

South Fork, Eastern Long Island (2016)

Power Demand vs Expected Supply from South Fork Wind *

Month & Day	Electrical Load (Area 1, 2 & 3)	Wind Farm Power Output (MW)	Power Variance (-ve shortfall)	Type/Period	OSW Capacity Contribution	South Fork Demand (MW)	Wind Farm Output (132 MW)	Shortfall in Power Supply (MW)
01 01	1,629	994	-635					
01 02	1,763	2,098	335					
01 03	1,630	2,352	722					
01 04	1,818	1,819	1					
01 05	2,061	2,132	71					
01 06	1,910	344	-1,566					
01 07	1,802	271	-1,531					
01 08	1,718	1,578	-141					
01 09	1,585	1,222	-364					
01 10	1,498	2,557	1,059					
01 11	1,696	2,853	1,157					
01 12	1,790	1,161	-629					
01 13	1,901	3,027	1,126					
01 14	1,909	2,169	260					
01 15	1,660	251	-1,409					
01 16	1,698	1,361	-337					
01 17	1,950	1,206	-744					
01 18	1,959	2,520	561					
01 19	2,083	3,166	1,083					
01 20	1,894	2,801	908					
01 21	1,860	1,557	-303					
01 22	1,967	1,596	-371					
01 23	2,001	2,517	516					
01 24	1,841	2,508	666					
01 25	1,790	350	-1,440					
01 26	1,650	1,877	226					
01 27	1,588	1,228	-360					
01 28	1,713	190	-1,523					
01 29	1,722	610	-1,112					
01 30	1,772	2,074	303					
01 31	1,516	1,629	113					
02 01	1,471	1,485	15					
02 02	1,498	477	-1,021					
02 03	1,536	1,439	-97					
02 04	1,443	916	-526					
02 05	1,750	2,377	627					
02 06	1,794	1,261	-533					
02 07	1,669	417	-1,252					
02 08	1,837	3,039	1,202					
02 09	1,840	929	-911					
02 10	1,798	441	-1,358					
02 11	1,943	2,637	694					
02 12	2,136	1,406	-729					
02 13	2,241	2,144	-98					
02 14	2,553	2,757	204					
02 15	2,313	820	-1,492					

Month & Day	Electrical Load (Area 1, 2 & 3)	Wind Farm Power Output (MW)	Power Variance (-ve shortfall)	Type/Period	OSW Capacity Contribution	South Fork Demand (MW)	Wind Farm Output (132 MW)	Shortfall in Power Supply (MW)	
02 16	1,671	2,161	490						
02 17	1,689	1,382	-307						
02 18	1,793	1,617	-176						
02 19	1,855	912	-943						
02 20	1,652	1,792	141						
02 21	1,536	873	-663						
02 22	1,578	468	-1,109						
02 23	1,772	2,091	318						
02 24	1,637	2,197	560						
02 25	1,450	2,627	1,177						
02 26	1,733	3,106	1,373						
02 27	1,854	1,521	-333						
02 28	1,597	2,676	1,080						
02 29	1,495	2,561	1,066						
03 01	1,473	1,556	82						
03 02	1,516	2,653	1,137						
03 03	1,755	1,148	-607						
03 04	1,891	1,375	-516						
03 05	1,790	1,612	-178						
03 06	1,643	18	-1,625	SUPPLY RISK	1.1%	1,643	18	-1,625	1.1%
03 07	1,600	1,232	-369						
03 08	1,459	220	-1,239						
03 09	1,367	390	-977						
03 10	1,338	675	-664						
03 11	1,327	165	-1,162						
03 12	1,421	211	-1,210						
03 13	1,291	455	-836						
03 14	1,557	2,019	462						
03 15	1,506	1,417	-89						
03 16	1,372	108	-1,264	SUPPLY RISK	7.9%	1,372	108	-1,264	8.9%
03 17	1,379	137	-1,242	SUPPLY RISK	9.9%	1,379	137	-1,242	8.9%
03 18	1,420	1,004	-416						
03 19	1,543	531	-1,012						
03 20	1,647	2,266	619						
03 21	1,638	2,117	479						
03 22	1,550	2,483	933						
03 23	1,398	1,500	102						
03 24	1,503	1,935	432						
03 25	1,543	1,180	-363						
03 26	1,544	915	-629						
03 27	1,473	252	-1,221						
03 28	1,531	1,007	-525						
03 29	1,445	2,757	1,313						
03 30	1,481	864	-616						
03 31	1,396	1,551	156						
04 01	1,436	1,908	472						
04 02	1,505	328	-1,178						
04 03	1,581	2,706	1,125						
04 04	1,747	866	-881						
04 05	1,797	2,399	602						
04 06	1,886	810	-1,076						
04 07	1,537	1,851	314						
04 08	1,507	1,683	176						

