



Byron Generating Station

4450 North German Church Rd
Byron, IL 61010-9794

www.exeloncorp.com

February 5, 2016

LTR: BYRON 2016-0011
File: 1.10.0101 (1D.101)

United States Nuclear Regulatory Commission
ATTN: Document Control Desk
Washington, DC 20555-0001

Byron Station, Unit 1
Renewed Facility Operating License No. NPF-37
NRC Docket No. STN 50-454

Subject: Byron Station, Unit 1 Steam Generator Tube Inspection Report for
Refueling Outage 20

In accordance with Technical Specification 5.6.9, "Steam Generator (SG) Tube Inspection Report," Exelon Generation Company, LLC is reporting the results of the SG inspections that were completed during Byron Station, Unit 1 Refueling Outage 20 (B1R20).

Should you have any questions concerning this submittal, please contact Mr. Douglas Spitzer, Regulatory Assurance Manager, at (815) 406-2800.

Respectfully,

A handwritten signature in black ink, appearing to read "Mark E. Kanavos".

Mark E. Kanavos
Site Vice President
Byron Generating Station

MEK/AC/sg

Attachment: Byron Station, Unit 1 Steam Generator Tube Inspection Report
Refueling Outage 20, September, 2015

cc: Regional Administrator – NRC Region III
NRC Senior Resident Inspector – Byron Generating Station
Illinois Emergency Management Agency – Division of Nuclear Safety

Exelon Generation Company, LLC

**BYRON STATION UNIT 1
4450 North German Church Road
Byron, Illinois 61010**

COMMERCIAL OPERATION: September 16, 1985

**BYRON STATION UNIT 1
STEAM GENERATOR EDDY CURRENT INSPECTION REPORT**

REFUELING OUTAGE 20

September 2015

**Mailing Address
4300 Winfield Road
Warrenville, IL 60555**

TABLE OF CONTENTS

| | |
|--|-------------|
| Introduction..... | 3 |
| Steam Generator Inspection Scope (TS 5.6.9.a)..... | 3 |
| Degradation Mechanisms Found (TS 5.6.9.b)..... | 4 |
| Nondestructive Examination Techniques Utilized for Each Degradation Mechanism Found During B1R20 (TS 5.6.9.c)..... | 5 |
| Location, Orientation (if linear), and Measured Sizes of Service Induced Indications (TS 5.6.9.d)..... | 5 |
| Plugging Summary (TS 5.6.9.e and TS 5.6.9.f)..... | 7 |
| Results of Condition Monitoring (TS 5.6.9.g)..... | 7 |
| Attachment A – Fan Bar Wear Indications..... | 9-15 |

Introduction

Byron Station Unit 1 operates with four Babcock & Wilcox Replacement Steam Generators (SGs) in the four loop pressurized water reactor system. The SGs each contain 6633 thermally treated Alloy-690 U-tubes that have a nominal diameter of 0.6875 inches and a nominal thickness of 0.040 inches. The tubes are supported by stainless steel lattice grid structures and fan bars. The tubes are hydraulically expanded into the full depth of the tubesheet. Main Feedwater enters the SGs above the tube bundle through a feedring and J-tubes. The replacement SGs were installed during the eighth (8th) refueling outage in 1998.

Technical Specification (TS) 5.5.9.d provides the requirements for SG inspection frequencies and requires periodic SG tube inspections to be performed. TS 5.5.9.d requires that 100% of the Unit 1 tubes are to be inspected at sequential periods of 144, 120, 96, and thereafter 72 Effective Full Power Months (EFPM). The first sequential period shall be considered to begin after the first inservice inspection of the SGs.

The Byron Unit 1 replacement SGs are currently in their twelfth (12th) cycle of operation and are on an 18-month fuel cycle. During Cycles 18, 19, and 20, Byron Unit 1 operated a total of 4.182 Effective Full Power Year (EFPY) since the previous SG inspection during B1R17. The replacement SGs have operated a total of 16.550 EFPY through the end of Cycle 20, which is 42.3 EFPM within the 120 EFPM inspection period.

The B1R20 SG inspections were performed consistent with the Electric Power Research Institute (EPRI) "PWR Steam Generator Examination Guidelines: Revision 7," applicable interim guidance and Nuclear Energy Institute (NEI) 97-06, "Steam Generator Program Guidelines" Revision 3. The field inspection activities were conducted from September 17, 2015 through September 24, 2015 by the Westinghouse Electric Company LLC.

Steam Generator Inspection Scope (TS 5.6.9.a)

Byron Unit 1 Refueling Outage 20 (B1R20) was the third outage and first SG inspection of the 120 EFPM period, the next SG inspection is planned for B1R23, which will be the sixth refuel outage within the 120 EFPM period. The following inspections were performed during B1R20 to ensure that 100% of the tubes were inspected during the period as required by TS 5.5.9.d.

Primary Side Scope:

- 100% full-length bobbin coil eddy current examination of all four SGs.
- All Hot leg Dent & Dings ≥ 2.0 volts, Plus-Point in all four SGs.
- 100% Hot leg/Cold leg Periphery tubes, X-probe (5 tubes deep) from end of the tube to the first lattice grid support in all four SGs.
- Visual Inspection of all existing tube plugs (42 plugs)

Secondary Side Scope:

- Sludge lancing in all four SGs including "post sludge lance" Foreign Object Search and Retrieval (FOSAR)
- Feedring Inspection (1A SG)
- Steam Drum Internal Inspection (1A SG)
- Upper Bundle Inspection (1A SG)

Other SG Inspections:

Visual Inspection of Installed Tube Plugs – All previously installed tube plugs (42) were visually inspected for signs of degradation and leakage. No degradation or anomalies were found.

SG Channel Head Bowl Visual Inspections- Each SG primary channel head was visually examined in accordance with the recommendations of Westinghouse NSAL 12-01 and NRC IN 2013-20 for evidence of breaches in the cladding or divider to channel head weld and for evidence of wastage of the carbon steel channel head. No evidence of cladding or weld breaches or evidence of channel head wastage was identified.

Secondary Side Visual Inspections – Top of Tubesheet (TTS) sludge lancing was performed during B1R20 and visual inspection of the secondary tubesheet was performed following sludge lancing activities in all four SGs. The tube annulus, tube lane, and peripheral tubes (6-8 tubes deep) were visually inspected for foreign material. Additionally, FOSAR of all SGs was performed, which included in bundle eight columns, tube lane, and annulus. A total of three (3) foreign objects were found during inspections. The machine curl in the 1B SG was removed and the remaining two (small bristle and non-metallic object) in the 1C SG were not retrieved. The two foreign objects remaining in the 1C SG were evaluated as being benign, not able to cause tube wear due to the size and location within the tube bundle. No tubes were plugged as a result of foreign objects.

