



March 23, 2017

ULNRC-06357

U.S. Nuclear Regulatory Commission
Attn: Document Control Desk
Washington, DC 20555-0001

10 CFR 50.55a
10 CFR 50.36

Ladies and Gentlemen:

**DOCKET NUMBER 50-483
CALLAWAY PLANT UNIT 1
UNION ELECTRIC CO.
RENEWED FACILITY OPERATING LICENSE NPF-30
RESPONSE TO REQUEST FOR ADDITIONAL INFORMATION
2016 STEAM GENERATOR TUBE INSPECTIONS
(TAC NO. MF8474)**

By letter dated October 11, 2016 (ADAMS Accession No. ML16286A547) and pursuant to Callaway Plant Technical Specification 5.6.10, "Steam Generator Tube Inspection Report," Union Electric Company (dba Ameren Missouri), submitted information summarizing the 2016 steam generator tube inspections performed at Callaway Plant, Unit 1 during refueling outage 21.

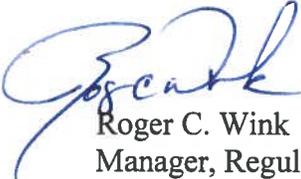
During its review of the submitted report, the NRC staff determined that a request for additional information (RAI) was needed to complete its review. The NRC transmitted an RAI to Ameren Missouri in electronic form on February 7, 2017, and requested that the response be provided by March 3, 2017. This information was provided as an enclosure to Ameren Missouri letter ULNRC-06352, dated February 28, 2017.

The provided information was designated as proprietary by the provider, and accordingly, it was requested in the February 28, 2017 letter that the information be withheld pursuant to 10 CFR 2.390. Subsequent to the February 28, 2017 submittal, however, and after consultation with the provider, it was determined that the provided information does not need to be considered proprietary and that withholding per 10 CFR 2.390 was unnecessary. Consequently, a non-proprietary version of the requested information has been received from the provider. The only change required to be made for the non-proprietary version was removal of the proprietary information notice that appeared as a note on the grid map pages included in the enclosure.

This letter provides, herewith, the same information provided in the February 28, 2017 letter but without any request for withholding in light of confirming that the information is non-proprietary. Therefore, this letter supersedes the transmittal made per Ameren Missouri's February 28, 2017 letter. The response to the RAI is thus provided in the Enclosure to this letter.

This letter does not contain new commitments. If there are questions, please contact Tom Elwood at 314-225-1905.

Sincerely,

 ^{PN}
6581
Roger C. Wink
Manager, Regulatory Affairs

DRB/

Enclosure: Response to Request for Additional Information – 2016 Steam Generator Tube Inspections

ULNRC-06357

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cc: Mr. Kriss M. Kennedy
Regional Administrator
U. S. Nuclear Regulatory Commission
Region IV
1600 East Lamar Boulevard
Arlington, TX 76011-4511

Senior Resident Inspector
Callaway Resident Office
U.S. Nuclear Regulatory Commission
8201 NRC Road
Steedman, MO 65077

Mr. L. John Klos
Project Manager, Callaway Plant
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U. S. Nuclear Regulatory Commission
Mail Stop O8H4
Washington, DC 20555-0001

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Index and send hardcopy to QA File A160.0761

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NSRB Secretary

STARS Regulatory Affairs

Mr. Jay Silberg (Pillsbury Winthrop Shaw Pittman LLP)

Missouri Public Service Commission

Response to Request for Additional Information – 2016 Steam Generator Tube Inspections

Request:

Please provide a listing of all service induced indications that were recorded in the (Callaway Plant) steam generator eddy current inspections during refueling outage 21.

Response:

The following pages list all service induced indications that were recorded in the (Callaway Plant) steam generator eddy current inspections during refueling outage 21. Grid maps are also provided in order to provide a visual reference for the listing of service induced indications.

Ameren - Callaway Unit 1 4/16 - 1R21

GROUP
avb_twd_0-9 TUBES
39

AVB %TWD <10%

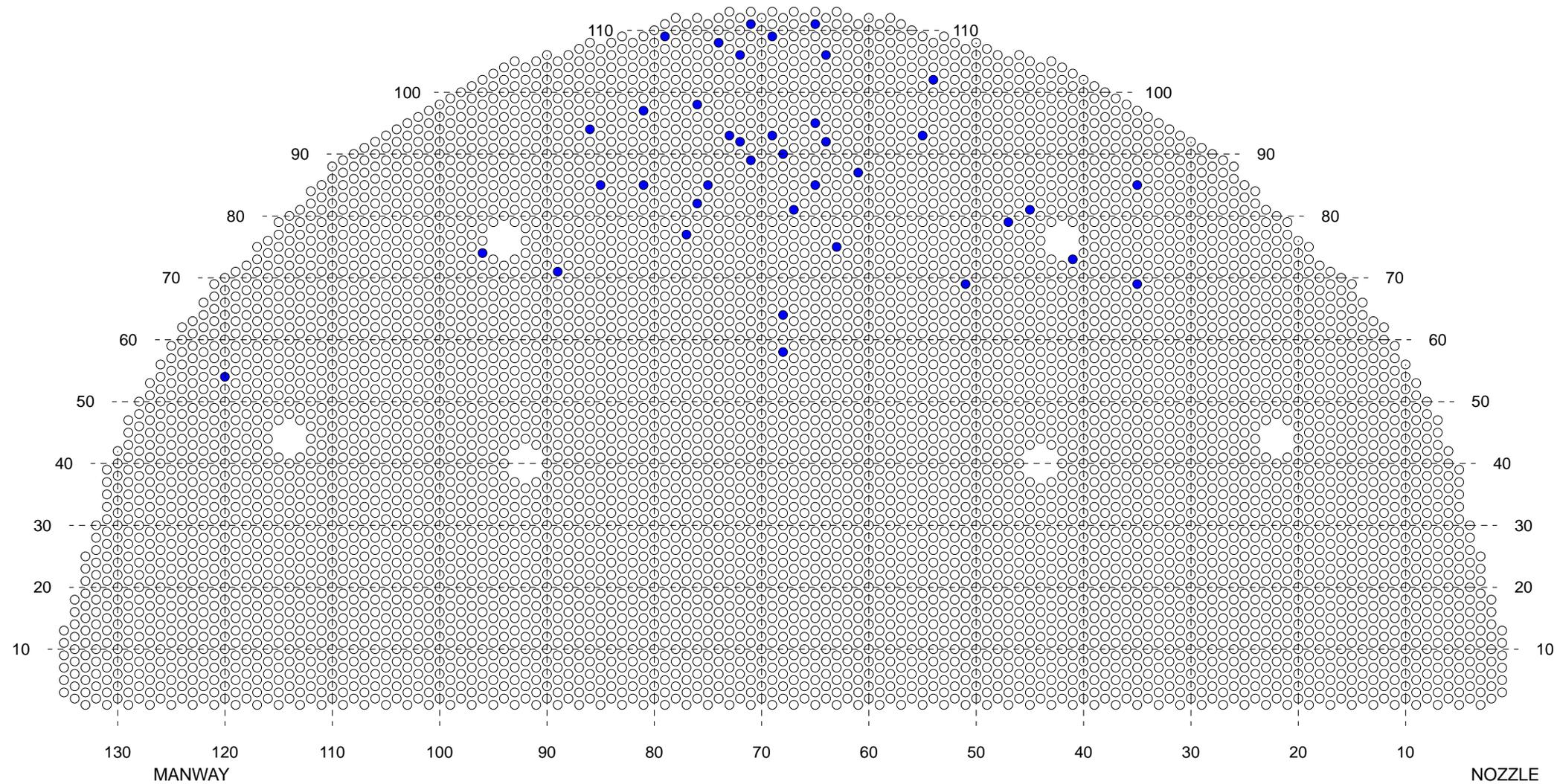
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Mon Apr 18 11:54:42 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 39
OUT OF SERVICE (#): NA

Ameren: S/G A HOT AREVA



AVB % TWD <10%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
54	120	0.11	136	P2	TWD	7	AV4 +0.07	TEC	TEH					28	HOT	610HS
58	68	0.16	76	P2	TWD	9	AV3 -0.02	TEC	TEH					20	HOT	610HS
		0.07	120	P2	TWD	5	AV2 +0.05	TEC	TEH					20	HOT	610HS
64	68	0.14	91	P2	TWD	9	AV3 -0.02	TEC	TEH					20	HOT	610HS
69	35	0.11	149	P2	TWD	7	AV4 -0.02	TEC	TEH					8	HOT	610HS
69	51	0.15	139	P2	TWD	9	AV4 +0.00	TEC	TEH					7	HOT	610HS
71	89	0.14	110	P2	TWD	8	AV3 -0.05	TEC	TEH					22	HOT	610HS
73	41	0.11	153	P2	TWD	7	AV4 -0.05	TEC	TEH					9	HOT	610HS
74	96	0.15	52	P2	TWD	9	AV5 +0.00	TEC	TEH					26	HOT	610HS
75	63	0.13	19	P2	TWD	8	AV3 +0.00	TEC	TEH					4	HOT	610HS
77	77	0.16	128	P2	TWD	9	AV3 -0.14	TEC	TEH					21	HOT	610HS
79	47	0.12	93	P2	TWD	7	AV2 +0.00	TEC	TEH					6	HOT	610HS
81	45	0.11	122	P2	TWD	7	AV4 +0.00	TEC	TEH					7	HOT	610HS
81	67	0.14	94	P2	TWD	8	AV4 +0.02	TEC	TEH					5	HOT	610HS
		0.14	53	P2	TWD	8	AV3 -0.02	TEC	TEH					5	HOT	610HS
82	76	0.14	115	P2	TWD	8	AV5 -0.02	TEC	TEH					3	HOT	610HS
85	35	0.13	143	P2	TWD	8	AV2 -0.02	TEC	TEH					9	HOT	610HS
85	65	0.12	129	P2	TWD	8	AV6 +0.00	TEC	TEH					3	HOT	610HS
		0.15	147	P2	TWD	9	AV4 +0.00	TEC	TEH					3	HOT	610HS
85	75	0.07	43	P2	TWD	4	AV5 -0.02	TEC	TEH					3	HOT	610HS
85	81	0.16	82	P2	TWD	9	AV4 -0.02	TEC	TEH					23	HOT	610HS
85	85	0.13	128	P2	TWD	8	AV2 +0.00	TEC	TEH					23	HOT	610HS
87	61	0.14	77	P2	TWD	9	AV4 -0.02	TEC	TEH					5	HOT	610HS
89	71	0.15	118	P2	TWD	9	AV5 +0.00	TEC	TEH					3	HOT	610HS
90	68	0.16	94	P2	TWD	9	AV3 -0.05	TEC	TEH					3	HOT	610HS
92	64	0.11	140	P2	TWD	7	AV1 +0.05	TEC	TEH					2	HOT	610HS
92	72	0.13	72	P2	TWD	8	AV2 -0.05	TEC	TEH					2	HOT	610HS
		0.08	158	P2	TWD	5	AV5 +0.00	TEC	TEH					2	HOT	610HS
93	55	0.16	133	P2	TWD	9	AV5 -0.05	TEC	TEH					5	HOT	610HS
93	69	0.11	67	P2	TWD	7	AV4 -0.14	TEC	TEH					3	HOT	610HS
		0.14	99	P2	TWD	8	AV3 -0.05	TEC	TEH					3	HOT	610HS
93	73	0.10	61	P2	TWD	6	AV4 -0.02	TEC	TEH					3	HOT	610HS
		0.11	117	P2	TWD	7	AV3 -0.05	TEC	TEH					3	HOT	610HS
94	86	0.13	138	P2	TWD	8	AV3 -0.07	TEC	TEH					22	HOT	610HS
95	65	0.12	100	P2	TWD	8	AV6 +0.07	TEC	TEH					2	HOT	610HS
97	81	0.12	114	P2	TWD	7	AV1 -0.09	TEC	TEH					23	HOT	610HS
98	76	0.08	121	P2	TWD	5	AV2 -0.02	TEC	TEH					3	HOT	610HS
102	54	0.14	125	P2	TWD	9	AV6 -0.02	TEC	TEH					7	HOT	610HS
106	64	0.15	83	P2	TWD	9	AV6 +0.09	TEC	TEH					3	HOT	610HS
106	72	0.15	104	P2	TWD	9	AV5 -0.05	TEC	TEH					3	HOT	610HS
108	74	0.16	141	P2	TWD	9	AV1 -0.02	TEC	TEH					2	HOT	610HS
		0.06	81	P2	TWD	4	AV2 -0.19	TEC	TEH					2	HOT	610HS
109	69	0.13	137	P2	TWD	8	AV2 -0.02	TEC	TEH					3	HOT	610HS
109	79	0.13	148	P2	TWD	8	AV1 -0.09	TEC	TEH					23	HOT	610HS

AVB % TWD <10%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
111	65	0.12	39	P2	TWD 7		AV2 -0.02	TEC	TEH					3	HOT	610HS
111	71	0.15	88	P2	TWD 9		AV6 -0.02	TEC	TEH					2	HOT	610HS
		0.13	119	P2	TWD 8		AV5 -0.05	TEC	TEH					2	HOT	610HS

Total Tubes : 39
Total Records: 47

Ameren - Callaway Unit 1 4/16 - 1R21

GROUP
avb_twd_0-9 TUBES
39

AVB %TWD <10%

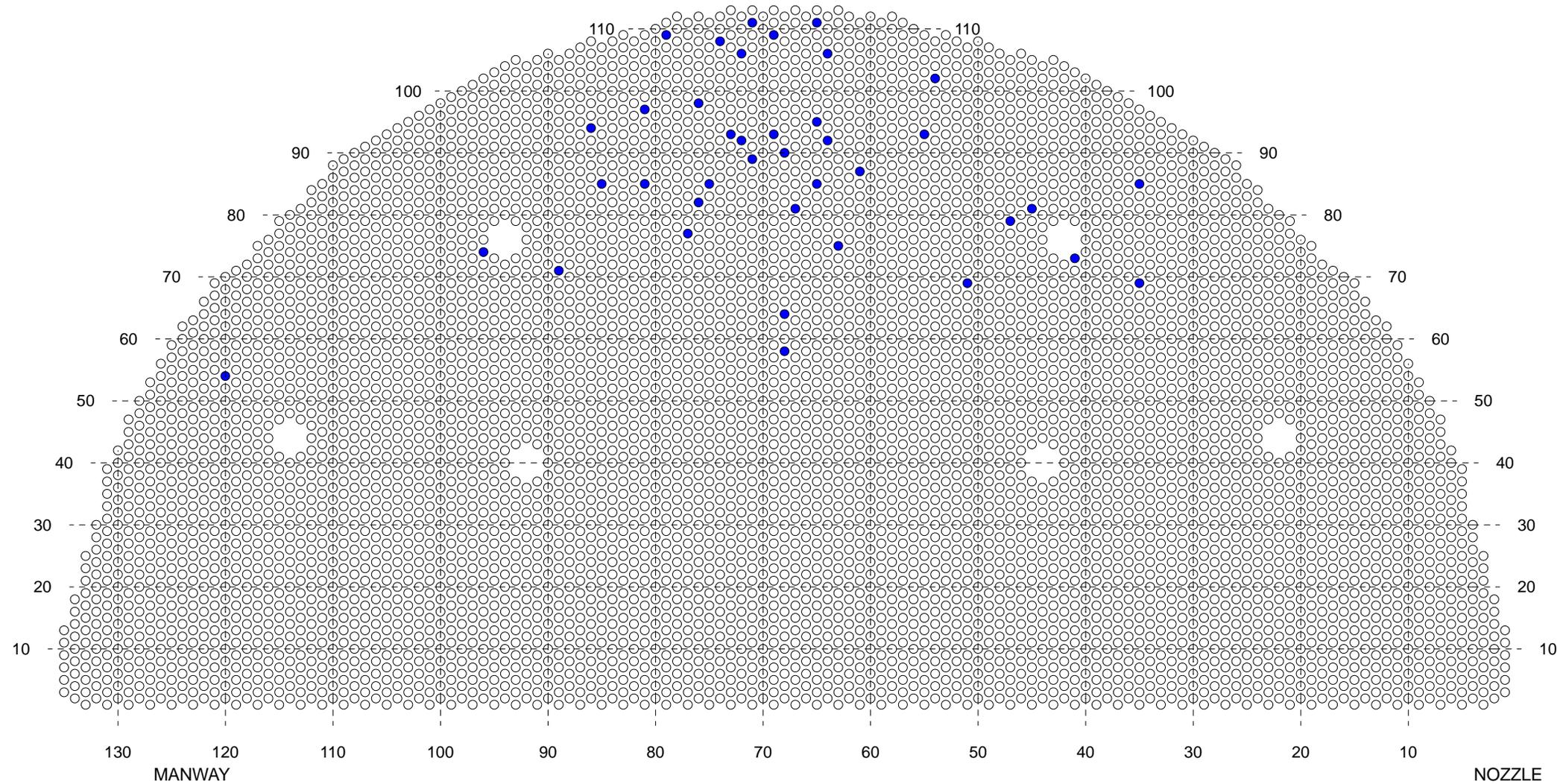
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Mon Apr 18 11:54:42 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 39
OUT OF SERVICE (#): NA

Ameren: S/G A HOT AREVA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB%TWD 10-19%

GROUP
avb_twd_10-19 TUBES
50

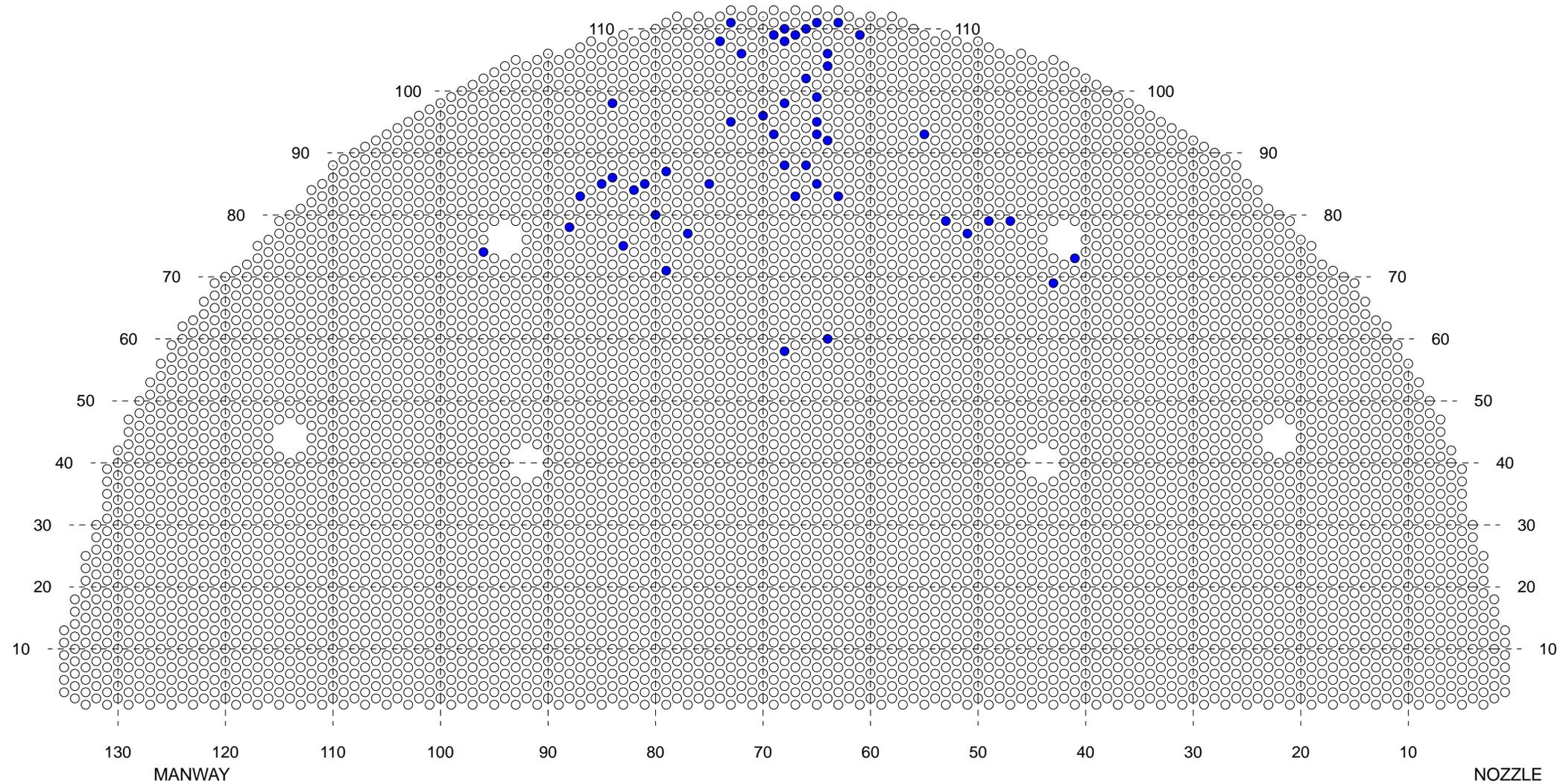
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Mon Apr 18 11:57:30 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 50
OUT OF SERVICE (#): NA

Ameren: S/G A HOT AREVA



AVB % TWD 10-19%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
58	68	0.36 0.24	126 121	P2 P2	TWD	17 13	AV5 -0.02 AV4 +0.00	TEC	TEH					20 20	HOT HOT	610HS 610HS
60	64	0.31	92	P2	TWD	15	AV5 +0.00	TEC	TEH					4	HOT	610HS
69	43	0.35	125	P2	TWD	17	AV4 -0.02	TEC	TEH					9	HOT	610HS
71	79	0.23 0.44	119 122	P2 P2	TWD	12 19	AV4 -0.02 AV3 +0.00	TEC	TEH					22 22	HOT HOT	610HS 610HS
73	41	0.33	93	P2	TWD	16	AV3 -0.02	TEC	TEH					9	HOT	610HS
74	96	0.22 0.18	146 110	P2 P2	TWD	12 10	AV4 +0.00 AV3 -0.05	TEC	TEH					26 26	HOT HOT	610HS 610HS
75	83	0.17	124	P2	TWD	10	AV2 -0.02	TEC	TEH					22	HOT	610HS
77	51	0.19 0.30 0.27	145 115 121	P2 P2 P2	TWD	11 15 14	AV5 -0.02 AV4 -0.02 AV2 -0.02	TEC	TEH					7 7 7	HOT HOT HOT	610HS 610HS 610HS
77	77	0.31	119	P2	TWD	15	AV5 -0.05	TEC	TEH					21	HOT	610HS
78	88	0.26	97	P2	TWD	14	AV5 -0.05	TEC	TEH					23	HOT	610HS
79	47	0.33 0.43	119 124	P2 P2	TWD	16 19	AV4 -0.05 AV3 -0.05	TEC	TEH					6 6	HOT HOT	610HS 610HS
79	49	0.22	103	P2	TWD	12	AV2 -0.02	TEC	TEH					7	HOT	610HS
79	53	0.28	100	P2	TWD	14	AV3 -0.02	TEC	TEH					6	HOT	610HS
80	80	0.20 0.20	123 120	P2 P2	TWD	11 11	AV4 +0.00 AV3 +0.05	TEC	TEH					22 22	HOT HOT	610HS 610HS
83	63	0.36	108	P2	TWD	17	AV5 -0.02	TEC	TEH					5	HOT	610HS
83	67	0.19	121	P2	TWD	11	AV4 +0.00	TEC	TEH					2	HOT	610HS
83	87	0.24	124	P2	TWD	13	AV4 +0.00	TEC	TEH					22	HOT	610HS
84	82	0.26 0.25	141 143	P2 P2	TWD	14 13	AV3 +0.00 AV2 -0.05	TEC	TEH					22 22	HOT HOT	610HS 610HS
85	65	0.27 0.40	103 122	P2 P2	TWD	14 18	AV5 -0.05 AV3 -0.02	TEC	TEH					3 3	HOT HOT	610HS 610HS
85	75	0.20	102	P2	TWD	11	AV2 -0.05	TEC	TEH					3	HOT	610HS
85	81	0.44 0.25	104 127	P2 P2	TWD	19 13	AV3 -0.05 AV2 -0.05	TEC	TEH					23 23	HOT HOT	610HS 610HS
85	85	0.38	119	P2	TWD	18	AV3 -0.02	TEC	TEH					23	HOT	610HS
86	84	0.36 0.17	129 147	P2 P2	TWD	17 10	AV4 -0.05 AV2 +0.02	TEC	TEH					22 22	HOT HOT	610HS 610HS
87	79	0.32 0.43	143 118	P2 P2	TWD	16 19	AV4 +0.00 AV3 -0.02	TEC	TEH					22 22	HOT HOT	610HS 610HS
88	66	0.23	104	P2	TWD	12	AV3 -0.02	TEC	TEH					3	HOT	610HS
88	68	0.34	134	P2	TWD	16	AV3 -0.02	TEC	TEH					2	HOT	610HS
92	64	0.33	122	P2	TWD	16	AV5 -0.05	TEC	TEH					2	HOT	610HS
93	55	0.18	65	P2	TWD	10	AV4 -0.02	TEC	TEH					5	HOT	610HS
93	65	0.27 0.42 0.21	136 109 89	P2 P2 P2	TWD	14 19 11	AV5 -0.05 AV3 -0.02 AV2 -0.02	TEC	TEH					3 3 3	HOT HOT HOT	610HS 610HS 610HS
93	69	0.19 0.17	42 82	P2 P2	TWD	11 10	AV6 -0.05 AV5 -0.07	TEC	TEH					3 3	HOT HOT	610HS 610HS
95	65	0.22	127	P2	TWD	12	AV5 -0.02	TEC	TEH					2	HOT	610HS
95	73	0.17 0.29 0.30	121 128 114	P2 P2 P2	TWD	10 15 15	AV5 -0.05 AV3 +0.02 AV2 -0.02	TEC	TEH					2 2 2	HOT HOT HOT	610HS 610HS 610HS

AVB % TWD 10-19%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
96	70	0.20	55	P2	TWD	11	AV5 -0.05	TEC	TEH					2	HOT	610HS
98	68	0.43	119	P2	TWD	19	AV4 -0.02	TEC	TEH					3	HOT	610HS
98	84	0.33	135	P2	TWD	16	AV3 -0.05	TEC	TEH					22	HOT	610HS
99	65	0.30	126	P2	TWD	15	AV6 -0.09	TEC	TEH					2	HOT	610HS
102	66	0.19	83	P2	TWD	11	AV6 -0.02	TEC	TEH					3	HOT	610HS
		0.32	112	P2	TWD	16	AV5 -0.05	TEC	TEH					3	HOT	610HS
104	64	0.37	105	P2	TWD	17	AV6 -0.05	TEC	TEH					2	HOT	610HS
106	64	0.23	115	P2	TWD	12	AV5 +0.00	TEC	TEH					3	HOT	610HS
106	72	0.22	111	P2	TWD	12	AV6 -0.02	TEC	TEH					3	HOT	610HS
108	68	0.40	118	P2	TWD	18	AV5 +0.00	TEC	TEH					2	HOT	610HS
		0.25	96	P2	TWD	13	AV2 -0.05	TEC	TEH					2	HOT	610HS
108	74	0.17	118	P2	TWD	10	AV6 -0.02	TEC	TEH					2	HOT	610HS
		0.27	119	P2	TWD	14	AV3 -0.05	TEC	TEH					2	HOT	610HS
109	61	0.34	71	P2	TWD	17	AV5 -0.07	TEC	TEH					4	HOT	610HS
109	67	0.17	93	P2	TWD	10	AV4 -0.05	TEC	TEH					2	HOT	610HS
		0.21	107	P2	TWD	12	AV1 -0.07	TEC	TEH					2	HOT	610HS
109	69	0.21	120	P2	TWD	11	AV4 -0.05	TEC	TEH					3	HOT	610HS
110	66	0.18	135	P2	TWD	10	AV5 +0.00	TEC	TEH					3	HOT	610HS
110	68	0.17	107	P2	TWD	10	AV1 -0.09	TEC	TEH					3	HOT	610HS
111	63	0.17	82	P2	TWD	10	AV2 -0.19	TEC	TEH					4	HOT	610HS
111	65	0.31	119	P2	TWD	15	AV6 +0.12	TEC	TEH					3	HOT	610HS
111	73	0.19	94	P2	TWD	11	AV4 -0.02	TEC	TEH					2	HOT	610HS

Total Tubes : 50
 Total Records: 71

Ameren - Callaway Unit 1 4/16 - 1R21

AVB%TWD 10-19%

GROUP
avb_twd_10-19

TUBES
50

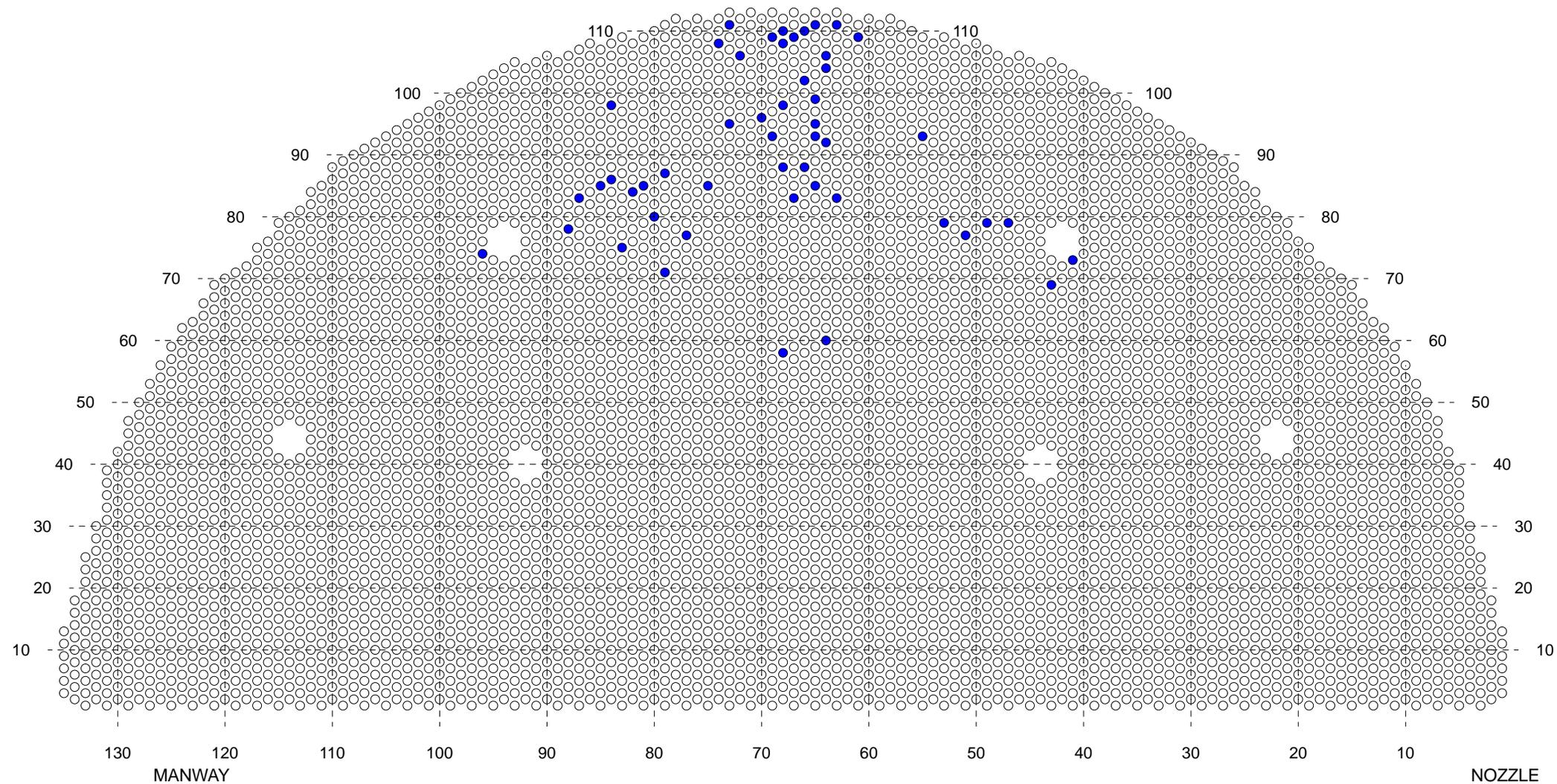
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Mon Apr 18 11:57:30 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 50
OUT OF SERVICE (#): NA

Ameren: S/G A HOT AREVA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 20-29%

GROUP
avb_twd_20-29 TUBES
23

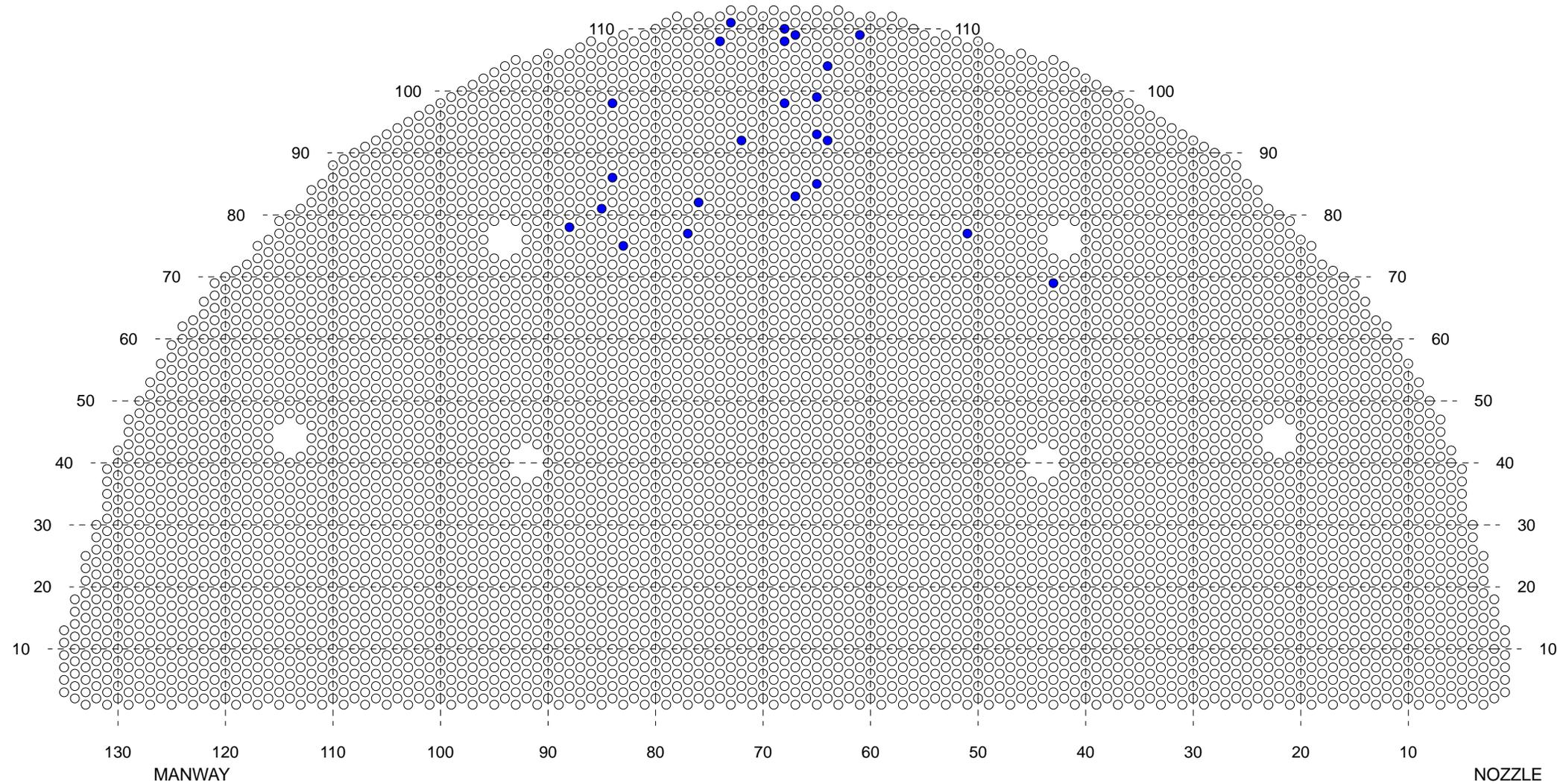
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Mon Apr 18 12:02:27 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 23
OUT OF SERVICE (#): NA