Month & Day	Electrical Load (Area 1, 2 & 3)	Wind Farm Power Output (MW)	Power Variance (-ve shortfall)	Type/Period	OSW Capacity Contribution	South Fork Demand (MW)	Wind Farm Output (132 MW)	Shortfall in Power Supply (MW)	
04 09	1,654	663	-991						
04 10	1,547	1,231	-316						
04 11	1,463	1,089	-374						
04 12	1,475	1,615	139						
04 13	1,449	757	-692						
04 14	1,449	392	-1,057						
04 15	1,474	380	-1,094						
04 16	1,506	1,227	-279						
04 17	1,398	677	-721						
04 18	1,353	8	-1,346	SUPPLY RISK	0.6%	1,353	8	-1,346	0.6%
04 19	1,352	159	-1,193						
04 20	1,428	258	-1,170						
04 21	1,652	441	-1,211						
04 22	1,771	300	-1,471						
04 23	1,457	200	-1,257						
04 24	1,387	852	-535						
04 25	1,494	146	-1,349	SUPPLY RISK	9.8%	1,494	146	-1,349	9.8%
04 26	1,522	554	-968						
04 27	1,611	301	-1,310						
04 28	1,797	407	-1,390						
04 29	1,896	1,267	-628						
04 30	1,555	432	-1,123						
05 01	1,615	322	-1,292						
05 02	1,694	513	-1,181						
05 03	1,572	551	-1,021						
05 04	1,615	1,526	-89						
05 05	1,680	2,940	1,260						
05 06	1,713	2,541	828						
05 07	1,715	923	-791						
05 08	1,585	328	-1,257						
05 09	1,520	814	-706						
05 10	1,511	230	-1,281						
05 11	1,532	192	-1,340						
05 12	1,546	10	-1,537	SUPPLY RISK	0.6%	1,546	10	-1,537	
05 13	1,653	43	-1,611	SUPPLY RISK	2.6%	1,653	43	-1,611	4.2%
05 14	1,673	152	-1,521	SUPPLY RISK	9.1%	1,673	152	-1,521	
05 15	1,608	1,953	345						
05 16	1,634	2,720	1,085						
05 17	1,652	849	-802						
05 18	1,745	126	-1,619	SUPPLY RISK	7.2%	1,745	126	-1,619	
05 19	1,876	16	-1,860	SUPPLY RISK	0.9%	1,876	16	-1,860	
05 20	1,956	53	-1,903	SUPPLY RISK	2.7%	1,956	53	-1,903	3.2%
05 21	1,814	39	-1,775	SUPPLY RISK	2.1%	1,814	39	-1,775	
05 22	1,737	376	-1,361						
05 23	1,726	8	-1,718	SUPPLY RISK	0.5%	1,726	8	-1,718	0.5%
05 24	1,778	315	-1,463						
05 25	1,845	238	-1,607						
05 26	2,110	178	-1,932	SUPPLY RISK	8.4%	2,110	178	-1,932	8.4%
05 27	2,329	412	-1,917						
05 28	2,612	1,154	-1,458						
05 29	2,691	190	-2,501	SUPPLY RISK	7.1%	2,691	190	-2,501	7.1%
05 30	2,378	589	-1,790						
05 31	2,151	262	-1,889						

