AEMO uses the term "operational" to describe electricity used in the NEM

"Operational"

Operational refers to the electricity used by residential, commercial and large industrial consumers, as supplied by scheduled, semi-scheduled and significant non-scheduled generating units.

Significant non-scheduled generation is:

- Wind or solar generators greater than or equal to 30 MW (and joined prior to the semi-scheduled rule change).
- Generators treated as scheduled generators in dispatch.
- Generators that are required when modelling network constraints equations.
- Other generators impacting the NEM.

It does not include electricity used by scheduled loads.
It does include both distribution and transmission losses at regional resolution, but only distribution losses when measured at connection point resolution.
It does not include demand met by rooftop solar PV (i.e. Operational consumption decreases as rooftop PV generation increases)

"Consumption"

Consumption refers to electricity used over a period of time (MWh)

Conceptual examples:

- In 2018-19, operational consumption was 12,873 GWh.
- Compared with today, annual operational consumption is forecast to decline by 502 GWh over the next three years.

"Demand"

Demand describes electricity used at a particular time (MW)

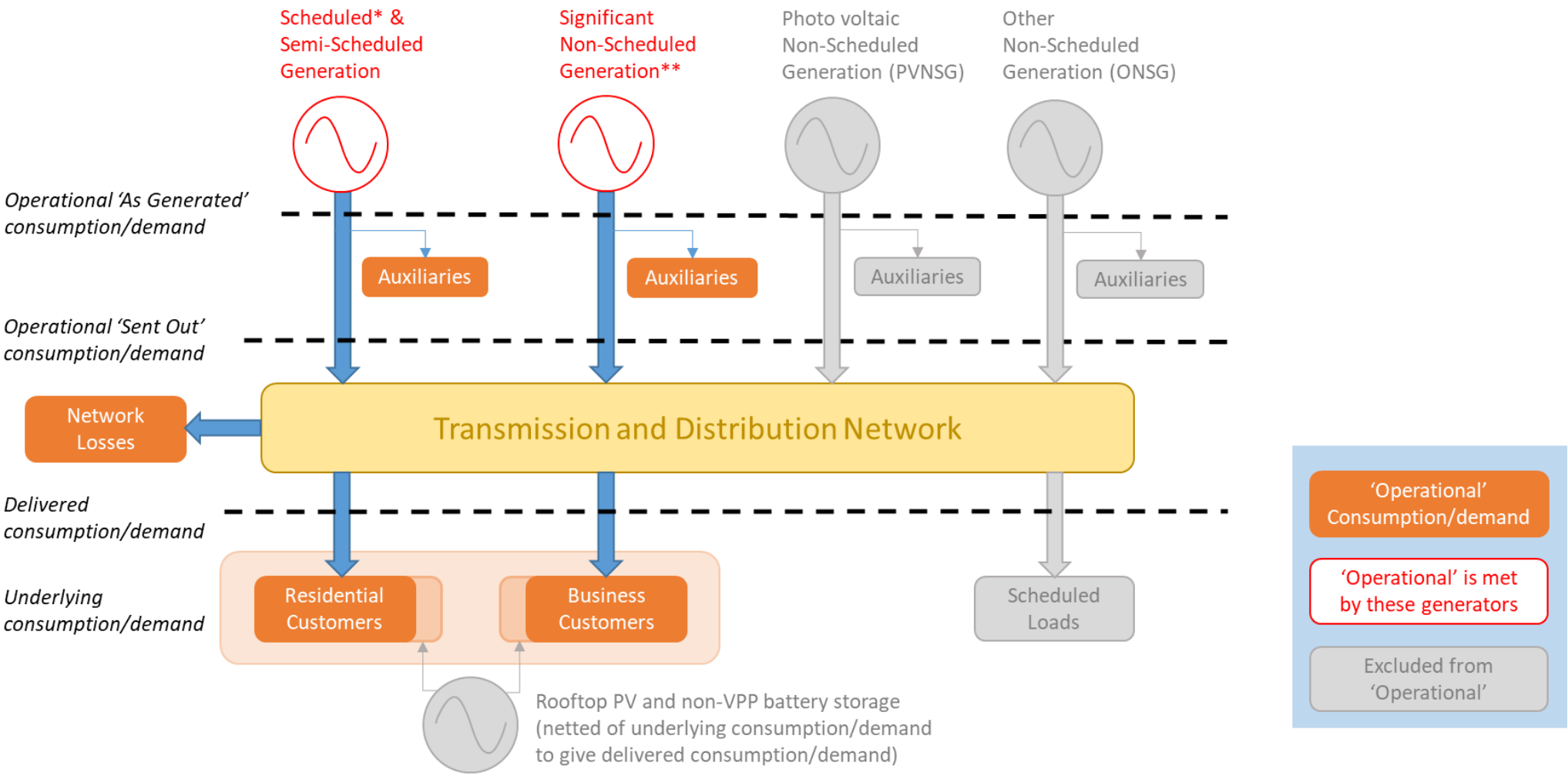
Conceptual examples:

- Operational demand was 3,281 MW at 5.30pm on 16 January 2019.
- Next summer, operational maximum demand is forecast to be 3,277 MW.

"As Generated" or "Sent Out" basis

"As Generated" refers to consumption or demand that includes generator auxiliary loads, and "Sent Out" refers to consumption or demand that excludes generator auxiliary loads. Choose whichever basis is most appropriate for the discussion.

How does everything fit together on the system?



***Refer to [AEMO's NEM Registration and Exemption list](#) for a list.** Includes also VPP from aggregated behind-the-meter battery storage

****Significant non-scheduled generation =**

Non-scheduled wind or solar generators ≥ 30 MW (registered prior to the semi-scheduled rule change) **+**
Non-scheduled generators treated as scheduled generators in dispatch (Yarwun – condition of registration) **+**
Non-scheduled generators that are required to model network constraints (see Operational Demand section of the "[Demand Terms in EMMS Data Model](#)")