

# CUSTOMER CASE STUDY

Yes Energy and MetraWeather Deliver  
a More Precise Forecast

“The relationships between weather and electricity consumption are rapidly changing .... To deal with these challenges, Transpower implemented the MetService powered TESLA load forecast in 2022. The MetService powered TESLA forecast is clearly performing better than the previous load forecast for all forecast horizons, across all regions. In addition, both the teams at Yes Energy and MetService are quick to answer any forecast related questions – they really have become part of the team.”

David Katz, Former Market and Security  
of Supply Manager at Transpower

## RESULTS

### GREATER RELIABILITY

On January, 22, 2024, Queensland's operational demand hit 11,005 MW, 9.28% beyond the previous record. Although all load forecasts underestimated the demand on this day, our clients noticed that the MetraWeather-powered Yes Energy forecast was the highest and predicted the shape of the evening peak.

### GREATER ACCURACY

The Yes Energy forecast was 10,634 MW, while the AEMO's was 10,251 MW.

Although both were below the record breaking 11,005 MW, our forecast was **383 MW closer**.

## BACKGROUND

The Australian summer of 2023/2024 was notable for its elevated electricity demand due to the combination of high dry bulb air temperatures (i.e. air temperature) and high dew point temperatures, particularly for Brisbane and Sydney.

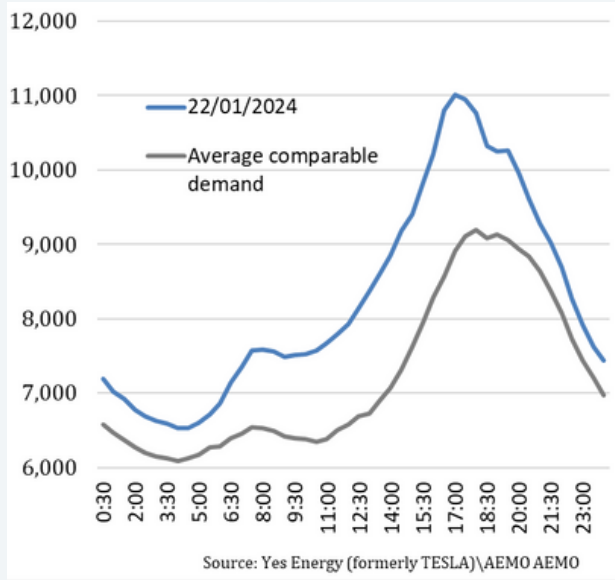
The minimum temperature in **Brisbane** failed to drop below 20 degrees Celsius between January 1 and March 15, due in large part to elevated moisture levels.



Yes Energy® is how traders, power companies, asset managers, and developers make sense of the complex, rapidly changing power market. You get accurate and timely data, tools, and a partner to help you make the right decisions every day.



Based in New Zealand, the company operates as MetService and exports services globally as MetraWeather. Its team of world-class meteorologists and technologists is the foundation of its expertise and research.



## Queensland, January 22

This proved a record day for Queensland with operational demand peaking at 11,005 MW at 17:00, which was 9.28% higher than the previous record of 10,070 MW set in March 2023. The dew point reached 25.7 C on this day versus 25 C in the March 2023 record.

The higher demand on January 22 relative to the average comparable days reveals that:

- ✔ dew point is a strong driver for power consumption and
- ✔ peak power consumption in Queensland is growing.

## Our Comparable Days Tool

The above image shows the demand on the 22nd next to an average of comparable days. These days have been selected using our Comparable Days tool, which compares days based on weather conditions, time of the year, and day of the week.

Peak demand on the 22nd is about 1.8 GW higher, contrasted with the average comparable days. Humidity reduces cooling efficiency, and increased air-conditioning usage is the key driver for demand flex on this day.



## Our Solutions



**MetraWeather**

MetraWeather-powered TESLA forecasts are available in the Philippines, Australia, Japan, and New Zealand.



**Yes Energy Forecasts**

Our forecasts feed comprehensive weather variables and calendar information to proprietary algorithms.



**Reliability**

Our solution is an advanced regression model using detailed demand and weather observation history and incorporating the latest near-term data