

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2016

|                                   | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak               | 2034 | 1941 | 1799 | 1577 | 1453 | 1385 | 1377 | 1360 | 1393 | 1466 | 1610 | 1766 |
| B Interruptible Demand            | 139  | 128  | 140  | 211  | 201  | 219  | 230  | 221  | 223  | 211  | 138  | 129  |
| C Firm Peak (A - B)               | 1895 | 1814 | 1659 | 1366 | 1253 | 1166 | 1148 | 1139 | 1170 | 1255 | 1471 | 1636 |
| D Required Reserve (C x 20%)      | 379  | 363  | 332  | 273  | 251  | 233  | 230  | 228  | 234  | 251  | 294  | 327  |
| E Required Capacity (C + D)       | 2274 | 2176 | 1990 | 1639 | 1503 | 1399 | 1377 | 1367 | 1404 | 1506 | 1766 | 1964 |
| F Existing Resources              | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:          |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions               | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| H Hydro                           | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| I Biomass                         | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| J Community Feed-in-Tariff        | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   | 23   |
| K REA Wind Projects               | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import            | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    |
| M Less Derations                  | 0    | 0    | 153  | 333  | 362  | 380  | 425  | 425  | 410  | 336  | 153  | 0    |
| Total Firm Supply Resources       |      |      |      |      |      |      |      |      |      |      |      |      |
| N (F + G + H + I + J + K + L - M) | 2377 | 2377 | 2224 | 2044 | 2014 | 1997 | 1952 | 1952 | 1967 | 2041 | 2223 | 2377 |
| + Surplus / - Deficit (N - E)     | 103  | 200  | 233  | 405  | 511  | 598  | 574  | 585  | 562  | 534  | 458  | 413  |
| Reserve Margin % (N - C)/ C       | 25%  | 31%  | 34%  | 50%  | 61%  | 71%  | 70%  | 71%  | 68%  | 63%  | 51%  | 45%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
  - REA Wind Projects - NRIS projects awarded by the Renewable Electricity Administrator and assumed to be in-service for the 2015 RES (South Canoe and Sable).
  - Maritime Link Import is a Renewable Electricity Standard (RES) compliant hydro energy import from the Muskrat Falls project in Newfoundland and Labrador assumed in-service in late 2017. This firm capacity import will largely achieve the incremental requirements of the RES 2020 of 40% renewable energy and coincides with the assumed retirement of a solid fuel unit.
- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2017

|                                   | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak               | 2040 | 1980 | 1807 | 1579 | 1453 | 1384 | 1377 | 1360 | 1391 | 1466 | 1608 | 1767 |
| B Interruptible Demand            | 139  | 128  | 140  | 211  | 201  | 219  | 229  | 221  | 223  | 211  | 138  | 129  |
| C Firm Peak (A - B)               | 1901 | 1852 | 1667 | 1368 | 1253 | 1165 | 1148 | 1139 | 1168 | 1255 | 1470 | 1638 |
| D Required Reserve (C x 20%)      | 380  | 370  | 333  | 274  | 251  | 233  | 230  | 228  | 234  | 251  | 294  | 328  |
| E Required Capacity (C + D)       | 2281 | 2223 | 2000 | 1641 | 1504 | 1398 | 1378 | 1367 | 1402 | 1506 | 1765 | 1965 |
| F Existing Resources              | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:          |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions               | 30   | 30   | 30   | 30   | 30   | 30   | 30   | 30   | 30   | -123 | -123 | -123 |
| H Hydro                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass                         | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   | 10   |
| J Community Feed-in-Tariff        | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects               | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import            | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 0    | 153  | 153  | 153  |
| M Less Derations                  | 0    | 0    | 153  | 333  | 367  | 385  | 430  | 430  | 415  | 183  | 0    | 0    |
| Total Firm Supply Resources       |      |      |      |      |      |      |      |      |      |      |      |      |
| N (F + G + H + I + J + K + L - M) | 2418 | 2418 | 2265 | 2085 | 2051 | 2034 | 1988 | 1988 | 2003 | 2236 | 2418 | 2419 |
| + Surplus / - Deficit (N - E)     | 137  | 195  | 265  | 444  | 548  | 636  | 611  | 622  | 601  | 730  | 654  | 453  |
| Reserve Margin % (N - C) / C      | 27%  | 31%  | 36%  | 52%  | 64%  | 75%  | 73%  | 75%  | 71%  | 78%  | 64%  | 48%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
  - REA Wind Projects - NRIS projects awarded by the Renewable Electricity Administrator and assumed to be in-service for the 2015 RES (South Canoe and Sable).
  - Maritime Link Import is a Renewable Electricity Standard (RES) compliant hydro energy import from the Muskrat Falls project in Newfoundland and Labrador assumed in-service in late 2017. This firm capacity import will largely achieve the incremental requirements of the RES 2020 of 40% renewable energy and coincides with the assumed retirement of a solid fuel unit.
- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2018

