

NERC GADS EFORD Class Averages as used by ISO New England

The values are based on North American generating units that report data to the North American Electric Reliability Corporation (NERC)

Source Data From:	2002-2006		2003-2007		2004-2008		2005-2009		2006-2010		2007-2011	
Class Average Type From NERC Brochure	EFORD Class Average	Capacity Factor Class Average (NCF Used)	EFORD Class Average	Capacity Factor Class Average (NCF Used)	EFORD Class Average	Capacity Factor Class Average (NCF Used)	EFORD Class Average	Capacity Factor Class Average (NCF Used)	EFORD Class Average	Capacity Factor Class Average (NCF Used)	EFORD Class Average	Capacity Factor Class Average (NCF Used)
Combined Cycle	0.0570	0.4476	0.0617	0.3147	0.0622	0.3013	0.0610	0.3213	0.0588	0.3428	0.0496	0.3735
Diesel	0.1247	0.0573	0.1030	0.0451	0.0841	0.0653	0.1046	0.0696	0.1304	0.0675	0.1441	0.0763
Farm Methane	Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine	
Fossil - All Fuel Types - All Sizes	0.0630	0.5823	0.0701	0.5784	0.0667	0.5800	0.0686	0.5757	0.0722	0.5598	0.0750	0.5475
Fossil - Coal Primary 1-99	0.0621	0.6536	0.0696	0.5335	0.0654	0.6642	0.0779	0.5433	0.0900	0.5064	0.1013	0.4860
Fossil - Coal Primary 100-199	0.0672	0.5365	0.0632	0.6578	0.0718	0.5549	0.0662	0.6517	0.0670	0.6125	0.0661	0.5827
Fossil - Coal Primary 200-299	0.0553	0.7121	0.0593	0.7079	0.0593	0.7247	0.0600	0.7227	0.0629	0.6900	0.0703	0.6579
Fossil - Coal Primary 300-399	0.0618	0.7102	0.0609	0.7176	0.0621	0.7278	0.0635	0.7178	0.0629	0.7041	0.0661	0.6894
Fossil - Coal Primary 600-799	0.0656	0.7575	0.0642	0.7628	0.0646	0.7641	0.0629	0.7543	0.0644	0.7476	0.0661	0.7334
Fossil - Gas Primary 1-99	0.0791	0.1123	0.0839	0.0921	0.0747	0.0810	0.0836	0.0785	0.0971	0.0804	0.1106	0.0819
Fossil - Gas Primary 100-199	N/A	N/A	0.0812	0.1572	0.0601	0.1523	0.0621	0.1400	0.0684	0.1309	0.0748	0.1162
Fossil - Gas Primary 200-299	N/A	N/A	0.0704	0.2021	0.0633	0.1885	0.0604	0.1844	0.0597	0.1716	0.0624	0.1706
Fossil - Gas Primary 300-399	0.0550	0.1916	0.0545	0.1526	0.0584	0.1317	0.0531	0.1231	0.0471	0.1184	0.0489	0.1126
Fossil - Oil Primary 1-99	0.0821	0.2546	0.1919	0.2312	0.1089	0.2484	0.1131	0.2440	0.0876	0.2440	0.0626	0.2408
Fossil - Oil Primary 100-199	0.0622	0.2107	0.1829	0.1829	0.1114	0.1869	0.1087	0.1760	0.1179	0.1613	0.0846	0.1402
Fossil - Oil Primary 200-299	0.0730	0.2121	0.4041	0.1307	0.2706	0.1522	0.2897	0.1295	0.3221	0.1031	0.2898	0.0682
Fossil - Oil Primary 300-399	0.0539	0.3733	0.0477	0.3386	0.0421	0.3122	0.0387	0.2902	0.0334	0.2344	0.0304	0.1773
Fossil - Oil Primary 400-599	0.0471	0.3394	0.0512	0.2891	0.0514	0.2614	0.0505	0.2150	0.0522	0.1722	0.0526	0.1189
Fossil - Oil Primary 600-799	0.0901	0.2031	0.0884	0.1744	0.1062	0.1585	0.1680	0.1156	0.2858	0.0790	0.3570	0.0603
Gas Turbine 1-19	0.2177	0.0112	0.2579	0.0099	0.1220	0.0092	0.1418	0.0091	0.1667	0.0088	0.1901	0.0083
Gas Turbine 20-49	0.1039	0.0180	0.1116	0.0177	0.1069	0.0176	0.0937	0.0170	0.1002	0.0149	0.1073	0.0130
Gas Turbine 50 Plus	0.0794	0.0397	0.0680	0.0357	0.0623	0.0339	0.0659	0.0308	0.0699	0.0293	0.0724	0.0277
Hydro 1-29	0.0459	0.4006	0.0462	0.4119	0.0613	0.4062	0.0676	0.3915	0.0731	0.4017	0.0761	0.4061
Hydro 30 Plus	0.0320	0.4018	0.0313	0.4207	0.0319	0.4160	0.0358	0.4142	0.0363	0.4121	0.0357	0.4062
Jet Engine 1-19	0.2471	0.0056	0.2526	0.0055	0.1210	0.0052	0.1300	0.0055	0.1361	0.0055	0.1496	0.0047
Jet Engine 20 Plus	0.0832	0.0454	0.0994	0.0473	0.0886	0.0497	0.0836	0.0499	0.0905	0.0465	0.0950	0.0438
Land Fill Gas (LFG)	Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine	
Miscellaneous	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	
Municipal Solid Waste	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	
Nuclear - BWR 400-799	0.0726	0.8455	0.0737	0.8508	0.0273	0.9041	0.0261	0.9144	0.0257	0.9139	0.0262	0.9174
Nuclear - PWR 1000 Plus	0.0369	0.8816	0.0314	0.8786	0.0296	0.8998	0.0254	0.8983	0.0292	0.8948	0.0311	0.8990
Nuclear - PWR 800-999	0.0435	0.8776	0.0415	0.8880	0.0292	0.8974	0.0195	0.9149	0.0176	0.9152	0.0297	0.9021
Pumped Storage	0.0384	0.1366	0.0257	0.1309	0.0258	0.1304	0.0286	0.1236	0.0337	0.1127	0.0368	0.1066
Solar	Use Hydro		Use Hydro		Use Hydro		Use Hydro		Use Hydro		Use Hydro	
Wind	Use Hydro		Use Hydro		Use Hydro		Use Hydro		Use Hydro		Use Hydro	
Wood	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	

