14.23	7.07E+03	5.79E+02	3.32E+05
3401-003	320-010000	340-020000	496.50	63.53	14.23	7.07E+03	5.81E+02	3.34E+05
3401-004	322-010000	340-020000	496.50	63.57	14.23	7.07E+03	5.84E+02	3.36E+05
3401-005	324-010000	340-030000	496.50	63.59	14.23	7.07E+03	5.86E+02	3.38E+05
3401-006	326-010000	340-030000	496.50	63.60	14.23	7.07E+03	5.86E+02	3.39E+05
3401-007	330-010000	340-040000	496.50	63.60	9.56	4.74E+03	5.86E+02	2.28E+05
3411-001	317-010000	341-010000	496.50	63.47	30.07	1.49E+04	5.77E+02	6.97E+05
3411-002	319-010000	341-010000	496.50	63.52	30.07	1.49E+04	5.80E+02	7.04E+05
3411-003	321-010000	341-020000	496.50	63.58	30.07	1.49E+04	5.85E+02	7.12E+05
3411-004	323-010000	341-020000	496.50	63.63	30.07	1.49E+04	5.89E+02	7.21E+05
3411-005	325-010000	341-030000	496.50	63.67	30.07	1.49E+04	5.92E+02	7.27E+05
3411-006	327-010000	341-030000	496.50	63.69	30.07	1.49E+04	5.93E+02	7.29E+05
3411-007	331-010000	341-040000	496.50	63.69	20.19	1.00E+04	5.93E+02	4.89E+05
3481-001	340-010000	306-010000	496.50	63.46	5.17	2.57E+03	5.76E+02	1.20E+05
3481-002	340-010000	306-010000	496.50	63.46	5.17	2.57E+03	5.76E+02	1.20E+05
3481-003	340-020000	306-010000	496.50	63.46	5.17	2.57E+03	5.76E+02	1.20E+05
3481-004	340-020000	304-010000	496.50	63.46	5.17	2.57E+03	5.76E+02	1.20E+05
3481-005	340-030000	304-010000	496.50	63.46	5.17	2.57E+03	5.76E+02	1.20E+05
3481-006	340-030000	304-010000	496.50	63.46	5.17	2.57E+03	5.76E+02	1.20E+05
3491-001	341-010000	307-010000	496.50	63.46	15.51	7.70E+03	5.76E+02	3.58E+05
3491-002	341-010000	307-010000	496.50	63.46	15.51	7.70E+03	5.76E+02	3.58E+05
3491-003	341-020000	307-010000	496.50	63.46	15.51	7.70E+03	5.76E+02	3.59E+05
3491-004	341-020000	305-010000	496.50	63.46	15.51	7.70E+03	5.76E+02	3.58E+05
3491-005	341-030000	305-010000	496.50	63.46	15.51	7.70E+03	5.76E+02	3.59E+05
3491-006	341-030000	305-010000	496.50	63.46	15.51	7.70E+03	5.76E+02	3.59E+05
3501-001	340-040000	302-010000	496.50	63.46	3.31	1.64E+03	5.76E+02	7.65E+04
3501-002	352-010000	302-010000	496.50	63.68	11.90	5.91E+03	5.92E+02	2.88E+05
3501-003	354-010000	300-010000	496.50	63.68	5.63	2.80E+03	5.92E+02	1.36E+05
3501-004	354-010000	300-010000	496.50	63.68	7.67	3.81E+03	5.92E+02	1.86E+05
3502-001	341-040000	303-010000	496.50	63.46	9.93	4.93E+03	5.76E+02	2.29E+05
3502-002	353-010000	303-010000	496.50	63.67	35.69	1.77E+04	5.92E+02	8.63E+05
3502-003	355-010000	301-010000	496.50	63.68	16.89	8.39E+03	5.92E+02	4.09E+05

Table 06.02.01.04-1.g-2: Primary System Metal Mass and Energy (t = 0 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
3502-004	357-010000	301-010000	496.50	63.46	23.02	1.14E+04	5.76E+02	5.32E+05
3503-001	314-010000	308-010000	496.50	63.46	1.59	7.89E+02	5.76E+02	3.67E+04
3504-001	315-010000	309-010000	496.50	63.46	4.76	2.37E+03	5.76E+02	1.10E+05
3521-001	330-010000	352-010000	496.50	63.90	4.11	2.04E+03	6.08E+02	1.04E+05
3521-002	331-010000	353-010000	496.50	63.90	12.32	6.12E+03	6.08E+02	3.12E+05
3541-001	354-010000	0-000000	496.50	63.90	13.51	6.71E+03	6.08E+02	3.41E+05
3541-002	356-010000	0-000000	496.50	63.46	14.74	7.32E+03	5.76E+02	3.41E+05
3541-003	360-020000	0-000000	496.50	63.47	15.80	7.84E+03	5.77E+02	3.66E+05
3551-001	354-010000	0-000000	496.50	63.90	40.52	2.01E+04	6.08E+02	1.02E+06
3551-002	355-010000	0-000000	496.50	63.90	44.22	2.20E+04	6.08E+02	1.12E+06
3551-003	355-010000	0-000000	496.50	63.90	47.40	2.35E+04	6.08E+02	1.20E+06
3601-001	360-010000	352-010000	496.50	63.80	13.69	6.79E+03	6.01E+02	3.39E+05
3601-002	360-020000	354-010000	496.50	63.72	6.48	3.22E+03	5.95E+02	1.58E+05
3601-003	360-020000	356-010000	496.50	63.47	15.71	7.80E+03	5.77E+02	3.64E+05
3601-004	361-010000	353-010000	496.50	63.80	41.06	2.04E+04	6.01E+02	1.02E+06
3601-005	361-020000	355-010000	496.50	63.72	19.44	9.65E+03	5.95E+02	4.74E+05
3601-006	361-020000	357-010000	496.50	63.47	47.13	2.34E+04	5.77E+02	1.09E+06
3641-001	364-010000	0-000000	485.48	65.32	300.89	1.46E+05	5.76E+02	7.16E+06
4001-001	400-010000	0-000000	484.10	66.53	45.07	2.18E+04	6.10E+02	1.19E+06
4101-001	410-010000	0-000000	502.60	65.52	86.21	4.33E+04	6.36E+02	2.39E+06
4101-002	410-020000	0-000000	502.60	65.78	86.21	4.33E+04	6.49E+02	2.48E+06
4101-003	410-030000	0-000000	502.60	65.88	86.21	4.33E+04	6.54E+02	2.51E+06
4101-004	410-040000	0-000000	502.60	65.91	86.21	4.33E+04	6.55E+02	2.52E+06
4101-005	410-050000	0-000000	502.60	65.91	86.21	4.33E+04	6.55E+02	2.52E+06
4101-006	410-060000	0-000000	502.60	65.91	86.21	4.33E+04	6.55E+02	2.52E+06
4201-001	408-010000	0-000000	502.60	65.10	51.40	2.58E+04	6.15E+02	1.35E+06
4301-001	412-010000	0-000000	502.60	65.90	51.51	2.59E+04	6.55E+02	1.50E+06

Table 06.02.01.04-1.g-3: Secondary System Metal Mass and Energy (t = 0)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity (BTU/ ft^3-°F)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
6201-001	620-010000	0-000000	484.10	65.51	154.28	7.47E+04	5.75E+02	3.66E+06
6201-002	639-010000	0-000000	484.10	65.51	289.34	1.40E+05	5.75E+02	6.87E+06
6201-003	645-010000	0-000000	484.10	65.51	563.01	2.73E+05	5.74E+02	1.34E+07
6201-004	650-010000	0-000000	484.10	65.50	319.87	1.55E+05	5.74E+02	7.59E+06
6201-005	660-010000	0-000000	484.10	65.50	384.39	1.86E+05	5.74E+02	9.12E+06
6201-006	623-010000	0-000000	484.10	65.51	154.28	7.47E+04	5.75E+02	3.66E+06
6241-001	624-040000	625-040000	496.50	62.76	6.90	3.42E+03	5.28E+02	1.37E+05
6241-002	624-030000	625-030000	496.50	62.75	9.48	4.71E+03	5.28E+02	1.88E+05
6241-003	624-020000	625-020000	496.50	62.75	6.90	3.42E+03	5.27E+02	1.36E+05
6241-004	624-010000	625-010000	496.50	62.81	6.69	3.32E+03	5.31E+02	1.34E+05
6242-001	979-010000	624-010000	496.50	61.18	7.05	3.50E+03	4.27E+02	9.27E+04
6251-001	625-010000	0-000000	484.10	65.50	186.86	9.05E+04	5.74E+02	4.44E+06
6252-001	625-020000	0-000000	484.10	65.50	144.13	6.98E+04	5.74E+02	3.42E+06
6252-002	625-030000	0-000000	484.10	65.49	198.19	9.59E+04	5.74E+02	4.70E+06
6252-003	625-040000	0-000000	484.10	65.48	144.13	6.98E+04	5.74E+02	3.41E+06
6301-001	630-010000	625-040000	496.50	63.43	1.64	8.13E+02	5.74E+02	3.76E+04
6301-002	630-020000	625-040000	496.50	63.43	1.64	8.13E+02	5.74E+02	3.77E+04
6301-003	630-030000	625-040000	496.50	63.43	1.64	8.13E+02	5.75E+02	3.77E+04
6301-004	630-040000	625-040000	496.50	63.43	1.64	8.13E+02	5.75E+02	3.77E+04
6301-005	630-050000	625-030000	496.50	63.43	2.46	1.22E+03	5.75E+02	5.65E+04
6301-006	630-060000	625-030000	496.50	63.43	3.28	1.63E+03	5.75E+02	7.54E+04
6301-007	630-070000	625-030000	496.50	63.43	3.28	1.63E+03	5.75E+02	7.53E+04
6301-008	632-010000	625-020000	496.50	63.43	3.28	1.63E+03	5.75E+02	7.54E+04
6301-009	634-010000	625-020000	496.50	63.43	3.28	1.63E+03	5.75E+02	7.54E+04
6301-010	636-010000	625-010000	496.50	63.43	2.86	1.42E+03	5.75E+02	6.59E+04
6301-011	638-010000	625-010000	496.50	63.43	4.44	2.21E+03	5.75E+02	1.02E+05
6302-001	630-010000	631-010000	484.10	64.65	0.56	2.70E+02	5.44E+02	1.20E+04
6302-002	630-020000	631-020000	484.10	64.85	0.56	2.70E+02	5.52E+02	1.23E+04
6302-003	630-030000	631-030000	484.10	65.02	0.56	2.70E+02	5.57E+02	1.25E+04
6302-004	630-040000	631-040000	484.10	65.14	0.56	2.70E+02	5.62E+02	1.27E+04
6302-005	630-050000	631-050000	484.10	65.27	0.84	4.05E+02	5.66E+02	1.94E+04
6302-006	630-060000	631-060000	484.10	65.40	1.12	5.40E+02	5.71E+02	2.62E+04
6302-007	630-070000	631-070000	484.10	65.49	1.12	5.40E+02	5.74E+02	2.64E+04
6303-001	630-010000	630-010000	496.50	63.44	1.06	5.28E+02	5.75E+02	2.45E+04
6303-002	630-020000	630-020000	496.50	63.45	1.06	5.28E+02	5.75E+02	2.45E+04
6303-003	630-030000	630-030000	496.50	63.45	1.06	5.28E+02	5.75E+02	2.45E+04
6303-004	630-040000	630-040000	496.50	63.45	1.06	5.28E+02	5.75E+02	2.45E+04
6303-005	630-050000	630-050000	496.50	63.44	1.60	7.92E+02	5.75E+02	3.68E+04
6303-006	630-060000	630-060000	496.50	63.44	2.13	1.06E+03	5.75E+02	4.90E+04
6303-007	630-070000	630-070000	496.50	63.44	2.13	1.06E+03	5.75E+02	4.90E+04
6303-008	632-010000	632-010000	496.50	63.44	2.13	1.06E+03	5.75E+02	4.90E+04
6303-009	634-010000	634-010000	496.50	63.44	2.13	1.06E+03	5.75E+02	4.90E+04
6303-010	636-010000	636-010000	496.50	63.44	1.31	6.53E+02	5.75E+02	3.03E+04
6304-001	631-010000	631-010000	496.50	62.34	1.06	5.28E+02	5.00E+02	1.91E+04
6304-002	631-020000	631-020000	496.50	62.60	1.06	5.28E+02	5.18E+02	2.03E+04

Table 06.02.01.04-1.g-3: Secondary System Metal Mass and Energy (t = 0)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
6304-003	631-030000	631-030000	496.50	62.80	1.06	5.28E+02	5.31E+02	2.13E+04
6304-004	631-040000	631-040000	496.50	62.95	1.06	5.28E+02	5.41E+02	2.21E+04
6304-005	631-050000	631-050000	496.50	63.12	1.60	7.92E+02	5.53E+02	3.43E+04
6304-006	631-060000	631-060000	496.50	63.27	2.13	1.06E+03	5.63E+02	4.73E+04
6304-007	631-070000	631-070000	496.50	63.39	2.13	1.06E+03	5.72E+02	4.85E+04
6304-008	632-010000	632-010000	496.50	63.44	2.13	1.06E+03	5.75E+02	4.90E+04
6304-009	634-010000	634-010000	496.50	63.44	2.13	1.06E+03	5.75E+02	4.90E+04
6304-010	636-010000	636-010000	496.50	63.44	1.31	6.53E+02	5.75E+02	3.03E+04
6311-001	631-010000	624-040000	496.50	62.14	1.64	8.13E+02	4.87E+02	2.80E+04
6311-002	631-020000	624-040000	496.50	62.24	1.64	8.13E+02	4.94E+02	2.88E+04
6311-003	631-030000	624-040000	496.50	62.32	1.64	8.13E+02	4.99E+02	2.94E+04
6311-004	631-040000	624-040000	496.50	62.39	1.64	8.13E+02	5.04E+02	2.98E+04
6311-005	631-050000	624-030000	496.50	62.45	2.46	1.22E+03	5.08E+02	4.54E+04
6311-006	631-060000	624-030000	496.50	62.52	3.28	1.63E+03	5.12E+02	6.15E+04
6311-007	631-070000	624-030000	496.50	62.56	3.28	1.63E+03	5.15E+02	6.22E+04
6311-008	633-010000	624-020000	496.50	62.53	3.28	1.63E+03	5.13E+02	6.16E+04
6311-009	635-010000	624-020000	496.50	62.50	3.28	1.63E+03	5.11E+02	6.13E+04
6311-010	637-010000	624-010000	496.50	62.66	2.86	1.42E+03	5.21E+02	5.55E+04
6311-011	638-010000	624-010000	496.50	62.78	4.44	2.21E+03	5.30E+02	8.86E+04
6401-001	640-010000	623-010000	496.50	63.44	8.53	4.24E+03	5.75E+02	1.96E+05
6402-001	640-010000	620-010000	496.50	63.44	8.53	4.24E+03	5.75E+02	1.96E+05
6411-001	641-010000	639-010000	496.50	63.43	13.75	6.83E+03	5.75E+02	3.16E+05
6411-002	642-010000	645-010000	496.50	63.43	13.75	6.83E+03	5.74E+02	3.16E+05
6451-001	803-010000	645-010000	496.50	63.43	1.19	5.92E+02	5.74E+02	2.74E+04
6601-001	660-010000	660-010000	496.50	63.43	81.53	4.05E+04	5.74E+02	1.87E+06
6701-001	670-010000	0-000000	484.10	65.50	759.20	3.68E+05	5.74E+02	1.80E+07
6741-001	674-010000	0-000000	488.00	65.96	2.75	1.34E+03	5.74E+02	6.56E+04
6751-001	675-010000	0-000000	488.00	65.96	8.58	4.19E+03	5.74E+02	2.05E+05
6751-002	675-020000	0-000000	488.00	65.96	13.05	6.37E+03	5.74E+02	3.12E+05
6751-003	675-030000	0-000000	488.00	65.96	12.54	6.12E+03	5.74E+02	3.00E+05
6751-004	675-040000	0-000000	488.00	65.96	21.11	1.03E+04	5.74E+02	5.04E+05
6751-005	675-050000	0-000000	488.00	65.96	12.54	6.12E+03	5.74E+02	3.00E+05
6751-006	675-060000	0-000000	488.00	65.96	9.57	4.67E+03	5.74E+02	2.29E+05
6751-007	675-070000	0-000000	488.00	65.96	18.41	8.98E+03	5.74E+02	4.40E+05
6751-008	675-080000	0-000000	488.00	65.96	3.94	1.92E+03	5.74E+02	9.42E+04
6761-001	676-010000	0-000000	488.00	65.96	2.37	1.16E+03	5.74E+02	5.66E+04
6791-001	679-010000	0-000000	488.00	65.96	2.95	1.44E+03	5.74E+02	7.05E+04
6811-001	681-010000	0-000000	488.00	65.96	6.12	2.99E+03	5.74E+02	1.46E+05
6811-002	681-020000	0-000000	488.00	65.96	5.66	2.76E+03	5.74E+02	1.35E+05
6811-003	681-030000	0-000000	488.00	65.96	8.58	4.19E+03	5.74E+02	2.05E+05
6811-004	681-040000	0-000000	488.00	65.96	6.27	3.06E+03	5.74E+02	1.50E+05
6811-005	681-050000	0-000000	488.00	65.96	5.38	2.62E+03	5.74E+02	1.28E+05
6811-006	681-060000	0-000000	488.00	65.96	6.27	3.06E+03	5.74E+02	1.50E+05
6811-007	681-070000	0-000000	488.00	65.96	22.30	1.09E+04	5.74E+02	5.32E+05
6811-008	681-080000	0-000000	488.00	65.96	2.11	1.03E+03	5.74E+02	5.04E+04
6811-009	681-090000	0-000000	488.00	65.96	28.92	1.41E+04	5.74E+02	6.90E+05

Table 06.02.01.04-1.g-3: Secondary System Metal Mass and Energy (t = 0)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
6811-010	681-100000	0-000000	488.00	65.96	12.37	6.04E+03	5.74E+02	2.95E+05
6811-011	681-110000	0-000000	488.00	65.96	4.63	2.26E+03	5.74E+02	1.11E+05
6811-012	681-120000	0-000000	488.00	65.96	6.56	3.20E+03	5.74E+02	1.57E+05
6811-013	681-130000	0-000000	488.00	65.96	22.87	1.12E+04	5.74E+02	5.46E+05
6811-014	681-140000	0-000000	488.00	65.96	6.56	3.20E+03	5.74E+02	1.57E+05
6811-015	681-150000	0-000000	488.00	65.96	97.23	4.74E+04	5.74E+02	2.32E+06
6811-016	681-160000	0-000000	488.00	65.96	7.45	3.63E+03	5.74E+02	1.78E+05
6811-017	681-170000	0-000000	488.00	65.96	18.57	9.06E+03	5.74E+02	4.43E+05
6811-018	681-180000	0-000000	488.00	65.96	3.91	1.91E+03	5.74E+02	9.34E+04
6811-019	681-190000	0-000000	488.00	65.96	67.35	3.29E+04	5.74E+02	1.61E+06
6811-020	681-200000	0-000000	488.00	65.96	11.36	5.54E+03	5.74E+02	2.71E+05
6811-021	681-210000	0-000000	488.00	65.96	13.17	6.43E+03	5.74E+02	3.14E+05
6821-001	682-010000	0-000000	488.00	65.96	3.95	1.93E+03	5.74E+02	9.43E+04
6841-001	684-010000	0-000000	488.00	65.96	3.91	1.91E+03	5.74E+02	9.32E+04
6841-002	684-020000	0-000000	488.00	65.96	11.36	5.54E+03	5.74E+02	2.71E+05
6841-003	684-030000	0-000000	488.00	65.96	8.95	4.37E+03	5.74E+02	2.14E+05
6841-004	684-040000	0-000000	488.00	65.96	11.36	5.54E+03	5.74E+02	2.71E+05
6841-005	684-050000	0-000000	488.00	65.96	5.31	2.59E+03	5.74E+02	1.27E+05
6951-001	695-010000	0-000000	488.00	65.96	53.09	2.59E+04	5.74E+02	1.27E+06
6951-002	695-020000	0-000000	488.00	66.13	53.09	2.59E+04	5.80E+02	1.29E+06
6951-003	695-030000	0-000000	488.00	66.28	53.09	2.59E+04	5.86E+02	1.31E+06
6951-004	695-040000	0-000000	488.00	66.30	53.09	2.59E+04	5.86E+02	1.32E+06
6951-005	695-050000	0-000000	488.00	66.29	53.09	2.59E+04	5.86E+02	1.32E+06
6951-006	695-060000	0-000000	488.00	66.25	53.09	2.59E+04	5.85E+02	1.31E+06
6951-007	695-070000	0-000000	488.00	66.18	53.09	2.59E+04	5.82E+02	1.30E+06
6951-008	695-080000	0-000000	488.00	66.09	53.09	2.59E+04	5.79E+02	1.29E+06
6951-009	695-090000	0-000000	488.00	65.96	53.09	2.59E+04	5.74E+02	1.27E+06
6951-010	695-100000	0-000000	488.00	65.96	53.09	2.59E+04	5.74E+02	1.27E+06
7241-001	724-040000	725-040000	496.50	62.76	20.69	1.03E+04	5.28E+02	4.11E+05
7241-002	724-030000	725-030000	496.50	62.76	28.44	1.41E+04	5.28E+02	5.64E+05
7241-003	724-020000	725-020000	496.50	62.75	20.69	1.03E+04	5.27E+02	4.09E+05
7241-004	724-010000	725-010000	496.50	62.81	20.06	9.96E+03	5.31E+02	4.02E+05
7301-001	730-010000	725-040000	496.50	63.43	4.91	2.44E+03	5.74E+02	1.13E+05
7301-002	730-020000	725-040000	496.50	63.43	4.91	2.44E+03	5.74E+02	1.13E+05
7301-003	730-030000	725-040000	496.50	63.43	4.91	2.44E+03	5.74E+02	1.13E+05
7301-004	730-040000	725-040000	496.50	63.43	4.91	2.44E+03	5.74E+02	1.13E+05
7301-005	730-050000	725-030000	496.50	63.43	7.37	3.66E+03	5.75E+02	1.70E+05
7301-006	730-060000	725-030000	496.50	63.43	9.83	4.88E+03	5.74E+02	2.26E+05
7301-007	730-070000	725-030000	496.50	63.43	9.83	4.88E+03	5.74E+02	2.26E+05
7301-008	732-010000	725-020000	496.50	63.43	9.83	4.88E+03	5.75E+02	2.26E+05
7301-009	734-010000	725-020000	496.50	63.43	9.83	4.88E+03	5.74E+02	2.26E+05
7301-010	736-010000	725-010000	496.50	63.43	8.59	4.27E+03	5.75E+02	1.98E+05
7301-011	738-010000	725-010000	496.50	63.43	13.33	6.62E+03	5.75E+02	3.07E+05
7311-001	731-010000	724-040000	496.50	62.14	4.91	2.44E+03	4.88E+02	8.41E+04
7311-002	731-020000	724-040000	496.50	62.25	4.91	2.44E+03	4.94E+02	8.64E+04
7311-003	731-030000	724-040000	496.50	62.33	4.91	2.44E+03	5.00E+02	8.81E+04

