## Existing Generation Resource Listing for Locational Forward Reserves Market (LFRM)

*compiled by London Economics International LLC for DPUC revised August 25 Needs Assessment*

| Resource Name | Region | Summer Capacity (MW) | LFRM Offer (MW) | On-line/ off-line unit | Fuel Type |
|---|---|---|---|---|---|
| AES THAMES | CT | 181.0 | 9.1 | on-line | Coal |
| BRANFORD 10 | SWCT | 15.8 | 15.8 | off-line | Distillate Oil |
| BRIDGEPORT ENERGY 1 | SWCT | 446.5 | 0.0 | on-line | Natural Gas |
| BRIDGEPORT HARBOR 2 | SWCT | 130.5 | 0.0 | on-line | Residual Oil |
| BRIDGEPORT HARBOR 3 | SWCT | 372.2 | 18.5 | on-line | Coal |
| BRIDGEPORT HARBOR 4 | SWCT | 9.9 | 9.9 | off-line | Distillate Oil |
| BRIDGEPORT RESCO | SWCT | 58.5 | 2.9 | on-line | Other |
| CDECCA | CT | 51.7 | 5.2 | on-line | Dual Fuel |
| Composite NUG units in CT | CT | 47.1 | 2.4 | on-line | Other |
| COS COB 10 | NOR | 17.9 | 17.9 | off-line | Distillate Oil |
| COS COB 11 | NOR | 18.2 | 18.2 | off-line | Distillate Oil |
| COS COB 12 | NOR | 18.4 | 18.4 | off-line | Distillate Oil |
| DEVON 11 | SWCT | 29.6 | 29.6 | on-line | Dual Fuel |
| DEVON 12 | SWCT | 29.2 | 29.2 | on-line | Dual Fuel |
| DEVON 13 | SWCT | 30.8 | 30.8 | on-line | Dual Fuel |
| DEVON 14 | SWCT | 29.8 | 29.8 | on-line | Dual Fuel |
| DEXTER | CT | 38.0 | 3.8 | on-line | Dual Fuel |
| EXETER | CT | 24.2 | 1.2 | on-line | Other |
| FRANKLIN DRIVE 10 | CT | 15.4 | 15.4 | off-line | Distillate Oil |
| MIDDLETOWN 10 | CT | 17.1 | 0.0 | on-line | Distillate Oil |
| MIDDLETOWN 2 | CT | 117.0 | 0.0 | on-line | Dual Fuel |
| MIDDLETOWN 3 | CT | 236.0 | 0.0 | on-line | Dual Fuel |
| MIDDLETOWN 4 | CT | 400.0 | 0.0 | on-line | Residual Oil |
| Milford | SWCT | 492.1 | 0.0 | on-line | Dual Fuel |
| MILLSTONE POINT 2 | CT | 856.9 | 0.0 | on-line | Nuclear |
| MILLSTONE POINT 2_1 | CT | 25.3 | 0.0 | on-line | Nuclear |
| MILLSTONE POINT 3 | CT | 1,031.2 | 0.0 | on-line | Nuclear |
| MILLSTONE POINT 3_1 | CT | 50.0 | 0.0 | on-line | Nuclear |
| MILLSTONE POINT 3_2 | CT | 54.2 | 0.0 | on-line | Nuclear |
| MILLSTONE POINT 3_3 | CT | 19.6 | 0.0 | on-line | Nuclear |
| MONTVILLE 10 AND 11 | CT | 5.3 | 0.0 | on-line | Distillate Oil |
| MONTVILLE 5 | CT | 81.0 | 0.0 | on-line | Dual Fuel |
| MONTVILLE 6 | CT | 407.4 | 0.0 | on-line | Residual Oil |
| NEW HAVEN HARBOR | CT | 447.9 | 0.0 | on-line | Dual Fuel |
| NORWALK HARBOR 1 | NOR | 162.0 | 8.1 | on-line | Residual Oil |
| NORWALK HARBOR 10 (3) | NOR | 11.9 | 11.9 | off-line | Distillate Oil |
| NORWALK HARBOR 2 | NOR | 168.0 | 8.4 | on-line | Residual Oil |
| NORWICH JET | CT | 15.3 | 0.0 | on-line | Distillate Oil |
| PPL WALLINGFORD UNIT 1 | SWCT | 43.5 | 17.6 | on-line | Natural Gas |
| PPL WALLINGFORD UNIT 2 | SWCT | 41.4 | 41.4 | on-line | Natural Gas |
| PPL WALLINGFORD UNIT 3 | SWCT | 43.5 | 43.5 | on-line | Natural Gas |
| PPL WALLINGFORD UNIT 4 | SWCT | 44.5 | 44.5 | on-line | Natural Gas |
| PPL WALLINGFORD UNIT 5 | SWCT | 42.6 | 42.6 | on-line | Natural Gas |
| WALLINGFORD REFUSE | SWCT | 6.4 | 0.3 | on-line | Other |
| SO. MEADOW 11 | CT | 35.8 | 35.8 | off-line | Distillate Oil |
| SO. MEADOW 12 | CT | 37.7 | 37.7 | off-line | Distillate Oil |
| SO. MEADOW 13 | CT | 38.3 | 38.3 | off-line | Distillate Oil |
| SO. MEADOW 14 | CT | 37.4 | 37.4 | off-line | Distillate Oil |
| SO. MEADOW 5 | CT | 25.6 | 1.3 | on-line | Other |
| SO. MEADOW 6 | CT | 27.1 | 1.4 | on-line | Other |
| TORRINGTON TERMINAL 10 | CT | 16.9 | 14.4 | on-line | Distillate Oil |
| TUNNEL 10 | CT | 15.9 | 15.9 | off-line | Distillate Oil |
| Composite small hydro units in CT | CT | 23.8 | 0.0 | on-line | Hydro |
| Falls Village | CT | 9.8 | 0.0 | on-line | Hydro |
| Rocky River (NU)-PS | SWCT | 29.4 | 17.6 | on-line | Hydro |
| Shepaug | SWCT | 41.5 | 20.8 | on-line | Hydro |
| Stevenson | SWCT | 28.3 | 14.2 | on-line | Hydro |
| Composite small hydro units in SWCT | SWCT | 16.4 | 0.0 | on-line | Hydro |
| **capacity per CELT 2006 =** | | **6,768.5** | **711.0** | **MW** | |