|  | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak  | 2044 | 1969 | 1807 | 1579 | 1452 | 1381 | 1377 | 1359 | 1388 | 1464 | 1606 | 1765 |
| B Interruptible Demand   | 138  | 127  | 140  | 211  | 200  | 219  | 229  | 221  | 222  | 211  | 138  | 129  |
| C Firm Peak (A - B)  | 1906 | 1841 | 1667 | 1368 | 1252 | 1163 | 1147 | 1138 | 1166 | 1253 | 1468 | 1636 |
| D Required Reserve (C x 20%)                                   | 381  | 368  | 333  | 274  | 250  | 233  | 229  | 228  | 233  | 251  | 294  | 327  |
| E Required Capacity (C + D)                                    | 2287 | 2210 | 2001 | 1642 | 1502 | 1395 | 1377 | 1366 | 1399 | 1504 | 1761 | 1964 |
| F Existing Resources   | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions  | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 |
| H Hydro  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass  | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   |
| J Community Feed-in-Tariff                                     | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects  | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import   | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  |
| M Less Derations   | 0    | 0    | 150  | 330  | 364  | 382  | 427  | 427  | 412  | 333  | 150  | 0    |
| Total Firm Supply Resources<br>(F + G + H + I + J + K + L - M) | 2464 | 2464 | 2314 | 2134 | 2099 | 2082 | 2037 | 2037 | 2052 | 2131 | 2313 | 2464 |
| + Surplus / - Deficit (N - E)                                  | 176  | 254  | 313  | 492  | 597  | 687  | 660  | 671  | 653  | 627  | 552  | 500  |
| Reserve Margin % (N - C)/ C                                    | 29%  | 34%  | 39%  | 56%  | 68%  | 79%  | 78%  | 79%  | 76%  | 70%  | 58%  | 51%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
  - REA Wind Projects - NRIS projects awarded by the Renewable Electricity Administrator and assumed to be in-service for the 2015 RES (South Canoe and Sable).
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- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2019

|  | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak  | 2039 | 1964 | 1803 | 1573 | 1446 | 1375 | 1371 | 1353 | 1381 | 1458 | 1597 | 1758 |
| B Interruptible Demand   | 138  | 127  | 140  | 211  | 200  | 219  | 229  | 221  | 222  | 211  | 138  | 129  |
| C Firm Peak (A - B)  | 1901 | 1836 | 1663 | 1363 | 1246 | 1156 | 1142 | 1132 | 1159 | 1247 | 1460 | 1629 |
| D Required Reserve (C x 20%)                                   | 380  | 367  | 333  | 273  | 249  | 231  | 228  | 226  | 232  | 249  | 292  | 326  |
| E Required Capacity (C + D)                                    | 2281 | 2204 | 1995 | 1635 | 1495 | 1387 | 1370 | 1359 | 1390 | 1496 | 1752 | 1955 |
| F Existing Resources   | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions  | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 |
| H Hydro  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass  | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   |
| J Community Feed-in-Tariff                                     | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects  | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import   | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  |
| M Less Derations   | 0    | 0    | 150  | 330  | 364  | 382  | 427  | 427  | 412  | 333  | 150  | 0    |
| Total Firm Supply Resources<br>(F + G + H + I + J + K + L - M) | 2464 | 2464 | 2314 | 2134 | 2099 | 2082 | 2037 | 2037 | 2052 | 2131 | 2313 | 2464 |
| + Surplus / - Deficit (N - E)                                  | 182  | 260  | 318  | 499  | 604  | 695  | 666  | 678  | 661  | 634  | 562  | 509  |
| Reserve Margin % (N - C)/ C                                    | 30%  | 34%  | 39%  | 57%  | 69%  | 80%  | 78%  | 80%  | 77%  | 71%  | 58%  | 51%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
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  - Maritime Link Import is a Renewable Electricity Standard (RES) compliant hydro energy import from the Muskrat Falls project in Newfoundland and Labrador assumed in-service in late 2017. This firm capacity import will largely achieve the incremental requirements of the RES 2020 of 40% renewable energy and coincides with the assumed retirement of a solid fuel unit.
- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2020