Table 06.02.01.04-1.g-3: Secondary System Metal Mass and Energy (t = 0)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
7311-004	731-040000	724-040000	496.50	62.39	4.91	2.44E+03	5.04E+02	8.95E+04
7311-005	731-050000	724-030000	496.50	62.46	7.37	3.66E+03	5.08E+02	1.36E+05
7311-006	731-060000	724-030000	496.50	62.52	9.83	4.88E+03	5.12E+02	1.85E+05
7311-007	731-070000	724-030000	496.50	62.57	9.83	4.88E+03	5.15E+02	1.87E+05
7311-008	733-010000	724-020000	496.50	62.53	9.83	4.88E+03	5.13E+02	1.85E+05
7311-009	735-010000	724-020000	496.50	62.51	9.83	4.88E+03	5.11E+02	1.84E+05
7311-010	737-010000	724-010000	496.50	62.66	8.59	4.27E+03	5.21E+02	1.67E+05
7311-011	738-010000	724-010000	496.50	62.78	13.33	6.62E+03	5.30E+02	2.66E+05
7811-001	781-010000	0-000000	488.00	65.96	31.03	1.51E+04	5.74E+02	7.41E+05
7811-002	781-020000	0-000000	488.00	65.96	28.68	1.40E+04	5.74E+02	6.85E+05
7811-003	781-030000	0-000000	488.00	65.96	43.49	2.12E+04	5.74E+02	1.04E+06
7811-004	781-040000	0-000000	488.00	65.96	31.80	1.55E+04	5.74E+02	7.59E+05
7811-005	781-050000	0-000000	488.00	65.96	27.26	1.33E+04	5.74E+02	6.51E+05
7811-006	781-060000	0-000000	488.00	65.96	31.80	1.55E+04	5.74E+02	7.59E+05
7811-007	781-070000	0-000000	488.00	65.96	113.03	5.52E+04	5.74E+02	2.70E+06
7811-008	781-080000	0-000000	488.00	65.96	10.71	5.23E+03	5.74E+02	2.56E+05
7811-009	781-090000	0-000000	488.00	65.96	146.57	7.15E+04	5.74E+02	3.50E+06
7811-010	781-100000	0-000000	488.00	65.96	62.72	3.06E+04	5.74E+02	1.50E+06
7811-011	781-110000	0-000000	488.00	65.96	23.49	1.15E+04	5.74E+02	5.61E+05
7811-012	781-120000	0-000000	488.00	65.96	33.27	1.62E+04	5.74E+02	7.94E+05
7811-013	781-130000	0-000000	488.00	65.96	115.93	5.66E+04	5.74E+02	2.77E+06
7811-014	781-140000	0-000000	488.00	65.96	33.27	1.62E+04	5.74E+02	7.94E+05
7811-015	781-150000	0-000000	488.00	65.96	492.88	2.41E+05	5.74E+02	1.18E+07
7811-016	781-160000	0-000000	488.00	65.96	37.75	1.84E+04	5.74E+02	9.01E+05
7811-017	781-170000	0-000000	488.00	65.96	94.13	4.59E+04	5.74E+02	2.25E+06
7811-018	781-180000	0-000000	488.00	65.96	19.83	9.68E+03	5.74E+02	4.73E+05
7811-019	781-190000	0-000000	488.00	65.96	341.39	1.67E+05	5.74E+02	8.15E+06
7811-020	781-200000	0-000000	488.00	65.96	57.58	2.81E+04	5.74E+02	1.37E+06
7811-021	781-210000	0-000000	488.00	65.96	66.76	3.26E+04	5.74E+02	1.59E+06
7821-001	782-010000	0-000000	488.00	65.96	20.03	9.78E+03	5.74E+02	4.78E+05
7841-001	784-010000	0-000000	488.00	65.96	19.80	9.66E+03	5.74E+02	4.73E+05
7841-002	784-020000	0-000000	488.00	65.96	57.57	2.81E+04	5.74E+02	1.37E+06
7841-003	784-030000	0-000000	488.00	65.96	45.39	2.21E+04	5.74E+02	1.08E+06
7841-004	784-040000	0-000000	488.00	65.96	57.57	2.81E+04	5.74E+02	1.37E+06
7841-005	784-050000	0-000000	488.00	65.96	26.91	1.31E+04	5.74E+02	6.42E+05
8841-001	884-010000	0-000000	488.00	61.10	3.02	1.47E+03	3.93E+02	3.34E+04
8841-002	884-020000	0-000000	488.00	61.10	9.44	4.61E+03	3.93E+02	1.05E+05
8841-003	884-030000	0-000000	488.00	61.10	9.44	4.61E+03	3.93E+02	1.05E+05
8841-004	884-040000	0-000000	488.00	61.10	9.44	4.61E+03	3.93E+02	1.05E+05
8841-005	884-050000	0-000000	488.00	61.10	9.44	4.61E+03	3.93E+02	1.05E+05
9011-001	901-010000	0-000000	488.00	61.10	10.52	5.13E+03	3.93E+02	1.17E+05
9011-002	901-020000	0-000000	488.00	61.10	10.52	5.13E+03	3.93E+02	1.17E+05
9011-003	900-010000	0-000000	488.00	61.10	9.45	4.61E+03	3.93E+02	1.05E+05
9011-004	880-010000	0-000000	488.00	61.10	9.14	4.46E+03	3.93E+02	1.01E+05
9011-005	880-020000	0-000000	488.00	61.10	9.14	4.46E+03	3.93E+02	1.01E+05
9011-006	880-030000	0-000000	488.00	61.10	9.14	4.46E+03	3.93E+02	1.01E+05

Table 06.02.01.04-1.g-3: Secondary System Metal Mass and Energy (t = 0)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
9031-001	903-010000	0-000000	488.00	61.10	3.23	1.58E+03	3.93E+02	3.58E+04
9031-002	903-020000	0-000000	488.00	61.10	3.23	1.58E+03	3.93E+02	3.58E+04
9031-003	902-010000	0-000000	488.00	61.10	1.42	6.94E+02	3.93E+02	1.58E+04
9031-004	914-010000	0-000000	488.00	61.11	3.01	1.47E+03	3.94E+02	3.34E+04
9031-005	914-020000	0-000000	488.00	61.11	3.01	1.47E+03	3.94E+02	3.34E+04
9031-006	914-030000	0-000000	488.00	61.11	3.01	1.47E+03	3.94E+02	3.34E+04
9031-007	914-040000	0-000000	488.00	61.11	3.01	1.47E+03	3.94E+02	3.34E+04
9031-008	914-050000	0-000000	488.00	61.11	3.01	1.47E+03	3.94E+02	3.34E+04
9091-001	909-010000	0-000000	488.00	61.10	0.52	2.53E+02	3.93E+02	5.74E+03
9091-002	908-010000	0-000000	488.00	61.10	0.48	2.34E+02	3.93E+02	5.32E+03
9091-003	906-010000	0-000000	488.00	61.10	0.56	2.72E+02	3.93E+02	6.19E+03
9091-004	905-010000	0-000000	488.00	61.10	1.16	5.68E+02	3.93E+02	1.29E+04
9131-001	913-010000	0-000000	488.00	61.11	0.19	9.10E+01	3.94E+02	2.07E+03
9131-002	913-020000	0-000000	488.00	61.11	0.19	9.10E+01	3.94E+02	2.07E+03
9131-003	911-010000	0-000000	488.00	61.11	0.24	1.17E+02	3.94E+02	2.66E+03
9131-004	911-020000	0-000000	488.00	61.11	0.24	1.17E+02	3.94E+02	2.66E+03
9171-001	917-010000	0-000000	488.00	61.10	4.22	2.06E+03	3.93E+02	4.68E+04
9171-002	910-010000	0-000000	488.00	61.10	2.03	9.91E+02	3.93E+02	2.25E+04
9171-003	882-010000	0-000000	488.00	61.10	3.88	1.89E+03	3.93E+02	4.30E+04
9171-004	977-010000	0-000000	488.00	61.10	4.73	2.31E+03	3.93E+02	5.25E+04
9171-005	977-020000	0-000000	488.00	61.10	4.73	2.31E+03	3.93E+02	5.25E+04
9791-001	979-010000	0-000000	488.00	61.11	4.94	2.41E+03	3.94E+02	5.49E+04
9791-002	979-020000	0-000000	488.00	61.11	4.94	2.41E+03	3.94E+02	5.49E+04

Table 06.02.01.04-1.g-4: Primary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
100-010000	112.11	0.00	42.56	6.60	0.00	4771.76	4.77E+03	6.14E+02	1.05E+03	2.93E+06
105-010000	112.11	0.00	42.56	6.60	0.00	4771.65	4.77E+03	6.14E+02	1.05E+03	2.93E+06
110-010000	90.69	0.00	42.56	6.60	0.00	3860.12	3.86E+03	6.14E+02	1.05E+03	2.37E+06
115-010000	99.53	0.00	42.56	6.60	0.00	4236.30	4.24E+03	6.14E+02	1.05E+03	2.60E+06
117-010000	34.49	0.00	42.56	6.58	0.00	1467.81	1.47E+03	6.14E+02	1.05E+03	9.01E+05
120-010000	605.62	0.00	42.57	6.63	0.00	25779.26	2.58E+04	6.14E+02	1.05E+03	1.58E+07
121-010000	90.01	0.00	42.56	6.62	0.00	3830.99	3.83E+03	6.14E+02	1.05E+03	2.35E+06
125-010000	104.55	0.00	42.75	6.61	0.00	4468.82	4.47E+03	6.11E+02	1.05E+03	2.73E+06
125-020000	104.55	0.00	42.91	6.60	0.00	4486.28	4.49E+03	6.08E+02	1.05E+03	2.73E+06
125-030000	104.55	0.00	43.07	6.59	0.00	4502.48	4.50E+03	6.06E+02	1.05E+03	2.73E+06
125-040000	104.55	0.00	43.21	6.58	0.00	4517.85	4.52E+03	6.03E+02	1.05E+03	2.73E+06
125-050000	156.83	0.00	43.41	6.57	0.00	6807.59	6.81E+03	6.00E+02	1.05E+03	4.09E+06
125-060000	209.09	0.00	43.63	6.55	0.00	9122.47	9.12E+03	5.97E+02	1.05E+03	5.44E+06
125-070000	209.09	0.00	43.82	6.53	0.00	9162.41	9.16E+03	5.93E+02	1.05E+03	5.44E+06
125-080000	209.09	0.00	43.99	6.51	0.00	9197.12	9.20E+03	5.90E+02	1.05E+03	5.43E+06
125-090000	209.09	0.00	44.13	6.49	0.00	9227.23	9.23E+03	5.88E+02	1.05E+03	5.43E+06
125-100000	182.76	0.00	44.24	6.48	0.00	8086.03	8.09E+03	5.86E+02	1.05E+03	4.74E+06
125-110000	182.76	0.00	44.33	6.47	0.00	8102.66	8.10E+03	5.84E+02	1.05E+03	4.73E+06
125-120000	209.09	0.00	44.42	6.46	0.00	9288.70	9.29E+03	5.83E+02	1.05E+03	5.41E+06
125-130000	209.09	0.00	44.50	6.46	0.00	9305.43	9.31E+03	5.81E+02	1.05E+03	5.41E+06
125-140000	209.09	0.00	44.58	6.45	0.00	9321.11	9.32E+03	5.80E+02	1.05E+03	5.41E+06
125-150000	209.09	0.00	44.65	6.45	0.00	9336.79	9.34E+03	5.79E+02	1.05E+03	5.40E+06
125-160000	156.83	0.00	44.73	6.44	0.00	7015.07	7.02E+03	5.77E+02	1.05E+03	4.05E+06
125-170000	104.55	0.00	44.80	6.44	0.00	4683.77	4.68E+03	5.76E+02	1.05E+03	2.70E+06
125-180000	104.55	0.00	44.89	6.44	0.00	4692.76	4.69E+03	5.75E+02	1.05E+03	2.70E+06
125-190000	104.55	0.00	44.99	6.44	0.00	4703.84	4.70E+03	5.73E+02	1.05E+03	2.69E+06
125-200000	104.55	0.00	45.12	6.44	0.00	4717.53	4.72E+03	5.71E+02	1.05E+03	2.69E+06
129-010000	90.01	0.00	45.12	6.43	0.00	4061.32	4.06E+03	5.71E+02	1.05E+03	2.32E+06
130-010000	605.62	0.00	45.12	6.44	0.00	27327.82	2.73E+04	5.71E+02	1.05E+03	1.56E+07
132-010000	34.49	0.00	45.12	6.37	0.00	1555.96	1.56E+03	5.71E+02	1.05E+03	8.88E+05
135-010000	51.86	0.00	45.12	6.37	0.00	2339.65	2.34E+03	5.71E+02	1.05E+03	1.33E+06
140-010000	61.59	0.00	45.12	6.37	0.00	2778.56	2.78E+03	5.71E+02	1.05E+03	1.59E+06
145-010000	116.68	0.00	45.12	6.38	0.00	5264.03	5.26E+03	5.71E+02	1.05E+03	3.00E+06
150-010000	102.59	0.00	45.12	6.37	0.00	4628.50	4.63E+03	5.71E+02	1.05E+03	2.64E+06
155-010000	108.95	0.00	45.12	6.36	0.00	4915.21	4.92E+03	5.71E+02	1.05E+03	2.80E+06
160-010000	413.10	0.00	45.13	6.60	0.00	18642.38	1.86E+04	5.71E+02	1.05E+03	1.06E+07
165-010000	105.12	0.00	45.15	6.86	0.00	4746.17	4.75E+03	5.71E+02	1.04E+03	2.71E+06
170-010000	105.12	0.00	45.15	6.86	0.00	4746.17	4.75E+03	5.71E+02	1.05E+03	2.71E+06
175-010000	135.84	0.00	45.15	6.85	0.00	6132.81	6.13E+03	5.71E+02	1.05E+03	3.50E+06
180-010000	116.69	0.00	45.15	6.85	0.00	5268.48	5.27E+03	5.71E+02	1.05E+03	3.01E+06
200-010000	37.37	0.00	42.56	6.61	0.00	1590.59	1.59E+03	6.14E+02	1.05E+03	9.76E+05
205-010000	37.37	0.00	42.56	6.60	0.00	1590.55	1.59E+03	6.14E+02	1.05E+03	9.76E+05
210-010000	30.23	0.00	42.56	6.60	0.00	1286.71	1.29E+03	6.14E+02	1.05E+03	7.90E+05
215-010000	33.18	0.00	42.56	6.60	0.00	1412.10	1.41E+03	6.14E+02	1.05E+03	8.67E+05

Table 06.02.01.04-1.g-4: Primary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
217-010000	11.50	0.00	42.56	6.58	0.00	489.27	4.89E+02	6.14E+02	1.05E+03	3.00E+05
220-010000	201.87	0.00	42.57	6.63	0.00	8593.09	8.59E+03	6.14E+02	1.05E+03	5.27E+06
221-010000	30.00	0.00	42.56	6.62	0.00	1277.00	1.28E+03	6.14E+02	1.05E+03	7.84E+05
225-010000	34.85	0.00	42.75	6.61	0.00	1489.61	1.49E+03	6.11E+02	1.05E+03	9.10E+05
225-020000	34.85	0.00	42.91	6.60	0.00	1495.39	1.50E+03	6.08E+02	1.05E+03	9.10E+05
225-030000	34.85	0.00	43.07	6.59	0.00	1500.79	1.50E+03	6.06E+02	1.05E+03	9.09E+05
225-040000	34.85	0.00	43.21	6.58	0.00	1505.88	1.51E+03	6.03E+02	1.05E+03	9.09E+05
225-050000	52.28	0.00	43.41	6.57	0.00	2269.09	2.27E+03	6.00E+02	1.05E+03	1.36E+06
225-060000	69.70	0.00	43.63	6.55	0.00	3040.69	3.04E+03	5.97E+02	1.05E+03	1.81E+06
225-070000	69.70	0.00	43.82	6.53	0.00	3053.94	3.05E+03	5.93E+02	1.05E+03	1.81E+06
225-080000	69.70	0.00	43.98	6.51	0.00	3065.44	3.07E+03	5.91E+02	1.05E+03	1.81E+06
225-090000	69.70	0.00	44.13	6.49	0.00	3075.54	3.08E+03	5.88E+02	1.05E+03	1.81E+06
225-100000	60.92	0.00	44.24	6.48	0.00	2695.09	2.70E+03	5.86E+02	1.05E+03	1.58E+06
225-110000	60.92	0.00	44.33	6.47	0.00	2700.58	2.70E+03	5.84E+02	1.05E+03	1.58E+06
225-120000	69.70	0.00	44.42	6.46	0.00	3095.96	3.10E+03	5.83E+02	1.05E+03	1.80E+06
225-130000	69.70	0.00	44.50	6.46	0.00	3101.54	3.10E+03	5.81E+02	1.05E+03	1.80E+06
225-140000	69.70	0.00	44.57	6.45	0.00	3106.70	3.11E+03	5.80E+02	1.05E+03	1.80E+06
225-150000	69.70	0.00	44.65	6.45	0.00	3111.92	3.11E+03	5.79E+02	1.05E+03	1.80E+06
225-160000	52.28	0.00	44.73	6.44	0.00	2338.10	2.34E+03	5.78E+02	1.05E+03	1.35E+06
225-170000	34.85	0.00	44.80	6.44	0.00	1561.05	1.56E+03	5.76E+02	1.05E+03	9.00E+05
225-180000	34.85	0.00	44.88	6.44	0.00	1564.04	1.56E+03	5.75E+02	1.05E+03	8.99E+05
225-190000	34.85	0.00	44.99	6.44	0.00	1567.70	1.57E+03	5.73E+02	1.05E+03	8.98E+05
225-200000	34.85	0.00	45.12	6.44	0.00	1572.27	1.57E+03	5.71E+02	1.05E+03	8.97E+05
229-010000	30.00	0.00	45.12	6.43	0.00	1353.56	1.35E+03	5.71E+02	1.05E+03	7.72E+05
230-010000	201.87	0.00	45.12	6.44	0.00	9107.86	9.11E+03	5.71E+02	1.05E+03	5.20E+06
232-010000	11.50	0.00	45.11	6.37	0.00	518.58	5.19E+02	5.71E+02	1.05E+03	2.96E+05
235-010000	17.29	0.00	45.11	6.37	0.00	779.76	7.80E+02	5.71E+02	1.05E+03	4.45E+05
240-010000	20.53	0.00	45.11	6.37	0.00	926.04	9.26E+02	5.71E+02	1.05E+03	5.29E+05
245-010000	38.89	0.00	45.11	6.38	0.00	1754.41	1.75E+03	5.71E+02	1.05E+03	1.00E+06
250-010000	34.20	0.00	45.11	6.37	0.00	1542.62	1.54E+03	5.71E+02	1.05E+03	8.80E+05
255-010000	36.32	0.00	45.11	6.36	0.00	1638.15	1.64E+03	5.71E+02	1.05E+03	9.35E+05
260-010000	137.70	0.00	45.12	6.60	0.00	6213.30	6.21E+03	5.71E+02	1.05E+03	3.55E+06
265-010000	35.04	0.00	45.14	6.86	0.00	1581.82	1.58E+03	5.71E+02	1.04E+03	9.03E+05
270-010000	35.04	0.00	45.14	6.86	0.00	1581.82	1.58E+03	5.71E+02	1.05E+03	9.03E+05
275-010000	45.28	0.00	45.14	6.85	0.00	2044.00	2.04E+03	5.71E+02	1.05E+03	1.17E+06
280-010000	38.90	0.00	45.14	6.85	0.00	1755.93	1.76E+03	5.71E+02	1.05E+03	1.00E+06
300-010000	33.52	0.00	45.12	6.91	0.00	1512.57	1.51E+03	5.71E+02	1.04E+03	8.64E+05
301-010000	100.56	0.00	45.14	6.91	0.00	4539.73	4.54E+03	5.71E+02	1.04E+03	2.59E+06
302-010000	70.99	0.00	45.15	6.90	0.00	3205.18	3.21E+03	5.71E+02	1.04E+03	1.83E+06
303-010000	212.98	0.00	45.15	6.90	0.00	9617.03	9.62E+03	5.71E+02	1.04E+03	5.49E+06
304-010000	78.30	0.00	45.15	6.92	0.00	3535.02	3.54E+03	5.71E+02	1.04E+03	2.02E+06
305-010000	234.90	0.00	45.16	6.92	0.00	10606.68	1.06E+04	5.71E+02	1.04E+03	6.05E+06
306-010000	78.30	0.00	45.15	6.93	0.00	3535.09	3.54E+03	5.71E+02	1.04E+03	2.02E+06
307-010000	234.90	0.00	45.16	6.93	0.00	10606.92	1.06E+04	5.71E+02	1.04E+03	6.06E+06
308-010000	23.49	0.00	45.15	6.93	0.00	1060.56	1.06E+03	5.71E+02	1.04E+03	6.06E+05

