



Northern Ireland

NDM Accuracy of Forecasting Report Gas Year 2018/2019

Report Description

This report is an ongoing requirement of the Balancing Network Code (Commission Regulation (EU) No 312/2014). The requirement is outlined in Article 42, “Information obligations of the forecasting party towards the transmission systems operator”, Paragraph 3 ‘a Report on the accuracy of the forecast of a network user’s Non Daily Metered (NDM) off-takes shall be published by the Forecasting Party at least every two years’.

This Report will look at the aggregated Distribution Network Operator (DNO) NDM forecast at a given DN Exit Point.

The Forecasting Party in this instance is Premier Transmission Limited (PTL). GMO NI collated the data and publish the report on behalf of PTL.

The report has been prepared in conjunction with the 3 NI DNO’s who are responsible for producing the DNO forecasts:

- Phoenix Natural Gas Limited (PNGL)
- firmus energy Distribution Limited (feDL)
- SGN Natural Gas Limited (SGN NG)

The data contained in this report is defined as follows:

<u>Data Element</u>	<u>Description</u>
Date	Gas Day
Daily Delivered Energy (kWh)	Aggregate NDM delivered energy for Gas Day D, measured in kWh.
Forecast Energy Demand (kWh)	Aggregate of the final NDM energy forecasts issued to shippers on Gas Day D.
Accuracy (%)	Calculated field, defining the % difference between the delivered and forecasted energy at all NDM offtakes for the relevant Gas Day.

The Forecasted Energy Demand in the report is an aggregation of the DNO NDM forecasts issued to Shippers on a given Gas Day.

There will always be variances between the level of NDM forecasts issued to Shippers each day and the actual level of NDM demand on the day. The accuracy of the forecast on any given day will be subject to variations caused by a number of reasons including, but not limited to:

- The accuracy of Shipper provided DM forecast nominations as per the DNO’s Distribution Code;

- Changes in weather forecasts;
- Changes in actual weather conditions after the final forecast was issued by the DNO's (and degree to which end user demand responds);
- Operational issues with Transmission System Operator (TSO) metering; and
- Changes in End User Demand (e.g. change of occupancy).

Gas Year 2018/2019 – PNGL

Date	NDM Daily Delivered Energy kWh	NDM Forecast Energy Demand kWh	Accuracy %
01-Oct-2018	9,780,531	9,839,009	-1%
02-Oct-2018	8,230,569	7,969,143	3%
03-Oct-2018	7,389,977	7,528,825	-2%
04-Oct-2018	7,009,533	6,867,717	2%
*05-Oct-2018	8,147,487	8,262,959	-1%
06-Oct-2018	8,162,715	8,038,616	2%
07-Oct-2018	9,700,075	10,066,945	-4%
08-Oct-2018	8,336,924	8,426,603	-1%
09-Oct-2018	7,426,842	7,429,339	0%
10-Oct-2018	5,753,622	5,747,216	0%
11-Oct-2018	6,647,522	6,826,623	-3%
12-Oct-2018	8,063,957	8,156,897	-1%
13-Oct-2018	7,642,492	7,875,777	-3%
14-Oct-2018	7,725,561	7,994,179	-3%
*15-Oct-2018	9,575,999	8,954,414	7%
*16-Oct-2018	8,782,998	8,852,543	-1%
*17-Oct-2018	9,579,329	9,981,487	-4%
18-Oct-2018	10,272,028	10,487,762	-2%
*19-Oct-2018	10,022,526	9,683,457	4%
*20-Oct-2018	7,352,521	7,357,393	0%
21-Oct-2018	7,407,618	6,883,767	8%
22-Oct-2018	10,700,606	10,588,654	1%
23-Oct-2018	10,424,452	10,211,017	2%
24-Oct-2018	10,098,796	10,069,144	0%
25-Oct-2018	10,118,263	10,244,890	-1%
26-Oct-2018	12,684,836	12,789,586	-1%
27-Oct-2018	13,617,073	12,298,274	11%
28-Oct-2018	12,274,094	12,276,653	0%
29-Oct-2018	14,579,643	14,948,362	-2%
30-Oct-2018	13,728,160	13,868,177	-1%
31-Oct-2018	13,504,111	13,291,124	2%
01-Nov-2018	14,543,370	14,229,756	2%
02-Nov-2018	14,968,846	15,111,196	-1%
03-Nov-2018	10,160,249	10,288,664	-1%
04-Nov-2018	9,666,139	9,471,768	2%
05-Nov-2018	11,181,517	11,423,033	-2%
06-Nov-2018	10,966,706	10,662,582	3%
07-Nov-2018	11,637,578	11,156,839	4%
08-Nov-2018	12,839,417	13,149,909	-2%
09-Nov-2018	12,863,741	12,972,025	-1%
10-Nov-2018	11,848,330	11,737,290	1%

11-Nov-2018	12,126,935	12,370,143	-2%
12-Nov-2018	13,083,456	13,069,308	0%
13-Nov-2018	12,392,101	12,446,269	0%
14-Nov-2018	10,660,858	10,507,430	1%
15-Nov-2018	10,477,979	9,951,034	5%
16-Nov-2018	11,182,896	11,126,849	1%
17-Nov-2018	10,623,270	10,824,073	-2%
18-Nov-2018	11,088,983	10,933,959	1%
19-Nov-2018	14,443,901	14,554,565	-1%
20-Nov-2018	15,303,087	15,582,851	-2%
21-Nov-2018	15,684,804	15,938,686	-2%
22-Nov-2018	14,773,064	14,947,547	-1%
23-Nov-2018	14,416,178	14,272,731	1%
24-Nov-2018	13,164,032	12,992,574	1%
25-Nov-2018	13,653,080	13,611,445	0%
26-Nov-2018	15,295,052	14,813,691	3%
27-Nov-2018	15,946,023	15,871,901	0%
28-Nov-2018	13,566,669	13,431,557	1%
29-Nov-2018	13,868,486	14,234,652	-3%
30-Nov-2018	15,611,101	15,698,277	-1%
01-Dec-2018	13,782,039	13,918,419	-1%
02-Dec-2018	12,520,938	12,538,383	0%
03-Dec-2018	15,162,229	14,708,865	3%
04-Dec-2018	17,583,249	17,656,782	0%
05-Dec-2018	16,339,534	16,519,617	-1%
06-Dec-2018	13,632,856	13,393,138	2%
07-Dec-2018	15,448,760	15,632,568	-1%
08-Dec-2018	14,131,569	13,931,164	1%
09-Dec-2018	13,678,603	13,639,648	0%
10-Dec-2018	15,781,383	16,513,561	-4%
11-Dec-2018	14,080,784	14,004,203	1%
12-Dec-2018	14,217,491	14,256,475	0%
13-Dec-2018	16,477,444	16,245,707	1%
14-Dec-2018	16,392,159	15,991,913	3%
15-Dec-2018	15,654,768	15,548,004	1%
16-Dec-2018	15,009,830	15,064,210	0%
17-Dec-2018	16,385,398	16,039,993	2%
18-Dec-2018	14,392,981	14,045,617	2%
19-Dec-2018	15,540,737	15,533,082	0%
20-Dec-2018	15,241,441	15,249,403	0%
21-Dec-2018	14,690,827	14,593,450	1%
22-Dec-2018	13,418,101	13,340,623	1%
23-Dec-2018	13,659,281	13,496,335	1%
24-Dec-2018	15,293,904	15,465,998	-1%
25-Dec-2018	11,454,244	11,251,615	2%
26-Dec-2018	11,248,887	11,103,185	1%