Ameren: S/G A HOT AREVA



AVB % TWD 20-29%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
69	43	0.51	117	P2	TWD	21	AV3 +0.00	TEC	TEH					9	HOT	610HS
75	83	0.59	122	P2	TWD	23	AV5 -0.02	TEC	TEH					22	HOT	610HS
		0.65	121	P2	TWD	24	AV4 +0.00	TEC	TEH					22	HOT	610HS
		0.59	132	P2	TWD	23	AV3 +0.00	TEC	TEH					22	HOT	610HS
77	51	0.53	136	P2	TWD	22	AV3 +0.00	TEC	TEH					7	HOT	610HS
77	77	0.63	118	P2	TWD	24	AV4 +0.00	TEC	TEH					21	HOT	610HS
78	88	0.47	101	P2	TWD	20	AV4 -0.05	TEC	TEH					23	HOT	610HS
81	85	0.44	117	P2	TWD	20	AV4 -0.02	TEC	TEH					23	HOT	610HS
		0.81	115	P2	TWD	27	AV3 -0.05	TEC	TEH					23	HOT	610HS
		0.48	108	P2	TWD	21	AV2 +0.00	TEC	TEH					23	HOT	610HS
82	76	0.84	119	P2	TWD	28	AV4 -0.02	TEC	TEH					3	HOT	610HS
83	67	0.82	122	P2	TWD	27	AV2 -0.02	TEC	TEH					2	HOT	610HS
85	65	0.49	127	P2	TWD	21	AV2 -0.02	TEC	TEH					3	HOT	610HS
86	84	0.55	131	P2	TWD	22	AV3 +0.00	TEC	TEH					22	HOT	610HS
92	64	0.92	122	P2	TWD	29	AV3 -0.02	TEC	TEH					2	HOT	610HS
		0.74	125	P2	TWD	26	AV2 +0.00	TEC	TEH					2	HOT	610HS
92	72	0.65	125	P2	TWD	24	AV4 +0.00	TEC	TEH					2	HOT	610HS
93	65	0.45	113	P2	TWD	20	AV4 -0.02	TEC	TEH					3	HOT	610HS
98	68	0.75	129	P2	TWD	26	AV5 +0.00	TEC	TEH					3	HOT	610HS
98	84	0.56	123	P2	TWD	22	AV2 -0.05	TEC	TEH					22	HOT	610HS
99	65	0.69	128	P2	TWD	25	AV5 -0.05	TEC	TEH					2	HOT	610HS
104	64	0.52	127	P2	TWD	22	AV5 -0.07	TEC	TEH					2	HOT	610HS
108	68	0.66	125	P2	TWD	25	AV4 +0.00	TEC	TEH					2	HOT	610HS
		0.87	121	P2	TWD	28	AV3 +0.00	TEC	TEH					2	HOT	610HS
108	74	0.83	111	P2	TWD	27	AV4 -0.05	TEC	TEH					2	HOT	610HS
109	61	0.81	92	P2	TWD	27	AV6 -0.07	TEC	TEH					4	HOT	610HS
109	67	0.70	121	P2	TWD	25	AV6 -0.05	TEC	TEH					2	HOT	610HS
		0.89	118	P2	TWD	28	AV5 -0.02	TEC	TEH					2	HOT	610HS
		0.89	124	P2	TWD	28	AV3 -0.02	TEC	TEH					2	HOT	610HS
110	68	0.77	126	P2	TWD	27	AV2 -0.07	TEC	TEH					3	HOT	610HS
111	73	0.89	128	P2	TWD	28	AV6 +0.00	TEC	TEH					2	HOT	610HS
		0.47	129	P2	TWD	20	AV5 -0.02	TEC	TEH					2	HOT	610HS
		0.72	117	P2	TWD	26	AV3 -0.02	TEC	TEH					2	HOT	610HS
		0.95	124	P2	TWD	29	AV2 +0.00	TEC	TEH					2	HOT	610HS

Total Tubes : 23
 Total Records: 34

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 20-29%

GROUP
avb_twd_20-29

TUBES
23

AREVA - FDMS map module Version 11.0

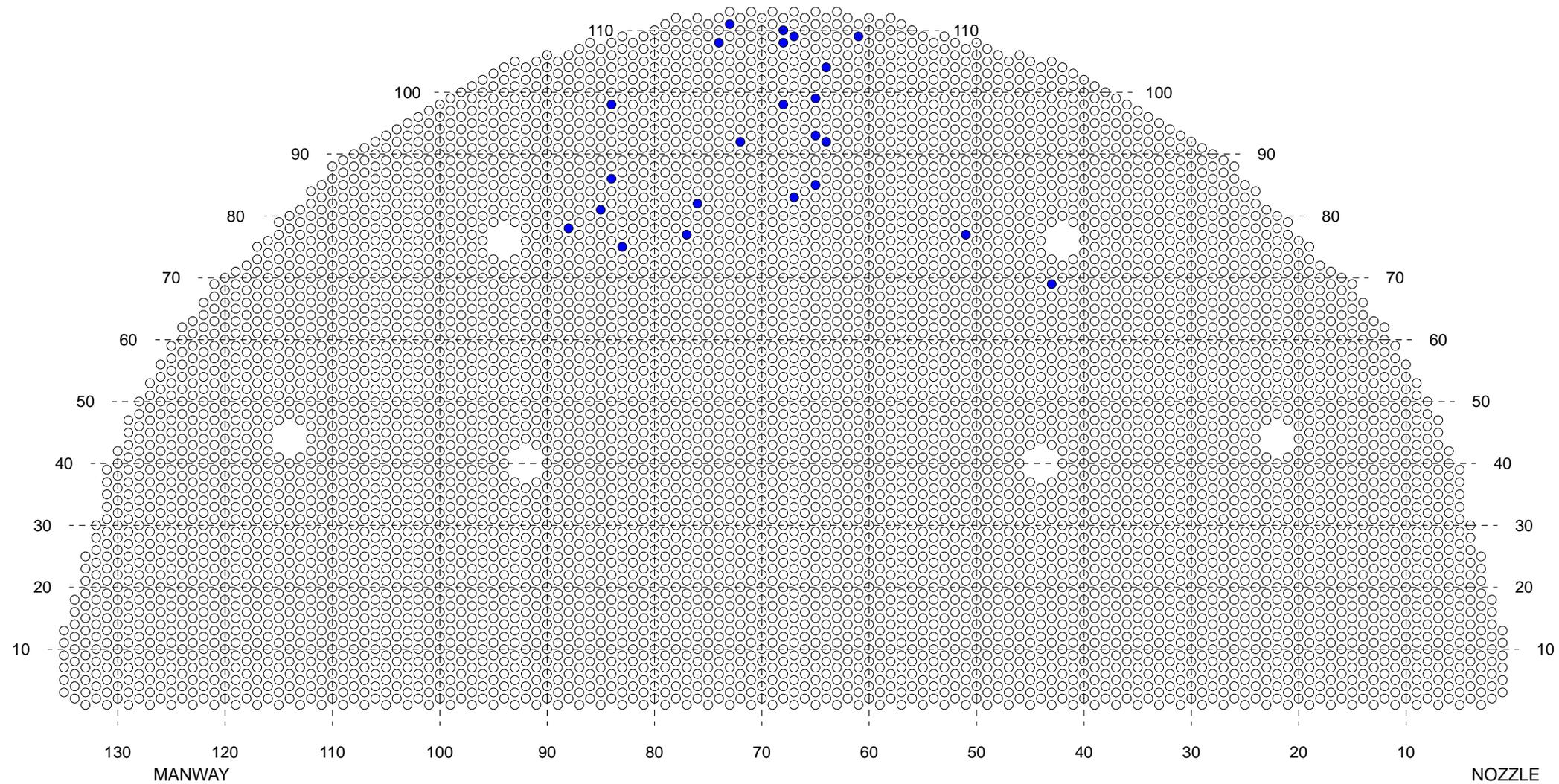
SCALE: 0.084494 X
Mon Apr 18 12:02:27 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 23
OUT OF SERVICE (#): NA

Ameren: S/G A HOT

AREVA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 30-39 %

GROUP
avb_twd_30-39 TUBES
7

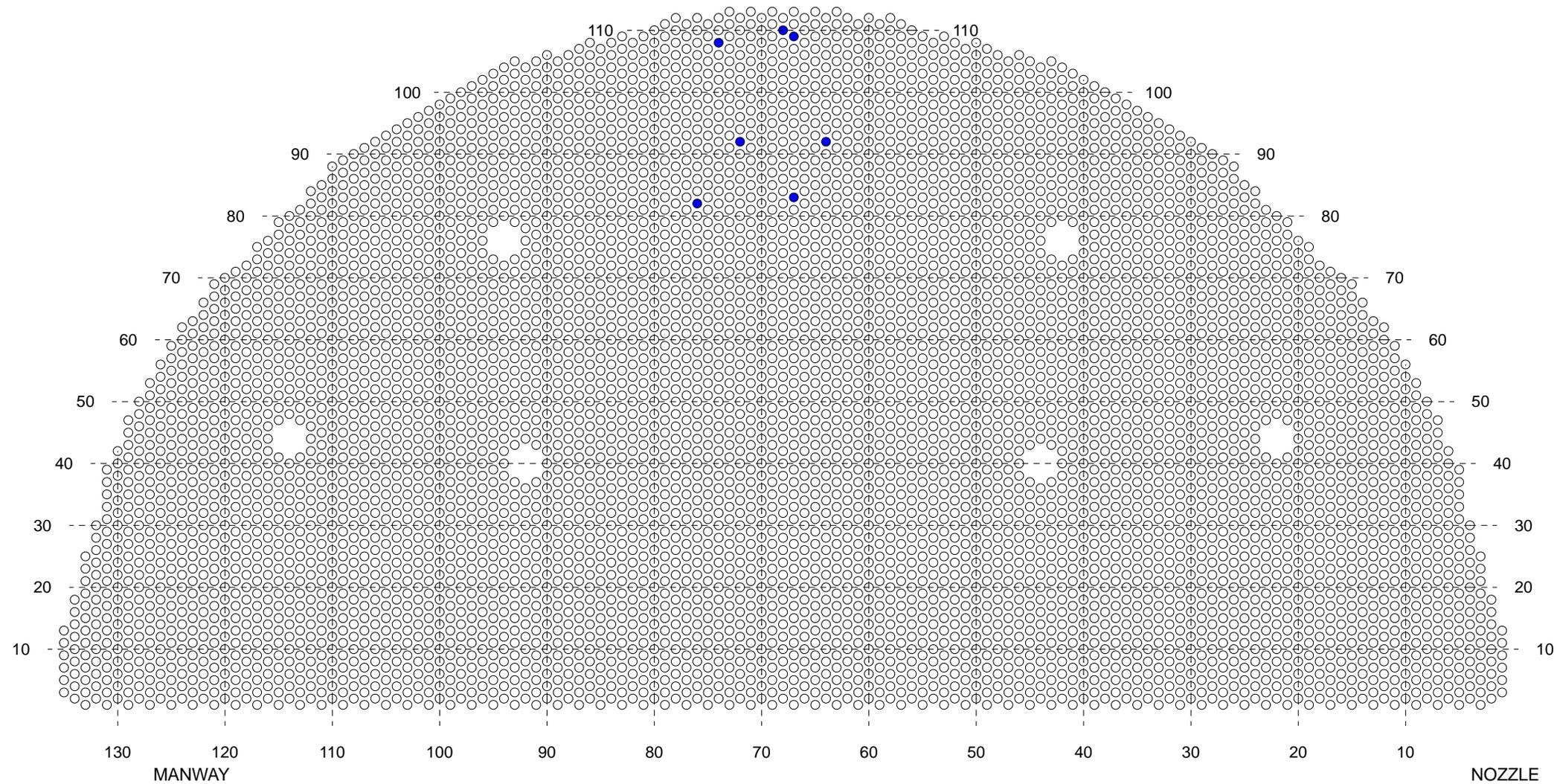
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Mon Apr 18 12:12:51 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 7
OUT OF SERVICE (#): NA

Ameren: S/G A HOT AREVA



AVB % TWD 30-39%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE
82	76	1.14	109	P2	TWD	31	AV3 +0.00	TEC	TEH					3	HOT	610HS
83	67	1.09	123	P2	TWD	31	AV3 -0.02	TEC	TEH					2	HOT	610HS
92	64	1.17	118	P2	TWD	32	AV4 -0.02	TEC	TEH					2	HOT	610HS
92	72	1.16	125	P2	TWD	32	AV3 +0.00	TEC	TEH					2	HOT	610HS
108	74	1.16	118	P2	TWD	32	AV5 -0.05	TEC	TEH					2	HOT	610HS
109	67	1.25	119	P2	TWD	33	AV2 -0.05	TEC	TEH					2	HOT	610HS
110	68	1.08	122	P2	TWD	31	AV4 -0.02	TEC	TEH					3	HOT	610HS
		1.09	106	P2	TWD	31	AV3 -0.05	TEC	TEH					3	HOT	610HS

Total Tubes : 7
 Total Records: 8

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 30-39 %

GROUP
avb_twd_30-39 TUBES
7

AREVA - FDMS map module Version 11.0

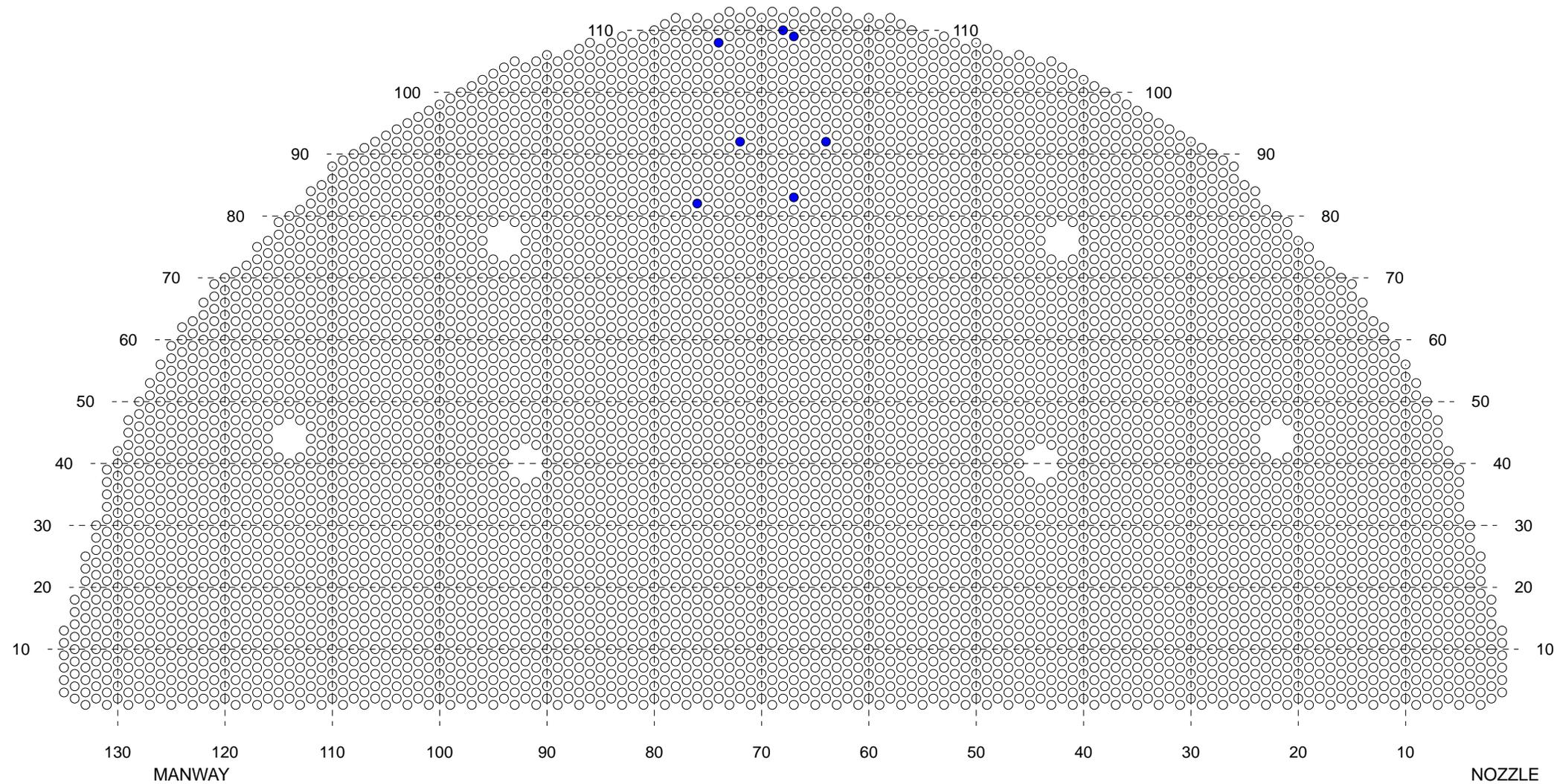
SCALE: 0.084494 X
Mon Apr 18 12:12:51 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 7
OUT OF SERVICE (#): NA

Ameren: S/G A HOT

AREVA



AVB % TWD >= 40%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE
-----	-----	-------	-----	-----	-----	-----	----------	-----	-----	------	---	------	---	-----	---	-----	-------

Total Tubes : 0
Total Records: 0

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD < 10%

GROUP
A QueryM1

TUBES
36

AREVA - FDMS map module Version 11.0

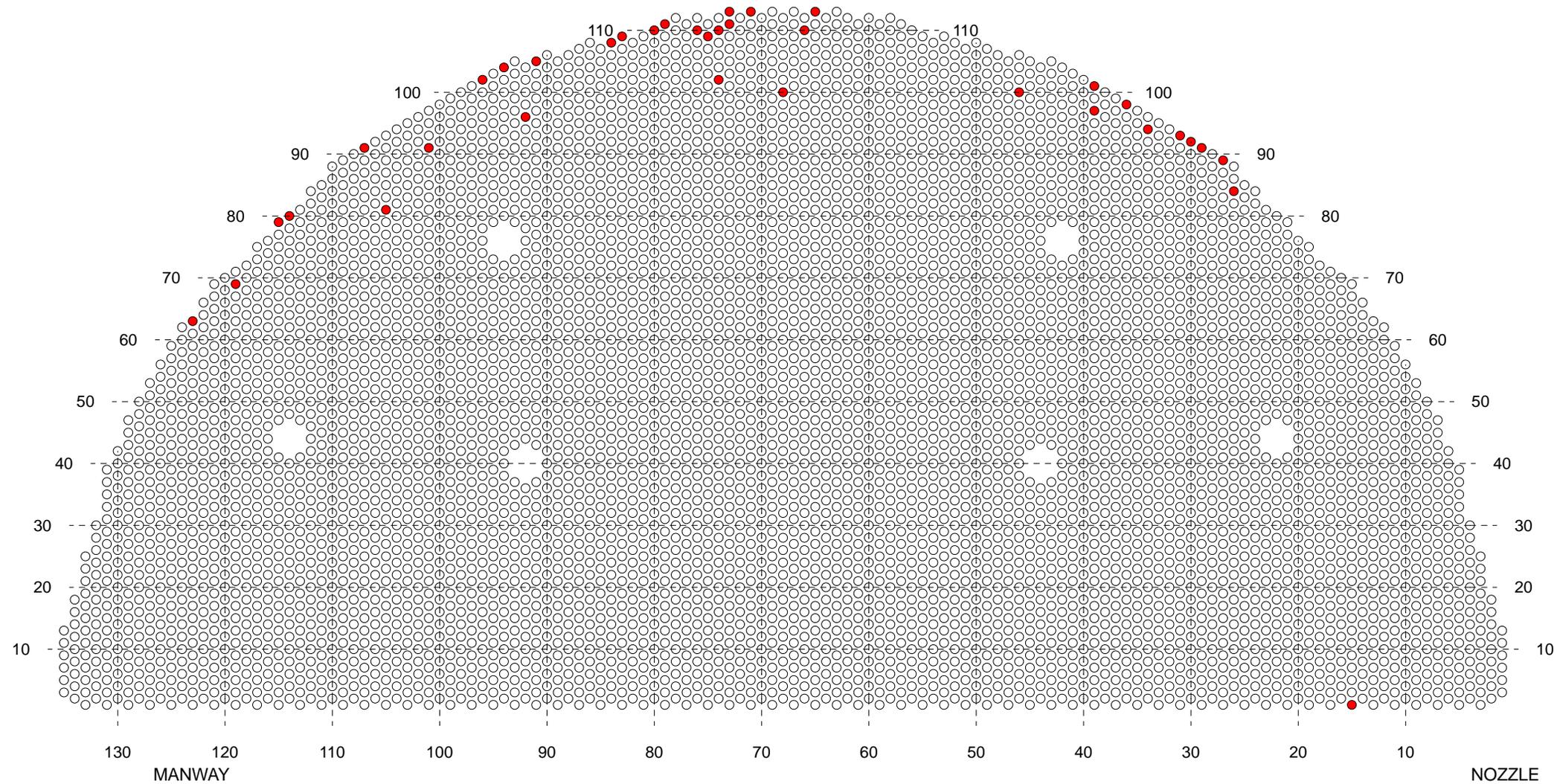
SCALE: 0.084494 X
Tue Apr 19 03:01:33 2016

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 36
OUT OF SERVICE (#): NA

Ameren: S/G A HOT

AREVA



TSP %TWD < 10%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
1	15	0.29	108	P4	TWD	9	07C -0.59	07C	07C	WAR		1_Land		12	COLD	610PP	6
63	123	0.30	104	P4	TWD	9	05H +0.35	05H	05H	WAR		1_Land		65	HOT	610PP	26
69	119	0.21	103	P4	TWD	6	05H +0.32	05H	05H	WAR		1_Land		65	HOT	610PP	25
79	115	0.22	111	P4	TWD	6	04H +0.35	04H	04H	WAR		1_Land		65	HOT	610PP	24
80	114	0.24	114	P4	TWD	7	04H -0.59	04H	04H	WAR		2_Land		65	HOT	610PP	23
		0.16	284	P4	TWD	4	05H +0.37	05H	05H	WAR		2_Land		65	HOT	610PP	23
		0.26	98	P4	TWD	8	05H +0.35	05H	05H	WAR		2_Land		65	HOT	610PP	23
		0.16	90	P4	TWD	4	06H -0.83	06H	06H	WAR		2_Land		65	HOT	610PP	23
81	105	0.21	98	P4	TWD	6	06H -0.69	06H	06H	WAR		1_Land		65	HOT	610PP	22
84	26	0.16	105	P4	TWD	4	05C +0.37	05C	05C	WAR		1_Land		8	COLD	610PP	6
89	27	0.28	269	P4	TWD	8	06C -0.80	06C	06C	WAR		1_Land		8	COLD	610PP	9
91	29	0.27	105	P4	TWD	8	05H +0.43	05H	05H	WAR		1_Land		65	HOT	610PP	28
91	101	0.29	102	P4	TWD	9	05C +0.37	05C	05C	WAR		1_Land		7	COLD	610PP	60
91	107	0.26	112	P4	TWD	8	06C -0.59	06C	06C	WAR		1_Land		7	COLD	610PP	61
92	30	0.20	112	P4	TWD	6	05C -0.67	05C	05C	WAR		2_Land		7	COLD	610PP	21
		0.27	102	P4	TWD	8	05C +0.43	05C	05C	WAR		2_Land		7	COLD	610PP	21
93	31	0.22	106	P4	TWD	6	05H +0.40	05H	05H	WAR		1_Land		65	HOT	610PP	27
94	34	0.24	289	P4	TWD	7	05C +0.37	05C	05C	WAR		1_Land		7	COLD	610PP	26
96	92	0.20	88	P4	TWD	6	06H -0.72	06H	06H	WAR		1_Land		65	HOT	610PP	20
97	39	0.18	100	P4	TWD	5	05H +0.43	05H	05H	WAR		1_Land		65	HOT	610PP	29
		0.18	112	P4	TWD	5	05H -0.54	05H	05H	WAR		1_Land		65	HOT	610PP	29
98	36	0.23	273	P4	TWD	7	06C -0.85	06C	06C	WAR		1_Land		7	COLD	610PP	41
100	46	0.25	109	P4	TWD	7	05C +0.45	05C	05C	WAR		1_Land		7	COLD	610PP	15
100	68	0.25	103	P4	TWD	7	05H +0.40	05H	05H	WAR		1_Land		65	HOT	610PP	9
101	39	0.20	268	P4	TWD	6	06C -0.56	06C	06C	WAR		2_Land		7	COLD	610PP	14
		0.24	103	P4	TWD	7	06C +0.32	06C	06C	WAR		2_Land		7	COLD	610PP	14
102	74	0.19	92	P4	TWD	5	04C +0.45	04C	04C	WAR		1_Land		7	COLD	610PP	57
102	96	0.10	98	P4	TWD	3	06H -0.69	06H	06H	WAR		1_Land		65	HOT	610PP	21
104	94	0.27	87	P4	TWD	8	06C -0.67	06C	06C	WAR		1_Land		7	COLD	610PP	59
105	91	0.24	108	P4	TWD	7	05H -0.64	05H	05H	WAR		1_Land		65	HOT	610PP	19
		0.15	85	P4	TWD	4	06H -0.77	06H	06H	WAR		1_Land		65	HOT	610PP	19
108	84	0.25	101	P4	TWD	7	06H -0.67	06H	06H	WAR		1_Land		65	HOT	610PP	17
109	75	0.28	288	P4	TWD	8	06H -0.64	06H	06H	WAR		1_Land		65	HOT	610PP	13
109	83	0.27	105	P4	TWD	8	04H +0.37	04H	04H	WAR		1_Land		65	HOT	610PP	16
110	66	0.20	105	P4	TWD	6	06C +0.43	06C	06C	WAR		1_Land		7	COLD	610PP	54
110	74	0.14	268	P4	TWD	4	06C -0.67	06C	06C	WAR		1_Land		7	COLD	610PP	56
110	76	0.27	120	P4	TWD	8	06H -0.64	06H	06H	WAR		1_Land		65	HOT	610PP	14
		0.28	282	P4	TWD	8	05H +0.35	05H	05H	WAR		1_Land		65	HOT	610PP	14
110	80	0.29	103	P4	TWD	9	06H +0.32	06H	06H	WAR		1_Land		65	HOT	610PP	15
111	73	0.19	108	P4	TWD	5	06C -0.61	06C	06C	WAR		1_Land		7	COLD	610PP	55
111	79	0.17	288	P4	TWD	5	05C -0.64	05C	05C	WAR		2_Land		7	COLD	610PP	58
		0.22	111	P4	TWD	6	06C -0.59	06C	06C	WAR		3_Land		7	COLD	610PP	58
		0.23	281	P4	TWD	7	06C -0.61	06C	06C	WAR		3_Land		7	COLD	610PP	58
		0.20	95	P4	TWD	6	06C +0.45	06C	06C	WAR		3_Land		7	COLD	610PP	58
113	65	0.20	271	P4	TWD	6	04C +0.53	04C	04C	WAR		1_Land		7	COLD	610PP	52
113	71	0.15	277	P4	TWD	4	06H -0.69	06H	06H	WAR		1_Land		65	HOT	610PP	10
113	73	0.21	120	P4	TWD	6	06H -0.64	06H	06H	WAR		1_Land		65	HOT	610PP	12

Total Tubes : 36
 Total Records: 47

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD < 10%

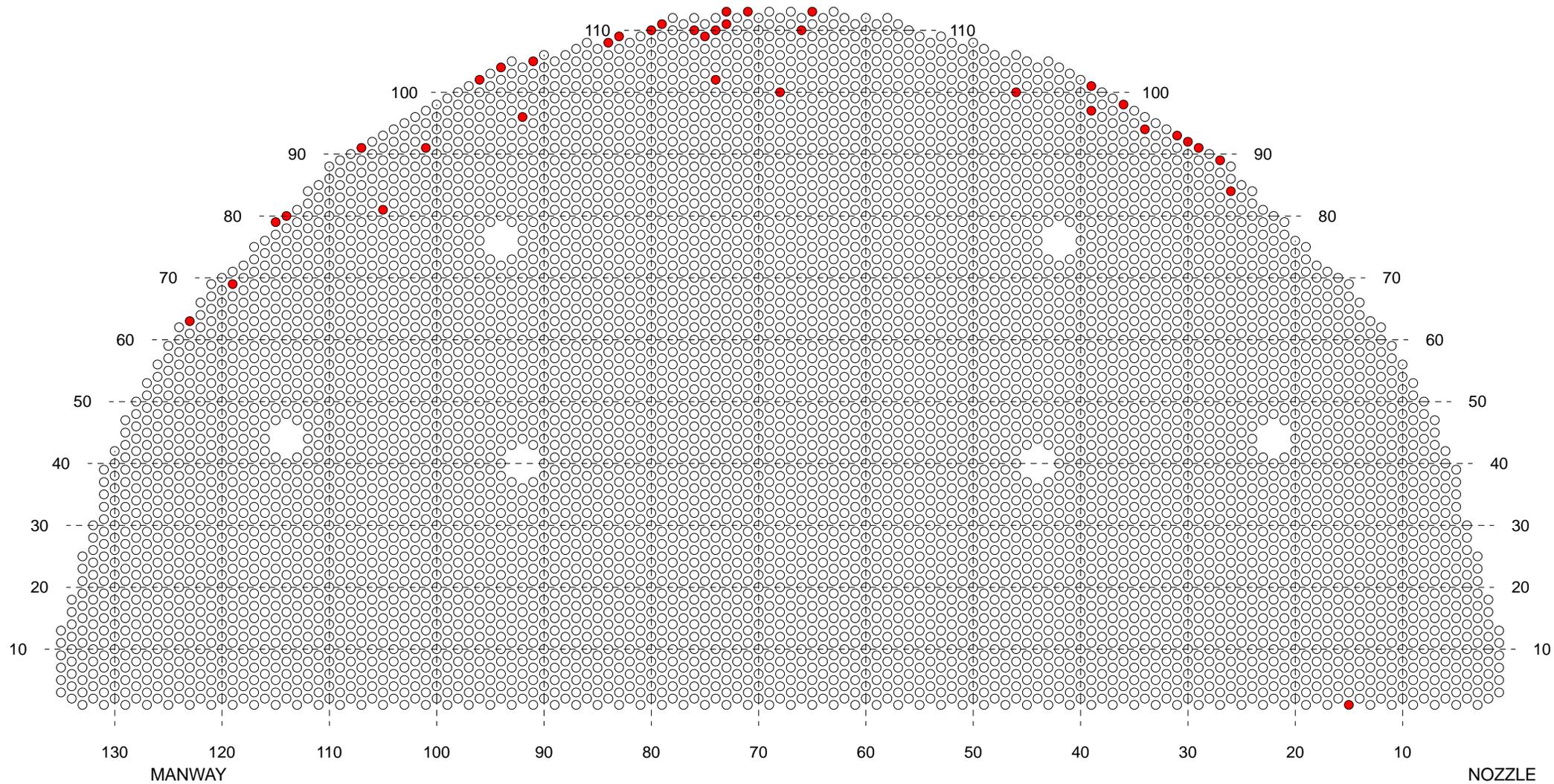
GROUP **A QueryM1** TUBES **36**

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:01:33 2016
Ameren: S/G A HOT AREVA

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 36
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD 10-19%