During visual inspections in the 1A SG of the lattice grids at the uppermost (9th) support location for the hot leg and cold leg some deposit accumulation was identified on the hot leg side at the lattice grids and on the tube surfaces. The corresponding cold leg was relatively free of deposit accumulation at the lattice grids and on the tube surfaces, as evidenced by sharply defined lattice grid edges and shiny tube surfaces. No degradation was noted.

During the Feeding inspections in the 1A SG, no anomalous structural conditions or foreign objects were observed. Additionally, no erosion or component degradation was identified.

Steam drum visual inspections were performed in the 1A SG. No evidence of foreign material, degradation or structural distortion was observed in the steam drum. The primary and secondary moisture separators were in good condition.

No repairs were required for the secondary side inspection, and it was concluded that a 3-cycle inspection interval was justified with no adverse consequences for all 4 SGs.

Degradation Mechanisms Found (TS 5.6.9.b)

The Table below provides a summary of all the degradation, by mechanism, identified during the B1R20 inspections (all mechanisms were present during previous inspections). No evidence of any cracking was found.

Summary of B1R20 Degradation Indications by Mechanism

| Degradation Mechanism | 1A SG | 1B SG | 1C SG | 1D SG | Total |
|-----------------------|-------|-------|-------|-------|-------|
| Fan Bar Wear | 24 | 98 | 28 | 53 | 203 |
| Lattice Grid Wear | 6 | 3 | 1 | 4 | 14 |
| Foreign Object Wear | 0 | 0 | 1 | 0 | 1 |

Nondestructive Examination Techniques Utilized for Each Degradation Mechanism Found During B1R20 (TS 5.6.9.c)

Steam Generator eddy current examination techniques used (see Table below) were qualified in accordance with Appendix H or Appendix I of the EPRI PWR SG Examination Guidelines Revision 7. Each examination technique was evaluated to be applicable to the tubing and the degradation mechanisms found in the Byron Station Unit 1 SGs during B1R20.

EPRI APPENDIX H & APPENDIX I TECHNIQUES

| Location | Degradation Mode | Orientation | EPRI ETSS | EPRI ETTS Rev | Probe |
|-------------------------|------------------|-------------|---------------|---------------|---------|
| Fan Bar | Wear | Vol | 96004.3 (D&S) | 13 | Bobbin |
| Lattice Grid | Wear | Vol | 96004.3 (D&S) | 13 | Bobbin |
| Foreign Object/Freespan | Wear | Vol | 96004.3 (D) | 13 | Bobbin |
| | | | 27091.2 (D) | 1 | Bobbin |
| | | | 96910.1 (D&S) | 10 | +Point |
| | | | 21998.1 (S) | 4 | +Point |
| | | | 2790x.1 (S)* | * | +Point |
| | | | 20402.1 (D) | 5 | X-Probe |

* The applicable ETSS are numbered 2790X.1 where X is a value between 1 and 7 with Revisions 1, 2, 1, 2, 2, 1, & 2 respectively. The value is selected to best match the shape of the detected foreign object wear.

(D) = Detection

(S) = Sizing

Location, Orientation (if linear), and Measured Sizes of Service Induced Indications (TS 5.6.9.d)

1. Fan bar Wear – A total of 203 indications of fan bar wear were found in the Steam Generators. The deepest indication measured 20%TW as measured by the EPRI Appendix H qualified bobbin coil examination technique 96004.3 which is consistent with results from previous inspections. No tubes were plugged as a result of fan bar wear. The Table below provides a summary of Fan bar wear degradation. Refer to Attachment A for detailed locations and sizing for all Fan Bar wear indications.

B1R20 Fan Bar Wear Summary

| | 1A SG Indications | 1B SG Indications | 1C SG Indications | 1D SG Indications | Total |
|-----------|-------------------|-------------------|-------------------|-------------------|-------|
| <10% TW | 17 | 77 | 21 | 37 | 152 |
| 10-19% TW | 7 | 20 | 7 | 16 | 50 |
| >= 20% TW | 0 | 1 | 0 | 0 | 1 |
| TOTAL | 24 | 98 | 28 | 53 | 203 |

2. Lattice Grid Wear – Fourteen (14) indications of wear related to the lattice grid supports were reported during the B1R20 outage. The deepest indication measured 9%TW as measured by the EPRI Appendix H qualified bobbin coil examination technique 96004.3. Seven (7) of these indications were newly reported, not present in past history. These indications were inspected with +Point™ to confirm that the morphologies of the indications were consistent with lattice grid wear. The new number of indications is in line with Braidwood Unit-1 SGs, which are of the same design. No tubes were plugged as a result of lattice grid wear. Table below provides a listing of all tubes that contain lattice grid wear.

B1R20 Lattice Grid Wear Indication Listing

| SG | Row | Col | Location | B1R20 Depth (% TW) | Newly Reported or Repeat? |
|----|-----|-----|-----------|--------------------|---------------------------|
| 1A | 46 | 93 | 02C +1.34 | 6 | New |
| 1A | 62 | 103 | 07H +1.2 | 4 | New |
| 1A | 69 | 94 | 07H +1.03 | 7 | New |
| 1A | 82 | 103 | 07H -0.89 | 5 | New |
| 1A | 84 | 93 | 07H +1.14 | 8 | New |
| 1A | 94 | 57 | 07H +1.03 | 9 | New |
| 1B | 11 | 32 | 05H -1.46 | 4 | New* |
| 1B | 43 | 72 | 02H -1.75 | 3 | New** |
| 1B | 118 | 73 | 07H +1.89 | 7 | Repeat |
| 1C | 21 | 142 | 07H -1.55 | 5 | New** |
| 1D | 8 | 1 | 06C -1.33 | 2 | New* |
| 1D | 51 | 8 | 08C -1.18 | 5 | Repeat |
| 1D | 105 | 96 | 07H +1.01 | 4 | New |
| 1D | 117 | 78 | 07H +0.7 | 6 | Repeat |

* Precursor traceable back to 2002

** Precursor traceable back to 2008

3. Foreign Object Wear – A total of 1 indication of secondary side foreign object (FO) wear was identified during B1R20. It has a measured depth of 18%TW using +Point™ Examination Technique Specification Sheet (ETSS) 21998.1 with no part present. No tubes were required to be plugged due to foreign object wear.

B1R20 Foreign Object Wear

| SG | Affected Tube | | TSP Location | | Axial Extent | NDE Depth (%TW) | Circumferential Extent | Comments |
|----|---------------|-----|--------------|------|--------------|-----------------|------------------------|--------------------|
| | Row | Col | | | | | | |
| 1C | 16 | 81 | 03H | 0.73 | 0.11" | 18 | 0.18" | Object Not Present |

The newly identified indication of secondary side FO wear triggered additional +Point™ inspection of the surrounding tubes to make certain that the wear region was adequately bounded. In addition, +Point™ inspections were performed on tubes surrounding all detected secondary side FOs to ensure that no wear had resulted from the objects.

