

# Day Ahead Limiting Constraints

| Time Stamp       | Time Zone | Limiting Facility           | Facility PTID | Contingency | Constraint Cost (\$) |
|------------------|-----------|-----------------------------|---------------|-------------|----------------------|
| 07/02/2016 14:00 | EDT       | SCH - OH - NY               | 23317         | BASE CASE   | 0.49                 |
| 07/02/2016 16:00 | EDT       | SCH - OH - NY               | 23317         | BASE CASE   | 0.27                 |
| 07/02/2016 00:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 17.77                |
| 07/02/2016 01:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 21.56                |
| 07/02/2016 02:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 16.23                |
| 07/02/2016 03:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 13.4                 |
| 07/02/2016 04:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 12.66                |
| 07/02/2016 05:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 8.77                 |
| 07/02/2016 06:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 4.92                 |
| 07/02/2016 09:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 2.2                  |
| 07/02/2016 13:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 1.57                 |
| 07/02/2016 14:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 1.6                  |
| 07/02/2016 15:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 3.1                  |
| 07/02/2016 16:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 1.54                 |
| 07/02/2016 23:00 | EDT       | CENTRAL EAST - VC           | 23330         | BASE CASE   | 1.77                 |
| 07/02/2016 09:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 0.02                 |
| 07/02/2016 10:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 0.02                 |
| 07/02/2016 11:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 2.26                 |
| 07/02/2016 12:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 3.01                 |
| 07/02/2016 13:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 2.33                 |
| 07/02/2016 14:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 2.14                 |
| 07/02/2016 15:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 1.58                 |
| 07/02/2016 16:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 1.68                 |
| 07/02/2016 17:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 2.17                 |
| 07/02/2016 18:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 2.17                 |
| 07/02/2016 19:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 2.33                 |
| 07/02/2016 20:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 2.69                 |
| 07/02/2016 21:00 | EDT       | E179THST 138 HELLTP_W 138 1 | 25288         | BASE CASE   | 2.98                 |
| 07/02/2016 00:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 01:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 02:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 03:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 04:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 05:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 09:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 10:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 11:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 4.54                 |
| 07/02/2016 12:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 6.04                 |
| 07/02/2016 13:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 4.68                 |
| 07/02/2016 14:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 4.29                 |
| 07/02/2016 15:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 3.17                 |
| 07/02/2016 16:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 3.37                 |
| 07/02/2016 17:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 4.35                 |
| 07/02/2016 18:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 4.35                 |
| 07/02/2016 19:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 4.67                 |
| 07/02/2016 20:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 5.4                  |
| 07/02/2016 21:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 6.02                 |
| 07/02/2016 22:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 23:00 | EDT       | RAINEY 138 VERNON 138 1     | 25297         | BASE CASE   | 0.02                 |
| 07/02/2016 08:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 0.02                 |
| 07/02/2016 09:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 0.03                 |
| 07/02/2016 11:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 1.56                 |
| 07/02/2016 12:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 10.49                |
| 07/02/2016 13:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 8.17                 |
| 07/02/2016 14:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 7.49                 |
| 07/02/2016 15:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 6.22                 |
| 07/02/2016 16:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 6.32                 |
| 07/02/2016 17:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 7.6                  |
| 07/02/2016 18:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 7.6                  |
| 07/02/2016 19:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 8.15                 |
| 07/02/2016 20:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 9.43                 |
| 07/02/2016 21:00 | EDT       | FRESHKLS 138 WILLWBRK 138 1 | 25319         | BASE CASE   | 10.46                |
| 07/02/2016 00:00 | EDT       | SCH - NPX_1385              | 325277        | BASE CASE   | 2.66                 |