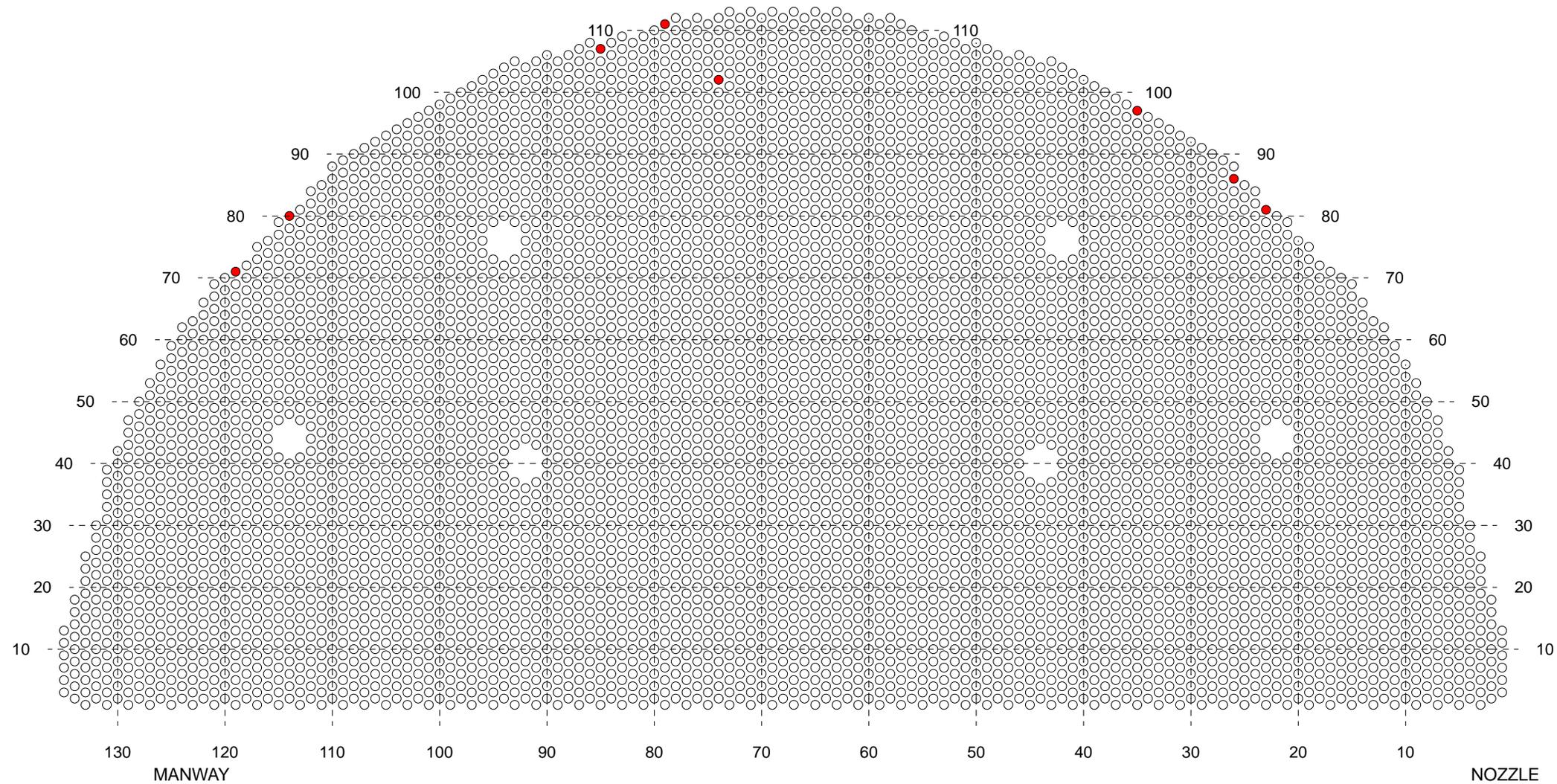
GROUP
A QueryM1 TUBES
8

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:05:31 2016
Ameren: S/G A HOT AREVA

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 8
OUT OF SERVICE (#): NA



TSP %TWD 10-19%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
71	119	0.33	277	P4	TWD	10	06C -0.67	06C	06C	WAR		1_Land	7	COLD	610PP	64	
80	114	0.36	100	P4	TWD	11	04H +0.40	04H	04H	WAR		2_Land	65	HOT	610PP	23	
		0.36	101	P4	TWD	11	06H +0.27	06H	06H	WAR		2_Land	65	HOT	610PP	23	
81	23	0.38	113	P4	TWD	11	05C -0.69	05C	05C	WAR		1_Land	8	COLD	610PP	7	
86	26	0.39	101	P4	TWD	12	06C +0.35	06C	06C	WAR		1_Land	8	COLD	610PP	8	
97	35	0.35	270	P4	TWD	11	06C -0.69	06C	06C	WAR		1_Land	7	COLD	610PP	38	
102	74	0.34	100	P4	TWD	10	05H +0.37	05H	05H	WAR		1_Land	65	HOT	610PP	11	
107	85	0.50	104	P4	TWD	17	06H +0.35	06H	06H	WAR		1_Land	65	HOT	610PP	18	
111	79	0.36	98	P4	TWD	11	05C +0.40	05C	05C	WAR		2_Land	7	COLD	610PP	58	

Total Tubes : 8

Total Records: 9

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD 10-19%

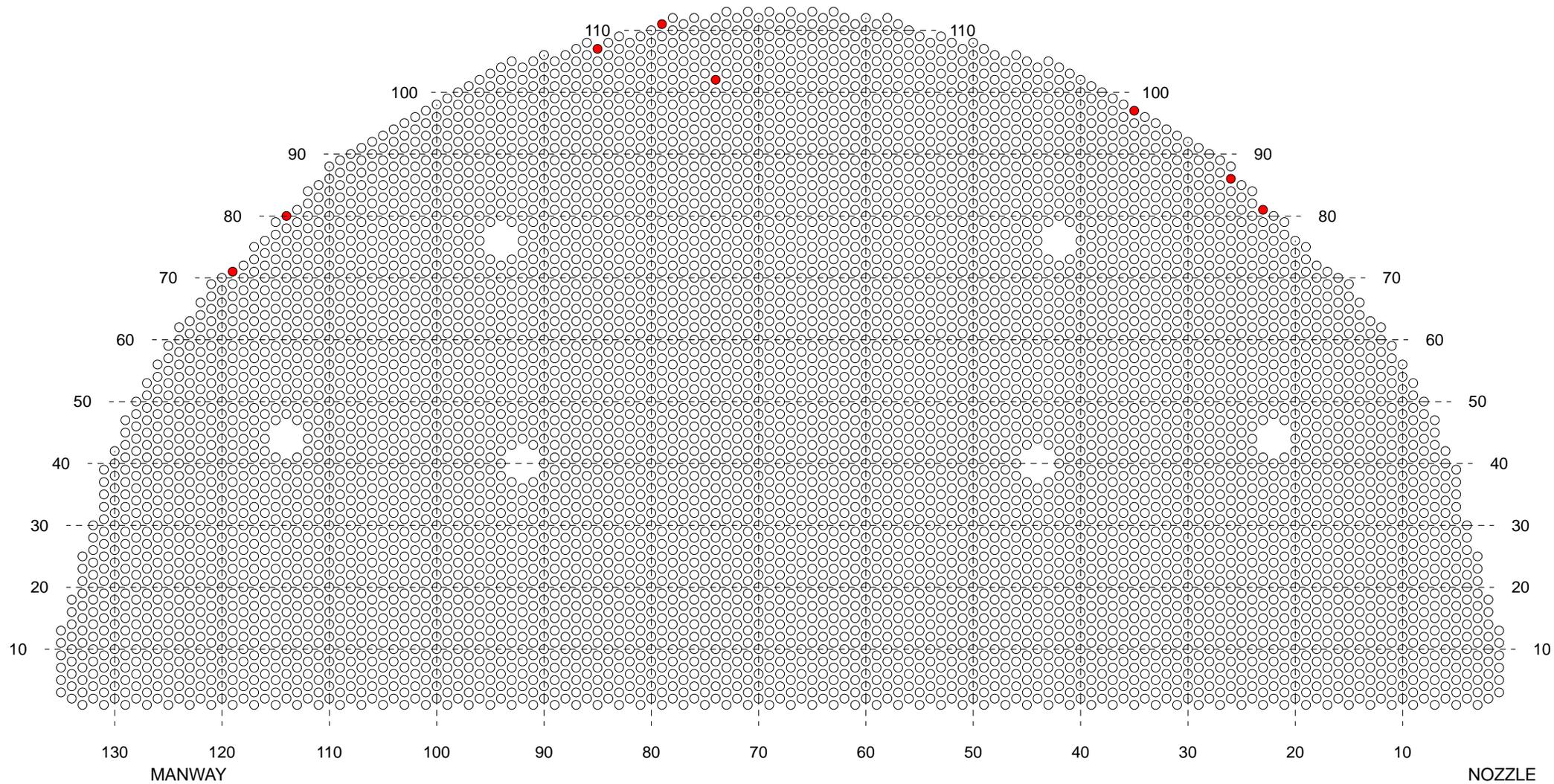
GROUP
A QueryM1 TUBES
8

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:05:31 2016
Ameren: S/G A HOT AREVA

S/G A
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 8
OUT OF SERVICE (#): NA



TSP %TWD 20-29%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	===	====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

TSP %TWD 30-39%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	===	====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

TSP %TWD 40-100%

QUERY: QueryM1.qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	===	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD < 10%

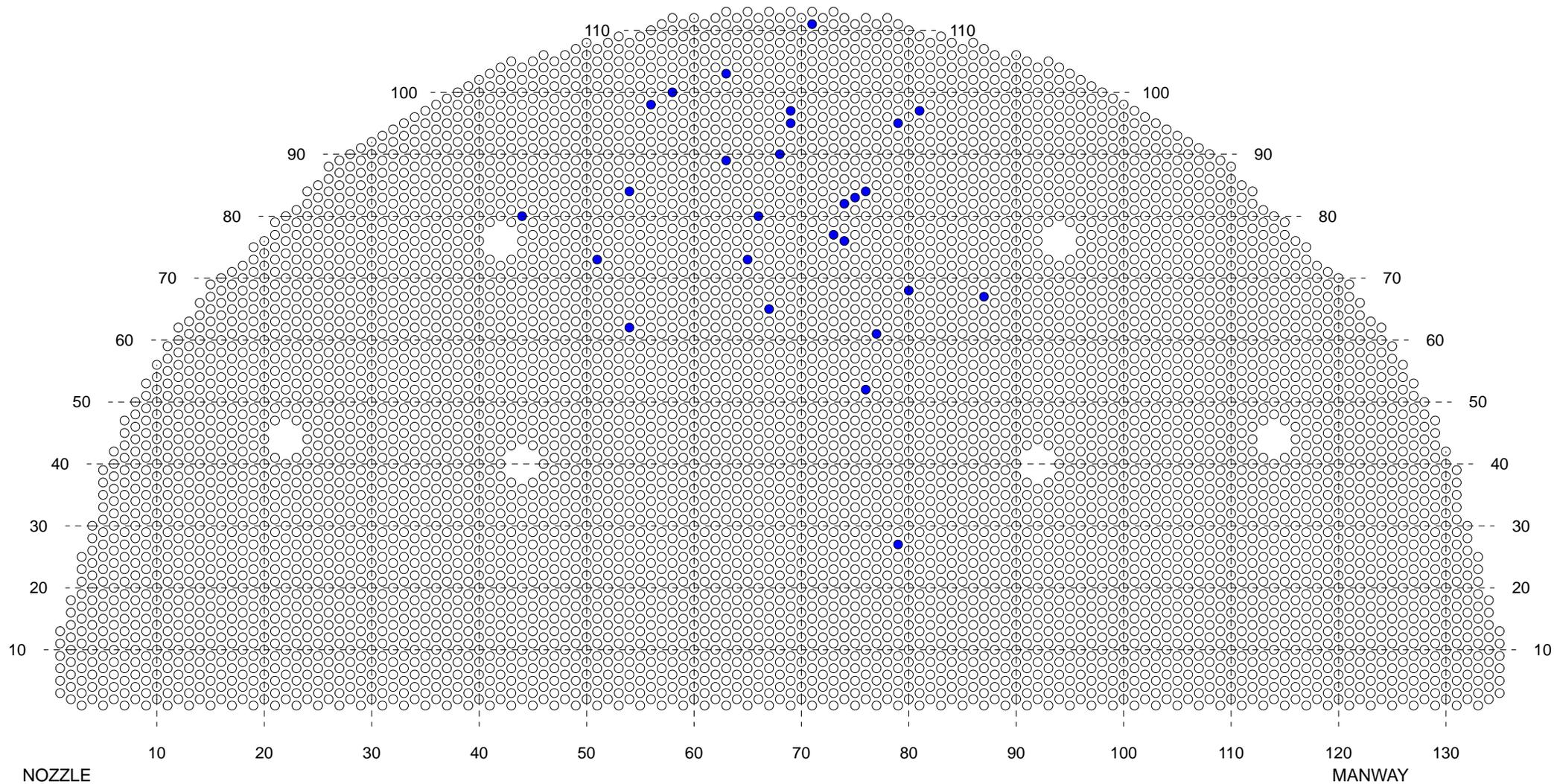
GROUP
A QueryM1[1] TUBES
27

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:36:34 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 27
OUT OF SERVICE (#): NA



AVB %TWD < 10%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
27	79	0.12	154	P2	TWD	8	AV5 +0.49	TEC	TEH					32	HOT	610HS	169
52	76	0.13	89	P2	TWD	8	AV4 -0.19	TEC	TEH					19	HOT	610HS	105
61	77	0.16	141	P2	TWD	9	AV3 -0.05	TEC	TEH					20	HOT	610HS	104
62	54	0.12	120	P2	TWD	7	AV5 -0.07	TEC	TEH					3	HOT	610HS	183
65	67	0.14	122	P2	TWD	8	AV5 +0.05	TEC	TEH					4	HOT	610HS	10
		0.12	59	P2	TWD	7	AV2 -0.02	TEC	TEH					4	HOT	610HS	10
67	87	0.10	31	P2	TWD	6	AV4 +0.00	TEC	TEH					23	HOT	610HS	57
68	80	0.11	52	P2	TWD	7	AV3 +0.00	TEC	TEH					19	HOT	610HS	159
73	51	0.15	82	P2	TWD	9	AV4 +0.02	TEC	TEH					6	HOT	610HS	21
73	65	0.15	36	P2	TWD	9	AV5 -0.05	TEC	TEH					4	HOT	610HS	32
76	74	0.14	116	P2	TWD	8	AV3 -0.05	TEC	TEH					1	HOT	610HS	85
77	73	0.14	49	P2	TWD	9	AV2 -0.05	TEC	TEH					2	HOT	610HS	86
80	44	0.13	136	P2	TWD	8	AV3 -0.05	TEC	TEH					6	HOT	610HS	123
80	66	0.16	119	P2	TWD	9	AV6 -0.10	TEC	TEH					1	HOT	610HS	43
		0.12	143	P2	TWD	7	AV5 -0.02	TEC	TEH					1	HOT	610HS	43
82	74	0.15	107	P2	TWD	9	AV3 -0.02	TEC	TEH					2	HOT	610HS	88
83	75	0.16	144	P2	TWD	9	AV4 +0.00	TEC	TEH					1	HOT	610HS	94
		0.13	153	P2	TWD	8	AV2 -0.02	TEC	TEH					1	HOT	610HS	94
		0.04	163	P2	TWD	3	AV5 +0.00	TEC	TEH					1	HOT	610HS	94
84	54	0.14	137	P2	TWD	8	AV4 -0.07	TEC	TEH					3	HOT	610HS	172
		0.11	129	P2	TWD	7	AV3 -0.05	TEC	TEH					3	HOT	610HS	172
84	76	0.15	133	P2	TWD	9	AV3 +0.00	TEC	TEH					1	HOT	610HS	98
89	63	0.15	60	P2	TWD	9	AV4 -0.05	TEC	TEH					2	HOT	610HS	30
90	68	0.10	40	P2	TWD	6	AV4 -0.05	TEC	TEH					2	HOT	610HS	57
		0.11	85	P2	TWD	7	AV3 -0.05	TEC	TEH					2	HOT	610HS	57
95	69	0.15	136	P2	TWD	9	AV3 -0.07	TEC	TEH					1	HOT	610HS	59
95	79	0.13	128	P2	TWD	8	AV6 -0.05	TEC	TEH					20	HOT	610HS	135
97	69	0.07	18	P2	TWD	5	AV4 +0.02	TEC	TEH					2	HOT	610HS	59
97	81	0.12	86	P2	TWD	7	AV3 -0.02	TEC	TEH					20	HOT	610HS	166
98	56	0.13	27	P2	TWD	8	AV5 -0.02	TEC	TEH					4	HOT	610HS	137
100	58	0.12	136	P2	TWD	7	AV5 -0.07	TEC	TEH					4	HOT	610HS	106
103	63	0.13	142	P2	TWD	8	AV6 -0.07	TEC	TEH					3	HOT	610HS	57
111	71	0.11	45	P2	TWD	7	AV3 +0.09	TEC	TEH					19	HOT	610HS	50
		0.15	148	P2	TWD	9	AV2 -0.02	TEC	TEH					19	HOT	610HS	50

Total Tubes : 27
 Total Records: 34

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD < 10%

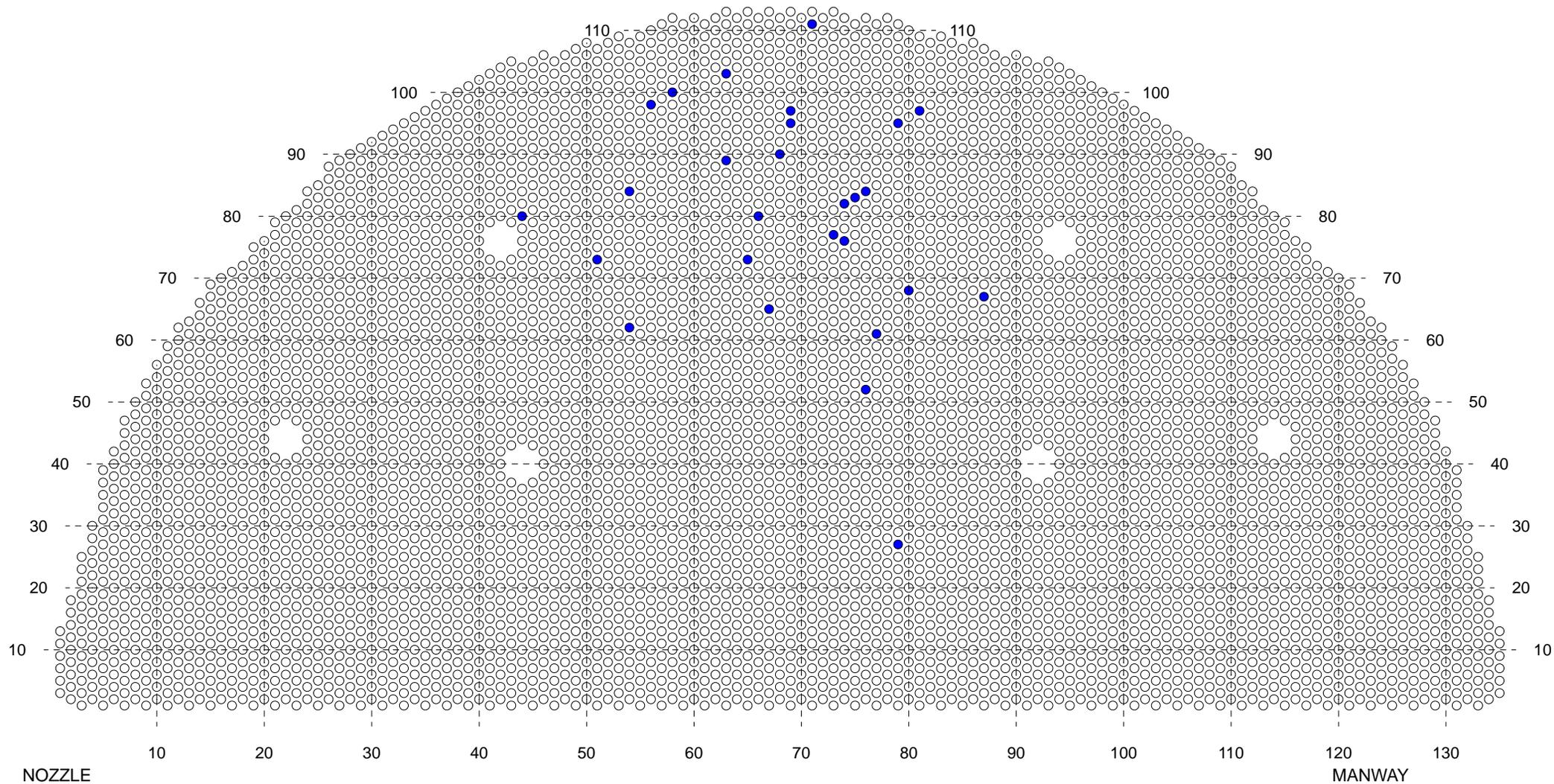
GROUP
A QueryM1[1] TUBES
27

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:36:34 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 27
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 10-19%

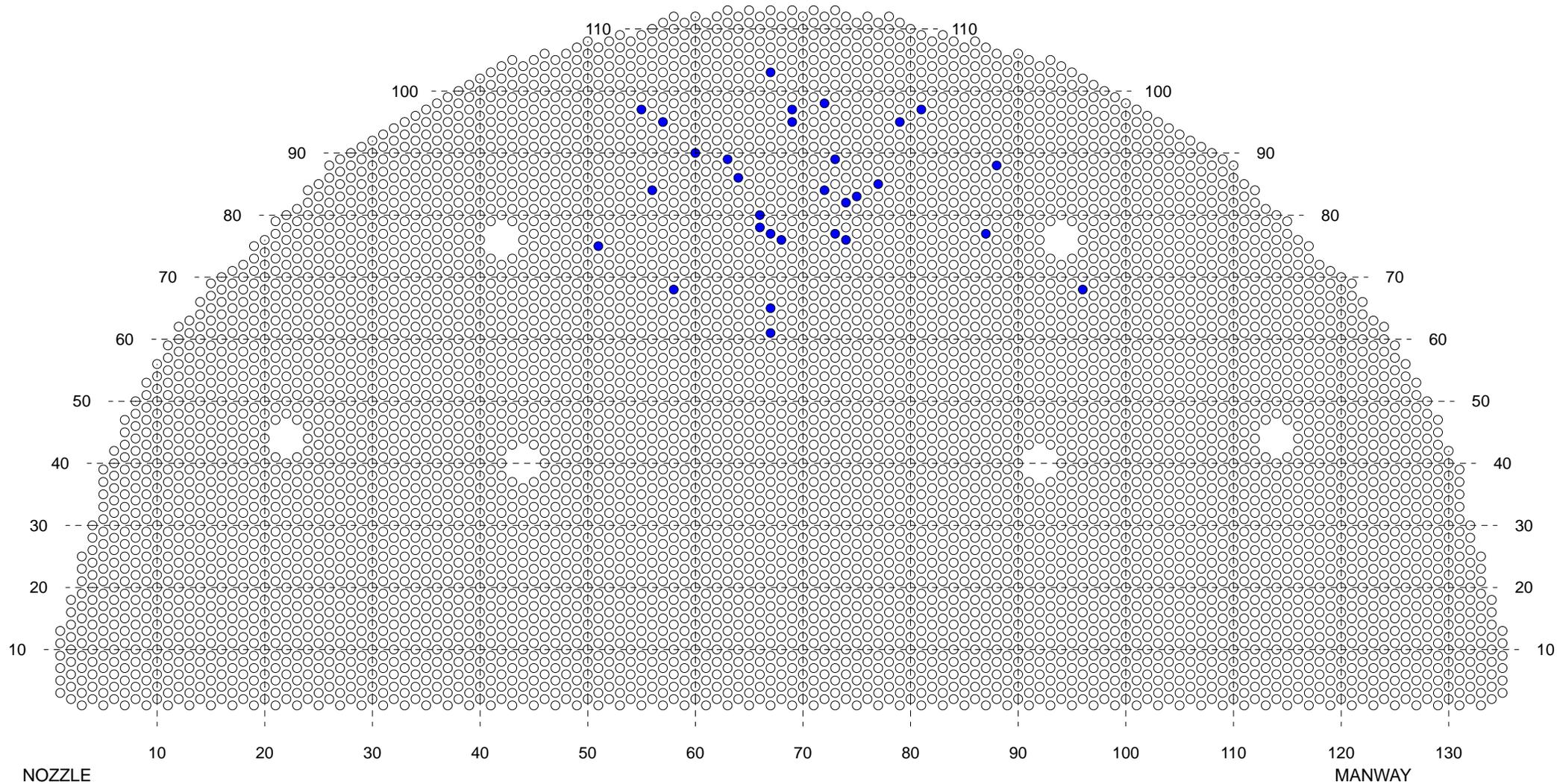
GROUP
A QueryM1[1] TUBES
30

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:38:45 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 30
OUT OF SERVICE (#): NA



AVB %TWD 10-19%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
61	67	0.30	105	P2	TWD	15	AV2 -0.02	TEC	TEH					4		HOT	610HS	9
65	67	0.20	144	P2	TWD	11	AV3 -0.05	TEC	TEH					4		HOT	610HS	10
68	58	0.38	131	P2	TWD	18	AV3 -0.05	TEC	TEH					3		HOT	610HS	116
68	96	0.18	149	P2	TWD	10	AV4 -0.05	TEC	TEH					26		HOT	610HS	18
		0.18	90	P2	TWD	10	AV3 -0.05	TEC	TEH					26		HOT	610HS	18
75	51	0.37	112	P2	TWD	18	AV3 -0.05	TEC	TEH					5		HOT	610HS	21
76	68	0.28	128	P2	TWD	14	AV6 +0.00	TEC	TEH					1		HOT	610HS	53
		0.33	140	P2	TWD	16	AV5 +0.00	TEC	TEH					1		HOT	610HS	53
76	74	0.18	81	P2	TWD	11	AV4 -0.02	TEC	TEH					1		HOT	610HS	85
77	67	0.40	127	P2	TWD	18	AV6 -0.12	TEC	TEH					2		HOT	610HS	54
		0.39	124	P2	TWD	18	AV3 -0.02	TEC	TEH					2		HOT	610HS	54
77	73	0.28	108	P2	TWD	14	AV4 -0.02	TEC	TEH					2		HOT	610HS	86
77	87	0.41	114	P2	TWD	19	AV4 -0.05	TEC	TEH					24		HOT	610HS	58
		0.32	104	P2	TWD	16	AV2 -0.02	TEC	TEH					24		HOT	610HS	58
78	66	0.23	88	P2	TWD	12	AV6 -0.10	TEC	TEH					2		HOT	610HS	45
		0.29	109	P2	TWD	15	AV5 -0.07	TEC	TEH					2		HOT	610HS	45
80	66	0.30	116	P2	TWD	15	AV3 -0.05	TEC	TEH					1		HOT	610HS	43
		0.18	50	P2	TWD	10	AV2 -0.02	TEC	TEH					1		HOT	610HS	43
82	74	0.25	107	P2	TWD	13	AV4 -0.02	TEC	TEH					2		HOT	610HS	88
83	75	0.30	81	P2	TWD	15	AV3 +0.00	TEC	TEH					1		HOT	610HS	94
84	56	0.32	124	P2	TWD	16	AV4 -0.02	TEC	TEH					3		HOT	610HS	142
		0.24	130	P2	TWD	13	AV3 +0.00	TEC	TEH					3		HOT	610HS	142
84	72	0.33	126	P2	TWD	16	AV3 -0.07	TEC	TEH					1		HOT	610HS	76
85	77	0.20	72	P2	TWD	11	AV4 -0.02	TEC	TEH					2		HOT	610HS	106
		0.30	55	P2	TWD	15	AV2 -0.05	TEC	TEH					2		HOT	610HS	106
86	64	0.27	113	P2	TWD	14	AV5 -0.05	TEC	TEH					2		HOT	610HS	36
88	88	0.28	124	P2	TWD	14	AV2 -0.05	TEC	TEH					23		HOT	610HS	72
89	63	0.22	62	P2	TWD	12	AV5 +0.00	TEC	TEH					2		HOT	610HS	30
		0.37	135	P2	TWD	17	AV2 -0.02	TEC	TEH					2		HOT	610HS	30
89	73	0.30	65	P2	TWD	15	AV4 -0.05	TEC	TEH					2		HOT	610HS	83
90	60	0.34	119	P2	TWD	16	AV4 -0.02	TEC	TEH					2		HOT	610HS	15
		0.26	115	P2	TWD	14	AV2 +0.02	TEC	TEH					2		HOT	610HS	15
95	57	0.44	145	P2	TWD	19	AV3 -0.05	TEC	TEH					3		HOT	610HS	132
95	69	0.21	91	P2	TWD	12	AV4 -0.02	TEC	TEH					1		HOT	610HS	59
95	79	0.26	131	P2	TWD	14	AV5 -0.02	TEC	TEH					20		HOT	610HS	135
		0.28	137	P2	TWD	15	AV3 -0.02	TEC	TEH					20		HOT	610HS	135
		0.18	116	P2	TWD	10	AV2 +0.00	TEC	TEH					20		HOT	610HS	135
97	55	0.17	105	P2	TWD	10	AV2 -0.02	TEC	TEH					4		HOT	610HS	160
97	69	0.29	96	P2	TWD	15	AV2 +0.00	TEC	TEH					2		HOT	610HS	59
97	81	0.24	114	P2	TWD	13	AV4 +0.02	TEC	TEH					20		HOT	610HS	166
98	72	0.21	121	P2	TWD	12	AV5 -0.05	TEC	TEH					19		HOT	610HS	54
103	67	0.17	140	P2	TWD	10	AV4 +0.00	TEC	TEH					3		HOT	610HS	15

Total Tubes : 30

Total Records: 42

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 10-19%

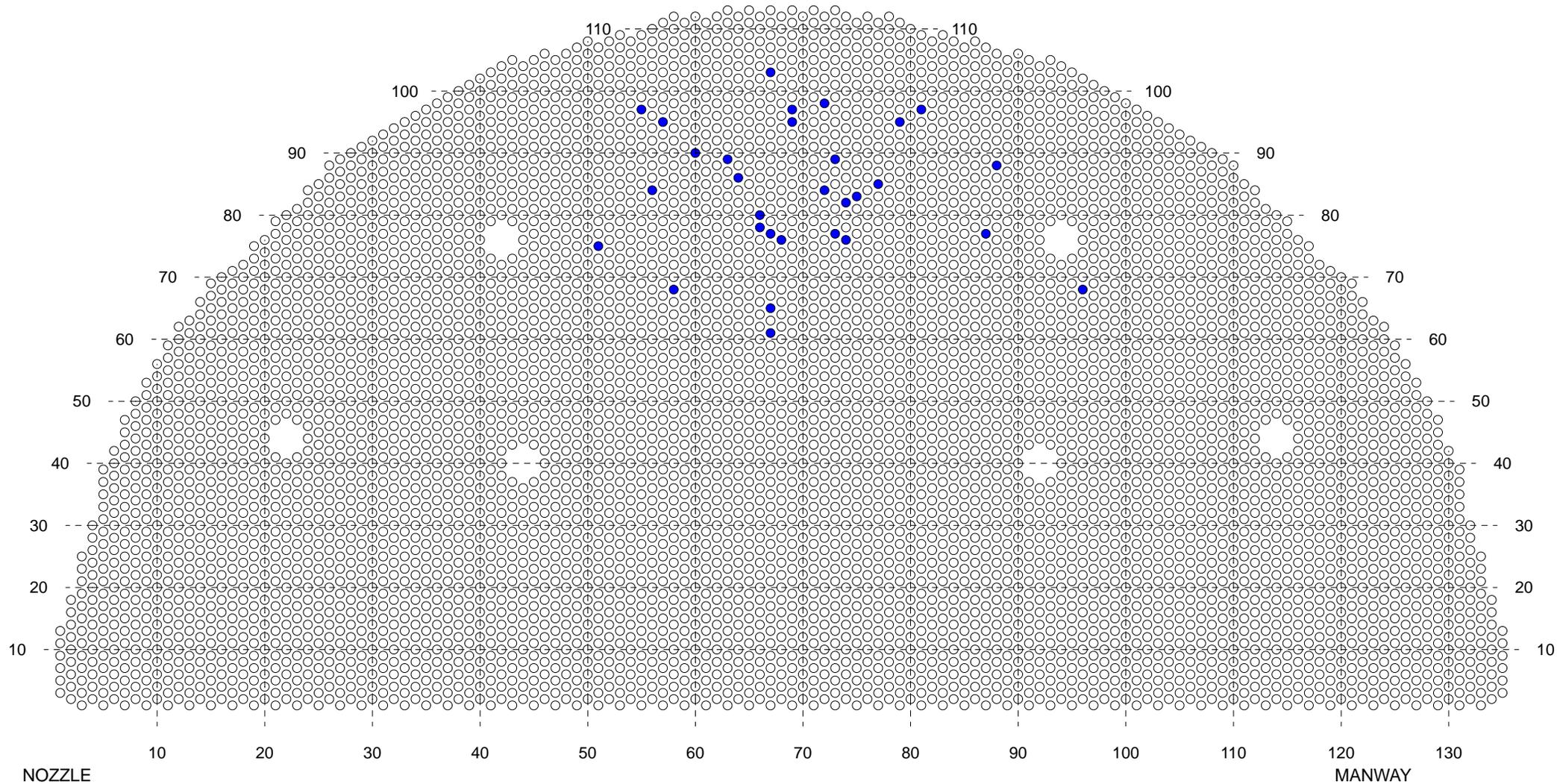
GROUP
A QueryM1[1] TUBES
30

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:38:45 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 30
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 20-29%

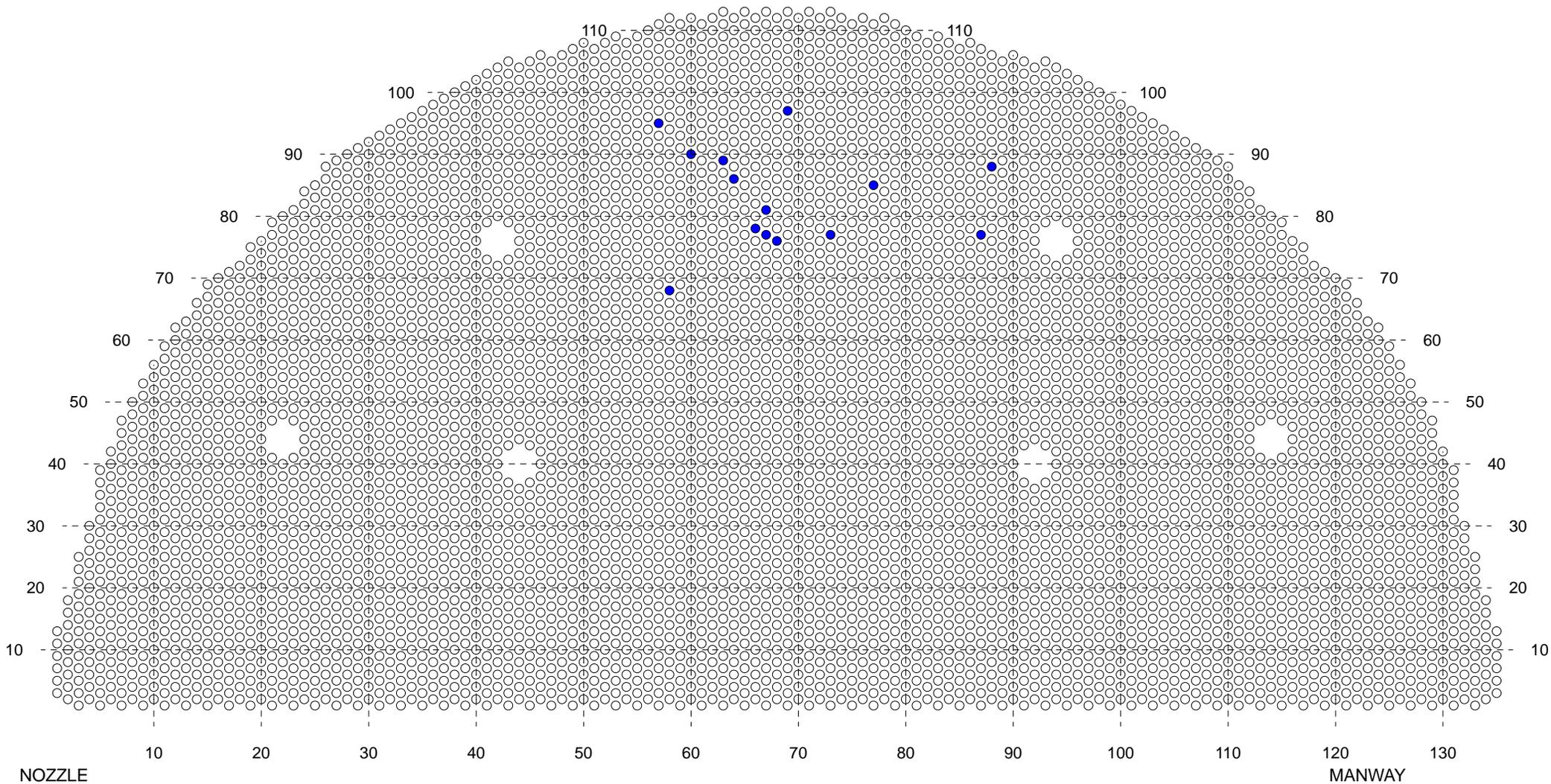
GROUP **A QueryM1** TUBES **14**

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 11:12:13 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 14
OUT OF SERVICE (#): NA