Table 06.02.01.04-1.g-4: Primary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
309-010000	70.47	0.00	45.16	6.93	0.00	3182.19	3.18E+03	5.71E+02	1.04E+03	1.82E+06
310-010000	148.04	0.00	45.15	6.93	0.00	6683.86	6.68E+03	5.71E+02	1.04E+03	3.82E+06
311-010000	444.12	0.00	45.16	6.93	0.00	20054.68	2.01E+04	5.71E+02	1.04E+03	1.14E+07
312-010000	13.09	0.00	45.14	6.87	0.00	590.94	5.91E+02	5.71E+02	1.04E+03	3.37E+05
313-010000	39.27	0.00	45.15	6.87	0.00	1773.07	1.77E+03	5.71E+02	1.04E+03	1.01E+06
314-010000	11.36	0.00	45.14	6.87	0.00	512.81	5.13E+02	5.71E+02	1.04E+03	2.93E+05
315-010000	34.08	0.00	45.15	6.88	0.00	1538.66	1.54E+03	5.71E+02	1.04E+03	8.78E+05
316-010000	36.98	0.00	44.97	6.85	0.00	1663.21	1.66E+03	5.74E+02	1.05E+03	9.55E+05
317-010000	110.95	0.00	44.98	6.85	0.00	4990.20	4.99E+03	5.74E+02	1.05E+03	2.86E+06
318-010000	36.98	0.00	44.50	6.82	0.00	1645.79	1.65E+03	5.82E+02	1.05E+03	9.58E+05
319-010000	110.95	0.00	44.51	6.82	0.00	4937.83	4.94E+03	5.82E+02	1.05E+03	2.87E+06
320-010000	36.98	0.00	43.86	6.80	0.00	1622.20	1.62E+03	5.93E+02	1.05E+03	9.62E+05
321-010000	110.95	0.00	43.87	6.80	0.00	4866.93	4.87E+03	5.93E+02	1.05E+03	2.89E+06
322-010000	36.98	0.00	43.19	6.78	0.00	1597.31	1.60E+03	6.04E+02	1.05E+03	9.65E+05
323-010000	110.95	0.00	43.19	6.78	0.00	4792.15	4.79E+03	6.04E+02	1.05E+03	2.89E+06
324-010000	36.98	0.00	42.69	6.76	0.00	1578.71	1.58E+03	6.12E+02	1.05E+03	9.66E+05
325-010000	110.95	0.00	42.69	6.76	0.00	4736.12	4.74E+03	6.12E+02	1.05E+03	2.90E+06
326-010000	36.98	0.00	42.50	6.74	0.00	1571.61	1.57E+03	6.15E+02	1.05E+03	9.67E+05
327-010000	110.95	0.00	42.50	6.74	0.00	4714.82	4.71E+03	6.15E+02	1.05E+03	2.90E+06
330-010000	24.91	0.00	42.50	6.70	0.00	1058.50	1.06E+03	6.15E+02	1.05E+03	6.51E+05
331-010000	74.72	0.00	42.50	6.70	0.00	3175.43	3.18E+03	6.15E+02	1.05E+03	1.95E+06
340-010000	3.01	0.00	45.13	6.73	0.00	136.02	1.36E+02	5.71E+02	1.05E+03	7.77E+04
340-020000	2.01	0.00	45.12	6.72	0.00	90.77	9.08E+01	5.71E+02	1.05E+03	5.18E+04
340-030000	2.01	0.00	45.10	6.71	0.00	90.74	9.07E+01	5.71E+02	1.05E+03	5.19E+04
340-040000	0.48	0.00	45.10	6.70	0.00	21.84	2.18E+01	5.72E+02	1.05E+03	1.25E+04
341-010000	9.04	0.00	45.14	6.73	0.00	408.13	4.08E+02	5.71E+02	1.05E+03	2.33E+05
341-020000	6.04	0.00	45.13	6.72	0.00	272.35	2.72E+02	5.71E+02	1.05E+03	1.56E+05
341-030000	6.04	0.00	45.11	6.71	0.00	272.28	2.72E+02	5.71E+02	1.05E+03	1.56E+05
341-040000	1.45	0.00	45.11	6.70	0.00	65.54	6.55E+01	5.71E+02	1.05E+03	3.74E+04
342-010000	7.42	0.00	45.13	6.72	0.00	335.02	3.35E+02	5.71E+02	1.05E+03	1.91E+05
342-020000	7.42	0.00	45.13	6.71	0.00	335.02	3.35E+02	5.71E+02	1.05E+03	1.91E+05
342-030000	7.42	0.00	45.13	6.71	0.00	335.01	3.35E+02	5.71E+02	1.05E+03	1.91E+05
342-040000	2.49	0.00	45.13	6.70	0.00	112.47	1.12E+02	5.71E+02	1.05E+03	6.42E+04
343-010000	22.27	0.00	45.14	6.72	0.00	1005.18	1.01E+03	5.71E+02	1.05E+03	5.74E+05
343-020000	22.27	0.00	45.14	6.71	0.00	1005.18	1.01E+03	5.71E+02	1.05E+03	5.74E+05
343-030000	22.27	0.00	45.14	6.70	0.00	1005.16	1.01E+03	5.71E+02	1.05E+03	5.74E+05
343-040000	7.48	0.00	45.13	6.70	0.00	337.44	3.37E+02	5.71E+02	1.05E+03	1.93E+05
352-010000	144.89	0.00	42.57	6.69	0.00	6168.50	6.17E+03	6.14E+02	1.05E+03	3.79E+06
353-010000	434.67	0.00	42.57	6.69	0.00	18505.47	1.85E+04	6.14E+02	1.05E+03	1.14E+07
354-010000	70.58	0.00	42.58	6.69	0.00	3004.99	3.00E+03	6.14E+02	1.05E+03	1.84E+06
355-010000	211.74	0.00	42.58	6.69	0.00	9014.96	9.01E+03	6.14E+02	1.05E+03	5.53E+06
356-010000	138.93	0.00	45.10	6.69	0.00	6265.88	6.27E+03	5.71E+02	1.05E+03	3.58E+06
357-010000	439.80	0.00	45.12	6.69	0.00	19843.25	1.98E+04	5.71E+02	1.05E+03	1.13E+07
360-010000	47.69	0.00	44.82	6.71	0.00	2137.41	2.14E+03	5.76E+02	1.05E+03	1.23E+06
360-020000	77.33	0.00	45.03	6.70	0.00	3482.40	3.48E+03	5.73E+02	1.05E+03	1.99E+06

Table 06.02.01.04-1.g-4: Primary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
361-010000	143.08	0.00	44.80	6.71	0.00	6409.33	6.41E+03	5.77E+02	1.05E+03	3.70E+06
361-020000	231.97	0.00	45.03	6.70	0.00	10445.15	1.04E+04	5.73E+02	1.05E+03	5.98E+06
364-010000	259.62	0.00	45.11	6.69	0.00	11712.41	1.17E+04	5.71E+02	1.05E+03	6.69E+06
400-010000	82.38	0.00	42.35	6.59	0.00	3488.45	3.49E+03	6.17E+02	1.05E+03	2.15E+06
408-010000	161.12	0.00	41.84	6.57	0.00	6741.53	6.74E+03	6.25E+02	1.05E+03	4.21E+06
410-010000	395.60	0.00	39.58	6.57	0.00	15658.56	1.57E+04	6.58E+02	1.05E+03	1.03E+07
410-020000	395.60	0.00	37.77	6.56	0.00	14943.32	1.49E+04	6.82E+02	1.05E+03	1.02E+07
410-030000	395.60	0.00	37.04	6.55	0.00	14651.37	1.47E+04	6.91E+02	1.05E+03	1.01E+07
410-040000	159.43	236.17	36.83	6.54	1544.09	5871.50	7.42E+03	6.94E+02	1.05E+03	5.69E+06
410-050000	0.00	395.60	36.78	6.52	2580.41	0.00	2.58E+03	6.94E+02	1.05E+03	2.71E+06
410-060000	0.00	395.60	36.78	6.54	2586.66	0.00	2.59E+03	6.94E+02	1.05E+03	2.72E+06
412-010000	0.00	161.12	36.78	6.53	1052.48	0.00	1.05E+03	6.94E+02	1.05E+03	1.11E+06

Table 06.02.01.04-1.g-5: Secondary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
620-010000	366.65	0.00	44.28	2.96	0.00	16236.14	1.62E+04	5.76E+02	1.10E+03	9.36E+06
623-010000	366.65	0.00	44.28	2.96	0.00	16236.14	1.62E+04	5.76E+02	1.10E+03	9.36E+06
624-010000	155.89	0.00	50.60	2.96	0.00	7888.65	7.89E+03	4.54E+02	1.10E+03	3.58E+06
624-020000	43.01	0.00	50.54	2.96	0.00	2173.71	2.17E+03	4.55E+02	1.10E+03	9.90E+05
624-030000	59.13	0.00	50.47	2.97	0.00	2984.34	2.98E+03	4.57E+02	1.10E+03	1.36E+06
624-040000	43.01	0.00	50.42	2.99	0.00	2168.51	2.17E+03	4.58E+02	1.10E+03	9.93E+05
625-010000	180.02	0.00	44.30	2.96	0.00	7974.53	7.97E+03	5.76E+02	1.10E+03	4.59E+06
625-020000	73.35	0.00	44.32	2.97	0.00	3250.58	3.25E+03	5.76E+02	1.10E+03	1.87E+06
625-030000	100.85	0.00	44.35	2.98	0.00	4472.44	4.47E+03	5.75E+02	1.10E+03	2.57E+06
625-040000	73.35	0.00	44.37	2.99	0.00	3254.18	3.25E+03	5.75E+02	1.10E+03	1.87E+06
630-010000	59.39	10.73	44.27	2.98	31.98	2629.30	2.66E+03	5.77E+02	1.10E+03	1.55E+06
630-020000	51.54	18.58	44.23	2.98	55.36	2279.62	2.33E+03	5.77E+02	1.10E+03	1.38E+06
630-030000	45.93	24.19	44.22	2.98	72.04	2030.85	2.10E+03	5.78E+02	1.10E+03	1.25E+06
630-040000	42.14	27.98	44.22	2.98	83.24	1863.30	1.95E+03	5.78E+02	1.10E+03	1.17E+06
630-050000	55.75	49.43	44.22	2.97	147.02	2465.01	2.61E+03	5.78E+02	1.10E+03	1.59E+06
630-060000	70.68	69.56	44.22	2.97	206.72	3125.62	3.33E+03	5.77E+02	1.10E+03	2.03E+06
630-070000	71.10	69.13	44.23	2.97	205.22	3144.72	3.35E+03	5.77E+02	1.10E+03	2.04E+06
631-010000	70.12	0.00	49.25	2.99	0.00	3453.22	3.45E+03	4.83E+02	1.10E+03	1.67E+06
631-020000	70.12	0.00	48.26	2.99	0.00	3383.88	3.38E+03	5.04E+02	1.10E+03	1.70E+06
631-030000	70.12	0.00	47.43	2.98	0.00	3325.61	3.33E+03	5.20E+02	1.10E+03	1.73E+06
631-040000	70.12	0.00	46.74	2.98	0.00	3277.37	3.28E+03	5.33E+02	1.10E+03	1.75E+06
631-050000	105.18	0.00	45.96	2.98	0.00	4833.65	4.83E+03	5.47E+02	1.10E+03	2.65E+06
631-060000	140.09	0.14	45.17	2.98	0.42	6327.95	6.33E+03	5.61E+02	1.10E+03	3.55E+06
631-070000	134.90	5.33	44.54	2.97	15.83	6009.13	6.02E+03	5.72E+02	1.10E+03	3.46E+06
632-010000	72.64	67.59	44.24	2.97	200.50	3213.89	3.41E+03	5.77E+02	1.10E+03	2.08E+06
633-010000	129.43	10.80	44.35	2.97	32.04	5739.89	5.77E+03	5.75E+02	1.10E+03	3.34E+06
634-010000	76.99	63.24	44.25	2.96	187.46	3406.46	3.59E+03	5.77E+02	1.10E+03	2.17E+06
635-010000	119.76	20.47	44.27	2.96	60.68	5301.33	5.36E+03	5.77E+02	1.10E+03	3.12E+06
636-010000	49.14	37.53	44.25	2.96	111.10	2174.74	2.29E+03	5.77E+02	1.10E+03	1.38E+06
637-010000	74.62	12.05	44.26	2.96	35.67	3302.75	3.34E+03	5.77E+02	1.10E+03	1.94E+06
638-010000	351.08	258.44	44.26	2.96	764.51	15537.95	1.63E+04	5.77E+02	1.10E+03	9.81E+06
639-010000	635.28	0.00	44.28	2.95	0.00	28132.19	2.81E+04	5.76E+02	1.10E+03	1.62E+07
640-010000	36.97	88.34	44.26	2.96	261.15	1636.27	1.90E+03	5.77E+02	1.10E+03	1.23E+06
641-010000	28.79	88.72	44.27	2.96	262.19	1274.63	1.54E+03	5.77E+02	1.10E+03	1.02E+06
642-010000	312.34	7.68	44.28	2.95	22.67	13830.35	1.39E+04	5.76E+02	1.10E+03	8.00E+06
645-010000	1027.99	47.31	44.28	2.95	139.48	45521.31	4.57E+04	5.76E+02	1.10E+03	2.64E+07
650-010000	24.91	805.30	44.30	2.95	2372.00	1103.32	3.48E+03	5.76E+02	1.10E+03	3.25E+06
660-010000	0.00	703.68	44.30	2.94	2071.83	0.00	2.07E+03	5.76E+02	1.10E+03	2.28E+06
670-010000	0.00	400.00	44.30	2.94	1177.52	0.00	1.18E+03	5.76E+02	1.10E+03	1.30E+06
803-010000	2.26	0.00	44.28	2.95	0.00	100.05	1.00E+02	5.76E+02	1.10E+03	5.77E+04
720-010000	1099.94	0.00	44.29	2.95	0.00	48719.64	4.87E+04	5.76E+02	1.10E+03	2.81E+07
723-010000	1099.94	0.00	44.29	2.95	0.00	48719.64	4.87E+04	5.76E+02	1.10E+03	2.81E+07
724-010000	467.68	0.00	50.58	2.95	0.00	23655.67	2.37E+04	4.55E+02	1.10E+03	1.08E+07
724-020000	129.02	0.00	50.52	2.96	0.00	6518.43	6.52E+03	4.56E+02	1.10E+03	2.97E+06

Table 06.02.01.04-1.g-5: Secondary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
724-030000	177.40	0.00	50.45	2.97	0.00	8949.50	8.95E+03	4.58E+02	1.10E+03	4.09E+06
724-040000	129.02	0.00	50.40	2.98	0.00	6502.94	6.50E+03	4.59E+02	1.10E+03	2.98E+06
725-010000	540.02	0.00	44.31	2.96	0.00	23926.62	2.39E+04	5.76E+02	1.10E+03	1.38E+07
725-020000	220.04	0.00	44.33	2.97	0.00	9753.71	9.75E+03	5.76E+02	1.10E+03	5.62E+06
725-030000	302.55	0.00	44.36	2.98	0.00	13420.04	1.34E+04	5.75E+02	1.10E+03	7.72E+06
725-040000	220.04	0.00	44.38	2.99	0.00	9764.27	9.76E+03	5.75E+02	1.10E+03	5.61E+06
730-010000	178.38	31.97	44.28	2.98	95.27	7898.31	7.99E+03	5.77E+02	1.10E+03	4.66E+06
730-020000	155.03	55.32	44.24	2.98	164.69	6858.09	7.02E+03	5.77E+02	1.10E+03	4.14E+06
730-030000	137.99	72.36	44.22	2.98	215.32	6102.42	6.32E+03	5.77E+02	1.10E+03	3.76E+06
730-040000	126.63	83.72	44.22	2.97	249.01	5599.58	5.85E+03	5.78E+02	1.10E+03	3.51E+06
730-050000	167.55	147.99	44.22	2.97	439.96	7409.50	7.85E+03	5.78E+02	1.10E+03	4.76E+06
730-060000	211.61	209.09	44.23	2.97	621.13	9359.11	9.98E+03	5.77E+02	1.10E+03	6.09E+06
730-070000	215.40	205.30	44.24	2.97	609.23	9528.08	1.01E+04	5.77E+02	1.10E+03	6.17E+06
731-010000	210.35	0.00	49.24	2.99	0.00	10357.16	1.04E+04	4.84E+02	1.10E+03	5.01E+06
731-020000	210.35	0.00	48.26	2.98	0.00	10150.81	1.02E+04	5.04E+02	1.10E+03	5.11E+06
731-030000	210.35	0.00	47.43	2.98	0.00	9976.85	9.98E+03	5.20E+02	1.10E+03	5.19E+06
731-040000	210.35	0.00	46.75	2.98	0.00	9832.97	9.83E+03	5.33E+02	1.10E+03	5.24E+06
731-050000	315.54	0.00	45.96	2.98	0.00	14503.21	1.45E+04	5.47E+02	1.10E+03	7.94E+06
731-060000	420.28	0.42	45.18	2.97	1.25	18988.92	1.90E+04	5.61E+02	1.10E+03	1.07E+07
731-070000	405.55	15.15	44.55	2.97	44.97	18068.55	1.81E+04	5.72E+02	1.10E+03	1.04E+07
732-010000	217.08	203.62	44.25	2.97	603.77	9605.34	1.02E+04	5.77E+02	1.10E+03	6.21E+06
733-010000	388.72	31.97	44.35	2.97	94.83	17241.08	1.73E+04	5.75E+02	1.10E+03	1.00E+07
734-010000	230.54	190.16	44.25	2.96	563.39	10201.71	1.08E+04	5.77E+02	1.10E+03	6.51E+06
735-010000	359.28	61.42	44.27	2.96	181.98	15905.83	1.61E+04	5.77E+02	1.10E+03	9.37E+06
736-010000	150.03	109.99	44.26	2.96	325.46	6639.87	6.97E+03	5.77E+02	1.10E+03	4.19E+06
737-010000	224.39	35.62	44.26	2.96	105.42	9932.16	1.00E+04	5.77E+02	1.10E+03	5.84E+06
738-010000	1053.26	775.31	44.26	2.96	2292.60	46618.18	4.89E+04	5.77E+02	1.10E+03	2.94E+07
739-010000	1905.85	0.00	44.29	2.95	0.00	84413.91	8.44E+04	5.76E+02	1.10E+03	4.86E+07
740-010000	111.65	264.28	44.27	2.95	780.91	4942.52	5.72E+03	5.77E+02	1.10E+03	3.71E+06
741-010000	87.08	265.46	44.28	2.95	783.86	3855.47	4.64E+03	5.77E+02	1.10E+03	3.09E+06
742-010000	937.01	23.04	44.28	2.95	67.97	41493.82	4.16E+04	5.76E+02	1.10E+03	2.40E+07
745-010000	3216.21	9.68	44.29	2.95	28.51	142449.26	1.42E+05	5.76E+02	1.10E+03	8.21E+07
750-010000	74.72	2415.89	44.30	2.94	7112.14	3310.02	1.04E+04	5.76E+02	1.10E+03	9.74E+06
760-010000	0.00	2111.03	44.30	2.94	6211.92	0.00	6.21E+03	5.76E+02	1.10E+03	6.84E+06
770-010000	0.00	1200.00	44.31	2.94	3530.52	0.00	3.53E+03	5.76E+02	1.10E+03	3.89E+06
674-010000	0.00	10.52	44.32	2.94	30.92	0.00	3.09E+01	5.76E+02	1.10E+03	3.41E+04
675-010000	0.00	32.83	44.32	2.94	96.51	0.00	9.65E+01	5.76E+02	1.10E+03	1.06E+05
675-020000	0.00	49.95	44.32	2.94	146.80	0.00	1.47E+02	5.76E+02	1.10E+03	1.62E+05
675-030000	0.00	48.01	44.32	2.94	141.10	0.00	1.41E+02	5.76E+02	1.10E+03	1.55E+05
675-040000	0.00	80.80	44.32	2.94	237.50	0.00	2.37E+02	5.76E+02	1.10E+03	2.62E+05
675-050000	0.00	48.01	44.32	2.94	141.09	0.00	1.41E+02	5.76E+02	1.10E+03	1.55E+05
675-060000	0.00	36.63	44.32	2.94	107.63	0.00	1.08E+02	5.76E+02	1.10E+03	1.19E+05
675-070000	0.00	70.45	44.32	2.94	206.99	0.00	2.07E+02	5.76E+02	1.10E+03	2.28E+05
675-080000	0.00	15.10	44.32	2.94	44.35	0.00	4.44E+01	5.76E+02	1.10E+03	4.89E+04
676-010000	0.00	9.07	44.32	2.94	26.66	0.00	2.67E+01	5.76E+02	1.10E+03	2.94E+04

Table 06.02.01.04-1.g-5: Secondary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
679-010000	0.00	11.30	44.32	2.94	33.21	0.00	3.32E+01	5.76E+02	1.10E+03	3.66E+04
681-010000	0.00	23.43	44.32	2.94	68.81	0.00	6.88E+01	5.76E+02	1.10E+03	7.58E+04
681-020000	0.00	21.65	44.32	2.94	63.60	0.00	6.36E+01	5.76E+02	1.10E+03	7.01E+04
681-030000	0.00	32.83	44.32	2.94	96.43	0.00	9.64E+01	5.76E+02	1.10E+03	1.06E+05
681-040000	0.00	24.01	44.32	2.94	70.50	0.00	7.05E+01	5.76E+02	1.10E+03	7.77E+04
681-050000	0.00	20.58	44.32	2.94	60.44	0.00	6.04E+01	5.76E+02	1.10E+03	6.66E+04
681-060000	0.00	24.01	44.32	2.94	70.50	0.00	7.05E+01	5.76E+02	1.10E+03	7.77E+04
681-070000	0.00	85.34	44.32	2.94	250.60	0.00	2.51E+02	5.76E+02	1.10E+03	2.76E+05
681-080000	0.00	8.08	44.32	2.94	23.74	0.00	2.37E+01	5.76E+02	1.10E+03	2.62E+04
681-090000	0.00	110.67	44.32	2.94	324.94	0.00	3.25E+02	5.76E+02	1.10E+03	3.58E+05
681-100000	0.00	47.35	44.33	2.94	139.02	0.00	1.39E+02	5.76E+02	1.10E+03	1.53E+05
681-110000	0.00	17.74	44.33	2.94	52.07	0.00	5.21E+01	5.76E+02	1.10E+03	5.74E+04
681-120000	0.00	25.12	44.33	2.94	73.75	0.00	7.37E+01	5.76E+02	1.10E+03	8.13E+04
681-130000	0.00	87.53	44.33	2.94	256.93	0.00	2.57E+02	5.76E+02	1.10E+03	2.83E+05
681-140000	0.00	25.12	44.33	2.94	73.73	0.00	7.37E+01	5.76E+02	1.10E+03	8.12E+04
681-150000	0.00	372.13	44.33	2.93	1091.64	0.00	1.09E+03	5.76E+02	1.10E+03	1.20E+06
681-160000	0.00	28.50	44.33	2.93	83.60	0.00	8.36E+01	5.76E+02	1.10E+03	9.21E+04
681-170000	0.00	71.07	44.33	2.93	208.42	0.00	2.08E+02	5.76E+02	1.10E+03	2.30E+05
681-180000	0.00	14.97	44.33	2.93	43.91	0.00	4.39E+01	5.76E+02	1.10E+03	4.84E+04
681-190000	0.00	257.75	44.33	2.93	755.75	0.00	7.56E+02	5.76E+02	1.10E+03	8.33E+05
681-200000	0.00	43.47	44.34	2.93	127.45	0.00	1.27E+02	5.75E+02	1.10E+03	1.40E+05
681-210000	0.00	50.40	44.34	2.93	147.74	0.00	1.48E+02	5.75E+02	1.10E+03	1.63E+05
682-010000	0.00	15.12	44.34	2.93	44.33	0.00	4.43E+01	5.75E+02	1.10E+03	4.88E+04
684-010000	0.00	14.95	44.34	2.93	43.83	0.00	4.38E+01	5.75E+02	1.10E+03	4.83E+04
684-020000	0.00	43.46	44.34	2.93	127.40	0.00	1.27E+02	5.75E+02	1.10E+03	1.40E+05
684-030000	0.00	34.27	44.34	2.93	100.45	0.00	1.00E+02	5.75E+02	1.10E+03	1.11E+05
684-040000	0.00	43.46	44.34	2.93	127.41	0.00	1.27E+02	5.75E+02	1.10E+03	1.40E+05
684-050000	0.00	20.31	44.34	2.93	59.54	0.00	5.95E+01	5.75E+02	1.10E+03	6.56E+04
689-010000	0.00	0.53	44.31	2.78	1.48	0.07	1.55E+00	5.76E+02	1.12E+03	1.69E+03
691-010000	0.00	0.53	44.31	2.78	1.48	0.07	1.55E+00	5.76E+02	1.12E+03	1.69E+03
695-010000	0.23	225.62	44.33	2.87	648.01	10.01	6.58E+02	5.76E+02	1.11E+03	7.23E+05
695-020000	0.23	225.62	44.33	2.86	644.42	10.01	6.54E+02	5.76E+02	1.11E+03	7.20E+05
695-030000	0.23	225.62	44.33	2.80	631.61	10.01	6.42E+02	5.76E+02	1.11E+03	7.09E+05
695-040000	0.23	225.62	44.33	2.79	629.74	10.01	6.40E+02	5.76E+02	1.11E+03	7.08E+05
695-050000	0.23	225.62	44.33	2.79	630.44	10.01	6.40E+02	5.76E+02	1.11E+03	7.08E+05
695-060000	0.23	225.62	44.33	2.81	633.98	10.01	6.44E+02	5.76E+02	1.11E+03	7.11E+05
695-070000	0.23	225.62	44.33	2.84	640.14	10.01	6.50E+02	5.76E+02	1.11E+03	7.16E+05
695-080000	0.23	225.62	44.33	2.87	648.28	10.01	6.58E+02	5.76E+02	1.11E+03	7.23E+05
695-090000	0.23	225.62	44.33	2.91	655.73	10.01	6.66E+02	5.76E+02	1.10E+03	7.30E+05
695-100000	0.23	225.62	44.33	2.93	660.74	10.01	6.71E+02	5.76E+02	1.10E+03	7.34E+05
774-010000	0.00	31.55	44.32	2.94	92.71	0.00	9.27E+01	5.76E+02	1.10E+03	1.02E+05
775-010000	0.00	98.50	44.32	2.94	289.36	0.00	2.89E+02	5.76E+02	1.10E+03	3.19E+05
775-020000	0.00	149.85	44.32	2.94	440.15	0.00	4.40E+02	5.76E+02	1.10E+03	4.85E+05
775-030000	0.00	144.04	44.32	2.94	423.07	0.00	4.23E+02	5.76E+02	1.10E+03	4.66E+05
775-040000	0.00	242.41	44.32	2.94	711.83	0.00	7.12E+02	5.76E+02	1.10E+03	7.84E+05