|  | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak  | 2031 | 1936 | 1794 | 1565 | 1438 | 1366 | 1363 | 1345 | 1372 | 1449 | 1586 | 1746 |
| B Interruptible Demand   | 139  | 127  | 140  | 211  | 200  | 218  | 229  | 221  | 222  | 211  | 138  | 129  |
| C Firm Peak (A - B)  | 1892 | 1809 | 1655 | 1355 | 1238 | 1148 | 1134 | 1125 | 1150 | 1238 | 1448 | 1617 |
| D Required Reserve (C x 20%)                                   | 378  | 362  | 331  | 271  | 248  | 230  | 227  | 225  | 230  | 248  | 290  | 323  |
| E Required Capacity (C + D)                                    | 2270 | 2171 | 1986 | 1625 | 1485 | 1377 | 1361 | 1350 | 1380 | 1486 | 1738 | 1941 |
| F Existing Resources   | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions  | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 |
| H Hydro  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass  | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   |
| J Community Feed-in-Tariff                                     | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects  | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import   | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  |
| M Less Derations   | 0    | 0    | 150  | 330  | 364  | 382  | 427  | 427  | 412  | 333  | 150  | 0    |
| Total Firm Supply Resources<br>(F + G + H + I + J + K + L - M) | 2464 | 2464 | 2314 | 2134 | 2099 | 2082 | 2037 | 2037 | 2052 | 2131 | 2313 | 2464 |
| + Surplus / - Deficit (N - E)                                  | 193  | 293  | 328  | 508  | 614  | 705  | 676  | 687  | 672  | 645  | 575  | 523  |
| Reserve Margin % (N - C)/ C                                    | 30%  | 36%  | 40%  | 58%  | 70%  | 81%  | 80%  | 81%  | 78%  | 72%  | 60%  | 52%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
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  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
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- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2021

|                                   | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak               | 2015 | 1955 | 1784 | 1553 | 1426 | 1354 | 1353 | 1335 | 1360 | 1437 | 1572 | 1732 |
| B Interruptible Demand            | 138  | 127  | 139  | 211  | 200  | 218  | 229  | 221  | 222  | 211  | 138  | 129  |
| C Firm Peak (A - B)               | 1877 | 1828 | 1644 | 1343 | 1226 | 1136 | 1124 | 1114 | 1138 | 1226 | 1434 | 1603 |
| D Required Reserve (C x 20%)      | 375  | 366  | 329  | 269  | 245  | 227  | 225  | 223  | 228  | 245  | 287  | 321  |
| E Required Capacity (C + D)       | 2252 | 2193 | 1973 | 1611 | 1471 | 1363 | 1348 | 1337 | 1365 | 1471 | 1721 | 1924 |
| F Existing Resources              | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:          |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions               | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 |
| H Hydro                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass                         | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   |
| J Community Feed-in-Tariff        | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects               | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import            | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  |
| M Less Derations                  | 0    | 0    | 150  | 330  | 364  | 382  | 427  | 427  | 412  | 333  | 150  | 0    |
| Total Firm Supply Resources       |      |      |      |      |      |      |      |      |      |      |      |      |
| N (F + G + H + I + J + K + L - M) | 2464 | 2464 | 2314 | 2134 | 2099 | 2082 | 2037 | 2037 | 2052 | 2131 | 2313 | 2464 |
| + Surplus / - Deficit (N - E)     | 211  | 270  | 341  | 523  | 629  | 719  | 688  | 700  | 687  | 659  | 593  | 540  |
| Reserve Margin % (N - C)/ C       | 31%  | 35%  | 41%  | 59%  | 71%  | 83%  | 81%  | 83%  | 80%  | 74%  | 61%  | 54%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
  - REA Wind Projects - NRIS projects awarded by the Renewable Electricity Administrator and assumed to be in-service for the 2015 RES (South Canoe and Sable).
  - Maritime Link Import is a Renewable Electricity Standard (RES) compliant hydro energy import from the Muskrat Falls project in Newfoundland and Labrador assumed in-service in late 2017. This firm capacity import will largely achieve the incremental requirements of the RES 2020 of 40% renewable energy and coincides with the assumed retirement of a solid fuel unit.
- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2022

