

**Attachment to “Affidavit And Certification Of The Total Mwh Quantity Generated By The Hope Creek,  
Salem 1 And Salem 2 Nuclear Plants” of Eric Carr, President and Chief Nuclear Officer Power of PSEG  
Nuclear LLC, dated June 29, 2020, describing loss events for Hope Creek Nuclear Unit**

Pursuant to the May 20, 2020 BPU Order, all loss events have been reviewed and meet the following allowable exceptions:

The selected nuclear power plant should operate at its maximum output, with the exception of;

- (1) reduced output or outages associated with equipment maintenance and/or repair that a prudent owner or operator of a nuclear power plant would undertake,
- (2) NRC license limitations, fuel limitations (for example, rod pattern adjustments, end of operating cycle fuel management, and coast downs),
- (3) any PJM imposed constraints,
- (4) and other events beyond its reasonable control that are classified as Force Majeure events.

| Hope Creek Total Losses |               |               | 1,624,548.4 |          | MWHR                                                                                                                                                                                                                                                                                                                         |                            |                |
|-------------------------|---------------|---------------|-------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| START                   | END           | DERATED HOURS | Mwe Loss    | MWh Loss | REASON                                                                                                                                                                                                                                                                                                                       | Allowed Exception Category | NERC/GADS Code |
| 6/1/19 0:00             | 6/1/19 16:40  | 16.7          | 140.2       | 2336.7   | DP Turbine Valve Testing, Periodic testing of turbine control valves                                                                                                                                                                                                                                                         | 1                          | 4267           |
| 6/4/19 12:45            | 6/4/19 13:10  | 0.4           | 12.4        | 5.2      | HPCI IST, Periodic testing of High Pressure Coolant Injection system (HPCI)                                                                                                                                                                                                                                                  | 1                          | 2602           |
| 6/4/19 4:00             | 6/6/19 20:00  | 64.0          | 9.6         | 617.4    | Coastdown into FFWTR Phase 1 , Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                               | 2                          | 9110           |
| 6/6/19 20:00            | 6/7/19 5:20   | 9.3           | 91.5        | 854.1    | DP FFWTR Phase 1 6A, FFWTR Final Feedwater Temperature Reduction:<br>Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |
| 6/7/19 5:20             | 6/13/19 20:00 | 158.7         | 4.0         | 639.7    | FFWTR Phase 1 6A, FFWTR Final Feedwater Temperature Reduction:<br>Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty    | 2                          | 9110           |
| 6/11/19 10:00           | 6/13/19 20:00 | 58.0          | 4.5         | 262.9    | Coastdown into FFWTR Phase 2, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                | 2                          | 9110           |

| Hope Creek Total Losses |               |               | 1,624,548.4 |          | MWHR                                                                                                                                                                                                                                                                                                                   |                            |                |
|-------------------------|---------------|---------------|-------------|----------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| START                   | END           | DERATED HOURS | Mwe Loss    | MWh Loss | REASON                                                                                                                                                                                                                                                                                                                 | Allowed Exception Category | NERC/GADS Code |
| 6/13/19 20:00           | 6/14/19 5:06  | 9.1           | 91.4        | 831.3    | DP FFWTR Phase 2, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |
| 6/14/19 5:06            | 6/20/19 20:00 | 158.9         | 5.6         | 882.1    | FFWTR Phase 2, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty    | 2                          | 9110           |
| 6/19/19 6:30            | 6/20/19 20:00 | 37.5          | 3.1         | 116.1    | Coastdown into FFWTR Phase 3, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                          | 2                          | 9110           |
| 6/20/19 20:00           | 6/21/19 4:20  | 8.3           | 96.4        | 803.6    | DP FFWTR Phase 3, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |
| 6/21/19 4:20            | 6/30/19 20:00 | 231.7         | 12.4        | 2870.6   | FFWTR Phase 3, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty    | 2                          | 9110           |
| 6/28/19 11:00           | 6/29/19 12:02 | 25.0          | 0.9         | 22.5     | Coastdown into FFWTR Phase 4a, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                         | 2                          | 9110           |
| 6/29/19 12:02           | 6/29/19 18:50 | 6.8           | 24.1        | 163.7    | DP due to condenser vacuum (ambient conditions), Condenser vacuum (absolute) increases with ambient conditions. There is a maximum operational limit for vacuum. When it is reached on hot days, reactor power is reduced                                                                                              | 2                          | 3280           |
| 6/29/19 18:50           | 6/30/19 20:00 | 25.2          | 3.9         | 98.9     | Coastdown into FFWTR Phase 4a, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                         | 2                          | 9110           |
| 6/30/19 20:00           | 7/1/19 0:00   | 4.0           | 151.8       | 607.2    | DP FFWTR Phase 4, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |
| 7/1/19 0:00             | 7/1/19 4:52   | 4.9           | 60.2        | 292.8    | DP FFWTR Phase 4, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |

| Hope Creek Total Losses |               |               | 1,624,548.4 |          | MWHr                                                                                                                                                                                                                                                                                                                |                            |                |
|-------------------------|---------------|---------------|-------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| START                   | END           | DERATED HOURS | Mwe Loss    | MWh Loss | REASON                                                                                                                                                                                                                                                                                                              | Allowed Exception Category | NERC/GADS Code |
| 7/1/19 4:52             | 8/1/19 0:00   | 739.1         | 20.0        | 14782.7  | FFWTR Phase 4, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |
| 7/2/19 16:45            | 7/2/19 23:28  | 6.7           | 20.4        | 136.9    | DP due to condenser vacuum, Condenser vacuum (absolute) increases with ambient conditions. There is a maximum operational limit for vacuum. When it is reached on hot days, reactor power is reduced                                                                                                                | 2                          | 3280           |
| 7/3/19 13:05            | 7/4/19 5:52   | 16.8          | 21.9        | 367.0    | DP due to condenser vacuum, Condenser vacuum (absolute) increases with ambient conditions. There is a maximum operational limit for vacuum. When it is reached on hot days, reactor power is reduced                                                                                                                | 2                          | 3280           |
| 7/4/19 11:22            | 7/4/19 23:02  | 11.7          | 25.5        | 297.9    | DP due to condenser vacuum (ambient conditions), Condenser vacuum (absolute) increases with ambient conditions. There is a maximum operational limit for vacuum. When it is reached on hot days, reactor power is reduced                                                                                           | 2                          | 3280           |
| 7/5/19 10:10            | 7/7/19 3:28   | 41.3          | 38.2        | 1576.3   | DP due to condenser vacuum, Condenser vacuum (absolute) increases with ambient conditions. There is a maximum operational limit for vacuum. When it is reached on hot days, reactor power is reduced                                                                                                                | 2                          | 3280           |
| 7/7/19 15:09            | 7/7/19 22:18  | 7.2           | 24.6        | 176.0    | DP due to condenser vacuum, Condenser vacuum (absolute) increases with ambient conditions. There is a maximum operational limit for vacuum. When it is reached on hot days, reactor power is reduced                                                                                                                | 2                          | 3280           |
| 7/7/19 22:18            | 7/11/19 13:21 | 87.0          | 15.7        | 1367.5   | Coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 7/11/19 13:21           | 7/11/19 20:00 | 6.7           | 27.0        | 179.6    | Coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 7/11/19 13:21           | 7/11/19 20:00 | 6.7           | 21.6        | 143.5    | DP due to condenser vacuum, Condenser vacuum (absolute) increases with ambient conditions. There is a maximum operational limit for vacuum. When it is reached on hot days, reactor power is reduced                                                                                                                | 2                          | 3280           |
| 7/11/19 20:00           | 7/12/19 10:50 | 14.8          | 126.7       | 1879.7   | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                                                 | 2                          | 2020           |
| 7/12/19 13:14           | 7/12/19 23:26 | 10.2          | 6.0         | 60.8     | Coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 7/14/19 2:15            | 7/14/19 12:39 | 10.4          | 4.9         | 50.7     | Coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 7/14/19 12:39           | 7/15/19 14:17 | 25.6          | 5.0         | 128.2    | Coastdown , Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast                                                                                                  | 2                          | 9110           |

