



**April 14, 2020** 

ELECTRONIC SUBMITTAL
Mr. Daniel Smith, Director
North Carolina Division of Water Resources

Address: desocdata@ncdenr.gov

Subject: Duke Energy Carolinas, LLC

Buck Steam Station / Combined Cycle

EMC SOC WQ S18-004

1st Quarter 2020 - Monitoring Data Results

Dear Mr. Smith:

In accordance with paragraph 2. e. 3) of the NC Environmental Management Commission Special Order by Consent, EMC SOC WQ S18-004, Duke Energy Carolinas, LLC is hereby submitting the monitoring results for the **1st quarter of 2020**. The annual monitoring requirements for TSS and Oil & Grease were also collected and analyzed in the first calendar quarter of 2020.

If you have any questions, please contact Mr. Robert Wylie (704) 382-4669 or Dale Wooten (704) 630-3086.

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,

Kristopher C Eisenrieth General Manager

Buck Combined Cycle

## Duke Energy Carolinas, LLC - Buck Steam Station Special Order by Consent - SOC No. S18-004 Monitoring Report for 1st Quarter of 2020

| SAMPLING<br>LOCATION | Date<br>Sampled | TSS* | Oil and Grease* | Нd  | 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      |
| S-01                 | 2/27/2020       | 8.6  | < 5             | 6.5 | < 100    | 2.07    | 57     | < 5   | < 1     | 70    | < 0.1   | < 1      | 1.54   | < 0.2    | 0.343 | < 1    | < 1      | 0.26                 | < 0.1    | 9.6      | 9.4       | 111  | 34.5           | 9           | 108          |
| S-04                 | 2/27/2020       | 21   | < 5             | 6.6 | < 100    | 2.93 ** | 64     | < 5   | < 1     | 236   | < 0.1   | 1.04     | 1.05   | < 0.2    | 0.367 | 2.99   | < 1      | 0.03                 | < 0.1    | 49       | 66        | 302  | 135            | 15          | 389          |
| S-05                 | 2/27/2020       | 6.6  | < 5             | 7   | < 100    | 0.639   | 39     | < 5   | < 1     | 533   | < 0.1   | < 1      | < 1    | < 0.2    | < 0.2 | < 1    | < 1      | 0.17                 | < 0.1    | 59       | 13        | 194  | 103            | 12          | 271          |
| 5-08                 | 2/27/2020       | 96   | < 5             | 7.6 | 130      | 5.99    | 44     | 55.8  | < 1     | 215   | < 0.1   | 4.06     | 10.7   | < 0.2    | 2.41  | 3.64   | < 1      | 0.41                 | 0.16     | 62       | 18        | 173  | 88.6           | 10          | 233          |
| S-09                 | 2/27/2020       | 3    | < 5             | 7.2 | 200      | 1.53    | 34     | 6.16  | < 1     | 617   | < 0.1   | < 1      | 3.99   | < 0.2    | < 0.2 | 5.66   | < 1      | 0.42                 | 0.28     | 36       | 11        | 198  | 120            | 12          | 254          |
| Upstream Yadkin      | 2/27/2020       | 17   | < 5             | 7.3 | < 100    | 2.11    | 34     | < 5   | < 1     | < 50  | < 0.1   | 2.25     | 1.75   | < 0.2    | 0.924 | < 1    | < 1      | 1.2                  | < 0.1    | 4.8      | 5.2       | 87   | 24.9           | 10          | 30.3         |

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

## Duke Energy Carolinas, LLC - Buck Steam Station Special Order by Consent - SOC No. S18-004 Monitoring Report for 1st Quarter of 2020

| 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 Yadkin           | 2/27/2020       | 14   | < 5             | 7.3 | < 100    | 2.66    | 33     | < 5   | < 1     | < 50  | < 0.1   | 1.96     | 1.74   | < 0.2    | 0.878 | < 1    | < 1      | 1.2                  | < 0.1    | 4.7      | 5.2       | 81   | 24.6           | 10          | 72           |
| Instream S-01 S-04*         | 2/27/2020       | 70   | < 5             | 7.1 | < 100    | 6.19    | 55     | 8.57  | 2.2     | < 50  | < 0.1   | 4.93     | 3.71   | < 0.2    | 3     | 2.14   | < 1      | 0.62                 | < 0.1    | 5.2      | 4         | 77   | 25.8           | 10          | 68           |
| Instream S-05 S-14<br>S-15* | 2/27/2020       | 52   | < 5             | 7.1 | < 100    | 5.25    | . 55   | 7.71  | 2.65    | 61    | < 0.1   | 4.37     | 3.28   | < 0.2    | 2.42  | 1.82   | < 1      | 0.42                 | < 0.1    | 7.9      | 5.8       | 88   | 32.6           | 11          | 83           |
|                             |                 |      |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |
|                             |                 |      |                 |     |          |         |        |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |
|                             |                 |      |                 |     |          |         | T      |       |         |       |         |          |        |          |       |        |          |                      |          |          |           |      |                |             |              |