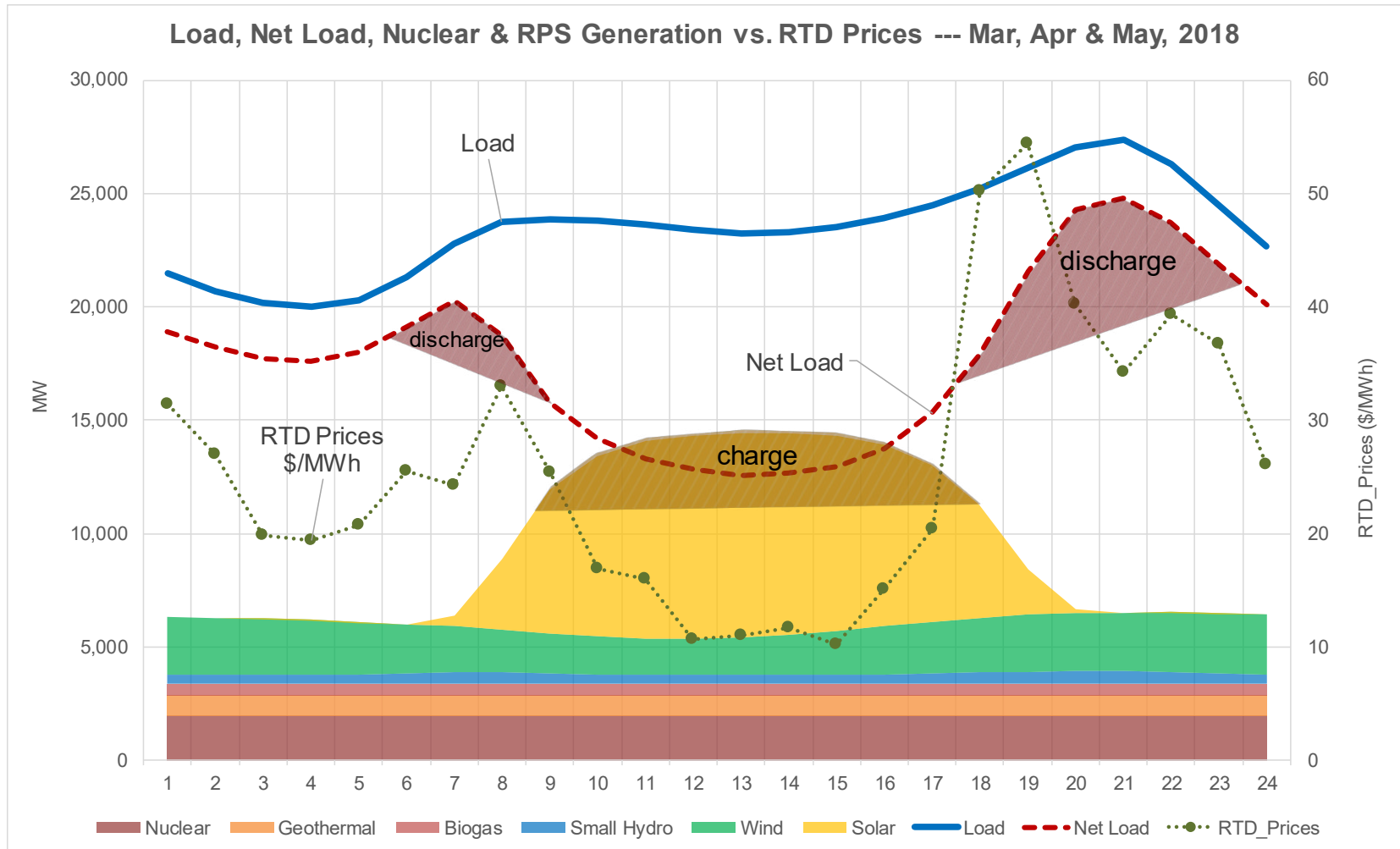


The ISO is experiencing a number of real-time operational challenges, which is expected to increase as more VERs are integrated into the resource mix

**Among others, these challenges include:**

- Significant variability between real-time dispatch intervals
- Steep intra-hour upward/downward ramps
- Sustained ramping needs over multiple hours
- Increased oversupply conditions and increased curtailment of renewables
- Depletion of upward/downward regulation
- Increased real-time control performance challenges during the middle of the day
- Insufficient primary frequency response during some hours

# CAISO's potential opportunities to utilize storage devices during the spring months



# CAISO's potential opportunities to utilize storage devices during the summer months