Month & Day	Electrical Load (Area 1, 2 & 3)	Wind Farm Power Output (MW)	Power Variance (-ve shortfall)	Type/Period	OSW Capacity Contribution	South Fork Demand (MW)	Wind Farm Output (132 MW)	Shortfall in Power Supply (MW)	
06 01	2,151	224	-1,927						
06 02	2,003	714	-1,289						
06 03	2,094	123	-1,971	SUPPLY RISK	5.9%	2,094	123	-1,971	4.6%
06 04	2,298	78	-2,220	SUPPLY RISK	3.4%	2,298	78	-2,220	
06 05	2,139	573	-1,567						
06 06	2,403	672	-1,732						
06 07	2,302	390	-1,912						
06 08	2,049	1,278	-771						
06 09	1,920	1,983	64						
06 10	2,107	733	-1,374						
06 11	2,228	344	-1,885						
06 12	2,363	838	-1,525						
06 13	2,089	1,445	-644						
06 14	2,109	882	-1,226						
06 15	2,263	325	-1,937						
06 16	2,411	75	-2,336	SUPPLY RISK	3.1%	2,411	75	-2,336	
06 17	2,460	56	-2,404	SUPPLY RISK	2.3%	2,460	56	-2,404	
06 18	2,543	22	-2,521	SUPPLY RISK	0.9%	2,543	22	-2,521	4.5%
06 19	2,420	185	-2,235	SUPPLY RISK	7.6%	2,420	185	-2,235	
06 20	2,360	216	-2,145	SUPPLY RISK	9.1%	2,360	216	-2,145	
06 21	2,459	455	-2,004						
06 22	2,575	122	-2,453	SUPPLY RISK	4.7%	2,575	122	-2,453	
06 23	2,514	19	-2,496	SUPPLY RISK	0.7%	2,514	19	-2,496	
06 24	2,755	178	-2,576	SUPPLY RISK	6.5%	2,755	178	-2,576	4.9%
06 25	2,765	270	-2,495	SUPPLY RISK	9.8%	2,765	270	-2,495	
06 26	2,597	55	-2,542	SUPPLY RISK	2.1%	2,597	55	-2,542	
06 27	2,599	370	-2,229						
06 28	2,531	269	-2,262						
06 29	2,840	148	-2,692	SUPPLY RISK	5.2%	2,840	148	-2,692	5.4%
06 30	3,025	171	-2,854	SUPPLY RISK	5.6%	3,025	171	-2,854	
07 01	3,242	352	-2,890						
07 02	3,216	597	-2,620						
07 03	3,077	407	-2,670						
07 04	3,192	736	-2,456						
07 05	3,260	370	-2,890						
07 06	3,552	132	-3,421	SUPPLY RISK	3.7%	3,552	132	-3,421	2.7%
07 07	3,575	64	-3,511	SUPPLY RISK	1.8%	3,575	64	-3,511	
07 08	3,211	849	-2,363						
07 09	2,756	1,165	-1,591						
07 10	2,683	180	-2,502	SUPPLY RISK	6.7%	2,683	180	-2,502	
07 11	2,707	209	-2,498	SUPPLY RISK	7.7%	2,707	209	-2,498	6.5%
07 12	2,823	66	-2,757	SUPPLY RISK	2.3%	2,823	66	-2,757	
07 13	3,063	278	-2,785	SUPPLY RISK	9.1%	3,063	278	-2,785	
07 14	3,237	527	-2,710						
07 15	4,030	236	-3,793	SUPPLY RISK	5.9%	4,030	236	-3,793	
07 16	4,140	115	-4,025	SUPPLY RISK	2.8%	4,140	115	-4,025	3.5%
07 17	4,087	78	-4,009	SUPPLY RISK	1.9%	4,087	78	-4,009	
07 18	3,820	887	-2,933						
07 19	3,435	345	-3,090						

