Gaps: Are there future energy consumption influencing factors you think are missing? How will these missing influencing factors impact demand?

Balcony solar

Extra-regional load (ie european consumption effects on interconnectors)

Where does the data centre growth fit into this conversation Urban vs Non Urban

EV batteries are getting larger compared with average Daily mileage; 20 miles, 7kWh. Much scope for use of same to manage low and high demand periods. Needs behind the meter access. Regards, Steve Browning

Heat batteries

Increased Electric Vehicle uptake leading to greater variability in time of use and location of charging / V2G

Regional Prices gets approved?

How good is the forecasting of Commercial and Industrial?

Do Damon's points refer to the idea of regional pricing comming in? (Damon: yes!)

Climate change affecting water availability / scarcity triggering utility emergency responses.

Increasing levels of self-generation / consumption

The ED3 narrative seems to be altering role of DSO very active DSO = more accurate forecasting?

Biggest Impact: What influencing factors do you think will have the biggest impact & why?

EIIs being TNUoS and BSUoS exempt

Rebuild Forecasting from the Bottom up as much volatility in the DER area. Customer systems to DSO to ESO with behind the meter access via SMETS Elective services and the BS000 Non Domestic site HHR dial up meter phone lines. Regards, Steve Browning

NESO rejoining ENTSOE So you can get IC forecasting back?

Challenges: What do you see as the biggest forecasting challenges between 2026-2031

Data covering potential factors (e.g. metering (especially operational), constraints, demand flex, timing of people going home derived from traffic) is becoming more scattered and decentralised. NESO has the relationships, is already ingesting this data, and is empowered by open data norms to publish it. Doing so ASAP is essential to unblock Industry's ability to innovate and develop higher quality forecasts.

Getting full observability of Distributed Resources (Generation separated from Demand) with forecasting at DSO to ESO level. Automatic premises systems, inc non Domestic sites FM interfaces and SMETS Elective services via the DCC. Regards, Steve Browning

The need to move to demand forecasting that includes embedded generation, rather than "National Demand", which misleads many people.

Demand was previously seen as exogenous, but is becoming dispatchable. But many demand users and suppliers don't have to publish their forecasts of expected outturn in the same way that generators do. In a dispatchable demand world, this needs to change, and NESO needs to lead the way in correcting this.

Cross border impacts.

The potential need to forecast increasing load steps at settlement period boundaries which may occur due to ToU tariffs.

Demand-side as new products and incentives come on the market

Nodal / zonal / national market design influence on flows and siting of new (distributed) generation.

Risks of CN/US controlled hardware herding from maliace or bugs.

Predicting (and inducing) domestic heap pump response, especially dynamic.

Smearing effects of behind-the-meter storage.

Modelling 'herding' effects at HH boundaries.

As regards using tracking techniques as well as NWP for Wind forecasting. With strong winds at the edges and within the 5 Air masses who can individually dominate around and across GB
https://renewables-map.robinhawkes.com/#5.17/56.753/-0.72
Robin is Octopus's visualisation expert. Nice combination of data from Windy.com with PNs and BOAs.
https://weather.metoffice.gov.uk/learn-about/weather/atmosphere/air-masses/types
With cyclonic systems whizzing across inside the Polar Maritime when it is 'in charge'!!. Regards, Steve Browning