Plugging Summary (TS 5.6.9.e and TS 5.6.9.f)

As a result of the B1R20 SG inspections, performed in accordance with TS 5.5.9.d, the modes of tube degradation found were Fan Bar wear, Lattice Grid wear, and secondary side foreign object (FO) wear. Based on the low severity degradation found in B1R20, no tubes were required to be removed from service.

Note: There are no approved tube repair methods for the Unit 1 SGs. No tube sleeving was performed.

B1R20 Tube Plugging by Degradation Mechanism (TS 5.6.9.e)

| Degradation Mechanism | 1A SG | 1B SG | 1C SG | 1D SG | Total |
|----------------------------|-------|-------|-------|-------|-------|
| Fan Bar Wear | 0 | 0 | 0 | 0 | 0 |
| Lattice Grid Wear | 0 | 0 | 0 | 0 | 0 |
| Foreign Object Wear | 0 | 0 | 0 | 0 | 0 |
| Preventative | 0 | 0 | 0 | 0 | 0 |
| Total Plugged during B1R20 | 0 | 0 | 0 | 0 | 0 |

Tube Plugging to Date (Number and Percentage per SG) (TS 5.6.9.f)

| | 1A SG | 1B SG | 1C SG | 1D SG | Total |
|-------------------------------------|--------|--------|-------|--------|-------|
| Total Plugged during B1R20 | 0 | 0 | 0 | 0 | 0 |
| Total Stabilized during B1R20 | 0 | 0 | 0 | 0 | 0 |
| Total Plugged through B1R20 | 1 | 1 | 14 | 5 | 21 |
| Total Percent Plugged through B1R20 | 0.015% | 0.015% | 0.21% | 0.075% | 0.08% |

Results of Condition Monitoring (TS 5.6.9.g)

A condition monitoring assessment was performed for each inservice degradation mechanism found during the B1R20 SG inspection. The condition monitoring assessment was performed in accordance with TS 5.5.9.a and NEI 97-06 Rev. 3 using the EPRI Steam Generator Integrity Assessment Guidelines, Revision 3. For each

identified degradation mechanism, the as-found condition was compared to the appropriate performance criteria for tube structural integrity, accident induced leakage, and operational leakage as defined in TS 5.5.9.b. For each degradation mechanism a tube structural limit was determined to ensure that SG tube integrity would be maintained over the full range of normal operating conditions, all anticipated transients in the design specifications, and design basis accidents. This includes retaining a safety factor of 3.0 against burst under normal steady state full power operation primary to secondary pressure differential and a safety factor of 1.4 against burst under the limiting design basis accident pressure differential. The structural limits for wear related degradation were performed in accordance with the EPRI Steam Generator Integrity Assessment Guidelines and the EPRI Steam Generator Degradation Specific Management Flaw Handbook, Revision 1 (Flaw Handbook).

The as-found condition of each degradation mechanism found during the B1R20 outage was shown to meet the appropriate limiting structural integrity performance parameter with a probability of survival of 0.95 at 50% confidence, including consideration of relevant uncertainties thus satisfying the condition monitoring requirements. The NDE measured flaw depths are compared to the structural integrity condition monitoring (CM) limits, which account for tube material strength, burst relation, and NDE measurement uncertainties with a 0.95 probability at 50% confidence. Therefore, the NDE measured flaw sizes are directly compared to the CM limit. No indications met the requirements for proof or leakage testing; therefore, no In Situ Pressure tests were performed during B1R20. In addition, no tube pulls were performed during B1R20.

Byron Station Unit 1 did not observe any SG primary to secondary operational leakage over the last 3 operating cycles preceding the inspection. This is based on chemistry sampling taken from the Steam Jet Air Ejector, liquid SG blowdown sample locations, and no potential sources of tube leakage found during SG tube inspections.

The sections below provide a summary of the condition monitoring assessment for each degradation mechanism found during B1R20.

Fan Bar Wear- The largest Fan Bar wear indication found during the B1R20 inspection was 20% TW as measured by the EPRI Appendix H qualified technique 96004.3, Rev. 13. This is well below the Fan Bar wear structural limit and CM limit curves. No tubes were required to be plugged.

Lattice Grid Wear- The largest Lattice Grid wear indication found during the B1R20 inspection was 9% TW, as measured by the EPRI Appendix H qualified technique 96004.3, Rev. 13. This is well below the Lattice Grid wear structural limit and CM limit curves. No tubes were required to be plugged.

Foreign Object Wear - The largest foreign object wear indication found during the B1R20 inspection was 18% TW with axial length of 0.11 inches as measured by the EPRI Appendix H qualified technique 21998.1, Revision 4. This is well below the Foreign Object wear structural limit and CM limit curves. No tubes were required to be plugged.