Table 06.02.01.04-1.g-5: Secondary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
775-050000	0.00	144.04	44.32	2.94	423.02	0.00	4.23E+02	5.76E+02	1.10E+03	4.66E+05
775-060000	0.00	109.88	44.32	2.94	322.69	0.00	3.23E+02	5.76E+02	1.10E+03	3.56E+05
775-070000	0.00	211.35	44.32	2.94	620.67	0.00	6.21E+02	5.76E+02	1.10E+03	6.84E+05
775-080000	0.00	45.29	44.32	2.94	132.99	0.00	1.33E+02	5.76E+02	1.10E+03	1.47E+05
776-010000	0.00	27.22	44.32	2.94	79.94	0.00	7.99E+01	5.76E+02	1.10E+03	8.81E+04
779-010000	0.00	33.91	44.32	2.94	99.56	0.00	9.96E+01	5.76E+02	1.10E+03	1.10E+05
781-010000	0.00	70.28	44.33	2.94	206.32	0.00	2.06E+02	5.76E+02	1.10E+03	2.27E+05
781-020000	0.00	64.96	44.33	2.94	190.70	0.00	1.91E+02	5.76E+02	1.10E+03	2.10E+05
781-030000	0.00	98.50	44.33	2.94	289.14	0.00	2.89E+02	5.76E+02	1.10E+03	3.19E+05
781-040000	0.00	72.02	44.33	2.94	211.41	0.00	2.11E+02	5.76E+02	1.10E+03	2.33E+05
781-050000	0.00	61.75	44.33	2.94	181.25	0.00	1.81E+02	5.76E+02	1.10E+03	2.00E+05
781-060000	0.00	72.02	44.33	2.94	211.41	0.00	2.11E+02	5.76E+02	1.10E+03	2.33E+05
781-070000	0.00	256.02	44.33	2.94	751.42	0.00	7.51E+02	5.76E+02	1.10E+03	8.28E+05
781-080000	0.00	24.25	44.33	2.94	71.18	0.00	7.12E+01	5.76E+02	1.10E+03	7.84E+04
781-090000	0.00	332.00	44.33	2.93	974.01	0.00	9.74E+02	5.76E+02	1.10E+03	1.07E+06
781-100000	0.00	142.06	44.33	2.93	416.76	0.00	4.17E+02	5.76E+02	1.10E+03	4.59E+05
781-110000	0.00	53.21	44.33	2.93	156.10	0.00	1.56E+02	5.76E+02	1.10E+03	1.72E+05
781-120000	0.00	75.36	44.33	2.93	221.06	0.00	2.21E+02	5.76E+02	1.10E+03	2.44E+05
781-130000	0.00	262.58	44.33	2.93	770.22	0.00	7.70E+02	5.76E+02	1.10E+03	8.49E+05
781-140000	0.00	75.36	44.33	2.93	221.05	0.00	2.21E+02	5.76E+02	1.10E+03	2.44E+05
781-150000	0.00	1116.39	44.33	2.93	3274.15	0.00	3.27E+03	5.76E+02	1.10E+03	3.61E+06
781-160000	0.00	85.51	44.33	2.93	250.73	0.00	2.51E+02	5.76E+02	1.10E+03	2.76E+05
781-170000	0.00	213.21	44.33	2.93	625.14	0.00	6.25E+02	5.76E+02	1.10E+03	6.89E+05
781-180000	0.00	44.92	44.33	2.93	131.70	0.00	1.32E+02	5.76E+02	1.10E+03	1.45E+05
781-190000	0.00	773.26	44.34	2.93	2266.96	0.00	2.27E+03	5.75E+02	1.10E+03	2.50E+06
781-200000	0.00	130.42	44.34	2.93	382.32	0.00	3.82E+02	5.75E+02	1.10E+03	4.21E+05
781-210000	0.00	151.21	44.34	2.93	443.23	0.00	4.43E+02	5.75E+02	1.10E+03	4.88E+05
782-010000	0.00	45.37	44.34	2.93	132.99	0.00	1.33E+02	5.75E+02	1.10E+03	1.47E+05
784-010000	0.00	44.86	44.34	2.93	131.48	0.00	1.31E+02	5.75E+02	1.10E+03	1.45E+05
784-020000	0.00	130.39	44.34	2.93	382.20	0.00	3.82E+02	5.75E+02	1.10E+03	4.21E+05
784-030000	0.00	102.81	44.34	2.93	301.35	0.00	3.01E+02	5.75E+02	1.10E+03	3.32E+05
784-040000	0.00	130.39	44.34	2.93	382.23	0.00	3.82E+02	5.75E+02	1.10E+03	4.21E+05
784-050000	0.00	60.94	44.34	2.93	178.63	0.00	1.79E+02	5.75E+02	1.10E+03	1.97E+05
789-010000	0.00	1.60	44.32	2.78	4.43	0.21	4.65E+00	5.76E+02	1.12E+03	5.07E+03
791-010000	0.00	1.60	44.32	2.78	4.43	0.21	4.65E+00	5.76E+02	1.12E+03	5.07E+03
880-010000	18.88	0.00	54.27	3.00	0.00	1024.85	1.02E+03	3.65E+02	1.10E+03	3.74E+05
880-020000	18.88	0.00	54.27	3.00	0.00	1024.85	1.02E+03	3.65E+02	1.10E+03	3.74E+05
880-030000	18.88	0.00	54.27	3.00	0.00	1024.85	1.02E+03	3.65E+02	1.10E+03	3.74E+05
882-010000	8.31	0.00	54.27	2.98	0.00	451.24	4.51E+02	3.65E+02	1.10E+03	1.65E+05
884-010000	6.24	0.00	54.27	2.97	0.00	338.49	3.38E+02	3.65E+02	1.10E+03	1.24E+05
884-020000	19.52	0.00	54.27	2.97	0.00	1059.16	1.06E+03	3.65E+02	1.10E+03	3.87E+05
884-030000	19.52	0.00	54.27	2.97	0.00	1059.16	1.06E+03	3.65E+02	1.10E+03	3.87E+05
884-040000	19.52	0.00	54.27	2.97	0.00	1059.16	1.06E+03	3.65E+02	1.10E+03	3.87E+05
884-050000	19.52	0.00	54.27	2.96	0.00	1059.14	1.06E+03	3.65E+02	1.10E+03	3.87E+05
895-010000	56.65	0.00	54.26	3.04	0.00	3073.83	3.07E+03	3.65E+02	1.10E+03	1.12E+06

Table 06.02.01.04-1.g-5: Secondary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
895-020000	56.65	0.00	54.26	3.04	0.00	3073.83	3.07E+03	3.65E+02	1.10E+03	1.12E+06
895-030000	56.65	0.00	54.26	3.04	0.00	3073.83	3.07E+03	3.65E+02	1.10E+03	1.12E+06
897-010000	24.94	0.00	54.25	2.97	0.00	1353.28	1.35E+03	3.65E+02	1.10E+03	4.94E+05
899-010000	18.71	0.00	54.25	2.97	0.00	1015.18	1.02E+03	3.65E+02	1.10E+03	3.71E+05
899-020000	58.55	0.00	54.25	2.97	0.00	3176.54	3.18E+03	3.65E+02	1.10E+03	1.16E+06
899-030000	58.55	0.00	54.25	2.97	0.00	3176.54	3.18E+03	3.65E+02	1.10E+03	1.16E+06
899-040000	58.55	0.00	54.25	2.96	0.00	3176.54	3.18E+03	3.65E+02	1.10E+03	1.16E+06
899-050000	58.55	0.00	54.25	2.96	0.00	3176.54	3.18E+03	3.65E+02	1.10E+03	1.16E+06
900-010000	19.54	0.00	54.27	3.00	0.00	1060.29	1.06E+03	3.65E+02	1.10E+03	3.87E+05
901-010000	21.74	0.00	54.27	3.00	0.00	1179.95	1.18E+03	3.65E+02	1.10E+03	4.31E+05
901-020000	21.74	0.00	54.27	3.00	0.00	1179.95	1.18E+03	3.65E+02	1.10E+03	4.31E+05
902-010000	2.72	0.00	54.27	3.00	0.00	147.44	1.47E+02	3.65E+02	1.10E+03	5.38E+04
903-010000	6.17	0.00	54.27	3.00	0.00	334.91	3.35E+02	3.65E+02	1.10E+03	1.22E+05
903-020000	6.17	0.00	54.27	3.00	0.00	334.91	3.35E+02	3.65E+02	1.10E+03	1.22E+05
905-010000	2.77	0.00	54.27	2.99	0.00	150.11	1.50E+02	3.65E+02	1.10E+03	5.48E+04
906-010000	1.33	0.00	54.27	2.99	0.00	71.98	7.20E+01	3.65E+02	1.10E+03	2.63E+04
908-010000	1.14	0.00	54.27	2.98	0.00	61.93	6.19E+01	3.65E+02	1.10E+03	2.26E+04
909-010000	1.23	0.00	54.27	2.98	0.00	66.76	6.68E+01	3.65E+02	1.10E+03	2.44E+04
910-010000	4.35	0.00	54.27	2.98	0.00	236.30	2.36E+02	3.65E+02	1.10E+03	8.62E+04
911-010000	0.34	0.00	54.26	2.99	0.00	18.26	1.83E+01	3.65E+02	1.10E+03	6.67E+03
911-020000	0.34	0.00	54.26	2.99	0.00	18.26	1.83E+01	3.65E+02	1.10E+03	6.67E+03
913-010000	0.26	0.00	54.26	2.98	0.00	14.19	1.42E+01	3.65E+02	1.10E+03	5.18E+03
913-020000	0.26	0.00	54.26	2.98	0.00	14.19	1.42E+01	3.65E+02	1.10E+03	5.18E+03
914-010000	5.74	0.00	54.26	3.00	0.00	311.53	3.12E+02	3.65E+02	1.10E+03	1.14E+05
914-020000	5.74	0.00	54.26	3.00	0.00	311.53	3.12E+02	3.65E+02	1.10E+03	1.14E+05
914-030000	5.74	0.00	54.26	3.00	0.00	311.53	3.12E+02	3.65E+02	1.10E+03	1.14E+05
914-040000	5.74	0.00	54.26	3.00	0.00	311.53	3.12E+02	3.65E+02	1.10E+03	1.14E+05
914-050000	5.74	0.00	54.26	3.00	0.00	311.53	3.12E+02	3.65E+02	1.10E+03	1.14E+05
917-010000	9.04	0.00	54.27	2.98	0.00	490.73	4.91E+02	3.65E+02	1.10E+03	1.79E+05
954-010000	58.61	0.00	54.26	3.04	0.00	3180.10	3.18E+03	3.65E+02	1.10E+03	1.16E+06
955-010000	65.22	0.00	54.26	3.04	0.00	3538.99	3.54E+03	3.65E+02	1.10E+03	1.29E+06
955-020000	65.22	0.00	54.26	3.04	0.00	3538.99	3.54E+03	3.65E+02	1.10E+03	1.29E+06
956-010000	8.15	0.00	54.26	3.04	0.00	442.21	4.42E+02	3.65E+02	1.10E+03	1.62E+05
957-010000	18.51	0.00	54.26	3.04	0.00	1004.49	1.00E+03	3.65E+02	1.10E+03	3.67E+05
957-020000	18.51	0.00	54.26	3.04	0.00	1004.49	1.00E+03	3.65E+02	1.10E+03	3.67E+05
959-010000	8.30	0.00	54.26	3.04	0.00	450.23	4.50E+02	3.65E+02	1.10E+03	1.65E+05
960-010000	3.98	0.00	54.26	3.04	0.00	215.90	2.16E+02	3.65E+02	1.10E+03	7.89E+04
962-010000	3.42	0.00	54.26	2.97	0.00	185.74	1.86E+02	3.65E+02	1.10E+03	6.79E+04
963-010000	3.69	0.00	54.26	2.97	0.00	200.23	2.00E+02	3.65E+02	1.10E+03	7.32E+04
964-010000	13.06	0.00	54.25	2.97	0.00	708.67	7.09E+02	3.65E+02	1.10E+03	2.59E+05
965-010000	1.01	0.00	54.27	3.04	0.00	54.78	5.48E+01	3.65E+02	1.10E+03	2.00E+04
965-020000	1.01	0.00	54.27	3.04	0.00	54.78	5.48E+01	3.65E+02	1.10E+03	2.00E+04
967-010000	0.78	0.00	54.26	2.97	0.00	42.58	4.26E+01	3.65E+02	1.10E+03	1.56E+04
967-020000	0.78	0.00	54.26	2.97	0.00	42.58	4.26E+01	3.65E+02	1.10E+03	1.56E+04
968-010000	17.22	0.00	54.27	3.04	0.00	934.67	9.35E+02	3.65E+02	1.10E+03	3.41E+05

Table 06.02.01.04-1.g-5: Secondary System Fluid Mass and Energy (t = 0)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
968-020000	17.22	0.00	54.27	3.04	0.00	934.67	9.35E+02	3.65E+02	1.10E+03	3.41E+05
968-030000	17.22	0.00	54.27	3.04	0.00	934.67	9.35E+02	3.65E+02	1.10E+03	3.41E+05
968-040000	17.22	0.00	54.27	3.04	0.00	934.67	9.35E+02	3.65E+02	1.10E+03	3.41E+05
968-050000	17.22	0.00	54.26	3.04	0.00	934.65	9.35E+02	3.65E+02	1.10E+03	3.41E+05
971-010000	27.13	0.00	54.25	2.97	0.00	1471.72	1.47E+03	3.65E+02	1.10E+03	5.38E+05
977-010000	10.14	0.00	54.27	2.99	0.00	550.54	5.51E+02	3.65E+02	1.10E+03	2.01E+05
977-020000	10.14	0.00	54.27	2.99	0.00	550.54	5.51E+02	3.65E+02	1.10E+03	2.01E+05
979-010000	12.88	0.00	54.25	2.95	0.00	698.50	6.99E+02	3.65E+02	1.10E+03	2.55E+05
979-020000	12.88	0.00	54.25	2.95	0.00	698.50	6.99E+02	3.65E+02	1.10E+03	2.55E+05
989-010000	30.43	0.00	54.26	3.04	0.00	1651.25	1.65E+03	3.65E+02	1.10E+03	6.03E+05
989-020000	30.43	0.00	54.26	3.04	0.00	1651.25	1.65E+03	3.65E+02	1.10E+03	6.03E+05
991-010000	38.63	0.00	54.25	2.95	0.00	2095.67	2.10E+03	3.65E+02	1.10E+03	7.66E+05
991-020000	38.63	0.00	54.25	2.95	0.00	2095.64	2.10E+03	3.65E+02	1.10E+03	7.66E+05

Table 06.02.01.04-1.g-6: Primary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity (BTU/ ft^3-°F)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
1001-001	100-010000	0-000000	496.50	63.67	47.37	2.35E+04	5.91E+02	1.14E+06
1001-002	105-010000	0-000000	496.50	63.67	47.37	2.35E+04	5.91E+02	1.14E+06
1001-003	110-010000	0-000000	496.50	63.67	38.32	1.90E+04	5.91E+02	9.25E+05
1001-004	115-010000	0-000000	496.50	63.67	42.06	2.09E+04	5.91E+02	1.02E+06
1251-001	125-010000	730-010000	506.30	63.51	30.68	1.55E+04	5.46E+02	6.50E+05
1251-002	125-020000	730-020000	506.30	63.51	30.68	1.55E+04	5.46E+02	6.51E+05
1251-003	125-030000	730-030000	506.30	63.51	30.68	1.55E+04	5.46E+02	6.51E+05
1251-004	125-040000	730-040000	506.30	63.52	30.68	1.55E+04	5.46E+02	6.51E+05
1251-005	125-050000	730-050000	506.30	63.52	46.02	2.33E+04	5.46E+02	9.77E+05
1251-006	125-060000	730-060000	506.30	63.52	61.36	3.11E+04	5.47E+02	1.30E+06
1251-007	125-070000	730-070000	506.30	63.53	61.36	3.11E+04	5.47E+02	1.31E+06
1251-008	125-080000	732-010000	506.30	63.53	61.36	3.11E+04	5.47E+02	1.31E+06
1251-009	125-090000	734-010000	506.30	63.54	61.36	3.11E+04	5.47E+02	1.31E+06
1251-010	125-100000	736-010000	506.30	63.54	53.64	2.72E+04	5.48E+02	1.14E+06
1251-011	125-110000	737-010000	506.30	63.54	53.64	2.72E+04	5.48E+02	1.14E+06
1251-012	125-120000	735-010000	506.30	63.55	61.36	3.11E+04	5.48E+02	1.31E+06
1251-013	125-130000	733-010000	506.30	63.56	61.36	3.11E+04	5.48E+02	1.31E+06
1251-014	125-140000	731-070000	506.30	63.56	61.36	3.11E+04	5.49E+02	1.31E+06
1251-015	125-150000	731-060000	506.30	63.56	61.36	3.11E+04	5.49E+02	1.31E+06
1251-016	125-160000	731-050000	506.30	63.57	46.02	2.33E+04	5.49E+02	9.86E+05
1251-017	125-170000	731-040000	506.30	63.57	30.68	1.55E+04	5.49E+02	6.57E+05
1251-018	125-180000	731-030000	506.30	63.57	30.68	1.55E+04	5.49E+02	6.57E+05
1251-019	125-190000	731-020000	506.30	63.57	30.68	1.55E+04	5.49E+02	6.58E+05
1251-020	125-200000	731-010000	506.30	63.58	30.68	1.55E+04	5.49E+02	6.58E+05
1401-001	135-010000	0-000000	496.50	63.36	21.91	1.09E+04	5.70E+02	4.97E+05
1401-002	140-010000	0-000000	496.50	63.36	26.02	1.29E+04	5.70E+02	5.90E+05
1401-003	145-010000	0-000000	496.50	63.36	49.30	2.45E+04	5.70E+02	1.12E+06
1401-004	150-010000	0-000000	496.50	63.36	43.35	2.15E+04	5.70E+02	9.82E+05
1401-005	155-010000	0-000000	496.50	63.36	46.04	2.29E+04	5.70E+02	1.04E+06
1401-006	160-010000	0-000000	496.50	63.37	174.56	8.67E+04	5.70E+02	3.96E+06
1701-001	165-010000	0-000000	496.50	63.37	44.42	2.21E+04	5.70E+02	1.01E+06
1701-002	170-010000	0-000000	496.50	63.37	44.42	2.21E+04	5.70E+02	1.01E+06
1701-003	175-010000	0-000000	496.50	63.37	57.40	2.85E+04	5.70E+02	1.30E+06
1701-004	180-010000	0-000000	496.50	63.38	49.31	2.45E+04	5.70E+02	1.12E+06
2001-001	200-010000	0-000000	496.50	63.51	15.79	7.84E+03	5.80E+02	3.69E+05
2001-002	205-010000	0-000000	496.50	63.51	15.79	7.84E+03	5.80E+02	3.69E+05
2001-003	210-010000	0-000000	496.50	63.51	12.77	6.34E+03	5.80E+02	2.99E+05
2001-004	215-010000	0-000000	496.50	63.51	14.02	6.96E+03	5.80E+02	3.28E+05
2201-001	220-010000	0-000000	484.10	65.87	19.36	9.37E+03	5.87E+02	4.79E+05
2211-001	221-010000	221-010000	484.10	63.58	94.20	4.56E+04	5.06E+02	1.76E+06
2251-001	225-010000	630-010000	506.30	62.72	10.23	5.18E+03	5.02E+02	1.86E+05
2251-002	225-020000	630-020000	506.30	62.75	10.23	5.18E+03	5.04E+02	1.87E+05
2251-003	225-030000	630-030000	506.30	62.74	10.23	5.18E+03	5.04E+02	1.87E+05
2251-004	225-040000	630-040000	506.30	62.73	10.23	5.18E+03	5.03E+02	1.87E+05
2251-005	225-050000	630-050000	506.30	62.73	15.34	7.77E+03	5.03E+02	2.80E+05

Table 06.02.01.04-1.g-6: Primary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
2251-006	225-060000	630-060000	506.30	62.73	20.45	1.04E+04	5.03E+02	3.74E+05
2251-007	225-070000	630-070000	506.30	62.73	20.45	1.04E+04	5.03E+02	3.74E+05
2251-008	225-080000	632-010000	506.30	62.73	20.45	1.04E+04	5.03E+02	3.74E+05
2251-009	225-090000	634-010000	506.30	62.73	20.45	1.04E+04	5.03E+02	3.73E+05
2251-010	225-100000	636-010000	506.30	62.72	17.88	9.05E+03	5.03E+02	3.26E+05
2251-011	225-110000	637-010000	506.30	62.69	17.88	9.05E+03	5.01E+02	3.24E+05
2251-012	225-120000	635-010000	506.30	62.70	20.45	1.04E+04	5.02E+02	3.71E+05
2251-013	225-130000	633-010000	506.30	62.69	20.45	1.04E+04	5.01E+02	3.71E+05
2251-014	225-140000	631-070000	506.30	62.68	20.45	1.04E+04	5.01E+02	3.70E+05
2251-015	225-150000	631-060000	506.30	62.67	20.45	1.04E+04	5.00E+02	3.69E+05
2251-016	225-160000	631-050000	506.30	62.66	15.34	7.77E+03	4.99E+02	2.76E+05
2251-017	225-170000	631-040000	506.30	62.64	10.23	5.18E+03	4.98E+02	1.83E+05
2251-018	225-180000	631-030000	506.30	62.60	10.23	5.18E+03	4.96E+02	1.82E+05
2251-019	225-190000	631-020000	506.30	62.54	10.23	5.18E+03	4.93E+02	1.79E+05
2251-020	225-200000	631-010000	506.30	61.27	10.23	5.18E+03	4.23E+02	1.32E+05
2291-001	229-010000	229-010000	484.10	63.14	85.64	4.15E+04	4.90E+02	1.50E+06
2301-001	230-010000	0-000000	484.10	64.98	19.36	9.37E+03	5.56E+02	4.33E+05
2401-001	235-010000	0-000000	496.50	63.08	7.30	3.63E+03	5.50E+02	1.56E+05
2401-002	240-010000	0-000000	496.50	63.08	8.67	4.31E+03	5.50E+02	1.85E+05
2401-003	245-010000	0-000000	496.50	63.08	16.43	8.16E+03	5.50E+02	3.51E+05
2401-004	250-010000	0-000000	496.50	63.08	14.45	7.17E+03	5.50E+02	3.08E+05
2401-005	255-010000	0-000000	496.50	63.08	15.35	7.62E+03	5.50E+02	3.28E+05
2401-006	260-010000	0-000000	496.50	63.09	58.19	2.89E+04	5.51E+02	1.24E+06
2701-001	265-010000	0-000000	496.50	63.09	14.81	7.35E+03	5.51E+02	3.17E+05
2701-002	270-010000	0-000000	496.50	63.09	14.81	7.35E+03	5.51E+02	3.17E+05
2701-003	275-010000	0-000000	496.50	63.09	19.13	9.50E+03	5.51E+02	4.09E+05
2701-004	280-010000	0-000000	496.50	63.09	16.44	8.16E+03	5.51E+02	3.51E+05
3001-001	300-010000	0-000000	486.58	65.09	107.63	5.24E+04	5.74E+02	2.54E+06
3011-001	301-010000	0-000000	486.58	65.14	322.88	1.57E+05	5.76E+02	7.66E+06
3021-001	302-010000	0-000000	486.58	64.97	124.61	6.06E+04	5.70E+02	2.90E+06
3031-001	303-010000	0-000000	486.58	65.11	373.84	1.82E+05	5.75E+02	8.84E+06
3041-001	304-010000	0-000000	486.58	64.89	76.93	3.74E+04	5.67E+02	1.77E+06
3041-002	306-010000	0-000000	486.58	64.89	76.93	3.74E+04	5.67E+02	1.77E+06
3041-003	308-010000	0-000000	486.58	64.89	23.09	1.12E+04	5.67E+02	5.32E+05
3051-001	305-010000	0-000000	486.58	65.09	230.78	1.12E+05	5.75E+02	5.45E+06
3051-002	307-010000	0-000000	486.58	65.09	230.78	1.12E+05	5.75E+02	5.45E+06
3051-003	309-010000	0-000000	486.58	65.09	69.22	3.37E+04	5.75E+02	1.63E+06
3101-001	310-010000	0-000000	486.58	64.91	38.26	1.86E+04	5.68E+02	8.83E+05
3101-002	311-010000	0-000000	486.58	65.11	114.78	5.59E+04	5.75E+02	2.71E+06
3111-001	310-010000	0-000000	496.50	62.15	3.96	1.96E+03	4.88E+02	6.79E+04
3111-002	311-010000	0-000000	496.50	63.22	11.87	5.89E+03	5.60E+02	2.61E+05
3121-001	312-010000	0-000000	496.50	62.91	36.42	1.81E+04	5.38E+02	7.48E+05
3121-002	313-010000	0-000000	496.50	63.35	109.27	5.43E+04	5.69E+02	2.47E+06
3141-001	0-000000	314-010000	406.00	32.27	8.59	3.49E+03	4.84E+02	7.54E+04
3141-002	0-000000	315-010000	406.00	32.85	25.77	1.05E+04	5.51E+02	2.87E+05
3161-001	0-000000	316-010000	524.37	36.03	27.96	1.47E+04	4.99E+02	2.90E+05

