



Tom Simril
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CNS-17-002

January 6, 2017

U.S. Nuclear Regulatory Commission
Attention: Document Control Desk
Washington, D.C. 20555-0001

Subject: Duke Energy Carolinas, LLC (Duke Energy)
Catawba Nuclear Station, Unit 2
Docket Number 50-414
Unit 2 End of Cycle 21 Refueling Outage
Inservice Inspection Report and Steam Generator Inservice Inspection
Summary Report

In accordance with Section XI of the ASME Code, please find attached the subject 90-day reports which provide the results of the inservice inspection and the steam generator inservice inspection associated with the subject outage. Note that the Steam Generator Inservice Inspection Summary Report includes all of the information required to be submitted in the 180-day report required by Catawba Technical Specification 5.6.8, "Steam Generator (SG) Tube Inspection Report." Therefore, no additional report is required to be submitted for this outage.

There are no regulatory commitments contained in this letter or its attachments.

If you have any questions concerning this material, please call Dustin Yang at (803) 701-3084.

Sincerely,

Tom Simril
Vice President, Catawba Nuclear Station

Attachments

1. Catawba Unit 2 End of Cycle 21 Inservice Inspection Report
2. Catawba Unit 2 End of Cycle 21 Steam Generator Inservice Inspection Summary Report

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Document Control Desk

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January 6, 2017

xc (with attachments):

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Region II Administrator
U.S. Nuclear Regulatory Commission
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Atlanta, GA 30303-1257

J. D. Austin
Senior Resident Inspector
U.S. Nuclear Regulatory Commission
Catawba Nuclear Station

M. Mahoney (addressee only)
Project Manager
U.S. Nuclear Regulatory Commission
11555 Rockville Pike
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Rockville, MD 20852

Attachment 1

Catawba Unit 2 End of Cycle 21 Inservice Inspection Report

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number Owner's Activity Report for Refueling Outage 2EOC21

Plant Catawba Nuclear Station, 4800 Concord Road, York, SC 29745

Unit No. 2 Commercial service date 08/19/1986 Refueling outage no. 2EOC21
(if applicable)

Current inspection interval See Attachment - Page 2
(1st, 2nd, 3rd, 4th, other)

Current inspection period See Attachment - Page 2
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans See Attachment - Page 2

Date and revision of inspection plans See Attachment - Pages 3 & 4

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans
Same

Code Cases used: The following Code Cases are permitted by the ISI Plans:
3rd Interval: N-460, N-504-3 N-513-2, N-532-5, N-533-1, N-566-2, N-586-1 N-613-1, N-616, N-624, N-639
N-643-2, N-647, N-663, N-665, N-683, N-685, N-686, N-686-1, N-694-1, N-695, N-696, N-697, N-700, N-
706, N-722-1, N-729-1, N-731, N-770-1
4th Interval: N-513-3, N-532-5, N-586-1, N-613-1, N-639, N-643-2, N-648-1, N-663, N-706-1, N-712,
N-722-1, N-729-1, N-735, N-747, N-770-1
(if applicable)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of 2EOC21 conform to the requirements of Section XI.
(refueling outage number)

Signed AVSTIN C. KELLER  Date 12/15/2016

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of South Carolina and employed by Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

 D. MALLET Commissions 15196, I, N, A, IS
Inspector's Signature National Board, State, Province, and Endorsements

Date 12/15/16

Attachment

The Catawba Nuclear Station Unit 2 Third Ten Year Inservice Inspection (ISI) Plan complies with 10CFR50.55a(g), which implements, by reference, the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 1998 Edition with 2000 Addenda.

The Catawba Nuclear Station Unit 2 Fourth Ten Year Inservice Inspection (ISI) Plan complies with 10CFR50.55a(g), which implements, by reference, the American Society of Mechanical Engineers (ASME) Boiler and Pressure Vessel Code, Section XI, 2007 Edition with 2008 Addenda.

This summary report is being submitted pursuant to the reporting requirements of ASME Section XI as amended by ASME Code Case N-532-5, "Repair/Replacement Activity Documentation Requirements and Inservice Inspection Summary Report Preparation and Submission Section XI, Division 1".

Contained within this summary report are the form OAR-1 (Owner's Activity Report) and Tables 1 and 2 of Code Case N-532-5 for Catawba Nuclear Station during Cycle 22 and Refueling Outage 22 (2EOC21). 2EOC21 is the third and last outage of the third period in the third inspection interval and includes the Repair/Replacement activities from April 5, 2015 through October 9, 2016. Additionally, 2EOC21 is the first outage of the first period in the fourth inspection interval.

Attachment

Catawba Unit 2 End of Cycle 21 Inservice Inspection Report

Date and Revision of Inservice Inspection Plans:

I. Third Interval Inservice Inspection Plans

1. The following documents comprise the Catawba Nuclear Station 3rd Interval Inservice Inspection Plan for Unit 2 (Class 1, 2, and 3 Components):
 - a. Third Interval Inservice Inspection Plan Catawba Nuclear Station Units 1 and 2 General Requirements, Document #CISI-1462.10-0030-GEN REQ, Rev. 1, dated 06/26/2008, including the following addenda:
 - i. CISI-1462.10-0030-3CNS-021 through CISI-1462.10-0030-3CNS-038
 - b. Catawba Nuclear Station Unit 2-Third Inspection Interval Inservice Inspection NDE Plan, Document #CISI-1462.10-0030-UNIT 2, Rev. 1, dated 06/26/2008, including the following addenda:
 - i. CISI-1462.10-0030-3CNS2-028 through CISI-1462.10-0030-3CNS2-090
2. The following documents comprise the Catawba Nuclear Station 3rd Interval Inservice Inspection Pressure Test Plan for Unit 2:
 - a. Third Inspection Interval Inservice Inspection Pressure Test Plan for Catawba Unit 2, Document #CISI-1462.20-0020-U2PTPLAN, Rev. 0, dated 02/21/2006, including the following addenda:
 - i. CISI-1462.20-0020-C2-PT-024 through CISI-1462.20-0020-C2-PT-046

II. Fourth Interval Inservice Inspection Plans

1. The following documents comprise the Catawba Nuclear Station 4th Interval Inservice Inspection Plan for Unit 2 (Class 1, 2, and 3 Components):
 - a. Catawba Nuclear Station Unit 1 and Unit 2 – Fourth Interval Inservice Inspection Plan, Document #CISI-1462.10-0040-ISI PLAN, Rev. 1, dated 08/12/2015.
 - b. Catawba Nuclear Station Unit 2-Fourth Inspection Interval Inservice Inspection Outage Schedule Catawba Nuclear Station, Document #CISI-1462.10-0040-UNIT 2, Rev. 0, dated 08/13/2015 including the following addenda:
 - i. CISI-1462.10-0040-4CNS2-001 through CISI-1462.10-0040-4CNS2-004
2. The following documents comprise the Catawba Nuclear Station 4th Interval Inservice Inspection Pressure Test Plan for Unit 2:
 - a. Fourth Inspection Interval Inservice Inspection Pressure Test Plan for Catawba Unit 2, Document #CISI-1462.20-0040 - PTPlan, Rev. 0, dated 06/24/2015 including the following addenda.
 - i. CISI-1462.20-0040-C2-PT-001

III. Containment Inservice Inspection Plan

1. The following document comprises the Catawba Nuclear Station 3rd Interval Containment Inservice Inspection Plan for Unit 2 (Class MC):
 - a. Catawba Nuclear Station Units 1 and 2 - Third Interval Containment Inservice Inspection Plan, Document #CN-ISIC3-1042-0001, Rev. 4, dated 12/05/2016.

Catawba Nuclear Unit 2
Form OAR-1 Owner's Activity Report

Table 1
Items with Flaws or Relevant Conditions that Required Evaluation for Continued Service

Examination Category and Item Number	Item Description	Evaluation Description
AUG / B15.80	C2.B15.80.0001 / 2RPV-BMI-NOZZLES	VE examination revealed evidence of corrosion and scaling on lower head. Engineering Evaluation found to be acceptable. Reference NCR# 2060612.
F-A / F1.20	C2.F1.20.0027 / 2-R-ND-0140	VT-3 examination revealed the hanger rod was loose. WO# 20110941 tightened the loose rod. Engineering Evaluation found to be acceptable. Reference NCR# 2062327.
F-A / F1.20	C2.F1.20.0070 / 2-R-NV-1170	VT-3 examination revealed a missing snap ring at the rear bracket pin. WO# 20110520 replaced the snap ring. Engineering Evaluation found to be acceptable. Reference NCR# 2061153.
F-A / F1.22	C2.F1.22.0013 / 2-R-ND-0025	VT-3 examination revealed the middle bolt on the pipe clamp had a loose lock nut. WO# 20110940 tightened the loose lock nut. Engineering Evaluation found to be acceptable. Reference NCR# 2062329.
F-A / F1.40	C2.F1.40.0092 / 2RPV-CRDM	VT-3 examination revealed loose lock nuts and lack of full thread engagement associated with the turnbuckle assembly. WO# 20032426 tightened the loose lock nuts and verified full thread engagement for the turnbuckle assembly. Engineering Evaluation found to be acceptable. Reference NCR# 2060571.
B-P / B15.10	ISI Class A Bolted Connection - IWA-5241(f)	VT-2 examination revealed boric acid residue on valve 2NI-157. Engineering Evaluation found to be acceptable. Reference NCR# 2060504.
B-P / B15.10	C2.B15.10.0001 / 2NC-001L-A	VT-2 examination revealed boric acid residue on NC Pump 2A Seal Housing and Incore Instrumentation Tubing. Engineering Evaluation found to be acceptable. Reference NCR# 2068192.
C-H / C7.10	C2.C7.10.0013 / 2ND-002L-B	VT-2 examination revealed boric acid residue on inlet flange of valve 2ND-38 and 2B ND Seal Housing. Engineering Evaluation found to be acceptable. Reference NCR# 2060511.
C-H / C7.10	C2.C7.10.0028 / 2NV-001L-B	VT-2 examination revealed boric acid residue valve 2NV-11A. Engineering Evaluation found to be acceptable. Reference NCR# 2068192.