ATTACHMENT A

Fan Bar Wear Indications

SG - A List of Fan Bar Wear

Byron 1 B1R20

CAE 20150901

09/22/2015 16:37:20

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX |
|-----|-----|-------|-----|-----|-----|-----|------|-------|-------|------|------|------|-------|-----|---|-----|
| 78 | 51 | .60 | | PCT | 13 | P2 | F05 | 1.02 | | TEC | TEH | .560 | CBAFR | 49 | H | 38 |
| 66 | 55 | .30 | | PCT | 6 | P2 | F05 | -.72 | | TEC | TEH | .560 | CBAFR | 43 | H | 190 |
| 70 | 55 | .23 | | PCT | 5 | P2 | F03 | 1.08 | | TEC | TEH | .560 | CBAFR | 43 | H | 188 |
| 53 | 58 | .28 | 0 | PCT | 6 | P2 | F06 | .46 | | TEC | TEH | .560 | CBAFR | 45 | H | 143 |
| 75 | 58 | .47 | 0 | PCT | 9 | P2 | F05 | -.48 | | TEC | TEH | .560 | CBAFR | 45 | H | 154 |
| 86 | 59 | .12 | | PCT | 3 | P2 | F04 | 1.40 | | TEC | TEH | .560 | CBAFR | 43 | H | 97 |
| 73 | 62 | .23 | 0 | PCT | 5 | P2 | F05 | -.74 | | TEC | TEH | .560 | CBAFR | 45 | H | 69 |
| 72 | 63 | .16 | | PCT | 4 | P2 | F05 | -1.43 | | TEC | TEH | .560 | CBAFR | 43 | H | 20 |
| 100 | 63 | .28 | | PCT | 6 | P2 | F05 | -1.63 | | TEC | TEH | .560 | CBAFR | 43 | H | 5 |
| 112 | 63 | .55 | | PCT | 11 | P2 | F04 | .68 | | TEC | TEH | .560 | CBAFR | 39 | H | 161 |
| 64 | 65 | .52 | 0 | PCT | 10 | P2 | F06 | .52 | | TEC | TEH | .560 | CBAFR | 45 | H | 35 |
| 80 | 67 | .25 | | PCT | 6 | P2 | F06 | -1.34 | | TEC | TEH | .560 | CBAFR | 39 | H | 52 |
| 84 | 69 | .20 | 0 | PCT | 6 | P2 | F06 | -.66 | | TEC | TEH | .560 | CBAFR | 41 | H | 51 |
| 88 | 69 | .28 | 0 | PCT | 8 | P2 | F06 | -.72 | | TEC | TEH | .560 | CBAFR | 41 | H | 53 |
| 96 | 69 | .55 | 0 | PCT | 12 | P2 | F05 | -1.68 | | TEC | TEH | .560 | CBAFR | 41 | H | 57 |
| 96 | 69 | .58 | 0 | PCT | 13 | P2 | F06 | -.61 | | TEC | TEH | .560 | CBAFR | 41 | H | 57 |
| 89 | 70 | .17 | 0 | PCT | 5 | P2 | F09 | -.64 | | TEC | TEH | .560 | CBAFR | 41 | H | 83 |
| 86 | 71 | .32 | | PCT | 8 | P2 | F05 | -1.68 | | TEC | TEH | .560 | CBAFR | 39 | H | 24 |
| 86 | 71 | .36 | | PCT | 8 | P2 | F05 | -.58 | | TEC | TEH | .560 | CBAFR | 39 | H | 24 |
| 86 | 71 | 1.02 | | PCT | 18 | P2 | F06 | .86 | | TEC | TEH | .560 | CBAFR | 39 | H | 24 |
| 114 | 71 | .27 | | PCT | 6 | P2 | F05 | -1.84 | | TEC | TEH | .560 | CBAFR | 39 | H | 10 |
| 115 | 78 | .62 | 0 | PCT | 9 | P2 | F05 | 1.61 | | TEC | TEH | .560 | CBAFR | 37 | H | 24 |
| 113 | 80 | .43 | | PCT | 10 | P2 | F05 | -1.25 | | TEC | TEH | .560 | CBAFR | 35 | H | 9 |
| 60 | 93 | .26 | 0 | PCT | 6 | P2 | F06 | -1.46 | | TEC | TEH | .560 | CBAFR | 17 | H | 75 |

ATTACHMENT A

SG - B List of Fan Bar Wear

Byron 1 B1R20

CAE 20150901

09/22/2015 16:37:20

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | EMDT | PDIA | PTYPE | CAL | L | IDX |
|-----|-----|-------|-----|-----|-----|-----|------|-------|-------|------|------|------|-------|-----|---|-----|
| 79 | 52 | .28 | 0 | PCT | 6 | P2 | F05 | .82 | | TEC | TEH | .560 | CBAFR | 37 | H | 125 |
| 102 | 53 | .28 | 0 | PCT | 6 | P2 | F04 | .47 | | TEC | TEH | .560 | CBAFR | 37 | H | 194 |
| 102 | 53 | .36 | 0 | PCT | 8 | P2 | F05 | -1.78 | | TEC | TEH | .560 | CBAFR | 37 | H | 194 |
| 102 | 53 | .42 | 0 | PCT | 9 | P2 | F05 | 1.66 | | TEC | TEH | .560 | CBAFR | 37 | H | 194 |
| 102 | 53 | .57 | 0 | PCT | 11 | P2 | F06 | -.63 | | TEC | TEH | .560 | CBAFR | 37 | H | 194 |
| 42 | 55 | .19 | 0 | PCT | 6 | P2 | F05 | .53 | | TEC | TEH | .560 | CBAFR | 39 | H | 164 |
| 109 | 56 | .36 | 0 | PCT | 8 | P2 | F05 | -.44 | | TEC | TEH | .560 | CBAFR | 37 | H | 204 |
| 109 | 56 | .34 | 0 | PCT | 7 | P2 | F07 | .68 | | TEC | TEH | .560 | CBAFR | 37 | H | 204 |
| 109 | 56 | .29 | 0 | PCT | 6 | P2 | F08 | 1.88 | | TEC | TEH | .560 | CBAFR | 37 | H | 204 |
| 64 | 57 | .92 | 0 | PCT | 17 | P2 | F06 | -1.44 | | TEC | TEH | .560 | CBAFR | 41 | H | 16 |
| 75 | 60 | .37 | 0 | PCT | 9 | P2 | F02 | -1.89 | | TEC | TEH | .560 | CBAFR | 41 | H | 64 |
| 60 | 61 | .52 | 0 | PCT | 11 | P2 | F06 | -.55 | | TEC | TEH | .560 | CBAFR | 41 | H | 110 |
| 67 | 62 | .61 | 0 | PCT | 10 | P2 | F01 | -1.67 | | TEC | TEH | .560 | CBAFR | 43 | H | 69 |
| 81 | 62 | .29 | 0 | PCT | 6 | P2 | F06 | 1.03 | | TEC | TEH | .560 | CBAFR | 43 | H | 62 |
| 60 | 63 | .15 | 0 | PCT | 3 | P2 | F05 | .58 | | TEC | TEH | .560 | CBAFR | 43 | H | 109 |
| 66 | 63 | .13 | 0 | PCT | 3 | P2 | F04 | 1.48 | | TEC | TEH | .560 | CBAFR | 43 | H | 112 |
| 68 | 63 | .29 | 0 | PCT | 6 | P2 | F05 | -1.72 | | TEC | TEH | .560 | CBAFR | 43 | H | 113 |
| 82 | 63 | .73 | 0 | PCT | 13 | P2 | F06 | 1.90 | | TEC | TEH | .560 | CBAFR | 43 | H | 120 |
| 86 | 63 | .69 | 0 | PCT | 12 | P2 | F05 | -.92 | | TEC | TEH | .560 | CBAFR | 43 | H | 122 |
| 86 | 63 | 1.48 | 0 | PCT | 20 | P2 | F06 | 1.30 | | TEC | TEH | .560 | CBAFR | 43 | H | 122 |
| 88 | 63 | .35 | 0 | PCT | 7 | P2 | F08 | .48 | | TEC | TEH | .560 | CBAFR | 43 | H | 123 |
| 106 | 63 | .78 | 0 | PCT | 13 | P2 | F05 | -1.09 | | TEC | TEH | .560 | CBAFR | 43 | H | 132 |
| 106 | 63 | .34 | 0 | PCT | 6 | P2 | F05 | 1.49 | | TEC | TEH | .560 | CBAFR | 43 | H | 132 |
| 106 | 63 | .37 | 0 | PCT | 7 | P2 | F07 | 1.83 | | TEC | TEH | .560 | CBAFR | 43 | H | 132 |
| 114 | 63 | .22 | 0 | PCT | 5 | P2 | F05 | 1.50 | | TEC | TEH | .560 | CBAFR | 43 | H | 136 |
| 114 | 63 | .27 | 0 | PCT | 5 | P2 | F06 | .95 | | TEC | TEH | .560 | CBAFR | 43 | H | 136 |
| 114 | 63 | .57 | 0 | PCT | 10 | P2 | F07 | 1.87 | | TEC | TEH | .560 | CBAFR | 43 | H | 136 |
| 114 | 63 | .36 | 0 | PCT | 7 | P2 | F08 | .59 | | TEC | TEH | .560 | CBAFR | 43 | H | 136 |
| 65 | 64 | .36 | 0 | PCT | 8 | P2 | F05 | .74 | | TEC | TEH | .560 | CBAFR | 41 | H | 167 |
| 77 | 64 | .67 | 0 | PCT | 14 | P2 | F05 | -1.41 | | TEC | TEH | .560 | CBAFR | 41 | H | 161 |
| 77 | 64 | .27 | 0 | PCT | 7 | P2 | F05 | .80 | | TEC | TEH | .560 | CBAFR | 41 | H | 161 |
| 91 | 64 | .50 | 0 | PCT | 11 | P2 | F06 | -.67 | | TEC | TEH | .560 | CBAFR | 41 | H | 154 |
| 97 | 64 | .84 | 0 | PCT | 16 | P2 | F06 | -.37 | | TEC | TEH | .560 | CBAFR | 41 | H | 151 |
| 113 | 64 | .41 | 0 | PCT | 9 | P2 | F04 | .81 | | TEC | TEH | .560 | CBAFR | 41 | H | 143 |
| 113 | 64 | .23 | 0 | PCT | 6 | P2 | F07 | .41 | | TEC | TEH | .560 | CBAFR | 41 | H | 143 |
| 52 | 65 | .27 | 0 | PCT | 7 | P2 | F04 | -1.86 | | TEC | TEH | .560 | CBAFR | 41 | H | 203 |
| 66 | 65 | .25 | 0 | PCT | 6 | P2 | F03 | -1.79 | | TEC | TEH | .560 | CBAFR | 41 | H | 210 |
| 74 | 65 | .28 | 0 | PCT | 7 | P2 | F06 | 1.72 | | TEC | TEH | .560 | CBAFR | 41 | H | 214 |
| 76 | 65 | .48 | 0 | PCT | 11 | P2 | F05 | .81 | | TEC | TEH | .560 | CBAFR | 41 | H | 215 |
| 90 | 65 | .37 | 0 | PCT | 9 | P2 | F05 | 1.40 | | TEC | TEH | .560 | CBAFR | 41 | H | 222 |
| 90 | 65 | .36 | 0 | PCT | 8 | P2 | F06 | -1.46 | | TEC | TEH | .560 | CBAFR | 41 | H | 222 |