Source: NERC Generating Unit Statistical Brochure - All Units Reporting - Five Year Average

<https://www.nerc.com/pa/RAPA/gads/Pages/Reports.aspx>

Updated: November 14, 2022

NERC GADS EFORd Class Averages as used by ISO New England

The values are based on all generating units that report data to the North American Electric Reliability Corporation

Source Data From:	2008-2012		2009-2013		2010-2014		2011-2015		2012-2016		2013-2017	
Class Average Type From NERC Brochure	EFORd Class Average	Capacity Factor Class Average (NCF Used)	EFORd Class Average	Capacity Factor Class Average (NCF Used)	EFORd Class Average	Capacity Factor Class Average (NCF Used)	EFORd Class Average	Capacity Factor Class Average (NCF Used)	EFORd Class Average	Capacity Factor Class Average (NCF Used)	EFORd Class Average	Capacity Factor Class Average (NCF Used)
Combined Cycle	0.0457	0.4511	0.0458	0.4763	0.0477	0.5129	0.0395	0.5609	0.0429	0.5304	0.0411	0.5272
Diesel	0.1329	0.1078	0.1337	0.1047	0.1230	0.1298	0.0370	0.0968	0.0583	0.0969	0.0587	0.0948
Farm Methane	Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine	
Fossil - All Fuel Types - All Sizes	0.0810	0.5088	0.0827	0.4945	0.0832	0.4946	0.0879	0.4388	0.0834	0.4582	0.0844	0.4534
Fossil - Coal Primary 1-99	0.1101	0.3935	0.1012	0.3690	0.0972	0.3677	0.1125	0.3297	0.0832	0.3408	0.0786	0.3565
Fossil - Coal Primary 100-199	0.0611	0.4826	0.0606	0.4434	0.0617	0.4398	0.0841	0.3933	0.0647	0.4120	0.0686	0.4118
Fossil - Coal Primary 200-299	0.0787	0.5558	0.0870	0.5068	0.0935	0.4888	0.1233	0.4187	0.1086	0.4444	0.1065	0.4520
Fossil - Coal Primary 300-399	0.0676	0.6110	0.0673	0.5841	0.0716	0.5753	0.0791	0.4909	0.0783	0.5134	0.0821	0.5060
Fossil - Coal Primary 600-799	0.0675	0.6905	0.0713	0.6798	0.0703	0.6701	0.0646	0.5922	0.0705	0.6152	0.0739	0.6103
Fossil - Gas Primary 1-99	0.1306	0.0883	0.1355	0.0884	0.1488	0.0893	0.1085	0.1022	0.1244	0.0982	0.1233	0.1012
Fossil - Gas Primary 100-199	0.0811	0.1113	0.0833	0.1112	0.0826	0.1095	0.0825	0.1160	0.0764	0.1185	0.0741	0.1109
Fossil - Gas Primary 200-299	0.0753	0.1648	0.0730	0.1611	0.0930	0.1526	0.1162	0.1509	0.0841	0.1456	0.0855	0.1393
Fossil - Gas Primary 300-399	0.0637	0.1095	0.0826	0.1058	0.0896	0.0948	0.1179	0.0939	0.0987	0.1002	0.1024	0.0924
Fossil - Oil Primary 1-99	0.0404	0.2416	0.0365	0.2421	0.0386	0.2488	0.0689	0.2754	0.0443	0.2480	0.0504	0.2573
Fossil - Oil Primary 100-199	0.0771	0.1059	0.1202	0.0980	0.1351	0.1043	0.1899	0.0854	0.1663	0.0964	0.1682	0.1010