27-Dec-2018	11,603,612	11,311,915	3%
28-Dec-2018	11,726,794	11,543,124	2%
29-Dec-2018	11,043,889	10,819,184	2%
30-Dec-2018	10,500,868	9,934,209	6%
31-Dec-2018	11,846,766	11,184,910	6%
01-Jan-2019	12,330,388	12,397,530	-1%
02-Jan-2019	15,107,268	15,351,377	-2%
03-Jan-2019	14,737,930	15,228,865	-3%
04-Jan-2019	15,190,029	15,456,935	-2%
05-Jan-2019	13,871,710	13,838,953	0%
06-Jan-2019	12,264,693	12,328,467	-1%
07-Jan-2019	13,588,316	13,542,536	0%
08-Jan-2019	14,635,673	15,447,675	-5%
09-Jan-2019	15,295,654	15,630,364	-2%
10-Jan-2019	13,631,660	13,442,237	1%
11-Jan-2019	13,460,514	13,369,304	1%
12-Jan-2019	12,398,616	12,228,061	1%
13-Jan-2019	12,403,163	12,189,343	2%
14-Jan-2019	14,441,263	14,564,315	-1%
15-Jan-2019	13,941,615	13,889,548	0%
16-Jan-2019	15,401,231	15,392,755	0%
17-Jan-2019	18,194,704	18,460,921	-1%
18-Jan-2019	17,881,219	18,350,289	-3%
19-Jan-2019	14,443,745	14,161,947	2%
20-Jan-2019	14,778,815	14,001,629	6%
21-Jan-2019	19,145,667	19,522,117	-2%
22-Jan-2019	20,007,429	20,330,073	-2%
23-Jan-2019	20,253,331	21,047,495	-4%
24-Jan-2019	17,022,923	17,892,424	-5%
25-Jan-2019	14,410,161	14,534,195	-1%
26-Jan-2019	13,409,348	13,263,686	1%
27-Jan-2019	16,225,422	16,715,233	-3%
28-Jan-2019	18,196,360	18,680,912	-3%
29-Jan-2019	18,991,697	19,644,729	-3%
30-Jan-2019	20,019,318	19,848,314	1%
31-Jan-2019	21,509,536	21,162,519	2%
01-Feb-2019	19,772,411	19,036,399	4%
02-Feb-2019	17,782,495	17,571,804	1%
03-Feb-2019	17,212,008	17,484,974	-2%
04-Feb-2019	17,217,494	17,052,674	1%
05-Feb-2019	17,522,925	17,046,084	3%
06-Feb-2019	16,125,547	16,115,099	0%
07-Feb-2019	16,063,161	15,908,885	1%
08-Feb-2019	15,585,326	15,195,827	3%
09-Feb-2019	14,075,580	13,519,382	4%
10-Feb-2019	15,108,594	15,038,202	0%

11-Feb-2019	16,158,488	16,301,309	-1%
12-Feb-2019	14,393,475	14,131,241	2%
13-Feb-2019	13,523,606	12,933,462	5%
14-Feb-2019	13,236,653	12,741,511	4%
15-Feb-2019	13,134,663	12,903,613	2%
16-Feb-2019	11,256,557	11,465,771	-2%
17-Feb-2019	10,818,456	10,586,420	2%
18-Feb-2019	13,912,868	13,949,309	0%
19-Feb-2019	14,414,202	14,627,052	-1%
20-Feb-2019	12,069,447	12,250,932	-1%
21-Feb-2019	10,416,206	10,447,067	0%
22-Feb-2019	11,495,049	11,809,476	-3%
23-Feb-2019	10,773,199	10,764,280	0%
24-Feb-2019	12,442,926	12,606,295	-1%
25-Feb-2019	12,489,739	12,480,942	0%
26-Feb-2019	12,234,275	12,439,713	-2%
27-Feb-2019	12,220,899	12,580,405	-3%
28-Feb-2019	13,410,764	13,590,842	-1%
01-Mar-2019	11,438,292	11,776,463	-3%
02-Mar-2019	12,039,161	12,162,836	-1%
03-Mar-2019	13,593,865	13,666,019	-1%
04-Mar-2019	17,055,582	17,389,290	-2%
05-Mar-2019	15,940,313	16,281,867	-2%
06-Mar-2019	14,668,730	14,378,737	2%
07-Mar-2019	15,579,565	15,827,786	-2%
08-Mar-2019	16,629,616	16,939,271	-2%
09-Mar-2019	14,095,281	14,637,573	-4%
10-Mar-2019	16,333,246	15,849,187	3%
11-Mar-2019	16,834,927	16,813,237	0%
12-Mar-2019	16,277,129	16,253,010	0%
13-Mar-2019	15,381,522	15,484,970	-1%
14-Mar-2019	13,715,410	14,135,122	-3%
15-Mar-2019	13,542,722	14,109,931	-4%
16-Mar-2019	13,296,335	13,441,206	-1%
17-Mar-2019	13,429,890	13,087,912	3%
18-Mar-2019	14,218,475	13,963,642	2%
19-Mar-2019	12,451,203	12,243,026	2%
20-Mar-2019	10,730,706	10,508,414	2%
21-Mar-2019	10,204,160	9,950,530	3%
22-Mar-2019	11,565,686	11,452,991	1%
23-Mar-2019	11,233,131	11,589,165	-3%
24-Mar-2019	11,866,934	12,080,714	-2%
25-Mar-2019	12,713,884	12,626,982	1%
26-Mar-2019	12,364,106	12,212,198	1%
27-Mar-2019	10,886,781	10,479,821	4%
28-Mar-2019	9,565,270	9,031,950	6%

29-Mar-2019	10,574,834	10,207,005	4%
30-Mar-2019	9,920,024	10,136,429	-2%
31-Mar-2019	9,970,708	9,952,811	0%
01-Apr-2019	13,143,299	12,977,955	1%
02-Apr-2019	13,284,640	13,911,077	-5%
03-Apr-2019	15,698,157	16,131,564	-3%
04-Apr-2019	14,519,347	14,911,080	-3%
05-Apr-2019	14,629,014	15,061,063	-3%
06-Apr-2019	9,833,296	10,321,236	-5%
07-Apr-2019	10,441,884	10,380,452	1%
08-Apr-2019	10,230,869	10,440,648	-2%
09-Apr-2019	10,051,679	9,464,100	6%
10-Apr-2019	10,573,828	10,400,927	2%
11-Apr-2019	12,111,073	12,331,640	-2%
*12-Apr-2019	11,573,031	11,291,751	2%
13-Apr-2019	11,248,960	11,233,933	0%
14-Apr-2019	13,355,894	13,341,331	0%
15-Apr-2019	14,710,491	14,783,942	0%
16-Apr-2019	12,466,166	12,434,782	0%
17-Apr-2019	10,316,350	10,334,706	0%
18-Apr-2019	8,371,260	8,145,717	3%
*19-Apr-2019	6,826,379	6,472,546	5%
*20-Apr-2019	5,076,613	4,859,371	4%
*21-Apr-2019	4,106,354	3,699,671	11%
*22-Apr-2019	4,078,398	3,700,427	10%
*23-Apr-2019	4,492,868	3,796,354	18%
24-Apr-2019	5,819,776	5,710,963	2%
25-Apr-2019	7,124,814	6,649,375	7%
26-Apr-2019	8,310,306	8,315,379	0%
27-Apr-2019	11,234,179	11,101,517	1%
28-Apr-2019	9,691,290	9,781,271	-1%
29-Apr-2019	10,391,773	10,640,188	-2%
30-Apr-2019	10,795,609	11,123,147	-3%
01-May-2019	7,827,708	7,992,250	-2%
02-May-2019	7,297,258	7,146,191	2%
03-May-2019	9,220,193	9,161,896	1%
04-May-2019	8,684,904	8,792,124	-1%
05-May-2019	10,063,872	9,731,349	3%
06-May-2019	10,787,667	10,655,523	1%
07-May-2019	11,442,978	11,253,207	2%
08-May-2019	12,563,572	12,768,687	-2%
09-May-2019	11,243,589	11,449,909	-2%
10-May-2019	9,994,879	10,394,695	-4%
11-May-2019	7,614,652	7,593,771	0%
12-May-2019	7,361,132	7,399,864	-1%
13-May-2019	6,066,307	6,381,203	-5%