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## Existing Generation Resource Listing for Forward Capacity Market (FCM)

*compiled by London Economics International LLC for DPUC revised August 25 Needs Assessment*

| Resource Name | Region | Summer Capacity (MW) | Fuel Type |
|---|---|---|---|
| AES THAMES | CT | 181.0 | Coal |
| BRANFORD 10 | SWCT | 15.8 | Distillate Oil |
| BRIDGEPORT ENERGY 1 | SWCT | 446.5 | Natural Gas |
| BRIDGEPORT HARBOR 2 | SWCT | 130.5 | Residual Oil |
| BRIDGEPORT HARBOR 3 | SWCT | 372.2 | Coal |
| BRIDGEPORT HARBOR 4 | SWCT | 9.9 | Distillate Oil |
| BRIDGEPORT RESCO | SWCT | 58.5 | Other |
| CDECCA | CT | 51.7 | Dual Fuel |
| Composite NUG units in CT | CT | 47.1 | Other |
| COS COB 10 | NOR | 17.9 | Distillate Oil |
| COS COB 11 | NOR | 18.2 | Distillate Oil |
| COS COB 12 | NOR | 18.4 | Distillate Oil |
| DEVON 11 | SWCT | 29.6 | Dual Fuel |
| DEVON 12 | SWCT | 29.2 | Dual Fuel |
| DEVON 13 | SWCT | 30.8 | Dual Fuel |
| DEVON 14 | SWCT | 29.8 | Dual Fuel |
| DEXTER | CT | 38.0 | Dual Fuel |
| EXETER | CT | 24.2 | Other |
| FRANKLIN DRIVE 10 | CT | 15.4 | Distillate Oil |
| MIDDLETOWN 10 | CT | 17.1 | Distillate Oil |
| MIDDLETOWN 2 | CT | 117.0 | Dual Fuel |
| MIDDLETOWN 3 | CT | 236.0 | Dual Fuel |
| MIDDLETOWN 4 | CT | 400.0 | Residual Oil |
| Milford | SWCT | 492.1 | Dual Fuel |
| MILLSTONE POINT 2 | CT | 856.9 | Nuclear |
| MILLSTONE POINT 2_1 | CT | 25.3 | Nuclear |
| MILLSTONE POINT 3 | CT | 1,031.2 | Nuclear |
| MILLSTONE POINT 3_1 | CT | 50.0 | Nuclear |
| MILLSTONE POINT 3_2 | CT | 54.2 | Nuclear |
| MILLSTONE POINT 3_3 | CT | 19.6 | Nuclear |
| MONTVILLE 10 AND 11 | CT | 5.3 | Distillate Oil |
| MONTVILLE 5 | CT | 81.0 | Dual Fuel |
| MONTVILLE 6 | CT | 407.4 | Residual Oil |
| NEW HAVEN HARBOR | CT | 447.9 | Dual Fuel |
| NORWALK HARBOR 1 | NOR | 162.0 | Residual Oil |
| NORWALK HARBOR 10 (3) | NOR | 11.9 | Distillate Oil |
| NORWALK HARBOR 2 | NOR | 168.0 | Residual Oil |
| NORWICH JET | CT | 15.3 | Distillate Oil |
| PPL WALLINGFORD UNIT 1 | SWCT | 43.5 | Natural Gas |
| PPL WALLINGFORD UNIT 2 | SWCT | 41.4 | Natural Gas |
| PPL WALLINGFORD UNIT 3 | SWCT | 43.5 | Natural Gas |
| PPL WALLINGFORD UNIT 4 | SWCT | 44.5 | Natural Gas |
| PPL WALLINGFORD UNIT 5 | SWCT | 42.6 | Natural Gas |
