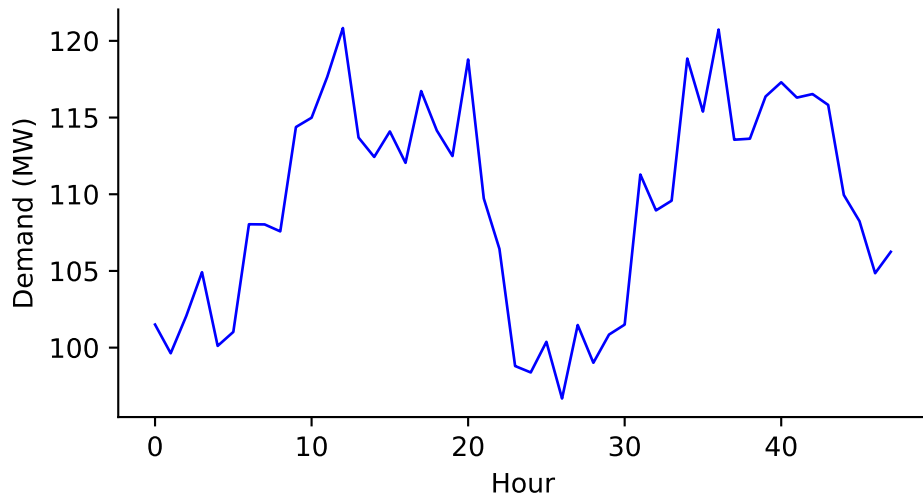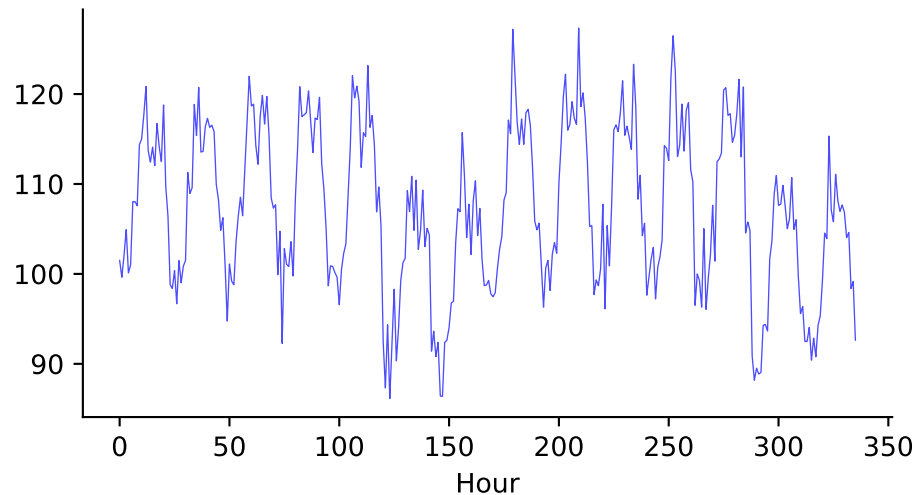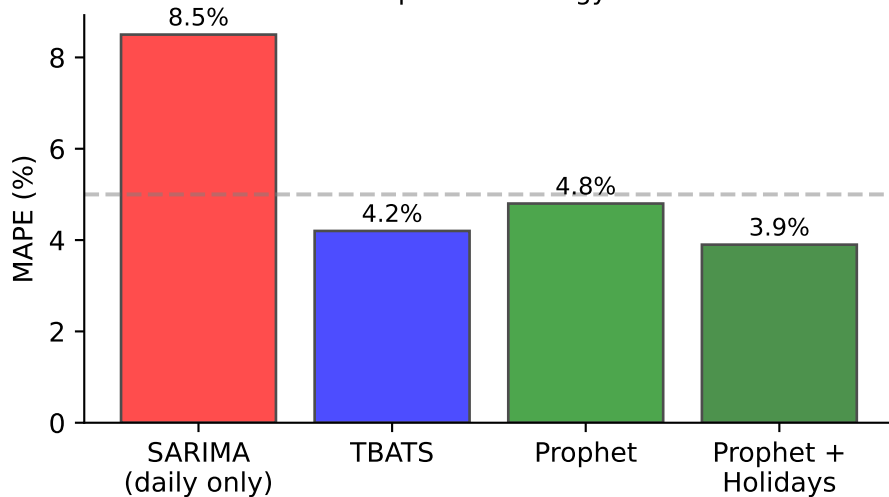First 2 Days: Daily Pattern Visible

Full 2 Weeks: Weekly Pattern Visible

Model Comparison: Energy Demand

Key Insights:

1. SARIMA with s=24 misses weekly pattern
   → Higher error (MAPE = 8.5%)

2. TBATS and Prophet capture both
   daily AND weekly seasonality
   → Much better (MAPE ~ 4-5%)

3. Prophet + holidays adds value
   when special days matter
   → Best result (MAPE = 3.9%)

Conclusion: Multiple seasonality
models significantly outperform
single-seasonality SARIMA!