| Hope Creek Total Losses |               |               | 1,624,548.4 |          | MWHR                                                                                                                                                                                                                                                                                                                |                            |                |
|-------------------------|---------------|---------------|-------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| START                   | END           | DERATED HOURS | Mwe Loss    | MWh Loss | REASON                                                                                                                                                                                                                                                                                                              | Allowed Exception Category | NERC/GADS Code |
|                         |               |               |             |          | down until refuel outage                                                                                                                                                                                                                                                                                            |                            |                |
| 7/14/19 12:39           | 7/14/19 20:43 | 8.1           | 34.1        | 275.4    | DP due to condenser vacuum, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                         | 2                          | 3280           |
| 7/14/19 20:43           | 7/15/19 14:17 | 17.6          | 28.0        | 491.9    | DP/running loss 5C FWH Level Valve 20827816, Feedwater heater level control component requiring reactor power reduced to troubleshoot and repair                                                                                                                                                                    | 1                          | 3502           |
| 8/1/19 0:00             | 8/3/19 19:47  | 67.8          | 20.0        | 1355.6   | FFWTR Phase 4, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |
| 8/1/19 0:00             | 8/1/19 20:00  | 20.0          | 84.4        | 1688.2   | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 8/1/19 20:00            | 8/2/19 6:20   | 10.3          | 80.0        | 826.4    | Coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 8/1/19 20:00            | 8/2/19 6:20   | 10.3          | 72.5        | 749.2    | DP Friction Testing, Control rod testing                                                                                                                                                                                                                                                                            | 1                          | 2155           |
| 8/2/19 6:20             | 8/3/19 19:11  | 36.8          | 67.0        | 2469.5   | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 8/3/19 19:11            | 8/3/19 19:47  | 0.6           | 82.0        | 49.2     | Coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 8/3/19 19:11            | 8/3/19 19:47  | 0.6           | 422.7       | 253.6    | DP Vacuum transient Cooling Tower Bypass Valve, Initial downpower due to condenser vacuum transient which led up to forced outage                                                                                                                                                                                   | 1                          | 3230           |
| 8/3/19 19:47            | 8/5/19 16:07  | 44.3          | 0.0         | 54747.8  | F191HC forced outage , Vacuum transient and forced outage due to undemanded opening of cooling tower bypass valve                                                                                                                                                                                                   | 1                          | 3230           |
| 8/5/19 16:07            | 8/6/19 18:00  | 25.9          | 660.8       | 17102.7  | Ascension from F191HC, Return to full power (in this case maximum core flow) after forced outage                                                                                                                                                                                                                    | 1                          | 3230           |
| 8/6/19 18:00            | 8/7/19 6:56   | 12.9          | 278.4       | 3600.0   | Max core flow - coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                          | 2                          | 9110           |
| 8/7/19 6:56             | 8/7/19 22:10  | 15.2          | 242.0       | 3685.7   | Coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast                                                                                                   | 2                          | 9110           |

| Hope Creek Total Losses |              |               | 1,624,548.4 |          | MWHR                                                                                                                                                                                                                                                                                                                |                            |                |
|-------------------------|--------------|---------------|-------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| START                   | END          | DERATED HOURS | Mwe Loss    | MWh Loss | REASON                                                                                                                                                                                                                                                                                                              | Allowed Exception Category | NERC/GADS Code |
|                         |              |               |             |          | down until refuel outage                                                                                                                                                                                                                                                                                            |                            |                |
| 8/7/19 6:56             | 8/7/19 22:10 | 15.2          | 42.1        | 641.5    | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                                                 | 2                          | 2020           |
| 8/7/19 22:10            | 8/8/19 10:06 | 11.9          | 138.6       | 1653.2   | Max core flow - coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                          | 2                          | 9110           |
| 8/8/19 10:06            | 8/9/19 0:48  | 14.7          | 140.0       | 2058.0   | Coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 8/8/19 10:06            | 8/9/19 0:48  | 14.7          | 107.9       | 1586.6   | DP 6A 6B FWH removed from service (FFWTR), Downpower to remove feedwater heaters from service in support of Final Feedwater Temperature Reduction                                                                                                                                                                   | 2                          | 9110           |
| 8/9/19 0:48             | 8/10/19 5:10 | 28.4          | 6.0         | 170.2    | FFWTR Phase 2, Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty                                              | 2                          | 9110           |
| 8/9/19 0:48             | 8/9/19 13:00 | 12.2          | 109.5       | 1335.6   | Max core flow - coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                          | 2                          | 9110           |
| 9/1/19 0:00             | 10/1/19 0:00 | 720.0         | 26.0        | 18720.0  | FFWTR Phase 5, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |
| 9/1/19 0:00             | 9/3/19 10:28 | 58.5          | 179.7       | 10505.2  | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 9/3/19 10:28            | 9/3/19 10:53 | 0.4           | 185.0       | 77.7     | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 9/3/19 10:28            | 9/3/19 10:53 | 0.4           | 19.2        | 8.1      | DP Friction Testing, Control rod testing                                                                                                                                                                                                                                                                            | 1                          | 2155           |
| 9/3/19 10:53            | 9/3/19 15:55 | 5.0           | 185.5       | 933.2    | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 9/3/19 15:55            | 9/4/19 5:30  | 13.6          | 178.0       | 2417.2   | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |

| Hope Creek Total Losses |                |               | 1,624,548.4 |          | MWHR                                                                                                                                                                                                                                                                                                                |                            |                |
|-------------------------|----------------|---------------|-------------|----------|---------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| START                   | END            | DERATED HOURS | Mwe Loss    | MWh Loss | REASON                                                                                                                                                                                                                                                                                                              | Allowed Exception Category | NERC/GADS Code |
| 9/3/19 15:55            | 9/4/19 5:30    | 13.6          | 169.2       | 2297.3   | DP D CWP Emergency Trip 20831825, Fault with D Circulating Water Pump (CWP) required removal from service which initially required a downpower. A running efficiency loss occurred during the duration that the pump was removed from service                                                                       | 1                          | 3211           |
| 9/4/19 5:30             | 9/13/19 20:31  | 231.0         | 10.0        | 2310.2   | D CWP OOS, Running losses due to D Circulating Water Pump (CWP) being out of service                                                                                                                                                                                                                                | 1                          | 3211           |
| 9/4/19 5:30             | 9/13/19 20:31  | 231.0         | 212.0       | 48987.1  | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 9/13/19 20:31           | 10/1/19 0:00   | 411.5         | 271.2       | 111601.6 | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 10/1/19 0:00            | 10/16/19 7:12  | 367.2         | 26.0        | 9547.2   | FFWTR Phase 5, FFWTR Final Feedwater Temperature Reduction: Feedwater heaters are removed from service at the end of the fuel cycle to increase reactivity and maintain full reactor power longer before fuel coastdown. FFWTR maintains power level longer when fuel is depleted but imposes an efficiency penalty | 2                          | 9110           |
| 10/1/19 0:00            | 10/8/19 20:00  | 188.0         | 324.8       | 61054.9  | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 10/8/19 20:00           | 10/8/19 23:20  | 3.3           | 342.0       | 1138.9   | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 10/8/19 20:00           | 10/8/19 23:20  | 3.3           | 33.7        | 112.1    | DP Friction Testing, Control rod testing                                                                                                                                                                                                                                                                            | 1                          | 2155           |
| 10/8/19 23:20           | 10/15/19 14:38 | 159.3         | 355.3       | 56606.0  | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 10/15/19 14:38          | 10/16/19 7:12  | 16.6          | 15.0        | 248.6    | C RFP placed on recirc, C Reactor Feedpump (RFP) placed in Recirc mode as part of long term power reduction                                                                                                                                                                                                         | 2                          | 2070           |
| 10/15/19 14:38          | 10/16/19 7:12  | 16.6          | 370.5       | 6139.1   | coastdown, Coastdown - max core flow. Core is at its limit for power production and power level fades until an adjustment is made via rod pattern adjustment or FFWTR. If no adjustment remains, power will coast down until refuel outage                                                                          | 2                          | 9110           |
| 10/16/19 7:12           | 10/16/19 12:00 | 4.8           | 860.5       | 4130.6   | DP Commence RF 22, Downpower to commence refuel outage                                                                                                                                                                                                                                                              | 1                          | 2070           |
| 10/16/19 12:00          | 11/1/19 0:00   | 372.0         | Offline     | 468583.3 | Refuel outage RF22, Refuel outage                                                                                                                                                                                                                                                                                   | 1                          | 2070           |
| 11/1/19 0:00            | 11/12/19 12:00 | 277.0         | Offline     | 351263.7 | Refuel outage RF22, Refuel outage                                                                                                                                                                                                                                                                                   | 1                          | 2070           |