Table 06.02.01.04-1.g-6: Primary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
3161-002	0-000000	318-010000	524.37	36.10	27.96	1.47E+04	5.07E+02	2.98E+05
3161-003	0-000000	320-010000	524.37	36.14	27.96	1.47E+04	5.11E+02	3.03E+05
3161-004	0-000000	322-010000	524.37	36.15	27.96	1.47E+04	5.12E+02	3.03E+05
3161-005	0-000000	324-010000	524.37	36.11	27.96	1.47E+04	5.08E+02	2.98E+05
3161-006	0-000000	326-010000	524.37	36.04	27.96	1.47E+04	5.00E+02	2.90E+05
3171-001	0-000000	317-010000	524.37	36.51	83.89	4.40E+04	5.51E+02	1.04E+06
3171-002	0-000000	319-010000	524.37	36.57	83.89	4.40E+04	5.59E+02	1.06E+06
3171-003	0-000000	321-010000	524.37	36.62	83.89	4.40E+04	5.63E+02	1.08E+06
3171-004	0-000000	323-010000	524.37	36.62	83.89	4.40E+04	5.64E+02	1.08E+06
3171-005	0-000000	325-010000	524.37	36.58	83.89	4.40E+04	5.60E+02	1.07E+06
3171-006	0-000000	327-010000	524.37	36.52	83.89	4.40E+04	5.52E+02	1.04E+06
3301-001	0-000000	330-010000	406.00	32.39	15.58	6.32E+03	4.97E+02	1.44E+05
3301-002	0-000000	331-010000	406.00	32.83	46.74	1.90E+04	5.48E+02	5.15E+05
3401-001	316-010000	340-010000	496.50	62.82	14.23	7.07E+03	5.32E+02	2.86E+05
3401-002	318-010000	340-010000	496.50	62.83	14.23	7.07E+03	5.33E+02	2.87E+05
3401-003	320-010000	340-020000	496.50	62.87	14.23	7.07E+03	5.36E+02	2.90E+05
3401-004	322-010000	340-020000	496.50	62.89	14.23	7.07E+03	5.37E+02	2.91E+05
3401-005	324-010000	340-030000	496.50	62.93	14.23	7.07E+03	5.40E+02	2.93E+05
3401-006	326-010000	340-030000	496.50	62.93	14.23	7.07E+03	5.40E+02	2.94E+05
3401-007	330-010000	340-040000	496.50	62.94	9.56	4.74E+03	5.40E+02	1.97E+05
3411-001	317-010000	341-010000	496.50	63.31	30.07	1.49E+04	5.66E+02	6.73E+05
3411-002	319-010000	341-010000	496.50	63.33	30.07	1.49E+04	5.67E+02	6.76E+05
3411-003	321-010000	341-020000	496.50	63.36	30.07	1.49E+04	5.69E+02	6.80E+05
3411-004	323-010000	341-020000	496.50	63.38	30.07	1.49E+04	5.71E+02	6.84E+05
3411-005	325-010000	341-030000	496.50	63.41	30.07	1.49E+04	5.73E+02	6.88E+05
3411-006	327-010000	341-030000	496.50	63.41	30.07	1.49E+04	5.73E+02	6.89E+05
3411-007	331-010000	341-040000	496.50	63.41	20.19	1.00E+04	5.73E+02	4.62E+05
3481-001	340-010000	306-010000	496.50	62.63	5.17	2.57E+03	5.19E+02	9.95E+04
3481-002	340-010000	306-010000	496.50	62.63	5.17	2.57E+03	5.19E+02	9.95E+04
3481-003	340-020000	306-010000	496.50	62.64	5.17	2.57E+03	5.20E+02	9.99E+04
3481-004	340-020000	304-010000	496.50	62.64	5.17	2.57E+03	5.20E+02	9.99E+04
3481-005	340-030000	304-010000	496.50	62.66	5.17	2.57E+03	5.22E+02	1.00E+05
3481-006	340-030000	304-010000	496.50	62.66	5.17	2.57E+03	5.22E+02	1.00E+05
3491-001	341-010000	307-010000	496.50	63.29	15.51	7.70E+03	5.65E+02	3.46E+05
3491-002	341-010000	307-010000	496.50	63.29	15.51	7.70E+03	5.65E+02	3.46E+05
3491-003	341-020000	307-010000	496.50	63.30	15.51	7.70E+03	5.65E+02	3.47E+05
3491-004	341-020000	305-010000	496.50	63.30	15.51	7.70E+03	5.65E+02	3.47E+05
3491-005	341-030000	305-010000	496.50	63.30	15.51	7.70E+03	5.65E+02	3.47E+05
3491-006	341-030000	305-010000	496.50	63.30	15.51	7.70E+03	5.65E+02	3.47E+05
3501-001	340-040000	302-010000	496.50	62.63	3.31	1.64E+03	5.20E+02	6.38E+04
3501-002	352-010000	302-010000	496.50	62.77	11.90	5.91E+03	5.29E+02	2.37E+05
3501-003	354-010000	300-010000	496.50	63.14	5.63	2.80E+03	5.54E+02	1.22E+05
3501-004	354-010000	300-010000	496.50	63.14	7.67	3.81E+03	5.54E+02	1.66E+05
3502-001	341-040000	303-010000	496.50	63.29	9.93	4.93E+03	5.65E+02	2.22E+05
3502-002	353-010000	303-010000	496.50	63.32	35.69	1.77E+04	5.67E+02	8.02E+05
3502-003	355-010000	301-010000	496.50	63.48	16.89	8.39E+03	5.78E+02	3.92E+05

Table 06.02.01.04-1.g-6: Primary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
3502-004	357-010000	301-010000	496.50	63.43	23.02	1.14E+04	5.74E+02	5.29E+05
3503-001	314-010000	308-010000	496.50	62.59	1.59	7.89E+02	5.17E+02	3.03E+04
3504-001	315-010000	309-010000	496.50	63.28	4.76	2.37E+03	5.64E+02	1.06E+05
3521-001	330-010000	352-010000	496.50	62.37	4.11	2.04E+03	5.02E+02	7.43E+04
3521-002	331-010000	353-010000	496.50	63.06	12.32	6.12E+03	5.49E+02	2.62E+05
3541-001	354-010000	0-000000	496.50	63.64	13.51	6.71E+03	5.89E+02	3.24E+05
3541-002	356-010000	0-000000	496.50	63.42	14.74	7.32E+03	5.74E+02	3.38E+05
3541-003	360-020000	0-000000	496.50	63.47	15.80	7.84E+03	5.77E+02	3.66E+05
3551-001	354-010000	0-000000	496.50	63.64	40.52	2.01E+04	5.89E+02	9.72E+05
3551-002	355-010000	0-000000	496.50	63.75	44.22	2.20E+04	5.97E+02	1.09E+06
3551-003	355-010000	0-000000	496.50	63.75	47.40	2.35E+04	5.97E+02	1.16E+06
3601-001	360-010000	352-010000	496.50	62.74	13.69	6.79E+03	5.27E+02	2.70E+05
3601-002	360-020000	354-010000	496.50	62.92	6.48	3.22E+03	5.39E+02	1.33E+05
3601-003	360-020000	356-010000	496.50	63.31	15.71	7.80E+03	5.66E+02	3.52E+05
3601-004	361-010000	353-010000	496.50	63.16	41.06	2.04E+04	5.55E+02	8.90E+05
3601-005	361-020000	355-010000	496.50	63.26	19.44	9.65E+03	5.63E+02	4.31E+05
3601-006	361-020000	357-010000	496.50	63.43	47.13	2.34E+04	5.74E+02	1.08E+06
3641-001	364-010000	0-000000	485.48	65.32	300.89	1.46E+05	5.76E+02	7.16E+06
4001-001	400-010000	0-000000	484.10	66.77	45.07	2.18E+04	6.18E+02	1.22E+06
4101-001	410-010000	0-000000	502.60	65.47	86.21	4.33E+04	6.33E+02	2.38E+06
4101-002	410-020000	0-000000	502.60	65.71	86.21	4.33E+04	6.45E+02	2.45E+06
4101-003	410-030000	0-000000	502.60	65.82	86.21	4.33E+04	6.51E+02	2.49E+06
4101-004	410-040000	0-000000	502.60	65.88	86.21	4.33E+04	6.54E+02	2.51E+06
4101-005	410-050000	0-000000	502.60	65.90	86.21	4.33E+04	6.55E+02	2.51E+06
4101-006	410-060000	0-000000	502.60	65.89	86.21	4.33E+04	6.54E+02	2.51E+06
4201-001	408-010000	0-000000	502.60	65.11	51.40	2.58E+04	6.16E+02	1.35E+06
4301-001	412-010000	0-000000	502.60	65.89	51.51	2.59E+04	6.54E+02	1.50E+06

Table 06.02.01.04-1.g-7: Secondary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity (BTU/ ft^3-°F)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
6201-001	620-010000	0-000000	484.10	64.44	154.28	7.47E+04	5.37E+02	3.23E+06
6201-002	639-010000	0-000000	484.10	65.39	289.34	1.40E+05	5.71E+02	6.78E+06
6201-003	645-010000	0-000000	484.10	65.43	563.01	2.73E+05	5.72E+02	1.33E+07
6201-004	650-010000	0-000000	484.10	64.92	319.87	1.55E+05	5.54E+02	7.10E+06
6201-005	660-010000	0-000000	484.10	65.12	384.39	1.86E+05	5.61E+02	8.73E+06
6201-006	623-010000	0-000000	484.10	65.21	154.28	7.47E+04	5.64E+02	3.54E+06
6241-001	624-040000	625-040000	496.50	60.33	6.90	3.42E+03	3.76E+02	6.83E+04
6241-002	624-030000	625-030000	496.50	60.43	9.48	4.71E+03	3.82E+02	9.74E+04
6241-003	624-020000	625-020000	496.50	60.44	6.90	3.42E+03	3.82E+02	7.09E+04
6241-004	624-010000	625-010000	496.50	60.53	6.69	3.32E+03	3.87E+02	7.10E+04
6242-001	979-010000	624-010000	496.50	60.43	7.05	3.50E+03	3.82E+02	7.23E+04
6251-001	625-010000	0-000000	484.10	64.85	186.86	9.05E+04	5.52E+02	4.12E+06
6252-001	625-020000	0-000000	484.10	64.63	144.13	6.98E+04	5.44E+02	3.09E+06
6252-002	625-030000	0-000000	484.10	64.60	198.19	9.59E+04	5.43E+02	4.23E+06
6252-003	625-040000	0-000000	484.10	64.43	144.13	6.98E+04	5.36E+02	3.01E+06
6301-001	630-010000	625-040000	496.50	60.52	1.64	8.13E+02	3.87E+02	1.74E+04
6301-002	630-020000	625-040000	496.50	60.58	1.64	8.13E+02	3.91E+02	1.78E+04
6301-003	630-030000	625-040000	496.50	60.63	1.64	8.13E+02	3.94E+02	1.81E+04
6301-004	630-040000	625-040000	496.50	60.63	1.64	8.13E+02	3.94E+02	1.81E+04
6301-005	630-050000	625-030000	496.50	60.82	2.46	1.22E+03	4.05E+02	2.89E+04
6301-006	630-060000	625-030000	496.50	60.83	3.28	1.63E+03	4.06E+02	3.86E+04
6301-007	630-070000	625-030000	496.50	60.84	3.28	1.63E+03	4.06E+02	3.87E+04
6301-008	632-010000	625-020000	496.50	60.85	3.28	1.63E+03	4.07E+02	3.88E+04
6301-009	634-010000	625-020000	496.50	60.86	3.28	1.63E+03	4.07E+02	3.89E+04
6301-010	636-010000	625-010000	496.50	61.03	2.86	1.42E+03	4.18E+02	3.60E+04
6301-011	638-010000	625-010000	496.50	61.12	4.44	2.21E+03	4.23E+02	5.74E+04
6302-001	630-010000	631-010000	484.10	60.45	0.56	2.70E+02	3.89E+02	5.96E+03
6302-002	630-020000	631-020000	484.10	61.54	0.56	2.70E+02	4.30E+02	7.49E+03
6302-003	630-030000	631-030000	484.10	61.82	0.56	2.70E+02	4.41E+02	7.89E+03
6302-004	630-040000	631-040000	484.10	61.77	0.56	2.70E+02	4.39E+02	7.82E+03
6302-005	630-050000	631-050000	484.10	62.01	0.84	4.05E+02	4.48E+02	1.23E+04
6302-006	630-060000	631-060000	484.10	62.14	1.12	5.40E+02	4.53E+02	1.67E+04
6302-007	630-070000	631-070000	484.10	62.13	1.12	5.40E+02	4.52E+02	1.67E+04
6303-001	630-010000	630-010000	496.50	60.48	1.06	5.28E+02	3.85E+02	1.11E+04
6303-002	630-020000	630-020000	496.50	60.63	1.06	5.28E+02	3.94E+02	1.17E+04
6303-003	630-030000	630-030000	496.50	60.95	1.06	5.28E+02	4.13E+02	1.30E+04
6303-004	630-040000	630-040000	496.50	60.85	1.06	5.28E+02	4.07E+02	1.26E+04
6303-005	630-050000	630-050000	496.50	61.20	1.60	7.92E+02	4.28E+02	2.11E+04
6303-006	630-060000	630-060000	496.50	61.35	2.13	1.06E+03	4.38E+02	2.95E+04
6303-007	630-070000	630-070000	496.50	61.43	2.13	1.06E+03	4.43E+02	3.01E+04
6303-008	632-010000	632-010000	496.50	61.34	2.13	1.06E+03	4.37E+02	2.93E+04
6303-009	634-010000	634-010000	496.50	61.46	2.13	1.06E+03	4.44E+02	3.04E+04
6303-010	636-010000	636-010000	496.50	61.35	1.31	6.53E+02	4.37E+02	1.82E+04
6304-001	631-010000	631-010000	496.50	60.12	1.06	5.28E+02	3.64E+02	9.71E+03
6304-002	631-020000	631-020000	496.50	60.33	1.06	5.28E+02	3.76E+02	1.05E+04

Table 06.02.01.04-1.g-7: Secondary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
6304-003	631-030000	631-030000	496.50	60.69	1.06	5.28E+02	3.97E+02	1.19E+04
6304-004	631-040000	631-040000	496.50	60.55	1.06	5.28E+02	3.89E+02	1.14E+04
6304-005	631-050000	631-050000	496.50	60.66	1.60	7.92E+02	3.95E+02	1.77E+04
6304-006	631-060000	631-060000	496.50	60.82	2.13	1.06E+03	4.05E+02	2.50E+04
6304-007	631-070000	631-070000	496.50	60.87	2.13	1.06E+03	4.08E+02	2.54E+04
6304-008	632-010000	632-010000	496.50	61.34	2.13	1.06E+03	4.37E+02	2.93E+04
6304-009	634-010000	634-010000	496.50	61.46	2.13	1.06E+03	4.44E+02	3.04E+04
6304-010	636-010000	636-010000	496.50	61.35	1.31	6.53E+02	4.37E+02	1.82E+04
6311-001	631-010000	624-040000	496.50	60.32	1.64	8.13E+02	3.75E+02	1.61E+04
6311-002	631-020000	624-040000	496.50	60.45	1.64	8.13E+02	3.83E+02	1.69E+04
6311-003	631-030000	624-040000	496.50	60.52	1.64	8.13E+02	3.87E+02	1.74E+04
6311-004	631-040000	624-040000	496.50	60.50	1.64	8.13E+02	3.86E+02	1.73E+04
6311-005	631-050000	624-030000	496.50	60.52	2.46	1.22E+03	3.87E+02	2.61E+04
6311-006	631-060000	624-030000	496.50	60.54	3.28	1.63E+03	3.88E+02	3.50E+04
6311-007	631-070000	624-030000	496.50	60.55	3.28	1.63E+03	3.89E+02	3.51E+04
6311-008	633-010000	624-020000	496.50	60.56	3.28	1.63E+03	3.90E+02	3.53E+04
6311-009	635-010000	624-020000	496.50	60.57	3.28	1.63E+03	3.90E+02	3.54E+04
6311-010	637-010000	624-010000	496.50	60.66	2.86	1.42E+03	3.96E+02	3.19E+04
6311-011	638-010000	624-010000	496.50	60.67	4.44	2.21E+03	3.96E+02	4.96E+04
6401-001	640-010000	623-010000	496.50	60.69	8.53	4.24E+03	3.97E+02	9.58E+04
6402-001	640-010000	620-010000	496.50	60.28	8.53	4.24E+03	3.73E+02	8.28E+04
6411-001	641-010000	639-010000	496.50	60.89	13.75	6.83E+03	4.10E+02	1.65E+05
6411-002	642-010000	645-010000	496.50	60.28	13.75	6.83E+03	3.73E+02	1.34E+05
6451-001	803-010000	645-010000	496.50	60.17	1.19	5.92E+02	3.66E+02	1.11E+04
6601-001	660-010000	660-010000	496.50	60.92	81.53	4.05E+04	4.11E+02	9.88E+05
6701-001	670-010000	0-000000	484.10	65.26	759.20	3.68E+05	5.66E+02	1.75E+07
6741-001	674-010000	0-000000	488.00	64.93	2.75	1.34E+03	5.36E+02	5.77E+04
6751-001	675-010000	0-000000	488.00	64.97	8.58	4.19E+03	5.37E+02	1.81E+05
6751-002	675-020000	0-000000	488.00	65.01	13.05	6.37E+03	5.38E+02	2.77E+05
6751-003	675-030000	0-000000	488.00	65.04	12.54	6.12E+03	5.40E+02	2.67E+05
6751-004	675-040000	0-000000	488.00	65.06	21.11	1.03E+04	5.41E+02	4.51E+05
6751-005	675-050000	0-000000	488.00	65.08	12.54	6.12E+03	5.41E+02	2.69E+05
6751-006	675-060000	0-000000	488.00	65.10	9.57	4.67E+03	5.42E+02	2.06E+05
6751-007	675-070000	0-000000	488.00	65.11	18.41	8.98E+03	5.42E+02	3.96E+05
6751-008	675-080000	0-000000	488.00	65.12	3.94	1.92E+03	5.43E+02	8.49E+04
6761-001	676-010000	0-000000	488.00	65.13	2.37	1.16E+03	5.43E+02	5.11E+04
6791-001	679-010000	0-000000	488.00	65.14	2.95	1.44E+03	5.44E+02	6.38E+04
6811-001	681-010000	0-000000	488.00	65.17	6.12	2.99E+03	5.44E+02	1.33E+05
6811-002	681-020000	0-000000	488.00	65.17	5.66	2.76E+03	5.45E+02	1.23E+05
6811-003	681-030000	0-000000	488.00	65.18	8.58	4.19E+03	5.45E+02	1.86E+05
6811-004	681-040000	0-000000	488.00	65.19	6.27	3.06E+03	5.45E+02	1.36E+05
6811-005	681-050000	0-000000	488.00	65.20	5.38	2.62E+03	5.46E+02	1.17E+05
6811-006	681-060000	0-000000	488.00	65.21	6.27	3.06E+03	5.46E+02	1.37E+05
6811-007	681-070000	0-000000	488.00	65.23	22.30	1.09E+04	5.47E+02	4.87E+05
6811-008	681-080000	0-000000	488.00	65.23	2.11	1.03E+03	5.47E+02	4.61E+04
6811-009	681-090000	0-000000	488.00	65.24	28.92	1.41E+04	5.47E+02	6.32E+05