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07 20	3,013	107	-2,907	SUPPLY RISK	3.5%	3,013	107	-2,907	3.5%
07 21	3,314	421	-2,893						
07 22	3,897	1,851	-2,046						
07 23	4,457	1,025	-3,432						
07 24	3,890	121	-3,769	SUPPLY RISK	3.1%	3,890	121	-3,769	3.2%
07 25	3,671	118	-3,553	SUPPLY RISK	3.2%	3,671	118	-3,553	
07 26	3,780	484	-3,296						
07 27	3,691	61	-3,630	SUPPLY RISK	1.7%	3,691	61	-3,630	1.0%
07 28	3,824	12	-3,812	SUPPLY RISK	0.3%	3,824	12	-3,812	
07 29	3,661	598	-3,063						
07 30	3,855	18	-3,836	SUPPLY RISK	0.5%	3,855	18	-3,836	0.5%
07 31	3,555	423	-3,132						
08 01	3,131	1,750	-1,381						
08 02	2,825	1,151	-1,674						
08 03	2,860	546	-2,314						
08 04	2,974	6	-2,968	SUPPLY RISK	0.2%	2,974	6	-2,968	2.5%
08 05	3,253	147	-3,105	SUPPLY RISK	4.5%	3,253	147	-3,105	
08 06	3,942	907	-3,035						
08 07	3,737	169	-3,569	SUPPLY RISK	4.5%	3,737	169	-3,569	
08 08	3,355	97	-3,258	SUPPLY RISK	2.9%	3,355	97	-3,258	2.7%
08 09	3,427	20	-3,408	SUPPLY RISK	0.6%	3,427	20	-3,408	
08 10	3,372	684	-2,688						
08 11	3,971	898	-3,073						
08 12	4,405	1,263	-3,142						
08 13	4,783	720	-4,062						
08 14	4,774	647	-4,127						
08 15	4,288	135	-4,153	SUPPLY RISK	3.2%	4,288	135	-4,153	3.2%
08 16	3,986	447	-3,539						
08 17	4,037	1,617	-2,420						
08 18	3,662	0	-3,662	SUPPLY RISK	0.0%	3,662	0	-3,662	
08 19	3,949	19	-3,930	SUPPLY RISK	0.5%	3,949	19	-3,930	2.0%
08 20	4,037	208	-3,829	SUPPLY RISK	5.2%	4,037	208	-3,829	
08 21	3,959	908	-3,051						
08 22	3,340	1,733	-1,607						
08 23	2,841	542	-2,298						
08 24	3,194	224	-2,970	SUPPLY RISK	7.0%	3,194	224	-2,970	7.0%
08 25	3,428	660	-2,769						
08 26	4,041	916	-3,125						
08 27	3,963	207	-3,755	SUPPLY RISK	5.2%	3,963	207	-3,755	
08 28	3,555	66	-3,489	SUPPLY RISK	1.9%	3,555	66	-3,489	6.3%
08 29	3,704	332	-3,373	SUPPLY RISK	9.0%	3,704	332	-3,373	
08 30	3,325	309	-3,016	SUPPLY RISK	9.3%	3,325	309	-3,016	
08 31	3,472	381	-3,091						
09 01	3,260	315	-2,945	SUPPLY RISK	9.7%	3,260	315	-2,945	9.7%
09 02	3,204	621	-2,583						
09 03	3,005	1,064	-1,941						
09 04	2,875	2,778	-97						
09 05	2,505	2,866	361						
09 06	2,384	2,982	598						
09 07	2,523	1,565	-958						
09 08	2,788	273	-2,515	SUPPLY RISK	9.8%	2,788	273	-2,515	9.8%
09 09	3,349	406	-2,943						
09 10	3,310	121	-3,189	SUPPLY RISK	3.6%	3,310	121	-3,189	3.6%

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09 11	2,974	1,218	-1,755						
09 12	2,346	576	-1,770						
09 13	2,238	161	-2,077	SUPPLY RISK	7.2%	2,238	161	-2,077	7.2%
09 14	2,530	669	-1,861						
09 15	2,191	1,273	-918						
09 16	2,214	171	-2,043	SUPPLY RISK	7.7%	2,214	171	-2,043	
09 17	2,230	60	-2,170	SUPPLY RISK	2.7%	2,230	60	-2,170	5.2%
09 18	2,483	437	-2,046						
09 19	2,252	243	-2,009						
09 20	2,205	37	-2,169	SUPPLY RISK	1.7%	2,205	37	-2,169	
09 21	2,229	18	-2,211	SUPPLY RISK	0.8%	2,229	18	-2,211	
09 22	2,154	37	-2,117	SUPPLY RISK	1.7%	2,154	37	-2,117	1.7%
09 23	2,238	59	-2,179	SUPPLY RISK	2.6%	2,238	59	-2,179	
09 24	2,140	1,244	-895						
09 25	1,858	654	-1,204						
09 26	1,784	268	-1,517						
09 27	1,847	1,144	-703						
09 28	1,794	1,764	-31						
09 29	1,732	3,145	1,413						
09 30	1,806	3,168	1,362						
10 01	1,874	2,792	918						
10 02	1,824	919	-905						
10 03	1,838	3	-1,835	SUPPLY RISK	0.2%	1,838	3	-1,835	0.2%
10 04	1,761	1,797	36						
10 05	1,719	1,624	-95						
10 06	1,713	102	-1,611	SUPPLY RISK	6.0%	1,713	102	-1,611	
10 07	1,786	15	-1,771	SUPPLY RISK	0.8%	1,786	15	-1,771	2.2%
10 08	1,885	2	-1,883	SUPPLY RISK	0.1%	1,885	2	-1,883	
10 09	1,920	1,662	-258						
10 10	1,735	2,703	968						
10 11	1,650	574	-1,075						
10 12	1,615	37	-1,578	SUPPLY RISK	2.3%	1,615	37	-1,578	2.3%
10 13	1,624	225	-1,399						
10 14	1,643	1,519	-124						
10 15	1,682	17	-1,665	SUPPLY RISK	1.0%	1,682	17	-1,665	1.0%
10 16	1,616	855	-761						
10 17	1,622	1,061	-561						
10 18	1,657	631	-1,025						
10 19	1,718	1,180	-537						
10 20	1,605	842	-763						
10 21	1,695	205	-1,490						
10 22	1,687	1,433	-254						
10 23	1,568	3,159	1,591						
10 24	1,524	1,903	379						
10 25	1,536	2,611	1,075						
10 26	1,617	1,626	9						
10 27	1,694	659	-1,035						
10 28	1,610	2,848	1,237						
10 29	1,648	1,880	232						
10 30	1,475	1,074	-402						
10 31	1,489	1,484	-4						