ATTACHMENT A

SG - B List of Fan Bar Wear

Byron 1 B1R20

CAE 20150901

09/22/2015 16:37:20

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX |
|-----|-----|-------|-----|-----|-----|-----|------|-------|-------|------|------|------|-------|-----|---|-----|
| 106 | 65 | .30 | 0 | PCT | 7 | P2 | F05 | 1.76 | | TEC | TEH | .560 | CBAFR | 41 | H | 230 |
| 106 | 65 | .34 | 0 | PCT | 8 | P2 | F06 | -1.53 | | TEC | TEH | .560 | CBAFR | 41 | H | 230 |
| 110 | 65 | .35 | 0 | PCT | 8 | P2 | F06 | .53 | | TEC | TEH | .560 | CBAFR | 41 | H | 232 |
| 112 | 65 | .44 | 0 | PCT | 10 | P2 | F05 | 1.60 | | TEC | TEH | .560 | CBAFR | 41 | H | 233 |
| 112 | 65 | .50 | 0 | PCT | 11 | P2 | F06 | -1.74 | | TEC | TEH | .560 | CBAFR | 41 | H | 233 |
| 67 | 66 | .33 | 0 | PCT | 7 | P2 | F06 | .63 | | TEC | TEH | .560 | CBAFR | 43 | H | 165 |
| 79 | 66 | .26 | 0 | PCT | 6 | P2 | F06 | -1.64 | | TEC | TEH | .560 | CBAFR | 43 | H | 159 |
| 95 | 66 | .39 | 0 | PCT | 7 | P2 | F05 | -.55 | | TEC | TEH | .560 | CBAFR | 43 | H | 151 |
| 109 | 66 | .37 | 0 | PCT | 7 | P2 | F04 | -1.10 | | TEC | TEH | .560 | CBAFR | 43 | H | 144 |
| 109 | 66 | .57 | 0 | PCT | 10 | P2 | F04 | 1.15 | | TEC | TEH | .560 | CBAFR | 43 | H | 144 |
| 109 | 66 | .50 | 0 | PCT | 9 | P2 | F05 | 1.41 | | TEC | TEH | .560 | CBAFR | 43 | H | 144 |
| 109 | 66 | .37 | 0 | PCT | 7 | P2 | F08 | -1.80 | | TEC | TEH | .560 | CBAFR | 43 | H | 144 |
| 113 | 66 | .42 | 0 | PCT | 8 | P2 | F03 | .92 | | TEC | TEH | .560 | CBAFR | 43 | H | 142 |
| 113 | 66 | .44 | 0 | PCT | 8 | P2 | F05 | -.86 | | TEC | TEH | .560 | CBAFR | 43 | H | 142 |
| 91 | 68 | .37 | 0 | PCT | 9 | P2 | F07 | 1.78 | | TEC | TEH | .560 | CBAFR | 41 | H | 251 |
| 97 | 68 | .62 | 0 | PCT | 13 | P2 | F06 | -1.52 | | TEC | TEH | .560 | CBAFR | 41 | H | 248 |
| 88 | 69 | .34 | 0 | PCT | 6 | P2 | F05 | 1.71 | | TEC | TEH | .560 | CBAFR | 45 | H | 25 |
| 63 | 70 | .31 | 0 | PCT | 6 | P2 | F05 | .70 | | TEC | TEH | .560 | CBAFR | 43 | H | 263 |
| 109 | 70 | .30 | 0 | PCT | 6 | P2 | F05 | .77 | | TEC | TEH | .560 | CBAFR | 43 | H | 240 |
| 43 | 72 | .30 | 0 | PCT | 6 | P2 | F06 | -.45 | | TEC | TEH | .560 | CBAFR | 45 | H | 113 |
| 95 | 72 | .53 | 0 | PCT | 10 | P2 | F05 | 1.26 | | TEC | TEH | .560 | CBAFR | 45 | H | 88 |
| 92 | 73 | .32 | 0 | PCT | 6 | P2 | F06 | 1.78 | | TEC | TEH | .560 | CBAFR | 45 | H | 158 |
| 101 | 74 | .36 | | PCT | 8 | P2 | F05 | 1.71 | | TEC | TEH | .560 | CBAFR | 47 | H | 82 |
| 88 | 75 | .37 | | PCT | 8 | P2 | F06 | -.66 | | TEC | TEH | .560 | CBAFR | 47 | H | 155 |
| 100 | 75 | .10 | | PCT | 3 | P2 | F06 | 1.64 | | TEC | TEH | .560 | CBAFR | 47 | H | 161 |
| 51 | 76 | .26 | 0 | PCT | 5 | P2 | F05 | 1.82 | | TEC | TEH | .560 | CBAFR | 45 | H | 205 |
| 97 | 76 | .43 | 0 | PCT | 8 | P2 | F09 | -.73 | | TEC | TEH | .560 | CBAFR | 45 | H | 182 |
| 109 | 76 | .36 | 0 | PCT | 7 | P2 | F05 | -.43 | | TEC | TEH | .560 | CBAFR | 45 | H | 176 |
| 109 | 76 | .72 | 0 | PCT | 12 | P2 | F06 | 1.69 | | TEC | TEH | .560 | CBAFR | 45 | H | 176 |
| 109 | 76 | .46 | 0 | PCT | 9 | P2 | F07 | -1.46 | | TEC | TEH | .560 | CBAFR | 45 | H | 176 |
| 109 | 76 | .15 | 0 | PCT | 3 | P2 | F09 | .57 | | TEC | TEH | .560 | CBAFR | 45 | H | 176 |
| 94 | 77 | .40 | 0 | PCT | 9 | P2 | F07 | 1.85 | | TEC | TEH | .560 | CBAFR | 49 | H | 40 |
| 104 | 77 | .26 | 0 | PCT | 5 | P2 | F05 | -1.76 | | TEC | TEH | .560 | CBAFR | 49 | H | 45 |
| 108 | 77 | .18 | 0 | PCT | 4 | P2 | F07 | -.43 | | TEC | TEH | .560 | CBAFR | 49 | H | 47 |
| 109 | 78 | .20 | | PCT | 6 | P2 | F02 | -1.81 | | TEC | TEH | .560 | CBAFR | 47 | H | 176 |
| 56 | 79 | .20 | | PCT | 6 | P2 | F06 | -.82 | | TEC | TEH | .560 | CBAFR | 51 | H | 23 |
| 114 | 79 | .23 | | PCT | 6 | P2 | F05 | 1.31 | | TEC | TEH | .560 | CBAFR | 51 | H | 52 |
| 103 | 80 | .21 | 0 | PCT | 4 | P2 | F06 | .64 | | TEC | TEH | .560 | CBAFR | 49 | H | 61 |
| 111 | 80 | .27 | 0 | PCT | 7 | P2 | F06 | .64 | | TEC | TEH | .560 | CBAFR | 49 | H | 57 |