Table 06.02.01.04-1.g-7: Secondary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
6811-010	681-100000	0-000000	488.00	65.25	12.37	6.04E+03	5.47E+02	2.71E+05
6811-011	681-110000	0-000000	488.00	65.25	4.63	2.26E+03	5.48E+02	1.01E+05
6811-012	681-120000	0-000000	488.00	65.26	6.56	3.20E+03	5.48E+02	1.44E+05
6811-013	681-130000	0-000000	488.00	65.27	22.87	1.12E+04	5.48E+02	5.02E+05
6811-014	681-140000	0-000000	488.00	65.28	6.56	3.20E+03	5.49E+02	1.44E+05
6811-015	681-150000	0-000000	488.00	65.31	97.23	4.74E+04	5.50E+02	2.14E+06
6811-016	681-160000	0-000000	488.00	65.31	7.45	3.63E+03	5.50E+02	1.64E+05
6811-017	681-170000	0-000000	488.00	65.32	18.57	9.06E+03	5.50E+02	4.10E+05
6811-018	681-180000	0-000000	488.00	65.33	3.91	1.91E+03	5.50E+02	8.65E+04
6811-019	681-190000	0-000000	488.00	65.35	67.35	3.29E+04	5.51E+02	1.49E+06
6811-020	681-200000	0-000000	488.00	65.35	11.36	5.54E+03	5.51E+02	2.52E+05
6811-021	681-210000	0-000000	488.00	65.36	13.17	6.43E+03	5.51E+02	2.92E+05
6821-001	682-010000	0-000000	488.00	65.38	3.95	1.93E+03	5.52E+02	8.79E+04
6841-001	684-010000	0-000000	488.00	65.91	3.91	1.91E+03	5.72E+02	9.27E+04
6841-002	684-020000	0-000000	488.00	65.91	11.36	5.54E+03	5.72E+02	2.70E+05
6841-003	684-030000	0-000000	488.00	65.92	8.95	4.37E+03	5.72E+02	2.13E+05
6841-004	684-040000	0-000000	488.00	65.82	11.36	5.54E+03	5.69E+02	2.67E+05
6841-005	684-050000	0-000000	488.00	65.82	5.31	2.59E+03	5.69E+02	1.25E+05
6951-001	695-010000	0-000000	488.00	65.68	53.09	2.59E+04	5.64E+02	1.23E+06
6951-002	695-020000	0-000000	488.00	65.83	53.09	2.59E+04	5.69E+02	1.25E+06
6951-003	695-030000	0-000000	488.00	65.96	53.09	2.59E+04	5.74E+02	1.27E+06
6951-004	695-040000	0-000000	488.00	65.98	53.09	2.59E+04	5.75E+02	1.27E+06
6951-005	695-050000	0-000000	488.00	65.98	53.09	2.59E+04	5.75E+02	1.27E+06
6951-006	695-060000	0-000000	488.00	65.95	53.09	2.59E+04	5.73E+02	1.27E+06
6951-007	695-070000	0-000000	488.00	65.89	53.09	2.59E+04	5.71E+02	1.26E+06
6951-008	695-080000	0-000000	488.00	65.83	53.09	2.59E+04	5.69E+02	1.25E+06
6951-009	695-090000	0-000000	488.00	65.72	53.09	2.59E+04	5.65E+02	1.23E+06
6951-010	695-100000	0-000000	488.00	65.73	53.09	2.59E+04	5.65E+02	1.23E+06
7241-001	724-040000	725-040000	496.50	63.25	20.69	1.03E+04	5.62E+02	4.57E+05
7241-002	724-030000	725-030000	496.50	63.30	28.44	1.41E+04	5.65E+02	6.36E+05
7241-003	724-020000	725-020000	496.50	63.33	20.69	1.03E+04	5.68E+02	4.66E+05
7241-004	724-010000	725-010000	496.50	63.35	20.06	9.96E+03	5.68E+02	4.53E+05
7301-001	730-010000	725-040000	496.50	63.25	4.91	2.44E+03	5.62E+02	1.09E+05
7301-002	730-020000	725-040000	496.50	63.25	4.91	2.44E+03	5.62E+02	1.09E+05
7301-003	730-030000	725-040000	496.50	63.26	4.91	2.44E+03	5.62E+02	1.09E+05
7301-004	730-040000	725-040000	496.50	63.26	4.91	2.44E+03	5.62E+02	1.09E+05
7301-005	730-050000	725-030000	496.50	63.28	7.37	3.66E+03	5.64E+02	1.64E+05
7301-006	730-060000	725-030000	496.50	63.28	9.83	4.88E+03	5.64E+02	2.19E+05
7301-007	730-070000	725-030000	496.50	63.28	9.83	4.88E+03	5.64E+02	2.19E+05
7301-008	732-010000	725-020000	496.50	63.29	9.83	4.88E+03	5.65E+02	2.19E+05
7301-009	734-010000	725-020000	496.50	63.30	9.83	4.88E+03	5.65E+02	2.20E+05
7301-010	736-010000	725-010000	496.50	63.30	8.59	4.27E+03	5.65E+02	1.92E+05
7301-011	738-010000	725-010000	496.50	63.41	13.33	6.62E+03	5.73E+02	3.05E+05
7311-001	731-010000	724-040000	496.50	63.17	4.91	2.44E+03	5.56E+02	1.07E+05
7311-002	731-020000	724-040000	496.50	63.18	4.91	2.44E+03	5.57E+02	1.07E+05
7311-003	731-030000	724-040000	496.50	63.18	4.91	2.44E+03	5.57E+02	1.07E+05

Table 06.02.01.04-1.g-7: Secondary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
7311-004	731-040000	724-040000	496.50	63.19	4.91	2.44E+03	5.58E+02	1.07E+05
7311-005	731-050000	724-030000	496.50	63.22	7.37	3.66E+03	5.60E+02	1.62E+05
7311-006	731-060000	724-030000	496.50	63.23	9.83	4.88E+03	5.60E+02	2.16E+05
7311-007	731-070000	724-030000	496.50	63.23	9.83	4.88E+03	5.60E+02	2.16E+05
7311-008	733-010000	724-020000	496.50	63.26	9.83	4.88E+03	5.62E+02	2.18E+05
7311-009	735-010000	724-020000	496.50	63.26	9.83	4.88E+03	5.62E+02	2.18E+05
7311-010	737-010000	724-010000	496.50	63.26	8.59	4.27E+03	5.62E+02	1.90E+05
7311-011	738-010000	724-010000	496.50	63.38	13.33	6.62E+03	5.71E+02	3.03E+05
7811-001	781-010000	0-000000	488.00	65.92	31.03	1.51E+04	5.72E+02	7.37E+05
7811-002	781-020000	0-000000	488.00	65.92	28.68	1.40E+04	5.72E+02	6.81E+05
7811-003	781-030000	0-000000	488.00	65.91	43.49	2.12E+04	5.72E+02	1.03E+06
7811-004	781-040000	0-000000	488.00	65.91	31.80	1.55E+04	5.72E+02	7.54E+05
7811-005	781-050000	0-000000	488.00	65.90	27.26	1.33E+04	5.72E+02	6.46E+05
7811-006	781-060000	0-000000	488.00	65.90	31.80	1.55E+04	5.72E+02	7.54E+05
7811-007	781-070000	0-000000	488.00	65.90	113.03	5.52E+04	5.72E+02	2.68E+06
7811-008	781-080000	0-000000	488.00	65.89	10.71	5.23E+03	5.71E+02	2.54E+05
7811-009	781-090000	0-000000	488.00	65.89	146.57	7.15E+04	5.71E+02	3.47E+06
7811-010	781-100000	0-000000	488.00	65.88	62.72	3.06E+04	5.71E+02	1.48E+06
7811-011	781-110000	0-000000	488.00	65.87	23.49	1.15E+04	5.71E+02	5.55E+05
7811-012	781-120000	0-000000	488.00	65.87	33.27	1.62E+04	5.70E+02	7.86E+05
7811-013	781-130000	0-000000	488.00	65.86	115.93	5.66E+04	5.70E+02	2.73E+06
7811-014	781-140000	0-000000	488.00	65.84	33.27	1.62E+04	5.70E+02	7.83E+05
7811-015	781-150000	0-000000	488.00	65.83	492.88	2.41E+05	5.69E+02	1.16E+07
7811-016	781-160000	0-000000	488.00	65.81	37.75	1.84E+04	5.68E+02	8.85E+05
7811-017	781-170000	0-000000	488.00	65.81	94.13	4.59E+04	5.68E+02	2.21E+06
7811-018	781-180000	0-000000	488.00	65.80	19.83	9.68E+03	5.68E+02	4.65E+05
7811-019	781-190000	0-000000	488.00	65.80	341.39	1.67E+05	5.68E+02	7.99E+06
7811-020	781-200000	0-000000	488.00	65.79	57.58	2.81E+04	5.68E+02	1.35E+06
7811-021	781-210000	0-000000	488.00	65.79	66.76	3.26E+04	5.67E+02	1.56E+06
7821-001	782-010000	0-000000	488.00	65.78	20.03	9.78E+03	5.67E+02	4.68E+05
7841-001	784-010000	0-000000	488.00	65.90	19.80	9.66E+03	5.72E+02	4.69E+05
7841-002	784-020000	0-000000	488.00	65.91	57.57	2.81E+04	5.72E+02	1.37E+06
7841-003	784-030000	0-000000	488.00	65.92	45.39	2.21E+04	5.72E+02	1.08E+06
7841-004	784-040000	0-000000	488.00	65.58	57.57	2.81E+04	5.60E+02	1.31E+06
7841-005	784-050000	0-000000	488.00	65.79	26.91	1.31E+04	5.68E+02	6.30E+05
8841-001	884-010000	0-000000	488.00	60.93	3.02	1.47E+03	3.87E+02	3.22E+04
8841-002	884-020000	0-000000	488.00	60.93	9.44	4.61E+03	3.87E+02	1.01E+05
8841-003	884-030000	0-000000	488.00	60.94	9.44	4.61E+03	3.88E+02	1.01E+05
8841-004	884-040000	0-000000	488.00	60.97	9.44	4.61E+03	3.88E+02	1.02E+05
8841-005	884-050000	0-000000	488.00	60.95	9.44	4.61E+03	3.88E+02	1.01E+05
9011-001	901-010000	0-000000	488.00	61.10	10.52	5.13E+03	3.93E+02	1.16E+05
9011-002	901-020000	0-000000	488.00	61.10	10.52	5.13E+03	3.93E+02	1.16E+05
9011-003	900-010000	0-000000	488.00	61.10	9.45	4.61E+03	3.93E+02	1.05E+05
9011-004	880-010000	0-000000	488.00	61.10	9.14	4.46E+03	3.93E+02	1.01E+05
9011-005	880-020000	0-000000	488.00	61.10	9.14	4.46E+03	3.93E+02	1.01E+05
9011-006	880-030000	0-000000	488.00	61.10	9.14	4.46E+03	3.93E+02	1.01E+05

Table 06.02.01.04-1.g-7: Secondary System Metal Mass and Energy (t = 100 sec)

R5/M2 Heat Structure	Associated Control Volume		Average Density (lbm/ft^3)	Average Heat Capacity ($BTU/ ft^3\text{-}°F$)	Metal Volume (ft^3)	Metal Mass (lbm)	Slab Temp (°F)	Sensible Heat (BTU)
	Left Side	Right Side						
9031-001	903-010000	0-000000	488.00	61.09	3.23	1.58E+03	3.93E+02	3.57E+04
9031-002	903-020000	0-000000	488.00	61.09	3.23	1.58E+03	3.93E+02	3.57E+04
9031-003	902-010000	0-000000	488.00	61.09	1.42	6.94E+02	3.93E+02	1.57E+04
9031-004	914-010000	0-000000	488.00	61.10	3.01	1.47E+03	3.93E+02	3.33E+04
9031-005	914-020000	0-000000	488.00	61.10	3.01	1.47E+03	3.93E+02	3.33E+04
9031-006	914-030000	0-000000	488.00	61.10	3.01	1.47E+03	3.93E+02	3.33E+04
9031-007	914-040000	0-000000	488.00	61.10	3.01	1.47E+03	3.93E+02	3.33E+04
9031-008	914-050000	0-000000	488.00	61.10	3.01	1.47E+03	3.93E+02	3.33E+04
9091-001	909-010000	0-000000	488.00	60.85	0.52	2.53E+02	3.84E+02	5.42E+03
9091-002	908-010000	0-000000	488.00	60.84	0.48	2.34E+02	3.84E+02	5.01E+03
9091-003	906-010000	0-000000	488.00	61.09	0.56	2.72E+02	3.93E+02	6.17E+03
9091-004	905-010000	0-000000	488.00	61.09	1.16	5.68E+02	3.93E+02	1.29E+04
9131-001	913-010000	0-000000	488.00	60.76	0.19	9.10E+01	3.81E+02	1.91E+03
9131-002	913-020000	0-000000	488.00	60.77	0.19	9.10E+01	3.81E+02	1.91E+03
9131-003	911-010000	0-000000	488.00	61.10	0.24	1.17E+02	3.93E+02	2.66E+03
9131-004	911-020000	0-000000	488.00	61.10	0.24	1.17E+02	3.93E+02	2.66E+03
9171-001	917-010000	0-000000	488.00	60.93	4.22	2.06E+03	3.87E+02	4.50E+04
9171-002	910-010000	0-000000	488.00	60.94	2.03	9.91E+02	3.87E+02	2.17E+04
9171-003	882-010000	0-000000	488.00	60.95	3.88	1.89E+03	3.88E+02	4.16E+04
9171-004	977-010000	0-000000	488.00	61.09	4.73	2.31E+03	3.93E+02	5.24E+04
9171-005	977-020000	0-000000	488.00	61.09	4.73	2.31E+03	3.93E+02	5.24E+04
9791-001	979-010000	0-000000	488.00	61.03	4.94	2.41E+03	3.91E+02	5.39E+04
9791-002	979-020000	0-000000	488.00	61.23	4.94	2.41E+03	3.98E+02	5.64E+04

Table 06.02.01.04-1.g-8: Primary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
100-010000	112.11	0.00	46.86	4.39	0.00	5253.72	5.25E+03	5.34E+02	1.08E+03	2.81E+06
105-010000	112.11	0.00	46.86	4.39	0.00	5253.38	5.25E+03	5.34E+02	1.08E+03	2.81E+06
110-010000	90.69	0.00	46.85	4.39	0.00	4249.19	4.25E+03	5.35E+02	1.08E+03	2.27E+06
115-010000	99.53	0.00	46.85	4.39	0.00	4662.88	4.66E+03	5.35E+02	1.08E+03	2.49E+06
117-010000	34.49	0.00	46.85	4.38	0.00	1615.63	1.62E+03	5.35E+02	1.08E+03	8.64E+05
120-010000	605.62	0.00	46.84	4.41	0.00	28367.66	2.84E+04	5.35E+02	1.08E+03	1.52E+07
121-010000	90.01	0.00	46.84	4.40	0.00	4215.68	4.22E+03	5.35E+02	1.08E+03	2.26E+06
125-010000	104.55	0.00	46.83	4.39	0.00	4895.78	4.90E+03	5.35E+02	1.08E+03	2.62E+06
125-020000	104.55	0.00	46.82	4.39	0.00	4894.95	4.89E+03	5.35E+02	1.08E+03	2.62E+06
125-030000	104.55	0.00	46.81	4.38	0.00	4894.01	4.89E+03	5.35E+02	1.08E+03	2.62E+06
125-040000	104.55	0.00	46.80	4.37	0.00	4893.07	4.89E+03	5.35E+02	1.08E+03	2.62E+06
125-050000	156.83	0.00	46.79	4.36	0.00	7337.98	7.34E+03	5.36E+02	1.08E+03	3.93E+06
125-060000	209.09	0.00	46.77	4.35	0.00	9779.23	9.78E+03	5.36E+02	1.08E+03	5.24E+06
125-070000	209.09	0.00	46.75	4.34	0.00	9775.05	9.78E+03	5.36E+02	1.08E+03	5.24E+06
125-080000	209.09	0.00	46.73	4.33	0.00	9770.87	9.77E+03	5.37E+02	1.08E+03	5.24E+06
125-090000	209.09	0.00	46.71	4.31	0.00	9766.69	9.77E+03	5.37E+02	1.08E+03	5.25E+06
125-100000	182.76	0.00	46.69	4.30	0.00	8533.62	8.53E+03	5.37E+02	1.08E+03	4.59E+06
125-110000	182.76	0.00	46.68	4.29	0.00	8531.06	8.53E+03	5.38E+02	1.08E+03	4.59E+06
125-120000	209.09	0.00	46.66	4.29	0.00	9756.02	9.76E+03	5.38E+02	1.08E+03	5.25E+06
125-130000	209.09	0.00	46.64	4.29	0.00	9752.26	9.75E+03	5.38E+02	1.08E+03	5.25E+06
125-140000	209.09	0.00	46.62	4.28	0.00	9748.71	9.75E+03	5.39E+02	1.08E+03	5.25E+06
125-150000	209.09	0.00	46.61	4.28	0.00	9744.94	9.74E+03	5.39E+02	1.08E+03	5.25E+06
125-160000	156.83	0.00	46.59	4.28	0.00	7307.24	7.31E+03	5.39E+02	1.08E+03	3.94E+06
125-170000	104.55	0.00	46.59	4.27	0.00	4870.38	4.87E+03	5.39E+02	1.08E+03	2.63E+06
125-180000	104.55	0.00	46.58	4.27	0.00	4869.54	4.87E+03	5.39E+02	1.08E+03	2.63E+06
125-190000	104.55	0.00	46.57	4.27	0.00	4868.81	4.87E+03	5.40E+02	1.08E+03	2.63E+06
125-200000	104.55	0.00	46.56	4.27	0.00	4867.87	4.87E+03	5.40E+02	1.08E+03	2.63E+06
129-010000	90.01	0.00	46.56	4.27	0.00	4190.57	4.19E+03	5.40E+02	1.08E+03	2.26E+06
130-010000	605.62	0.00	46.55	4.27	0.00	28190.21	2.82E+04	5.40E+02	1.08E+03	1.52E+07
132-010000	34.49	0.00	46.54	4.22	0.00	1605.04	1.61E+03	5.40E+02	1.08E+03	8.67E+05
135-010000	51.86	0.00	46.54	4.22	0.00	2413.39	2.41E+03	5.40E+02	1.08E+03	1.30E+06
140-010000	61.59	0.00	46.54	4.22	0.00	2866.01	2.87E+03	5.40E+02	1.08E+03	1.55E+06
145-010000	116.68	0.00	46.54	4.22	0.00	5429.47	5.43E+03	5.40E+02	1.08E+03	2.93E+06
150-010000	102.59	0.00	46.53	4.22	0.00	4773.76	4.77E+03	5.40E+02	1.08E+03	2.58E+06
155-010000	108.95	0.00	46.53	4.22	0.00	5069.15	5.07E+03	5.40E+02	1.08E+03	2.74E+06
160-010000	413.10	0.00	46.53	4.39	0.00	19222.37	1.92E+04	5.41E+02	1.08E+03	1.04E+07
165-010000	105.12	0.00	46.55	4.57	0.00	4893.34	4.89E+03	5.41E+02	1.08E+03	2.65E+06
170-010000	105.12	0.00	46.55	4.57	0.00	4893.13	4.89E+03	5.41E+02	1.08E+03	2.65E+06
175-010000	135.84	0.00	46.54	4.57	0.00	6322.30	6.32E+03	5.41E+02	1.08E+03	3.42E+06
180-010000	116.69	0.00	46.54	4.57	0.00	5430.92	5.43E+03	5.41E+02	1.08E+03	2.94E+06
200-010000	37.37	0.00	49.16	4.39	0.00	1837.07	1.84E+03	4.89E+02	1.08E+03	8.98E+05
205-010000	37.37	0.00	49.16	4.38	0.00	1837.19	1.84E+03	4.88E+02	1.08E+03	8.97E+05
210-010000	30.23	0.00	49.17	4.38	0.00	1486.32	1.49E+03	4.88E+02	1.08E+03	7.26E+05
215-010000	33.18	0.00	49.17	4.38	0.00	1631.27	1.63E+03	4.88E+02	1.08E+03	7.97E+05

Table 06.02.01.04-1.g-8: Primary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
217-010000	11.50	0.00	49.17	4.37	0.00	565.24	5.65E+02	4.88E+02	1.08E+03	2.76E+05
220-010000	201.87	0.00	49.18	4.41	0.00	9928.67	9.93E+03	4.88E+02	1.08E+03	4.85E+06
221-010000	30.00	0.00	49.18	4.39	0.00	1475.58	1.48E+03	4.88E+02	1.08E+03	7.20E+05
225-010000	34.85	0.00	49.21	4.39	0.00	1714.83	1.71E+03	4.88E+02	1.08E+03	8.36E+05
225-020000	34.85	0.00	49.22	4.38	0.00	1715.39	1.72E+03	4.87E+02	1.08E+03	8.36E+05
225-030000	34.85	0.00	49.25	4.37	0.00	1716.12	1.72E+03	4.87E+02	1.08E+03	8.35E+05
225-040000	34.85	0.00	49.27	4.36	0.00	1716.93	1.72E+03	4.86E+02	1.08E+03	8.35E+05
225-050000	52.28	0.00	49.30	4.35	0.00	2577.00	2.58E+03	4.86E+02	1.08E+03	1.25E+06
225-060000	69.70	0.00	49.31	4.34	0.00	3436.78	3.44E+03	4.85E+02	1.08E+03	1.67E+06
225-070000	69.70	0.00	49.31	4.33	0.00	3436.64	3.44E+03	4.85E+02	1.08E+03	1.67E+06
225-080000	69.70	0.00	49.30	4.31	0.00	3436.23	3.44E+03	4.85E+02	1.08E+03	1.67E+06
225-090000	69.70	0.00	49.30	4.30	0.00	3436.23	3.44E+03	4.85E+02	1.08E+03	1.67E+06
225-100000	60.92	0.00	49.31	4.28	0.00	3003.78	3.00E+03	4.85E+02	1.08E+03	1.46E+06
225-110000	60.92	0.00	49.33	4.28	0.00	3005.06	3.01E+03	4.85E+02	1.08E+03	1.46E+06
225-120000	69.70	0.00	49.34	4.27	0.00	3438.94	3.44E+03	4.85E+02	1.08E+03	1.67E+06
225-130000	69.70	0.00	49.36	4.27	0.00	3440.13	3.44E+03	4.84E+02	1.08E+03	1.67E+06
225-140000	69.70	0.00	49.38	4.26	0.00	3441.45	3.44E+03	4.84E+02	1.08E+03	1.66E+06
225-150000	69.70	0.00	49.40	4.26	0.00	3442.92	3.44E+03	4.83E+02	1.08E+03	1.66E+06
225-160000	52.28	0.00	49.42	4.26	0.00	2583.38	2.58E+03	4.83E+02	1.08E+03	1.25E+06
225-170000	34.85	0.00	49.44	4.25	0.00	1722.82	1.72E+03	4.82E+02	1.08E+03	8.31E+05
225-180000	34.85	0.00	49.47	4.25	0.00	1723.83	1.72E+03	4.82E+02	1.08E+03	8.31E+05
225-190000	34.85	0.00	49.52	4.25	0.00	1725.53	1.73E+03	4.81E+02	1.08E+03	8.30E+05
225-200000	34.85	0.00	50.00	4.25	0.00	1742.33	1.74E+03	4.70E+02	1.08E+03	8.20E+05
229-010000	30.00	0.00	50.00	4.25	0.00	1500.18	1.50E+03	4.70E+02	1.08E+03	7.05E+05
230-010000	201.87	0.00	50.01	4.25	0.00	10095.82	1.01E+04	4.70E+02	1.08E+03	4.75E+06
232-010000	11.50	0.00	50.01	4.20	0.00	574.86	5.75E+02	4.70E+02	1.08E+03	2.70E+05
235-010000	17.29	0.00	50.01	4.20	0.00	864.41	8.64E+02	4.70E+02	1.08E+03	4.06E+05
240-010000	20.53	0.00	50.01	4.20	0.00	1026.59	1.03E+03	4.70E+02	1.08E+03	4.83E+05
245-010000	38.89	0.00	50.01	4.20	0.00	1945.06	1.95E+03	4.70E+02	1.08E+03	9.14E+05
250-010000	34.20	0.00	50.02	4.19	0.00	1710.39	1.71E+03	4.70E+02	1.08E+03	8.04E+05
255-010000	36.32	0.00	50.02	4.19	0.00	1816.53	1.82E+03	4.70E+02	1.09E+03	8.53E+05
260-010000	137.70	0.00	50.07	4.37	0.00	6894.64	6.89E+03	4.69E+02	1.08E+03	3.23E+06
265-010000	35.04	0.00	50.10	4.58	0.00	1755.40	1.76E+03	4.69E+02	1.08E+03	8.23E+05
270-010000	35.04	0.00	50.11	4.58	0.00	1755.79	1.76E+03	4.69E+02	1.08E+03	8.23E+05
275-010000	45.28	0.00	50.13	4.57	0.00	2269.62	2.27E+03	4.68E+02	1.08E+03	1.06E+06
280-010000	38.90	0.00	50.14	4.57	0.00	1950.37	1.95E+03	4.68E+02	1.08E+03	9.13E+05
300-010000	33.52	0.00	49.69	4.62	0.00	1665.53	1.67E+03	4.78E+02	1.08E+03	7.96E+05
301-010000	100.56	0.00	45.86	4.61	0.00	4611.93	4.61E+03	5.54E+02	1.08E+03	2.55E+06
302-010000	70.99	0.00	50.18	4.61	0.00	3562.29	3.56E+03	4.67E+02	1.08E+03	1.66E+06
303-010000	212.98	0.00	46.54	4.61	0.00	9912.23	9.91E+03	5.41E+02	1.08E+03	5.36E+06
304-010000	78.30	0.00	50.22	4.62	0.00	3931.75	3.93E+03	4.66E+02	1.08E+03	1.83E+06
305-010000	234.90	0.00	46.54	4.62	0.00	10930.84	1.09E+04	5.41E+02	1.08E+03	5.91E+06
306-010000	78.30	0.00	50.25	4.63	0.00	3934.81	3.93E+03	4.66E+02	1.08E+03	1.83E+06
307-010000	234.90	0.00	46.53	4.63	0.00	10929.66	1.09E+04	5.41E+02	1.08E+03	5.92E+06
308-010000	23.49	0.00	50.27	4.64	0.00	1180.74	1.18E+03	4.65E+02	1.08E+03	5.49E+05