Month & Day	Electrical Load (Area 1, 2 & 3)	Wind Farm Power Output (MW)	Power Variance (-ve shortfall)	Type/Period	OSW Capacity Contribution	South Fork Demand (MW)	Wind Farm Output (132 MW)	Shortfall in Power Supply (MW)
11 01	1,527	223	-1,305					
11 02	1,453	892	-561					
11 03	1,453	833	-620					
11 04	1,478	1,413	-65					
11 05	1,549	1,151	-397					
11 06	1,585	1,857	272					
11 07	1,554	2,107	552					
11 08	1,510	228	-1,282					
11 09	1,485	203	-1,282					
11 10	1,465	1,271	-193					
11 11	1,503	2,993	1,490					
11 12	1,678	1,862	184					
11 13	1,547	2,123	576					
11 14	1,488	1,333	-155					
11 15	1,469	1,391	-78					
11 16	1,419	1,563	143					
11 17	1,452	1,579	127					
11 18	1,493	1,139	-354					
11 19	1,526	234	-1,291					
11 20	1,594	2,417	823					
11 21	1,813	3,168	1,355					
11 22	1,776	2,898	1,122					
11 23	1,830	2,232	402					
11 24	1,719	65	-1,654	SUPPLY RISK	3.8%	1,719	65	-1,654
11 25	1,698	160	-1,538	SUPPLY RISK	9.4%	1,698	160	-1,538
11 26	1,737	567	-1,171					
11 27	1,670	2,189	519					
11 28	1,619	888	-732					
11 29	1,570	1,367	-204					
11 30	1,475	1,360	-115					
12 01	1,447	2,462	1,016					
12 02	1,563	2,715	1,153					
12 03	1,593	3,049	1,456					
12 04	1,619	1,529	-90					
12 05	1,643	761	-882					
12 06	1,686	1,511	-174					
12 07	1,837	1,209	-628					
12 08	1,968	829	-1,140					
12 09	2,063	2,963	899					
12 10	2,160	2,103	-57					
12 11	2,080	387	-1,693					
12 12	2,237	1,879	-358					
12 13	1,895	1,373	-523					
12 14	1,748	864	-884					
12 15	2,094	2,660	566					
12 16	2,197	2,168	-30					
12 17	2,014	1,630	-384					
12 18	1,656	2,451	795					
12 19	1,967	1,599	-368					

Month & Day	Electrical Load (Area 1, 2 & 3)	Wind Farm Power Output (MW)	Power Variance (-ve shortfall)	Type/Period	OSW Capacity Contribution	South Fork Demand (MW)	Wind Farm Output (132 MW)	Shortfall in Power Supply (MW)
12 20	1,963	338	-1,625					
12 21	1,917	833	-1,084					
12 22	1,860	1,155	-705					
12 23	1,795	1,493	-301					
12 24	1,788	1,902	114					
12 25	1,705	1,115	-590					
12 26	1,831	1,344	-487					
12 27	1,630	2,589	959					
12 28	1,818	861	-957					
12 29	1,938	1,128	-810					
12 30	1,907	3,008	1,101					
12 31	1,957	2,438	481					
Totals:	778,121	387,352	-390,768	SOUTH FORK WIND: ELECTRICAL SUPPLY RISK				
Average:	2,126	1,058	-1,068	76 days	4.1%	203,521	8,339	-195,182 4.1%
Summer of 2016 (May 1 to Aug 31):			366 days	Total capacity shortfall: 50.2%				
Supply Risk, Lowest Decile (90% failure):			76 days 4.1%					

Note:

* South Fork Wind power output is based upon 2016 offshore wind speed data (10-minute intervals) provided by the US National Oceanic and Atmospheric Administration (NOAA). Power generation is derived from a Siemens Gamesa (SG 8.0-167 DD) constructed power curve for an offshore wind turbine of 8 MW. A press release dated October 23, 2019, reads: "Ørsted and Eversource have signed a wind turbine contract with Siemens Gamesa Renewable Energy for the joint venture's North East cluster [comprising South Fork, Sunrise Wind and Revolution Wind]. Subject to Ørsted's and Eversource's final investment decision, all three offshore wind farms will install Siemens Gamesa's 8.0 MW turbines."