14-May-2019	5,164,125	5,288,701	-2%
15-May-2019	4,742,489	4,696,124	1%
16-May-2019	5,015,006	4,996,923	0%
17-May-2019	5,329,219	4,957,570	7%
18-May-2019	6,612,661	7,108,822	-7%
19-May-2019	6,693,487	6,504,852	3%
20-May-2019	6,553,698	6,817,940	-4%
21-May-2019	6,149,199	6,079,623	1%
22-May-2019	5,664,462	5,180,577	9%
23-May-2019	5,485,391	5,305,613	3%
24-May-2019	6,173,390	5,663,680	9%
*25-May-2019	5,764,833	5,846,637	-1%
26-May-2019	5,044,637	4,886,717	3%
27-May-2019	6,364,027	6,663,161	-4%
28-May-2019	6,172,991	5,574,374	11%
29-May-2019	7,511,043	8,068,709	-7%
30-May-2019	5,880,327	5,975,071	-2%
31-May-2019	5,455,268	5,808,683	-6%
*01-Jun-2019	4,422,584	4,103,642	8%
02-Jun-2019	4,330,581	4,232,775	2%
03-Jun-2019	4,906,793	5,089,301	-4%
04-Jun-2019	6,806,536	7,461,552	-9%
05-Jun-2019	6,967,779	7,254,634	-4%
06-Jun-2019	6,270,001	6,132,186	2%
07-Jun-2019	5,428,585	5,584,941	-3%
08-Jun-2019	5,621,646	5,380,132	4%
09-Jun-2019	5,638,556	5,908,796	-5%
10-Jun-2019	5,036,441	4,955,384	2%
*11-Jun-2019	5,092,863	5,172,042	-2%
12-Jun-2019	7,065,357	7,400,060	-5%
13-Jun-2019	7,195,253	7,432,463	-3%
14-Jun-2019	7,366,882	7,595,565	-3%
15-Jun-2019	6,513,839	6,819,791	-4%
16-Jun-2019	5,158,421	5,312,219	-3%
17-Jun-2019	5,289,188	5,230,114	1%
*18-Jun-2019	4,643,964	4,548,032	2%
19-Jun-2019	4,699,985	4,481,325	5%
*20-Jun-2019	5,340,672	5,130,544	4%
*21-Jun-2019	5,019,315	4,767,429	5%
*22-Jun-2019	3,798,737	3,500,799	9%
*23-Jun-2019	3,781,524	3,598,839	5%
*24-Jun-2019	4,121,628	4,063,273	1%
*25-Jun-2019	3,743,442	3,565,229	5%
*26-Jun-2019	3,406,977	3,045,053	12%
*27-Jun-2019	3,072,014	2,751,100	12%
*28-Jun-2019	2,757,959	2,643,284	4%

*29-Jun-2019	2,633,964	2,221,206	19%
*30-Jun-2019	2,679,343	2,623,201	2%
*01-Jul-2019	3,380,758	3,268,638	3%
*02-Jul-2019	3,688,405	3,232,469	14%
*03-Jul-2019	3,659,331	3,584,620	2%
*04-Jul-2019	3,370,178	3,077,542	10%
*05-Jul-2019	3,324,357	3,024,673	10%
*06-Jul-2019	2,919,101	2,611,246	12%
07-Jul-2019	2,737,626	2,552,541	7%
08-Jul-2019	3,617,818	4,015,681	-10%
09-Jul-2019	3,190,502	2,698,093	18%
10-Jul-2019	3,012,119	2,691,343	12%
*11-Jul-2019	2,689,462	2,172,528	24%
*12-Jul-2019	2,660,864	1,835,210	45%
13-Jul-2019	2,744,303	2,647,427	4%
14-Jul-2019	2,357,814	2,164,813	9%
15-Jul-2019	2,442,107	1,967,844	24%
16-Jul-2019	2,520,204	2,654,649	-5%
17-Jul-2019	3,083,352	3,382,034	-9%
18-Jul-2019	3,049,803	3,231,060	-6%
19-Jul-2019	3,513,549	3,703,362	-5%
20-Jul-2019	2,877,255	2,922,626	-2%
21-Jul-2019	3,168,787	3,263,220	-3%
22-Jul-2019	2,536,160	2,599,482	-2%
23-Jul-2019	2,235,768	2,380,577	-6%
24-Jul-2019	2,495,258	2,380,827	5%
25-Jul-2019	2,424,789	2,272,811	7%
*26-Jul-2019	2,313,607	2,333,710	-1%
*27-Jul-2019	2,336,451	2,169,488	8%
28-Jul-2019	2,946,821	2,979,798	-1%
29-Jul-2019	3,001,401	2,999,632	0%
*30-Jul-2019	2,965,517	2,538,688	17%
*31-Jul-2019	2,884,720	2,707,291	7%
*01-Aug-2019	2,700,502	2,676,277	1%
*02-Aug-2019	2,562,408	2,628,194	-3%
*03-Aug-2019	2,466,933	2,339,642	5%
*04-Aug-2019	2,277,000	2,253,535	1%
*05-Aug-2019	2,680,626	2,971,929	-10%
06-Aug-2019	2,898,890	2,992,878	-3%
07-Aug-2019	2,981,940	3,126,894	-5%
08-Aug-2019	2,795,236	2,860,725	-2%
09-Aug-2019	3,114,807	3,283,078	-5%
10-Aug-2019	2,907,271	3,069,082	-5%
11-Aug-2019	3,450,859	3,236,215	7%
12-Aug-2019	3,850,623	4,042,001	-5%
13-Aug-2019	3,607,162	3,855,028	-6%

14-Aug-2019	3,816,097	4,209,213	-9%
15-Aug-2019	3,390,851	3,611,901	-6%
16-Aug-2019	3,126,931	3,037,075	3%
17-Aug-2019	3,042,446	2,931,636	4%
18-Aug-2019	3,160,229	2,963,427	7%
19-Aug-2019	3,657,623	3,465,999	6%
20-Aug-2019	3,730,569	3,744,709	0%
21-Aug-2019	4,355,358	4,115,927	6%
22-Aug-2019	4,179,305	4,061,992	3%
*23-Aug-2019	3,182,869	3,163,595	1%
*24-Aug-2019	2,667,349	2,426,133	10%
*25-Aug-2019	2,167,941	1,716,691	26%
26-Aug-2019	2,563,360	2,535,064	1%
27-Aug-2019	2,715,044	2,690,806	1%
28-Aug-2019	3,132,263	2,638,962	19%
29-Aug-2019	3,689,412	3,740,188	-1%
*30-Aug-2019	3,881,503	3,920,809	-1%
31-Aug-2019	3,706,821	3,762,836	-1%
01-Sep-2019	4,267,660	4,219,663	1%
02-Sep-2019	5,752,583	6,114,269	-6%
03-Sep-2019	4,752,003	5,104,688	-7%
04-Sep-2019	6,569,923	6,967,454	-6%
05-Sep-2019	5,591,694	5,659,776	-1%
06-Sep-2019	5,325,147	5,540,391	-4%
07-Sep-2019	4,606,240	4,868,869	-5%
08-Sep-2019	4,746,523	4,764,541	0%
09-Sep-2019	5,298,414	5,442,956	-3%
10-Sep-2019	6,324,367	6,866,176	-8%
11-Sep-2019	4,919,109	4,827,516	2%
12-Sep-2019	5,381,268	5,238,324	3%
13-Sep-2019	5,318,503	5,707,454	-7%
14-Sep-2019	4,551,708	4,834,427	-6%
15-Sep-2019	5,217,488	5,420,094	-4%
16-Sep-2019	5,408,076	5,714,230	-5%
17-Sep-2019	5,559,976	5,545,638	0%
18-Sep-2019	5,527,140	5,805,990	-5%
19-Sep-2019	4,594,247	4,767,878	-4%
*20-Sep-2019	4,103,915	4,146,911	-1%
*21-Sep-2019	3,540,430	3,474,477	2%
22-Sep-2019	3,967,871	3,656,271	9%
23-Sep-2019	4,822,864	4,710,702	2%
24-Sep-2019	4,365,059	4,138,608	5%
25-Sep-2019	4,396,069	4,264,596	3%
26-Sep-2019	5,407,044	5,083,996	6%
27-Sep-2019	6,047,543	5,792,729	4%
28-Sep-2019	5,188,920	5,128,912	1%

29-Sep-2019	5,261,994	5,266,566	0%
30-Sep-2019	7,339,785	7,779,245	-6%

Observation: PNGL have verified that larger percentage variances of accuracy in the above data set were due to:

- The accuracy of Shipper provided DM forecast nominations as per the DNO's Distribution Network Code; and
- Operational issues with Transmission System Operator (TSO) metering. * Denotes a day where TSO metering was unavailable, and an estimate was used.