Table 06.02.01.04-1.g-8: Primary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
309-010000	70.47	0.00	46.53	4.63	0.00	3278.87	3.28E+03	5.41E+02	1.08E+03	1.77E+06
310-010000	148.04	0.00	50.33	4.63	0.00	7451.00	7.45E+03	4.64E+02	1.08E+03	3.46E+06
311-010000	444.12	0.00	46.52	4.63	0.00	20659.57	2.07E+04	5.41E+02	1.08E+03	1.12E+07
312-010000	13.09	0.00	50.33	4.58	0.00	658.87	6.59E+02	4.64E+02	1.08E+03	3.06E+05
313-010000	39.27	0.00	46.51	4.58	0.00	1826.48	1.83E+03	5.41E+02	1.08E+03	9.89E+05
314-010000	11.36	0.00	50.34	4.59	0.00	571.83	5.72E+02	4.64E+02	1.08E+03	2.65E+05
315-010000	34.08	0.00	46.51	4.59	0.00	1584.98	1.58E+03	5.42E+02	1.08E+03	8.58E+05
316-010000	36.98	0.00	49.71	4.57	0.00	1838.51	1.84E+03	4.77E+02	1.08E+03	8.77E+05
317-010000	110.95	0.00	46.81	4.57	0.00	5193.24	5.19E+03	5.36E+02	1.08E+03	2.78E+06
318-010000	36.98	0.00	49.71	4.55	0.00	1838.51	1.84E+03	4.77E+02	1.08E+03	8.77E+05
319-010000	110.95	0.00	46.79	4.55	0.00	5190.80	5.19E+03	5.36E+02	1.08E+03	2.78E+06
320-010000	36.98	0.00	49.71	4.54	0.00	1838.29	1.84E+03	4.77E+02	1.08E+03	8.77E+05
321-010000	110.95	0.00	46.76	4.53	0.00	5187.91	5.19E+03	5.37E+02	1.08E+03	2.78E+06
322-010000	36.98	0.00	49.70	4.52	0.00	1838.07	1.84E+03	4.77E+02	1.08E+03	8.77E+05
323-010000	110.95	0.00	46.73	4.52	0.00	5184.92	5.18E+03	5.37E+02	1.08E+03	2.79E+06
324-010000	36.98	0.00	49.70	4.50	0.00	1837.92	1.84E+03	4.77E+02	1.08E+03	8.77E+05
325-010000	110.95	0.00	46.71	4.50	0.00	5182.47	5.18E+03	5.38E+02	1.08E+03	2.79E+06
326-010000	36.98	0.00	49.70	4.49	0.00	1838.11	1.84E+03	4.77E+02	1.08E+03	8.77E+05
327-010000	110.95	0.00	46.70	4.49	0.00	5181.25	5.18E+03	5.38E+02	1.08E+03	2.79E+06
330-010000	24.91	0.00	49.69	4.46	0.00	1237.42	1.24E+03	4.78E+02	1.08E+03	5.91E+05
331-010000	74.72	0.00	46.69	4.46	0.00	3488.42	3.49E+03	5.38E+02	1.08E+03	1.88E+06
340-010000	3.01	0.00	50.31	4.48	0.00	151.63	1.52E+02	4.64E+02	1.08E+03	7.04E+04
340-020000	2.01	0.00	50.20	4.47	0.00	100.99	1.01E+02	4.66E+02	1.08E+03	4.71E+04
340-030000	2.01	0.00	50.05	4.46	0.00	100.69	1.01E+02	4.70E+02	1.08E+03	4.73E+04
340-040000	0.48	0.00	49.99	4.46	0.00	24.21	2.42E+01	4.71E+02	1.08E+03	1.14E+04
341-010000	9.04	0.00	46.41	4.48	0.00	419.65	4.20E+02	5.43E+02	1.08E+03	2.28E+05
341-020000	6.04	0.00	46.33	4.47	0.00	279.59	2.80E+02	5.45E+02	1.08E+03	1.52E+05
341-030000	6.04	0.00	46.24	4.47	0.00	279.08	2.79E+02	5.46E+02	1.08E+03	1.52E+05
341-040000	1.45	0.00	46.21	4.46	0.00	67.14	6.71E+01	5.47E+02	1.08E+03	3.67E+04
342-010000	7.42	0.00	50.45	4.48	0.00	374.53	3.75E+02	4.61E+02	1.08E+03	1.73E+05
342-020000	7.42	0.00	50.52	4.47	0.00	375.01	3.75E+02	4.59E+02	1.08E+03	1.72E+05
342-030000	7.42	0.00	50.55	4.46	0.00	375.22	3.75E+02	4.59E+02	1.08E+03	1.72E+05
342-040000	2.49	0.00	50.55	4.46	0.00	125.98	1.26E+02	4.59E+02	1.08E+03	5.78E+04
343-010000	22.27	0.00	46.46	4.48	0.00	1034.74	1.03E+03	5.42E+02	1.08E+03	5.61E+05
343-020000	22.27	0.00	46.43	4.47	0.00	1034.00	1.03E+03	5.43E+02	1.08E+03	5.61E+05
343-030000	22.27	0.00	46.40	4.46	0.00	1033.24	1.03E+03	5.43E+02	1.08E+03	5.61E+05
343-040000	7.48	0.00	46.39	4.46	0.00	346.79	3.47E+02	5.44E+02	1.08E+03	1.88E+05
352-010000	144.89	0.00	49.16	4.45	0.00	7122.31	7.12E+03	4.89E+02	1.08E+03	3.48E+06
353-010000	434.67	0.00	46.88	4.45	0.00	20375.40	2.04E+04	5.34E+02	1.08E+03	1.09E+07
354-010000	70.58	0.00	49.17	4.45	0.00	3470.26	3.47E+03	4.89E+02	1.08E+03	1.70E+06
355-010000	211.74	0.00	46.87	4.45	0.00	9923.76	9.92E+03	5.34E+02	1.08E+03	5.30E+06
356-010000	138.93	0.00	46.51	4.46	0.00	6461.22	6.46E+03	5.41E+02	1.08E+03	3.50E+06
357-010000	439.80	0.00	45.02	4.46	0.00	19797.51	1.98E+04	5.68E+02	1.08E+03	1.13E+07
360-010000	47.69	0.00	45.13	4.46	0.00	2152.24	2.15E+03	5.66E+02	1.08E+03	1.22E+06
360-020000	77.33	0.00	44.96	4.46	0.00	3476.99	3.48E+03	5.69E+02	1.08E+03	1.98E+06

Table 06.02.01.04-1.g-8: Primary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
361-010000	143.08	0.00	44.79	4.46	0.00	6408.76	6.41E+03	5.72E+02	1.08E+03	3.67E+06
361-020000	231.97	0.00	44.84	4.46	0.00	10400.37	1.04E+04	5.71E+02	1.08E+03	5.94E+06
364-010000	259.62	0.00	45.03	4.45	0.00	11691.64	1.17E+04	5.68E+02	1.08E+03	6.64E+06
400-010000	74.62	7.76	40.88	4.38	33.97	3050.23	3.08E+03	6.34E+02	1.08E+03	1.97E+06
408-010000	160.85	0.27	40.90	4.37	1.16	6578.37	6.58E+03	6.33E+02	1.08E+03	4.17E+06
410-010000	232.80	162.80	40.84	4.36	710.30	9508.15	1.02E+04	6.34E+02	1.08E+03	6.80E+06
410-020000	0.11	395.49	40.91	4.36	1724.93	4.37	1.73E+03	6.33E+02	1.08E+03	1.87E+06
410-030000	0.07	395.53	40.92	4.36	1724.67	2.75	1.73E+03	6.33E+02	1.08E+03	1.87E+06
410-040000	0.07	395.53	40.92	4.36	1724.38	2.91	1.73E+03	6.33E+02	1.08E+03	1.87E+06
410-050000	0.06	395.54	40.92	4.36	1724.07	2.43	1.73E+03	6.33E+02	1.08E+03	1.87E+06
410-060000	0.04	395.55	40.92	4.36	1723.87	1.78	1.73E+03	6.33E+02	1.08E+03	1.87E+06
412-010000	0.00	161.11	40.92	4.36	701.94	0.20	7.02E+02	6.33E+02	1.08E+03	7.60E+05

Table 06.02.01.04-1.g-9: Secondary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
620-010000	168.39	198.25	55.14	0.34	67.98	9285.85	9.35E+03	3.34E+02	1.11E+03	3.18E+06
623-010000	0.69	365.95	55.18	0.34	125.22	38.24	1.63E+02	3.33E+02	1.11E+03	1.52E+05
624-010000	11.01	144.88	55.17	0.34	49.65	607.51	6.57E+02	3.33E+02	1.11E+03	2.57E+05
624-020000	2.33	40.68	55.18	0.34	13.94	128.50	1.42E+02	3.33E+02	1.11E+03	5.83E+04
624-030000	3.07	56.06	55.18	0.34	19.23	169.56	1.89E+02	3.33E+02	1.11E+03	7.78E+04
624-040000	4.82	38.19	55.17	0.34	13.13	265.76	2.79E+02	3.33E+02	1.11E+03	1.03E+05
625-010000	0.91	179.11	55.18	0.34	61.29	50.07	1.11E+02	3.33E+02	1.11E+03	8.47E+04
625-020000	0.40	72.94	55.18	0.34	24.82	22.10	4.69E+01	3.33E+02	1.11E+03	3.50E+04
625-030000	0.54	100.31	55.18	0.34	34.08	30.05	6.41E+01	3.33E+02	1.11E+03	4.79E+04
625-040000	0.93	72.42	55.18	0.34	24.66	51.32	7.60E+01	3.33E+02	1.11E+03	4.45E+04
630-010000	0.65	69.47	55.18	0.33	23.25	35.67	5.89E+01	3.33E+02	1.12E+03	3.78E+04
630-020000	0.19	69.93	55.18	0.33	23.09	10.49	3.36E+01	3.33E+02	1.12E+03	2.94E+04
630-030000	0.22	69.89	55.18	0.33	22.99	12.27	3.53E+01	3.33E+02	1.12E+03	2.99E+04
630-040000	0.21	69.91	55.18	0.33	22.94	11.41	3.44E+01	3.33E+02	1.12E+03	2.95E+04
630-050000	0.22	104.96	55.19	0.33	34.24	12.31	4.65E+01	3.33E+02	1.12E+03	4.26E+04
630-060000	0.19	140.05	55.19	0.32	45.29	10.29	5.56E+01	3.33E+02	1.13E+03	5.44E+04
630-070000	0.11	140.12	55.19	0.32	44.89	6.35	5.12E+01	3.33E+02	1.13E+03	5.28E+04
631-010000	1.36	68.76	55.17	0.34	23.63	75.04	9.87E+01	3.33E+02	1.11E+03	5.13E+04
631-020000	0.65	69.47	55.17	0.33	23.25	35.67	5.89E+01	3.33E+02	1.12E+03	3.79E+04
631-030000	0.54	69.57	55.17	0.33	22.90	30.02	5.29E+01	3.33E+02	1.12E+03	3.57E+04
631-040000	0.48	69.64	55.17	0.33	22.67	26.34	4.90E+01	3.33E+02	1.13E+03	3.43E+04
631-050000	0.62	104.56	55.18	0.32	33.69	34.01	6.77E+01	3.33E+02	1.13E+03	4.93E+04
631-060000	0.72	139.52	55.18	0.32	44.55	39.54	8.41E+01	3.33E+02	1.13E+03	6.35E+04
631-070000	0.63	139.60	55.18	0.32	44.29	34.98	7.93E+01	3.33E+02	1.13E+03	6.18E+04
632-010000	0.06	140.17	55.19	0.32	44.16	3.17	4.73E+01	3.33E+02	1.13E+03	5.11E+04
633-010000	0.64	139.59	55.18	0.32	44.17	35.52	7.97E+01	3.33E+02	1.13E+03	6.19E+04
634-010000	0.04	140.20	55.19	0.31	43.48	1.93	4.54E+01	3.33E+02	1.14E+03	5.02E+04
635-010000	0.61	139.62	55.19	0.32	44.16	33.82	7.80E+01	3.33E+02	1.13E+03	6.13E+04
636-010000	0.13	86.55	55.19	0.31	26.77	6.94	3.37E+01	3.33E+02	1.14E+03	3.28E+04
637-010000	0.59	86.08	55.19	0.32	27.17	32.48	5.97E+01	3.33E+02	1.13E+03	4.16E+04
638-010000	1.22	608.30	55.19	0.32	196.10	67.28	2.63E+02	3.33E+02	1.13E+03	2.43E+05
639-010000	0.28	635.00	55.18	0.34	217.27	15.42	2.33E+02	3.33E+02	1.11E+03	2.46E+05
640-010000	0.14	125.17	55.19	0.32	40.46	7.81	4.83E+01	3.33E+02	1.13E+03	4.82E+04
641-010000	0.09	117.42	55.19	0.32	38.03	5.19	4.32E+01	3.33E+02	1.13E+03	4.45E+04
642-010000	1.80	318.21	55.19	0.33	104.80	99.61	2.04E+02	3.33E+02	1.12E+03	1.51E+05
645-010000	1.12	1074.18	55.18	0.34	367.50	61.71	4.29E+02	3.33E+02	1.11E+03	4.29E+05
650-010000	27.85	802.36	55.24	0.33	267.32	1538.19	1.81E+03	3.31E+02	1.11E+03	8.07E+05
660-010000	0.00	703.68	55.24	0.33	228.98	0.00	2.29E+02	3.31E+02	1.12E+03	2.56E+05
670-010000	0.00	400.00	55.25	0.32	129.84	0.00	1.30E+02	3.31E+02	1.12E+03	1.45E+05
803-010000	2.09	0.17	55.09	0.35	0.06	115.20	1.15E+02	3.36E+02	1.11E+03	3.87E+04
720-010000	1099.94	0.00	44.55	2.95	0.00	48999.03	4.90E+04	5.72E+02	1.10E+03	2.80E+07
723-010000	1099.94	0.00	44.53	2.95	0.00	48978.13	4.90E+04	5.72E+02	1.10E+03	2.80E+07
724-010000	467.68	0.00	44.78	2.95	0.00	20944.07	2.09E+04	5.68E+02	1.10E+03	1.19E+07
724-020000	129.02	0.00	44.88	2.96	0.00	5790.11	5.79E+03	5.66E+02	1.10E+03	3.28E+06

Table 06.02.01.04-1.g-9: Secondary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
724-030000	177.40	0.00	45.07	2.97	0.00	7996.13	8.00E+03	5.63E+02	1.10E+03	4.50E+06
724-040000	129.02	0.00	45.27	2.98	0.00	5840.56	5.84E+03	5.60E+02	1.10E+03	3.27E+06
725-010000	540.02	0.00	44.57	2.95	0.00	24066.49	2.41E+04	5.72E+02	1.10E+03	1.38E+07
725-020000	220.04	0.00	44.68	2.96	0.00	9830.06	9.83E+03	5.70E+02	1.10E+03	5.60E+06
725-030000	302.55	0.00	44.85	2.97	0.00	13570.71	1.36E+04	5.67E+02	1.10E+03	7.69E+06
725-040000	220.04	0.00	45.36	2.98	0.00	9979.91	9.98E+03	5.58E+02	1.10E+03	5.57E+06
730-010000	210.35	0.00	46.06	2.98	0.00	9688.04	9.69E+03	5.46E+02	1.10E+03	5.29E+06
730-020000	210.35	0.00	46.05	2.98	0.00	9686.36	9.69E+03	5.46E+02	1.10E+03	5.29E+06
730-030000	210.35	0.00	46.04	2.98	0.00	9684.47	9.68E+03	5.46E+02	1.10E+03	5.29E+06
730-040000	210.35	0.00	46.03	2.98	0.00	9682.15	9.68E+03	5.46E+02	1.10E+03	5.29E+06
730-050000	315.54	0.00	46.02	2.97	0.00	14519.62	1.45E+04	5.46E+02	1.10E+03	7.93E+06
730-060000	420.70	0.00	46.00	2.97	0.00	19350.80	1.94E+04	5.47E+02	1.10E+03	1.06E+07
730-070000	420.70	0.00	45.98	2.96	0.00	19342.39	1.93E+04	5.47E+02	1.10E+03	1.06E+07
731-010000	210.35	0.00	45.78	2.98	0.00	9629.15	9.63E+03	5.51E+02	1.10E+03	5.30E+06
731-020000	210.35	0.00	45.87	2.98	0.00	9649.55	9.65E+03	5.49E+02	1.10E+03	5.30E+06
731-030000	210.35	0.00	45.89	2.98	0.00	9651.86	9.65E+03	5.49E+02	1.10E+03	5.30E+06
731-040000	210.35	0.00	45.88	2.98	0.00	9651.02	9.65E+03	5.49E+02	1.10E+03	5.30E+06
731-050000	315.54	0.00	45.88	2.97	0.00	14475.44	1.45E+04	5.49E+02	1.10E+03	7.95E+06
731-060000	420.70	0.00	45.87	2.97	0.00	19299.05	1.93E+04	5.49E+02	1.10E+03	1.06E+07
731-070000	420.70	0.00	45.88	2.96	0.00	19301.58	1.93E+04	5.49E+02	1.10E+03	1.06E+07
732-010000	420.70	0.00	45.96	2.96	0.00	19333.97	1.93E+04	5.47E+02	1.10E+03	1.06E+07
733-010000	420.70	0.00	45.89	2.96	0.00	19305.79	1.93E+04	5.49E+02	1.10E+03	1.06E+07
734-010000	420.70	0.00	45.94	2.96	0.00	19325.56	1.93E+04	5.48E+02	1.10E+03	1.06E+07
735-010000	420.70	0.00	45.90	2.96	0.00	19309.99	1.93E+04	5.48E+02	1.10E+03	1.06E+07
736-010000	260.02	0.00	45.91	2.95	0.00	11938.16	1.19E+04	5.48E+02	1.10E+03	6.54E+06
737-010000	260.02	0.00	46.01	2.95	0.00	11962.08	1.20E+04	5.47E+02	1.10E+03	6.54E+06
738-010000	1820.25	8.32	44.27	2.95	24.53	80586.26	8.06E+04	5.77E+02	1.10E+03	4.65E+07
739-010000	1905.85	0.00	44.49	2.94	0.00	84791.27	8.48E+04	5.73E+02	1.10E+03	4.86E+07
740-010000	373.10	2.82	44.28	2.94	8.32	16522.41	1.65E+04	5.76E+02	1.10E+03	9.53E+06
741-010000	351.88	0.66	44.26	2.94	1.94	15573.66	1.56E+04	5.77E+02	1.10E+03	8.98E+06
742-010000	125.70	834.36	44.30	2.94	2453.01	5569.02	8.02E+03	5.76E+02	1.10E+03	5.91E+06
745-010000	759.63	2466.26	44.31	2.93	7237.97	33655.52	4.09E+04	5.76E+02	1.10E+03	2.74E+07
750-010000	0.00	2490.61	44.31	2.94	7323.89	0.00	7.32E+03	5.76E+02	1.10E+03	8.07E+06
760-010000	0.00	2111.03	44.31	2.87	6054.01	0.00	6.05E+03	5.76E+02	1.11E+03	6.71E+06
770-010000	0.00	1200.00	44.32	2.84	3412.80	0.00	3.41E+03	5.76E+02	1.11E+03	3.79E+06
674-010000	0.00	10.52	59.81	0.03	0.26	0.00	2.64E-01	1.80E+02	1.19E+03	3.14E+02
675-010000	0.00	32.83	59.81	0.03	0.82	0.00	8.23E-01	1.80E+02	1.19E+03	9.81E+02
675-020000	0.00	49.95	59.81	0.03	1.25	0.00	1.25E+00	1.80E+02	1.19E+03	1.49E+03
675-030000	0.00	48.01	59.81	0.03	1.20	0.00	1.20E+00	1.80E+02	1.19E+03	1.43E+03
675-040000	0.00	80.80	59.81	0.03	2.03	0.00	2.03E+00	1.80E+02	1.19E+03	2.41E+03
675-050000	0.00	48.01	59.81	0.03	1.20	0.00	1.20E+00	1.80E+02	1.19E+03	1.44E+03
675-060000	0.00	36.63	59.81	0.03	0.92	0.00	9.19E-01	1.80E+02	1.19E+03	1.10E+03
675-070000	0.00	70.45	59.81	0.03	1.77	0.00	1.77E+00	1.80E+02	1.19E+03	2.11E+03
675-080000	0.00	15.10	59.81	0.03	0.38	0.00	3.79E-01	1.80E+02	1.19E+03	4.52E+02
676-010000	0.00	9.07	59.81	0.03	0.23	0.00	2.28E-01	1.80E+02	1.19E+03	2.72E+02