Fossil - Oil Primary 200-299	0.1249	0.0366	0.1503	0.0248	0.1696	0.0281	****	****	0.1497	0.0391	0.1538	0.0576
Fossil - Oil Primary 300-399	0.0551	0.1411	0.0554	0.1302	0.0533	0.1286	0.0507	0.1185	0.0662	0.1239	0.0647	0.1092
Fossil - Oil Primary 400-599	0.0616	0.0864	0.1153	0.0799	0.1241	0.0847	0.2573	0.0190	0.1956	0.0424	0.2366	0.0248
Fossil - Oil Primary 600-799	0.4463	0.0577	0.4096	0.0552	0.3623	0.0683	0.0699	0.0473	0.1463	0.0471	0.0663	0.0315
Gas Turbine 1-19	0.2140	0.0073	0.2078	0.0072	0.2048	0.0070	0.1838	0.0057	0.1860	0.0067	0.1735	0.0062
Gas Turbine 20-49	0.1120	0.0109	0.1462	0.0120	0.1524	0.0150	0.1213	0.0205	0.1297	0.0230	0.1153	0.0268
Gas Turbine 50 Plus	0.0761	0.0277	0.0816	0.0274	0.0871	0.0291	0.0960	0.0607	0.0929	0.0526	0.0986	0.0369
Hydro 1-29	0.0792	0.4116	0.0871	0.4118	0.1025	0.3811	0.1566	0.3068	0.1281	0.3431	0.1339	0.3351
Hydro 30 Plus	0.0352	0.4197	0.0343	0.4140	0.0348	0.4067	0.0327	0.3853	0.0355	0.4009	0.0375	0.3791
Jet Engine 1-19	0.1818	0.0029	0.2039	0.0023	0.2157	0.0025	0.2138	0.0022	0.2116	0.0023	0.1986	0.0025
Jet Engine 20 Plus	0.0976	0.0387	0.1064	0.0375	0.1106	0.0396	0.1088	0.0429	0.1154	0.0435	0.1111	0.0447
Land Fill Gas (LFG)	Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine	
Miscellaneous	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	
Municipal Solid Waste	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	
Nuclear - BWR 400-799	0.0323	0.9055	0.0349	0.8820	0.0358	0.8875	0.0327	0.8877	0.0358	0.8929	0.0299	0.8910
Nuclear - PWR 1000 Plus	0.0432	0.8852	0.0481	0.8752	0.0425	0.8812	0.0164	0.9095	0.0402	0.8808	0.0276	0.8953
Nuclear - PWR 800-999	0.0530	0.8821	0.0559	0.8779	0.0550	0.8749	0.0148	0.9140	0.0302	0.9000	0.0214	0.9165
Pumped Storage	0.0577	0.0941	0.0610	0.0919	0.0618	0.0893	0.0742	0.0767	0.0602	0.0805	0.0541	0.0819
Solar	Use Hydro		Use Hydro		Use Hydro		Use Hydro		Use Hydro		Use Hydro	
Wind	Use Hydro		Use Hydro		Use Hydro		Use Hydro		Use Hydro		Use Hydro	
Wood	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	

Source: NERC Generating Unit Statistical Brochure - All Units Reporting - Five Year Average

Updated: November 14, 2022

<https://www.nerc.com/pa/RAPA/gads/Pages/Reports.aspx>

NERC GADS EFORD Class Averages as used by ISO New England

The values are based on all generating units that report data to the North American Electric Reliability Corporation