|  | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak  | 2006 | 1931 | 1776 | 1548 | 1421 | 1349 | 1348 | 1330 | 1354 | 1431 | 1562 | 1722 |
| B Interruptible Demand   | 138  | 127  | 139  | 211  | 200  | 218  | 229  | 220  | 222  | 210  | 137  | 129  |
| C Firm Peak (A - B)  | 1868 | 1804 | 1637 | 1337 | 1221 | 1131 | 1119 | 1110 | 1132 | 1221 | 1425 | 1594 |
| D Required Reserve (C x 20%)                                   | 374  | 361  | 327  | 267  | 244  | 226  | 224  | 222  | 226  | 244  | 285  | 319  |
| E Required Capacity (C + D)                                    | 2242 | 2165 | 1964 | 1605 | 1465 | 1357 | 1343 | 1332 | 1358 | 1465 | 1710 | 1912 |
| F Existing Resources   | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions  | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 |
| H Hydro  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass  | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   |
| J Community Feed-in-Tariff                                     | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects  | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import   | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  |
| M Less Derations   | 0    | 0    | 150  | 330  | 364  | 382  | 427  | 427  | 412  | 333  | 150  | 0    |
| Total Firm Supply Resources<br>(F + G + H + I + J + K + L - M) | 2464 | 2464 | 2314 | 2134 | 2099 | 2082 | 2037 | 2037 | 2052 | 2131 | 2313 | 2464 |
| + Surplus / - Deficit (N - E)                                  | 222  | 299  | 350  | 529  | 634  | 725  | 694  | 705  | 693  | 666  | 604  | 551  |
| Reserve Margin % (N - C)/ C                                    | 32%  | 37%  | 41%  | 60%  | 72%  | 84%  | 82%  | 84%  | 81%  | 75%  | 62%  | 55%  |

### Notes:

- 1) Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- 2) Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- 3) Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
  - REA Wind Projects - NRIS projects awarded by the Renewable Electricity Administrator and assumed to be in-service for the 2015 RES (South Canoe and Sable).
  - Maritime Link Import is a Renewable Electricity Standard (RES) compliant hydro energy import from the Muskrat Falls project in Newfoundland and Labrador assumed in-service in late 2017. This firm capacity import will largely achieve the incremental requirements of the RES 2020 of 40% renewable energy and coincides with the assumed retirement of a solid fuel unit.
- 4) Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- 5) NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- 6) This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2023

