

Duke Energy
Belews Creek Steam Station
3195 Pine Hall Road
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September 27, 2019

ELECTRONIC SUBMITTAL
Ms. Linda Culpepper
North Carolina Division of Water Resources

Address: desocdata@ncdenr.gov

Subject: Duke Energy Carolinas, LLC

Belews Creek Steam Station EMC SOC WQ S18-004

Dear Ms. Culpepper:

In accordance with paragraph 3.e.3) of the NC Environmental Management Commission Special Order of Consent, EMC SOC WQ S18-004, Duke Energy Carolinas, LLC is hereby submitting the monitoring results for the 3<sup>rd</sup> quarter 2019.

If you have any questions, please contact Ms. Joyce Dishmon (336) 623-0238.

I certify under penalty of law, that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fines and imprisonment for knowing violations

Sincerely

Reginald D. Anderson

General Manager III, Regulated Stations

Belews Creek Steam Station

Power Generation Carolinas East

## Duke Energy Carolinas, LLC - Belews Steam Station Special Order by Consent - SOC No. S18-004 Monitoring Report for 3rd Quarter of 2019

| SAMPLING<br>LOCATION  | Date<br>Sampled | TSS* | Oil and Grease* | Hd  | Fluoride | Mercury | Barium | Zinc  | Arsenic | Boron | Cadmium | Chromium | Copper | Thallium | Lead  | Nickel | Selenium | Nitrate/Nitrite as N | Bromides | Sulfates | Chlorides | TDS  | Total Hardness | Temperature | Conductivity |
|-----------------------|-----------------|------|-----------------|-----|----------|---------|--------|-------|---------|-------|---------|----------|--------|----------|-------|--------|----------|----------------------|----------|----------|-----------|------|----------------|-------------|--------------|
|                       |                 | -    | -               | -   | -        | Total   | Total  | Total | Total   | Total | Total   | Total    | Total  | Total    | Total | Total  | Total    | -                    | -        | ı        | -         | -    | Total          | -           | -            |
|                       |                 | mg/L | mg/L            | SU  | ug/L     | ng/L    | ug/L   | ug/L  | ug/L    | ug/L  | ug/L    | ug/L     | ug/L   | ug/L     | ug/L  | ug/L   | ug/L     | mg/L                 | mg/L     | mg/L     | mg/L      | mg/L | mg/L           | °C          | umho/cm      |
|                       |                 |      |                 |     |          |         | T      | ,     |         |       | T       |          |        | T        | ,     | ,      |          | T                    |          |          |           | T    | T              |             | •            |
| S-02                  | 8/14/2019       |      |                 | 7.2 | < 200    | 0.613   | 295    | 6     | < 1     | 537   | 0.258   | < 1      | < 1    | < 0.2    | < 0.2 | 8.74   | <1       | 0.07                 | 1.5      | 0.38     | 99        | 258  | 117            | 25          | 403          |
|                       |                 |      |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |
| S-06                  | 8/14/2019       |      |                 | 6.9 | 140      | 0.561   | 45     | < 5   | 1.2     | 1420  | < 0.1   | 1.07     | 1.04   | < 0.2    | 0.454 | < 1    | <1       | 0.34                 | 0.42     | 17       | 41        | 242  | 115            | 24          | 93.7         |
|                       |                 |      |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |
| S-08                  | 8/14/2019       |      |                 | 6.8 | < 100    | 0.76    | 50     | < 5   | < 1     | 95    | 0.123   | < 1      | < 1    | < 0.2    | 0.618 | < 1    | 3.92     | 0.41                 | < 0.1    | 8.8      | 17        | 136  | 29.7           | 20          | 76.9         |
|                       |                 |      |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |
| S-09                  | 8/14/2019       |      |                 | 6.7 | < 500    | 5.39    | 40     | 11.7  | < 1     | 882   | 0.186   | < 1      | < 1    | < 0.2    | 0.316 | 1.81   | 1.06     | 0.96                 | < 0.5    | 150      | 9.3       | 269  | 153            | 24          | 95.2         |
|                       |                 |      |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |
| S-10                  | 8/14/2019       |      |                 | 6.3 | < 500    | 13.8    | 255    | < 5   | < 1     | 7150  | 0.75    | < 1      | < 1    | 0.371    | < 0.2 | 9.2    | < 1      | 0.17                 | 3.9      | 19       | 310       | 849  | 426            | 24          | 1080         |
|                       |                 | •    |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             | ·            |
| Upstream Dan<br>River | 8/14/2019       |      |                 | 6.8 | 120      | 3.45    | 34     | < 5   | <1      | < 50  | < 0.1   | 1.03     | 1.16   | < 0.2    | 0.841 | < 1    | <1       | 0.28                 | < 0.1    | 2.9      | 5.1       | 90   | 31.1           | 24          | 11           |