Gas Year 2018/2019 – feDL

Date	NDM Daily Delivered Energy kWh	NDM Forecast Energy Demand kWh	Accuracy %
01-Oct-2018	3,021,551	2,914,281	4%
02-Oct-2018	2,678,354	2,521,144	6%
03-Oct-2018	2,505,761	2,400,221	4%
04-Oct-2018	2,429,504	2,228,496	9%
05-Oct-2018	2,732,231	2,977,741	-8%
06-Oct-2018	2,344,034	2,396,627	-2%
07-Oct-2018	2,499,545	2,493,804	0%
08-Oct-2018	2,699,740	2,781,866	-3%
09-Oct-2018	2,522,036	2,377,167	6%
10-Oct-2018	2,029,648	1,806,921	12%
11-Oct-2018	2,281,700	2,271,205	0%
12-Oct-2018	2,530,728	2,441,803	4%
13-Oct-2018	2,114,885	2,069,254	2%
14-Oct-2018	2,215,931	2,035,118	9%
15-Oct-2018	2,922,557	2,885,862	1%
16-Oct-2018	2,896,898	2,992,240	-3%
17-Oct-2018	2,892,841	3,143,483	-8%
18-Oct-2018	3,248,247	3,400,423	-4%
19-Oct-2018	2,862,485	2,984,167	-4%
20-Oct-2018	1,932,081	1,735,585	11%
21-Oct-2018	2,147,216	1,727,378	24%
22-Oct-2018	3,210,295	3,308,209	-3%
23-Oct-2018	3,098,692	3,008,565	3%
24-Oct-2018	3,050,064	3,052,129	0%
25-Oct-2018	3,113,855	2,942,797	6%
26-Oct-2018	3,627,993	4,203,024	-14%
27-Oct-2018	3,342,455	3,468,551	-4%
28-Oct-2018	3,249,034	3,477,853	-7%
29-Oct-2018	4,234,912	4,219,325	0%
30-Oct-2018	4,020,427	3,852,769	4%
31-Oct-2018	4,105,907	4,051,019	1%
01-Nov-2018	4,253,546	4,309,438	-1%
02-Nov-2018	4,116,567	4,748,282	-13%
03-Nov-2018	2,532,454	2,726,294	-7%
04-Nov-2018	2,657,041	2,327,775	14%
05-Nov-2018	3,471,396	3,084,329	13%
06-Nov-2018	3,243,136	2,831,703	15%
07-Nov-2018	3,633,897	3,195,264	14%
08-Nov-2018	3,741,359	4,005,890	-7%
09-Nov-2018	3,667,911	3,535,765	4%
10-Nov-2018	2,929,416	2,578,853	14%

11-Nov-2018	3,048,404	2,991,907	2%
12-Nov-2018	3,844,663	3,777,837	2%
13-Nov-2018	3,682,544	3,672,102	0%
14-Nov-2018	3,134,067	2,959,855	6%
15-Nov-2018	3,224,219	2,879,463	12%
16-Nov-2018	3,149,491	3,087,080	2%
17-Nov-2018	2,678,564	2,527,137	6%
18-Nov-2018	2,787,880	2,577,335	8%
19-Nov-2018	4,114,382	3,862,032	7%
20-Nov-2018	4,244,774	4,209,131	1%
21-Nov-2018	4,446,840	4,470,995	-1%
22-Nov-2018	4,353,774	4,267,349	2%
23-Nov-2018	4,063,060	3,935,849	3%
24-Nov-2018	3,313,438	3,113,708	6%
25-Nov-2018	3,442,836	3,220,974	7%
26-Nov-2018	4,490,807	4,830,654	-7%
27-Nov-2018	4,422,827	4,522,853	-2%
28-Nov-2018	3,748,691	3,610,964	4%
29-Nov-2018	3,914,715	3,813,663	3%
30-Nov-2018	4,273,498	4,696,079	-9%
01-Dec-2018	3,330,649	3,564,675	-7%
02-Dec-2018	3,126,080	2,969,127	5%
03-Dec-2018	4,445,516	4,311,476	3%
04-Dec-2018	4,901,534	4,729,904	4%
05-Dec-2018	4,408,842	4,503,291	-2%
06-Dec-2018	3,869,075	3,705,720	4%
07-Dec-2018	4,233,781	4,341,920	-2%
08-Dec-2018	3,363,856	3,396,430	-1%
09-Dec-2018	3,383,675	3,251,189	4%
10-Dec-2018	4,360,998	4,600,041	-5%
11-Dec-2018	3,953,495	3,698,409	7%
12-Dec-2018	3,970,709	3,796,251	5%
13-Dec-2018	4,572,949	4,687,487	-2%
14-Dec-2018	4,503,192	4,687,008	-4%
15-Dec-2018	3,576,476	3,577,738	0%
16-Dec-2018	3,642,566	3,330,678	9%
17-Dec-2018	4,615,408	4,418,891	4%
18-Dec-2018	4,100,193	3,847,890	7%
19-Dec-2018	4,378,000	4,373,535	0%
20-Dec-2018	4,245,730	4,070,408	4%
21-Dec-2018	3,941,767	3,858,030	2%
22-Dec-2018	3,295,251	3,265,563	1%
23-Dec-2018	3,459,002	3,657,971	-5%
24-Dec-2018	3,929,918	4,988,284	-21%
25-Dec-2018	2,741,501	2,830,877	-3%
26-Dec-2018	2,848,112	2,425,674	17%

27-Dec-2018	3,197,428	2,981,690	7%
28-Dec-2018	3,158,358	3,305,703	-4%
29-Dec-2018	2,751,611	2,817,097	-2%
30-Dec-2018	2,599,829	2,322,394	12%
31-Dec-2018	3,185,631	3,035,677	5%
01-Jan-2019	3,230,289	2,896,939	12%
02-Jan-2019	4,167,212	4,265,967	-2%
03-Jan-2019	4,162,317	4,188,280	-1%
04-Jan-2019	4,223,078	4,211,546	0%
05-Jan-2019	3,427,414	3,434,672	0%
06-Jan-2019	3,074,791	2,791,737	10%
07-Jan-2019	4,096,146	3,867,750	6%
08-Jan-2019	4,296,771	4,403,823	-2%
09-Jan-2019	4,392,935	4,627,369	-5%
10-Jan-2019	3,981,340	3,736,186	7%
11-Jan-2019	3,780,879	3,835,309	-1%
12-Jan-2019	3,069,987	3,146,122	-2%
13-Jan-2019	3,153,679	3,148,874	0%
14-Jan-2019	4,249,935	5,141,198	-17%
15-Jan-2019	4,069,640	4,062,265	0%
16-Jan-2019	4,519,045	4,653,484	-3%
17-Jan-2019	5,018,255	5,140,316	-2%
18-Jan-2019	4,622,856	4,898,237	-6%
19-Jan-2019	3,584,104	3,578,365	0%
20-Jan-2019	3,734,662	3,680,016	1%
21-Jan-2019	5,329,414	5,458,524	-2%
22-Jan-2019	5,396,714	5,369,605	1%
23-Jan-2019	5,297,677	5,642,181	-6%
24-Jan-2019	4,574,812	4,378,987	4%
25-Jan-2019	3,948,190	4,026,699	-2%
26-Jan-2019	3,324,920	3,585,449	-7%
27-Jan-2019	3,958,094	3,831,574	3%
28-Jan-2019	5,168,558	5,153,585	0%
29-Jan-2019	5,341,441	5,310,668	1%
30-Jan-2019	5,641,462	5,425,571	4%
31-Jan-2019	5,795,417	6,031,365	-4%
01-Feb-2019	5,396,564	5,747,468	-6%
02-Feb-2019	4,445,727	4,720,369	-6%
03-Feb-2019	4,130,910	4,399,482	-6%
04-Feb-2019	4,843,043	4,910,066	-1%
05-Feb-2019	4,716,069	4,812,145	-2%
06-Feb-2019	4,550,231	4,533,417	0%
07-Feb-2019	4,557,979	4,451,636	2%
08-Feb-2019	4,409,750	4,531,591	-3%
09-Feb-2019	3,622,979	3,676,559	-1%
10-Feb-2019	3,879,139	3,638,451	7%