AVB %TWD 20-29%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
68	58	0.46	127	P2	TWD	20	AV4 -0.02	TEC	TEH					3	HOT	610HS	116
76	68	0.71	125	P2	TWD	26	AV4 -0.02	TEC	TEH					1	HOT	610HS	53
		0.82	121	P2	TWD	27	AV3 -0.05	TEC	TEH					1	HOT	610HS	53
		0.76	113	P2	TWD	26	AV2 -0.05	TEC	TEH					1	HOT	610HS	53
77	67	0.67	123	P2	TWD	25	AV4 +0.00	TEC	TEH					2	HOT	610HS	54
77	73	0.57	122	P2	TWD	23	AV3 -0.02	TEC	TEH					2	HOT	610HS	86
77	87	0.48	131	P2	TWD	20	AV3 -0.02	TEC	TEH					24	HOT	610HS	58
78	66	0.61	96	P2	TWD	24	AV3 +0.00	TEC	TEH					2	HOT	610HS	45
81	67	0.46	124	P2	TWD	20	AV5 +0.00	TEC	TEH					2	HOT	610HS	53
		0.71	117	P2	TWD	26	AV4 -0.05	TEC	TEH					2	HOT	610HS	53
		0.60	100	P2	TWD	23	AV3 -0.02	TEC	TEH					2	HOT	610HS	53
85	77	0.67	116	P2	TWD	25	AV3 -0.02	TEC	TEH					2	HOT	610HS	106
86	64	0.60	126	P2	TWD	23	AV4 -0.02	TEC	TEH					2	HOT	610HS	36
		0.74	116	P2	TWD	26	AV3 -0.02	TEC	TEH					2	HOT	610HS	36
88	88	0.92	128	P2	TWD	29	AV4 -0.02	TEC	TEH					23	HOT	610HS	72
		0.59	121	P2	TWD	23	AV3 -0.02	TEC	TEH					23	HOT	610HS	72
89	63	0.88	135	P2	TWD	28	AV3 -0.02	TEC	TEH					2	HOT	610HS	30
90	60	0.55	120	P2	TWD	22	AV3 -0.02	TEC	TEH					2	HOT	610HS	15
95	57	0.48	133	P2	TWD	21	AV5 -0.07	TEC	TEH					3	HOT	610HS	132
97	69	0.62	109	P2	TWD	24	AV3 -0.05	TEC	TEH					2	HOT	610HS	59

Total Tubes : 14
 Total Records: 20

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 20-29%

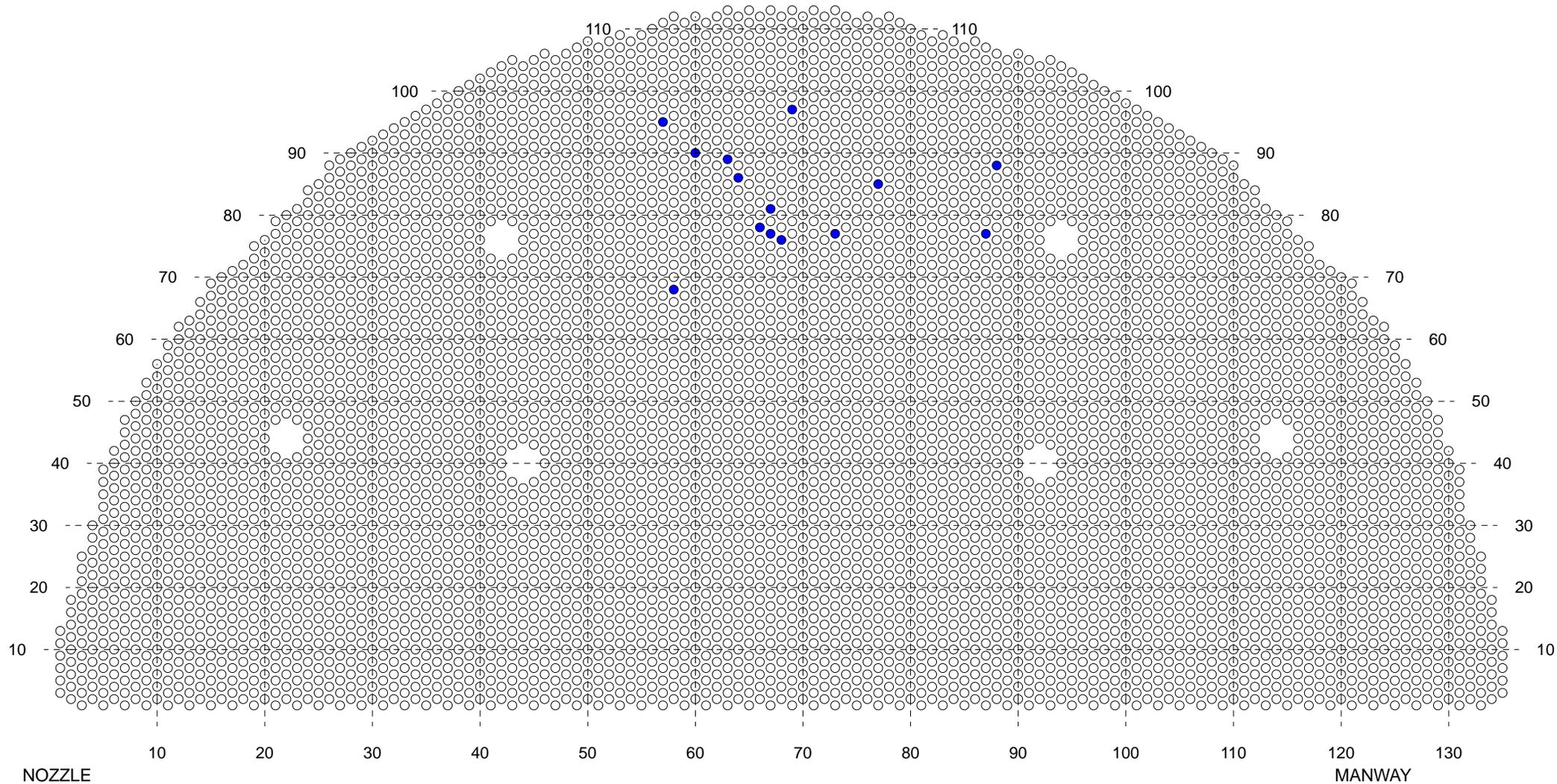
GROUP **A QueryM1[1]** TUBES **14**

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:40:50 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 14
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 30-39%

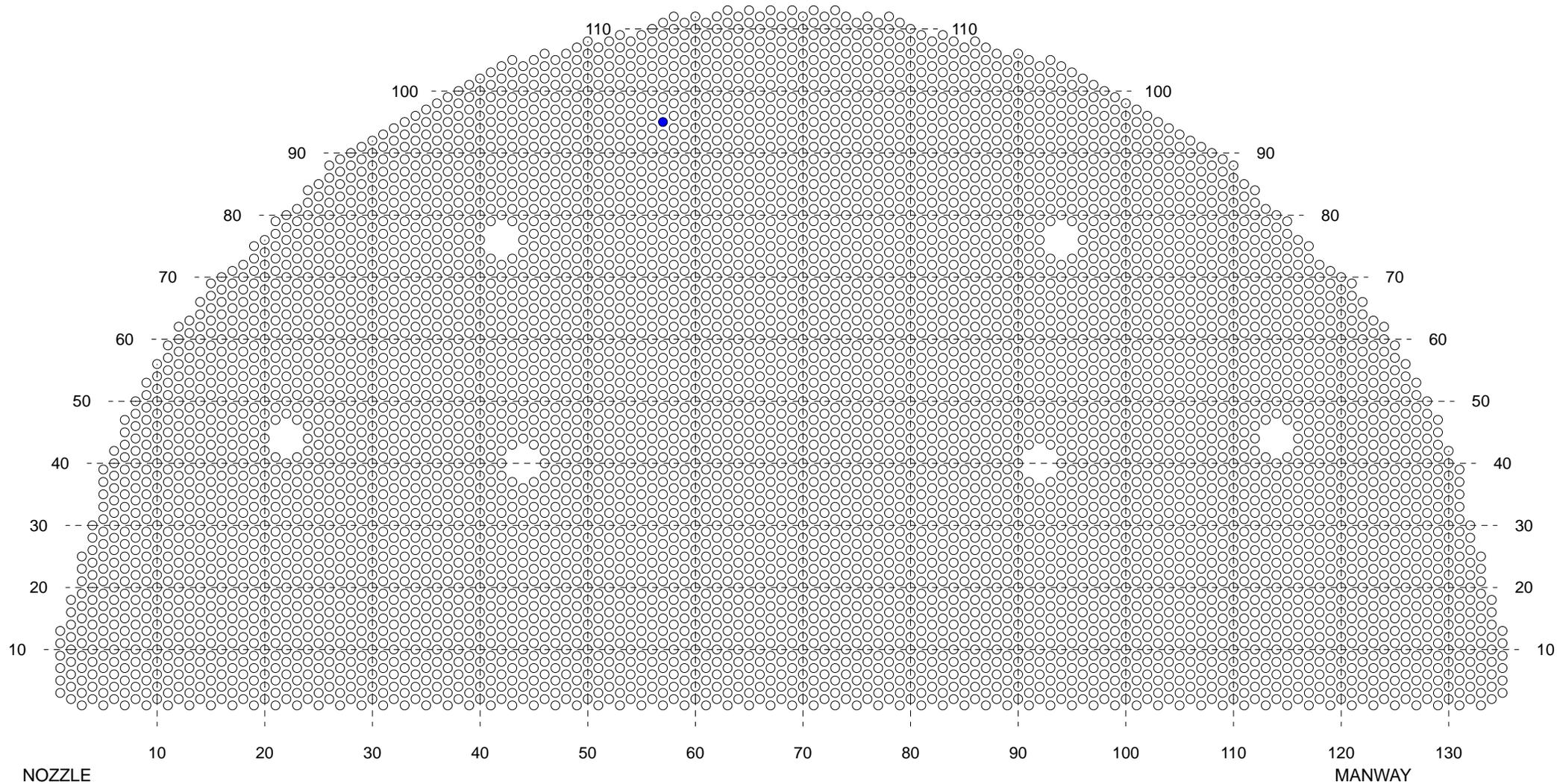
GROUP
A QueryM1[1] TUBES
1

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:42:48 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 1
OUT OF SERVICE (#): NA



AVB %TWD 30-39%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
95	57	1.04	127	P2	TWD	30	AV4 -0.02	TEC	TEH					3		HOT	610HS	132

Total Tubes : 1
Total Records: 1

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 30-39%

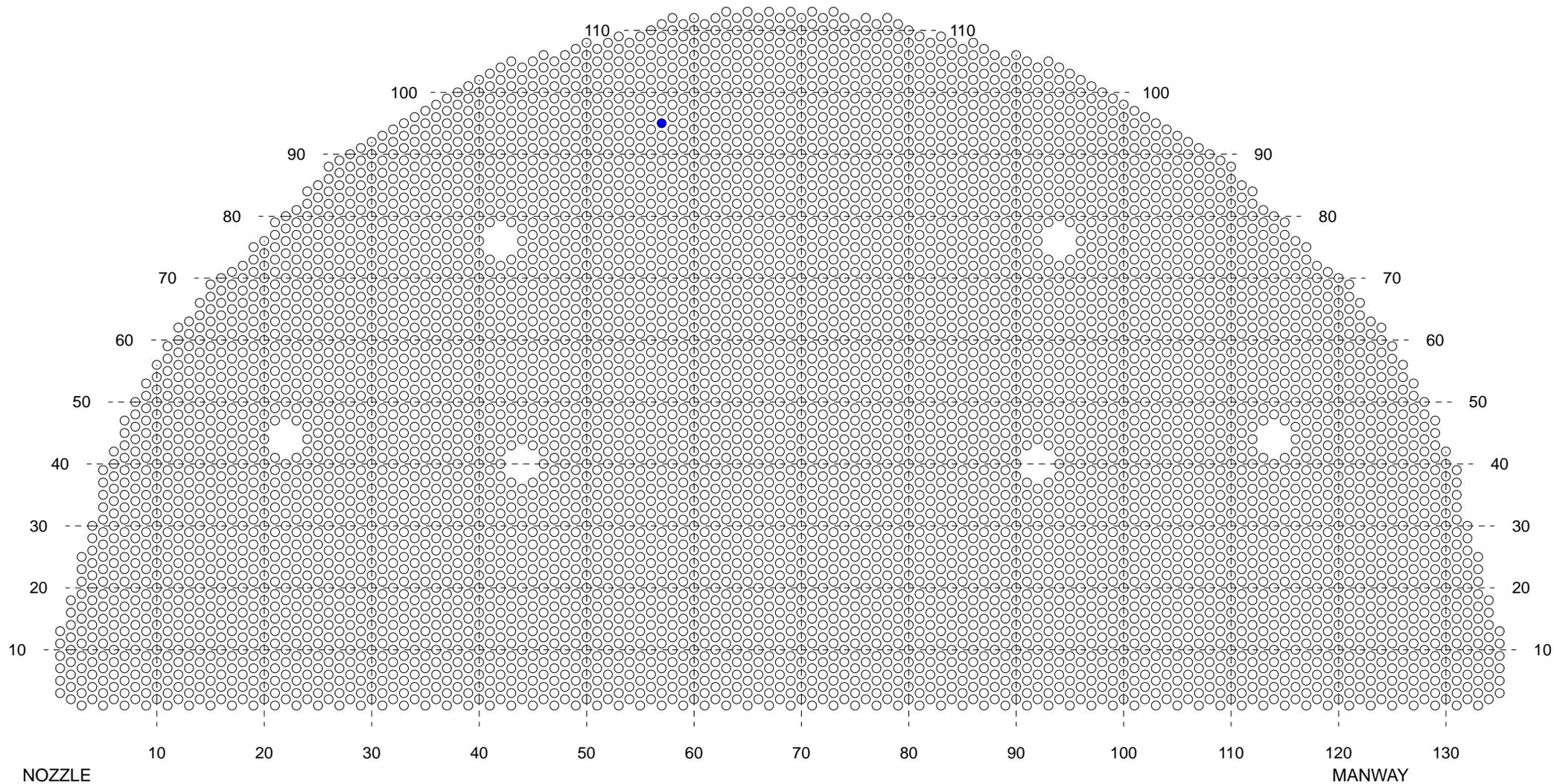
GROUP: A QueryM1[1]
TUBES: 1

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:42:48 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 1
OUT OF SERVICE (#): NA



AVB %TWD 40-100%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
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Total Tubes : 0
Total Records: 0

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD < 10%

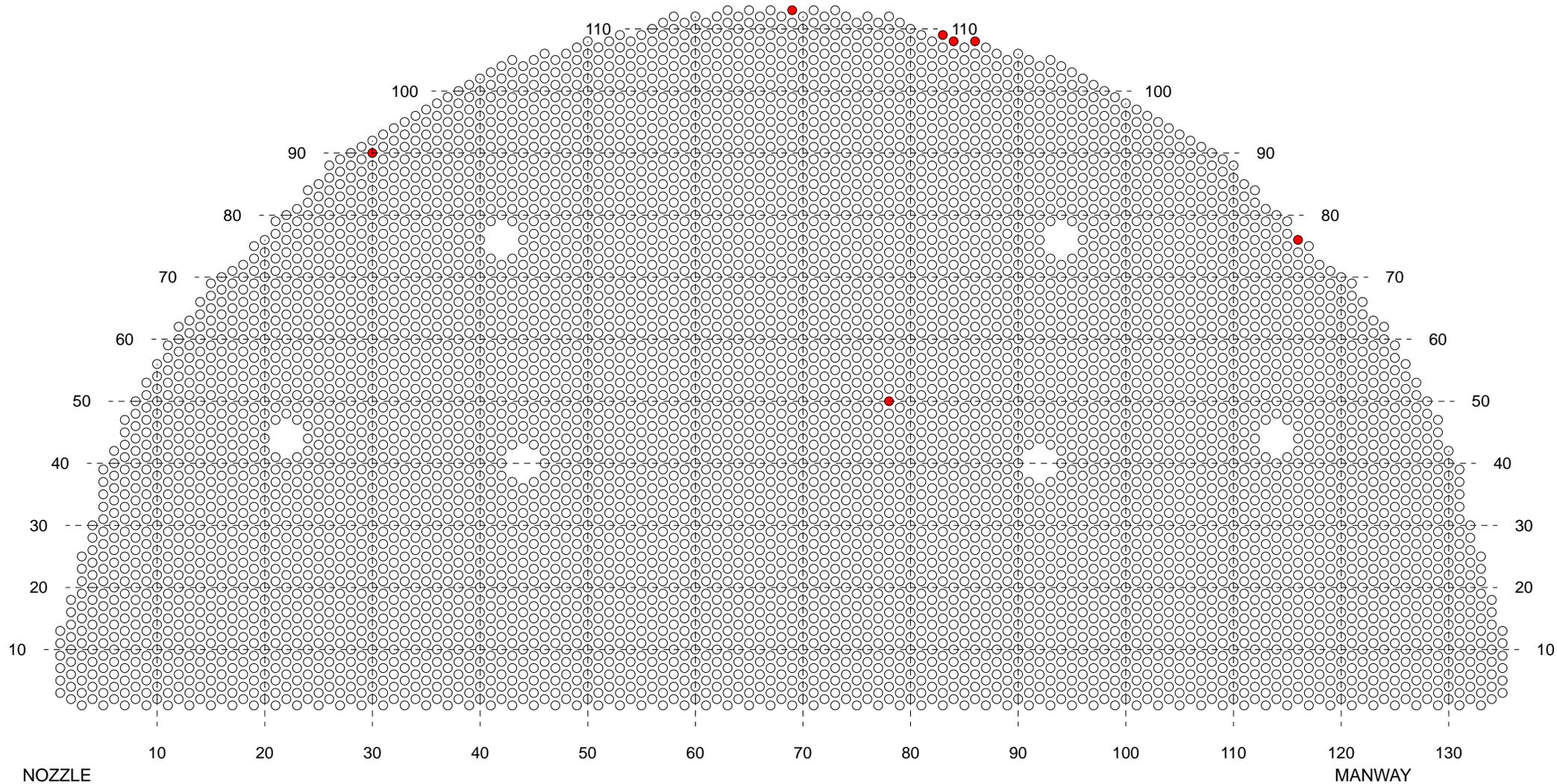
GROUP
A QueryM1[1] TUBES
7

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:12:46 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 7
OUT OF SERVICE (#): NA



TSP %TWD < 10%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
50	78	0.16	104	P4	TWD	8	04H +0.37	04H	04H	WAR		1_Land		64		HOT	610PP	27
76	116	0.09	267	P4	TWD	5	05H -0.75	05H	05H	WAR		2_Land		64		HOT	610PP	25
		0.14	264	P4	TWD	7	05H -0.77	05H	05H	WAR		2_Land		64		HOT	610PP	25
90	30	0.12	109	P4	TWD	6	04C +0.43	04C	04C	WAR		1_Land		7		COLD	610PP	21
108	84	0.10	82	P4	TWD	5	06H -0.64	06H	06H	WAR		2_Land		64		HOT	610PP	19
108	86	0.19	104	P4	TWD	9	06H +0.35	06H	06H	WAR		2_Land		64		HOT	610PP	23
109	83	0.10	101	P4	TWD	5	05H -0.53	05H	05H	WAR		2_Land		64		HOT	610PP	20
113	69	0.16	105	P4	TWD	7	06C +0.40	06C	06C	WAR		1_Land		7		COLD	610PP	13

Total Tubes : 7
 Total Records: 8

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD < 10%

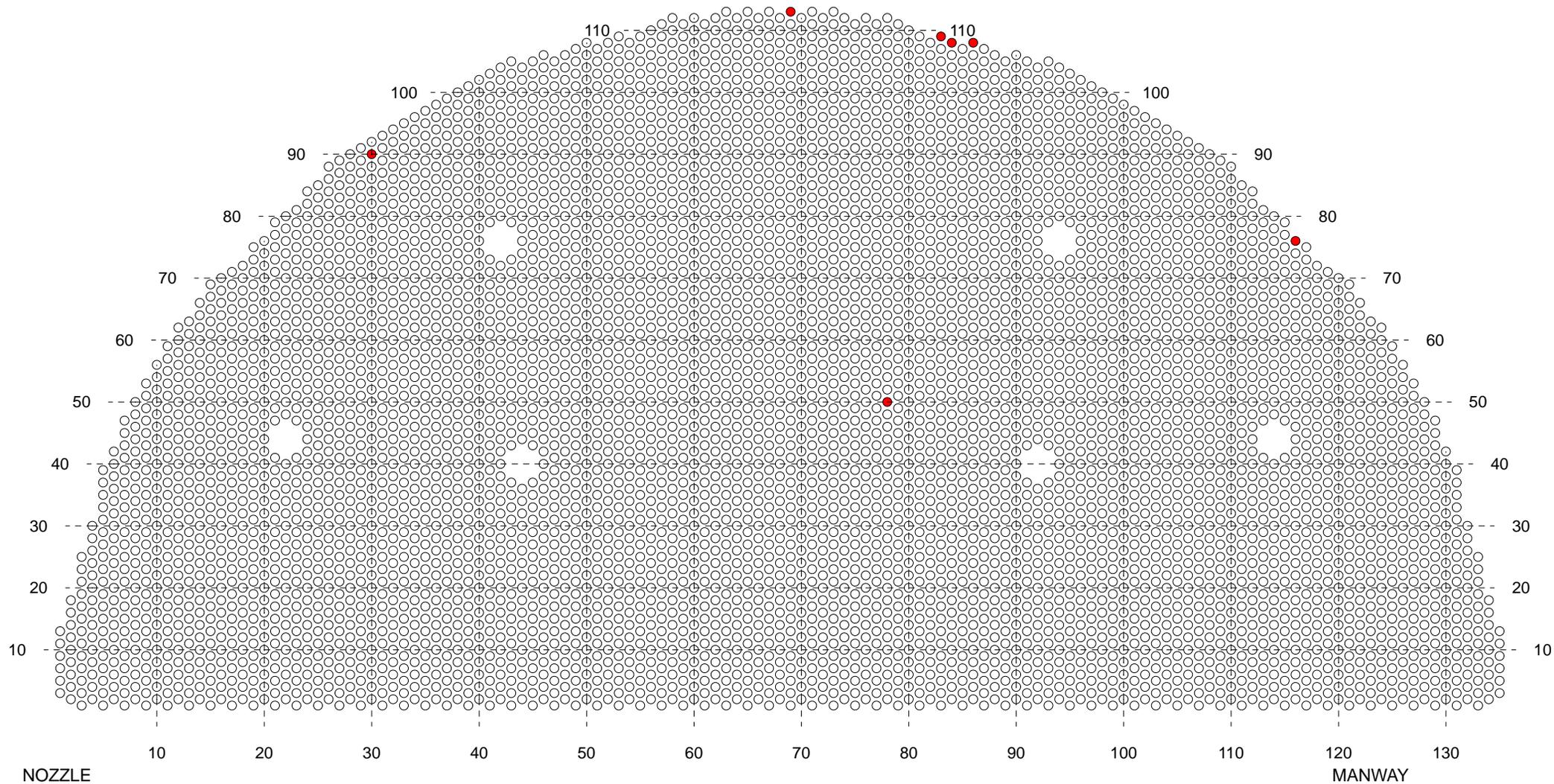
GROUP
A QueryM1[1] TUBES
7

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:12:46 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 7
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD 10-19%

GROUP **A QueryM1[1]** TUBES **19**

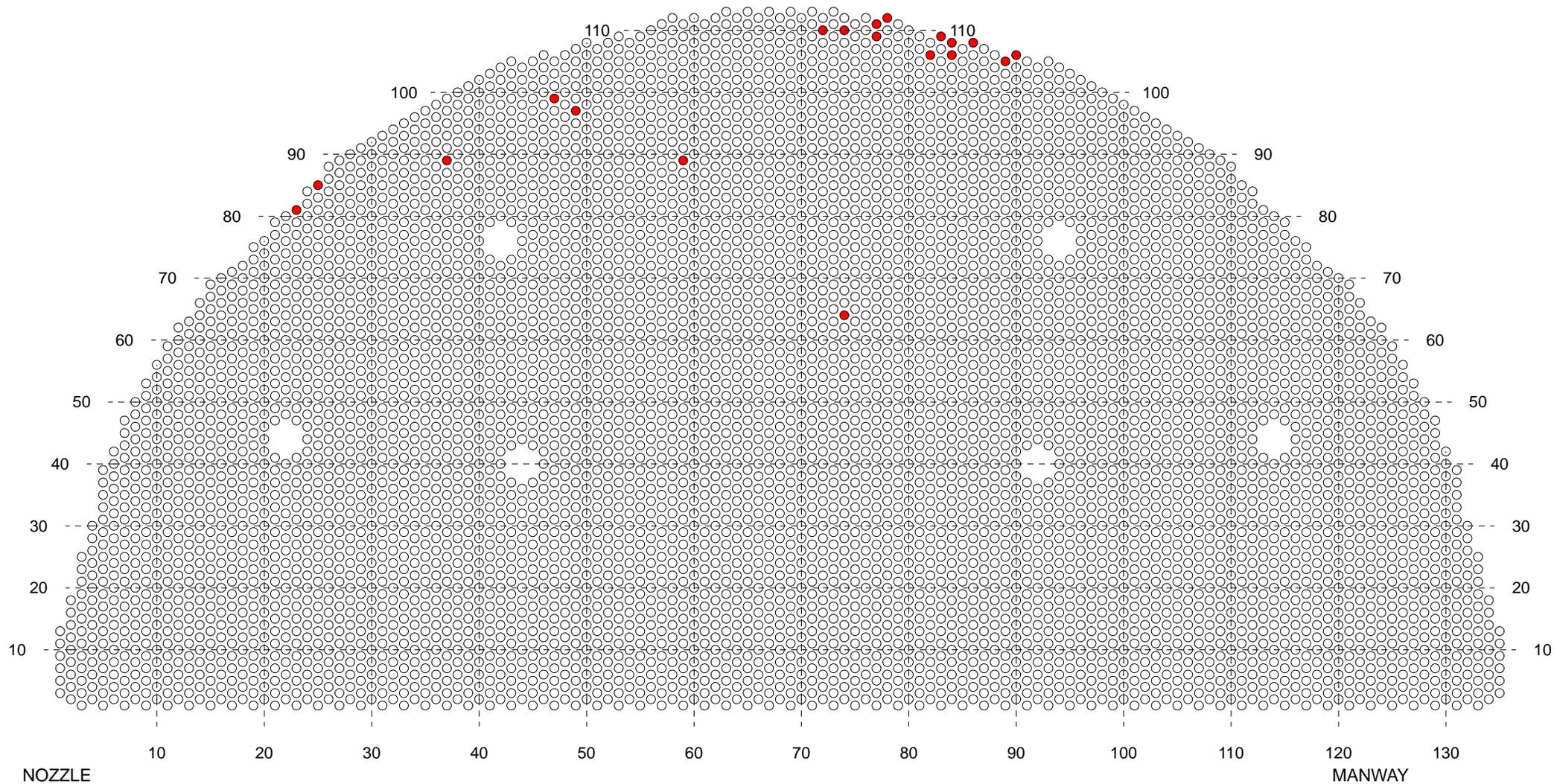
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:15:29 2016

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 19
OUT OF SERVICE (#): NA

Ameren: S/G B HOT AREVA



TSP %TWD 10-19%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
64	74	0.22	91	P4	TWD	10	05H +0.35	05H	05H	WAR		1_Land	64	HOT	610PP	15	
81	23	0.22	102	P4	TWD	10	05H +0.35	05H	05H	WAR		1_Land	64	HOT	610PP	9	
85	25	0.37	275	P4	TWD	16	05H +0.43	05H	05H	WAR		2_Land	64	HOT	610PP	10	
		0.24	278	P4	TWD	11	05H -0.64	05H	05H	WAR		2_Land	64	HOT	610PP	10	
89	37	0.24	100	P4	TWD	11	05H -0.77	05H	05H	WAR		1_Land	64	HOT	610PP	11	
89	59	0.36	95	P4	TWD	16	05H +0.32	05H	05H	WAR		1_Land	64	HOT	610PP	14	
97	49	0.24	101	P4	TWD	11	05H +0.45	05H	05H	WAR		1_Land	64	HOT	610PP	13	
99	47	0.25	277	P4	TWD	12	05H +0.40	05H	05H	WAR		1_Land	64	HOT	610PP	12	
105	89	0.24	99	P4	TWD	11	05C +0.35	05C	05C	WAR		1_Land	7	COLD	610PP	17	
106	82	0.20	89	P4	TWD	10	05H -0.77	05H	05H	WAR		1_Land	64	HOT	610PP	18	
106	84	0.28	103	P4	TWD	13	04H -0.61	04H	04H	WAR		1_Land	64	HOT	610PP	21	
		0.34	106	P4	TWD	15	05H -0.56	05H	05H	WAR		1_Land	64	HOT	610PP	22	
106	90	0.31	95	P4	TWD	14	06H +0.32	06H	06H	WAR		1_Land	64	HOT	610PP	24	
108	84	0.29	91	P4	TWD	13	06H +0.40	06H	06H	WAR		2_Land	64	HOT	610PP	19	
108	86	0.20	93	P4	TWD	10	06H -0.72	06H	06H	WAR		2_Land	64	HOT	610PP	23	
109	77	0.27	97	P4	TWD	12	04C +0.35	04C	04C	WAR		1_Land	7	COLD	610PP	16	
109	83	0.26	104	P4	TWD	12	05H +0.56	05H	05H	WAR		2_Land	64	HOT	610PP	20	
110	72	0.32	95	P4	TWD	14	06C +0.37	06C	06C	WAR		1_Land	7	COLD	610PP	14	
110	74	0.22	96	P4	TWD	10	04C +0.40	04C	04C	WAR		1_Land	7	COLD	610PP	15	
111	77	0.28	106	P4	TWD	13	05H +0.43	05H	05H	WAR		1_Land	64	HOT	610PP	16	
112	78	0.23	81	P4	TWD	11	05H -0.72	05H	05H	WAR		1_Land	64	HOT	610PP	17	

Total Tubes : 19
 Total Records: 21

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD 10-19%

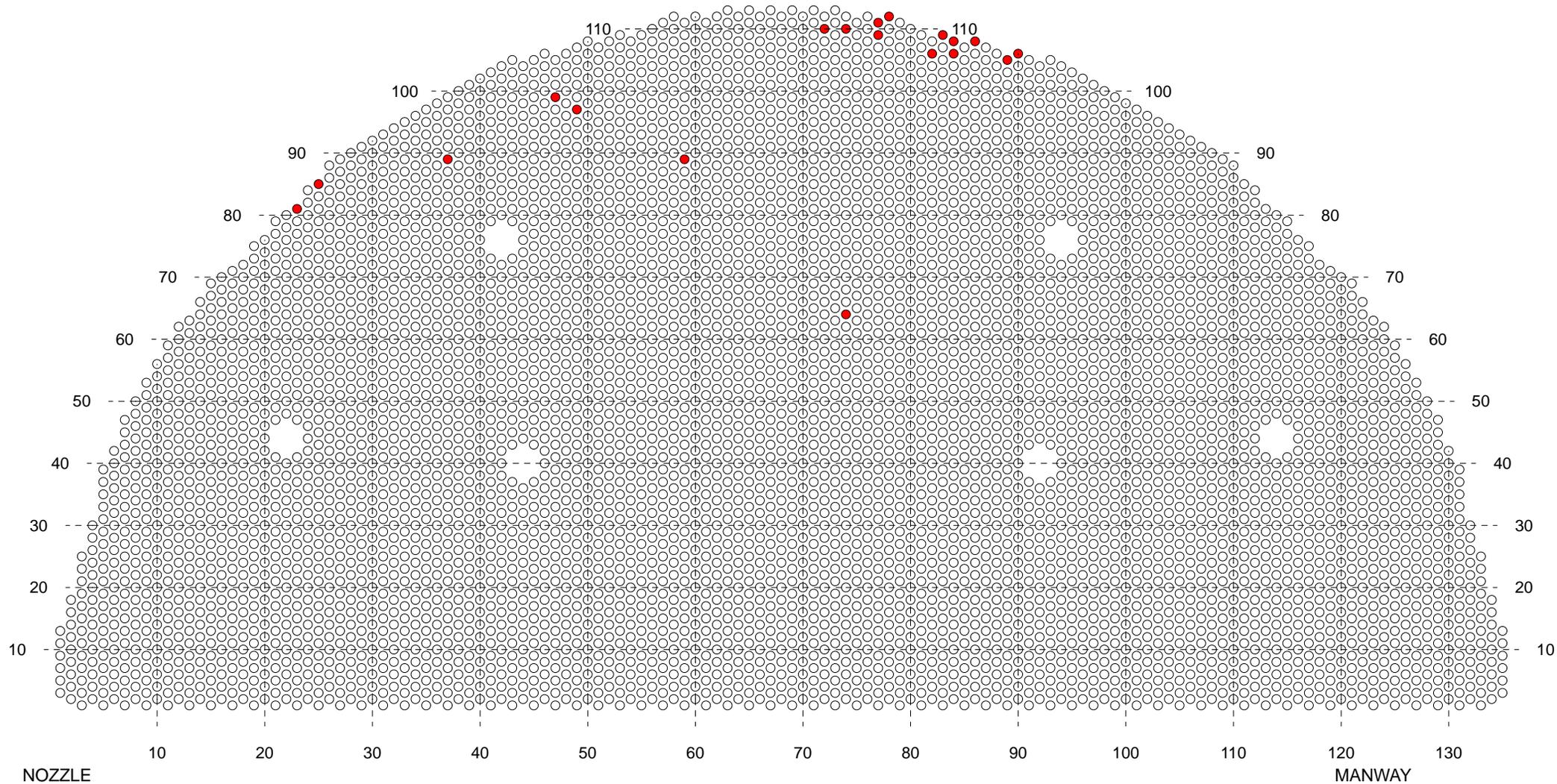
GROUP
A QueryM1[1] TUBES
19

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:15:29 2016
Ameren: S/G B HOT AREVA

