

# Austin Energy Resource Overview



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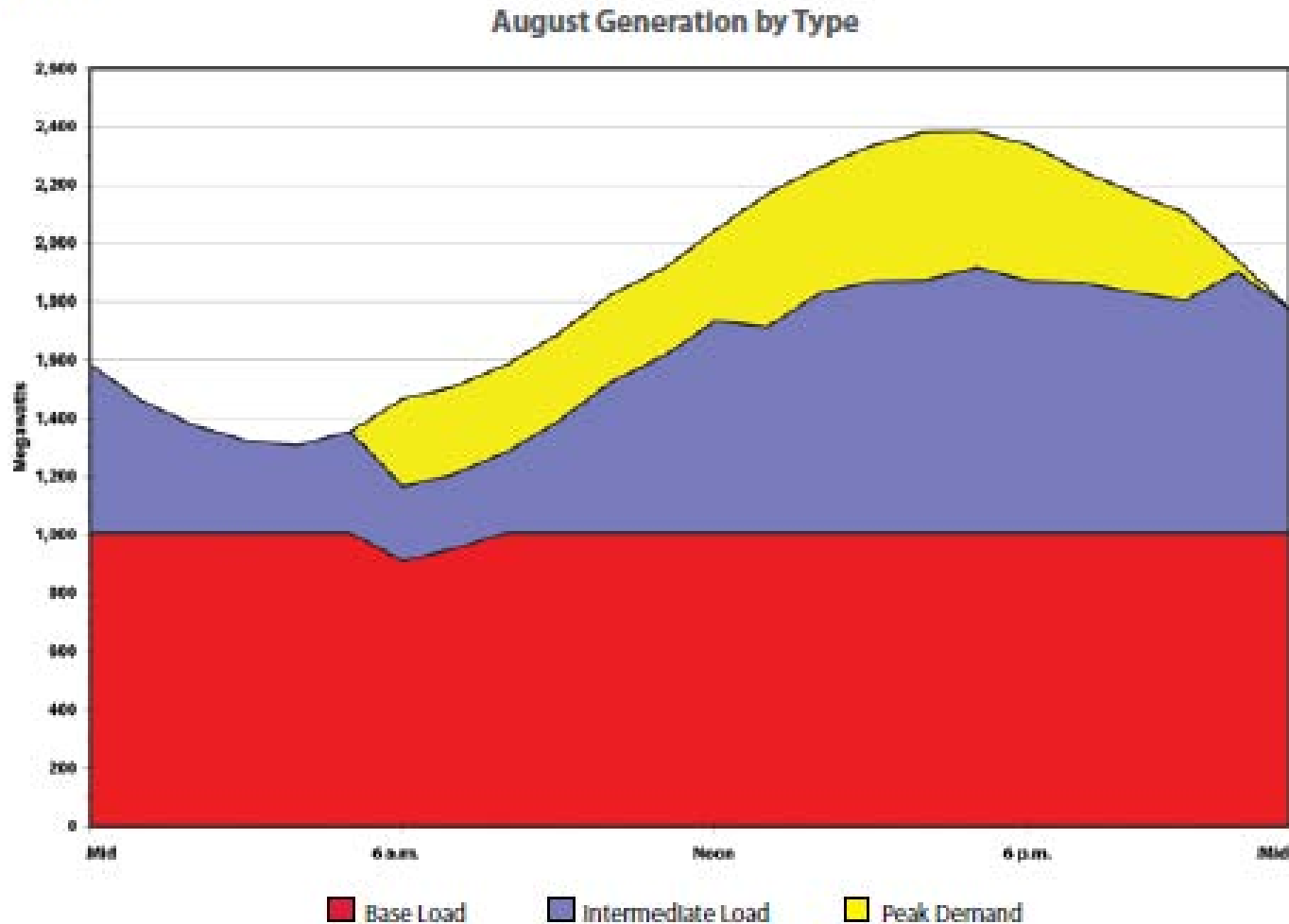
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# Types of Resources

- Traditional
  - Baseload – Coal and Nuclear
    - Ramping
    - Costs
  - Intermediate – Natural Gas
  - Peaking – Natural Gas CTs
- New Resources: Wind and Solar
  - First choice due to low marginal cost
    - AE operates within constraints of resource mix
    - Typically displaces natural gas, could displace some baseload (coal) seasonally
  - Variability
  - Combined with energy storage could theoretically become baseload resources