11-Feb-2019	4,666,982	4,737,299	-1%
12-Feb-2019	4,052,429	3,809,845	6%
13-Feb-2019	3,911,760	3,785,122	3%
14-Feb-2019	3,854,848	3,375,832	14%
15-Feb-2019	3,681,661	4,013,802	-8%
16-Feb-2019	2,953,312	2,974,545	-1%
17-Feb-2019	2,919,559	2,966,580	-2%
18-Feb-2019	3,987,902	4,686,075	-15%
19-Feb-2019	4,084,664	4,374,414	-7%
20-Feb-2019	3,527,660	3,782,863	-7%
21-Feb-2019	3,199,483	2,690,911	19%
22-Feb-2019	3,205,738	3,535,839	-9%
23-Feb-2019	2,765,678	2,600,629	6%
24-Feb-2019	3,052,820	3,206,556	-5%
25-Feb-2019	3,596,311	3,375,223	7%
26-Feb-2019	3,455,782	3,162,556	9%
27-Feb-2019	3,616,391	3,547,191	2%
28-Feb-2019	3,882,503	4,036,238	-4%
01-Mar-2019	3,405,327	3,380,154	1%
02-Mar-2019	3,182,213	3,184,745	0%
03-Mar-2019	3,330,205	3,104,544	7%
04-Mar-2019	4,719,709	5,018,103	-6%
05-Mar-2019	4,363,878	4,275,448	2%
06-Mar-2019	4,392,258	4,115,424	7%
07-Mar-2019	4,554,491	4,626,799	-2%
08-Mar-2019	4,545,400	4,861,585	-7%
09-Mar-2019	3,616,768	3,841,373	-6%
10-Mar-2019	4,094,937	3,827,031	7%
11-Mar-2019	4,710,712	4,695,753	0%
12-Mar-2019	4,662,540	4,482,688	4%
13-Mar-2019	4,507,546	4,451,976	1%
14-Mar-2019	4,098,445	4,030,516	2%
15-Mar-2019	4,086,556	4,091,296	0%
16-Mar-2019	3,551,825	3,624,444	-2%
17-Mar-2019	3,443,403	3,469,946	-1%
18-Mar-2019	3,966,636	3,860,067	3%
19-Mar-2019	3,691,791	3,542,862	4%
20-Mar-2019	3,294,394	3,137,902	5%
21-Mar-2019	3,226,670	3,117,818	3%
22-Mar-2019	3,483,432	3,621,367	-4%
23-Mar-2019	2,957,429	3,008,599	-2%
24-Mar-2019	3,123,707	2,873,551	9%
25-Mar-2019	3,857,137	3,647,255	6%
26-Mar-2019	3,823,191	3,803,571	1%
27-Mar-2019	3,486,163	3,606,140	-3%
28-Mar-2019	3,098,240	3,517,547	-12%

29-Mar-2019	3,164,537	4,085,584	-23%
30-Mar-2019	2,786,260	3,302,185	-16%
31-Mar-2019	2,832,966	2,654,420	7%
01-Apr-2019	3,850,595	3,991,826	-4%
02-Apr-2019	4,128,536	4,289,608	-4%
03-Apr-2019	4,654,592	4,628,726	1%
04-Apr-2019	4,225,504	4,232,303	0%
05-Apr-2019	4,128,272	4,427,243	-7%
06-Apr-2019	2,663,693	2,543,116	5%
07-Apr-2019	2,802,914	2,731,332	3%
08-Apr-2019	3,363,142	3,549,551	-5%
09-Apr-2019	3,295,012	3,390,793	-3%
10-Apr-2019	3,431,402	3,358,449	2%
11-Apr-2019	3,459,601	3,860,488	-10%
12-Apr-2019	3,278,571	3,427,662	-4%
13-Apr-2019	2,989,810	3,157,842	-5%
14-Apr-2019	3,331,784	3,174,211	5%
15-Apr-2019	4,282,087	4,654,328	-8%
16-Apr-2019	3,838,324	3,802,686	1%
17-Apr-2019	3,357,194	3,334,517	1%
18-Apr-2019	2,768,366	2,373,011	17%
19-Apr-2019	2,215,903	2,322,724	-5%
20-Apr-2019	1,650,084	1,273,137	30%
21-Apr-2019	1,369,190	1,105,522	24%
22-Apr-2019	1,455,318	934,025	56%
23-Apr-2019	1,682,912	885,445	90%
24-Apr-2019	2,150,926	1,836,088	17%
25-Apr-2019	2,298,974	2,138,059	8%
26-Apr-2019	2,568,923	2,548,584	1%
27-Apr-2019	2,872,036	2,938,379	-2%
28-Apr-2019	2,524,120	2,398,433	5%
29-Apr-2019	3,186,468	3,189,708	0%
30-Apr-2019	3,154,623	2,926,490	8%
01-May-2019	2,658,936	2,363,386	13%
02-May-2019	2,677,641	2,518,331	6%
03-May-2019	3,002,216	3,016,016	0%
04-May-2019	2,445,424	2,134,955	15%
05-May-2019	2,506,345	2,487,550	1%
06-May-2019	2,913,513	2,597,202	12%
07-May-2019	3,260,815	3,194,848	2%
08-May-2019	3,474,809	3,743,434	-7%
09-May-2019	3,368,625	3,518,466	-4%
10-May-2019	3,125,917	3,459,134	-10%
11-May-2019	2,265,354	2,138,410	6%
12-May-2019	2,097,257	2,044,354	3%
13-May-2019	2,281,150	2,408,026	-5%

14-May-2019	1,986,582	2,119,650	-6%
15-May-2019	1,795,395	1,835,306	-2%
16-May-2019	1,872,668	2,004,234	-7%
17-May-2019	1,976,953	2,282,136	-13%
18-May-2019	1,937,918	2,171,364	-11%
19-May-2019	1,957,604	1,806,402	8%
20-May-2019	2,400,503	2,399,783	0%
21-May-2019	2,156,759	2,072,881	4%
22-May-2019	2,081,717	2,054,157	1%
23-May-2019	1,931,247	1,813,837	6%
24-May-2019	2,015,667	1,997,167	1%
25-May-2019	1,735,183	1,802,062	-4%
26-May-2019	1,729,388	1,653,798	5%
27-May-2019	2,302,068	2,346,715	-2%
28-May-2019	2,239,594	2,176,455	3%
29-May-2019	2,390,695	2,650,389	-10%
30-May-2019	2,054,284	1,882,809	9%
31-May-2019	1,981,502	2,019,334	-2%
01-Jun-2019	1,446,709	1,337,118	8%
02-Jun-2019	1,542,032	1,271,759	21%
03-Jun-2019	2,050,181	2,085,169	-2%
04-Jun-2019	2,302,315	2,099,021	10%
05-Jun-2019	2,265,861	2,296,638	-1%
06-Jun-2019	2,238,229	2,185,260	2%
07-Jun-2019	1,877,029	1,897,345	-1%
08-Jun-2019	1,714,235	1,589,742	8%
09-Jun-2019	1,661,939	1,936,176	-14%
10-Jun-2019	1,975,768	2,119,053	-7%
11-Jun-2019	2,083,891	2,465,142	-15%
12-Jun-2019	2,218,813	2,495,718	-11%
13-Jun-2019	2,390,746	2,666,444	-10%
14-Jun-2019	2,212,002	2,414,059	-8%
15-Jun-2019	1,764,544	1,820,396	-3%
16-Jun-2019	1,616,698	1,546,408	5%
17-Jun-2019	2,043,262	1,978,365	3%
18-Jun-2019	1,908,241	1,792,715	6%
19-Jun-2019	1,933,938	2,026,631	-5%
20-Jun-2019	1,979,137	2,008,320	-1%
21-Jun-2019	1,777,689	1,755,853	1%
22-Jun-2019	1,295,576	1,589,714	-19%
23-Jun-2019	1,281,587	1,195,256	7%
24-Jun-2019	1,687,055	1,824,198	-8%
25-Jun-2019	1,608,558	1,637,653	-2%
26-Jun-2019	1,528,881	1,477,955	3%
27-Jun-2019	1,439,820	1,329,043	8%
28-Jun-2019	1,138,033	1,409,914	-19%