S/G B
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 19
OUT OF SERVICE (#): NA



TSP %TWD 20-29%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
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Total Tubes : 0
Total Records: 0

TSP %TWD 30-39%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	===	====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

TSP %TWD 40-100%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
-----	-----	-------	-----	-----	-----	-----	----------	-----	-----	------	---	------	---	-----	---	-----	-------	-------

Total Tubes : 0
Total Records: 0

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD < 10%

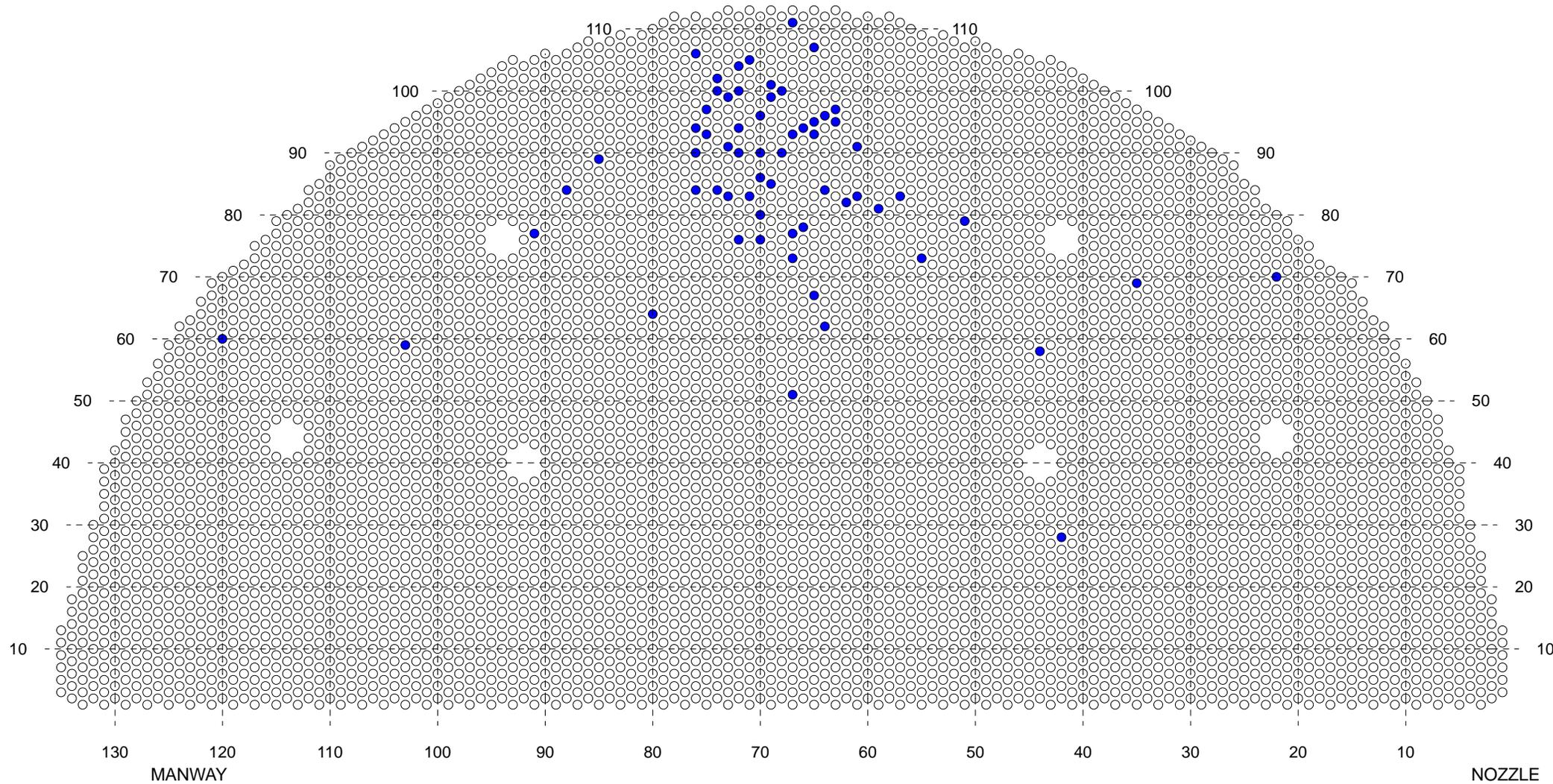
GROUP
A QueryM1[1] TUBES
62

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:45:51 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 62
OUT OF SERVICE (#): NA



AVB %TWD < 10%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
28	42	0.14	146	P2	TWD	8	AV1 +1.09	TEC	TEH					35		HOT	610HS	74
51	67	0.13	145	P2	TWD	8	AV3 +0.07	TEC	TEH					6		HOT	610HS	6
58	44	0.13	65	P2	TWD	8	AV4 -0.05	TEC	TEH					13		HOT	610HS	61
59	103	0.13	71	P2	TWD	8	AV5 +0.10	TEC	TEH					24		HOT	610HS	128
		0.14	126	P2	TWD	8	AV4 -0.02	TEC	TEH					24		HOT	610HS	128
60	120	0.11	88	P2	TWD	7	AV4 +0.09	TEC	TEH					28		HOT	610HS	54
62	64	0.09	120	P2	TWD	6	AV2 -0.02	TEC	TEH					6		HOT	610HS	103
64	80	0.13	157	P2	TWD	8	AV5 -0.07	TEC	TEH					22		HOT	610HS	33
		0.12	145	P2	TWD	7	AV3 -0.07	TEC	TEH					22		HOT	610HS	33
67	65	0.07	148	P2	TWD	4	AV2 +0.07	TEC	TEH					6		HOT	610HS	98
69	35	0.14	97	P2	TWD	8	AV4 -0.02	TEC	TEH					10		HOT	610HS	208
70	22	0.12	108	P2	TWD	8	AV2 -0.16	TEC	TEH					11		HOT	610HS	63
73	55	0.12	80	P2	TWD	7	AV4 -0.07	TEC	TEH					8		HOT	610HS	61
73	67	0.13	71	P2	TWD	8	AV2 -0.05	TEC	TEH					7		HOT	610HS	11
76	70	0.12	121	P2	TWD	7	AV2 -0.14	TEC	TEH					19		HOT	610HS	176
76	72	0.11	79	P2	TWD	7	AV4 -0.02	TEC	TEH					19		HOT	610HS	207
77	67	0.14	66	P2	TWD	8	AV4 -0.05	TEC	TEH					7		HOT	610HS	12
77	91	0.11	42	P2	TWD	7	AV5 +0.00	TEC	TEH					23		HOT	610HS	191
		0.12	148	P2	TWD	8	AV2 -0.02	TEC	TEH					23		HOT	610HS	191
78	66	0.12	108	P2	TWD	7	AV4 +0.12	TEC	TEH					7		HOT	610HS	30
79	51	0.12	142	P2	TWD	8	AV2 +0.00	TEC	TEH					12		HOT	610HS	158
80	70	0.11	152	P2	TWD	7	AV4 +0.00	TEC	TEH					19		HOT	610HS	175
81	59	0.11	54	P2	TWD	7	AV4 -0.07	TEC	TEH					7		HOT	610HS	136
82	62	0.13	73	P2	TWD	8	AV3 -0.24	TEC	TEH					7		HOT	610HS	68
83	57	0.11	139	P2	TWD	7	AV3 -0.07	TEC	TEH					8		HOT	610HS	31
83	61	0.16	139	P2	TWD	9	AV3 -0.02	TEC	TEH					6		HOT	610HS	69
83	71	0.10	154	P2	TWD	6	AV2 -0.09	TEC	TEH					18		HOT	610HS	193
83	73	0.07	46	P2	TWD	5	AV5 -0.24	TEC	TEH					21		HOT	610HS	7
84	64	0.08	131	P2	TWD	5	AV4 +0.00	TEC	TEH					7		HOT	610HS	50
84	74	0.10	146	P2	TWD	6	AV3 +0.00	TEC	TEH					21		HOT	610HS	22
84	76	0.13	108	P2	TWD	8	AV4 -0.02	TEC	TEH					20		HOT	610HS	53
84	88	0.15	130	P2	TWD	9	AV4 +0.00	TEC	TEH					22		HOT	610HS	144
		0.11	151	P2	TWD	7	AV2 +0.00	TEC	TEH					22		HOT	610HS	144
85	69	0.12	145	P2	TWD	7	AV3 -0.02	TEC	TEH					19		HOT	610HS	159
86	70	0.14	154	P2	TWD	8	AV6 +0.00	TEC	TEH					18		HOT	610HS	174
89	85	0.15	92	P2	TWD	9	AV4 +0.02	TEC	TEH					23		HOT	610HS	106
90	68	0.12	89	P2	TWD	7	AV2 -0.02	TEC	TEH					18		HOT	610HS	143
90	70	0.11	138	P2	TWD	7	AV5 -0.16	TEC	TEH					18		HOT	610HS	173
90	72	0.12	144	P2	TWD	7	AV6 -0.05	TEC	TEH					18		HOT	610HS	206
90	76	0.13	96	P2	TWD	8	AV3 -0.02	TEC	TEH					21		HOT	610HS	53
91	61	0.10	65	P2	TWD	7	AV4 +0.02	TEC	TEH					6		HOT	610HS	71
91	73	0.14	137	P2	TWD	9	AV2 +0.02	TEC	TEH					21		HOT	610HS	9
93	65	0.16	132	P2	TWD	9	AV1 +0.02	TEC	TEH					6		HOT	610HS	36
93	67	0.11	68	P2	TWD	7	AV3 -0.07	TEC	TEH					7		HOT	610HS	16
93	75	0.11	155	P2	TWD	7	AV5 -0.02	TEC	TEH					21		HOT	610HS	42
		0.13	65	P2	TWD	8	AV2 -0.07	TEC	TEH					21		HOT	610HS	42
94	66	0.16	109	P2	TWD	9	AV6 +0.00	TEC	TEH					7		HOT	610HS	26
		0.11	53	P2	TWD	7	AV2 +0.14	TEC	TEH					7		HOT	610HS	26
94	72	0.11	118	P2	TWD	7	AV5 +0.09	TEC	TEH					18		HOT	610HS	205
94	76	0.15	143	P2	TWD	9	AV6 +0.05	TEC	TEH					20		HOT	610HS	50
		0.16	156	P2	TWD	9	AV5 -0.02	TEC	TEH					20		HOT	610HS	50
95	63	0.10	122	P2	TWD	6	AV3 -0.02	TEC	TEH					6		HOT	610HS	54
95	65	0.14	141	P2	TWD	8	AV2 -0.02	TEC	TEH					7		HOT	610HS	37
96	64	0.14	53	P2	TWD	8	AV2 -0.02	TEC	TEH					7		HOT	610HS	47
96	70	0.13	123	P2	TWD	8	AV6 -0.05	TEC	TEH					19		HOT	610HS	171
		0.10	71	P2	TWD	6	AV5 -0.16	TEC	TEH					19		HOT	610HS	171
97	63	0.11	88	P2	TWD	7	AV6 -0.02	TEC	TEH					7		HOT	610HS	56
97	75	0.11	126	P2	TWD	7	AV6 -0.02	TEC	TEH					21		HOT	610HS	43
99	69	0.11	84	P2	TWD	7	AV6 +0.00	TEC	TEH					19		HOT	610HS	162

AVB %TWD < 10%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
99	73	0.11	106	P2	TWD	7	AV3 +0.02	TEC	TEH					21	HOT	610HS	10
100	68	0.10	108	P2	TWD	7	AV5 -0.05	TEC	TEH					19	HOT	610HS	138
100	72	0.12	118	P2	TWD	7	AV4 -0.05	TEC	TEH					19	HOT	610HS	201
		0.09	101	P2	TWD	6	AV2 -0.05	TEC	TEH					19	HOT	610HS	201
100	74	0.07	36	P2	TWD	5	AV1 +0.12	TEC	TEH					21	HOT	610HS	18
101	69	0.12	86	P2	TWD	7	AV1 +0.00	TEC	TEH					18	HOT	610HS	165
102	74	0.13	93	P2	TWD	8	AV5 -0.05	TEC	TEH					20	HOT	610HS	18
104	72	0.13	113	P2	TWD	8	AV5 +0.09	TEC	TEH					19	HOT	610HS	200
105	71	0.14	150	P2	TWD	8	AV2 -0.07	TEC	TEH					19	HOT	610HS	195
106	76	0.14	96	P2	TWD	8	AV3 +0.09	TEC	TEH					20	HOT	610HS	47
107	65	0.14	47	P2	TWD	9	AV5 -0.05	TEC	TEH					7	HOT	610HS	40
111	67	0.12	143	P2	TWD	8	AV3 -0.09	TEC	TEH					7	HOT	610HS	20

Total Tubes : 62
 Total Records: 71

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD < 10%

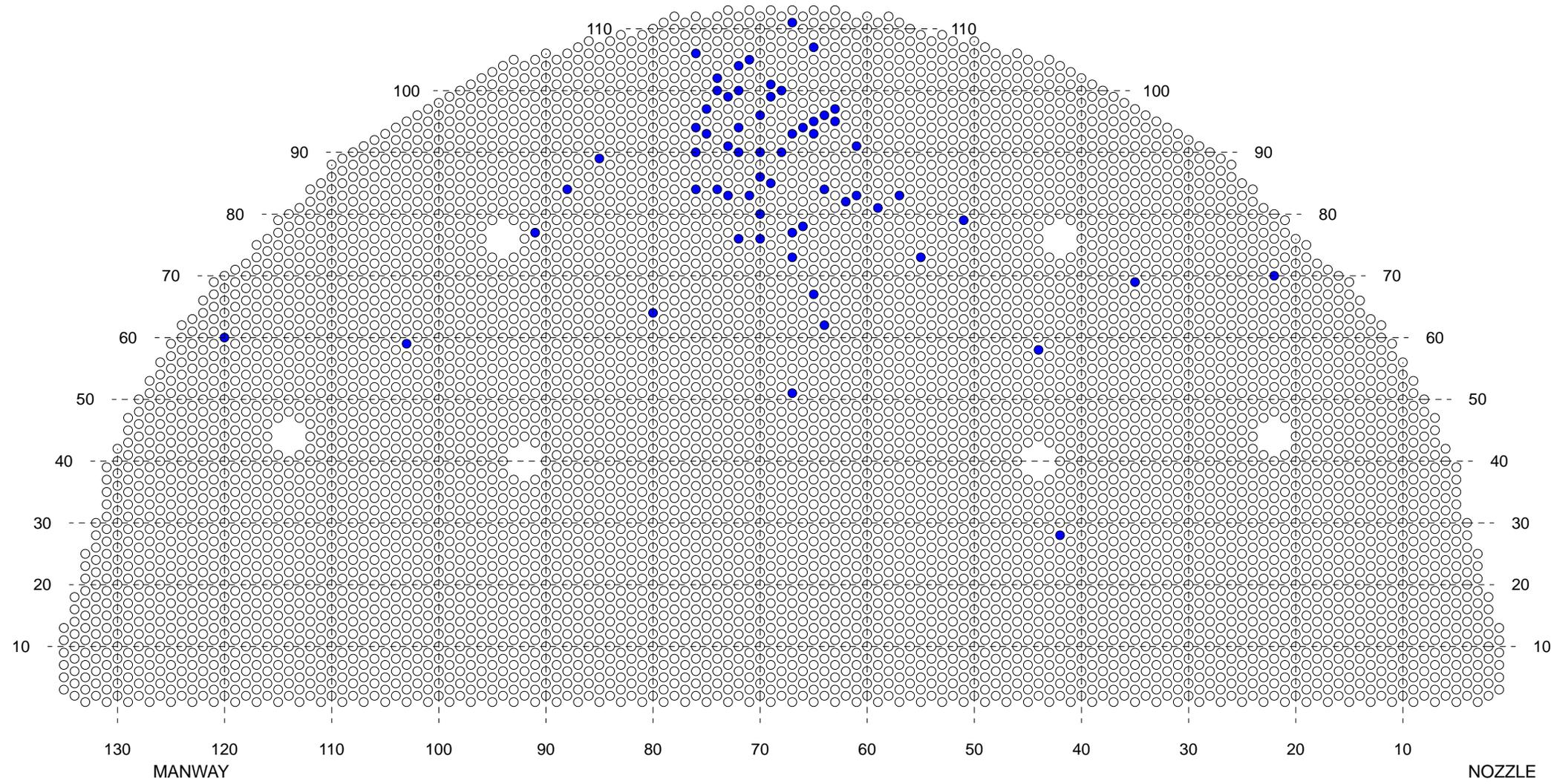
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A QueryM1[1] TUBES
62

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:45:51 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 62
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 10-19%

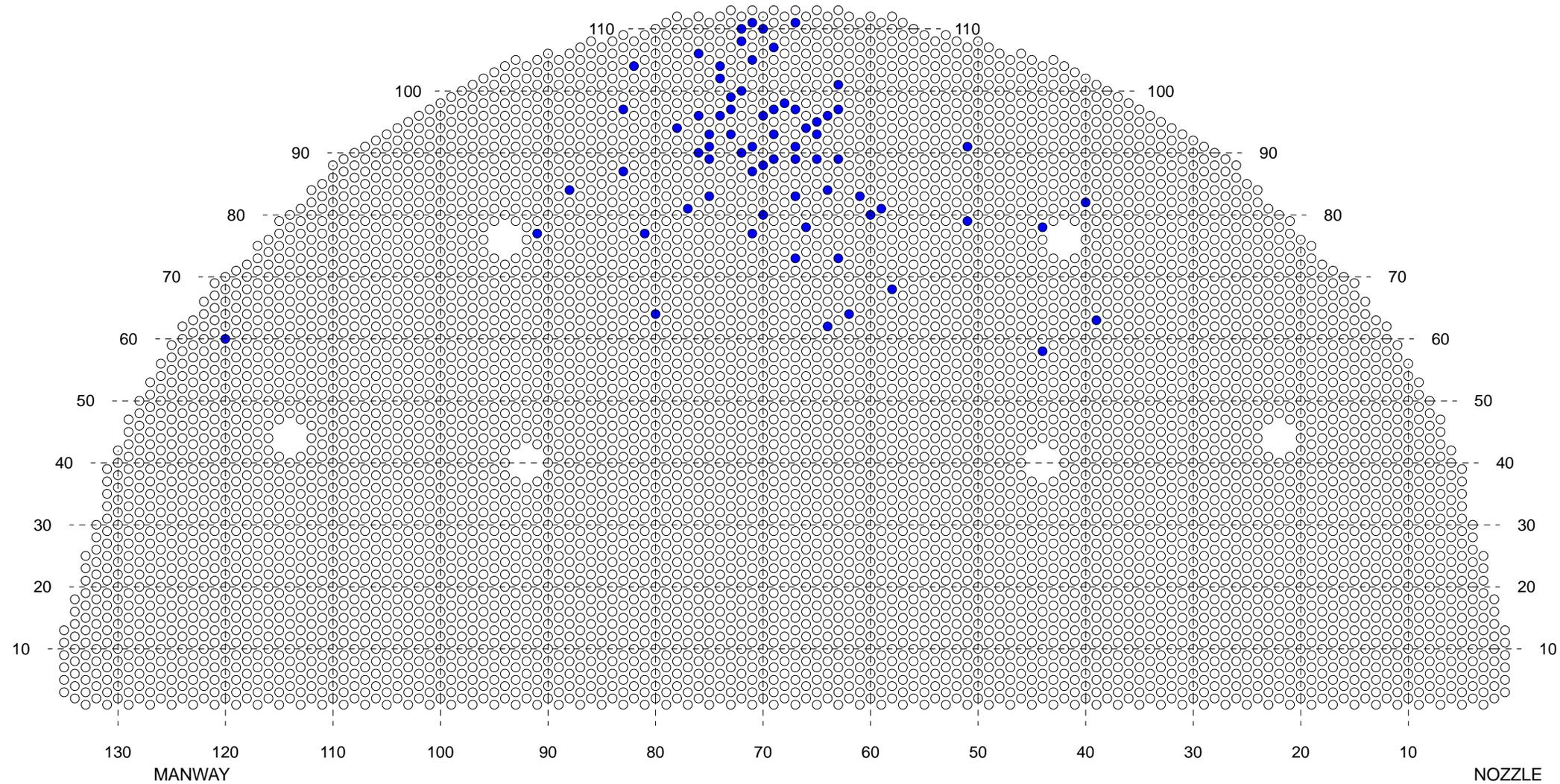
GROUP
A QueryM1[1] TUBES
70

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:47:50 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 70
OUT OF SERVICE (#): NA



AVB %TWD 10-19%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
58	44	0.38	100	P2	TWD	18	AV5 +0.00	TEC	TEH					13		HOT	610HS	61
		0.30	109	P2	TWD	15	AV3 -0.07	TEC	TEH					13		HOT	610HS	61
		0.18	82	P2	TWD	11	AV2 -0.02	TEC	TEH					13		HOT	610HS	61
60	120	0.17	139	P2	TWD	10	AV3 -0.02	TEC	TEH					28		HOT	610HS	54
62	64	0.21	121	P2	TWD	12	AV5 +0.00	TEC	TEH					6		HOT	610HS	103
		0.19	135	P2	TWD	11	AV4 -0.02	TEC	TEH					6		HOT	610HS	103
63	39	0.24	95	P2	TWD	13	AV4 -0.05	TEC	TEH					11		HOT	610HS	236
64	62	0.30	128	P2	TWD	15	AV3 -0.05	TEC	TEH					6		HOT	610HS	116
64	80	0.20	110	P2	TWD	11	AV4 -0.02	TEC	TEH					22		HOT	610HS	33
68	58	0.19	125	P2	TWD	11	AV5 +0.00	TEC	TEH					8		HOT	610HS	18
		0.25	104	P2	TWD	13	AV4 -0.05	TEC	TEH					8		HOT	610HS	18
73	63	0.36	111	P2	TWD	17	AV3 -0.02	TEC	TEH					7		HOT	610HS	110
73	67	0.17	114	P2	TWD	10	AV4 -0.05	TEC	TEH					7		HOT	610HS	11
		0.42	113	P2	TWD	19	AV3 -0.05	TEC	TEH					7		HOT	610HS	11
77	71	0.25	143	P2	TWD	13	AV5 -0.02	TEC	TEH					19		HOT	610HS	191
77	81	0.18	115	P2	TWD	10	AV3 +0.02	TEC	TEH					23		HOT	610HS	42
		0.35	108	P2	TWD	17	AV2 +0.00	TEC	TEH					23		HOT	610HS	42
77	91	0.22	120	P2	TWD	12	AV4 -0.05	TEC	TEH					23		HOT	610HS	191
		0.30	138	P2	TWD	15	AV3 +0.00	TEC	TEH					23		HOT	610HS	191
78	44	0.16	99	P2	TWD	10	AV3 -0.05	TEC	TEH					13		HOT	610HS	56
78	66	0.31	82	P2	TWD	16	AV3 -0.05	TEC	TEH					7		HOT	610HS	30
		0.44	121	P2	TWD	19	AV2 -0.05	TEC	TEH					7		HOT	610HS	30
79	51	0.24	130	P2	TWD	13	AV4 +0.00	TEC	TEH					12		HOT	610HS	158
		0.43	126	P2	TWD	19	AV3 -0.05	TEC	TEH					12		HOT	610HS	158
80	60	0.18	114	P2	TWD	10	AV5 -0.05	TEC	TEH					7		HOT	610HS	84
		0.22	113	P2	TWD	12	AV2 +0.00	TEC	TEH					7		HOT	610HS	84
80	70	0.28	130	P2	TWD	14	AV5 -0.19	TEC	TEH					19		HOT	610HS	175
		0.18	105	P2	TWD	10	AV3 -0.02	TEC	TEH					19		HOT	610HS	175
		0.22	73	P2	TWD	12	AV2 -0.05	TEC	TEH					19		HOT	610HS	175
81	59	0.18	116	P2	TWD	10	AV3 -0.02	TEC	TEH					7		HOT	610HS	136
81	77	0.21	78	P2	TWD	12	AV5 -0.05	TEC	TEH					21		HOT	610HS	70
		0.31	109	P2	TWD	16	AV4 +0.02	TEC	TEH					21		HOT	610HS	70
82	40	0.19	134	P2	TWD	11	AV3 -0.05	TEC	TEH					10		HOT	610HS	272
83	61	0.19	96	P2	TWD	11	AV2 +0.00	TEC	TEH					6		HOT	610HS	69
83	67	0.17	137	P2	TWD	10	AV4 -0.05	TEC	TEH					6		HOT	610HS	14
		0.30	107	P2	TWD	15	AV2 -0.02	TEC	TEH					6		HOT	610HS	14
83	75	0.18	144	P2	TWD	11	AV5 +0.02	TEC	TEH					20		HOT	610HS	39
84	64	0.21	84	P2	TWD	12	AV3 -0.05	TEC	TEH					7		HOT	610HS	50
84	88	0.28	134	P2	TWD	15	AV3 +0.02	TEC	TEH					22		HOT	610HS	144
87	71	0.38	134	P2	TWD	18	AV5 -0.05	TEC	TEH					18		HOT	610HS	194
		0.36	121	P2	TWD	17	AV3 -0.07	TEC	TEH					18		HOT	610HS	194
87	83	0.28	108	P2	TWD	14	AV3 +0.00	TEC	TEH					22		HOT	610HS	76
88	70	0.39	129	P2	TWD	18	AV5 -0.05	TEC	TEH					19		HOT	610HS	173
89	63	0.22	92	P2	TWD	12	AV4 -0.02	TEC	TEH					7		HOT	610HS	54
		0.20	78	P2	TWD	11	AV3 -0.02	TEC	TEH					7		HOT	610HS	54
89	65	0.36	123	P2	TWD	17	AV3 -0.02	TEC	TEH					6		HOT	610HS	35
89	67	0.34	131	P2	TWD	17	AV3 -0.02	TEC	TEH					7		HOT	610HS	15
89	69	0.38	128	P2	TWD	18	AV4 -0.07	TEC	TEH					19		HOT	610HS	160
		0.27	103	P2	TWD	14	AV2 -0.05	TEC	TEH					19		HOT	610HS	160
89	75	0.26	82	P2	TWD	14	AV5 -0.05	TEC	TEH					21		HOT	610HS	41
		0.31	134	P2	TWD	16	AV4 -0.02	TEC	TEH					21		HOT	610HS	41
90	72	0.27	135	P2	TWD	14	AV5 -0.02	TEC	TEH					18		HOT	610HS	206
		0.20	127	P2	TWD	11	AV3 +0.00	TEC	TEH					18		HOT	610HS	206
		0.17	142	P2	TWD	10	AV2 -0.02	TEC	TEH					18		HOT	610HS	206
90	76	0.20	87	P2	TWD	11	AV2 +0.02	TEC	TEH					21		HOT	610HS	53
91	51	0.26	122	P2	TWD	14	AV4 +0.00	TEC	TEH					12		HOT	610HS	161
		0.36	114	P2	TWD	17	AV2 +0.00	TEC	TEH					12		HOT	610HS	161
91	67	0.21	127	P2	TWD	12	AV4 -0.07	TEC	TEH					6		HOT	610HS	16
91	71	0.23	112	P2	TWD	13	AV6 +0.00	TEC	TEH					18		HOT	610HS	195

AVB %TWD 10-19%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
91	75	0.32	130	P2	TWD	16	AV5 -0.05	TEC	TEH					18	HOT	610HS	195
		0.36	101	P2	TWD	17	AV5 -0.02	TEC	TEH					20	HOT	610HS	41
		0.19	115	P2	TWD	11	AV4 -0.02	TEC	TEH					20	HOT	610HS	41
93	65	0.33	113	P2	TWD	16	AV3 -0.02	TEC	TEH					6	HOT	610HS	36
93	69	0.22	125	P2	TWD	12	AV2 -0.05	TEC	TEH					18	HOT	610HS	163
93	73	0.21	104	P2	TWD	11	AV5 -0.19	TEC	TEH					20	HOT	610HS	11
		0.23	108	P2	TWD	12	AV4 +0.00	TEC	TEH					20	HOT	610HS	11
		0.23	137	P2	TWD	12	AV3 -0.02	TEC	TEH					20	HOT	610HS	11
93	75	0.22	79	P2	TWD	12	AV3 -0.07	TEC	TEH					21	HOT	610HS	42
94	66	0.36	118	P2	TWD	17	AV5 -0.02	TEC	TEH					7	HOT	610HS	26
		0.31	127	P2	TWD	16	AV4 -0.02	TEC	TEH					7	HOT	610HS	26
94	78	0.17	134	P2	TWD	10	AV2 +0.02	TEC	TEH					20	HOT	610HS	81
95	65	0.31	112	P2	TWD	16	AV5 +0.00	TEC	TEH					7	HOT	610HS	37
		0.41	127	P2	TWD	19	AV4 +0.00	TEC	TEH					7	HOT	610HS	37
		0.24	107	P2	TWD	13	AV3 -0.05	TEC	TEH					7	HOT	610HS	37
96	64	0.39	106	P2	TWD	18	AV3 -0.02	TEC	TEH					7	HOT	610HS	47
96	70	0.20	108	P2	TWD	11	AV1 -0.05	TEC	TEH					19	HOT	610HS	171
96	74	0.34	105	P2	TWD	17	AV5 -0.07	TEC	TEH					21	HOT	610HS	19
		0.42	115	P2	TWD	19	AV3 +0.00	TEC	TEH					21	HOT	610HS	19
96	76	0.18	135	P2	TWD	11	AV3 +0.02	TEC	TEH					21	HOT	610HS	52
97	63	0.17	81	P2	TWD	10	AV3 +0.00	TEC	TEH					7	HOT	610HS	56
97	67	0.20	134	P2	TWD	11	AV4 -0.02	TEC	TEH					7	HOT	610HS	17
		0.20	110	P2	TWD	11	AV3 -0.02	TEC	TEH					7	HOT	610HS	17
97	69	0.22	123	P2	TWD	12	AV6 +0.00	TEC	TEH					18	HOT	610HS	164
97	73	0.27	141	P2	TWD	14	AV6 -0.02	TEC	TEH					20	HOT	610HS	12
97	83	0.25	117	P2	TWD	13	AV4 -0.02	TEC	TEH					23	HOT	610HS	76
98	68	0.22	136	P2	TWD	12	AV5 -0.02	TEC	TEH					18	HOT	610HS	141
		0.41	140	P2	TWD	19	AV3 +0.02	TEC	TEH					18	HOT	610HS	141
99	73	0.43	133	P2	TWD	19	AV5 -0.05	TEC	TEH					21	HOT	610HS	10
		0.22	128	P2	TWD	12	AV4 -0.02	TEC	TEH					21	HOT	610HS	10
		0.21	125	P2	TWD	11	AV2 -0.05	TEC	TEH					21	HOT	610HS	10
100	72	0.18	112	P2	TWD	10	AV3 -0.02	TEC	TEH					19	HOT	610HS	201
101	63	0.21	78	P2	TWD	12	AV3 +0.00	TEC	TEH					7	HOT	610HS	57
102	74	0.24	117	P2	TWD	13	AV6 +0.00	TEC	TEH					20	HOT	610HS	18
104	74	0.39	123	P2	TWD	18	AV4 +0.00	TEC	TEH					21	HOT	610HS	17
104	82	0.17	117	P2	TWD	10	AV5 -0.05	TEC	TEH					23	HOT	610HS	52
		0.21	71	P2	TWD	12	AV3 +0.02	TEC	TEH					23	HOT	610HS	52
105	71	0.26	115	P2	TWD	14	AV4 -0.05	TEC	TEH					19	HOT	610HS	195
		0.31	112	P2	TWD	16	AV3 -0.02	TEC	TEH					19	HOT	610HS	195
106	76	0.19	138	P2	TWD	11	AV2 +0.00	TEC	TEH					20	HOT	610HS	47
107	69	0.34	133	P2	TWD	16	AV6 +0.02	TEC	TEH					19	HOT	610HS	164
		0.31	119	P2	TWD	16	AV4 -0.05	TEC	TEH					19	HOT	610HS	164
108	72	0.37	126	P2	TWD	17	AV6 +0.00	TEC	TEH					19	HOT	610HS	199
110	70	0.17	104	P2	TWD	10	AV4 -0.02	TEC	TEH					18	HOT	610HS	168
110	72	0.37	134	P2	TWD	17	AV5 +0.00	TEC	TEH					18	HOT	610HS	201
111	67	0.37	107	P2	TWD	17	AV4 -0.07	TEC	TEH					7	HOT	610HS	20
111	71	0.20	112	P2	TWD	11	AV6 +0.00	TEC	TEH					18	HOT	610HS	200
		0.17	115	P2	TWD	10	AV5 +0.00	TEC	TEH					18	HOT	610HS	200

Total Tubes : 70
 Total Records: 107

Ameren - Callaway Unit 1

4/16 - 1R21

AVB %TWD 10-19%

GROUP
A QueryM1[1]

