

STAKEHOLDER VIEWS ON DEMAND FORECASTING

National Grid has been seeking customer feedback in the area of demand forecasting for some months. A number of phone interviews were conducted with individuals in November, a link to an online survey was placed on our website where we publish our daily PV and embedded wind forecasts on 30th November, and feedback has been sought at industry meetings.

Nearly all respondents to the phone survey described our forecasts as critical to them, either in terms of the forecast themselves and in the other areas the forecasts feed into, such as the decision to issue EMNs or de-rated margin calculations. Attendees at a Demand Side Response seminar hosted by ADE expressed the view that small companies cannot afford to purchase demand forecasts and so without the free National Grid forecasts small service providers would not have been able to enter the market. It was also pointed out that building business plans for investment in providing services relies on NG's medium and long term forecasts.

The most requested new service was a day ahead forecast published at 7am.

Many respondents want greater visibility of CDM / Triad avoidance forecasts, so that it is clear how much CDM is included in forecasts. There is a general desire for maximum possible clarity, breaking down our forecasts as far as possible so that people can understand what is included in the forecast. A desire was also expressed for notification to be published when our models or processes changed in such a way that they could introduce a step change to our forecasts.

There was a desire for clear and consistent demand definitions.

Several respondents do their own forecasts, or purchase forecasts. Comments reflect that commercially available wind and PV forecasts are available that are more accurate than National Grid's forecast, but that there is little evidence of better national demand forecasts being available.

One respondent requested that the embedded generation forecasts that National Grid publish on their website be published by 08:45 in line with the Grid Code required day ahead forecast.

Several respondents expressed a desire for a range forecast rather than a single central estimate as at present

A number of respondents wanted more focus on the 2-52 week forecasts.

Some respondents only use our forecasts during the Triad season, and are interested only in peak forecasts within day and day ahead for Triad avoidance. These respondents want more in day updates to be published.

Some respondents wanted improved interfaces, such as an API, to allow easy automatic download of our forecasts from our website. Other respondents did not see this as an issue.

At least one respondent identified variability of wind power forecasts from one forecast to the next as a particular problem, quoting instances where the forecast moved by over 3 GW. A similar event

occurred on 19th January. It is noted that these forecasts are automatically generated from the Met Office weather forecasts, and so such variations reflect changes in the forecast weather, and so would be difficult to avoid.

A complete breakdown of the online survey results received up to 22nd January is given below.

The key requests are again a desire for an 0700 forecast, for within day or day ahead; an 0900 in day and day ahead forecast; a two day ahead forecast at 12:00 and an hourly seven day ahead forecast, as well as the existing 14 day ahead daily peak forecast and 2-52 week ahead weekly peak forecast. At least 50% of respondents described these as very useful.

Top priorities are for accurate evening peak forecasts, improved PV forecasts, improved embedded wind forecasts, developing forecasts of embedded non-weather variable generation and improving our website (at least 40% of respondents specified these as High Priority)

Over 90% of respondents rate our forecast accuracy as good or adequate, although none rate it as excellent.

Over 75% of respondents describe our customer service as good or excellent

How important are National Grid's demand/energy forecasts to you

Critical	66.67%
	8
Useful	25.00%
	3
Nice to Have	8.33%
	1
Not Relevant	0.00%
	0

What do you use our forecasts for (please tick as many as appropriate)

Making Commercial Decisions	40.00%
	4
Starting Point for your own forecasts	50.00%
	5
Comparison with your own forecasts	90.00%
	9
Comparison with commercially available forecast	30.00%
	3

What timescales of forecast do / would you find useful to have available?