Source Data From:	2014-2018		2015-2019		2016-2020		2017-2021	
Class Average Type From NERC Brochure	EFORD Class Average	Capacity Factor Class Average (NCF Used)	EFORD Class Average	Capacity Factor Class Average (NCF Used)	EFORD Class Average	Capacity Factor Class Average (NCF Used)	EFORD Class Average	Capacity Factor Class Average (NCF Used)
Combined Cycle	0.0394	0.5359	0.0381	0.5476	0.0387	0.5425	0.0406	0.5421
Diesel	0.0623	0.1035	0.0723	0.1066	0.0792	0.1100	0.0658	0.1514
Farm Methane	Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine	
Fossil - All Fuel Types - All Sizes	0.0885	0.4431	0.0910	0.4227	0.0931	0.4056	0.0990	0.3986
Fossil - Coal Primary 1-99	0.0865	0.3600	0.0836	0.3518	0.0802	0.3575	0.0843	0.3642
Fossil - Coal Primary 100-199	0.0754	0.3970	0.0834	0.3684	0.0842	0.3634	0.0930	0.3773
Fossil - Coal Primary 200-299	0.1086	0.4562	0.0980	0.4421	0.0887	0.4395	0.0850	0.4464
Fossil - Coal Primary 300-399	0.0886	0.4849	0.0948	0.4495	0.1002	0.4224	0.1049	0.4089
Fossil - Coal Primary 600-799	0.0740	0.5962	0.0751	0.5712	0.0778	0.5466	0.0838	0.5386
Fossil - Gas Primary 1-99	0.1219	0.1118	0.1175	0.1220	0.1187	0.1233	0.1369	0.1186
Fossil - Gas Primary 100-199	0.0800	0.1144	0.0874	0.1182	0.0892	0.1219	0.0948	0.1221
Fossil - Gas Primary 200-299	0.0931	0.1474	0.0901	0.1643	0.0819	0.1752	0.0774	0.1713
Fossil - Gas Primary 300-399	0.0989	0.0983	0.0997	0.1063	0.0959	0.1154	0.0927	0.1262
Fossil - Oil Primary 1-99	0.0660	0.2668	0.0958	0.2872	0.1420	0.2898	0.1875	0.2925
Fossil - Oil Primary 100-199	0.1443	0.1078	0.1782	0.1114	0.1738	0.1300	0.1827	0.1448
Fossil - Oil Primary 200-299	****	****	****	****	****	****	****	****
Fossil - Oil Primary 300-399	0.0710	0.1089	0.0734	0.0988	0.1025	0.0835	0.0916	0.0689
Fossil - Oil Primary 400-599	0.2334	0.0162	0.2421	0.0103	0.2332	0.0051	0.1935	0.0048
Fossil - Oil Primary 600-799	0.0617	0.0320	0.0882	0.0261	0.1055	0.0188	0.1393	0.0154
Gas Turbine 1-19	0.1724	0.0066	0.1750	0.0068	0.1720	0.0071	0.1757	0.0065
Gas Turbine 20-49	0.1108	0.0326	0.1092	0.0383	0.1040	0.0471	0.1015	0.0508
Gas Turbine 50 Plus	0.0965	0.0452	0.0940	0.0505	0.0927	0.0518	0.0923	0.0513
Hydro 1-29	0.1375	0.3285	0.1407	0.3361	0.1437	0.3452	0.1457	0.3331
Hydro 30 Plus	0.0371	0.3797	0.0395	0.3655	0.0429	0.3635	0.0453	0.3354
Jet Engine 1-19	0.1974	0.0030	0.1909	0.0023	0.1831	0.0020	0.1773	0.0019
Jet Engine 20 Plus	0.1018	0.0483	0.0947	0.0496	0.0886	0.0516	0.0889	0.0525
Land Fill Gas (LFG)	Use Gas Turbine		Use Gas Turbine		Use Gas Turbine		Use Gas Turbine	
Miscellaneous	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	
Municipal Solid Waste	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	
Nuclear - BWR 400-799	0.0351	0.9117	0.0361	0.9036	0.0324	0.9190	0.0306	0.9198
Nuclear - PWR 1000 Plus	0.0193	0.9133	0.0199	0.9148	0.0214	0.9148	0.0222	0.9125
Nuclear - PWR 800-999	0.0172	0.9220	0.0162	0.9280	0.0164	0.9323	0.0156	0.9309
Pumped Storage	0.0525	0.0811	0.0539	0.0805	0.0469	0.0800	0.0579	0.0785
Solar	Use Hydro		Use Hydro		Use Hydro		Use Hydro	
Wind	Use Hydro		Use Hydro		Use Hydro		Use Hydro	
Wood	Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types		Use Fossil-All Fuel Types	

Source: NERC Generating Unit Statistical Brochure - All Units Reporting - Five Year Average
<https://www.nerc.com/pa/RAPA/gads/Pages/Reports.aspx>

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