TUBES
70

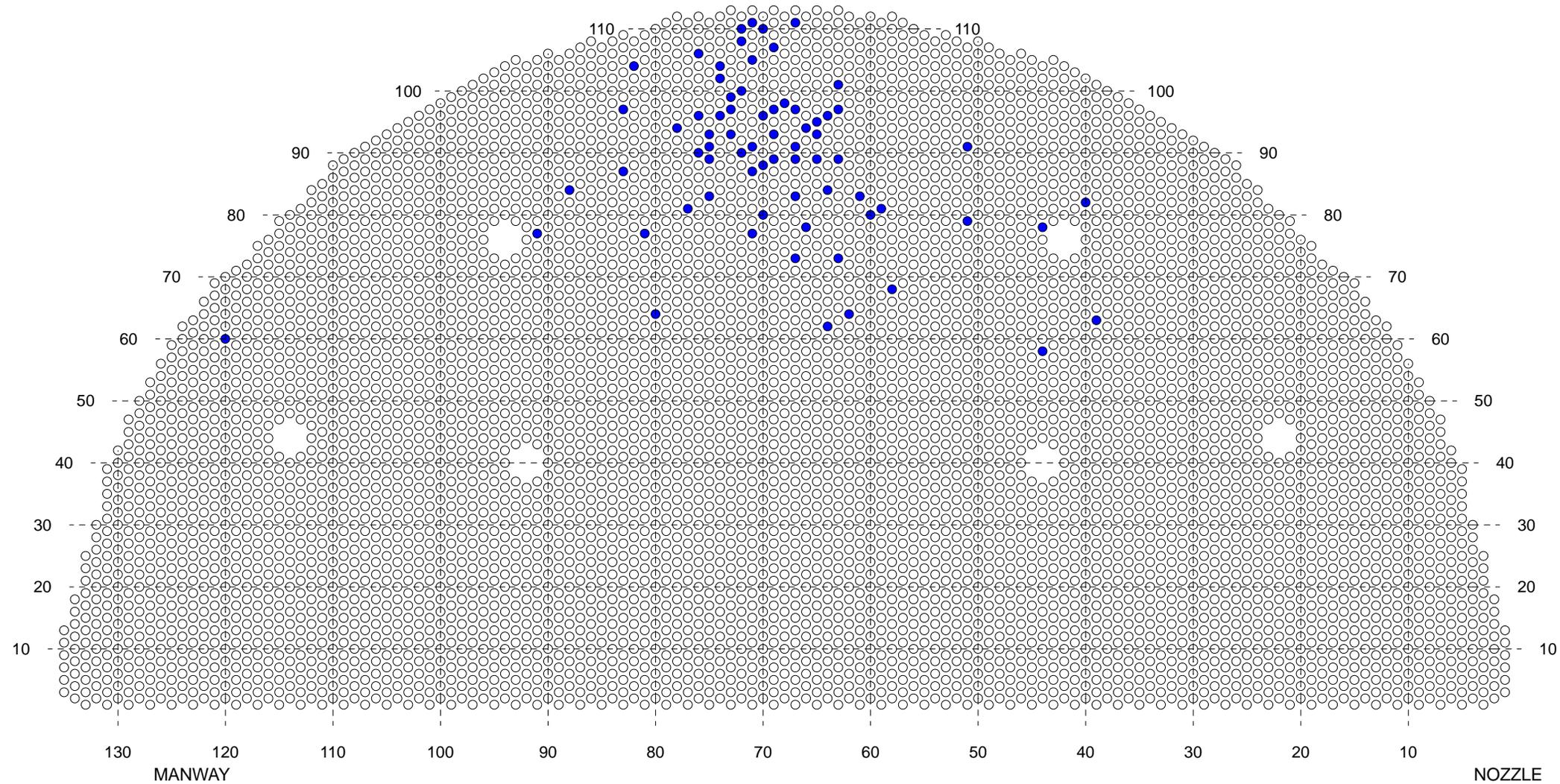
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:47:50 2016

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 70
OUT OF SERVICE (#): NA

Ameren: S/G C HOT AREVA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 20-29%

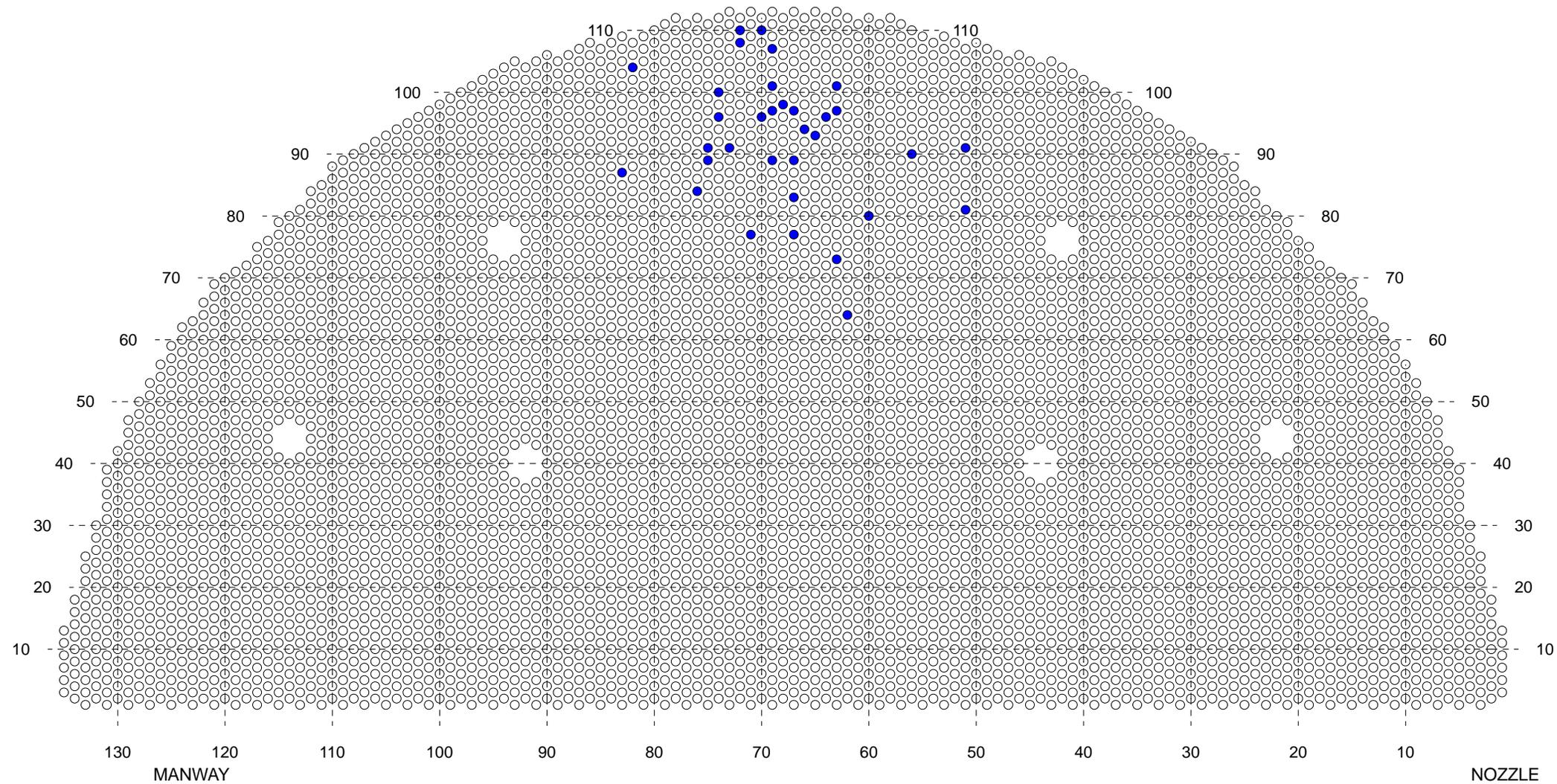
GROUP
A QueryM1[1] TUBES
33

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:49:45 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 33
OUT OF SERVICE (#): NA



AVB %TWD 20-29%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
64	62	0.47	124	P2	TWD	20	AV4 -0.02	TEC	TEH					6		HOT	610HS	116
73	63	0.72	101	P2	TWD	26	AV5 -0.02	TEC	TEH					7		HOT	610HS	110
		0.55	132	P2	TWD	22	AV4 -0.02	TEC	TEH					7		HOT	610HS	110
77	67	0.78	119	P2	TWD	27	AV3 +0.00	TEC	TEH					7		HOT	610HS	12
		0.45	112	P2	TWD	20	AV2 -0.02	TEC	TEH					7		HOT	610HS	12
77	71	0.45	121	P2	TWD	20	AV4 -0.02	TEC	TEH					19		HOT	610HS	191
80	60	0.75	117	P2	TWD	26	AV4 -0.02	TEC	TEH					7		HOT	610HS	84
81	51	0.79	116	P2	TWD	27	AV4 +0.00	TEC	TEH					13		HOT	610HS	156
		0.87	111	P2	TWD	28	AV3 +0.00	TEC	TEH					13		HOT	610HS	156
83	67	0.48	125	P2	TWD	20	AV3 -0.02	TEC	TEH					6		HOT	610HS	14
84	76	0.45	105	P2	TWD	20	AV2 +0.00	TEC	TEH					20		HOT	610HS	53
87	83	0.54	125	P2	TWD	22	AV4 +0.00	TEC	TEH					22		HOT	610HS	76
89	67	0.75	116	P2	TWD	26	AV5 +0.00	TEC	TEH					7		HOT	610HS	15
		0.64	125	P2	TWD	24	AV4 -0.05	TEC	TEH					7		HOT	610HS	15
89	69	0.73	121	P2	TWD	26	AV3 +0.00	TEC	TEH					19		HOT	610HS	160
89	75	0.69	108	P2	TWD	25	AV3 -0.02	TEC	TEH					21		HOT	610HS	41
90	56	0.74	106	P2	TWD	26	AV3 -0.05	TEC	TEH					9		HOT	610HS	45
		0.47	101	P2	TWD	20	AV2 -0.02	TEC	TEH					9		HOT	610HS	45
91	51	0.68	122	P2	TWD	25	AV3 +0.00	TEC	TEH					12		HOT	610HS	161
91	73	0.45	120	P2	TWD	20	AV3 -0.02	TEC	TEH					21		HOT	610HS	9
91	75	0.58	126	P2	TWD	23	AV6 -0.02	TEC	TEH					20		HOT	610HS	41
93	65	0.60	123	P2	TWD	23	AV2 -0.05	TEC	TEH					6		HOT	610HS	36
94	66	0.46	89	P2	TWD	20	AV3 -0.02	TEC	TEH					7		HOT	610HS	26
96	64	0.68	109	P2	TWD	25	AV5 -0.02	TEC	TEH					7		HOT	610HS	47
96	70	0.47	130	P2	TWD	20	AV4 -0.05	TEC	TEH					19		HOT	610HS	171
96	74	0.69	110	P2	TWD	25	AV2 -0.02	TEC	TEH					21		HOT	610HS	19
97	63	0.63	116	P2	TWD	24	AV5 -0.02	TEC	TEH					7		HOT	610HS	56
97	67	0.52	101	P2	TWD	21	AV2 -0.05	TEC	TEH					7		HOT	610HS	17
97	69	0.90	113	P2	TWD	28	AV5 -0.02	TEC	TEH					18		HOT	610HS	164
		0.87	129	P2	TWD	28	AV4 +0.00	TEC	TEH					18		HOT	610HS	164
98	68	0.45	129	P2	TWD	20	AV2 -0.05	TEC	TEH					18		HOT	610HS	141
100	74	0.59	124	P2	TWD	23	AV4 -0.02	TEC	TEH					21		HOT	610HS	18
		0.60	102	P2	TWD	23	AV2 -0.02	TEC	TEH					21		HOT	610HS	18
101	63	0.82	115	P2	TWD	27	AV5 -0.05	TEC	TEH					7		HOT	610HS	57
101	69	0.85	126	P2	TWD	28	AV6 +0.02	TEC	TEH					18		HOT	610HS	165
104	82	0.46	115	P2	TWD	20	AV4 -0.02	TEC	TEH					23		HOT	610HS	52
107	69	0.54	115	P2	TWD	22	AV5 -0.02	TEC	TEH					19		HOT	610HS	164
108	72	0.79	110	P2	TWD	27	AV3 +0.00	TEC	TEH					19		HOT	610HS	199
110	70	0.50	120	P2	TWD	21	AV3 +0.00	TEC	TEH					18		HOT	610HS	168
110	72	0.83	132	P2	TWD	27	AV6 +0.00	TEC	TEH					18		HOT	610HS	201

Total Tubes : 33
 Total Records: 40

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 20-29%

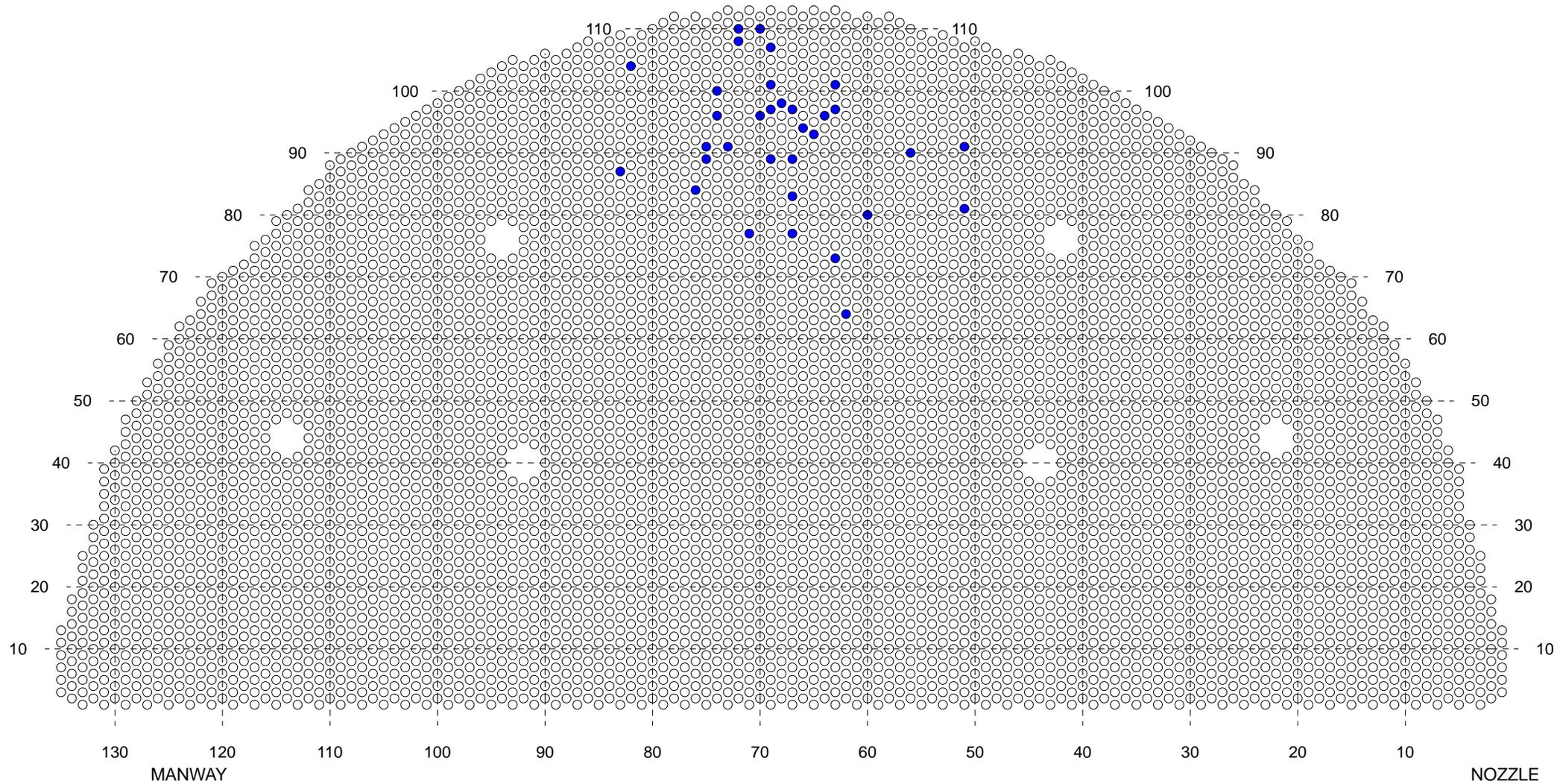
GROUP
A QueryM1[1] TUBES
33

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:49:45 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 33
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 30-39%

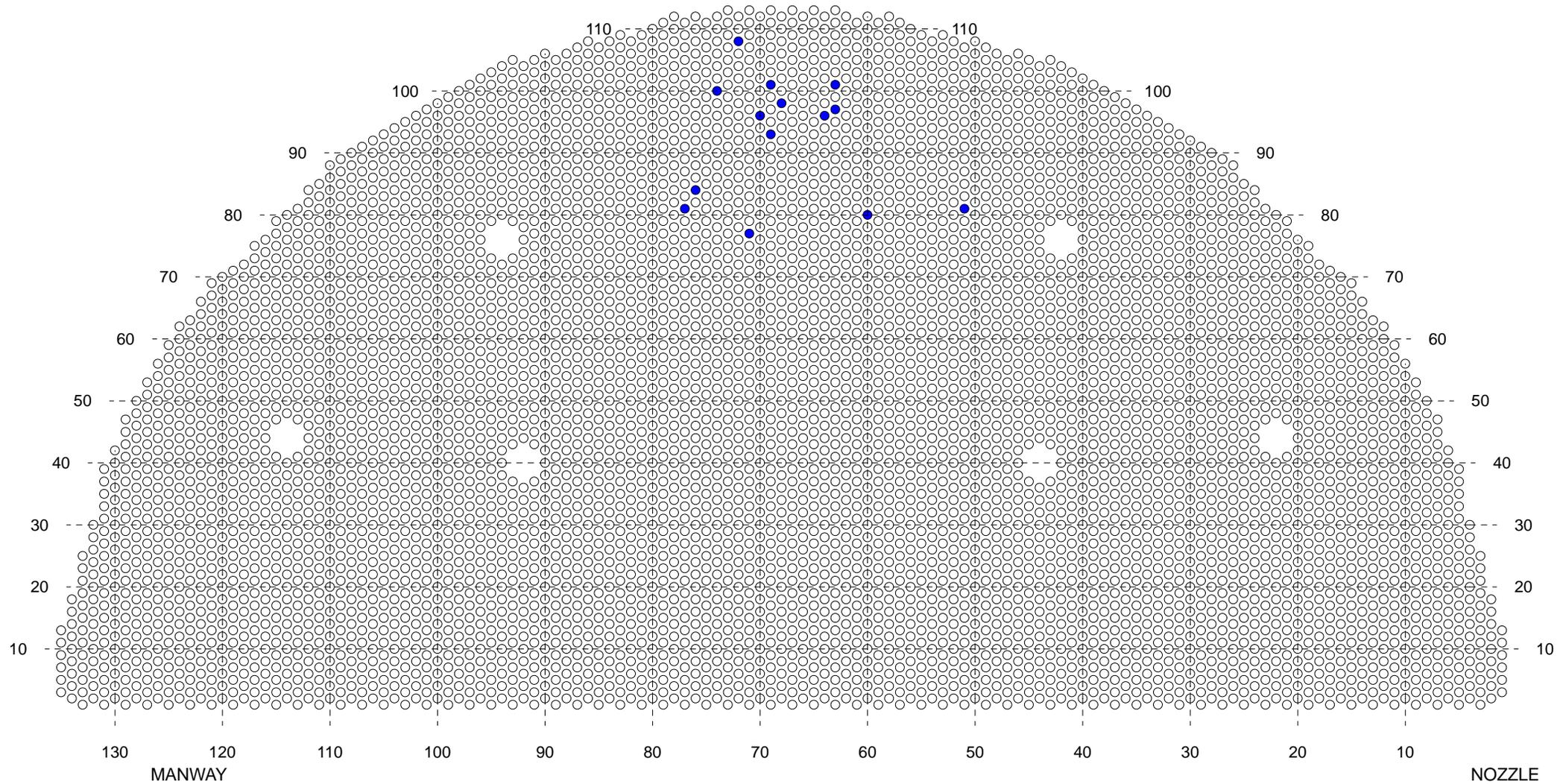
GROUP
A QueryM1[1] TUBES
14

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:51:41 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 14
OUT OF SERVICE (#): NA



AVB %TWD 30-39%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
77	71	1.65	108	P2	TWD	36	AV3 -0.05	TEC	TEH					19	HOT	610HS	191
80	60	1.01	110	P2	TWD	30	AV3 -0.02	TEC	TEH					7	HOT	610HS	84
81	51	1.36	111	P2	TWD	34	AV5 -0.02	TEC	TEH					13	HOT	610HS	156
81	77	1.23	112	P2	TWD	32	AV3 +0.00	TEC	TEH					21	HOT	610HS	70
		1.06	100	P2	TWD	30	AV2 -0.02	TEC	TEH					21	HOT	610HS	70
84	76	1.01	119	P2	TWD	30	AV3 +0.00	TEC	TEH					20	HOT	610HS	53
93	69	1.18	117	P2	TWD	32	AV5 -0.05	TEC	TEH					18	HOT	610HS	163
		1.22	121	P2	TWD	32	AV4 -0.05	TEC	TEH					18	HOT	610HS	163
		1.93	120	P2	TWD	37	AV3 +0.00	TEC	TEH					18	HOT	610HS	163
96	64	1.04	117	P2	TWD	30	AV4 -0.05	TEC	TEH					7	HOT	610HS	47
96	70	1.61	112	P2	TWD	35	AV3 -0.02	TEC	TEH					19	HOT	610HS	171
		1.09	120	P2	TWD	31	AV2 -0.02	TEC	TEH					19	HOT	610HS	171
97	63	1.38	115	P2	TWD	34	AV4 -0.02	TEC	TEH					7	HOT	610HS	56
98	68	1.53	124	P2	TWD	35	AV4 +0.00	TEC	TEH					18	HOT	610HS	141
100	74	1.53	111	P2	TWD	35	AV3 -0.02	TEC	TEH					21	HOT	610HS	18
101	63	1.04	113	P2	TWD	30	AV4 -0.02	TEC	TEH					7	HOT	610HS	57
101	69	1.48	123	P2	TWD	34	AV5 -0.02	TEC	TEH					18	HOT	610HS	165
		1.09	123	P2	TWD	31	AV4 -0.02	TEC	TEH					18	HOT	610HS	165
		1.37	120	P2	TWD	34	AV3 +0.02	TEC	TEH					18	HOT	610HS	165
		1.36	122	P2	TWD	33	AV2 -0.02	TEC	TEH					18	HOT	610HS	165
108	72	1.38	118	P2	TWD	34	AV5 -0.02	TEC	TEH					19	HOT	610HS	199
		1.23	118	P2	TWD	32	AV4 -0.02	TEC	TEH					19	HOT	610HS	199

Total Tubes : 14
 Total Records: 22

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 30-39%

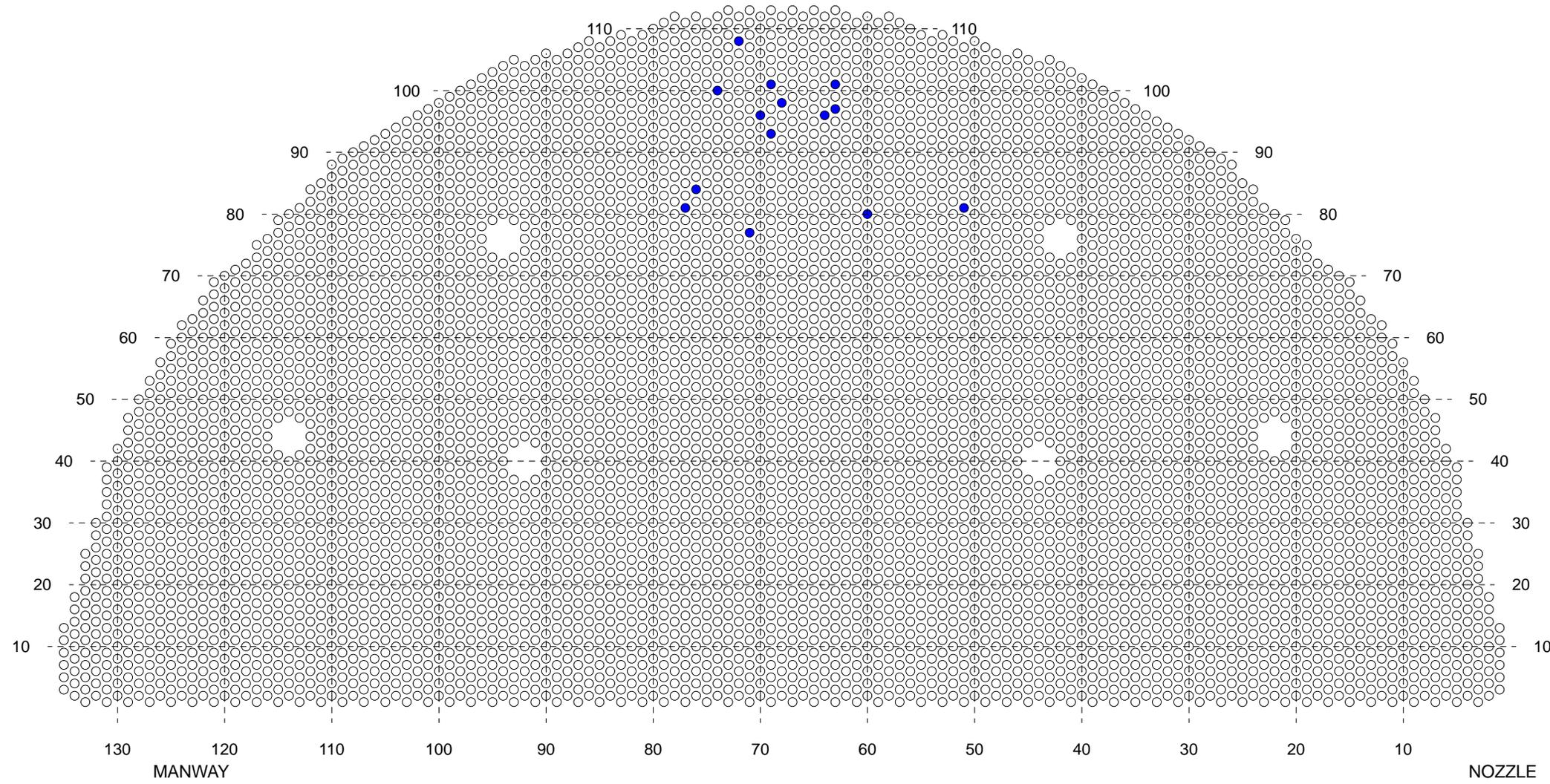
GROUP
A QueryM1[1] TUBES
14

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:51:41 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 14
OUT OF SERVICE (#): NA



AVB %TWD 40-100%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	==	====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD < 10%

GROUP
A QueryM1[1] TUBES
8

AREVA - FDMS map module Version 11.0

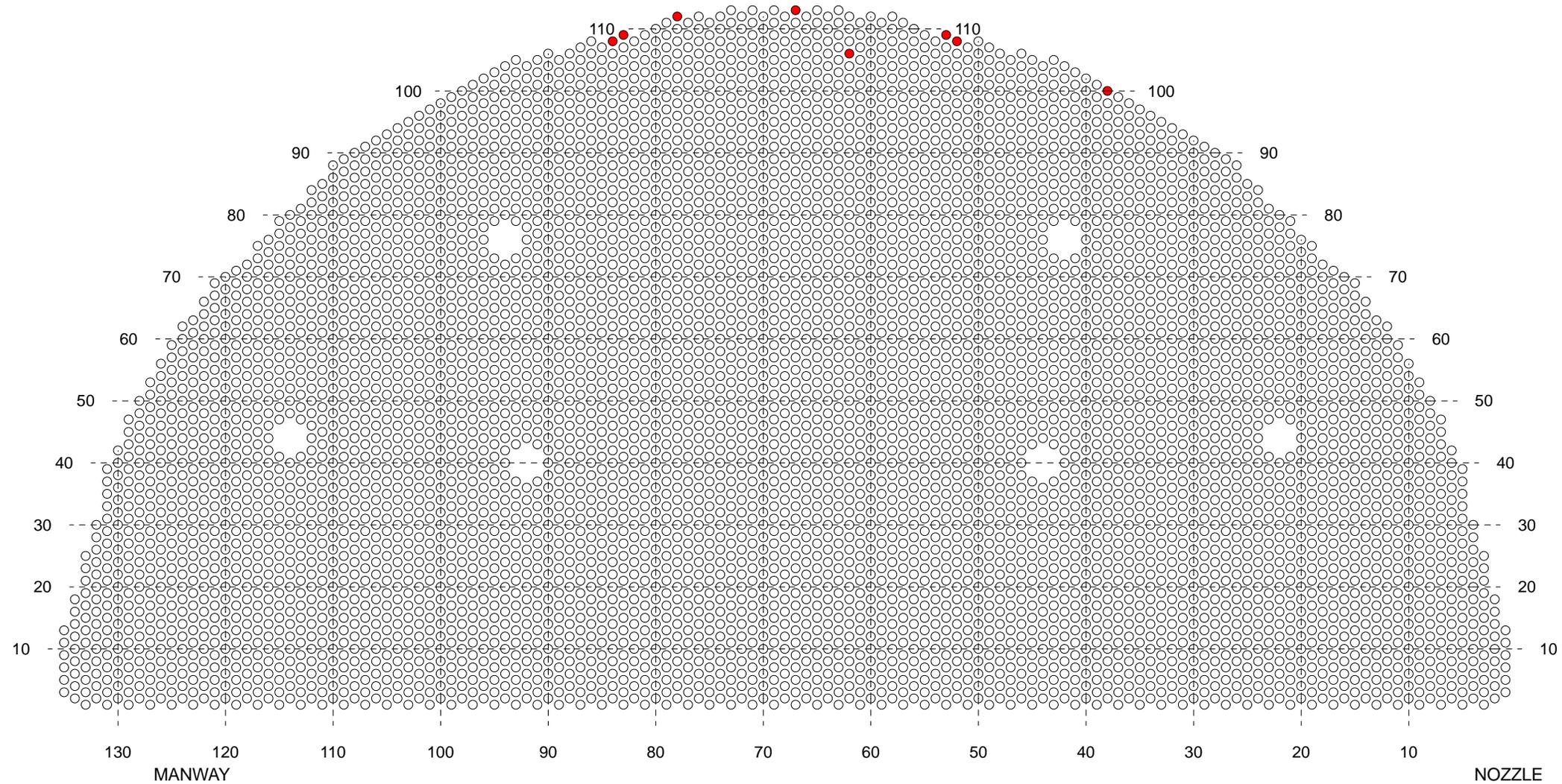
SCALE: 0.084494 X
Tue Apr 19 03:21:08 2016

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 8
OUT OF SERVICE (#): NA

Ameren: S/G C HOT

AREVA



TSP %TWD <10%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
100	38	0.16	119	P4	TWD	8	05H -0.64	05H	05H	WAR		2_Land	56	HOT	610PP	20	
		0.07	82	P4	TWD	4	05H -0.72	05H	05H	WAR		2_Land	56	HOT	610PP	20	
106	62	0.16	88	P4	TWD	8	08C -0.80	08C	08C	WAR		2_Land	6	COLD	610PP	9	
		0.11	99	P4	TWD	6	08C +0.29	08C	08C	WAR		2_Land	6	COLD	610PP	9	
108	52	0.19	117	P4	TWD	9	04H -0.59	04H	04H	WAR		2_Land	56	HOT	610PP	19	
108	84	0.11	284	P4	TWD	6	06H -0.61	06H	06H	WAR		2_Land	56	HOT	610PP	25	
109	53	0.11	289	P4	TWD	6	04H -0.59	04H	04H	WAR		2_Land	56	HOT	610PP	18	
		0.12	106	P4	TWD	6	04H -0.61	04H	04H	WAR		2_Land	56	HOT	610PP	18	
109	83	0.17	107	P4	TWD	9	06H -0.59	06H	06H	WAR		2_Land	56	HOT	610PP	24	
		0.15	89	P4	TWD	8	06H -0.69	06H	06H	WAR		2_Land	56	HOT	610PP	24	
112	78	0.14	100	P4	TWD	7	06H +0.32	06H	06H	WAR		2_Land	56	HOT	610PP	23	
		0.17	277	P4	TWD	9	06H -0.69	06H	06H	WAR		2_Land	56	HOT	610PP	23	
113	67	0.13	130	P4	TWD	7	07C -0.48	06C	07C	WAR		3_Land	6	COLD	610PP	11	
		0.10	93	P4	TWD	5	07C -0.59	06C	07C	WAR		3_Land	6	COLD	610PP	11	

Total Tubes : 8
 Total Records: 14

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD < 10%

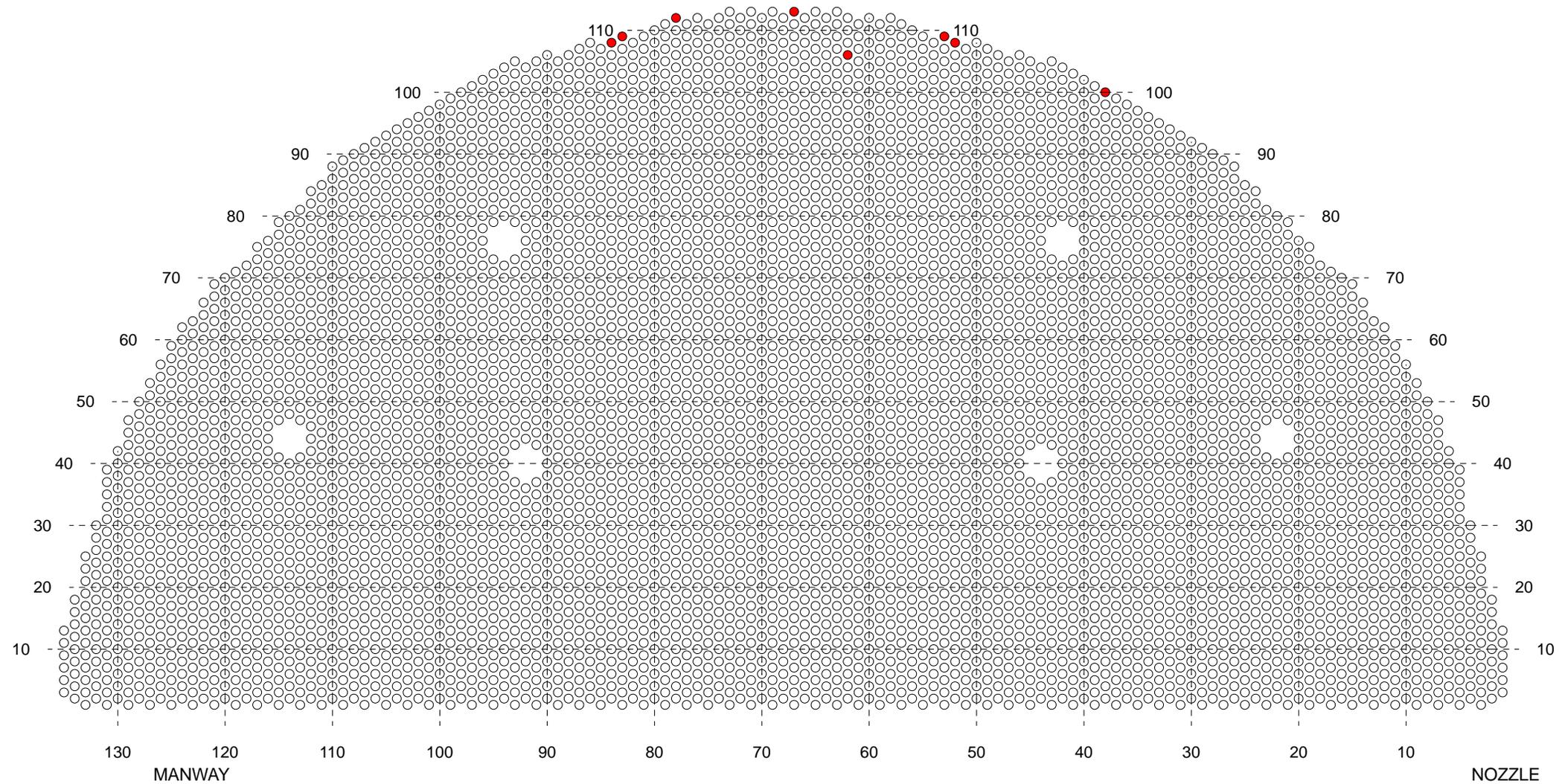
GROUP
A QueryM1[1] TUBES
8

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:21:08 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 8
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD 10-19%