29-Jun-2019	948,768	801,508	18%
30-Jun-2019	1,048,345	889,036	18%
01-Jul-2019	1,521,460	1,371,551	11%
02-Jul-2019	1,509,565	1,412,226	7%
03-Jul-2019	1,471,329	1,417,181	4%
04-Jul-2019	1,398,692	1,158,977	21%
05-Jul-2019	1,336,304	1,260,903	6%
06-Jul-2019	1,052,844	924,316	14%
07-Jul-2019	1,055,738	925,559	14%
08-Jul-2019	1,482,863	1,150,670	29%
09-Jul-2019	1,354,270	1,200,688	13%
10-Jul-2019	1,277,722	839,260	52%
11-Jul-2019	1,182,588	829,591	43%
12-Jul-2019	1,144,054	692,417	65%
13-Jul-2019	1,085,570	903,218	20%
14-Jul-2019	966,352	1,102,640	-12%
15-Jul-2019	1,117,206	1,468,753	-24%
16-Jul-2019	1,170,512	1,511,129	-23%
17-Jul-2019	1,347,469	1,734,082	-22%
18-Jul-2019	1,269,765	1,623,518	-22%
19-Jul-2019	1,300,692	1,822,387	-29%
20-Jul-2019	1,083,339	1,487,904	-27%
21-Jul-2019	1,136,374	1,145,331	-1%
22-Jul-2019	1,222,164	1,157,040	6%
23-Jul-2019	1,129,087	1,235,998	-9%
24-Jul-2019	1,139,865	1,240,507	-8%
25-Jul-2019	1,133,636	996,656	14%
26-Jul-2019	1,178,962	1,446,409	-18%
27-Jul-2019	938,863	889,740	6%
28-Jul-2019	1,050,739	966,021	9%
29-Jul-2019	1,327,150	1,378,868	-4%
30-Jul-2019	1,290,087	1,056,921	22%
31-Jul-2019	1,307,722	1,318,986	-1%
01-Aug-2019	1,222,298	1,025,813	19%
02-Aug-2019	1,106,797	1,115,611	-1%
03-Aug-2019	945,061	993,135	-5%
04-Aug-2019	915,852	876,568	4%
05-Aug-2019	1,202,235	1,011,318	19%
06-Aug-2019	1,265,129	1,256,417	1%
07-Aug-2019	1,353,208	1,249,835	8%
08-Aug-2019	1,256,530	1,054,256	19%
09-Aug-2019	1,180,251	1,110,069	6%
10-Aug-2019	1,039,113	886,150	17%
11-Aug-2019	1,251,923	1,292,023	-3%
12-Aug-2019	1,581,228	1,586,710	0%
13-Aug-2019	1,476,280	1,560,435	-5%

14-Aug-2019	1,414,468	1,616,177	-12%
15-Aug-2019	1,345,604	1,341,660	0%
16-Aug-2019	1,268,195	1,124,306	13%
17-Aug-2019	1,183,378	1,230,441	-4%
18-Aug-2019	1,168,986	1,450,721	-19%
19-Aug-2019	1,560,173	1,587,983	-2%
20-Aug-2019	1,483,459	1,633,634	-9%
21-Aug-2019	1,652,204	1,853,314	-11%
22-Aug-2019	1,569,084	1,727,891	-9%
23-Aug-2019	1,324,079	1,136,673	16%
24-Aug-2019	1,002,348	929,381	8%
25-Aug-2019	926,334	773,076	20%
26-Aug-2019	1,209,456	1,051,607	15%
27-Aug-2019	1,340,175	913,577	47%
28-Aug-2019	1,493,723	1,226,738	22%
29-Aug-2019	1,529,582	1,413,355	8%
30-Aug-2019	1,524,743	1,335,093	14%
31-Aug-2019	1,340,449	1,475,760	-9%
01-Sep-2019	1,361,257	1,219,065	12%
02-Sep-2019	1,936,129	2,209,818	-12%
03-Sep-2019	1,752,080	2,001,174	-12%
04-Sep-2019	2,279,117	2,593,638	-12%
05-Sep-2019	1,966,480	2,065,241	-5%
06-Sep-2019	1,922,295	2,139,371	-10%
07-Sep-2019	1,431,549	1,546,753	-7%
08-Sep-2019	1,370,760	1,391,896	-2%
09-Sep-2019	1,880,102	1,868,330	1%
10-Sep-2019	2,153,842	2,179,302	-1%
11-Sep-2019	1,878,737	1,619,629	16%
12-Sep-2019	1,928,598	2,057,333	-6%
13-Sep-2019	1,907,258	2,379,252	-20%
14-Sep-2019	1,469,613	1,704,788	-14%
15-Sep-2019	1,559,167	1,599,501	-3%
16-Sep-2019	2,018,748	2,243,459	-10%
17-Sep-2019	1,984,637	2,045,763	-3%
18-Sep-2019	1,904,217	1,892,206	1%
19-Sep-2019	1,715,159	1,726,917	-1%
20-Sep-2019	1,566,079	1,801,440	-13%
21-Sep-2019	1,155,773	1,055,684	9%
22-Sep-2019	1,192,375	1,052,948	13%
23-Sep-2019	1,778,908	1,690,718	5%
24-Sep-2019	1,561,818	1,257,467	24%
25-Sep-2019	1,649,362	1,698,050	-3%
26-Sep-2019	1,863,795	1,981,041	-6%
27-Sep-2019	1,964,628	2,198,213	-11%
28-Sep-2019	1,506,460	1,419,943	6%

29-Sep-2019	1,527,029	1,410,108	8%
30-Sep-2019	2,448,078	2,523,633	-3%

Gas Year 2018/2019 – SGN NG

Date	NDM Daily Delivered Energy kWh	NDM Forecast Energy Demand kWh	Accuracy %
01-Oct-2018	8,263	5,728	44%
02-Oct-2018	16,372	5,747	185%
03-Oct-2018	21,566	5,968	261%
04-Oct-2018	5,999	5,988	0%
05-Oct-2018	7,203	6,010	20%
06-Oct-2018	3,725	6,031	-38%
07-Oct-2018	739	5,959	-88%
08-Oct-2018	3,067	7,416	-59%
09-Oct-2018	1,819	7,433	-76%
10-Oct-2018	1,944	7,663	-75%
11-Oct-2018	7,696	7,681	0%
12-Oct-2018	7,237	7,702	-6%
13-Oct-2018	5,080	7,731	-34%
14-Oct-2018	4,574	7,656	-40%
15-Oct-2018	1,682	5,622	-70%
16-Oct-2018	4,536	5,648	-20%
17-Oct-2018	3,947	5,910	-33%
18-Oct-2018	2,836	5,934	-52%
19-Oct-2018	7,859	5,955	32%
20-Oct-2018	5,136	5,971	-14%
21-Oct-2018	1,420	5,874	-76%
22-Oct-2018	3,495	8,960	-61%
23-Oct-2018	5,010	8,974	-44%
24-Oct-2018	5,924	9,237	-36%
25-Oct-2018	4,245	9,263	-54%
26-Oct-2018	9,163	9,294	-1%
27-Oct-2018	6,712	9,324	-28%
28-Oct-2018	5,102	9,229	-45%
29-Oct-2018	7,866	10,734	-27%
30-Oct-2018	8,557	10,764	-21%
31-Oct-2018	8,828	11,062	-20%
01-Nov-2018	10,008	11,091	-10%
02-Nov-2018	9,786	11,117	-12%
03-Nov-2018	5,973	11,140	-46%
04-Nov-2018	5,704	11,025	-48%
05-Nov-2018	7,608	13,322	-43%
06-Nov-2018	7,587	13,347	-43%
07-Nov-2018	7,827	13,656	-43%
08-Nov-2018	7,626	13,699	-44%
09-Nov-2018	10,106	13,735	-26%
10-Nov-2018	2,863	13,768	-79%