	Not Useful	Somewhat Useful	Very Useful	Total
One hour ahead	22.22% 2	66.67% 6	11.11% 1	9
Four hours ahead	11.11% 1	44.44% 4	44.44% 4	9
In Day forecast published around 1200	11.11% 1	55.56% 5	33.33% 3	9
In Day forecast published around 0900	0.00% 0	44.44% 4	55.56% 5	9
In Day forecast published around 0700	0.00% 0	37.50% 3	62.50% 5	8
Day Ahead forecast published around 1700	30.00% 3	50.00% 5	20.00% 2	10
Day Ahead forecast published around 1200	20.00% 2	40.00% 4	40.00% 4	10
Day Ahead forecast published around 0900	0.00% 0	50.00% 5	50.00% 5	10
Day Ahead forecast published around 0700	0.00% 0	40.00% 4	60.00% 5	10
Two Day Ahead hourly forecast published around 1700	20.00% 2	40.00% 4	40.00% 4	10
Two Day Ahead hourly forecast published around 1200	10.00% 1	40.00% 4	50.00% 5	10
Seven Day Ahead hourly forecast	10.00% 1	40.00% 4	50.00% 5	10
14 Day Ahead Daily Peak Forecast	20.00% 2	10.00% 2	60.00% 6	10
11 Week Ahead Daily Peak Forecast	20.00% 2	40.00% 4	40.00% 4	10
2-52 Week Ahead Weekly Peak Forecast	20.00% 2	20.00% 2	60.00% 6	10

What should our priorities be in developing our forecasting service?

	Not Important	Low Priority	Moderate Priority	High Priority	Total
Improving Accuracy of Evening Peak Forecast	0.00% 0	0.00% 0	33.33% 3	66.67% 6	9
– Improving Accuracy of Daytime Forecasts	0.00% 0	12.50% 1	75.00% 6	12.50% 1	8
– Improving Accuracy of Overnight Forecasts	0.00% 0	50.00% 4	50.00% 4	0.00% 0	8
– Publishing more forecasts per day	0.00% 0	62.50% 5	37.50% 3	0.00% 0	8
– Publishing forecasts earlier in morning	0.00% 0	33.33% 3	33.33% 3	33.33% 3	9
– Improving PV forecast	0.00% 0	33.33% 3	11.11% 1	55.56% 5	9
– Improving Metered Wind forecast	0.00% 0	25.00% 2	37.50% 3	37.50% 3	8
– Improving Embedded wind forecast	0.00% 0	22.22% 2	0.00% 0	77.78% 7	9
– Developing short term (1-4 hour ahead) forecasts	0.00% 0	57.14% 4	42.86% 3	0.00% 0	7
– Improving Website	20.00% 2	10.00% 1	30.00% 3	40.00% 4	10
– Providing Live demand data	0.00% 0	22.22% 2	44.44% 4	33.33% 3	9
– Developing forecast of embedded non-weather variable generation	0.00% 0	22.22% 2	33.33% 3	44.44% 4	9
– Dealing with customer queries better	22.22% 2	44.44% 4	11.11% 1	22.22% 2	9

What best describes your reason for interest in forecasting?

Work for large generating company	20.00%
—	2
Work for small generating company	10.00%
—	1
Work for Distribution Network Operator	0.00%
—	0
Work for large demand side customer	20.00%
—	2
Involved in Triad avoidance for my company	30.00%
—	3
Work for energy management company	10.00%
—	1
Work for energy trading company	50.00%
—	5
Work for energy forecasting company	50.00%
—	5
Work in academia	10.00%
—	1
Interested private individual	10.00%
—	1

What is your perception of National Grid's Demand / Energy Forecasts in terms of accuracy?

Excellent	0.00%
—	0
Good	50.00%
—	6
Adequate	41.67%
—	5
Poor	8.33%
—	1
Unacceptable	0.00%
—	0

What is your perception of National Grid's Demand / Energy Forecasting team in terms of customer service?

Excellent	8.33%
1	
Good	66.67%
8	
Adequate	16.67%
2	
Poor	8.33%
1	
Unacceptable	0.00%
0	

Has National Grid's Forecasting service (accuracy and customer service) got better or worse over the last two years?

Better	8.33%
1	
Same	16.67%
2	
Worse	16.67%
2	
Cant say	58.33%
7	