Catawba Nuclear Unit 2
Form OAR-1 Owner's Activity Report

Table 2
Abstract of Repair/Replacement Activities Required For Continued Service

Code Class	Item Description	Description of Work	Date Completed	Repair / Replacement Plan Number
2	Reactor Coolant System flow transmitter tubing	Repair leak on tubing to 2NCFT5080	09/27/2016	02111279-01
2	Steam Generator Blowdown Recycle System Valve 2BB-12	Replace valve 1/2" 2BB-12 and piping assembly due to leak	09/21/2016	20011859-01

Attachment 2

Catawba Unit 2 End of Cycle 21 Steam Generator Inservice Inspection Summary Report

***Steam Generator
In-service Inspection Summary Report***

***Catawba Nuclear Station
Unit 2 EOC21
September 2016***

Location: 4800 Concord Road, York South Carolina 29745

NRC Docket No. 50-414

National Board No. 173

Commercial Service Date: August 19, 1986

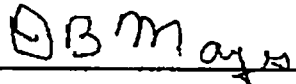
Owner: Duke Energy Corporation


526 South Church St.

Charlotte, N.C. 28201-1006

Revision 0

Prepared By: Chuck Cauthen  Date: 12-6-2016

Reviewed By: Dan Mayes  Date: 12/6/2016

Approved By: Etienne Fonteneau  Date: 12.8.2016

FORM OAR-1 OWNER'S ACTIVITY REPORT

Report Number Owner's Activity Report for Steam Generator Inspection Outage 2EOC21

Plant Catawba Nuclear Station, 4800 Concord Road, York, SC 29745

Unit No. 2 Commercial service date 08/19/1986 Refueling outage no. 2EOC21
(if applicable)

Current inspection interval Fourth Interval
(1st, 2nd, 3rd, 4th, other)

Current inspection period First Period
(1st, 2nd, 3rd)

Edition and Addenda of Section XI applicable to the inspection plans 2007 Edition through 2008 Addendum

Date and revision of inspection plans August 19, 2015, Revision 0 (Document #C-ISIG-0169.030.0040)

Edition and Addenda of Section XI applicable to repair/replacement activities, if different than the inspection plans
Same as Plan

Code Cases used: N-532-5
(if applicable)

CERTIFICATE OF CONFORMANCE

I certify that (a) the statements made in this report are correct; (b) the examinations and tests meet the Inspection Plan as required by the ASME Code, Section XI; and (c) the repair/replacement activities and evaluations supporting the completion of 2EOC21 conform to the requirements of Section XI.
(refueling outage number)

Signed

C. B. Caution
C. B. CAUTION

Date 12-12-2016

CERTIFICATE OF INSERVICE INSPECTION

I, the undersigned, holding a valid commission issued by the National Board of Boiler and Pressure Vessel Inspectors and the State or Province of South Carolina and employed by Hartford Steam Boiler Inspection and Insurance Company of Connecticut have inspected the items described in this Owner's Activity Report, and state that, to the best of my knowledge and belief, the Owner has performed all activities represented by this report in accordance with the requirements of Section XI.

By signing this certificate neither the Inspector nor his employer makes any warranty, expressed or implied, concerning the repair/replacement activities and evaluation described in this report. Furthermore, neither the Inspector nor his employer shall be liable in any manner for any personal injury or property damage or a loss of any kind arising from or connected with this inspection.

[Signature]
Inspector's Signature

Commissions 15196, I, N, A, I, S
National Board, State, Province, and Endorsements

Date 12/15/16

Catawba Nuclear Unit 1
Form OAR-1 Owner's Activity Report

Table 1
Items with Flaws or Relevant Conditions that Required Evaluation for Continued Service

Examination Category and Item Number	Item Description	Evaluation Description
Category B-Q B16.20	Steam Generator Tubing in U-Tube Design	No ASME Section XI Acceptance Requirement Exceeded (Reference Attached Inspection Report)

Catawba Nuclear Unit 1
Form OAR-1 Owner's Activity Report

Table 2
Abstract of Repair/Replacement Activities Required For Continued Service

Code Class	Item Description	Description of Work	Date Completed	Repair / Replacement Plan Number
1	Steam Generator 2A (2 NC HX A)	Plugged and stabilized 16 tubes via rolled plug and wire rope stabilizer	10/09/2016	20032784-07
1	Steam Generator 2B (2 NC HX B)	Plugged and stabilized 13 tubes via rolled plug and wire rope stabilizer	10/07/2016	20032783-07
1	Steam Generator 2C (2 NC HX C)	Plugged and stabilized 12 tubes via rolled plug and wire rope stabilizer	10/07/2016	20032782-07
1	Steam Generator 2D (2 NC HX D)	Plugged and stabilized 6 tubes via rolled plug and wire rope stabilizer	10/07/2016	20032781-07

Catawba 2 EOC21 Steam Generator Tube Inspection Report
(reference Catawba technical Specification 5.6.8)

Summary of inspections and inspection results:

- a) The scope of inspections performed on each SG

The inspection scope for all four steam generators was as follows:

Bobbin Inspection

- 100% full length (except Row 1-5 U-bend region)
- Row 1-5 hot leg straight section
- Row 1-5 cold leg straight section
- Tubes surrounding plugged tubes full length

Array Inspection

- 100% TTS hot leg (TEH to TSH +3")
- TTS hot leg two tubes deep periphery, including the T-slot and open lane (TEH to 01H or 02H for the baffle cutout)
- TTS cold leg two tubes deep periphery, including the T-slot and open lane (TEC to 18C +3")
- 50% Row 1-5 U-bends (includes any tubes not examined in 2EOC19 or 2EOC20) 08H to 09C
- 20% Row 10 U-bends-08H to 09C
- Hot and cold leg straights for all tubes screened as 2 Sigma
- Expanded baffles at TSP 17C and 18C with extent of $\pm 3"$ at each support plate (20% sample of expanded baffles not examined in 2EOC17 - 2EOC20)
- 100% DNT sample

Array Special Interest

- All tube locations with indication calls that required Array sizing from 2EOC20
- Tubes with PLP calls as well as a bounding inspection of one tube deep. For PLP indications with tube degradation bounding inspection of two tube deep
- Bounding inspection 2 tubes deep surrounding known foreign object locations
- New wear indications
- All bobbin I-codes
- New DNT calls

Visual Inspection

- *Previously installed plugs*
- *Bowl cladding inspection*
- *Foreign object search and retrieval (FOSAR) of the tubesheet in all 4 steam generators.*

b. Degradation mechanisms found

Degradation found included wear at support structures; wear from foreign objects and crack-like indications near the tube ends.

c. Non-destructive examination techniques utilized for each degradation mechanism

The bobbin probe was utilized for the detection of wear at support structures and freespan locations and to size wear at support structures. The array probe was used for detection of indications within the tubesheet, U-bend regions, and the 2 sigma high stress tubes. The array probe was used to size the foreign object wear.

d. Location, orientation (if linear), and measured sizes (if available) of service induced indications.

The complete listing for service induced indications is attached.

Tubes with anti-vibration bar wear indications

SG 2A – 81 tubes/153 indications

SG 2B – 25 tubes/38 indications

SG 2C – 54 tubes/79 indications

SG 2D – 72 tubes/109 indications

Total – 232 tubes/379 indications

Tubes with tube support plate wear indications

SG 2A – 5 tubes/5 indications

SG 2B – 8 tubes/8 indications

SG 2C – 2 tubes/2 indications

SG 2D – 1 tubes/1 indications

Total– 16 tubes/16 indications

15 broached TSP wear-1 baffle plate wear

Tubes with tube presumed foreign object wear indications

SG 2A – 8 tubes/8 indications

SG 2B – 17 tubes/18 indications

SG 2C – 2 tubes/2 indications

SG 2D – 6 tubes/6 indications

Total– 33 tubes/35 indications

Tubes with crack like indications within the tubesheet at the tube end

SG 2A – 18 tubes/19 indications

SG 2B – 215 tubes/221 indications

SG 2C – 22 tubes/22 indications

SG 2D – 45 tubes/47 indications

Total – 300 tubes/309 indications

- e. Number of tubes plugged during the inspection outage for each degradation mechanism

Steam Generator 2A:

There were sixteen (16) tubes plugged. Four tubes were plugged due to a foreign object

The remaining tubes were high stress tubes or two sigma tubes. The tubes plugged were as follows:

2A SG			
Count	Row	Tube	Reason
1	11	83	High stress tube
2	11	84	High stress tube
3	11	78	High stress tube
4	12	99	High stress tube
5	12	107	High stress tube
6	13	109	High stress tube
7	16	44	High stress tube
8	16	105	High stress tube
9	17	27	High stress tube
10	21	51	High stress tube
11	35	50	High stress tube
12	48	67	High stress tube
13	48	81	Downstream of the foreign object
14	48	82	Downstream of the foreign object
15	49	81	Foreign object
16	49	82	Foreign object with wear

Steam Generator 2B:

There were thirteen (13) tubes plugged. All were high stress tubes or two sigma tubes.

The tubes plugged were as follows:

2B SG		
Count	Row	Tube
1	23	104
2	24	50
3	24	55
4	24	53
5	24	45
6	26	78
7	26	79
8	28	77
9	30	76
10	32	89
11	34	68
12	36	52
13	36	48

Steam Generator 2C:

There were twelve (12) tubes plugged. All were high stress tubes or two sigma tubes.

The tubes plugged were as follows:

2C SG		
Count	Row	Tube
1	17	87
2	17	17
3	20	94
4	21	93
5	24	36
6	24	40
7	24	26
8	27	45
9	27	26
10	29	41
11	36	96
12	36	98
13	36	48

Steam Generator 2D:

There were six(6) tubes plugged. All were high stress tubes or two sigma tubes.

The tubes plugged were as follows:

2D SG		
Count	Row	Tube
1	24	26
2	25	25
3	29	19
4	38	59
5	39	82
6	41	53

- f. The number and percentage of tubes plugged to date, and the effective plugging percentage in each steam generator.

<i>Steam Generator¹</i>	<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>Total</i>
<i>Prior to EOC21</i>	<i>69</i>	<i>118</i>	<i>65</i>	<i>91</i>	<i>343</i>
<i>EOC21</i>	<i>16</i>	<i>13</i>	<i>12</i>	<i>6</i>	<i>47</i>
<i>Total</i>	<i>85</i>	<i>131</i>	<i>77</i>	<i>97</i>	<i>390</i>
<i>% Plugged</i>	<i>1.86</i>	<i>2.86</i>	<i>1.68</i>	<i>2.13</i>	<i>2.13</i>

1= There are 4578 tubes per steam generator

- g. The results of condition monitoring, including the results of tube pulls and in-situ testing.

The cumulative EFPY for EOC-18 was 21.5, EOC-19 was 22.89 and EOC-20 was 24.24 and EOC-21 was 25.67.