11-Nov-2018	6,785	13,642	-50%
12-Nov-2018	11,486	11,892	-3%
13-Nov-2018	8,473	11,907	-29%
14-Nov-2018	6,134	12,223	-50%
15-Nov-2018	6,173	12,249	-50%
16-Nov-2018	7,411	12,279	-40%
17-Nov-2018	2,083	12,305	-83%
18-Nov-2018	6,698	12,170	-45%
19-Nov-2018	8,336	11,173	-25%
20-Nov-2018	8,956	11,179	-20%
21-Nov-2018	9,288	11,482	-19%
22-Nov-2018	9,510	11,497	-17%
23-Nov-2018	10,915	11,510	-5%
24-Nov-2018	9,591	11,518	-17%
25-Nov-2018	9,786	11,381	-14%
26-Nov-2018	10,451	16,164	-35%
27-Nov-2018	11,173	16,186	-31%
28-Nov-2018	10,239	16,502	-38%
29-Nov-2018	10,524	16,534	-36%
30-Nov-2018	12,077	16,561	-27%
01-Dec-2018	11,496	16,590	-31%
02-Dec-2018	9,723	16,429	-41%
03-Dec-2018	10,931	16,568	-34%
04-Dec-2018	14,286	16,584	-14%
05-Dec-2018	12,501	16,899	-26%
06-Dec-2018	10,921	16,916	-35%
07-Dec-2018	13,013	16,944	-23%
08-Dec-2018	11,417	16,957	-33%
09-Dec-2018	9,789	16,795	-42%
10-Dec-2018	10,229	18,193	-44%
11-Dec-2018	12,626	18,209	-31%
12-Dec-2018	11,787	18,502	-36%
13-Dec-2018	14,466	18,517	-22%
14-Dec-2018	11,704	18,540	-37%
15-Dec-2018	17,572	18,549	-5%
16-Dec-2018	9,646	18,372	-47%
17-Dec-2018	12,800	19,603	-35%
18-Dec-2018	10,563	19,617	-46%
19-Dec-2018	14,035	19,911	-30%
20-Dec-2018	11,920	19,929	-40%
21-Dec-2018	12,871	19,956	-36%
22-Dec-2018	12,318	19,968	-38%
23-Dec-2018	12,115	20,142	-40%
24-Dec-2018	13,611	19,356	-30%
25-Dec-2018	10,670	19,369	-45%
26-Dec-2018	8,767	19,369	-55%

27-Dec-2018	10,871	19,372	-44%
28-Dec-2018	11,414	19,672	-42%
29-Dec-2018	9,222	19,685	-53%
30-Dec-2018	10,334	19,499	-47%
31-Dec-2018	8,658	17,770	-51%
01-Jan-2019	8,347	17,689	-53%
02-Jan-2019	10,712	17,683	-39%
03-Jan-2019	11,894	17,970	-34%
04-Jan-2019	12,476	17,964	-31%
05-Jan-2019	12,015	17,958	-33%
06-Jan-2019	9,189	17,761	-48%
07-Jan-2019	11,613	21,830	-47%
08-Jan-2019	10,132	21,832	-54%
09-Jan-2019	14,789	22,129	-33%
10-Jan-2019	11,198	22,147	-49%
11-Jan-2019	1,513	22,163	-93%
12-Jan-2019	10,414	22,183	-53%
13-Jan-2019	11,712	22,001	-47%
14-Jan-2019	11,815	18,600	-36%
15-Jan-2019	11,461	18,603	-38%
16-Jan-2019	14,431	18,898	-24%
17-Jan-2019	16,204	18,898	-14%
18-Jan-2019	16,790	18,900	-11%
19-Jan-2019	13,757	18,904	-27%
20-Jan-2019	14,600	18,704	-22%
21-Jan-2019	17,067	23,817	-28%
22-Jan-2019	18,290	23,802	-23%
23-Jan-2019	19,021	24,059	-21%
24-Jan-2019	16,153	22,624	-29%
25-Jan-2019	10,333	22,611	-54%
26-Jan-2019	13,117	22,593	-42%
27-Jan-2019	14,549	22,386	-35%
28-Jan-2019	15,264	24,155	-37%
29-Jan-2019	21,453	24,155	-11%
30-Jan-2019	20,110	24,425	-18%
31-Jan-2019	20,601	24,435	-16%
01-Feb-2019	25,400	24,432	4%
02-Feb-2019	18,512	24,423	-24%
03-Feb-2019	17,514	24,228	-28%
04-Feb-2019	14,393	23,834	-40%
05-Feb-2019	17,707	23,831	-26%
06-Feb-2019	14,393	24,103	-40%
07-Feb-2019	16,036	24,109	-33%
08-Feb-2019	16,659	24,112	-31%
09-Feb-2019	15,367	24,087	-36%
10-Feb-2019	14,704	23,875	-38%

11-Feb-2019	16,445	21,235	-23%
12-Feb-2019	14,101	21,211	-34%
13-Feb-2019	12,415	21,448	-42%
14-Feb-2019	15,291	18,638	-18%
15-Feb-2019	16,071	19,320	-17%
16-Feb-2019	13,659	19,265	-29%
17-Feb-2019	9,106	19,297	-53%
18-Feb-2019	16,083	18,783	-14%
19-Feb-2019	15,407	18,771	-18%
20-Feb-2019	12,388	19,295	-36%
21-Feb-2019	11,834	19,275	-39%
22-Feb-2019	13,357	19,243	-31%
23-Feb-2019	13,119	19,203	-32%
24-Feb-2019	14,042	18,919	-26%
25-Feb-2019	9,845	16,127	-39%
26-Feb-2019	11,359	16,106	-29%
27-Feb-2019	11,672	16,599	-30%
28-Feb-2019	14,917	16,582	-10%
01-Mar-2019	16,099	16,569	-3%
02-Mar-2019	16,867	16,553	2%
03-Mar-2019	16,095	16,279	-1%
04-Mar-2019	17,994	19,246	-7%
05-Mar-2019	17,326	19,224	-10%
06-Mar-2019	18,991	19,665	-3%
07-Mar-2019	16,129	19,629	-18%
08-Mar-2019	20,232	19,604	3%
09-Mar-2019	17,341	19,578	-11%
10-Mar-2019	18,793	19,319	-3%
11-Mar-2019	17,819	22,428	-21%
12-Mar-2019	20,610	22,406	-8%
13-Mar-2019	16,797	22,840	-26%
14-Mar-2019	16,553	22,532	-27%
15-Mar-2019	19,585	22,514	-13%
16-Mar-2019	18,500	22,504	-18%
17-Mar-2019	17,539	22,047	-20%
18-Mar-2019	15,824	23,234	-32%
19-Mar-2019	13,069	23,231	-44%
20-Mar-2019	16,214	23,927	-32%
21-Mar-2019	10,836	23,894	-55%
22-Mar-2019	18,515	23,864	-22%
23-Mar-2019	15,708	23,822	-34%
24-Mar-2019	15,669	23,796	-34%
25-Mar-2019	16,372	18,701	-12%
26-Mar-2019	13,942	18,665	-25%
27-Mar-2019	17,402	19,302	-10%
28-Mar-2019	12,265	19,271	-36%

29-Mar-2019	16,701	19,238	-13%
30-Mar-2019	15,264	19,208	-21%
31-Mar-2019	12,935	18,884	-32%
01-Apr-2019	19,080	17,647	8%
02-Apr-2019	18,479	17,621	5%
03-Apr-2019	20,924	18,305	14%
04-Apr-2019	18,064	18,271	-1%
05-Apr-2019	19,204	20,195	-5%
06-Apr-2019	14,242	20,168	-29%
07-Apr-2019	12,553	19,863	-37%
08-Apr-2019	13,450	19,506	-31%
09-Apr-2019	11,722	19,489	-40%
10-Apr-2019	13,165	20,064	-34%
11-Apr-2019	14,700	20,033	-27%
12-Apr-2019	16,860	19,999	-16%
13-Apr-2019	15,799	19,946	-21%
14-Apr-2019	16,493	19,321	-15%
15-Apr-2019	17,435	19,059	-9%
16-Apr-2019	15,747	18,998	-17%
17-Apr-2019	14,012	18,941	-26%
18-Apr-2019	12,903	19,421	-34%
19-Apr-2019	11,186	19,374	-42%
20-Apr-2019	8,997	19,330	-53%
21-Apr-2019	6,599	19,056	-65%
22-Apr-2019	11,095	14,142	-22%
23-Apr-2019	8,152	14,102	-42%
24-Apr-2019	9,243	14,550	-36%
25-Apr-2019	9,547	14,523	-34%
26-Apr-2019	14,472	14,508	0%
27-Apr-2019	16,043	14,484	11%
28-Apr-2019	12,702	14,245	-11%
29-Apr-2019	11,785	13,104	-10%
30-Apr-2019	9,698	13,100	-26%
01-May-2019	20,805	12,973	60%
02-May-2019	10,764	13,379	-20%
03-May-2019	14,671	13,389	10%
04-May-2019	12,544	13,346	-6%
05-May-2019	9,698	13,118	-26%
06-May-2019	14,647	13,219	11%
07-May-2019	12,744	13,189	-3%
08-May-2019	14,446	16,161	-11%
09-May-2019	15,076	13,528	11%
10-May-2019	15,053	16,091	-6%
11-May-2019	14,465	16,055	-10%
12-May-2019	8,964	13,242	-32%
13-May-2019	9,602	14,436	-33%