| Hope Creek Total Losses |                |               | 1,624,548.4 |          | MWHr                                                                                                                                                                                                                                                                                 |                            |                |
|-------------------------|----------------|---------------|-------------|----------|--------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| START                   | END            | DERATED HOURS | Mwe Loss    | MWh Loss | REASON                                                                                                                                                                                                                                                                               | Allowed Exception Category | NERC/GADS Code |
| 11/12/19 12:00          | 11/21/19 9:41  | 213.7         | Offline     | 270967.6 | Refuel outage RF22, RF22 Ext Refuel outage extension T-Quencher repair. Reactor pressure vessel (boiler) relief valves terminate into T-Quenchers which diffuse steam should the valves lift. One T-Quencher was identified with a piping defect during inspection that was repaired | 1                          | 2070           |
| 11/21/19 9:41           | 11/22/19 16:00 | 30.3          | 717.2       | 21744.1  | Ascension, Increase to full power after outage                                                                                                                                                                                                                                       | 1                          | 2070           |
| 11/22/19 16:00          | 11/23/19 16:54 | 24.9          | 248.3       | 6182.2   | RFPT Overspeed Trip Issue 20839613 20840380, Power ascension delay due to issue encountered during Reactor Feedpump Turbine (RFPT) overspeed testing                                                                                                                                 | 1                          | 3412           |
| 11/23/19 16:54          | 11/24/19 3:03  | 10.2          | 149.5       | 1517.7   | Ascension, Increase to full power after outage                                                                                                                                                                                                                                       | 1                          | 2070           |
| 11/24/19 11:03          | 11/25/19 4:18  | 17.3          | 250.9       | 4328.4   | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 11/25/19 19:00          | 11/25/19 20:38 | 1.6           | 24.3        | 39.5     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 11/26/19 10:00          | 11/26/19 11:34 | 1.6           | 22.3        | 35.3     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 11/27/19 13:00          | 11/27/19 14:51 | 1.9           | 21.8        | 40.4     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 12/6/19 20:00           | 12/6/19 23:07  | 3.1           | 51.4        | 160.4    | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 12/14/19 8:00           | 12/14/19 21:24 | 13.4          | 206.8       | 2770.8   | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 12/15/19 14:00          | 12/16/19 1:51  | 11.9          | 169.2       | 2006.1   | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 12/17/19 0:00           | 12/17/19 0:30  | 0.5           | 22.4        | 11.2     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 12/27/19 10:09          | 12/27/19 10:36 | 0.5           | 5.0         | 2.2      | 42-59 Inserted due to friction 20837510, Control Rod with high friction fully inserted (conservative position) until friction issue can be resolved                                                                                                                                  | 1                          | 2155           |
| 1/4/20 20:20            | 1/4/20 20:50   | 0.5           | 3.7         | 1.9      | Monthly BPV testing, Monthly turbine bypass valve (BPV) testing. Sometimes loss is detectable and sometimes it is not                                                                                                                                                                | 1                          | 2530           |
| 1/17/20 20:00           | 1/17/20 20:14  | 0.2           | 9.4         | 2.2      | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 1/21/20 9:12            | 1/21/20 15:34  | 6.4           | 15.4        | 98.3     | Cn Waterbox Cond Probe leak 20835510, A leak of a conductivity probe mounted in the C North (Cn) condenser waterbox required isolating circulating water flow to the waterbox                                                                                                        | 1                          | 3231           |
| 2/2/20 19:07            | 2/11/20 9:39   | 206.5         | 10.3        | 2119.4   | D CWP OOS Motor Replacement, D Circulating Water Pump (CWP) was removed from service for a motor replacement                                                                                                                                                                         | 1                          | 3211           |
| 2/12/20 20:00           | 2/12/20 20:16  | 0.3           | 9.3         | 2.6      | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |
| 2/20/20 2:40            | 2/21/20 5:45   | 27.1          | 385.8       | 10446.7  | DP C String Feedwater Heater Trip Panel Power Fail, The C String of feedwater heating tripped due to a power failure to the C string control panel                                                                                                                                   | 1                          | 3542           |
| 2/21/20 15:00           | 2/21/20 15:39  | 0.7           | 34.2        | 22.6     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                                                                                                                                  | 2                          | 2020           |