GROUP
A QueryM1[1] TUBES
14

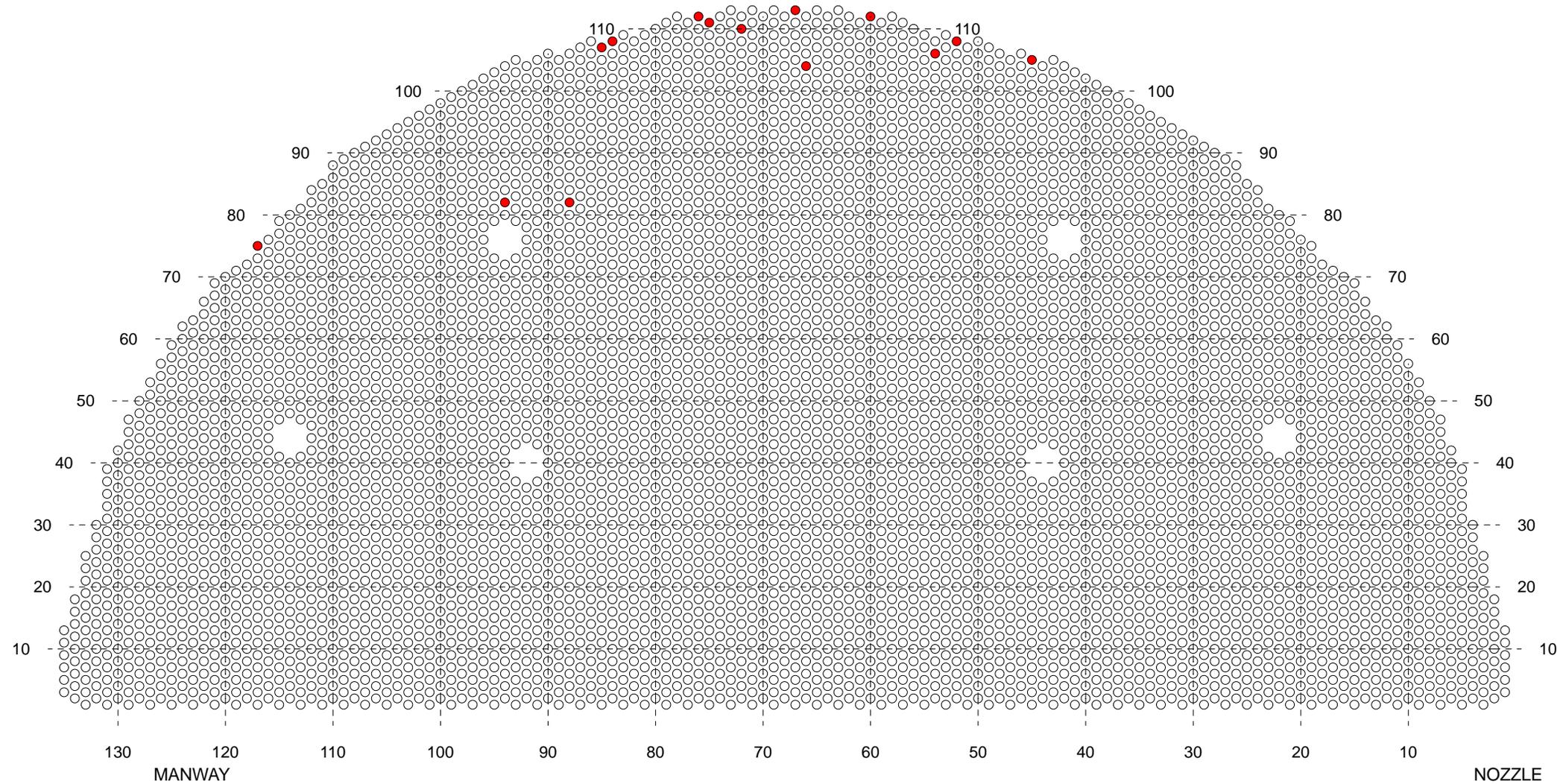
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:23:33 2016

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 14
OUT OF SERVICE (#): NA

Ameren: S/G C HOT AREVA



TSP %TWD 10-19%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
75	117	0.31	101	P4	TWD	14	06C +0.29	06C	06C	WAR		1-LAND	6	COLD	610PP	15	
82	88	0.23	280	P4	TWD	11	05H +0.40	05H	05H	WAR		1_Land	56	HOT	610PP	27	
82	94	0.30	104	P4	TWD	13	04H +0.32	04H	04H	WAR		1_Land	56	HOT	610PP	28	
104	66	0.20	97	P4	TWD	10	05H +0.43	05H	05H	WAR		1_Land	56	HOT	610PP	17	
105	45	0.31	102	P4	TWD	14	04C +0.43	04C	04C	WAR		1-LAND	6	COLD	610PP	14	
106	54	0.20	105	P4	TWD	10	04C +0.40	04C	04C	WAR		1_Land	6	COLD	610PP	13	
107	85	0.26	96	P4	TWD	12	05H +0.35	05H	05H	WAR		2_Land	56	HOT	610PP	26	
		0.21	280	P4	TWD	10	05H -0.77	05H	05H	WAR		2_Land	56	HOT	610PP	26	
108	52	0.32	93	P4	TWD	14	04H +0.48	04H	04H	WAR		2_Land	56	HOT	610PP	19	
108	84	0.26	101	P4	TWD	12	06H -0.59	06H	06H	WAR		2_Land	56	HOT	610PP	25	
110	72	0.22	110	P4	TWD	10	06C -0.61	06C	06C	WAR		1_Land	6	COLD	610PP	10	
111	75	0.20	94	P4	TWD	10	06H +0.35	06H	06H	WAR		1_Land	56	HOT	610PP	21	
112	60	0.36	101	P4	TWD	15	04C +0.43	04C	04C	WAR		1_Land	6	COLD	610PP	12	
112	76	0.36	283	P4	TWD	16	05H -0.59	05H	05H	WAR		1_Land	56	HOT	610PP	22	
113	67	0.29	97	P4	TWD	14	06C +0.45	06C	07C	WAR		1-LAND	6	COLD	610PP	11	
		0.30	98	P4	TWD	13	07C +0.53	06C	07C	WAR		3_Land	6	COLD	610PP	11	

Total Tubes : 14
 Total Records: 16

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD 10-19%

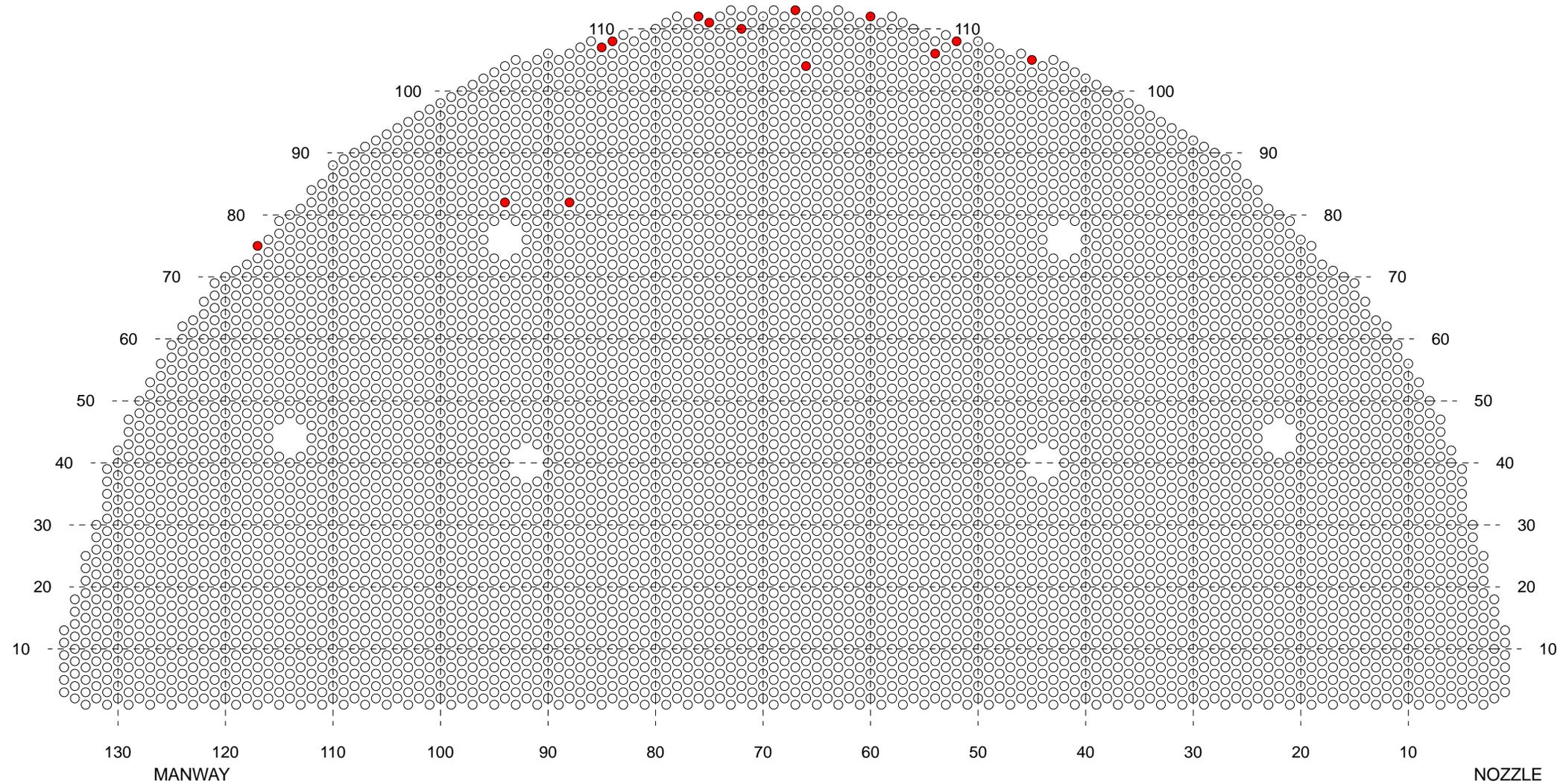
GROUP
A QueryM1[1] TUBES
14

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:23:33 2016
Ameren: S/G C HOT AREVA

S/G C
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 14
OUT OF SERVICE (#): NA



TSP %TWD 20-29%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	==	====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

TSP %TWD 30-39%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	===	=====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

TSP %TWD 40-100%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	===	====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

Ameren - Callaway Unit 1 4/16 - 1R21

GROUP
A QueryM1[1] TUBES
14

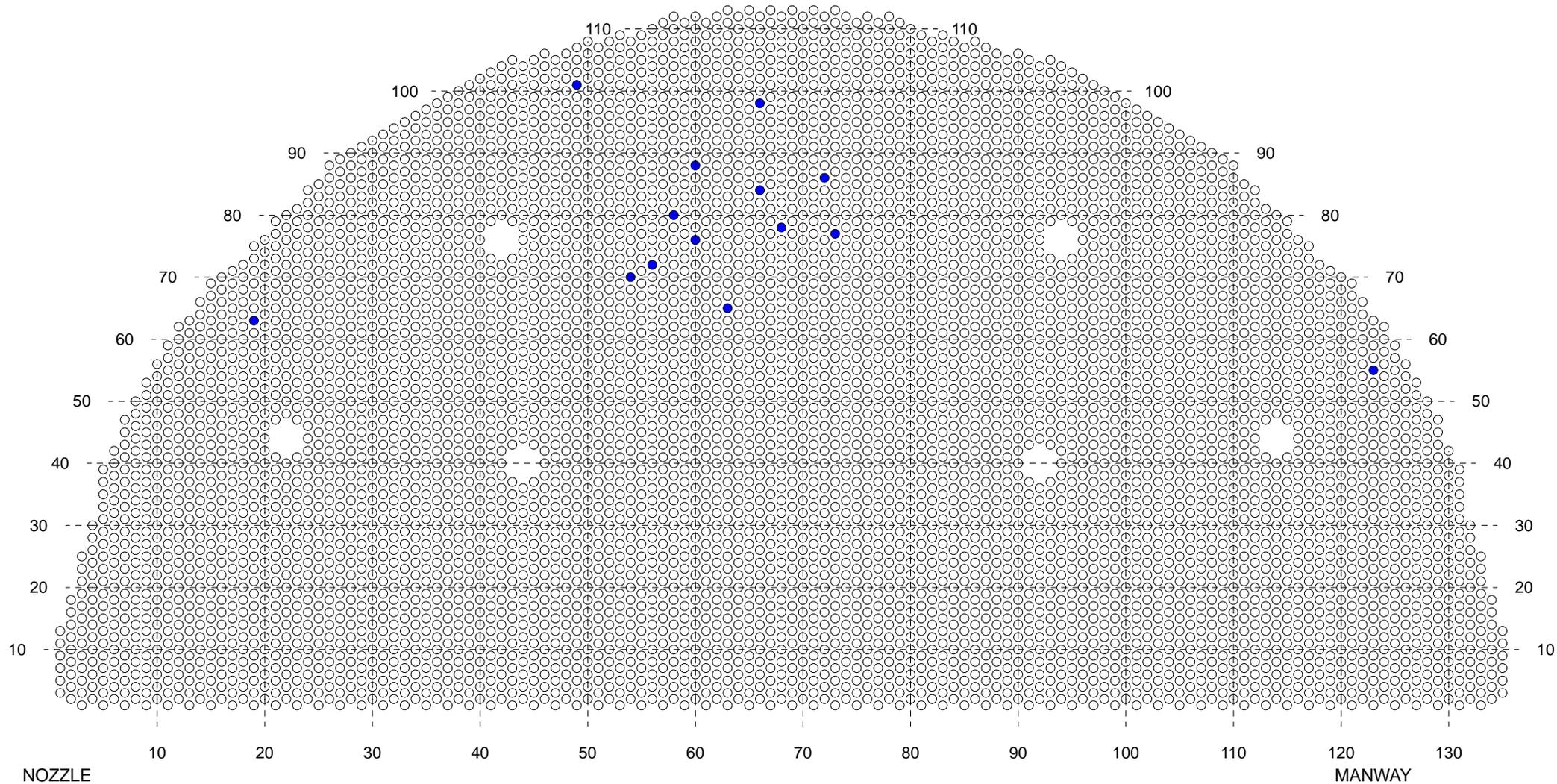
AVB %TWD < 10%

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:54:31 2016
Ameren: S/G D HOT AREVA

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 14
OUT OF SERVICE (#): NA



AVB %TWD < 10%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
55	123	0.14	84	P2	TWD	8	AV3 -0.19	TEC	TEH					38	HOT	610HS	33
63	19	0.09	132	P2	TWD	6	AV3 -0.19	TEC	TEH					9	HOT	610HS	41
65	63	0.10	40	P2	TWD	6	AV4 -0.07	TEC	TEH					17	HOT	610HS	22
70	54	0.13	93	P2	TWD	8	AV4 -0.05	TEC	TEH					14	HOT	610HS	32
72	56	0.14	124	P2	TWD	9	AV3 -0.02	TEC	TEH					14	HOT	610HS	62
		0.09	144	P2	TWD	6	AV2 +0.00	TEC	TEH					14	HOT	610HS	62
76	60	0.13	37	P2	TWD	8	AV6 -0.05	TEC	TEH					14	HOT	610HS	122
77	73	0.09	125	P2	TWD	6	AV4 +0.07	TEC	TEH					27	HOT	610HS	99
78	68	0.12	66	P2	TWD	8	AV6 -0.19	TEC	TEH					26	HOT	610HS	18
		0.09	93	P2	TWD	6	AV5 +0.12	TEC	TEH					26	HOT	610HS	18
		0.10	130	P2	TWD	6	AV4 -0.07	TEC	TEH					26	HOT	610HS	18
80	58	0.14	133	P2	TWD	9	AV6 +0.00	TEC	TEH					15	HOT	610HS	92
84	66	0.10	145	P2	TWD	6	AV3 +0.07	TEC	TEH					17	HOT	610HS	74
86	72	0.13	56	P2	TWD	8	AV5 -0.17	TEC	TEH					26	HOT	610HS	80
88	60	0.14	110	P2	TWD	8	AV5 -0.02	TEC	TEH					14	HOT	610HS	119
98	66	0.11	51	P2	TWD	7	AV6 +0.12	TEC	TEH					16	HOT	610HS	70
		0.10	88	P2	TWD	6	AV2 -0.14	TEC	TEH					16	HOT	610HS	70
101	49	0.11	146	P2	TWD	7	AV5 -0.30	TEC	TEH					13	HOT	610HS	117

Total Tubes : 14
 Total Records: 18

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD < 10%

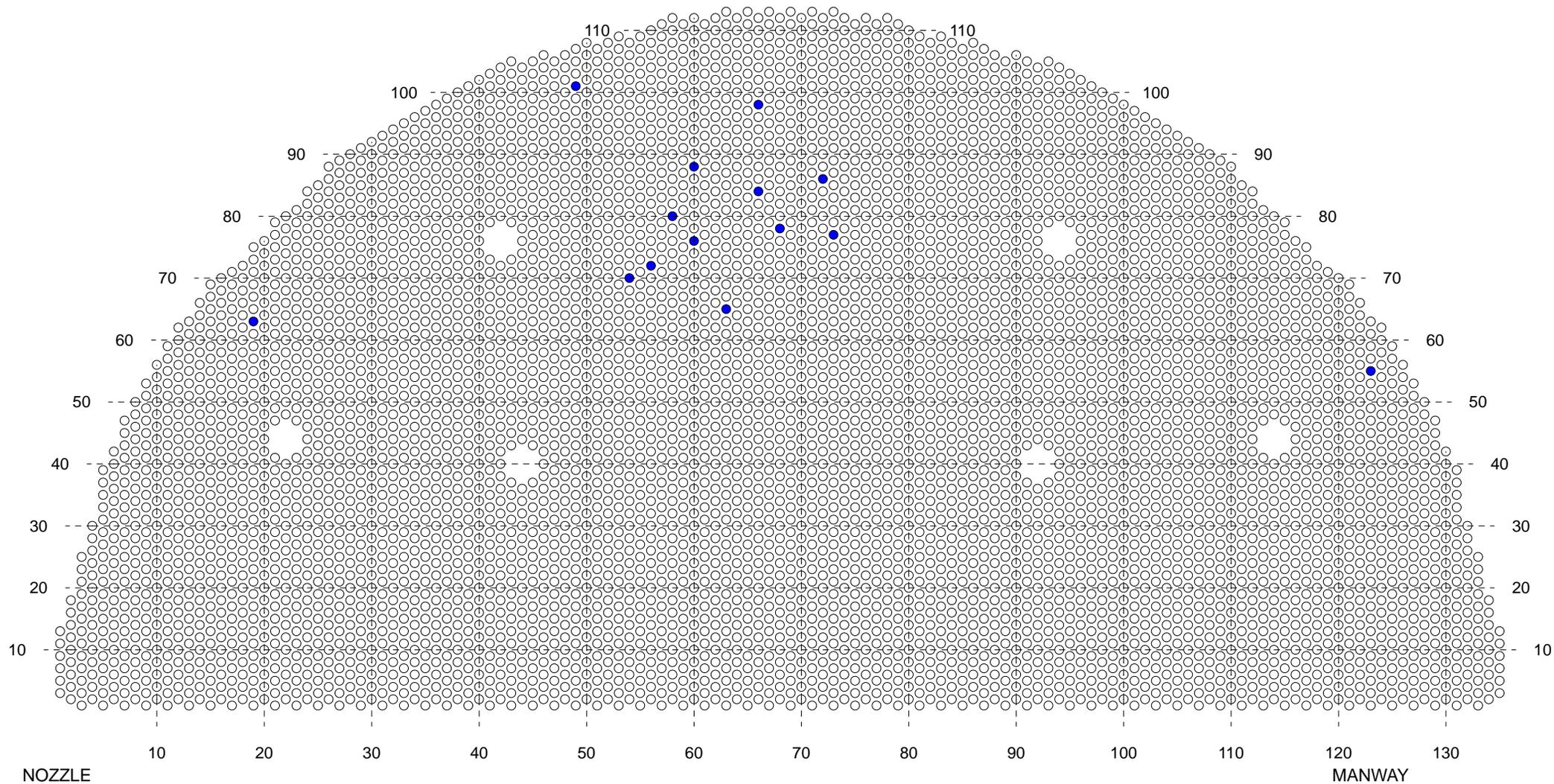
GROUP
A QueryM1[1] TUBES
14

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:54:31 2016
Ameren: S/G D HOT AREVA

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 14
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 10-19%

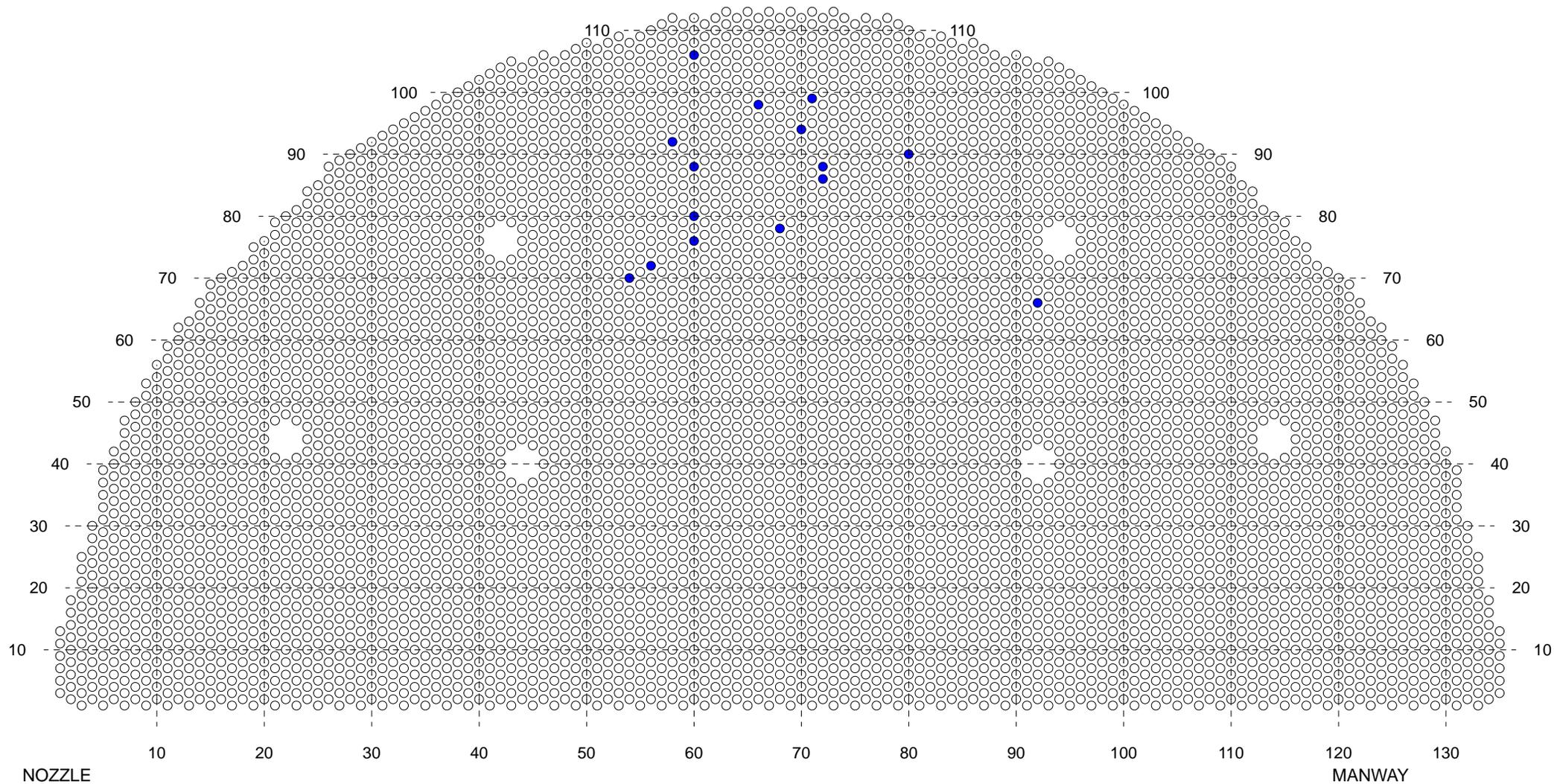
GROUP
A QueryM1[1] TUBES
15

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:57:50 2016
Ameren: S/G D HOT AREVA

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 15
OUT OF SERVICE (#): NA



AVB %TWD 10-19%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
66	92	0.25	128	P2	TWD	13	AV4 -0.02	TEC	TEH					33	HOT	610HS	132
		0.24	145	P2	TWD	13	AV3 -0.05	TEC	TEH					33	HOT	610HS	132
70	54	0.42	112	P2	TWD	19	AV5 -0.05	TEC	TEH					14	HOT	610HS	32
72	56	0.25	121	P2	TWD	13	AV5 +0.00	TEC	TEH					14	HOT	610HS	62
76	60	0.21	123	P2	TWD	12	AV3 -0.07	TEC	TEH					14	HOT	610HS	122
78	68	0.18	135	P2	TWD	10	AV3 -0.07	TEC	TEH					26	HOT	610HS	18
80	60	0.22	100	P2	TWD	12	AV4 -0.02	TEC	TEH					14	HOT	610HS	121
		0.20	102	P2	TWD	11	AV3 -0.02	TEC	TEH					14	HOT	610HS	121
86	72	0.18	83	P2	TWD	10	AV4 -0.05	TEC	TEH					26	HOT	610HS	80
88	60	0.26	89	P2	TWD	14	AV4 -0.07	TEC	TEH					14	HOT	610HS	119
88	72	0.35	122	P2	TWD	17	AV5 -0.02	TEC	TEH					27	HOT	610HS	83
		0.31	113	P2	TWD	15	AV4 -0.05	TEC	TEH					27	HOT	610HS	83
90	80	0.30	98	P2	TWD	15	AV5 -0.05	TEC	TEH					32	HOT	610HS	29
92	58	0.29	138	P2	TWD	15	AV3 -0.07	TEC	TEH					15	HOT	610HS	89
94	70	0.23	137	P2	TWD	13	AV2 -0.05	TEC	TEH					26	HOT	610HS	46
98	66	0.19	98	P2	TWD	11	AV5 -0.02	TEC	TEH					16	HOT	610HS	70
99	71	0.17	76	P2	TWD	10	AV3 -0.05	TEC	TEH					26	HOT	610HS	71
106	60	0.30	132	P2	TWD	15	AV2 +0.00	TEC	TEH					14	HOT	610HS	114

Total Tubes : 15
 Total Records: 18

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 10-19%

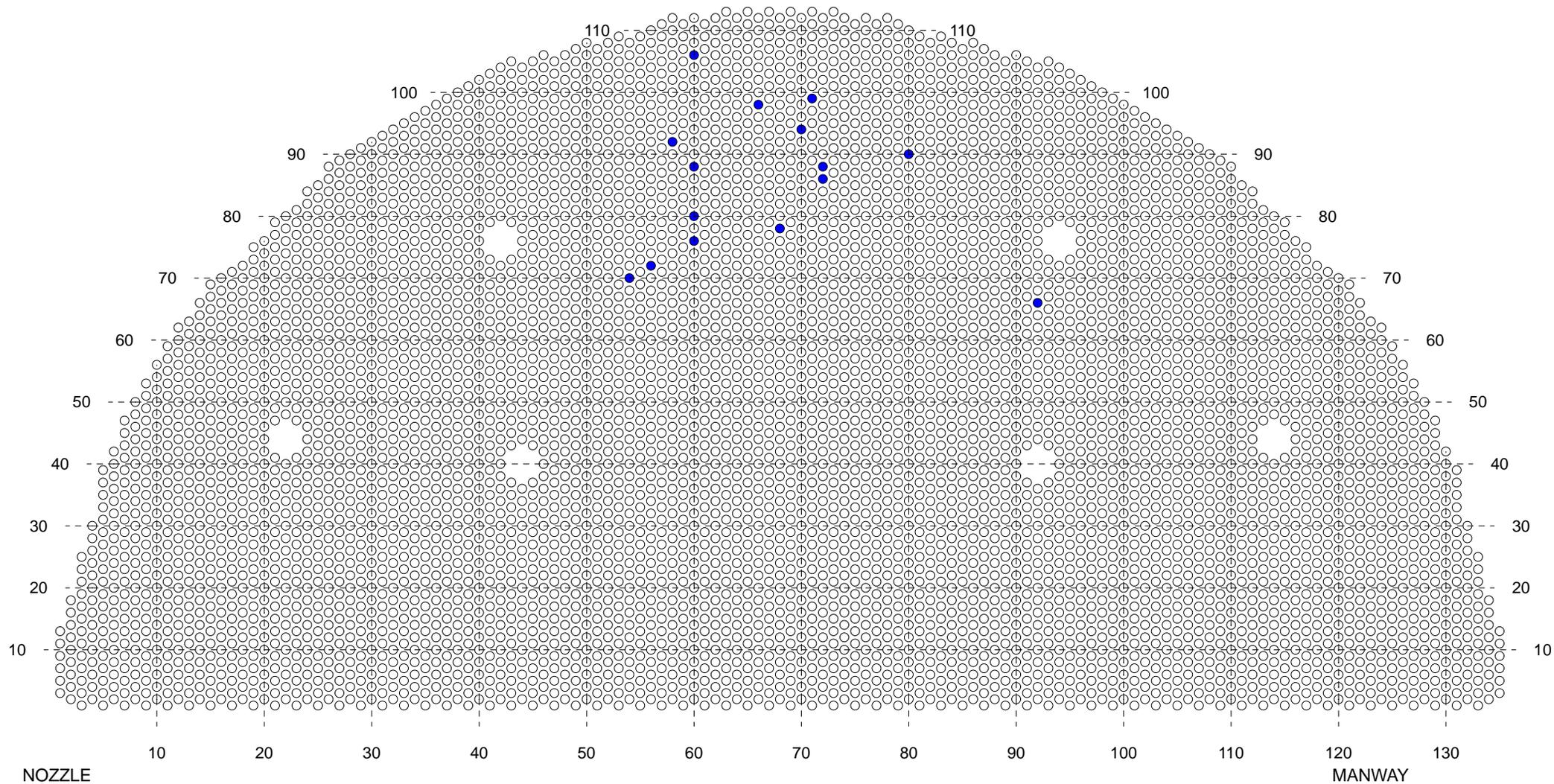
GROUP
A QueryM1[1] TUBES
15

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:57:50 2016
Ameren: S/G D HOT AREVA

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 15
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 20-29%

GROUP **A QueryM1[1]** TUBES **5**

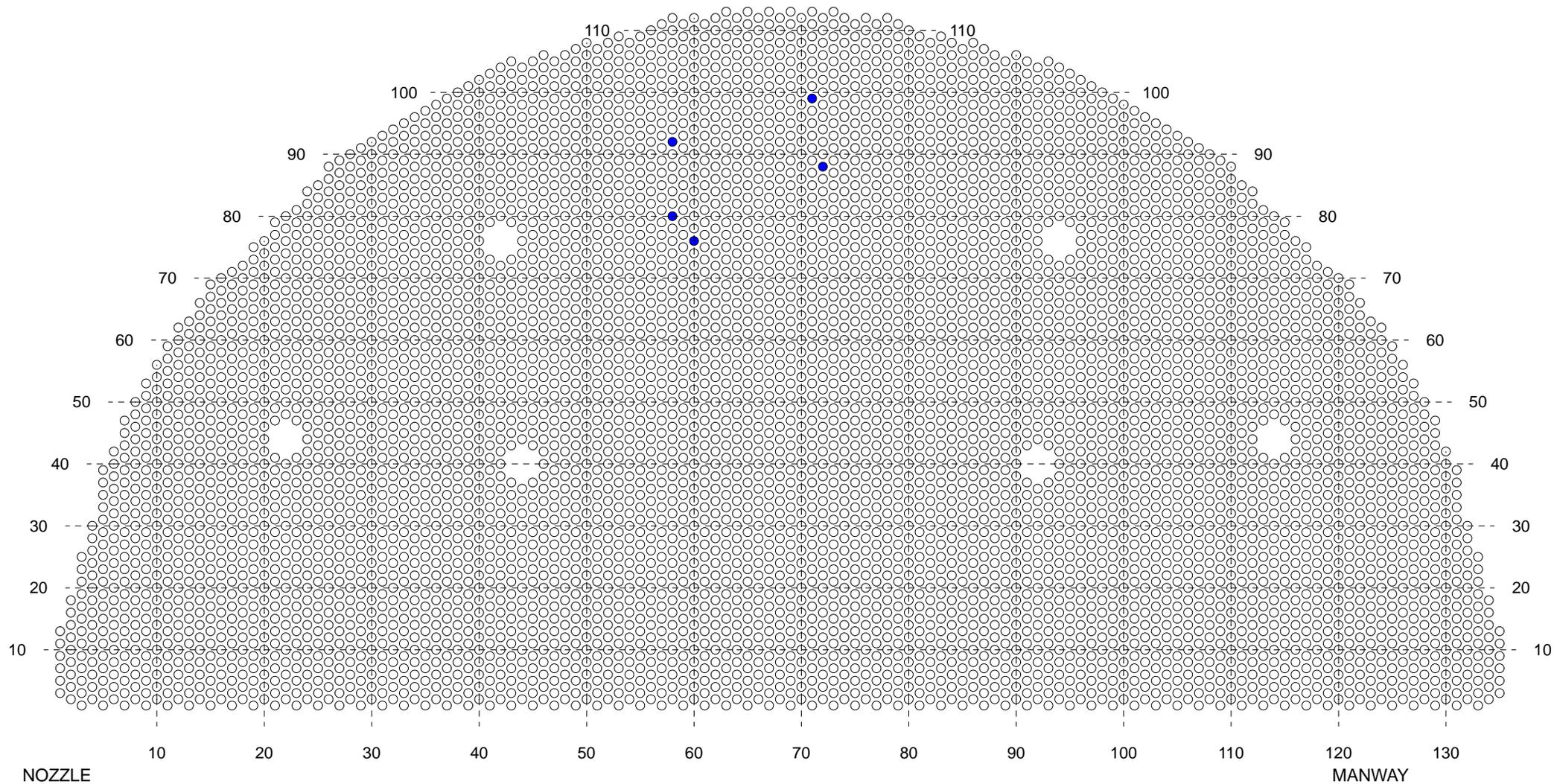
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:59:47 2016