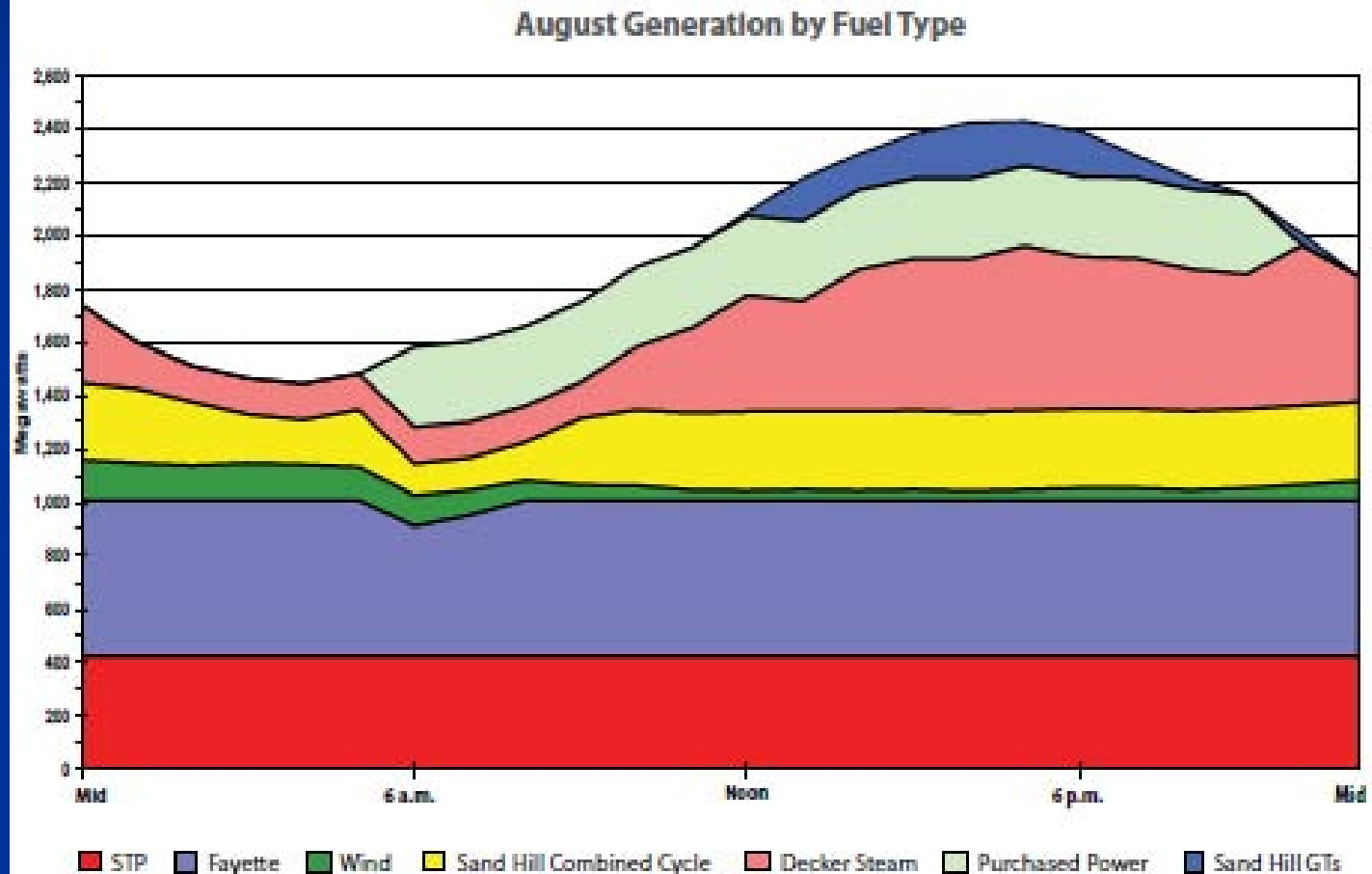
# Dispatch of Resource Types

Figure 8



# Dispatch of Resources – Unit Specific

Figure 9



# Reliability of Resource Portfolios

- Clean, consistent power supply
- Pace directed to ensure adequate generation meets load
  - Assume market power available as needed
- All scenarios ensure system reliability
- Variability of wind / solar
  - ERCOT ancillary services market used to balance solar and wind
  - AE will incur costs for needed ancillary services
- ERCOT responsibility ultimately
- Local reliability issue is voltage support
  - Distributed generation
  - Displacement of units from imports

# For more information

- See pages 12-14 in resource guide
- Chapters 2 and 5 of Volume II of LBJ report
  - More specific generation technology information by chapter in Volume II of LBJ report