| Hope Creek Total Losses |               |               | 1,624,548.4 |          | MWHR                                                                                                                                                                             |                            |                |
|-------------------------|---------------|---------------|-------------|----------|----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|----------------------------|----------------|
| START                   | END           | DERATED HOURS | Mwe Loss    | MWh Loss | REASON                                                                                                                                                                           | Allowed Exception Category | NERC/GADS Code |
| 2/22/20 0:05            | 2/22/20 0:41  | 0.6           | 33.3        | 20.0     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                              | 2                          | 2020           |
| 2/22/20 13:00           | 2/22/20 13:30 | 0.5           | 31.7        | 15.8     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                              | 2                          | 2020           |
| 3/3/20 11:28            | 3/3/20 12:28  | 1.0           | 12.3        | 12.3     | HPCI IST, Periodic test of High Pressure Coolant Injection (HPCI) system. HPCI consumes nuclear steam                                                                            | 1                          | 2602           |
| 3/5/20 8:05             | 3/6/20 14:53  | 30.8          | 9.4         | 288.0    | C CWP OOS Motor Inspection, C Circulating Water Pump (CWP) was removed from service for a motor inspection                                                                       | 1                          | 3211           |
| 3/8/20 19:44            | 3/8/20 22:09  | 2.4           | 38.6        | 92.9     | DP Rod Insertion for Maintenance, Control Rod maintenance                                                                                                                        | 1                          | 2112           |
| 3/14/20 1:00            | 3/15/20 5:21  | 28.4          | 341.0       | 9666.6   | DP Turbine Valve Testing, DP Downpower (reactor power reduction) for periodic testing of turbine control valves                                                                  | 1                          | 4267           |
| 3/15/20 20:00           | 3/16/20 4:23  | 8.4           | 153.6       | 1287.4   | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                              | 2                          | 2020           |
| 3/16/20 21:04           | 3/16/20 21:46 | 0.7           | 20.8        | 14.6     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                              | 2                          | 2020           |
| 4/10/20 20:00           | 4/10/20 20:20 | 0.3           | 11.4        | 3.7      | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                              | 2                          | 2020           |
| 4/18/20 4:15            | 4/19/20 2:48  | 22.6          | 272.9       | 6157.6   | DP due to 4/5/6C FWH Trip , #4, 5, and 6 feedwater heater (FWH) tripped due to electrical transient in concert with out-of-service panel UPS                                     | 1                          | 9300           |
| 4/19/20 12:45           | 4/19/20 13:30 | 0.8           | 31.5        | 23.9     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                              | 2                          | 2020           |
| 4/19/20 20:00           | 4/19/20 20:35 | 0.6           | 27.1        | 16.2     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                              | 2                          | 2020           |
| 4/20/20 7:00            | 4/20/20 7:22  | 0.4           | 29.7        | 11.0     | DP Rod Pattern Adjustment, Rod pattern Adjustment: long-term power control maneuver                                                                                              | 2                          | 2020           |
| 5/8/20 20:00            | 5/8/20 21:06  | 1.1           | 41.0        | 45.6     | DP Rod Friction Surveillance, Control rod testing                                                                                                                                | 1                          | 2155           |
| 5/20/20 20:55           | 5/20/20 21:21 | 0.4           | 18.8        | 8.3      | Cn WB isolated due to conductivity spike, C North (Cn) condenser waterbox isolated due to condenser tube leak causing river water intrusion into condensate                      | 1                          | 3110           |
| 5/22/20 8:24            | 5/22/20 14:09 | 5.8           | 52.0        | 298.7    | Cn WB isolated/DP due to tube leak, Followup investigation for C North (Cn) condenser waterbox isolated due to condenser tube leak causing river water intrusion into condensate | 1                          | 3110           |
| 5/31/20 10:36           | 5/31/20 22:35 | 12.0          | 9.3         | 112.1    | A Recirc speed hold, A Recirc Pump (used for reactor power control) went into speed hold mode (safe mode) due to equipment issue                                                 | 1                          | 2220           |