Feature assumptions for NYAM generator emissions

|  |  |
| --- | --- |
| Operating time | Assume 1 if operating status is 1; 0 otherwise. |
| Gross load (MW) | Will provide this as an input array with 24 values – 1 for each hour over a 24h time horizon – for each generator. |
| SO2 | *Model predicted* |
| NOx | *Model predicted* |
| CO2 | *Model predicted* |
| SO2 phase | Phase 2 |
| NOx phase | Assume none |
| Operating status | [0 or 1]. Assume 1 if there’s a non-zero value for gross load. |
| Unit type | Will provide this as an input vector with length equal to that of Gross load. |
| Fuel type (primary) | “ “ |
| Fuel type (secondary) | Assume none |
| SO2 controls | For coal and oil fuel type, assume flue gas desulfurization (FGD); otherwise none. |
| NOx controls | For coal and natural gas, assume selective catalytic reduction (SCR); otherwise none. |
| PM controls | For coal, assume electrostatic precipitator; otherwise none. |
| HG controls | Assume none |

# Example Data

Genfuel =

'Nuke'

'Nuke'

'Nuke'

'Coal'

'Coal'

'Coal'

'Coal'

'Coal'

'Import'

'NG'

'NG'

'NG'

'NG'

'Import'

Gross load =

2668.99999999999 2664.99999999999 2660.99999999999 2656.99999999999 2652.99999999999 2649.00000000000 2645.00000000000 2641.00000000000 2637.00000000000 2633.00000000000 2629.00000000000 2625 2625 2625 2629.00000000000 2633.00000000000 2637.00000000000 2641.00000000000 2645.00000000000 2649.00000000000 2652.99999999999 2656.99999999999 2660.99999999999 2656.99999999999

1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100

1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100 1100

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

1994.35217767316 1837.72432213178 1813.49138992616 1726.99829667303 1772.07114378607 1966.80653270992 2401.80653270992 2836.80653270992 2697.34415922912 2524.35988506752 2564.34431063051 2534.43732090193 2488.49863150369 2469.13336551647 2517.78718365617 2614.53047178633 2775.30494907166 2900 2900 2900 2900 2867.27842633389 2432.27842633389 1997.27842633389

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

1744.35217767315 1587.72432213176 1563.49138992614 1476.99829667301 1522.07114378606 1761.80653270992 2151.80653270992 2541.80653270992 2447.34415922910 2274.35988506750 2152.04572514092 2122.90743947572 2078.14951944035 2059.28200193226 2106.68526332778 2200.94194349887 2525.30494907164 2600 2600 2600 2600 2572.27842633389 2182.27842633389 1792.27842633389

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 0 0 330 660.000000000001 990.000000000000 1320.00000000000 1447.34415922910 1274.35988506750 1152.04572514092 1122.90743947572 1078.14951944035 1059.28200193226 1106.68526332779 1273.43713889399 1603.43713889399 1933.43713889399 2263.43713889399 2138.31604029227 1842.55904928386 1512.55904928386 1182.55904928386 852.559049283864

0 0 0 0 0 0 626.356427036089 224.323874788977 65 65 65 65 65 65 65 65 65 563.117320039620 784.384342965917 638.316040292299 343.400918133829 255.509152115255 270.601212687499 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0

0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0 0