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 5
OUT OF SERVICE (#): NA

Ameren: S/G D HOT AREVA



AVB %TWD 20-29%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
76	60	0.88	114	P2	TWD	28	AV5 -0.05	TEC	TEH					14		HOT	610HS	122
		0.50	116	P2	TWD	21	AV4 -0.02	TEC	TEH					14		HOT	610HS	122
80	58	0.93	122	P2	TWD	29	AV2 +0.00	TEC	TEH					15		HOT	610HS	92
88	72	0.52	113	P2	TWD	21	AV6 -0.02	TEC	TEH					27		HOT	610HS	83
92	58	0.48	136	P2	TWD	21	AV5 -0.05	TEC	TEH					15		HOT	610HS	89
99	71	0.57	122	P2	TWD	23	AV2 -0.07	TEC	TEH					26		HOT	610HS	71

Total Tubes : 5
Total Records: 6

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 20-29%

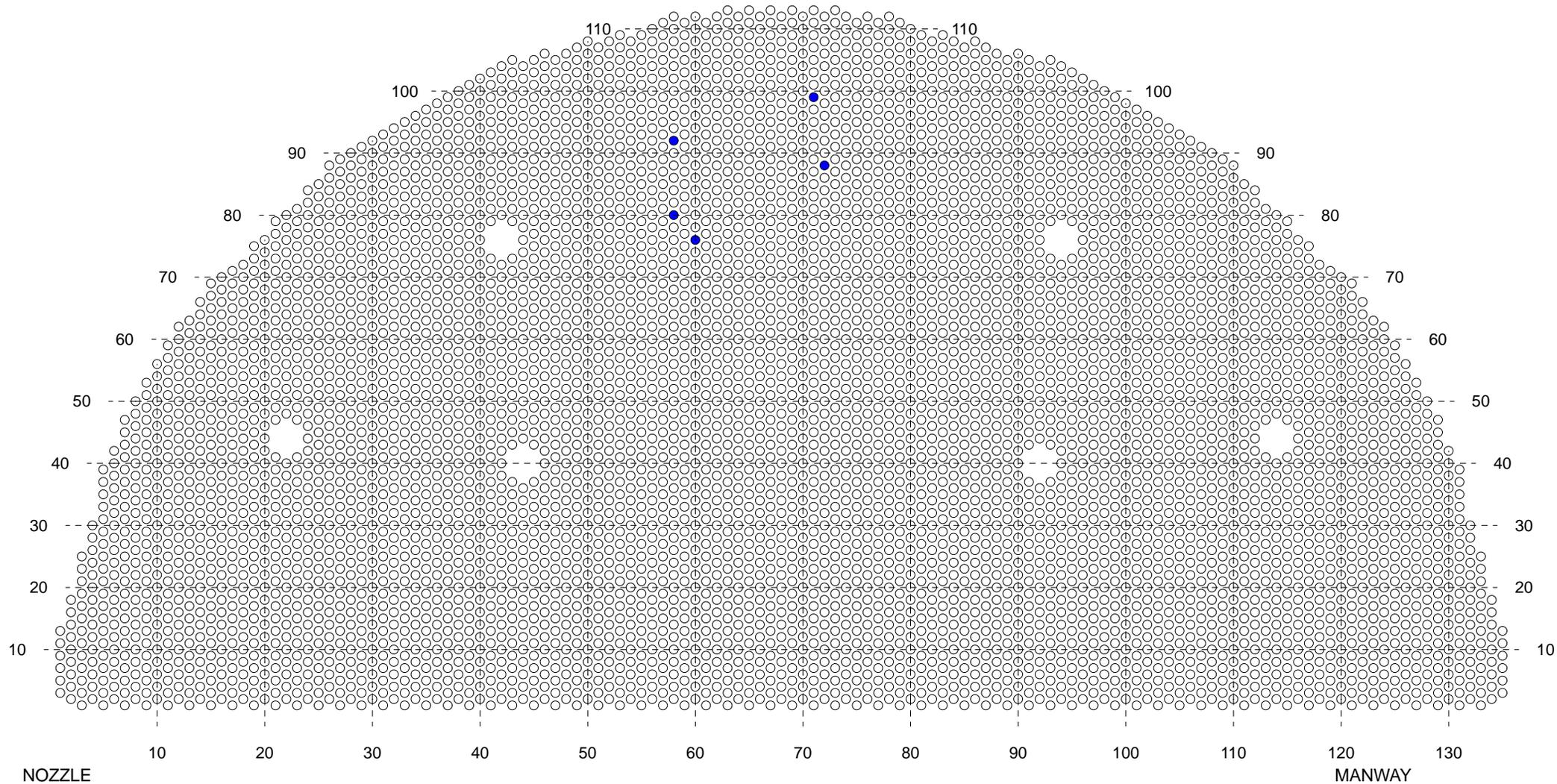
GROUP: A QueryM1[1]
TUBES: 5

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:59:47 2016
Ameren: S/G D HOT AREVA

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 5
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 30-39%

GROUP
A QueryM1[1] TUBES
2

AREVA - FDMS map module Version 11.0

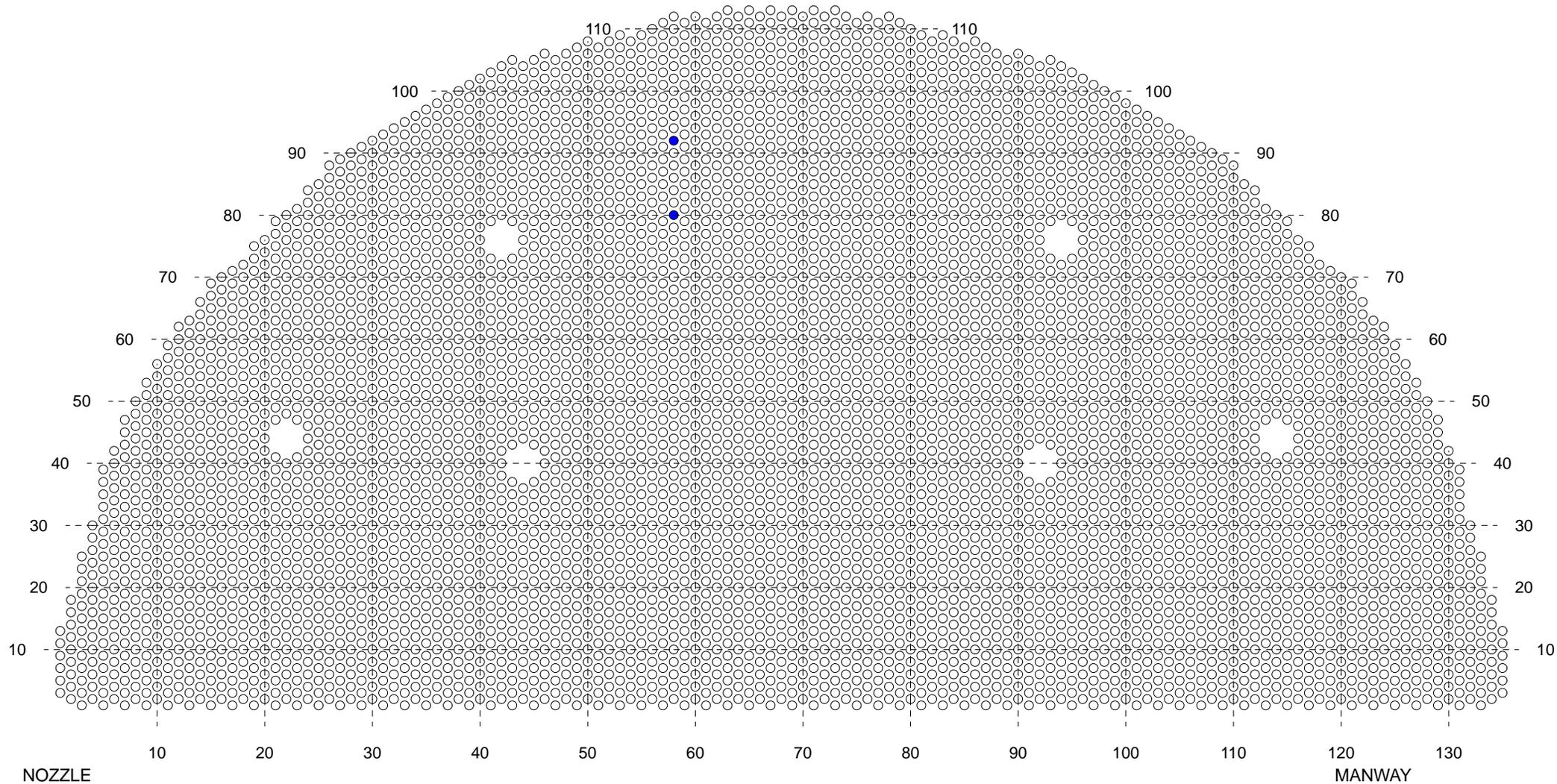
SCALE: 0.084494 X
Tue Apr 19 04:01:48 2016

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 2
OUT OF SERVICE (#): NA

Ameren: S/G D HOT

AREVA



AVB %TWD 30-39%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
80	58	1.71	119	P2	TWD	36	AV5 -0.02	TEC	TEH					15		HOT	610HS	92
		1.59	123	P2	TWD	35	AV4 -0.02	TEC	TEH					15		HOT	610HS	92
		2.02	117	P2	TWD	38	AV3 +0.00	TEC	TEH					15		HOT	610HS	92
92	58	1.05	127	P2	TWD	30	AV4 -0.02	TEC	TEH					15		HOT	610HS	89

Total Tubes : 2

Total Records: 4

Ameren - Callaway Unit 1 4/16 - 1R21

AVB %TWD 30-39%

GROUP
A QueryM1[1] TUBES
2

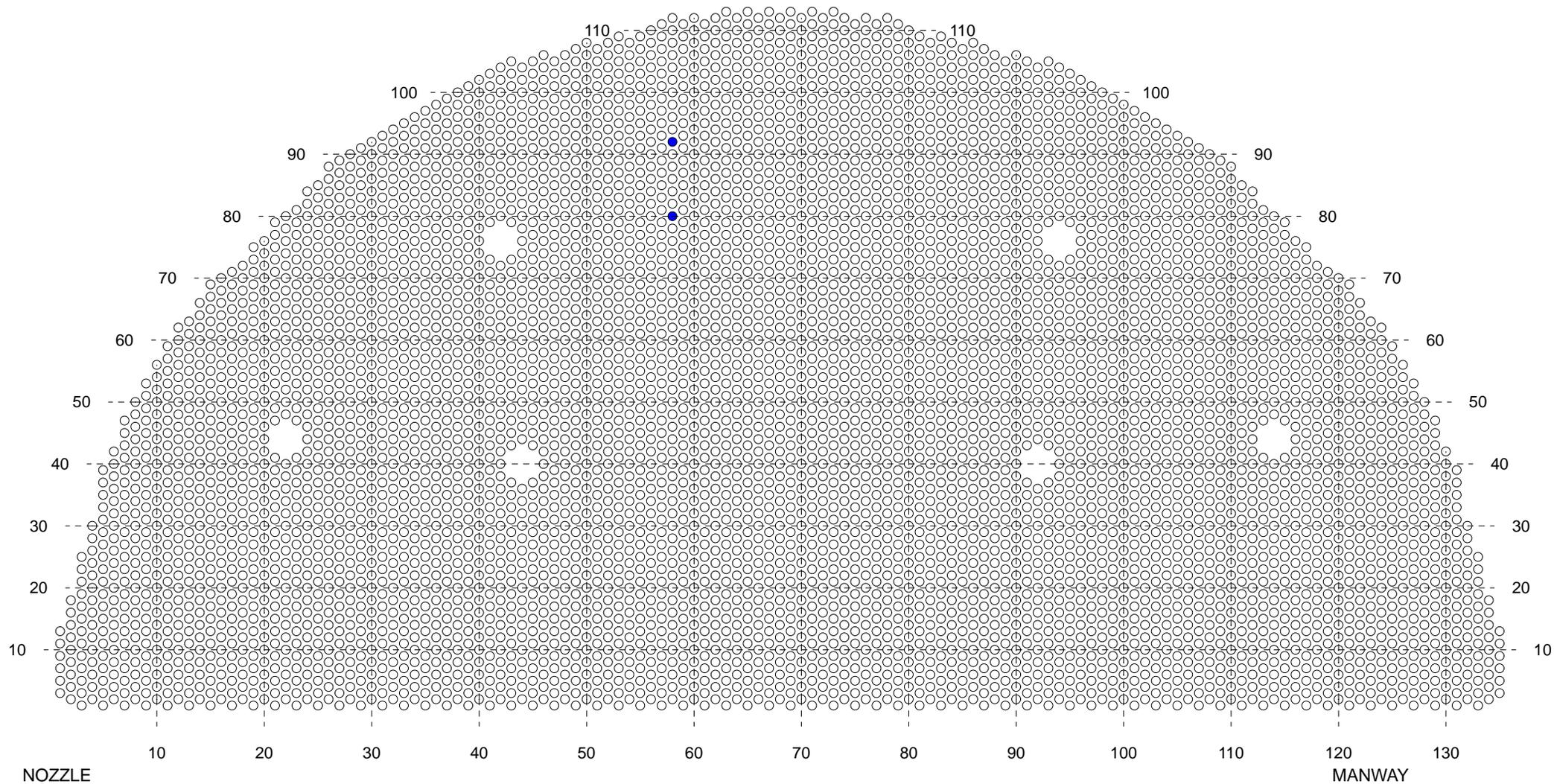
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 04:01:48 2016

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 2
OUT OF SERVICE (#): NA

Ameren: S/G D HOT AREVA



AVB %TWD 40-100%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	==	==	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD < 10%

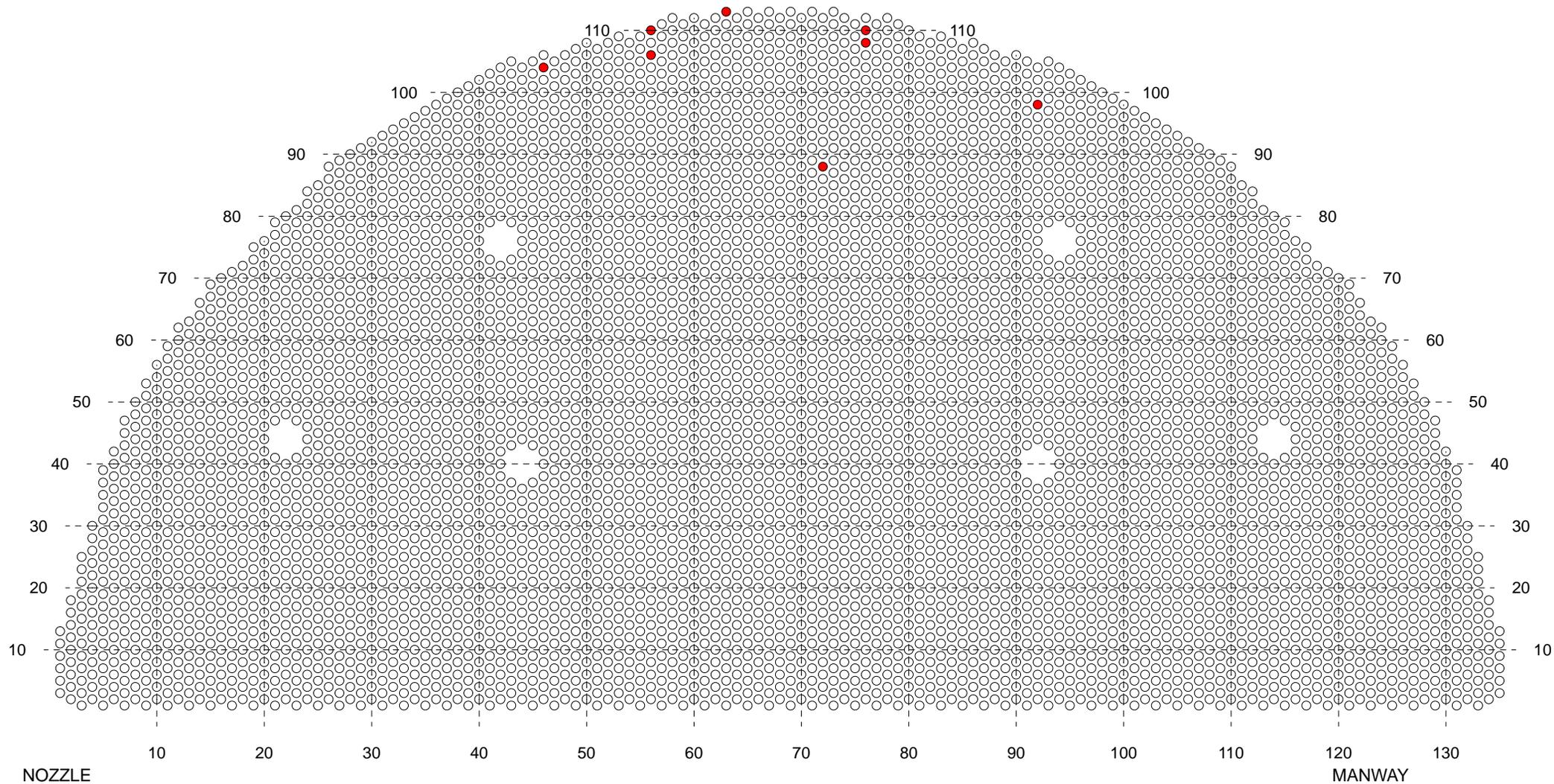
GROUP
A QueryM1[1] TUBES
8

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:28:34 2016
Ameren: S/G D HOT AREVA

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 8
OUT OF SERVICE (#): NA



TSP %TWD < 10%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL #	LEG	PROBE	INDEX
88	72	0.22	261	P4	TWD	7	08C -0.80	08C	08C	WAR		2_Land	8	COLD	610PP	8	
		0.24	97	P4	TWD	8	08C +0.27	08C	08C	WAR		2_Land	8	COLD	610PP	8	
98	92	0.19	99	P4	TWD	5	04H +0.43	04H	04H	WAR		2_Land	63	HOT	610PP	18	
		0.11	296	P4	TWD	3	04H -0.59	04H	04H	WAR		2_Land	63	HOT	610PP	18	
104	46	0.20	283	P4	TWD	6	04H -0.69	04H	04H	WAR		2_Land	63	HOT	610PP	13	
		0.17	286	P4	TWD	5	04H -0.69	04H	04H	WAR		2_Land	63	HOT	610PP	13	
106	56	0.13	256	P4	TWD	4	06H -0.83	06H	06H	WAR		2_Land	63	HOT	610PP	14	
		0.08	105	P4	TWD	2	06H +0.32	06H	06H	WAR		2_Land	63	HOT	610PP	14	
108	76	0.28	287	P4	TWD	8	06H +0.37	06H	06H	WAR		1_Land	63	HOT	610PP	17	
110	56	0.15	102	P4	TWD	4	04H -0.67	04H	04H	WAR		2_Land	63	HOT	610PP	15	
		0.15	106	P4	TWD	4	04H -0.67	04H	04H	WAR		2_Land	63	HOT	610PP	15	
110	76	0.14	101	P4	TWD	4	04C +0.35	04C	04C	WAR		1_Land	8	COLD	610PP	9	
113	63	0.27	281	P4	TWD	8	04H +0.48	04H	04H	WAR		3_Land	63	HOT	610PP	16	
		0.16	123	P4	TWD	4	04H -0.59	04H	04H	WAR		3_Land	63	HOT	610PP	16	
		0.11	128	P4	TWD	3	04H -0.59	04H	04H	WAR		3_Land	63	HOT	610PP	16	

Total Tubes : 8
 Total Records: 15

Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD < 10%

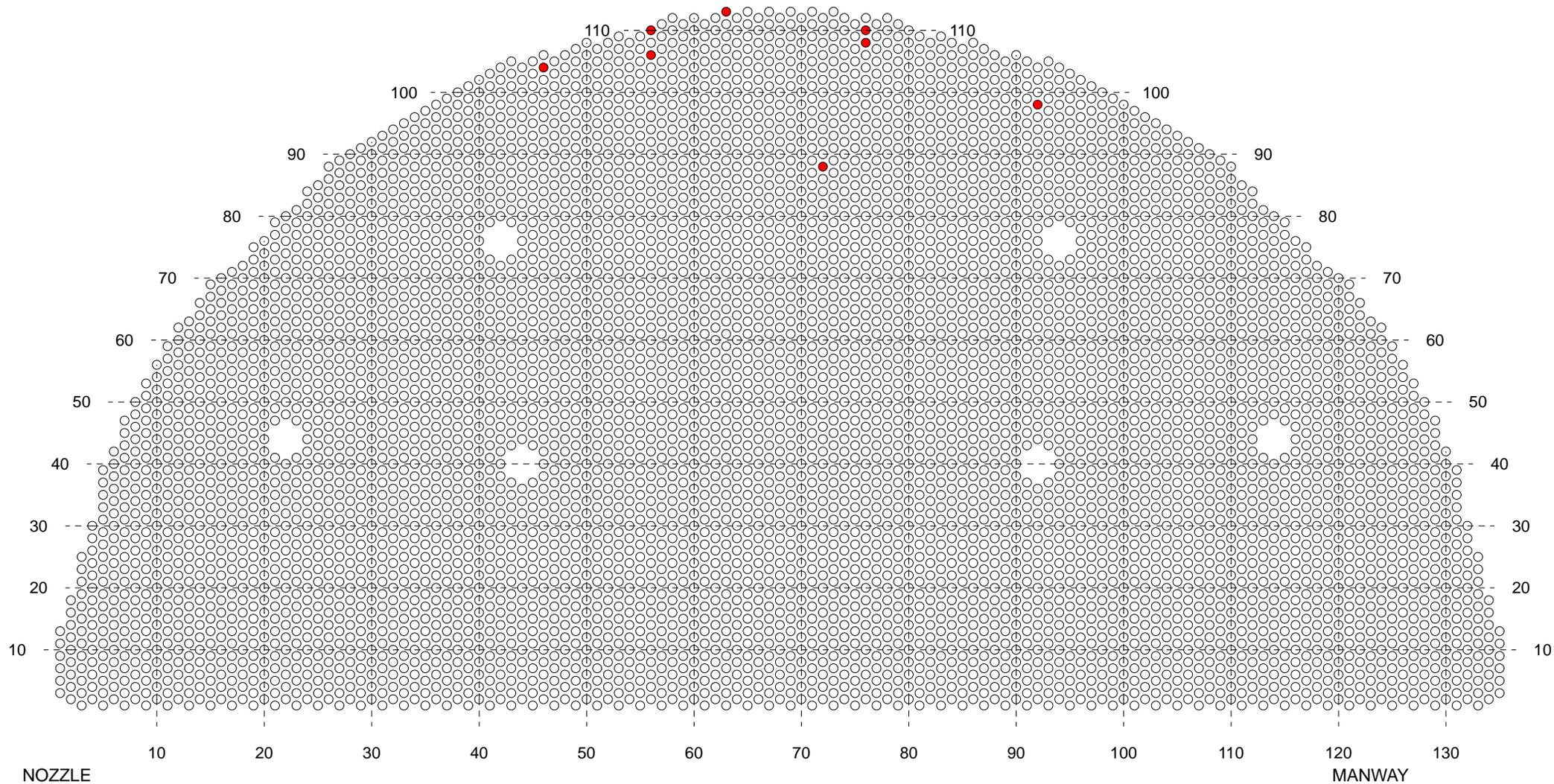
GROUP
A QueryM1[1] TUBES
8

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:28:34 2016
Ameren: S/G D HOT AREVA

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 8
OUT OF SERVICE (#): NA



Ameren - Callaway Unit 1 4/16 - 1R21

TSP %TWD 10-19%

GROUP **A QueryM1[1]** TUBES **1**

AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X

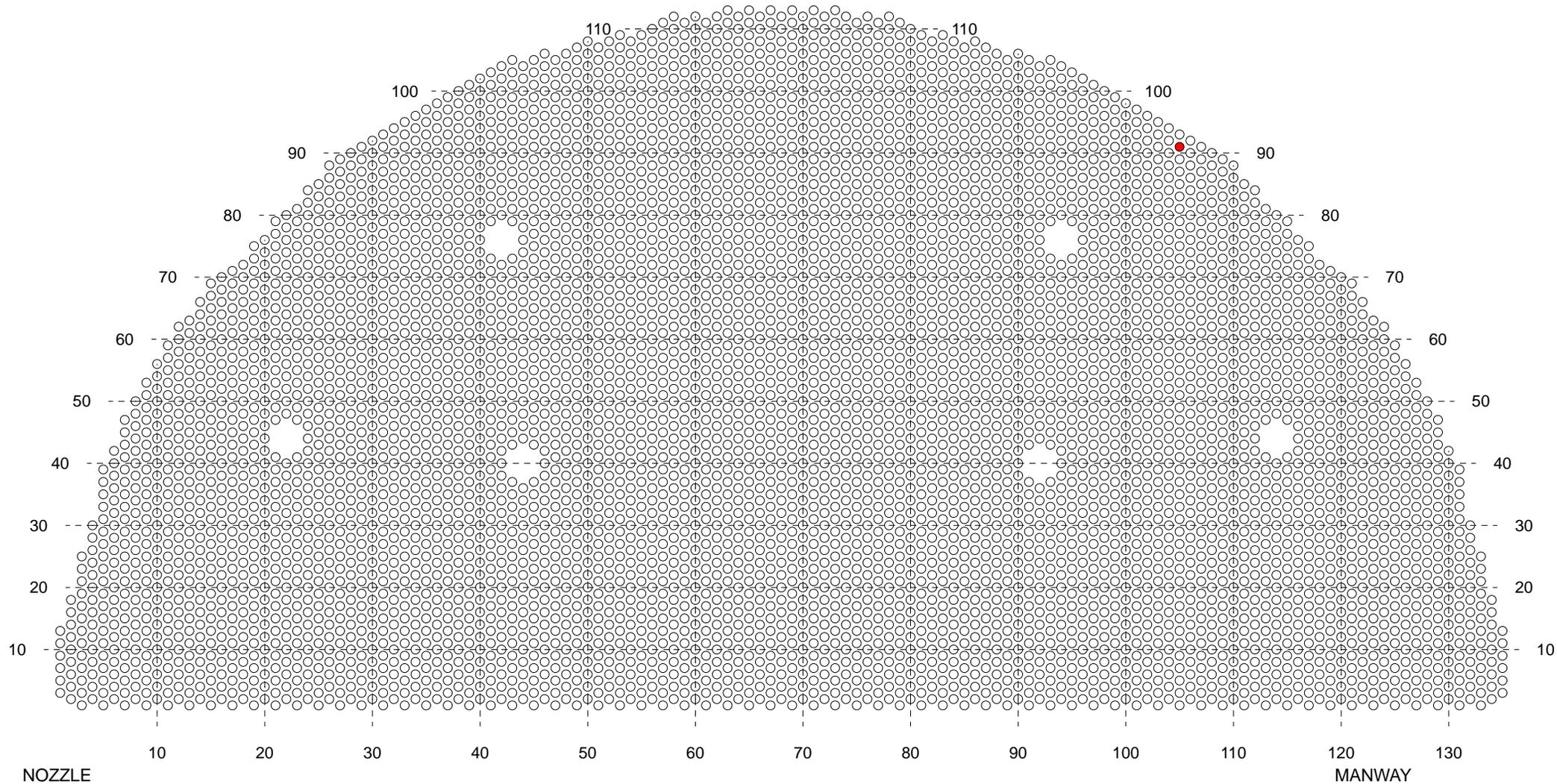
Tue Apr 19 03:31:02 2016

Ameren: S/G D HOT

AREVA

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 1
OUT OF SERVICE (#): NA



TSP %TWD 10-19%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
91	105	0.35	99	P4	TWD	11	06H +0.35	06H	06H	WAR		1_Land		63		HOT	610PP	19

Total Tubes : 1
Total Records: 1

Ameren - Callaway Unit 1

4/16 - 1R21

TSP %TWD 10-19%

GROUP **A QueryM1[1]** TUBES **1**

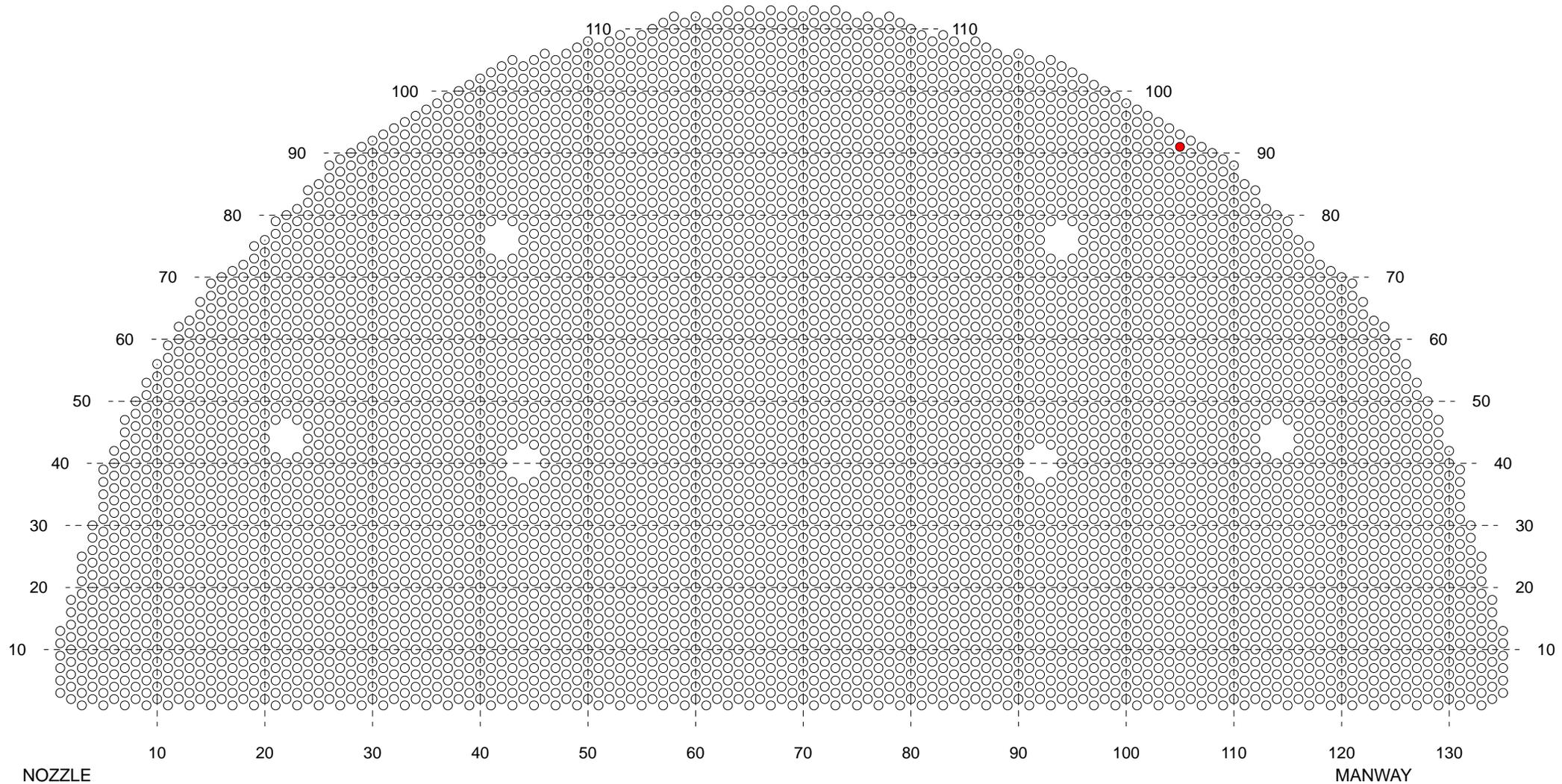
AREVA - FDMS map module Version 11.0

SCALE: 0.084494 X
Tue Apr 19 03:31:02 2016

S/G D
HOT
PRIMARY FACE

TOTAL TUBES: 5872
SELECTED TUBES: 1
OUT OF SERVICE (#): NA

Ameren: S/G D HOT AREVA



TSP %TWD 20-29%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	===	====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

TSP %TWD 30-39%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
====	====	=====	===	===	===	===	=====	===	====	=====	=====	=====	=====	=====	=====	=====	=====	=====

Total Tubes : 0
Total Records: 0

TSP %TWD 40-100%

QUERY: QueryM1[1] .qry

ROW	COL	VOLTS	DEG	CHN	IND	%TW	LOCATION	EXT	EXT	UTIL	1	UTIL	2	CAL	#	LEG	PROBE	INDEX
-----	-----	-------	-----	-----	-----	-----	----------	-----	-----	------	---	------	---	-----	---	-----	-------	-------

Total Tubes : 0
Total Records: 0