Condition monitoring was met for all degradation. All structural performance criteria were met for wear with more than adequate margin projected through the next planned inspection at EOC23. All structural performance criteria requirements were met for possible new ODS-CC indications at TSP locations with margin projected through the next planned inspection at EOC23.

No new foreign objects were identified. All historical foreign objects that were not removed have a technical evaluation demonstrating that tube integrity will be met through the next scheduled inspection of this region at EOC23.

An upper bundle visual inspection was performed in the steam generator 2A, no degradation was detected.

No degradation was detected in the plug visual.

Bowl cladding inspections did identify an area of missing stainless steel cladding in the Catawba Unit 2 D SG hot leg channel head. It was located over the nozzle on the channel head 10 1/2 inches from the divider plate and 8 1/2 inches from the tubesheet, 4 1/2 inches from the tubesheet lip at the interface of the machined cladding and as-welded cladding. The area was 5 1/8 inches long and 15/16 inches wide and irregular in shape. Base metal is present in the area but no evidence of significant wastage. The maximum depth (from the cladding surface to the exposed base material) identified was 0.234 inch. No repair is planned. Analysis supports operation until the next planned inspection at EOC 23. There was no degradation detected in any of the other bowl cladding inspections.

No in-situ tests or tube pulls were performed.

- h. For Unit 2, the primary to secondary LEAKAGE rate observed in each SG (if it is not practical to assign leakage to an individual SG, the entire primary to secondary LEAKAGE should be conservatively assumed to be from one SG) during the cycle preceding the inspection which is the subject of the report.

There was no primary to secondary leakage above detection limits during the preceding Cycle 21 operation.

- i. For Unit 2, the calculated leakage rate from the portion of the tubes below 14.01 inches from the top of the tubesheet for the most limiting accident in the most limiting SG. In addition, if the calculated accident leakage rate from the most limiting accident is less than 3.27 times the maximum primary to secondary LEAKAGE rate, the report shall describe how it was determined.

There was no calculated leakage from the portion of the tubes more than 14.01 inches from the top of the tubesheet, for the most limiting accident in the most limiting SG.

- j. For Unit 2, the results of monitoring for tube axial displacement (slippage). If slippage is discovered, the implications of the discovery and corrective action shall be provided.

No indications of slippage were detected.

List of Service Induced Indications

Catawba 2, EOC-21

The complete listings of service induced indications are on the following pages. The codes and their descriptions used in the inspection data base are provided here to assist in review of these lists.

<u>Indication Code</u>	<u>Description</u>
MAI	Multiple Axial Indication
MCI	Multiple Circumferential Indication
PCT	Percent Indication
SAI	Single Axial Indication
SCI	Single Circumferential Indication
SVI	Single Volumetric Indication
WAR	Wear

INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	
2016/09/01	32	12	.28	78	PCT	9	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	36	H	204
2016/09/01	30	13	.63	130	PCT	14	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	34	H	197
2016/09/01	32	15	.29	52	PCT	8	P4	AV2	-.07			WAR					TEC	TEH	.610	ZBAUC	22	H	134
2016/09/01	35	16	.52	57	PCT	14	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	36	H	212
2016/09/01	35	16	1.23	126	PCT	25	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	36	H	212
2016/09/01	35	17	.28	108	PCT	9	P4	AV1	-.16			WAR					TEC	TEH	.610	ZBAUC	24	H	112
2016/09/01	36	17	.28	143	PCT	8	P4	AV1	-.18			WAR					TEC	TEH	.610	ZBAUC	22	H	115
2016/09/01	36	17	.30	163	PCT	8	P4	AV2	-.21			WAR					TEC	TEH	.610	ZBAUC	22	H	115
2016/09/01	36	17	.42	19	PCT	11	P4	AV3	-.08			WAR					TEC	TEH	.610	ZBAUC	22	H	115
2016/09/01	37	17	.26	114	PCT	8	P4	AV2	.08			WAR					TEC	TEH	.610	ZBAUC	36	H	213
2016/09/01	37	17	.46	55	PCT	13	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	36	H	213
2016/09/01	38	17	.40	93	PCT	11	P4	AV1	-.14			WAR					TEC	TEH	.610	ZBAUC	34	H	204
2016/09/01	38	17	.63	67	PCT	15	P4	AV3	.14			WAR					TEC	TEH	.610	ZBAUC	34	H	204
2016/09/01	38	17	.23	22	PCT	6	P4	AV4	.00			WAR					TEC	TEH	.610	ZBAUC	34	H	204
2016/09/01	40	18	.45	42	PCT	11	P4	AV1	-.07			WAR					TEC	TEH	.610	ZBAUC	34	H	205
2016/09/01	40	18	.31	141	PCT	8	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	34	H	205
2016/09/01	40	18	1.56	99	PCT	26	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	34	H	205
2016/09/01	38	19	.48	93	PCT	13	P4	AV1	-.36			WAR					TEC	TEH	.610	ZBAUC	24	H	90
2016/09/01	38	21	.60	77	PCT	14	P4	AV2	-.11			WAR					TEC	TEH	.610	ZBAUC	22	H	63
2016/09/01	39	21	.26	158	PCT	8	P4	AV1	-.25			WAR					TEC	TEH	.610	ZBAUC	24	H	64
2016/09/01	39	21	.38	123	PCT	11	P4	AV2	-.14			WAR					TEC	TEH	.610	ZBAUC	24	H	64
2016/09/01	39	21	.28	127	PCT	9	P4	AV3	-.05			WAR					TEC	TEH	.610	ZBAUC	24	H	64
2016/09/01	38	22	.45	89	PCT	11	P4	AV2	-.16			WAR					TEC	TEH	.610	ZBAUC	22	H	40
2016/09/01	38	22	.15	46	PCT	4	P4	AV3	-.10			WAR					TEC	TEH	.610	ZBAUC	22	H	40
2016/09/01	30	23	.22	125	PCT	6	P4	AV2	.66			WAR					TEC	TEH	.610	ZBAUC	22	H	30
2016/09/01	33	23	.35	122	PCT	10	P4	AV2	-.51			WAR					TEC	TEH	.610	ZBAUC	24	H	32
2016/09/01	33	23	.30	138	PCT	9	P4	AV3	-.07			WAR					TEC	TEH	.610	ZBAUC	24	H	32
2016/09/01	38	23	.50	145	PCT	12	P4	AV2	-.16			WAR					TEC	TEH	.610	ZBAUC	22	H	34
2016/09/01	43	23	.34	43	PCT	10	P4	AV1	.02			WAR					TEC	TEH	.610	ZBAUC	24	H	37
2016/09/01	43	23	.76	143	PCT	18	P4	AV2	-.22			WAR					TEC	TEH	.610	ZBAUC	24	H	37
2016/09/01	43	23	.29	21	PCT	9	P4	AV3	.24			WAR					TEC	TEH	.610	ZBAUC	24	H	37
2016/09/01	44	23	.58	151	PCT	14	P4	AV1	-.05			WAR					TEC	TEH	.610	ZBAUC	22	H	37
2016/09/01	44	23	1.26	111	PCT	23	P4	AV2	-.20			WAR					TEC	TEH	.610	ZBAUC	22	H	37
2016/09/01	44	23	3.24	102	PCT	35	P4	AV3	.31			WAR					TEC	TEH	.610	ZBAUC	22	H	37
2016/09/01	44	23	.87	106	PCT	18	P4	AV4	.24			WAR					TEC	TEH	.610	ZBAUC	22	H	37
2016/09/01	42	24	.68	71	PCT	15	P4	AV2	-.02			WAR					TEC	TEH	.610	ZBAUC	18	H	330
2016/09/01	42	24	.55	44	PCT	13	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	18	H	330
2016/09/01	31	25	.34	32	PCT	6	P3	02H	-.46			WAR					TEC	TEH	.610	ZBAUC	46	H	20
2016/09/01	38	25	.55	88	PCT	13	P4	AV3	-.12			WAR					TEC	TEH	.610	ZBAUC	20	H	303
2016/09/01	44	25	.43	47	PCT	11	P4	AV1	-.16			WAR					TEC	TEH	.610	ZBAUC	20	H	306
2016/09/01	44	25	1.04	97	PCT	21	P4	AV2	-.25			WAR					TEC	TEH	.610	ZBAUC	20	H	306
2016/09/01	44	25	.61	110	PCT	14	P4	AV3	-.12			WAR					TEC	TEH	.610	ZBAUC	20	H	306
2016/09/01	17	26	.60	245	PCT	16	P1	05H	1.53					.34	.29	06H	05H	.610	ZYAXP	19	H	290	
2016/09/01	45	26	.67	149	PCT	15	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	20	H	276
2016/09/01	45	26	1.84	105	PCT	28	P4	AV3	-.10			WAR					TEC	TEH	.610	ZBAUC	20	H	276
2016/09/01	37	27	.74	121	PCT	16	P4	AV2	-.07			WAR					TEC	TEH	.610	ZBAUC	20	H	271
2016/09/01	43	27	.44	124	PCT	9	P2	15C	.55			WAR		.36	.29	TEC	TEH	.610	ZBAUC	46	H	21	
2016/09/01	47	27	.57	138	PCT	13	P4	AV2	-.11			WAR					TEC	TEH	.610	ZBAUC	18	H	297
2016/09/01	47	27	1.50	107	PCT	25	P4	AV3	.21			WAR					TEC	TEH	.610	ZBAUC	18	H	297
2016/09/01	35	28	.31	138	PCT	8	P4	AV2	-.36			WAR					TEC	TEH	.610	ZBAUC	18	H	271
2016/09/01	35	28	1.02	128	PCT	20	P4	AV3	-.12			WAR					TEC	TEH	.610	ZBAUC	18	H	271
2016/09/01	41	30	.54	127	PCT	13	P4	AV2	-.18			WAR					TEC	TEH	.610	ZBAUC	20	H	214
2016/09/01	44	31	.35	45	PCT	9	P4	AV2	.07			WAR					TEC	TEH	.610	ZBAUC	18	H	227
2016/09/01	31	33	1.04	86	PCT	15	P3	03H	.62			WAR					TEC	TEH	.610	ZBAUC	46	H	19
2016/09/01	41	36	.55	97	PCT	13	P4	AV3	-.07			WAR					TEC	TEH	.610	ZBAUC	18	H	128
2016/09/01	41	36	.28	152	PCT	8	P4	AV4	.02			WAR					TEC	TEH	.610	ZBAUC	18	H	128
2016/09/01	37	39	.53	119	PCT	14	P4	AV2	-.40			WAR					TEC	TEH	.610	ZBAUC	16	H	228
2016/09/01	41	44	1.15	99	PCT	22	P4	AV1	-.31			WAR					TEC	TEH	.610	ZBAUC	14	H	145
2016/09/01	41	44	.86	47	PCT	18	P4	AV2	-.24			WAR					TEC	TEH	.610	ZBAUC	14	H	145
2016/09/01	41	44	.56	156	PCT	13	P4	AV3	.24			WAR					TEC	TEH	.610	ZBAUC	14	H	145
2016/09/01	28	48	1.15	144	PCT	21	P32	18C	.60					.32	.29	18C	18C	.610	ZYAXP	15	H	81	
2016/09/01	25	56	.42	125	PCT	13	P29	05H	-.55					.29	.34	05H	05H	.610	ZYAXP	11	H	149	
2016/09/01	26	60	.73	134	PCT	17	P16	04H	1.14					.34	.44	05H	04H	.610	ZYAXP	11	H	112	
2016/09/01	31	62	.88	122	PCT	19	P1	09C	-.65					.25	.37	09C	09C	.610	ZYAXP	9	H	82	
2016/09/01	35	64	.42	101	PCT	7	P3	02H	.12			WAR					TEC	TEH	.610	ZBAUC	14	H	14
2016/09/01	38	68	.49																				

INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	
2016/09/01	23	70	.89	64	PCT	19	P1	05H	1.25					.32	.29	06H	05H	.610	ZYAXP	5	H	327	
2016/09/01	38	70	.18	140	PCT	5	P4	AV4	-.09			WAR					TEC	TEH	.610	ZBAUC	6	H	321
2016/09/01	40	70	.38	131	PCT	10	P4	AV2	-.39			WAR					TEC	TEH	.610	ZBAUC	6	H	320
2016/09/01	49	70	.47	136	PCT	11	P4	AV1	.00			WAR					TEC	TEH	.610	ZBAUC	8	H	308
2016/09/01	4	72	1.01	296	PCT	12	P3	04H	-.48			WAR				08H	TEH	.610	ZBAUC	163	H	7	
2016/09/01	49	73	.34	143	PCT	9	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	8	H	273
2016/09/01	41	75	.50	115	PCT	12	P4	AV2	-.32			WAR					TEC	TEH	.610	ZBAUC	8	H	234
2016/09/01	37	77	.47	102	PCT	12	P4	AV2	-.61			WAR					TEC	TEH	.610	ZBAUC	6	H	206
2016/09/01	37	77	.53	92	PCT	13	P4	AV3	-.11			WAR					TEC	TEH	.610	ZBAUC	6	H	206
2016/09/01	37	77	.37	132	PCT	10	P4	AV4	.02			WAR					TEC	TEH	.610	ZBAUC	6	H	206
2016/09/01	41	77	.29	135	PCT	8	P4	AV2	-.27			WAR					TEC	TEH	.610	ZBAUC	6	H	208
2016/09/01	41	81	2.17	97	PCT	30	P4	AV2	-.27			WAR					TEC	TEH	.610	ZBAUC	8	H	131
2016/09/01	41	81	.87	65	PCT	18	P4	AV3	.22			WAR					TEC	TEH	.610	ZBAUC	8	H	131
2016/09/01	41	81	.29	90	PCT	8	P4	AV4	.00			WAR					TEC	TEH	.610	ZBAUC	8	H	131
2016/09/01	42	81	.50	128	PCT	12	P4	AV2	-.12			WAR					TEC	TEH	.610	ZBAUC	6	H	137
2016/09/01	42	81	.23	133	PCT	6	P4	AV3	-.27			WAR					TEC	TEH	.610	ZBAUC	6	H	137
2016/09/01	42	81	.28	146	PCT	8	P4	AV4	-.02			WAR					TEC	TEH	.610	ZBAUC	6	H	137
2016/09/01	49	81	.55	169	PCT	13	P4	AV1	.05			WAR					TEC	TEH	.610	ZBAUC	6	H	141
2016/09/01	49	82	4.03	118	PCT	36	P1	18C	1.03					.81	.29	TEC	18C	.610	ZYAXP	5	H	107	
2016/09/01	49	82	3.72	289	SVI		P1	18C	1.03								TEC	18C	.610	ZYAXP	5	H	107
2016/09/01	49	82	.33	151	PCT	9	P4	AV4	.05			WAR					TEC	TEH	.610	ZBAUC	6	H	107
2016/09/01	49	82	1.26	275	SVI		3	18C	1.03								18C	17C	.610	ZRSNM	109	C	6
2016/09/01	41	83	.76	109	PCT	16	P4	AV2	-.30			WAR					TEC	TEH	.610	ZBAUC	8	H	97
2016/09/01	41	83	.80	127	PCT	17	P4	AV3	-.05			WAR					TEC	TEH	.610	ZBAUC	8	H	97
2016/09/01	41	83	.38	132	PCT	10	P4	AV4	.12			WAR					TEC	TEH	.610	ZBAUC	8	H	97
2016/09/01	49	83	.24	142	PCT	7	P4	AV1	.11			WAR					TEC	TEH	.610	ZBAUC	6	H	106
2016/09/01	49	83	.21	170	PCT	6	P4	AV4	.16			WAR					TEC	TEH	.610	ZBAUC	6	H	106
2016/09/01	41	85	1.16	134	PCT	22	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	8	H	64
2016/09/01	41	85	.37	142	PCT	9	P4	AV4	-.19			WAR					TEC	TEH	.610	ZBAUC	8	H	64
2016/09/01	42	85	1.47	119	PCT	25	P4	AV2	-.33			WAR					TEC	TEH	.610	ZBAUC	6	H	68
2016/09/01	42	85	.40	156	PCT	10	P4	AV3	.05			WAR					TEC	TEH	.610	ZBAUC	6	H	68
2016/09/01	48	85	.20	145	PCT	6	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	6	H	71
2016/09/01	48	85	.26	161	PCT	7	P4	AV4	.14			WAR					TEC	TEH	.610	ZBAUC	6	H	71
2016/09/01	39	86	.26	154	PCT	7	P4	AV3	-.09			WAR					TEC	TEH	.610	ZBAUC	8	H	40
2016/09/01	39	86	.38	53	PCT	10	P4	AV4	-.05			WAR					TEC	TEH	.610	ZBAUC	8	H	40
2016/09/01	48	86	.26	46	PCT	7	P4	AV3	.12			WAR					TEC	TEH	.610	ZBAUC	6	H	38
2016/09/01	48	86	.22	155	PCT	6	P4	AV4	.07			WAR					TEC	TEH	.610	ZBAUC	6	H	38
2016/09/01	46	88	.34	53	PCT	9	P4	AV2	-.11			WAR					TEC	TEH	.610	ZBAUC	4	H	163
2016/09/01	46	88	.26	83	PCT	7	P4	AV3	.24			WAR					TEC	TEH	.610	ZBAUC	4	H	163
2016/09/01	38	89	.47	136	PCT	12	P4	AV2	.07			WAR					TEC	TEH	.610	ZBAUC	2	H	168
2016/09/01	38	89	.33	22	PCT	9	P4	AV3	.22			WAR					TEC	TEH	.610	ZBAUC	2	H	168
2016/09/01	31	90	.29	78	PCT	8	P4	AV2	-.35			WAR					TEC	TEH	.610	ZBAUC	2	H	148
2016/09/01	41	90	.24	140	PCT	7	P4	AV2	.10			WAR					TEC	TEH	.610	ZBAUC	2	H	143
2016/09/01	41	90	.48	141	PCT	12	P4	AV3	-.02			WAR					TEC	TEH	.610	ZBAUC	2	H	143
2016/09/01	42	90	.27	126	PCT	7	P4	AV3	.12			WAR					TEC	TEH	.610	ZBAUC	4	H	133
2016/09/01	44	90	.30	110	PCT	8	P4	AV3	.12			WAR					TEC	TEH	.610	ZBAUC	4	H	132
2016/09/01	45	90	.21	143	PCT	6	P4	AV2	.05			WAR					TEC	TEH	.610	ZBAUC	2	H	141
2016/09/01	45	90	.58	87	PCT	14	P4	AV3	.15			WAR					TEC	TEH	.610	ZBAUC	2	H	141
2016/09/01	38	91	.46	130	PCT	11	P4	AV2	-.07			WAR					TEC	TEH	.610	ZBAUC	4	H	128
2016/09/01	38	91	.28	128	PCT	8	P4	AV3	.12			WAR					TEC	TEH	.610	ZBAUC	4	H	128
2016/09/01	38	91	.40	97	PCT	10	P4	AV4	-.02			WAR					TEC	TEH	.610	ZBAUC	4	H	128
2016/09/01	42	91	.66	90	PCT	15	P4	AV3	.22			WAR					TEC	TEH	.610	ZBAUC	4	H	130
2016/09/01	42	91	.27	56	PCT	7	P4	AV4	.05			WAR					TEC	TEH	.610	ZBAUC	4	H	130
2016/09/01	43	91	.31	82	PCT	8	P4	AV1	-.23			WAR					TEC	TEH	.610	ZBAUC	2	H	139
2016/09/01	43	91	.53	99	PCT	13	P4	AV2	-.14			WAR					TEC	TEH	.610	ZBAUC	2	H	139
2016/09/01	43	91	.58	114	PCT	14	P4	AV3	.10			WAR					TEC	TEH	.610	ZBAUC	2	H	139
2016/09/01	43	91	.88	117	PCT	18	P4	AV4	-.02			WAR					TEC	TEH	.610	ZBAUC	2	H	139
2016/09/01	45	91	.23	156	PCT	6	P4	AV1	-.23			WAR					TEC	TEH	.610	ZBAUC	2	H	140
2016/09/01	45	91	.67	129	PCT	15	P4	AV2	.15			WAR					TEC	TEH	.610	ZBAUC	2	H	140
2016/09/01	45	91	.64	108	PCT	15	P4	AV3	.17			WAR					TEC	TEH	.610	ZBAUC	2	H	140
2016/09/01	45	91	1.11	101	PCT	21	P4	AV4	.14			WAR					TEC	TEH	.610	ZBAUC	2	H	140
2016/09/01	41	92	.87	120	PCT	18	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	4	H	103
2016/09/01	41	92	.46	70	PCT	11	P4	AV4	.09			WAR					TEC	TEH	.610	ZBAUC	4	H	103
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INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	
2016/09/01	41	93	.21	128	PCT	6	P4	AV4	.11			WAR					TEC	TEH	.610	ZBAUC	4	H	102
2016/09/01	43	93	.42	106	PCT	11	P4	AV3	.10			WAR					TEC	TEH	.610	ZBAUC	2	H	111
2016/09/01	43	93	.31	32	PCT	8	P4	AV4	-.02			WAR					TEC	TEH	.610	ZBAUC	2	H	111
2016/09/01	40	94	1.63	109	PCT	26	P4	AV2	-.28			WAR					TEC	TEH	.610	ZBAUC	4	H	76
2016/09/01	40	94	.28	67	PCT	8	P4	AV4	.02			WAR					TEC	TEH	.610	ZBAUC	4	H	76
2016/09/01	41	94	.96	105	PCT	19	P4	AV2	-.29			WAR					TEC	TEH	.610	ZBAUC	2	H	84
2016/09/01	41	94	1.79	103	PCT	28	P4	AV3	.19			WAR					TEC	TEH	.610	ZBAUC	2	H	84
2016/09/01	41	94	.30	65	PCT	8	P4	AV4	.02			WAR					TEC	TEH	.610	ZBAUC	2	H	84
2016/09/01	40	95	1.23	116	PCT	23	P4	AV2	-.05			WAR					TEC	TEH	.610	ZBAUC	2	H	83
2016/09/01	40	95	.60	103	PCT	14	P4	AV4	.05			WAR					TEC	TEH	.610	ZBAUC	2	H	83
2016/09/01	38	96	2.06	98	PCT	29	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	2	H	60
2016/09/01	38	96	.48	82	PCT	12	P4	AV3	-.23			WAR					TEC	TEH	.610	ZBAUC	2	H	60
2016/09/01	38	96	.27	133	PCT	7	P4	AV4	.02			WAR					TEC	TEH	.610	ZBAUC	2	H	60
2016/09/01	39	96	.29	112	PCT	8	P4	AV3	.07			WAR					TEC	TEH	.610	ZBAUC	4	H	52
2016/09/01	38	97	2.69	93	PCT	33	P4	AV2	-.02			WAR					TEC	TEH	.610	ZBAUC	2	H	57
2016/09/01	38	97	.94	120	PCT	19	P4	AV3	.19			WAR					TEC	TEH	.610	ZBAUC	2	H	57
2016/09/01	38	97	.56	123	PCT	13	P4	AV4	-.02			WAR					TEC	TEH	.610	ZBAUC	2	H	57
2016/09/01	33	98	.51	135	PCT	12	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	4	H	45
2016/09/01	36	98	.21	128	PCT	6	P4	AV4	-.02			WAR					TEC	TEH	.610	ZBAUC	2	H	49
2016/09/01	38	98	.70	103	PCT	16	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	2	H	48
2016/09/01	38	98	.39	93	PCT	10	P4	AV3	.17			WAR					TEC	TEH	.610	ZBAUC	2	H	48
2016/09/01	38	98	.28	147	PCT	8	P4	AV4	.02			WAR					TEC	TEH	.610	ZBAUC	2	H	48
2016/09/01	33	99	.35	135	PCT	9	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	4	H	41
2016/09/01	34	99	.24	116	PCT	7	P4	AV3	-.12			WAR					TEC	TEH	.610	ZBAUC	2	H	46
2016/09/01	34	99	.24	92	PCT	7	P4	AV4	-.07			WAR					TEC	TEH	.610	ZBAUC	2	H	46
2016/09/01	33	100	.65	143	PCT	15	P4	AV3	.20			WAR					TEC	TEH	.610	ZBAUC	4	H	23
2016/09/01	31	102	.48	133	PCT	12	P4	AV2	-.29			WAR					TEC	TEH	.610	ZBAUC	20	H	56
2016/09/01	31	102	.30	64	PCT	8	P4	AV4	.10			WAR					TEC	TEH	.610	ZBAUC	20	H	56
2016/09/01	34	102	.17	68	PCT	5	P4	AV4	.45			WAR					TEC	TEH	.610	ZBAUC	18	H	67
2016/09/01	31	103	1.27	94	PCT	23	P4	AV2	-.74			WAR					TEC	TEH	.610	ZBAUC	20	H	54
2016/09/01	31	103	.47	26	PCT	12	P4	AV3	.21			WAR					TEC	TEH	.610	ZBAUC	20	H	54
INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	

INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	
2016/09/01	11	2	.57	52	PCT	9	P3	05H	-.56			WAR					TEC	TEH	.610	ZBAUC	60	H	12
2016/09/01	12	19	.38	117	PCT	13	P23	05H	1.25					.29	.29	06H	05H	.610	ZYAXP	39	H	18	
2016/09/01	23	23	.40	54	PCT	13	P23	10C	-.68					.34	.22	10C	10C	.610	ZYAXP	11	H	93	
2016/09/01	45	24	.28	107	PCT	6	P4	AV4	.15			WAR					TEC	TEH	.610	ZBAUL	10	H	35
2016/09/01	21	25	1.03	62	PCT	20	P1	06H	1.34					.32	.29	07H	06H	.610	ZYAXP	11	H	118	
2016/09/01	47	27	.27	78	PCT	6	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUL	188	H	36
2016/09/01	47	27	.98	108	PCT	17	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUL	188	H	36
2016/09/01	47	27	.68	135	PCT	13	P4	AV4	.07			WAR					TEC	TEH	.610	ZBAUL	188	H	36
2016/09/01	32	33	.29	105	PCT	11	P17	04H	1.90					.38	.29	05H	04H	.610	ZYAXP	5	H	77	
2016/09/01	35	34	.42	120	PCT	13	P18	04H	1.70					.24	.29	05H	04H	.610	ZYAXP	507	H	65	
2016/09/01	29	38	1.18	95	PCT	21	P30	09C	-.82					.32	.22	09C	09C	.610	ZYAXP	7	H	22	
2016/09/01	9	42	.33	112	PCT	4	P3	11C	-.56			WAR					TEC	TEH	.610	ZBAUC	175	H	21
2016/09/01	6	45	.68	102	PCT	16	P31	05H	-.63					.33	.37	05H	05H	.610	ZYAXP	187	H	23	
2016/09/01	41	45	.67	78	PCT	9	P3	03H	-.53			WAR					TEC	TEH	.610	ZBAUL	117	H	151
2016/09/01	21	48	.60	130	PCT	16	P1	18C	.48					.29	.29	TEC	18C	.610	ZYAXP	15	H	213	
2016/09/01	45	50	.56	332	PCT	15	P1	18C	-.22					.24	.22	TEC	18C	.610	ZYAXP	15	H	256	
2016/09/01	25	53	.33	83	PCT	5	P3	10C	-.65			WAR					TEC	TEH	.610	ZBAUC	60	H	9
2016/09/01	5	55	.64	175	PCT	16	P4	04H	-.21					.37	.29	04H	TEH	.610	ZYAXP	49	H	208	
2016/09/01	14	55	.19	120	PCT	9	P1	04H	-.53					.37	.22	04H	04H	.610	ZYAXP	37	H	112	
2016/09/01	15	56	.52	128	PCT	12	P4	AV4	-.27			WAR					TEC	TEH	.610	ZBAUL	121	H	201
2016/09/01	35	56	.33	163	PCT	9	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUL	20	H	63
2016/09/01	11	58	1.03	242	PCT	11	P3	04H	-.57			WAR					TEC	TEH	.610	ZBAUC	175	H	17
2016/09/01	21	58	1.16	48	PCT	21	P10	05H	-.76					.38	.29	05H	05H	.610	ZYAXP	517	H	77	
2016/09/01	21	59	.21	236	PCT	10	P1	05H	-.90					.21	.37	05H	05H	.610	ZYAXP	517	H	89	
2016/09/01	21	59	.32	229	PCT	12	P1	05H	-.55					.30	.22	05H	05H	.610	ZYAXP	517	H	89	
2016/09/01	36	59	.78	62	PCT	11	P3	06H	-.54			WAR					TEC	TEH	.610	ZBAUC	60	H	7
2016/09/01	39	59	.38	146	PCT	10	P4	AV4	.12			WAR					TEC	TEH	.610	ZBAUL	20	H	80
2016/09/01	27	60	.60	53	PCT	11	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUL	18	H	98
2016/09/01	49	63	.48	128	PCT	9	P4	AV1	-.16			WAR					TEC	TEH	.610	ZBAUL	18	H	143
2016/09/01	40	69	.33	112	PCT	8	P4	AV2	-.65			WAR					TEC	TEH	.610	ZBAUL	119	H	69
2016/09/01	7	74	.29	294	PCT	11	P1	03H	-.54					.26	.22	03H	03H	.610	ZYAXP	197	H	15	
2016/09/01	38	75	.40	111	PCT	9	P4	AV2	-.70			WAR					TEC	TEH	.610	ZBAUL	24	H	117
2016/09/01	49	76	.39	158	PCT	8	P4	AV1	.11			WAR					TEC	TEH	.610	ZBAUL	22	H	152
2016/09/01	44	81	.25	125	PCT	7	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUL	115	H	179
2016/09/01	40	84	.33	113	PCT	8	P4	AV2	-.15			WAR					TEC	TEH	.610	ZBAUL	115	H	145
2016/09/01	33	85	.43	112	PCT	5	P3	09C	-.68			WAR					TEC	TEH	.610	ZBAUC	175	H	16
2016/09/01	38	85	.44	36	PCT	8	P4	AV3	.24			WAR					TEC	TEH	.610	ZBAUL	26	H	84
2016/09/01	48	85	.45	146	PCT	14	P1	05H	-.48					.38	.29	05H	05H	.610	ZYAXP	25	H	79	
2016/09/01	47	88	.52	167	PCT	9	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUL	26	H	145
2016/09/01	47	88	.42	140	PCT	8	P4	AV4	.02			WAR					TEC	TEH	.610	ZBAUL	26	H	145
2016/09/01	44	91	.82	90	PCT	17	P4	AV2	-.44			WAR					TEC	TEH	.610	ZBAUL	28	H	168
2016/09/01	44	91	.26	232	PCT	7	P4	AV3	.28			WAR					TEC	TEH	.610	ZBAUL	28	H	168
2016/09/01	44	91	.32	165	PCT	8	P4	AV4	.04			WAR					TEC	TEH	.610	ZBAUL	28	H	168
2016/09/01	37	95	.30	39	PCT	6	P4	AV2	.04			WAR					TEC	TEH	.610	ZBAUL	26	H	234
2016/09/01	35	96	.29	86	PCT	6	P4	AV2	-.53			WAR					TEC	TEH	.610	ZBAUL	105	H	36
2016/09/01	35	96	.35	50	PCT	8	P4	AV3	.07			WAR					TEC	TEH	.610	ZBAUL	105	H	36
2016/09/01	38	96	.59	39	PCT	9	P3	05H	-.75			WAR					TEC	TEH	.610	ZBAUC	60	H	8
2016/09/01	40	96	.24	105	PCT	6	P4	AV2	-.55			WAR					TEC	TEH	.610	ZBAUL	32	H	10
2016/09/01	36	98	.51	115	PCT	12	P4	AV4	-.13			WAR					TEC	TEH	.610	ZBAUL	32	H	13
2016/09/01	37	98	.57	162	PCT	11	P4	AV2	-.63			WAR					TEC	TEH	.610	ZBAUL	30	H	11
2016/09/01	37	98	.54	117	PCT	11	P4	AV3	-.23			WAR					TEC	TEH	.610	ZBAUL	30	H	11
2016/09/01	36	99	.47	88	PCT	11	P4	AV4	-.06			WAR					TEC	TEH	.610	ZBAUL	32	H	17
2016/09/01	37	99	.32	160	PCT	7	P4	AV3	.08			WAR					TEC	TEH	.610	ZBAUL	30	H	12
2016/09/01	37	99	.91	145	PCT	16	P4	AV4	-.08			WAR					TEC	TEH	.610	ZBAUL	30	H	12
2016/09/01	3	102	.27	76	PCT	11	P1	05H	1.80					.36	.22	06H	05H	.610	ZYAXP	197	H	7	
2016/09/01	32	102	.31	160	PCT	8	P4	AV1	-.22			WAR					TEC	TEH	.610	ZBAUL	32	H	29
2016/09/01	32	103	.69	131	PCT	13	P4	AV2	-.17			WAR					TEC	TEH	.610	ZBAUL	30	H	27
2016/09/01	32	103	.37	29	PCT	8	P4	AV3	-.19			WAR					TEC	TEH	.610	ZBAUL	30	H	27
2016/09/01	32	103	.52	98	PCT	10	P4	AV4	-.06			WAR					TEC	TEH	.610	ZBAUL	30	H	27

INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX
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INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX
2016/09/01	30	104	.67	136	PCT	13	P4	AV1	-.34			WAR				TEC	TEH	.610	ZBAUL	30	H	39
2016/09/01	30	104	.28	154	PCT	6	P4	AV2	.06			WAR				TEC	TEH	.610	ZBAUL	30	H	39
2016/09/01	30	104	.53	146	PCT	11	P4	AV3	-.45			WAR				TEC	TEH	.610	ZBAUL	30	H	39
2016/09/01	30	104	.27	155	PCT	6	P4	AV4	-.02			WAR				TEC	TEH	.610	ZBAUL	30	H	39
2016/09/01	9	113	1.97	67	PCT	26	P22	07H	41.53					.31	.44	08H	TEH	.610	ZYAXP	195	H	9
INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX

INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	
2016/09/01	27	9	1.89	119	PCT	27	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	36	H	63
2016/09/01	28	10	.63	72	PCT	17	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	34	H	73
2016/09/01	29	10	.36	53	PCT	8	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	36	H	61
2016/09/01	29	10	.55	92	PCT	12	P4	AV3	.04			WAR					TEC	TEH	.610	ZBAUC	36	H	61
2016/09/01	28	11	.28	117	PCT	8	P4	AV2	.06			WAR					TEC	TEH	.610	ZBAUC	22	H	148
2016/09/01	29	12	.43	120	PCT	11	P4	AV2	-.28			WAR					TEC	TEH	.610	ZBAUC	22	H	135
2016/09/01	29	12	.28	150	PCT	8	P4	AV3	-.37			WAR					TEC	TEH	.610	ZBAUC	22	H	135
2016/09/01	31	12	.90	71	PCT	19	P4	AV3	.19			WAR					TEC	TEH	.610	ZBAUC	22	H	134
2016/09/01	33	12	.89	159	PCT	19	P4	AV1	-.10			WAR					TEC	TEH	.610	ZBAUC	34	H	70
2016/09/01	33	12	.54	30	PCT	15	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	34	H	70
2016/09/01	29	14	.33	140	PCT	9	P4	AV3	.19			WAR					TEC	TEH	.610	ZBAUC	119	H	56
2016/09/01	33	14	.73	122	PCT	16	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	22	H	115
2016/09/01	33	14	.48	129	PCT	12	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	22	H	115
2016/09/01	30	15	.74	125	PCT	17	P4	AV4	.11			WAR					TEC	TEH	.610	ZBAUC	119	H	53
2016/09/01	31	15	.33	167	PCT	10	P4	AV2	-.14			WAR					TEC	TEH	.610	ZBAUC	117	H	63
2016/09/01	38	17	.26	248	PCT	7	P4	AV1	-.18			WAR					TEC	TEH	.610	ZBAUC	22	H	89
2016/09/01	38	17	.91	129	PCT	19	P4	AV2	-.29			WAR					TEC	TEH	.610	ZBAUC	22	H	89
2016/09/01	38	17	.43	146	PCT	11	P4	AV4	-.05			WAR					TEC	TEH	.610	ZBAUC	22	H	89
2016/09/01	39	17	.28	332	PCT	8	P4	AV1	-.35			WAR					TEC	TEH	.610	ZBAUC	22	H	90
2016/09/01	39	18	.34	138	PCT	9	P4	AV1	-.09			WAR					TEC	TEH	.610	ZBAUC	24	H	65
2016/09/01	39	18	.54	144	PCT	13	P4	AV2	-.24			WAR					TEC	TEH	.610	ZBAUC	24	H	65
2016/09/01	40	20	.84	59	PCT	18	P4	AV2	-.23			WAR					TEC	TEH	.610	ZBAUC	24	H	38
2016/09/01	41	20	.37	157	PCT	10	P4	AV1	-.18			WAR					TEC	TEH	.610	ZBAUC	22	H	39
2016/09/01	41	20	.29	140	PCT	8	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	22	H	39
2016/09/01	41	20	.27	168	PCT	7	P4	AV3	-.25			WAR					TEC	TEH	.610	ZBAUC	22	H	39
2016/09/01	35	21	.28	148	PCT	8	P4	AV4	.02			WAR					TEC	TEH	.610	ZBAUC	113	H	218
2016/09/01	40	22	.66	92	PCT	15	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	24	H	11
2016/09/01	42	22	.39	44	PCT	10	P4	AV4	-.05			WAR					TEC	TEH	.610	ZBAUC	24	H	10
2016/09/01	43	22	.44	167	PCT	11	P4	AV1	.00			WAR					TEC	TEH	.610	ZBAUC	22	H	10
2016/09/01	38	23	.44	139	PCT	11	P4	AV2	-.11			WAR					TEC	TEH	.610	ZBAUC	113	H	196
2016/09/01	38	23	.42	117	PCT	11	P4	AV4	.00			WAR					TEC	TEH	.610	ZBAUC	113	H	196
2016/09/01	44	23	.51	164	PCT	12	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	22	H	9
2016/09/01	44	23	.45	151	PCT	11	P4	AV4	.09			WAR					TEC	TEH	.610	ZBAUC	22	H	9
2016/09/01	36	25	.27	164	PCT	7	P4	AV2	-.18			WAR					TEC	TEH	.610	ZBAUC	115	H	176
2016/09/01	2	26	1.14	119	PCT	21	P1	11C	-.57					.34	.29	11C	11C	.610	ZYAXP	127	C	24	
2016/09/01	31	27	.53	168	PCT	13	P4	AV1	-.24			WAR					TEC	TEH	.610	ZBAUC	115	H	148
2016/09/01	39	27	.39	146	PCT	10	P4	AV2	-.02			WAR					TEC	TEH	.610	ZBAUC	20	H	230
2016/09/01	39	27	.76	134	PCT	16	P4	AV3	-.05			WAR					TEC	TEH	.610	ZBAUC	20	H	230
2016/09/01	40	27	.45	118	PCT	11	P4	AV2	.13			WAR					TEC	TEH	.610	ZBAUC	115	H	152
2016/09/01	36	33	.46	167	PCT	10	P4	AV2	-.20			WAR					TEC	TEH	.610	ZBAUC	165	H	104
2016/09/01	38	34	.58	89	PCT	15	P4	AV2	-.30			WAR					TEC	TEH	.610	ZBAUC	18	H	108
2016/09/01	36	37	.35	110	PCT	9	P4	AV2	-.21			WAR					TEC	TEH	.610	ZBAUC	20	H	58
2016/09/01	25	40	.74	94	PCT	21	Q10	02H	-.57					.37	.29	02H	02H	.610	ZYAXP	161	H	8	
2016/09/01	40	47	.45	23	PCT	11	P4	AV2	-.44			WAR					TEC	TEH	.610	ZBAUC	111	H	145
2016/09/01	33	55	.47	147	PCT	12	P4	AV3	-.78			WAR					TEC	TEH	.610	ZBAUC	14	H	30
2016/09/01	49	60	2.13	93	PCT	23	P3	13C	.00			WAR					TEC	TEH	.610	ZBAUC	10	H	218
2016/09/01	40	62	.40	71	PCT	13	P4	AV2	-.29			WAR					TEC	TEH	.610	ZBAUC	109	H	33
2016/09/01	49	76	.77	28	PCT	16	P4	AV1	-.63			WAR					TEC	TEH	.610	ZBAUC	8	H	299
2016/09/01	3	78	1.08	234	PCT	14	P3	13C	.62			WAR					09C	TEC	.610	ZBAUC	117	C	120
2016/09/01	49	79	.37	171	PCT	10	P4	AV1	-.07			WAR					TEC	TEH	.610	ZBAUC	6	H	270
2016/09/01	44	81	2.33	120	PCT	31	P4	AV2	-.22			WAR					TEC	TEH	.610	ZBAUC	105	H	66
2016/09/01	44	81	1.03	120	PCT	21	P4	AV3	-.11			WAR					TEC	TEH	.610	ZBAUC	105	H	66
2016/09/01	44	81	.35	150	PCT	10	P4	AV4	.04			WAR					TEC	TEH	.610	ZBAUC	105	H	66
2016/09/01	48	81	.45	128	PCT	12	P4	AV1	-.16			WAR					TEC	TEH	.610	ZBAUC	6	H	237
2016/09/01	49	82	.34	127	PCT	9	P4	AV4	.00			WAR					TEC	TEH	.610	ZBAUC	6	H	203
2016/09/01	48	86	.50	165	PCT	13	P4	AV1	.02			WAR					TEC	TEH	.610	ZBAUC	6	H	136
2016/09/01	46	88	.27	29	PCT	7	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	8	H	101
2016/09/01	44	92	.36	150	PCT	10	P4	AV3	.16			WAR					TEC	TEH	.610	ZBAUC	6	H	43
2016/09/01	44	92	.33	116	PCT	9	P4	AV4	.12			WAR					TEC	TEH	.610	ZBAUC	6	H	43
2016/09/01	43	93	.30	329	PCT	8	P4	AV2	-.12			WAR					TEC	TEH	.610	ZBAUC	6	H	42
2016/09/01	43	93	.29	163	PCT	8	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	6	H	42
2016/09/01	43	93	.29	158	PCT	8	P4	AV4	-.09			WAR					TEC	TEH	.610	ZBAUC	6	H	42
INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	

INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	
2016/09/01	38	94	.36	17	PCT	10	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	6	H	13
2016/09/01	39	94	.68	140	PCT	15	P4	AV3	.18			WAR					TEC	TEH	.610	ZBAUC	8	H	11
2016/09/01	42	94	.33	166	PCT	9	P4	AV2	-.05			WAR					TEC	TEH	.610	ZBAUC	6	H	11
2016/09/01	42	94	.21	155	PCT	6	P4	AV4	.00			WAR					TEC	TEH	.610	ZBAUC	6	H	11
2016/09/01	33	97	.23	155	PCT	7	P4	AV3	-.18			WAR					TEC	TEH	.610	ZBAUC	103	H	76
2016/09/01	38	97	.81	87	PCT	17	P4	AV2	-.20			WAR					TEC	TEH	.610	ZBAUC	2	H	141
2016/09/01	38	97	.27	165	PCT	7	P4	AV4	-.09			WAR					TEC	TEH	.610	ZBAUC	2	H	141
2016/09/01	39	97	.18	89	PCT	5	P4	AV1	-.18			WAR					TEC	TEH	.610	ZBAUC	4	H	12
2016/09/01	39	97	.41	90	PCT	10	P4	AV2	-.17			WAR					TEC	TEH	.610	ZBAUC	4	H	12
2016/09/01	39	97	.43	151	PCT	10	P4	AV3	.02			WAR					TEC	TEH	.610	ZBAUC	4	H	12
2016/09/01	39	97	.71	127	PCT	15	P4	AV4	-.07			WAR					TEC	TEH	.610	ZBAUC	4	H	12
2016/09/01	36	98	.68	97	PCT	15	P4	AV2	-.05			WAR					TEC	TEH	.610	ZBAUC	4	H	109
2016/09/01	38	99	.93	143	PCT	19	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	2	H	116
2016/09/01	38	99	2.09	121	PCT	29	P4	AV4	.00			WAR					TEC	TEH	.610	ZBAUC	2	H	116
2016/09/01	33	100	.44	146	PCT	10	P4	AV2	-.12			WAR					TEC	TEH	.610	ZBAUC	4	H	87
2016/09/01	33	101	.27	87	PCT	7	P4	AV2	-.25			WAR					TEC	TEH	.610	ZBAUC	4	H	85
2016/09/01	33	101	.34	147	PCT	8	P4	AV3	-.16			WAR					TEC	TEH	.610	ZBAUC	4	H	85
2016/09/01	33	101	.35	45	PCT	9	P4	AV4	.12			WAR					TEC	TEH	.610	ZBAUC	4	H	85
2016/09/01	33	102	.53	85	PCT	12	P4	AV2	.06			WAR					TEC	TEH	.610	ZBAUC	4	H	67
2016/09/01	28	103	.19	60	PCT	6	P4	AV3	-.04			WAR					TEC	TEH	.610	ZBAUC	101	H	21
2016/09/01	28	105	.79	94	PCT	17	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	2	H	52
INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	

INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	
2016/09/01	26	8	.35	62	PCT	9	P4	AV3	-.05			WAR					TEC	TEH	.610	ZBAUL	16	H	22
2016/09/01	28	10	.31	150	PCT	7	P4	AV3	-.21			WAR					TEC	TEH	.610	ZBAUL	14	H	8
2016/09/01	28	10	.26	84	PCT	6	P4	AV4	-.07			WAR					TEC	TEH	.610	ZBAUL	14	H	8
2016/09/01	32	12	.50	162	PCT	12	P4	AV2	-.21			WAR					TEC	TEH	.610	ZBAUL	12	H	134
2016/09/01	33	13	1.51	122	PCT	25	P4	AV2	-.21			WAR					TEC	TEH	.610	ZBAUL	12	H	133
2016/09/01	33	13	.81	143	PCT	17	P4	AV3	-.02			WAR					TEC	TEH	.610	ZBAUL	12	H	133
2016/09/01	33	13	.41	75	PCT	10	P4	AV4	.07			WAR					TEC	TEH	.610	ZBAUL	12	H	133
2016/09/01	35	14	2.39	103	PCT	31	P4	AV2	.25			WAR					TEC	TEH	.610	ZBAUL	10	H	109
2016/09/01	35	14	.39	100	PCT	10	P4	AV4	.15			WAR					TEC	TEH	.610	ZBAUL	10	H	109
2016/09/01	33	15	.40	92	PCT	10	P4	AV4	.05			WAR					TEC	TEH	.610	ZBAUL	12	H	109
2016/09/01	36	16	.43	63	PCT	11	P4	AV1	-.19			WAR					TEC	TEH	.610	ZBAUL	12	H	85
2016/09/01	36	16	3.18	119	PCT	36	P4	AV2	-.05			WAR					TEC	TEH	.610	ZBAUL	12	H	85
2016/09/01	36	16	.64	113	PCT	14	P4	AV3	.07			WAR					TEC	TEH	.610	ZBAUL	12	H	85
2016/09/01	36	16	.31	45	PCT	8	P4	AV4	.07			WAR					TEC	TEH	.610	ZBAUL	12	H	85
2016/09/01	37	17	.84	128	PCT	17	P4	AV2	-.18			WAR					TEC	TEH	.610	ZBAUL	12	H	84
2016/09/01	37	17	.71	117	PCT	16	P4	AV4	-.02			WAR					TEC	TEH	.610	ZBAUL	12	H	84
2016/09/01	38	18	.98	120	PCT	19	P4	AV2	-.18			WAR					TEC	TEH	.610	ZBAUL	10	H	63
2016/09/01	38	18	.71	72	PCT	15	P4	AV4	.22			WAR					TEC	TEH	.610	ZBAUL	10	H	63
2016/09/01	38	19	.30	129	PCT	8	P4	AV2	-.11			WAR					TEC	TEH	.610	ZBAUL	10	H	61
2016/09/01	38	20	.51	116	PCT	12	P4	AV2	.10			WAR					TEC	TEH	.610	ZBAUC	109	H	64
2016/09/01	38	20	.28	26	PCT	7	P4	AV4	.14			WAR					TEC	TEH	.610	ZBAUC	109	H	64
2016/09/01	41	20	.38	159	PCT	9	P4	AV4	-.02			WAR					TEC	TEH	.610	ZBAUL	10	H	35
2016/09/01	38	21	.34	36	PCT	8	P4	AV2	-.16			WAR					TEC	TEH	.610	ZBAUL	10	H	32
2016/09/01	43	22	.30	139	PCT	7	P4	AV1	.02			WAR					TEC	TEH	.610	ZBAUL	6	H	246
2016/09/01	43	22	.43	107	PCT	9	P4	AV2	-.16			WAR					TEC	TEH	.610	ZBAUL	6	H	246
2016/09/01	43	22	1.47	122	PCT	23	P4	AV3	.21			WAR					TEC	TEH	.610	ZBAUL	6	H	246
2016/09/01	43	22	.82	103	PCT	16	P4	AV4	.25			WAR					TEC	TEH	.610	ZBAUL	6	H	246
2016/09/01	42	23	1.12	131	PCT	20	P4	AV2	-.23			WAR					TEC	TEH	.610	ZBAUL	6	H	245
2016/09/01	42	23	.35	81	PCT	8	P4	AV4	.07			WAR					TEC	TEH	.610	ZBAUL	6	H	245
2016/09/01	44	24	.58	92	PCT	12	P4	AV3	.19			WAR					TEC	TEH	.610	ZBAUL	8	H	206
2016/09/01	38	26	.37	90	PCT	12	P4	AV2	.07			WAR					TEC	TEH	.610	ZBAUC	115	H	66
2016/09/01	33	28	.30	90	PCT	7	P4	AV2	.05			WAR					TEC	TEH	.610	ZBAUL	6	H	156
2016/09/01	43	29	.33	84	PCT	7	P4	AV2	.12			WAR					TEC	TEH	.610	ZBAUL	6	H	145
2016/09/01	42	30	.71	140	PCT	19	P4	AV2	.07			WAR					TEC	TEH	.610	ZBAUC	115	H	116
2016/09/01	42	32	.47	131	PCT	11	P4	AV2	.07			WAR					TEC	TEH	.610	ZBAUC	113	H	148
2016/09/01	44	34	.32	137	PCT	10	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	115	H	173
2016/09/01	49	37	.28	143	PCT	7	P4	AV1	-.07			WAR					TEC	TEH	.610	ZBAUL	2	H	58
2016/09/01	44	45	.34	164	PCT	10	P4	AV2	-.27			WAR					TEC	TEH	.610	ZBAUC	119	H	63
2016/09/01	44	46	1.40	108	PCT	23	P4	AV3	-.12			WAR					TEC	TEH	.610	ZBAUC	24	H	36
2016/09/01	17	55	.45	269	PCT	14	P1	01H	.72					.34	.29	01H	TEH	.610	ZYAXP	25	H	93	
2016/09/01	46	56	.40	254	PCT	10	P4	AV4	.34			WAR					TEC	TEH	.610	ZBAUC	28	H	8
2016/09/01	21	57	.39	286	PCT	13	P1	05H	-.69					.20	.44	05H	04H	.610	ZYAXP	25	H	100	
2016/09/01	48	61	2.60	101	PCT	27	P3	13C	-.07			WAR					TEC	TEH	.610	ZBAUL	74	H	9
2016/09/01	38	64	.83	122	PCT	18	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	117	H	170
2016/09/01	36	65	.80	86	PCT	17	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	117	H	176
2016/09/01	28	66	.71	59	PCT	17	P26	09C	-.66					.29	.29	09C	09C	.610	ZYAXP	31	H	58	
2016/09/01	49	66	.29	143	PCT	7	P4	AV4	.09			WAR					TEC	TEH	.610	ZBAUC	30	H	70
2016/09/01	28	69	.25	69	PCT	11	P1	10C	-.99					.34	.29	11C	10C	.610	ZYAXP	29	H	114	
2016/09/01	12	72	.55	46	PCT	15	P33	01H	.40					.36	.36	01H	TEH	.610	ZYAXP	543	H	131	
2016/09/01	48	72	.96	123	PCT	19	P31	18C	.67					.32	.44	TEC	17C	.610	ZYAXP	29	H	169	
2016/09/01	49	74	.20	146	PCT	5	P4	AV4	.05			WAR					TEC	TEH	.610	ZBAUC	30	H	206
2016/09/01	41	77	.85	128	PCT	18	P4	AV2	-.26			WAR					TEC	TEH	.610	ZBAUC	101	H	39
2016/09/01	41	77	.29	90	PCT	8	P4	AV3	-.05			WAR					TEC	TEH	.610	ZBAUC	101	H	39
2016/09/01	38	78	.25	71	PCT	7	P4	AV2	-.21			WAR					TEC	TEH	.610	ZBAUC	155	H	7
2016/09/01	38	78	1.19	87	PCT	22	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	155	H	7
2016/09/01	43	78	1.21	105	PCT	20	P4	AV2	-.36			WAR					TEC	TEH	.610	ZBAUC	34	H	46
2016/09/01	43	78	2.45	112	PCT	30	P4	AV3	.20			WAR					TEC	TEH	.610	ZBAUC	34	H	46
2016/09/01	33	79	.22	47	PCT	6	P4	AV1	-.27			WAR					TEC	TEH	.610	ZBAUC	105	H	17
2016/09/01	33	79	.28	119	PCT	7	P4	AV2	-.31			WAR					TEC	TEH	.610	ZBAUC	105	H	17
2016/09/01	36	79	.26	39	PCT	5	P4	AV1	.19			WAR					TEC	TEH	.610	ZBAUC	107	H	15
2016/09/01	36	79	.41	20	PCT	8	P4	AV3	.02			WAR					TEC	TEH	.610	ZBAUC	107	H	15
2016/09/01	33	81	.31	68	PCT	6	P4	AV2	-.21			WAR					TEC	TEH	.610	ZBAUC	107	H	42
2016/09/01	39	81	.51	110	PCT	11	P4	AV2	-.40			WAR					TEC	TEH	.610	ZBAUC	36	H	80
INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	

INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	
2016/09/01	48	82	.33	133	PCT	8	P4	AV1	-.16			WAR					TEC	TEH	.610	ZBAUC	36	H	98
2016/09/01	49	84	.41	153	PCT	9	P4	AV1	-.07			WAR					TEC	TEH	.610	ZBAUC	34	H	119
2016/09/01	42	85	.73	137	PCT	13	P4	AV2	-.19			WAR					TEC	TEH	.610	ZBAUC	107	H	98
2016/09/01	42	85	.35	31	PCT	7	P4	AV3	.09			WAR					TEC	TEH	.610	ZBAUC	107	H	98
2016/09/01	47	87	.34	80	PCT	7	P4	AV4	.09			WAR					TEC	TEH	.610	ZBAUC	34	H	198
2016/09/01	46	89	.43	169	PCT	9	P4	AV1	-.09			WAR					TEC	TEH	.610	ZBAUC	34	H	231
2016/09/01	46	89	.25	154	PCT	6	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	34	H	231
2016/09/01	38	90	.25	89	PCT	7	P4	AV2	-.40			WAR					TEC	TEH	.610	ZBAUC	105	H	162
2016/09/01	39	90	.41	150	PCT	8	P4	AV2	-.31			WAR					TEC	TEH	.610	ZBAUC	107	H	151
2016/09/01	44	90	.25	165	PCT	6	P4	AV1	-.15			WAR					TEC	TEH	.610	ZBAUC	34	H	275
2016/09/01	44	91	.37	111	PCT	8	P4	AV2	.05			WAR					TEC	TEH	.610	ZBAUC	34	H	245
2016/09/01	44	91	.39	162	PCT	8	P4	AV3	.17			WAR					TEC	TEH	.610	ZBAUC	34	H	245
2016/09/01	44	91	.33	163	PCT	7	P4	AV4	-.14			WAR					TEC	TEH	.610	ZBAUC	34	H	245
2016/09/01	45	91	.29	127	PCT	7	P4	AV2	-.10			WAR					TEC	TEH	.610	ZBAUC	36	H	246
2016/09/01	45	91	.55	136	PCT	12	P4	AV4	-.07			WAR					TEC	TEH	.610	ZBAUC	36	H	246
2016/09/01	36	93	.64	120	PCT	12	P4	AV2	.14			WAR					TEC	TEH	.610	ZBAUC	107	H	196
2016/09/01	36	93	.24	98	PCT	5	P4	AV3	.07			WAR					TEC	TEH	.610	ZBAUC	107	H	196
2016/09/01	38	93	1.47	125	PCT	24	P4	AV2	.05			WAR					TEC	TEH	.610	ZBAUC	40	H	9
2016/09/01	38	93	.45	131	PCT	10	P4	AV3	-.07			WAR					TEC	TEH	.610	ZBAUC	40	H	9
2016/09/01	40	93	.26	116	PCT	6	P4	AV1	-.13			WAR					TEC	TEH	.610	ZBAUC	40	H	8
2016/09/01	40	93	.65	83	PCT	14	P4	AV2	-.14			WAR					TEC	TEH	.610	ZBAUC	40	H	8
2016/09/01	36	94	.37	83	PCT	9	P4	AV1	-.11			WAR					TEC	TEH	.610	ZBAUC	105	H	205
2016/09/01	36	94	.43	128	PCT	10	P4	AV2	-.90			WAR					TEC	TEH	.610	ZBAUC	105	H	205
2016/09/01	38	94	.31	152	PCT	8	P4	AV3	-.02			WAR					TEC	TEH	.610	ZBAUC	105	H	204
2016/09/01	40	94	.31	150	PCT	7	P4	AV1	-.31			WAR					TEC	TEH	.610	ZBAUC	38	H	59
2016/09/01	40	94	.92	143	PCT	17	P4	AV2	.02			WAR					TEC	TEH	.610	ZBAUC	38	H	59
2016/09/01	40	94	.89	140	PCT	16	P4	AV3	-.11			WAR					TEC	TEH	.610	ZBAUC	38	H	59
2016/09/01	32	96	.32	156	PCT	8	P4	AV2	-.28			WAR					TEC	TEH	.610	ZBAUC	105	H	228
2016/09/01	35	96	.21	89	PCT	5	P4	AV2	-.23			WAR					TEC	TEH	.610	ZBAUC	38	H	71
2016/09/01	36	96	.61	126	PCT	11	P4	AV2	-.31			WAR					TEC	TEH	.610	ZBAUC	107	H	218
2016/09/01	36	96	.32	125	PCT	7	P4	AV3	.02			WAR					TEC	TEH	.610	ZBAUC	107	H	218
2016/09/01	39	96	.60	129	PCT	14	P4	AV3	.17			WAR					TEC	TEH	.610	ZBAUC	54	H	50
2016/09/01	40	96	.30	36	PCT	8	P4	AV1	.13			WAR					TEC	TEH	.610	ZBAUC	52	H	63
2016/09/01	40	96	.25	170	PCT	6	P4	AV2	.12			WAR					TEC	TEH	.610	ZBAUC	52	H	63
2016/09/01	36	97	.83	107	PCT	15	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	107	H	236
2016/09/01	40	97	.33	166	PCT	8	P4	AV1	-.11			WAR					TEC	TEH	.610	ZBAUC	52	H	64
2016/09/01	40	97	.30	172	PCT	8	P4	AV3	.15			WAR					TEC	TEH	.610	ZBAUC	52	H	64
2016/09/01	34	98	.84	127	PCT	17	P4	AV2	-.67			WAR					TEC	TEH	.610	ZBAUC	105	H	246
2016/09/01	36	98	.68	109	PCT	15	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	52	H	66
2016/09/01	39	98	.38	133	PCT	9	P4	AV1	.12			WAR					TEC	TEH	.610	ZBAUC	52	H	68
2016/09/01	34	99	.85	140	PCT	18	P4	AV2	-.07			WAR					TEC	TEH	.610	ZBAUC	54	H	56
2016/09/01	34	100	.58	146	PCT	13	P4	AV3	-.07			WAR					TEC	TEH	.610	ZBAUC	52	H	73
2016/09/01	36	100	.30	144	PCT	8	P4	AV1	.00			WAR					TEC	TEH	.610	ZBAUC	52	H	74
2016/09/01	36	100	1.42	107	PCT	24	P4	AV3	-.03			WAR					TEC	TEH	.610	ZBAUC	52	H	74
2016/09/01	36	100	2.98	87	PCT	34	P4	AV3	.00			WAR					TEC	TEH	.610	ZBAUC	52	H	74
2016/09/01	30	102	.81	133	PCT	17	P4	AV3	-.13			WAR					TEC	TEH	.610	ZBAUC	52	H	82
2016/09/01	27	104	.29	99	PCT	8	P4	AV2	.00			WAR					TEC	TEH	.610	ZBAUC	54	H	84
2016/09/01	29	104	.37	143	PCT	9	P4	AV2	.12			WAR					TEC	TEH	.610	ZBAUC	54	H	85
2016/09/01	28	105	.70	138	PCT	15	P4	AV2	.07			WAR					TEC	TEH	.610	ZBAUC	52	H	102
2016/09/01	28	105	.26	127	PCT	7	P4	AV3	.07			WAR					TEC	TEH	.610	ZBAUC	52	H	102
2016/09/01	25	107	1.11	118	PCT	21	P4	AV2	-.35			WAR					TEC	TEH	.610	ZBAUC	52	H	117
2016/09/01	25	107	.36	83	PCT	9	P4	AV3	-.10			WAR					TEC	TEH	.610	ZBAUC	52	H	117
2016/09/01	27	107	.62	152	PCT	14	P4	AV2	.26			WAR					TEC	TEH	.610	ZBAUC	52	H	116
INSPDATE	ROW	COL	VOLTS	DEG	IND	PER	CHN	LOCN	INCH1	LOC2	INCH2	UTIL1	UTIL2	CRLEN	CRWID	BEGT	ENDT	PDIA	PTYPE	CAL	L	IDX	