|                                   | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak               | 1999 | 1925 | 1772 | 1543 | 1417 | 1345 | 1344 | 1326 | 1349 | 1427 | 1554 | 1714 |
| B Interruptible Demand            | 138  | 127  | 139  | 210  | 200  | 218  | 229  | 220  | 222  | 210  | 137  | 129  |
| C Firm Peak (A - B)               | 1861 | 1798 | 1633 | 1333 | 1217 | 1126 | 1116 | 1106 | 1127 | 1216 | 1416 | 1585 |
| D Required Reserve (C x 20%)      | 372  | 360  | 327  | 267  | 243  | 225  | 223  | 221  | 225  | 243  | 283  | 317  |
| E Required Capacity (C + D)       | 2233 | 2157 | 1959 | 1599 | 1460 | 1352 | 1339 | 1327 | 1353 | 1460 | 1700 | 1902 |
| F Existing Resources              | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:          |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions               | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 |
| H Hydro                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass                         | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   |
| J Community Feed-in-Tariff        | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects               | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import            | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  |
| M Less Derations                  | 0    | 0    | 150  | 330  | 364  | 382  | 427  | 427  | 412  | 333  | 150  | 0    |
| Total Firm Supply Resources       |      |      |      |      |      |      |      |      |      |      |      |      |
| N (F + G + H + I + J + K + L - M) | 2464 | 2464 | 2314 | 2134 | 2099 | 2082 | 2037 | 2037 | 2052 | 2131 | 2313 | 2464 |
| + Surplus / - Deficit (N - E)     | 230  | 306  | 355  | 534  | 639  | 730  | 698  | 710  | 699  | 671  | 614  | 562  |
| Reserve Margin % (N - C)/ C       | 32%  | 37%  | 42%  | 60%  | 73%  | 85%  | 83%  | 84%  | 82%  | 75%  | 63%  | 55%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
  - REA Wind Projects - NRIS projects awarded by the Renewable Electricity Administrator and assumed to be in-service for the 2015 RES (South Canoe and Sable).
  - Maritime Link Import is a Renewable Electricity Standard (RES) compliant hydro energy import from the Muskrat Falls project in Newfoundland and Labrador assumed in-service in late 2017. This firm capacity import will largely achieve the incremental requirements of the RES 2020 of 40% renewable energy and coincides with the assumed retirement of a solid fuel unit.
- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.



## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2024

|  | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|--|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak  | 1992 | 1899 | 1767 | 1539 | 1413 | 1341 | 1341 | 1323 | 1345 | 1423 | 1547 | 1706 |
| B Interruptible Demand   | 138  | 127  | 139  | 210  | 200  | 218  | 229  | 220  | 222  | 210  | 137  | 128  |
| C Firm Peak (A - B)  | 1854 | 1773 | 1628 | 1329 | 1213 | 1123 | 1112 | 1102 | 1123 | 1212 | 1410 | 1578 |
| D Required Reserve (C x 20%)                                   | 371  | 355  | 326  | 266  | 243  | 225  | 222  | 220  | 225  | 242  | 282  | 316  |
| E Required Capacity (C + D)                                    | 2225 | 2127 | 1954 | 1594 | 1456 | 1347 | 1335 | 1323 | 1348 | 1455 | 1692 | 1893 |
| F Existing Resources   | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:                                       |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions  | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 | -123 |
| H Hydro  | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass  | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   |
| J Community Feed-in-Tariff                                     | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects  | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import   | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  |
| M Less Derations   | 0    | 0    | 150  | 330  | 364  | 382  | 427  | 427  | 412  | 333  | 150  | 0    |
| Total Firm Supply Resources<br>(F + G + H + I + J + K + L - M) | 2464 | 2464 | 2314 | 2134 | 2099 | 2082 | 2037 | 2037 | 2052 | 2131 | 2313 | 2464 |
| + Surplus / - Deficit (N - E)                                  | 239  | 336  | 360  | 539  | 643  | 735  | 702  | 714  | 704  | 676  | 622  | 570  |
| Reserve Margin % (N - C)/ C                                    | 33%  | 39%  | 42%  | 61%  | 73%  | 85%  | 83%  | 85%  | 83%  | 76%  | 64%  | 56%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
  - The Community Feed-in-Tariff represents distribution-connected renewable energy projects as outlined in the Province's Renewable Electricity Plan in April 2010. The projects are assumed to be phased-in over 4 years starting in 2014.
  - REA Wind Projects - NRIS projects awarded by the Renewable Electricity Administrator and assumed to be in-service for the 2015 RES (South Canoe and Sable).
  - Maritime Link Import is a Renewable Electricity Standard (RES) compliant hydro energy import from the Muskrat Falls project in Newfoundland and Labrador assumed in-service in late 2017. This firm capacity import will largely achieve the incremental requirements of the RES 2020 of 40% renewable energy and coincides with the assumed retirement of a solid fuel unit.
- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.