ATTACHMENT A

SG - B List of Fan Bar Wear

Byron 1 B1R20

CAE 20150901

09/22/2015 16:37:20

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX |
|-----|-----|-------|-----|-----|-----|-----|------|-------|-------|------|------|------|-------|-----|---|-----|
| 82 | 81 | .30 | 0 | PCT | 7 | P2 | F05 | -1.78 | | TEC | TEH | .560 | CBAFR | 49 | H | 145 |
| 94 | 81 | .49 | 0 | PCT | 9 | P2 | F05 | 1.66 | | TEC | TEH | .560 | CBAFR | 49 | H | 151 |
| 84 | 83 | .38 | | PCT | 9 | P2 | F05 | -1.89 | | TEC | TEH | .560 | CBAFR | 51 | H | 132 |
| 35 | 84 | .25 | 0 | PCT | 6 | P2 | F05 | -.50 | | TEC | TEH | .560 | CBAFR | 49 | H | 205 |
| 105 | 84 | .38 | 0 | PCT | 9 | P2 | F05 | -.69 | | TEC | TEH | .560 | CBAFR | 49 | H | 170 |
| 94 | 85 | .22 | 0 | PCT | 5 | P2 | F06 | -1.64 | | TEC | TEH | .560 | CBAFR | 53 | H | 4 |
| 110 | 85 | .55 | 0 | PCT | 11 | P2 | F05 | .84 | | TEC | TEH | .560 | CBAFR | 53 | H | 12 |
| 65 | 86 | .29 | | PCT | 7 | P2 | F06 | .42 | | TEC | TEH | .560 | CBAFR | 51 | H | 175 |
| 64 | 87 | .30 | | PCT | 7 | P2 | F05 | -.89 | | TEC | TEH | .560 | CBAFR | 51 | H | 219 |
| 65 | 88 | .30 | | PCT | 9 | P2 | F06 | -.62 | | TEC | TEH | .560 | CBAFR | 55 | H | 34 |
| 69 | 88 | .32 | | PCT | 9 | P2 | F06 | -.49 | | TEC | TEH | .560 | CBAFR | 55 | H | 36 |
| 59 | 90 | .31 | 0 | PCT | 7 | P2 | F05 | -.77 | | TEC | TEH | .560 | CBAFR | 53 | H | 33 |
| 87 | 90 | .52 | 0 | PCT | 10 | P2 | F06 | 1.59 | | TEC | TEH | .560 | CBAFR | 53 | H | 47 |
| 113 | 90 | .11 | 0 | PCT | 3 | P2 | F07 | .54 | | TEC | TEH | .560 | CBAFR | 53 | H | 60 |
| 109 | 92 | .17 | | PCT | 5 | P2 | F04 | -1.42 | | TEC | TEH | .560 | CBAFR | 55 | H | 154 |
| 63 | 94 | .27 | 0 | PCT | 6 | P2 | F06 | 1.82 | | TEC | TEH | .560 | CBAFR | 53 | H | 130 |
| 85 | 98 | .17 | 0 | PCT | 4 | P2 | F07 | 1.80 | | TEC | TEH | .560 | CBAFR | 53 | H | 229 |
| 102 | 107 | .39 | | PCT | 6 | P2 | F05 | -.80 | | TEC | TEH | .560 | CBAFR | 57 | H | 153 |
| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX |

ATTACHMENT A

SG - C List of Fan Bar Wear

Byron 1 B1R20

CAE 20150901

09/22/2015 16:37:20

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX |
|-----|-----|-------|-----|-----|-----|-----|------|-------|-------|------|------|------|-------|-----|---|-----|
| 47 | 14 | .28 | | PCT | 8 | P2 | F05 | .93 | | TEC | TEH | .560 | CBAFR | 83 | H | 227 |
| 41 | 38 | .15 | | PCT | 5 | P2 | F05 | -1.67 | | TEC | TEH | .560 | CBAFR | 79 | H | 10 |
| 45 | 46 | .11 | | PCT | 3 | P2 | F05 | -1.48 | | TEC | TEH | .560 | CBAFR | 73 | H | 183 |
| 56 | 47 | .21 | 0 | PCT | 5 | P2 | F04 | .70 | | TEC | TEH | .560 | CBAFR | 69 | H | 91 |
| 87 | 64 | .21 | | PCT | 6 | P2 | F05 | 1.09 | | TEC | TEH | .560 | CBAFR | 61 | H | 37 |
| 40 | 67 | .24 | | PCT | 7 | P2 | F05 | .87 | | TEC | TEH | .560 | CBAFR | 55 | H | 117 |
| 48 | 69 | .20 | | PCT | 6 | P2 | F06 | .61 | | TEC | TEH | .560 | CBAFR | 57 | H | 23 |
| 70 | 71 | .38 | | PCT | 10 | P2 | F05 | 1.61 | | TEC | TEH | .560 | CBAFR | 55 | H | 35 |
| 71 | 72 | .22 | 0 | PCT | 7 | P2 | F07 | -.53 | | TEC | TEH | .560 | CBAFR | 53 | H | 208 |
| 63 | 76 | .14 | 0 | PCT | 4 | P2 | F05 | 1.88 | | TEC | TEH | .560 | CBAFR | 53 | H | 111 |
| 102 | 77 | .23 | | PCT | 7 | P2 | F04 | -1.78 | | TEC | TEH | .560 | CBAFR | 61 | H | 219 |
| 109 | 78 | .33 | 0 | PCT | 9 | P2 | F05 | -.90 | | TEC | TEH | .560 | CBAFR | 63 | H | 9 |
| 52 | 79 | .36 | | PCT | 7 | P2 | F05 | -1.74 | | TEC | TEH | .560 | CBAFR | 51 | H | 66 |
| 98 | 79 | .44 | | PCT | 8 | P2 | F05 | -1.73 | | TEC | TEH | .560 | CBAFR | 51 | H | 89 |
| 113 | 80 | .79 | | PCT | 18 | P2 | F04 | 1.67 | | TEC | TEH | .560 | CBAFR | 61 | H | 207 |
| 113 | 80 | .29 | | PCT | 8 | P2 | F05 | .64 | | TEC | TEH | .560 | CBAFR | 61 | H | 207 |
| 60 | 81 | .21 | 0 | PCT | 6 | P2 | F05 | 1.56 | | TEC | TEH | .560 | CBAFR | 49 | H | 204 |
| 97 | 84 | .54 | 0 | PCT | 13 | P2 | F05 | -.81 | | TEC | TEH | .560 | CBAFR | 49 | H | 126 |
| 97 | 84 | .49 | 0 | PCT | 12 | P2 | F06 | -.64 | | TEC | TEH | .560 | CBAFR | 49 | H | 126 |
| 109 | 84 | .63 | | PCT | 15 | P2 | F04 | .62 | | TEC | TEH | .560 | CBAFR | 61 | H | 191 |
| 109 | 84 | .23 | | PCT | 7 | P2 | F05 | .48 | | TEC | TEH | .560 | CBAFR | 61 | H | 191 |
| 109 | 84 | .55 | | PCT | 14 | P2 | F06 | 1.10 | | TEC | TEH | .560 | CBAFR | 61 | H | 191 |
| 52 | 85 | .25 | 0 | PCT | 7 | P2 | F05 | .60 | | TEC | TEH | .560 | CBAFR | 49 | H | 94 |
| 90 | 85 | .43 | 0 | PCT | 11 | P2 | F05 | -1.58 | | TEC | TEH | .560 | CBAFR | 49 | H | 113 |
| 48 | 87 | .19 | | PCT | 5 | P2 | F05 | -1.69 | | TEC | TEH | .560 | CBAFR | 47 | H | 114 |
| 100 | 89 | .33 | 0 | PCT | 9 | P2 | F05 | -.78 | | TEC | TEH | .560 | CBAFR | 45 | H | 156 |
| 53 | 92 | .31 | 0 | PCT | 8 | P2 | F05 | -.69 | | TEC | TEH | .560 | CBAFR | 45 | H | 99 |
| 99 | 94 | .38 | | PCT | 8 | P2 | F03 | .69 | | TEC | TEH | .560 | CBAFR | 41 | H | 96 |