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|------------------|-----|-----------------------------|--------|---------------------------|--------|
| 07/02/2016 01:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 0.58   |
| 07/02/2016 02:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 3.36   |
| 07/02/2016 08:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 4.21   |
| 07/02/2016 09:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 6.55   |
| 07/02/2016 10:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 4.71   |
| 07/02/2016 11:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 2.88   |
| 07/02/2016 12:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 10.74  |
| 07/02/2016 13:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 9.6    |
| 07/02/2016 14:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 9.68   |
| 07/02/2016 15:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 9.58   |
| 07/02/2016 16:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 24.23  |
| 07/02/2016 17:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 16.9   |
| 07/02/2016 18:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 11.15  |
| 07/02/2016 19:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 11.19  |
| 07/02/2016 20:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 8.15   |
| 07/02/2016 21:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 8.25   |
| 07/02/2016 22:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 6.78   |
| 07/02/2016 23:00 | EDT | SCH - NPX_1385              | 325277 | BASE CASE                 | 3.25   |
| 07/02/2016 05:00 | EDT | NYCA ACTIVE DNI             | 990    | ACTIVE DNI                | -0.15  |
| 07/02/2016 14:00 | EDT | PACKARD 230 SAWYER 230 1    | 25164  | BUS:PACKARD BK3 & 61 & 78 | 0.16   |
| 07/02/2016 16:00 | EDT | PACKARD 230 SAWYER 230 1    | 25164  | BUS:PACKARD BK3 & 61 & 78 | 8.65   |
| 07/02/2016 10:00 | EDT | MOTTHAVN 345 RAINEY 345 1   | 325430 | MOTTHAVN-RAINEY___345_Q12 | 0.03   |
| 07/02/2016 15:00 | EDT | LEEDS 345 N.SCTLND 345 1    | 25171  | N.SCTLND-LEEDS___345_94   | -3.66  |
| 07/02/2016 16:00 | EDT | LEEDS 345 N.SCTLND 345 1    | 25171  | N.SCTLND-LEEDS___345_94   | -2.89  |
| 07/02/2016 00:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 4.63   |
| 07/02/2016 01:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 2.05   |
| 07/02/2016 02:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 5.32   |
| 07/02/2016 03:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 1.34   |
| 07/02/2016 06:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 6.01   |
| 07/02/2016 07:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 5.44   |
| 07/02/2016 08:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 8.86   |
| 07/02/2016 09:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 11.78  |
| 07/02/2016 10:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 9.77   |
| 07/02/2016 11:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 9.36   |
| 07/02/2016 12:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 16.93  |
| 07/02/2016 13:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 15.05  |
| 07/02/2016 14:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 14.04  |
| 07/02/2016 15:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 13.6   |
| 07/02/2016 16:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 31.04  |
| 07/02/2016 17:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 21.91  |
| 07/02/2016 18:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 14.11  |
| 07/02/2016 19:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 10.6   |
| 07/02/2016 20:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 8.68   |
| 07/02/2016 21:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 8.51   |
| 07/02/2016 22:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 6.86   |
| 07/02/2016 23:00 | EDT | DUNWODIE 345 SHORE_RD 345 1 | 25091  | NEPTUNE HVDC TIE LINE     | 6.81   |
| 07/02/2016 10:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25214  | TWR:GOETHALS 22 & 21      | 0.02   |
| 07/02/2016 11:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25214  | TWR:GOETHALS 22 & 21      | 11.1   |
| 07/02/2016 11:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 11.08  |
| 07/02/2016 12:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 14.75  |
| 07/02/2016 13:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 11.5   |
| 07/02/2016 14:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 10.53  |
| 07/02/2016 15:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 9.09   |
| 07/02/2016 16:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 9.09   |
| 07/02/2016 17:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 10.7   |
| 07/02/2016 18:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 10.69  |
| 07/02/2016 19:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 11.48  |
| 07/02/2016 20:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 13.27  |
| 07/02/2016 21:00 | EDT | GOWANUS 138 GREENWD 138 1   | 25215  | TWR:GOETHALS 22 & 21      | 14.78  |
| 07/02/2016 11:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -17.63 |
| 07/02/2016 12:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -23.47 |
| 07/02/2016 13:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -18.33 |
| 07/02/2016 14:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -16.8  |
| 07/02/2016 15:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -15.02 |
| 07/02/2016 16:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -14.81 |
| 07/02/2016 17:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -17.06 |
| 07/02/2016 18:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -17.05 |
| 07/02/2016 19:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -18.3  |
| 07/02/2016 20:00 | EDT | GREENWD 138 VERNON 138 1    | 25337  | TWR:GOETHALS 22 & 21      | -21.16 |

|                  |     |                          |       |                      |        |
|------------------|-----|--------------------------|-------|----------------------|--------|
| 07/02/2016 21:00 | EDT | GREENWD 138 VERNON 138 1 | 25337 | TWR:GOETHALS 22 & 21 | -23.56 |
|------------------|-----|--------------------------|-------|----------------------|--------|