

Start and Soak Costs Proposal

CDS

June 14, 2021

Joel Romero Luna



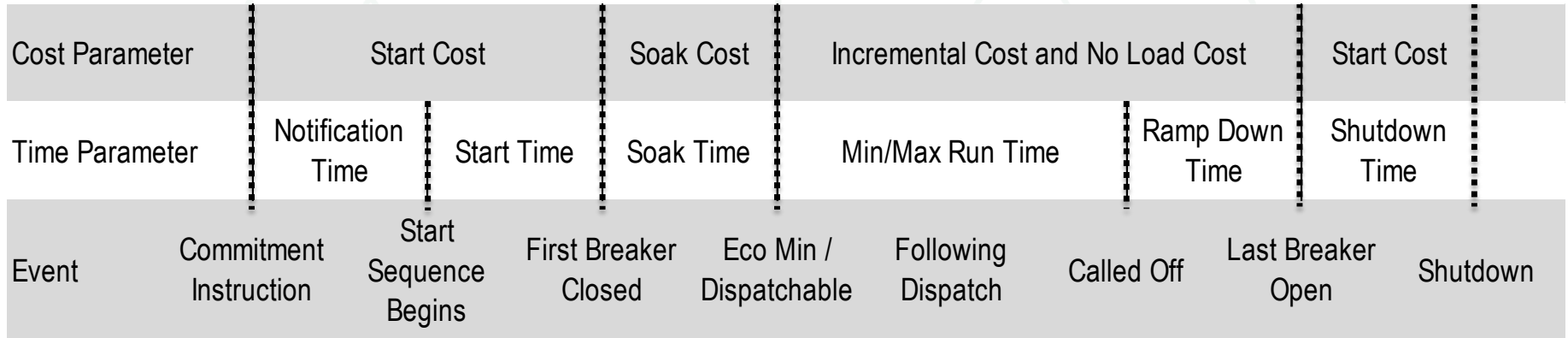
Monitoring Analytics

MMU Proposal

- **Define start cost from notification to first breaker close.**
- **Create new soak parameters (soak time, soak cost, soak MWh).**
- **Soak cost will be from first breaker close to dispatchable (economic min).**
- **Soak cost will be equal to soak heat rate times fuel cost.**
 - **Soak heat rate will be equal to MMBtu used during soak time divided by MWh produced during soak time.**
- **Start inputs will be calculated based on PLS parameters.**

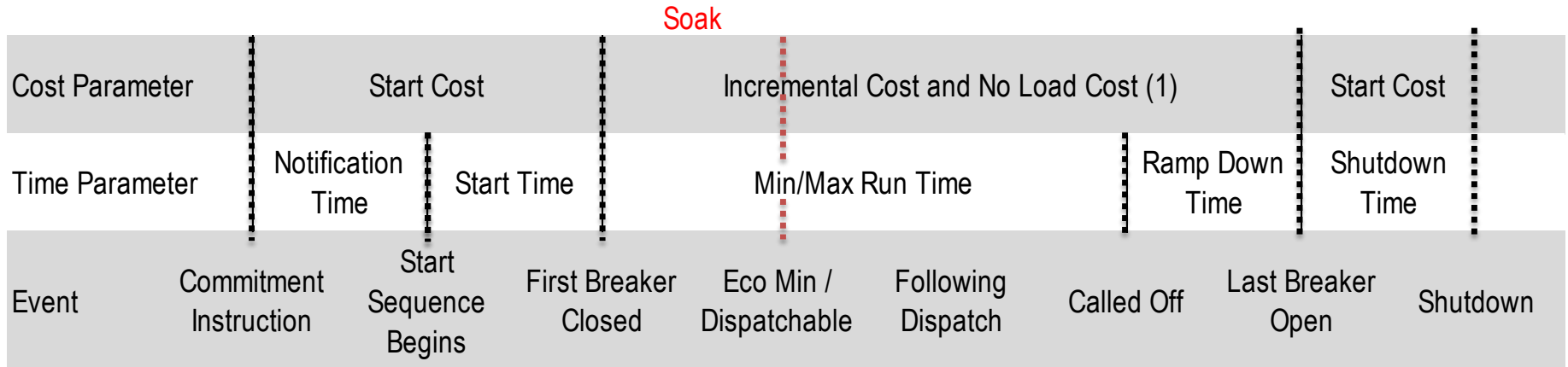
Proposal

- All units:



Status Quo

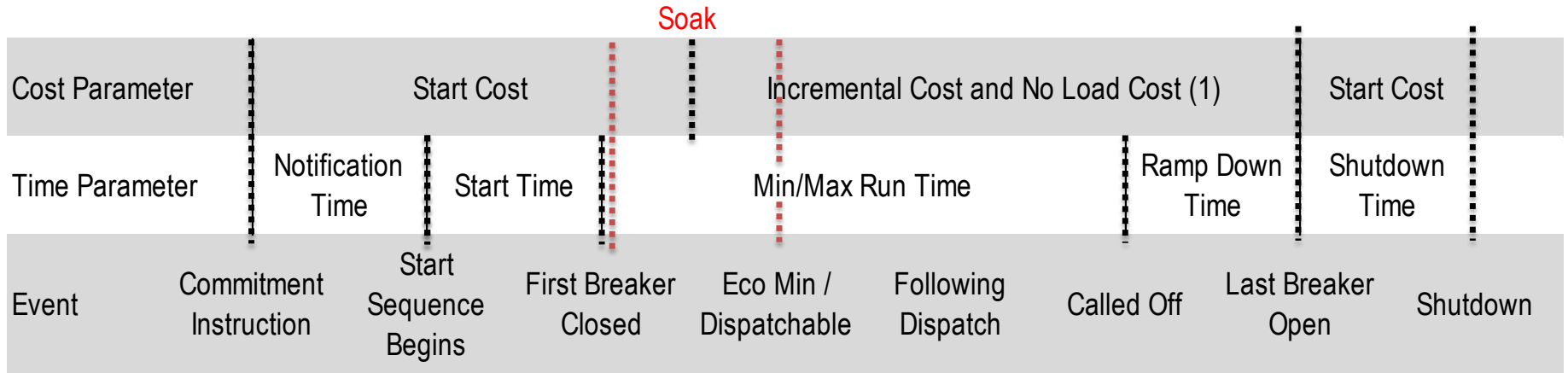
- **Steam turbines:**



(1) Eligible for uplift compensation based on start timing and dispatch log.

Status Quo

- Combined Cycles:**



(1) Eligible for uplift compensation based on start timing and dispatch log.

Start Inputs Based on PLS parameters

- **Inputs used in the start cost will be based on the PJM approved PLS parameters (notification time, start time, min down time).**
- **The amount of start fuel (MMBtu) and station power (MWh) should correspond to a period of time no longer than the sum of the notification plus start time.**
- **The amount of shutdown fuel (MMBtu) should correspond to a period of time no longer than the min down time minus the start time (shutdown time).**

Unit Example

- **Inputs**
 - **Notification Time: 1 hour**
 - **Start Time: 3 hours**
 - **Min Down Time: 5 hours**
 - **First breaker close: 14:00**
 - **Last breaker open: 20:00**
- **Start fuel and station power data will be from 10:00 until 14:00.**
- **Shutdown fuel data will be from 20:00 until 22:00.**



Monitoring Analytics, LLC

2621 Van Buren Avenue

Suite 160

Eagleville, PA

19403

(610) 271-8050

MA@monitoringanalytics.com

www.MonitoringAnalytics.com