Table 06.02.01.04-1.g-9: Secondary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
679-010000	0.00	11.30	59.81	0.03	0.28	0.00	2.84E-01	1.80E+02	1.19E+03	3.38E+02
681-010000	0.00	23.43	59.81	0.03	0.59	0.00	5.89E-01	1.80E+02	1.19E+03	7.01E+02
681-020000	0.00	21.65	59.81	0.03	0.54	0.00	5.44E-01	1.80E+02	1.19E+03	6.48E+02
681-030000	0.00	32.83	59.81	0.03	0.83	0.00	8.26E-01	1.80E+02	1.19E+03	9.83E+02
681-040000	0.00	24.01	59.81	0.03	0.60	0.00	6.04E-01	1.80E+02	1.19E+03	7.19E+02
681-050000	0.00	20.58	59.81	0.03	0.52	0.00	5.18E-01	1.80E+02	1.19E+03	6.17E+02
681-060000	0.00	24.01	59.81	0.03	0.60	0.00	6.04E-01	1.80E+02	1.19E+03	7.20E+02
681-070000	0.00	85.34	59.81	0.03	2.15	0.00	2.15E+00	1.80E+02	1.19E+03	2.56E+03
681-080000	0.00	8.08	59.81	0.03	0.20	0.00	2.04E-01	1.80E+02	1.19E+03	2.43E+02
681-090000	0.00	110.67	59.81	0.03	2.79	0.00	2.79E+00	1.80E+02	1.19E+03	3.32E+03
681-100000	0.00	47.35	59.81	0.03	1.20	0.00	1.20E+00	1.80E+02	1.19E+03	1.42E+03
681-110000	0.00	17.74	59.81	0.03	0.45	0.00	4.49E-01	1.80E+02	1.19E+03	5.34E+02
681-120000	0.00	25.12	59.81	0.03	0.64	0.00	6.36E-01	1.80E+02	1.19E+03	7.56E+02
681-130000	0.00	87.53	59.81	0.03	2.22	0.00	2.22E+00	1.80E+02	1.19E+03	2.64E+03
681-140000	0.00	25.12	59.81	0.03	0.64	0.00	6.38E-01	1.80E+02	1.19E+03	7.58E+02
681-150000	0.00	372.13	59.81	0.03	9.46	0.00	9.46E+00	1.80E+02	1.19E+03	1.12E+04
681-160000	0.00	28.50	59.81	0.03	0.73	0.00	7.33E-01	1.80E+02	1.18E+03	8.67E+02
681-170000	0.00	71.07	59.81	0.03	1.83	0.00	1.83E+00	1.80E+02	1.18E+03	2.16E+03
681-180000	0.00	14.97	59.81	0.03	0.39	0.00	3.87E-01	1.80E+02	1.18E+03	4.57E+02
681-190000	0.01	257.74	59.81	0.03	6.64	0.46	7.10E+00	1.80E+02	1.18E+03	7.93E+03
681-200000	0.00	43.47	59.81	0.03	1.13	0.03	1.15E+00	1.80E+02	1.18E+03	1.34E+03
681-210000	0.00	50.40	59.81	0.03	1.31	0.15	1.46E+00	1.80E+02	1.18E+03	1.57E+03
682-010000	0.00	15.12	59.81	0.03	0.39	0.12	5.11E-01	1.80E+02	1.18E+03	4.86E+02
684-010000	0.00	14.95	59.81	0.03	0.44	0.01	4.45E-01	1.80E+02	1.14E+03	5.00E+02
684-020000	0.00	43.46	59.81	0.03	1.35	0.00	1.35E+00	1.80E+02	1.12E+03	1.52E+03
684-030000	0.00	34.27	59.81	0.03	1.02	0.00	1.02E+00	1.80E+02	1.14E+03	1.16E+03
684-040000	0.50	42.96	59.81	0.04	1.60	30.08	3.17E+01	1.80E+02	1.08E+03	7.15E+03
684-050000	1.21	19.10	59.81	0.03	0.55	72.52	7.31E+01	1.80E+02	1.15E+03	1.37E+04
689-010000	0.00	0.53	59.81	0.04	0.02	0.00	2.35E-02	1.80E+02	1.08E+03	2.20E+01
691-010000	0.00	0.53	59.81	0.04	0.02	0.00	2.35E-02	1.80E+02	1.08E+03	2.20E+01
695-010000	0.03	225.81	59.81	0.03	5.82	1.89	7.72E+00	1.80E+02	1.18E+03	7.23E+03
695-020000	0.16	225.68	59.81	0.03	5.83	9.86	1.57E+01	1.80E+02	1.18E+03	8.67E+03
695-030000	0.66	225.18	59.81	0.03	5.84	39.58	4.54E+01	1.80E+02	1.18E+03	1.40E+04
695-040000	0.74	225.10	59.81	0.03	5.88	44.17	5.00E+01	1.80E+02	1.18E+03	1.49E+04
695-050000	0.42	225.43	59.81	0.03	5.91	24.85	3.08E+01	1.80E+02	1.18E+03	1.14E+04
695-060000	0.14	225.70	59.81	0.03	5.94	8.65	1.46E+01	1.80E+02	1.18E+03	8.54E+03
695-070000	0.03	225.81	59.81	0.03	5.98	1.89	7.87E+00	1.80E+02	1.17E+03	7.36E+03
695-080000	0.01	225.83	59.81	0.03	6.04	0.41	6.45E+00	1.80E+02	1.17E+03	7.14E+03
695-090000	0.00	225.84	59.81	0.03	6.16	0.27	6.43E+00	1.80E+02	1.16E+03	7.22E+03
695-100000	0.00	225.84	59.81	0.03	6.35	0.14	6.48E+00	1.80E+02	1.15E+03	7.35E+03
774-010000	0.00	31.55	44.32	2.84	89.72	0.00	8.97E+01	5.76E+02	1.11E+03	9.96E+04
775-010000	0.00	98.50	44.32	2.84	280.11	0.00	2.80E+02	5.76E+02	1.11E+03	3.11E+05
775-020000	0.00	149.85	44.32	2.84	426.23	0.00	4.26E+02	5.76E+02	1.11E+03	4.73E+05
775-030000	0.00	144.04	44.32	2.84	409.77	0.00	4.10E+02	5.76E+02	1.11E+03	4.55E+05
775-040000	0.00	242.41	44.31	2.85	689.73	0.00	6.90E+02	5.76E+02	1.11E+03	7.65E+05

Table 06.02.01.04-1.g-9: Secondary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
775-050000	0.00	144.04	44.31	2.84	409.02	0.00	4.09E+02	5.76E+02	1.11E+03	4.54E+05
775-060000	0.00	109.88	44.31	2.85	312.66	0.00	3.13E+02	5.76E+02	1.11E+03	3.47E+05
775-070000	0.00	211.35	44.31	2.84	600.15	0.00	6.00E+02	5.76E+02	1.11E+03	6.66E+05
775-080000	0.00	45.29	44.31	2.84	128.84	0.00	1.29E+02	5.76E+02	1.11E+03	1.43E+05
776-010000	0.16	27.06	44.41	2.83	76.67	7.12	8.38E+01	5.74E+02	1.11E+03	8.93E+04
779-010000	0.00	33.91	44.31	2.84	96.15	0.00	9.61E+01	5.76E+02	1.11E+03	1.07E+05
781-010000	0.00	70.28	59.81	0.02	1.73	0.00	1.73E+00	1.80E+02	1.20E+03	2.07E+03
781-020000	0.00	64.96	59.81	0.02	1.60	0.00	1.60E+00	1.80E+02	1.20E+03	1.92E+03
781-030000	0.00	98.50	59.81	0.02	2.42	0.00	2.42E+00	1.80E+02	1.20E+03	2.91E+03
781-040000	0.00	72.02	59.81	0.03	1.80	0.00	1.80E+00	1.80E+02	1.19E+03	2.15E+03
781-050000	0.00	61.75	59.81	0.02	1.54	0.00	1.54E+00	1.80E+02	1.19E+03	1.84E+03
781-060000	0.00	72.02	59.81	0.02	1.79	0.00	1.79E+00	1.80E+02	1.20E+03	2.14E+03
781-070000	0.00	256.02	59.81	0.02	6.32	0.00	6.32E+00	1.80E+02	1.20E+03	7.57E+03
781-080000	0.00	24.25	59.81	0.02	0.60	0.00	5.98E-01	1.80E+02	1.20E+03	7.17E+02
781-090000	0.00	332.00	59.81	0.02	8.18	0.00	8.18E+00	1.80E+02	1.20E+03	9.81E+03
781-100000	0.00	142.06	59.81	0.02	3.50	0.00	3.50E+00	1.80E+02	1.20E+03	4.19E+03
781-110000	0.00	53.21	59.81	0.02	1.31	0.00	1.31E+00	1.80E+02	1.20E+03	1.57E+03
781-120000	0.00	75.36	59.81	0.02	1.85	0.00	1.85E+00	1.80E+02	1.20E+03	2.22E+03
781-130000	0.00	262.58	59.81	0.02	6.47	0.00	6.47E+00	1.80E+02	1.20E+03	7.75E+03
781-140000	0.00	75.36	59.81	0.02	1.86	0.00	1.86E+00	1.80E+02	1.20E+03	2.23E+03
781-150000	0.02	1116.37	59.81	0.02	27.74	1.34	2.91E+01	1.80E+02	1.20E+03	3.34E+04
781-160000	0.00	85.50	59.81	0.02	2.13	0.10	2.23E+00	1.80E+02	1.20E+03	2.56E+03
781-170000	0.00	213.20	59.81	0.02	5.31	0.26	5.56E+00	1.80E+02	1.19E+03	6.39E+03
781-180000	0.00	44.92	59.81	0.02	1.12	0.08	1.20E+00	1.80E+02	1.19E+03	1.35E+03
781-190000	0.02	773.23	59.81	0.02	19.31	1.39	2.07E+01	1.80E+02	1.19E+03	2.33E+04
781-200000	0.00	130.42	59.81	0.03	3.26	0.23	3.49E+00	1.80E+02	1.19E+03	3.93E+03
781-210000	0.01	151.20	59.81	0.03	3.80	0.36	4.16E+00	1.80E+02	1.19E+03	4.59E+03
782-010000	0.00	45.37	59.81	0.03	1.34	0.08	1.43E+00	1.80E+02	1.14E+03	1.54E+03
784-010000	0.00	44.85	59.81	0.03	1.48	0.16	1.64E+00	1.80E+02	1.11E+03	1.67E+03
784-020000	0.01	130.38	59.81	0.04	4.83	0.55	5.38E+00	1.80E+02	1.08E+03	5.31E+03
784-030000	0.00	102.81	59.81	0.04	3.80	0.12	3.92E+00	1.80E+02	1.08E+03	4.13E+03
784-040000	1.59	128.80	59.81	0.04	4.80	94.91	9.97E+01	1.80E+02	1.08E+03	2.23E+04
784-050000	6.27	54.67	59.81	0.03	1.68	374.87	3.77E+02	1.80E+02	1.13E+03	6.95E+04
789-010000	0.00	1.60	44.58	2.79	4.45	0.19	4.64E+00	5.71E+02	1.12E+03	5.07E+03
791-010000	0.00	1.60	44.58	2.79	4.45	0.19	4.64E+00	5.71E+02	1.12E+03	5.07E+03
880-010000	18.88	0.00	54.12	1.48	0.00	1021.98	1.02E+03	3.65E+02	1.12E+03	3.73E+05
880-020000	18.88	0.00	54.12	1.48	0.00	1021.98	1.02E+03	3.65E+02	1.12E+03	3.73E+05
880-030000	18.88	0.00	54.12	1.48	0.00	1021.96	1.02E+03	3.65E+02	1.12E+03	3.73E+05
882-010000	3.28	5.04	55.11	0.35	1.74	180.54	1.82E+02	3.35E+02	1.11E+03	6.24E+04
884-010000	3.58	2.66	55.13	0.35	0.92	197.28	1.98E+02	3.34E+02	1.11E+03	6.70E+04
884-020000	7.91	11.61	55.15	0.34	4.00	436.24	4.40E+02	3.34E+02	1.11E+03	1.50E+05
884-030000	4.90	14.62	55.16	0.34	5.02	270.27	2.75E+02	3.34E+02	1.11E+03	9.57E+04
884-040000	1.40	18.12	55.16	0.34	6.22	77.05	8.33E+01	3.33E+02	1.11E+03	3.26E+04
884-050000	5.38	14.13	55.16	0.34	4.85	296.85	3.02E+02	3.34E+02	1.11E+03	1.04E+05
895-010000	56.65	0.00	54.25	2.96	0.00	3073.43	3.07E+03	3.65E+02	1.10E+03	1.12E+06

Table 06.02.01.04-1.g-9: Secondary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
895-020000	56.65	0.00	54.25	2.96	0.00	3073.43	3.07E+03	3.65E+02	1.10E+03	1.12E+06
895-030000	56.65	0.00	54.25	2.96	0.00	3073.43	3.07E+03	3.65E+02	1.10E+03	1.12E+06
897-010000	24.94	0.00	54.25	2.96	0.00	1353.26	1.35E+03	3.65E+02	1.10E+03	4.94E+05
899-010000	18.71	0.00	54.25	2.96	0.00	1015.17	1.02E+03	3.65E+02	1.10E+03	3.71E+05
899-020000	58.55	0.00	54.25	2.96	0.00	3176.49	3.18E+03	3.65E+02	1.10E+03	1.16E+06
899-030000	58.55	0.00	54.25	2.95	0.00	3176.49	3.18E+03	3.65E+02	1.10E+03	1.16E+06
899-040000	58.55	0.00	54.25	2.95	0.00	3176.49	3.18E+03	3.65E+02	1.10E+03	1.16E+06
899-050000	58.55	0.00	54.25	2.95	0.00	3176.25	3.18E+03	3.65E+02	1.10E+03	1.16E+06
900-010000	19.54	0.00	54.12	1.48	0.00	1057.30	1.06E+03	3.65E+02	1.12E+03	3.86E+05
901-010000	21.74	0.00	54.12	1.48	0.00	1176.62	1.18E+03	3.65E+02	1.12E+03	4.30E+05
901-020000	21.74	0.00	54.12	1.48	0.00	1176.62	1.18E+03	3.65E+02	1.12E+03	4.30E+05
902-010000	2.72	0.00	54.12	1.48	0.00	147.02	1.47E+02	3.65E+02	1.12E+03	5.37E+04
903-010000	6.17	0.00	54.12	1.48	0.00	333.95	3.34E+02	3.65E+02	1.12E+03	1.22E+05
903-020000	6.17	0.00	54.12	1.48	0.00	333.95	3.34E+02	3.65E+02	1.12E+03	1.22E+05
905-010000	2.77	0.00	54.14	1.68	0.00	149.75	1.50E+02	3.65E+02	1.12E+03	5.47E+04
906-010000	1.33	0.00	54.14	1.68	0.00	71.81	7.18E+01	3.65E+02	1.12E+03	2.62E+04
908-010000	0.33	0.81	55.05	0.35	0.28	18.02	1.83E+01	3.36E+02	1.11E+03	6.38E+03
909-010000	0.40	0.83	55.11	0.35	0.29	22.15	2.24E+01	3.35E+02	1.11E+03	7.73E+03
910-010000	1.86	2.49	55.11	0.35	0.86	102.73	1.04E+02	3.35E+02	1.11E+03	3.53E+04
911-010000	0.34	0.00	54.12	1.68	0.00	18.21	1.82E+01	3.66E+02	1.12E+03	6.66E+03
911-020000	0.34	0.00	54.12	1.68	0.00	18.21	1.82E+01	3.66E+02	1.12E+03	6.66E+03
913-010000	0.04	0.22	55.13	0.35	0.08	2.10	2.18E+00	3.34E+02	1.11E+03	7.88E+02
913-020000	0.03	0.23	55.13	0.35	0.08	1.60	1.68E+00	3.34E+02	1.11E+03	6.25E+02
914-010000	5.74	0.00	54.11	1.48	0.00	310.65	3.11E+02	3.65E+02	1.12E+03	1.14E+05
914-020000	5.74	0.00	54.11	1.48	0.00	310.65	3.11E+02	3.65E+02	1.12E+03	1.14E+05
914-030000	5.74	0.00	54.11	1.48	0.00	310.65	3.11E+02	3.65E+02	1.12E+03	1.14E+05
914-040000	5.74	0.00	54.11	1.48	0.00	310.65	3.11E+02	3.65E+02	1.12E+03	1.14E+05
914-050000	5.74	0.00	54.11	1.48	0.00	310.65	3.11E+02	3.65E+02	1.12E+03	1.14E+05
917-010000	3.85	5.19	55.12	0.35	1.80	212.13	2.14E+02	3.35E+02	1.11E+03	7.30E+04
954-010000	58.61	0.00	54.25	2.96	0.00	3179.69	3.18E+03	3.65E+02	1.10E+03	1.16E+06
955-010000	65.22	0.00	54.25	2.96	0.00	3538.54	3.54E+03	3.65E+02	1.10E+03	1.29E+06
955-020000	65.22	0.00	54.25	2.96	0.00	3538.54	3.54E+03	3.65E+02	1.10E+03	1.29E+06
956-010000	8.15	0.00	54.25	2.96	0.00	442.16	4.42E+02	3.65E+02	1.10E+03	1.62E+05
957-010000	18.51	0.00	54.25	2.96	0.00	1004.36	1.00E+03	3.65E+02	1.10E+03	3.67E+05
957-020000	18.51	0.00	54.25	2.96	0.00	1004.36	1.00E+03	3.65E+02	1.10E+03	3.67E+05
959-010000	8.30	0.00	54.25	2.96	0.00	450.18	4.50E+02	3.65E+02	1.10E+03	1.64E+05
960-010000	3.98	0.00	54.25	2.96	0.00	215.87	2.16E+02	3.65E+02	1.10E+03	7.89E+04
962-010000	3.42	0.00	54.25	2.96	0.00	185.73	1.86E+02	3.65E+02	1.10E+03	6.79E+04
963-010000	3.69	0.00	54.25	2.96	0.00	200.22	2.00E+02	3.65E+02	1.10E+03	7.32E+04
964-010000	13.06	0.00	54.25	2.96	0.00	708.66	7.09E+02	3.65E+02	1.10E+03	2.59E+05
965-010000	1.01	0.00	54.26	2.96	0.00	54.78	5.48E+01	3.65E+02	1.10E+03	2.00E+04
965-020000	1.01	0.00	54.26	2.96	0.00	54.78	5.48E+01	3.65E+02	1.10E+03	2.00E+04
967-010000	0.78	0.00	54.26	2.96	0.00	42.58	4.26E+01	3.65E+02	1.10E+03	1.56E+04
967-020000	0.78	0.00	54.26	2.96	0.00	42.58	4.26E+01	3.65E+02	1.10E+03	1.56E+04
968-010000	17.22	0.00	54.26	2.96	0.00	934.55	9.35E+02	3.65E+02	1.10E+03	3.41E+05

Table 06.02.01.04-1.g-9: Secondary System Fluid Mass and Energy (t = 100 sec)

R5/M2 Control Vol	Liquid Volume (ft^3)	Steam Volume (ft^3)	Liquid Density (lbm/ft^3)	Steam Density (lbm/ft^3)	Steam Mass (lbm)	Liquid Mass (lbm)	Total Mass (lbm)	Liquid Specific Internal Energy (BTU/lbm)	Steam Specific Internal Energy (BTU/lbm)	Total Energy (BTU)
968-020000	17.22	0.00	54.26	2.96	0.00	934.55	9.35E+02	3.65E+02	1.10E+03	3.41E+05
968-030000	17.22	0.00	54.26	2.96	0.00	934.55	9.35E+02	3.65E+02	1.10E+03	3.41E+05
968-040000	17.22	0.00	54.26	2.96	0.00	934.55	9.35E+02	3.65E+02	1.10E+03	3.41E+05
968-050000	17.22	0.00	54.26	2.96	0.00	934.53	9.35E+02	3.65E+02	1.10E+03	3.41E+05
971-010000	27.13	0.00	54.25	2.96	0.00	1471.69	1.47E+03	3.65E+02	1.10E+03	5.38E+05
977-010000	10.14	0.00	54.07	1.06	0.00	548.52	5.49E+02	3.65E+02	1.12E+03	2.00E+05
977-020000	10.14	0.00	54.07	1.06	0.00	548.52	5.49E+02	3.65E+02	1.12E+03	2.00E+05
979-010000	0.92	11.95	55.17	0.34	4.09	50.86	5.50E+01	3.33E+02	1.11E+03	2.15E+04
979-020000	0.03	12.84	55.17	0.34	4.40	1.90	6.29E+00	3.33E+02	1.11E+03	5.51E+03
989-010000	30.43	0.00	54.25	2.96	0.00	1651.03	1.65E+03	3.65E+02	1.10E+03	6.03E+05
989-020000	30.43	0.00	54.25	2.96	0.00	1651.03	1.65E+03	3.65E+02	1.10E+03	6.03E+05
991-010000	38.63	0.00	54.18	2.95	0.00	2092.85	2.09E+03	3.67E+02	1.10E+03	7.69E+05
991-020000	38.63	0.00	53.52	2.95	0.00	2067.24	2.07E+03	3.85E+02	1.10E+03	7.95E+05

Response to Question 06.02.01.04-1.h:

h. Unisolated Section of Main Feedwater Piping Fluid Inventory.

The statement in U.S. EPR FSAR, Tier 2, Section 6.2.1.4.3.3 regarding the volume of water in the unisolated section of the main feedwater piping will be updated to provide sufficient information about the approach used to determine the mass and energy release during a postulated steam line break. The RELAP5 model used for this purpose includes a partial representation of the main feedwater system. The piping downstream of the control and isolation valves is included in the RELAP5 model. Some of the piping upstream of the control and isolation valves is also explicitly modeled. Consistent with the description in U.S. EPR FSAR, Tier 2, Section 6.2.1.4.1.2, this model allows injection of additional feedwater into the steam generator due to flashing or swelling of the water contained in the unisolated section of the main feedwater piping.

The amount of water injected into the steam generator due to flashing and swelling varies with the feedwater temperature and the final steam generator pressure, but, is about 70% of the initial piping water mass. Table 06.02.01.04-1.h-1 shows the mass and energy inventory of the water in the unisolated portion of the feedwater piping, and compares it with that of the steam generator for the bounding break case (50% power, double-ended guillotine (DEG) break) in U.S. EPR FSAR, Tier 2, Table 6.2.1.9. The unisolated section has a volume of 160 ft^3, which amounts to 1.9% of the steam generator secondary side volume. The mass of water contained in this section is 8667 lbm initially, and 2608 lbm at 50 seconds into the transient. The amount of water that flashes and is injected into the steam generator is 6059 lbm, or 70% of the initial content.

FSAR Impact:

U.S. EPR FSAR, Tier 2, Section 6.2.1.4.3.3 will be revised as described in the response and indicated on the enclosed markup.

Table 06.02.01.04-1.h-1: Mass Inventory of Unisolated Section of Main Feedwater System (50% Power, DEG Break)

	Volume		Mass (t = 0.002 sec)		Mass (t = 50 sec)		Amount Flashed	
	ft^3	%	lbm	%	lbm	%	lbm	%
Steam Generator Secondary Side	8345	100%	253474	100%	3811	2%	N/A	N/A
Unisolated Portion of Main Feedwater System	160	1.9%	8667	3.4%	2608	1.0%	6059	70%

Note: Mass percentages are relative to the initial mass of fluid in the steam generator

U.S. EPR Final Safety Analysis Report Markups

6.2.1.4.3.1 Initial Conditions

The initial conditions used in the GOTHIC model are addressed in Section 6.2.1.1.3.

6.2.1.4.3.2 Mass and Energy Release Data

Table 6.2.1-22—MSLB Mass and Energy Release Data, present the mass and energy release data used to determine the containment pressure and temperature responses for the limiting MSLB, a double-ended guillotine break of the main steam line at 50 percent RTP concurrent with the single active failure of a single MSIV.

Feedwater isolation for the full and partial double-ended guillotine breaks depends on signals generated by the ESF instrumentation. The feedwater flow rates used in the analyses credited the longest isolation valve stroke time of 40 seconds. Valve leakage is not considered in the analyses as it is bounded by the emergency feedwater injection.

6.2.1.4.3.3 Containment Pressure and Temperature Results

Figure 6.2.1-34 and Figure 6.2.1-35 provide the pressure and temperature results for the most limiting MSLB scenario. Table 6.2.1-9 summarizes the results of all the cases analyzed.

The worst single active failure for the MSLB is the loss of one MSIV. Because the U.S. EPR includes redundant safety-grade feedwater isolation valves, the failure of the main feedwater isolation valve was not specifically analyzed. However, as an additional conservatism, the MFW valve with the longest stroke time is credited for isolation. ~~The additional feedwater that would be released following isolation of the feedwater system was not explicitly modeled.~~ Full feedwater flow is credited from the beginning of the transient until the isolation valve is fully closed. ~~The volume of water in the feedwater pipe is considered small and does not significantly affect the pressure and temperature response of the containment.~~

The RELAP5 model used for this purpose includes a partial representation of the main feedwater system. The piping downstream of the control and isolation valves is included in the RELAP5 model. Some, but not all, of the piping upstream of the control and isolation valves is explicitly modeled. Consistent with the description in Section 6.2.1.4.1.2, this model allows injection of additional feedwater into the steam generator due to flashing or swelling of the water contained in the unisolated section of the main feedwater piping.

The loss of one MSIV has been assumed for the spectrum of break sizes and power levels analyzed. As illustrated in Table 6.2.1-9, a full double-ended guillotine break of the main steam line at 50 percent RTP results in a peak pressure of 54.14 psig. This case represents the peak calculated containment pressure for the spectrum of breaks analyzed.