## Load and Resource Assessment for NSPI

(All values in MW except as noted)

2025

|                                   | Jan  | Feb  | Mar  | Apr  | May  | Jun  | Jul  | Aug  | Sep  | Oct  | Nov  | Dec  |
|-----------------------------------|------|------|------|------|------|------|------|------|------|------|------|------|
| A Total System Peak               | 1980 | 1922 | 1760 | 1529 | 1403 | 1331 | 1332 | 1314 | 1335 | 1413 | 1533 | 1692 |
| B Interruptible Demand            | 138  | 127  | 139  | 210  | 200  | 218  | 229  | 220  | 222  | 210  | 137  | 128  |
| C Firm Peak (A - B)               | 1842 | 1795 | 1620 | 1319 | 1204 | 1113 | 1103 | 1093 | 1113 | 1202 | 1396 | 1564 |
| D Required Reserve (C x 20%)      | 368  | 359  | 324  | 264  | 241  | 223  | 221  | 219  | 223  | 240  | 279  | 313  |
| E Required Capacity (C + D)       | 2210 | 2155 | 1945 | 1583 | 1444 | 1336 | 1324 | 1312 | 1336 | 1443 | 1676 | 1876 |
| F Existing Resources              | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 | 2336 |
| Firm Resource Additions:          |      |      |      |      |      |      |      |      |      |      |      |      |
| G Thermal Additions               | -204 | -204 | -204 | -204 | -204 | -204 | -204 | -204 | -204 | -204 | -204 | -204 |
| H Hydro                           | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    | 1    |
| I Biomass                         | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   | 55   |
| J Community Feed-in-Tariff        | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   | 24   |
| K REA Wind Projects               | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   | 17   |
| L Maritime Link Import            | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  | 153  |
| M Less Derations                  | 0    | 0    | 150  | 330  | 364  | 382  | 427  | 427  | 412  | 333  | 150  | 0    |
| Total Firm Supply Resources       |      |      |      |      |      |      |      |      |      |      |      |      |
| N (F + G + H + I + J + K + L - M) | 2383 | 2383 | 2233 | 2053 | 2018 | 2001 | 1956 | 1956 | 1971 | 2050 | 2232 | 2383 |
| + Surplus / - Deficit (N - E)     | 172  | 228  | 288  | 470  | 574  | 665  | 632  | 644  | 635  | 607  | 557  | 506  |
| Reserve Margin % (N - C)/ C       | 29%  | 33%  | 38%  | 56%  | 68%  | 80%  | 77%  | 79%  | 77%  | 70%  | 60%  | 52%  |

### Notes:

- Demand values as per NSPI 2015 Load Forecast Report (including the effects of DSM).
- Existing Resources include firm capacity contribution from hydro, steam, combined cycle, combustion turbine, Independent Power Producers (IPP) and renewable resources. If a wind project is designated as an Energy Resource Interconnection Service (ERIS) their firm capacity is assumed to be zero. If a wind project is designated as a Network Resource Interconnection Service (NRIS) the firm capacity contribution is assumed to be 17% of their installed capacity.
- Resource additions as outlined in the 2015 10 Year System Outlook (<http://oasis.nspower.ca/en/home/oasis/forecasts-and-assessments.aspx>):
  - Thermal Capacity additions include Burnside #4 (30 MW) assumed returned to service in 2017. Also includes forecasted unit retirements as as outlined in the 2014 Integrated Resource Plan Assumptions (shown as negative values).
  - Hydro Capacity additions assume that the Harmony hydro facility will be refurbished (0.8 MW) and in-service by 2017.
  - Biomass includes a small IPP expected in-service by 2017 (10 MW). Also includes the Port Hawkesbury Biomass plant which will be converted to Network Resource Interconnection Service (NRIS) following the transmission upgrades required for the Maritime Link (45 MW net by 2018).
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  - Maritime Link Import is a Renewable Electricity Standard (RES) compliant hydro energy import from the Muskrat Falls project in Newfoundland and Labrador assumed in-service in late 2017. This firm capacity import will largely achieve the incremental requirements of the RES 2020 of 40% renewable energy and coincides with the assumed retirement of a solid fuel unit.
- Derations include thermal unit reductions due to ambient temperature, planned maintenance and seasonal shut downs.
- NSPI planning criteria requires a minimum reserve margin equal to 20% of its forecasted firm peak load.
- This table reflects the firm capacity value of intermittent wind generation assumed for long-term planning purposes. For short-term assessments (e.g. 18-Month Load and Capacity Assessment) the assumed on peak capacity may be less.