ATTACHMENT A

SG - D List of Fan Bar Wear

Byron 1 B1R20

CAE 20150901

09/22/2015 16:37:20

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX |
|-----|-----|-------|-----|-----|-----|-----|------|-------|-------|------|------|------|-------|-----|---|-----|
| 80 | 57 | .23 | | PCT | 6 | P2 | F06 | -.78 | | TEC | TEH | .560 | CBAFR | 43 | H | 9 |
| 106 | 57 | .10 | | PCT | 3 | P2 | F07 | -1.90 | | TEC | TEH | .560 | CBAFR | 43 | H | 22 |
| 112 | 57 | .34 | | PCT | 8 | P2 | F08 | -1.77 | | TEC | TEH | .560 | CBAFR | 43 | H | 25 |
| 113 | 58 | .43 | | PCT | 9 | P2 | F06 | .54 | | TEC | TEH | .560 | CBAFR | 43 | H | 30 |
| 78 | 59 | .20 | 0 | PCT | 3 | P2 | F05 | 1.68 | | TEC | TEH | .560 | CBAFR | 45 | H | 9 |
| 78 | 59 | .65 | 0 | PCT | 9 | P2 | F06 | 1.90 | | TEC | TEH | .560 | CBAFR | 45 | H | 9 |
| 86 | 59 | .41 | 0 | PCT | 7 | P2 | F05 | 1.64 | | TEC | TEH | .560 | CBAFR | 45 | H | 13 |
| 86 | 59 | .40 | 0 | PCT | 6 | P2 | F06 | 1.06 | | TEC | TEH | .560 | CBAFR | 45 | H | 13 |
| 107 | 60 | .34 | 0 | PCT | 6 | P2 | F05 | 1.78 | | TEC | TEH | .560 | CBAFR | 45 | H | 34 |
| 107 | 60 | .75 | 0 | PCT | 11 | P2 | F06 | -.65 | | TEC | TEH | .560 | CBAFR | 45 | H | 34 |
| 107 | 60 | .33 | 0 | PCT | 5 | P2 | F07 | .71 | | TEC | TEH | .560 | CBAFR | 45 | H | 34 |
| 70 | 61 | .24 | | PCT | 6 | P2 | F07 | 1.85 | | TEC | TEH | .560 | CBAFR | 43 | H | 98 |
| 112 | 61 | .68 | | PCT | 12 | P2 | F06 | 1.48 | | TEC | TEH | .560 | CBAFR | 43 | H | 119 |
| 91 | 62 | .28 | | PCT | 6 | P2 | F06 | .58 | | TEC | TEH | .560 | CBAFR | 43 | H | 208 |
| 102 | 63 | 1.00 | 0 | PCT | 13 | P2 | F05 | 1.48 | | TEC | TEH | .560 | CBAFR | 45 | H | 116 |
| 102 | 63 | .39 | 0 | PCT | 6 | P2 | F06 | -1.73 | | TEC | TEH | .560 | CBAFR | 45 | H | 116 |
| 106 | 63 | .63 | 0 | PCT | 9 | P2 | F04 | 1.10 | | TEC | TEH | .560 | CBAFR | 45 | H | 118 |
| 106 | 63 | .53 | 0 | PCT | 8 | P2 | F05 | 1.40 | | TEC | TEH | .560 | CBAFR | 45 | H | 118 |
| 77 | 64 | .31 | | PCT | 6 | P2 | F07 | .68 | | TEC | TEH | .560 | CBAFR | 43 | H | 145 |
| 113 | 64 | .31 | | PCT | 6 | P2 | F04 | -1.75 | | TEC | TEH | .560 | CBAFR | 43 | H | 127 |
| 113 | 64 | .44 | | PCT | 10 | P2 | F05 | -.70 | | TEC | TEH | .560 | CBAFR | 43 | H | 127 |
| 113 | 64 | .29 | | PCT | 7 | P2 | F06 | 1.46 | | TEC | TEH | .560 | CBAFR | 43 | H | 127 |
| 72 | 65 | .51 | | PCT | 10 | P2 | F06 | 1.42 | | TEC | TEH | .560 | CBAFR | 43 | H | 244 |
| 76 | 65 | .50 | | PCT | 10 | P2 | F06 | 1.85 | | TEC | TEH | .560 | CBAFR | 43 | H | 242 |
| 84 | 65 | .45 | | PCT | 9 | P2 | F06 | 1.70 | | TEC | TEH | .560 | CBAFR | 43 | H | 238 |
| 106 | 65 | .50 | | PCT | 11 | P2 | F06 | -.99 | | TEC | TEH | .560 | CBAFR | 43 | H | 227 |
| 106 | 65 | .58 | | PCT | 12 | P2 | F07 | 1.75 | | TEC | TEH | .560 | CBAFR | 43 | H | 227 |
| 89 | 66 | .51 | 0 | PCT | 8 | P2 | F06 | 1.17 | | TEC | TEH | .560 | CBAFR | 45 | H | 140 |
| 99 | 66 | .65 | 0 | PCT | 9 | P2 | F05 | 1.65 | | TEC | TEH | .560 | CBAFR | 45 | H | 135 |
| 105 | 66 | .60 | 0 | PCT | 9 | P2 | F05 | 1.57 | | TEC | TEH | .560 | CBAFR | 45 | H | 132 |
| 82 | 67 | .67 | 0 | PCT | 10 | P2 | F06 | 1.84 | | TEC | TEH | .560 | CBAFR | 45 | H | 192 |
| 90 | 67 | .65 | 0 | PCT | 10 | P2 | F06 | 1.87 | | TEC | TEH | .560 | CBAFR | 45 | H | 188 |
| 92 | 67 | .71 | 0 | PCT | 10 | P2 | F06 | 1.70 | | TEC | TEH | .560 | CBAFR | 45 | H | 187 |
| 102 | 67 | .73 | 0 | PCT | 10 | P2 | F06 | 1.90 | | TEC | TEH | .560 | CBAFR | 45 | H | 182 |
| 106 | 67 | .41 | 0 | PCT | 6 | P2 | F05 | -.66 | | TEC | TEH | .560 | CBAFR | 45 | H | 180 |
| 106 | 67 | .62 | 0 | PCT | 9 | P2 | F06 | 1.79 | | TEC | TEH | .560 | CBAFR | 45 | H | 180 |
| 108 | 67 | .18 | 0 | PCT | 3 | P2 | F08 | 1.72 | | TEC | TEH | .560 | CBAFR | 45 | H | 179 |
| 112 | 67 | .22 | 0 | PCT | 4 | P2 | F05 | -1.37 | | TEC | TEH | .560 | CBAFR | 45 | H | 177 |
| 73 | 68 | .15 | 0 | PCT | 4 | P2 | F05 | -.65 | | TEC | TEH | .560 | CBAFR | 47 | H | 39 |

ATTACHMENT A

SG - D List of Fan Bar Wear

Byron 1 B1R20

CAE 20150901

09/22/2015 16:37:20

| ROW | COL | VOLTS | DEG | IND | PER | CHN | LOCN | INCH1 | INCH2 | BEGT | ENDT | PDIA | PTYPE | CAL | L | IDX |
|-----|-----|-------|-----|-----|-----|-----|------|-------|-------|------|------|------|-------|-----|---|-----|
| 103 | 68 | .64 | 0 | PCT | 12 | P2 | F06 | .69 | | TEC | TEH | .560 | CBAFR | 47 | H | 54 |
| 107 | 68 | .32 | 0 | PCT | 7 | P2 | F06 | .79 | | TEC | TEH | .560 | CBAFR | 47 | H | 56 |
| 113 | 68 | .47 | 0 | PCT | 9 | P2 | F06 | .85 | | TEC | TEH | .560 | CBAFR | 47 | H | 59 |
| 112 | 69 | .33 | 0 | PCT | 7 | P2 | F04 | .82 | | TEC | TEH | .560 | CBAFR | 47 | H | 66 |
| 112 | 69 | .56 | 0 | PCT | 11 | P2 | F05 | -1.63 | | TEC | TEH | .560 | CBAFR | 47 | H | 66 |
| 112 | 69 | .75 | 0 | PCT | 14 | P2 | F06 | 1.17 | | TEC | TEH | .560 | CBAFR | 47 | H | 66 |
| 58 | 79 | .44 | | PCT | 6 | P2 | F06 | .80 | | TEC | TEH | .560 | CBAFR | 53 | H | 29 |
| 69 | 82 | .52 | | PCT | 10 | P2 | F05 | -.90 | | TEC | TEH | .560 | CBAFR | 67 | H | 32 |
| 67 | 84 | .34 | | PCT | 6 | P2 | F06 | 1.51 | | TEC | TEH | .560 | CBAFR | 69 | H | 115 |
| 75 | 84 | .37 | | PCT | 7 | P2 | F06 | 1.90 | | TEC | TEH | .560 | CBAFR | 69 | H | 111 |
| 79 | 84 | .28 | | PCT | 6 | P2 | F05 | 1.01 | | TEC | TEH | .560 | CBAFR | 69 | H | 109 |
| 65 | 90 | .30 | | PCT | 7 | P2 | F06 | 1.53 | | TEC | TEH | .560 | CBAFR | 67 | H | 218 |
| 70 | 95 | .15 | 0 | PCT | 4 | P2 | F06 | -1.31 | | TEC | TEH | .560 | CBAFR | 71 | H | 122 |
| 63 | 104 | .29 | 0 | PCT | 5 | P2 | F06 | 1.36 | | TEC | TEH | .560 | CBAFR | 77 | H | 87 |