| WALLINGFORD REFUSE | SWCT | 6.4 | Other |
| SO. MEADOW 11 | CT | 35.8 | Distillate Oil |
| SO. MEADOW 12 | CT | 37.7 | Distillate Oil |
| SO. MEADOW 13 | CT | 38.3 | Distillate Oil |
| SO. MEADOW 14 | CT | 37.4 | Distillate Oil |
| SO. MEADOW 5 | CT | 25.6 | Other |
| SO. MEADOW 6 | CT | 27.1 | Other |
| TORRINGTON TERMINAL 10 | CT | 16.9 | Distillate Oil |
| TUNNEL 10 | CT | 15.9 | Distillate Oil |
| Composite small hydro units in CT | CT | 23.8 | Hydro |
| Falls Village | CT | 9.8 | Hydro |
| Rocky River (NU)-PS | SWCT | 29.4 | Hydro |
| Shepaug | SWCT | 41.5 | Hydro |
| Stevenson | SWCT | 28.3 | Hydro |
| Composite small hydro units in SWCT | SWCT | 16.4 | Hydro |
| | **capacity per CELT 2006 =** | **6,768.5** | **MW** |

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## Demand Response/ Energy Efficiency/ Distributed Generation Resource Listing for Forward Capacity Market (FCM)

*compiled by London Economics International LLC for DPUC revised August 25 Needs Assessment*

| Program | Location | Capacity (ICAP) (MW) [1] | | | |
|---|---|---|---|---|---|
| | | 2007 | 2008 | 2009 | 2010 - 2021 |
| **ISO-NE Demand Response** | | | | | |
| ISO Demand Response in CT [2] | CT | 143.7 | 71.85 | 71.85 | 71.85 |
| ISO Demand Response in SWCT [2] | SWCT | 17.0 | 8.50 | 8.50 | 8.50 |
| **CT DPUC Phase I** | | | | | |
| CL&P C&LM program [3] | CT | 34.65 | 34.65 | 34.65 | 34.65 |
| UI C&LM program [3] | SWCT | 8.65 | 8.65 | 8.65 | 8.65 |
| Awarded DG program | CT | 0.0 | 34.3 | 68.7 | 103.0 |
| DR approved in May '06 [2] | CT | 60.0 | 30.0 | 30.0 | 30.0 |
| EnerNOC [2] | CT | 115.0 | 57.5 | 57.5 | 57.5 |
| **SWCT GAP RFP** | | | | | |
| Resources selected in ISO-NE SWCT RFP - C&LM [2] | SWCT | 5.30 | 2.65 | 2.65 | 2.65 |
| DR program selected in ISO-NE SWCT RFP - Emergency Generation [2] | SWCT | 150.00 | 0.00 | 0.00 | 0.00 |
| DR program selected in ISO-NE SWCT RFP - Load Reduction [2] | SWCT | 74.10 | 37.05 | 37.05 | 37.05 |
| DR program selected in ISO-NE SWCT RFP - Resources to be Designated [2] | SWCT | 26.70 | 13.35 | 13.35 | 13.35 |
| **Total (SWCT)** | | **281.8** | **70.2** | **70.2** | **70.2** |
| **Total (rest of Connecticut)** | | **353.4** | **228.3** | **262.7** | **297.0** |
| **Total (Connecticut)** | | **635.1** | **298.5** | **332.9** | **367.2** |