14-May-2019	6,504	14,400	-55%
15-May-2019	7,562	14,737	-49%
16-May-2019	8,799	14,704	-40%
17-May-2019	10,792	14,668	-26%
18-May-2019	11,638	14,623	-20%
19-May-2019	10,168	14,419	-29%
20-May-2019	10,518	9,148	15%
21-May-2019	7,823	9,106	-14%
22-May-2019	8,203	9,400	-13%
23-May-2019	7,874	9,364	-16%
24-May-2019	12,923	9,580	35%
25-May-2019	9,936	9,560	4%
26-May-2019	7,796	9,383	-17%
27-May-2019	9,876	10,852	-9%
28-May-2019	9,475	10,831	-13%
29-May-2019	10,928	10,804	1%
30-May-2019	10,239	11,126	-8%
31-May-2019	8,428	11,098	-24%
01-Jun-2019	9,262	11,701	-21%
02-Jun-2019	7,609	12,172	-37%
03-Jun-2019	11,540	10,742	7%
04-Jun-2019	8,393	10,697	-22%
05-Jun-2019	7,804	10,447	-25%
06-Jun-2019	9,857	10,128	-3%
07-Jun-2019	9,532	10,095	-6%
08-Jun-2019	9,004	10,531	-14%
09-Jun-2019	8,596	10,498	-18%
10-Jun-2019	9,568	8,792	9%
11-Jun-2019	9,369	8,768	7%
12-Jun-2019	9,020	9,038	0%
13-Jun-2019	10,499	9,013	16%
14-Jun-2019	9,446	8,993	5%
15-Jun-2019	7,961	8,976	-11%
16-Jun-2019	8,069	8,846	-9%
17-Jun-2019	9,389	8,935	5%
18-Jun-2019	9,523	8,925	7%
19-Jun-2019	8,962	9,189	-2%
20-Jun-2019	8,037	9,172	-12%
21-Jun-2019	8,320	9,160	-9%
22-Jun-2019	7,597	9,143	-17%
23-Jun-2019	8,216	9,020	-9%
24-Jun-2019	6,303	9,859	-36%
25-Jun-2019	9,183	9,853	-7%
26-Jun-2019	6,314	10,364	-39%
27-Jun-2019	7,317	10,351	-29%
28-Jun-2019	6,196	10,347	-40%

29-Jun-2019	5,869	10,334	-43%
30-Jun-2019	4,338	10,135	-57%
01-Jul-2019	13,660	6,887	98%
02-Jul-2019	7,031	6,612	6%
03-Jul-2019	6,253	6,181	1%
04-Jul-2019	6,925	8,101	-15%
05-Jul-2019	8,798	8,713	1%
06-Jul-2019	8,483	8,682	-2%
07-Jul-2019	9,191	8,659	6%
08-Jul-2019	8,820	8,176	8%
09-Jul-2019	8,875	7,922	12%
10-Jul-2019	7,570	7,523	1%
11-Jul-2019	3,797	7,501	-49%
12-Jul-2019	5,023	8,057	-38%
13-Jul-2019	5,529	8,030	-31%
14-Jul-2019	2,142	8,008	-73%
15-Jul-2019	7,891	5,692	39%
16-Jul-2019	6,176	5,692	9%
17-Jul-2019	5,165	6,153	-16%
18-Jul-2019	3,832	6,153	-38%
19-Jul-2019	5,377	6,153	-13%
20-Jul-2019	4,976	6,153	-19%
21-Jul-2019	5,619	5,982	-6%
22-Jul-2019	5,659	5,839	-3%
23-Jul-2019	5,616	5,836	-4%
24-Jul-2019	2,497	6,287	-60%
25-Jul-2019	4,667	6,279	-26%
26-Jul-2019	5,678	6,274	-10%
27-Jul-2019	2,901	6,274	-54%
28-Jul-2019	2,257	6,108	-63%
29-Jul-2019	3,382	6,228	-46%
30-Jul-2019	6,605	5,801	14%
31-Jul-2019	4,490	5,801	-23%
01-Aug-2019	3,260	6,254	-48%
02-Aug-2019	6,165	6,254	-1%
03-Aug-2019	2,112	6,258	-66%
04-Aug-2019	3,735	6,095	-39%
05-Aug-2019	2,474	5,891	-58%
06-Aug-2019	549	5,894	-91%
07-Aug-2019	6,556	6,350	3%
08-Aug-2019	2,742	6,360	-57%
09-Aug-2019	4,065	6,364	-36%
10-Aug-2019	4,470	6,373	-30%
11-Aug-2019	4,034	6,206	-35%
12-Aug-2019	4,523	5,917	-24%
13-Aug-2019	3,763	5,925	-36%

14-Aug-2019	5,411	6,396	-15%
15-Aug-2019	5,150	6,401	-20%
16-Aug-2019	5,980	6,415	-7%
17-Aug-2019	5,580	6,429	-13%
18-Aug-2019	5,305	6,268	-15%
19-Aug-2019	5,656	6,735	-16%
20-Aug-2019	2,215	6,743	-67%
21-Aug-2019	1,193	7,235	-84%
22-Aug-2019	2,308	7,239	-68%
23-Aug-2019	1,551	7,248	-79%
24-Aug-2019	565	7,262	-92%
25-Aug-2019	511	7,098	-93%
26-Aug-2019	1,986	7,762	-74%
27-Aug-2019	3,207	7,777	-59%
28-Aug-2019	3,065	7,790	-61%
29-Aug-2019	2,304	8,322	-72%
30-Aug-2019	2,304	8,342	-72%
31-Aug-2019	4,618	8,366	-45%
01-Sep-2019	6,066	8,046	-25%
02-Sep-2019	6,174	7,653	-19%
03-Sep-2019	6,471	7,657	-15%
04-Sep-2019	9,034	7,494	21%
05-Sep-2019	8,548	7,215	18%
06-Sep-2019	7,628	7,219	6%
07-Sep-2019	4,749	7,673	-38%
08-Sep-2019	6,283	7,682	-18%
09-Sep-2019	5,700	10,500	-46%
10-Sep-2019	9,231	10,520	-12%
11-Sep-2019	4,261	11,131	-62%
12-Sep-2019	6,168	11,155	-45%
13-Sep-2019	6,212	11,189	-44%
14-Sep-2019	6,862	11,218	-39%
15-Sep-2019	3,022	11,020	-73%
16-Sep-2019	4,589	9,789	-53%
17-Sep-2019	5,419	9,823	-45%
18-Sep-2019	4,416	10,504	-58%
19-Sep-2019	3,337	10,548	-68%
20-Sep-2019	3,281	10,582	-69%
21-Sep-2019	3,998	10,610	-62%
22-Sep-2019	2,043	10,381	-80%
23-Sep-2019	3,072	10,205	-70%
24-Sep-2019	3,124	10,231	-69%
25-Sep-2019	3,528	10,981	-68%
26-Sep-2019	7,897	11,049	-29%
27-Sep-2019	8,517	11,108	-23%
28-Sep-2019	8,895	11,175	-20%

29-Sep-2019	6,447	10,942	-41%
30-Sep-2019	13,201	15,294	-14%