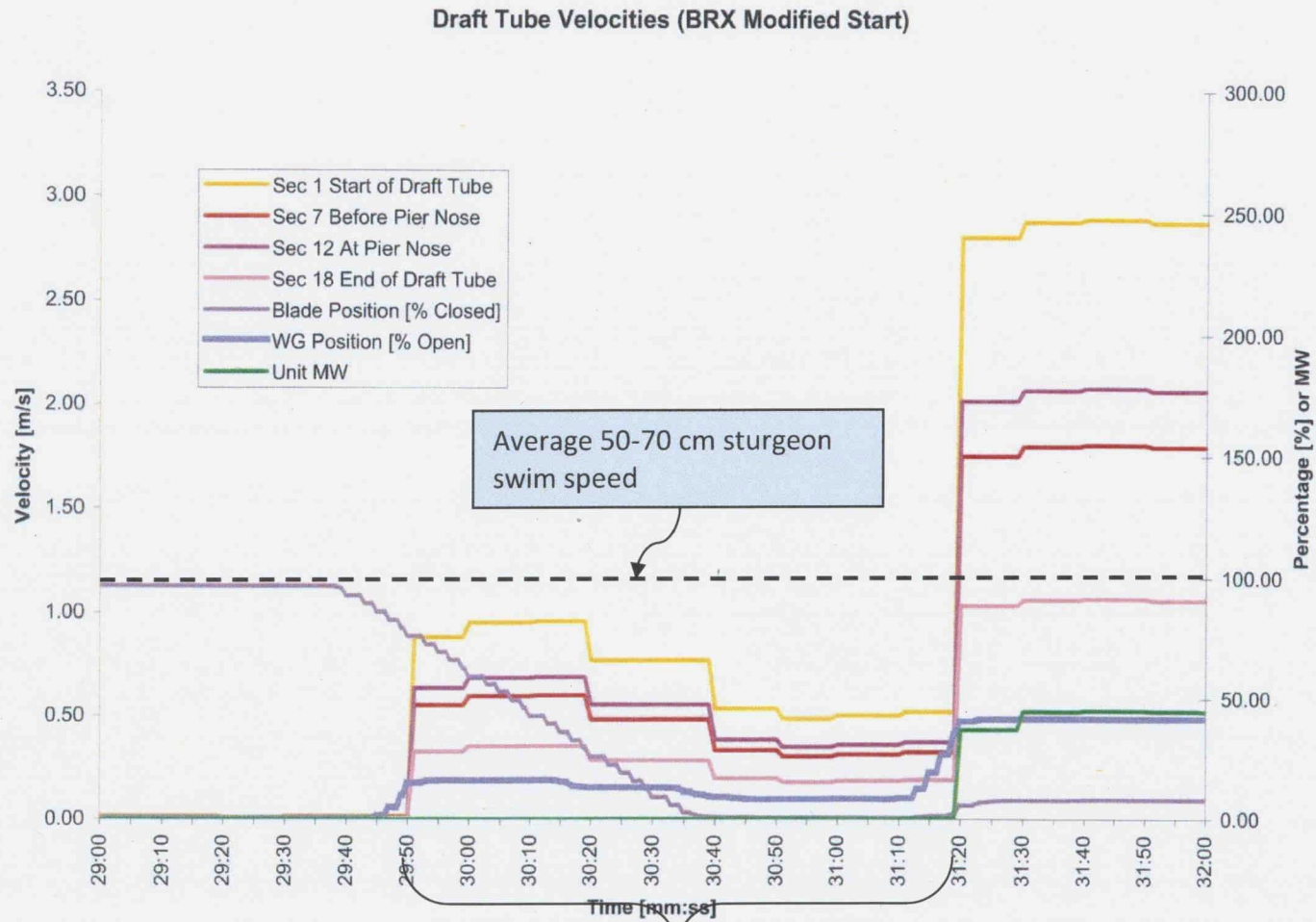


Figure 1: Current Unit Loading Ramp Rate at BRX.



Average 50-70 cm sturgeon swim speed

Wicket gates opened, synchronization in progress – turbine is not loaded

Turbine loading - Steep unit load ramp rate causes turbulent conditions in the draft tube during unit start. Once modifications are implemented this steep curve will ramp slowly rather than instantaneously.

Figure 2: Modified Unit Loading Ramp Rates at BRX

Draft Tube Velocities (ALH Modified Start)