*Note:*

*1) A 9.5% forced outage rate (FOR) is applied to demand response/ energy efficiency/ C&LM programs. DG programs have a 0% FOR.*

*2) We assume 50% of non-emergency generation demand response program continues after May 2008, while the remainder is retired (including the retirement of 100% of the emergency generation resources currently under contract under the SWCT GAP RFP)*

*3) We assume 100% of the utility C&LM program continues.*

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## Demand Forecast by RSP Sub-region

*compiled by London Economics International LLC for DPUC revised August 25 Needs Assessment*

| | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 | CAGR |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| **CT** | | | | | | | | | | | | | | | | |
| Peak demand (MW) | 3,630 | 3,695 | 3,780 | 3,865 | 3,955 | 4,050 | 4,115 | 4,175 | 4,230 | 4,309 | 4,390 | 4,472 | 4,556 | 4,641 | 4,728 | 1.9% |
| Energy (GWh) | 17,105 | 17,320 | 17,600 | 17,915 | 18,235 | 18,565 | 18,825 | 19,080 | 19,310 | 19,564 | 19,821 | 20,081 | 20,345 | 20,612 | 20,883 | 1.3% |
| *Growth in peak demand* | | *1.8%* | *2.3%* | *2.2%* | *2.3%* | *2.4%* | *1.6%* | *1.5%* | *1.3%* | *1.9%* | *1.9%* | *1.9%* | *1.9%* | *1.9%* | *1.9%* | |
| **SWCT** | | | | | | | | | | | | | | | | |
| Peak demand (MW) | 2,380 | 2,430 | 2,490 | 2,555 | 2,625 | 2,675 | 2,710 | 2,740 | 2,770 | 2,822 | 2,876 | 2,930 | 2,986 | 3,042 | 3,100 | 1.9% |
| Energy (GWh) | 11,340 | 11,520 | 11,755 | 12,005 | 12,260 | 12,440 | 12,570 | 12,695 | 12,810 | 12,984 | 13,160 | 13,339 | 13,520 | 13,704 | 13,890 | 1.4% |
| *Growth in peak demand* | | *2.1%* | *2.5%* | *2.6%* | *2.7%* | *1.9%* | *1.3%* | *1.1%* | *1.1%* | *1.9%* | *1.9%* | *1.9%* | *1.9%* | *1.9%* | *1.9%* | |
| **Norwalk** | | | | | | | | | | | | | | | | |
| Peak demand (MW) | 1,270 | 1,290 | 1,315 | 1,340 | 1,365 | 1,395 | 1,415 | 1,435 | 1,455 | 1,478 | 1,502 | 1,526 | 1,551 | 1,576 | 1,601 | 1.6% |
| Energy (GWh) | 5,850 | 5,895 | 5,960 | 6,035 | 6,110 | 6,210 | 6,290 | 6,370 | 6,440 | 6,502 | 6,565 | 6,629 | 6,693 | 6,758 | 6,823 | 1.0% |
| *Growth in peak demand* | | *1.6%* | *1.9%* | *1.9%* | *1.9%* | *2.2%* | *1.4%* | *1.4%* | *1.4%* | *1.6%* | *1.6%* | *1.6%* | *1.6%* | *1.6%* | *1.6%* | |

Sources: ISO-NE CELT 2006. Note that figures in blue reflect calculated estimates based on ISO-NE forecast growth rates.

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## Transmission Interface Limits for Forward Capacity Market (FCM)

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| Interface | Interface limits (MW) | 2007 | 2008 | 2009 | 2010 | 2011 | 2012 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 | 2020 | 2021 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| into Connecticut | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 | 2,500 |
| into Southwest Connecticut | 2,350 | 2,350 | 2,350 | 2,350 | 3,650 | 3,650 | 3,650 | 3,650 | 3,650 | 3,650 | 3,650 | 3,650 | 3,650 | 3,650 | 3,650 | 3,650 |

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