

**Information to request from facilities that have energy and power awareness methods implemented:**

- What is the job allocation policy at the facility? Job scheduling policy?
- Can you share some algorithm details of power management, power capping, or load management policies currently implemented at your facility?
  - Are your methods considering any feedback (measurements, user feedback, etc.)?
- Infrastructural information:
  - Number of pods/racks/servers, types of servers
  - Cooling infrastructure
  - Average / peak power and energy use
  - Are there any energy storage devices in the facility? What are they used for?
  - Do you have a monitoring system in place? What metrics does it keep track of? At what granularity?
  - Is any part of the facility “virtualized”?
- Load information:
  - What are the types of applications running?
  - What is the typical load (e.g., utilization)? Peak load?
  - What are the performance constraints/demands or service level agreements, if any?
- Cost information:
  - What type of energy programs do you participate in? How is the electricity cost computed?
  - What are the constraints your facility has? Peak power? Ramp rate? Other?

**Metrics / measurements that we would ideally like to have and idea about:**

- Load information:
  - Utilization, load arrival and running times
    - Average, peak
    - Broken down into racks / servers if possible / if needed (i.e., for getting some idea of how hardware is utilized)
    - Sample traces over time if possible
  - Performance
    - Running times, job arrival rates, service times, latency, throughput, etc.
    - Network contention / other contention metrics
- Power:
  - Power consumption, broken into cooling vs. computing
  - Broken into servers / racks, if possible
- Temperature:
  - Servers, aisles, cooling units