<sup>\*\*</sup>Duplicate was gathered at this location and the respective values averaged

## Duke Energy Carolinas, LLC - Belews Steam Station Special Order by Consent - SOC No. S18-004 Monitoring Report for 3rd Quarter of 2019

| SAMPLING<br>LOCATION              | Date<br>Sampled | TSS* | Oil and Grease* | Hd  | Fluoride | Mercury | Barium | Zinc  | Arsenic | Boron | Cadmium | Chromium | Copper | Thallium | Lead  | Nickel | Selenium | Nitrate/Nitrite as N | Bromides | Sulfates | Chlorides | TDS  | Total Hardness | Temperature | Conductivity |
|-----------------------------------|-----------------|------|-----------------|-----|----------|---------|--------|-------|---------|-------|---------|----------|--------|----------|-------|--------|----------|----------------------|----------|----------|-----------|------|----------------|-------------|--------------|
|                                   |                 | -    | =               | =   | -        | Total   | Total  | Total | Total   | Total | Total   | Total    | Total  | Total    | Total | Total  | Total    | -                    | =        | -        | -         | -    | Total          | -           | -            |
|                                   |                 | mg/L | mg/L            | SU  | ug/L     | ng/L    | ug/L   | ug/L  | ug/L    | ug/L  | ug/L    | ug/L     | ug/L   | ug/L     | ug/L  | ug/L   | ug/L     | mg/L                 | mg/L     | mg/L     | mg/L      | mg/L | mg/L           | °C          | umho/cm      |
| Downstream Dan<br>River           | 8/14/2019       |      |                 | 6.5 | < 100    | 3.45    | 29     | < 5   | < 1     | 78    | < 0.1   | 1.04     | 1.03   | < 0.2    | 0.751 | < 1    | < 1      | 0.26                 | < 0.1    | 3        | 6.4       | 103  | 24.8           | 24          | 76           |
| Instream Unnamed<br>Tributary     | 8/14/2019       |      |                 | 6.5 | < 500    | 10.3    | 209    | 8.86  | < 1     | 8570  | 0.429   | < 1      | <1     | 0.406    | < 0.2 | 9.61   | < 1      | 0.15                 | 4.3      | 86       | 340       | 882  | 575            | 20          | 1280         |
| Belews Lake<br>Instream S-06      | 8/14/2019       |      |                 | 8.4 | 120      | < 0.5** | 16     | < 5   | < 1     | 61    | < 0.1   | < 1      | 1.03   | < 0.2    | < 0.2 | < 1    | < 1      | < 0.01               | < 0.1    | 6.7      | 6.1       | 75   | 24.3           | 32          | 87           |
| Belews Lake<br>Instream S-08 S-09 | 8/14/2019       |      |                 | 7.8 | 110      | < 0.5   | 17     | < 5   | < 1     | 59    | < 0.1   | < 1      | 1.19   | < 0.2    | < 0.2 | < 1    | < 1      | 0.01                 | < 0.1    | 6.7      | 6.1       | 64   | 25.1           | 38          | 89           |
|                                   |                 |      |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |
|                                   |                 |      |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |

<sup>\*\*</sup>Duplicate was gathered at this location and the respective values averaged