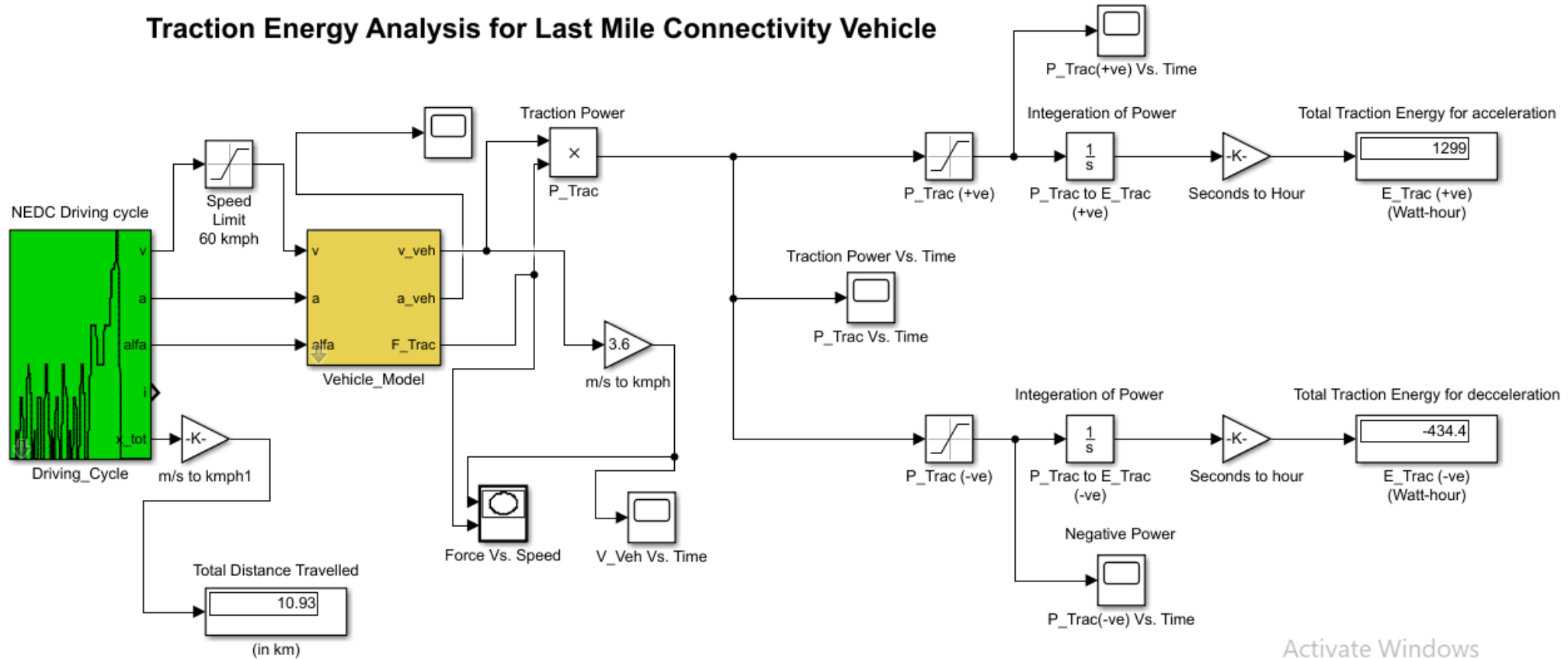
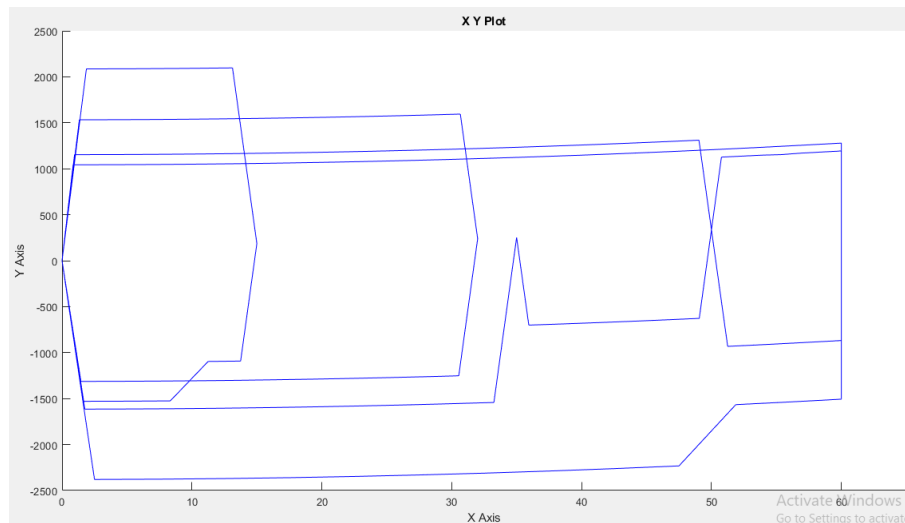


# Traction Energy Analysis for Last Mile Connectivity Vehicle

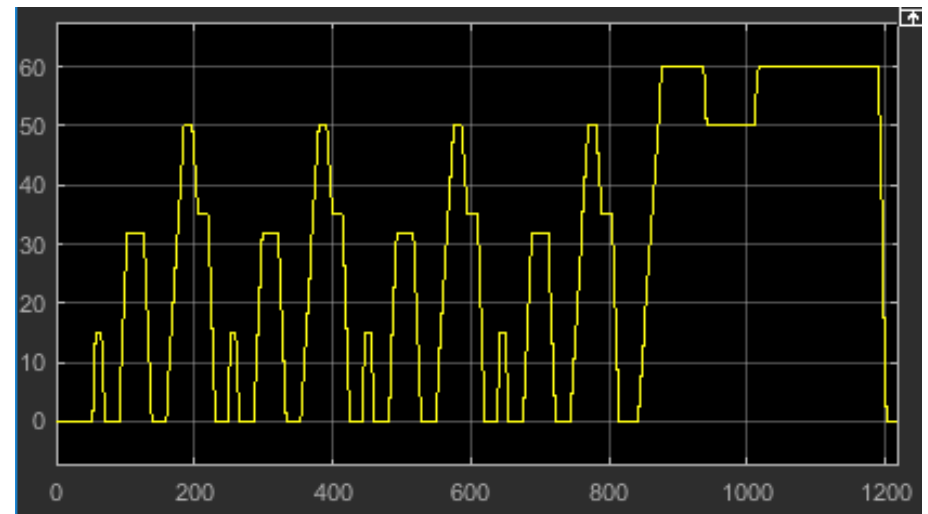


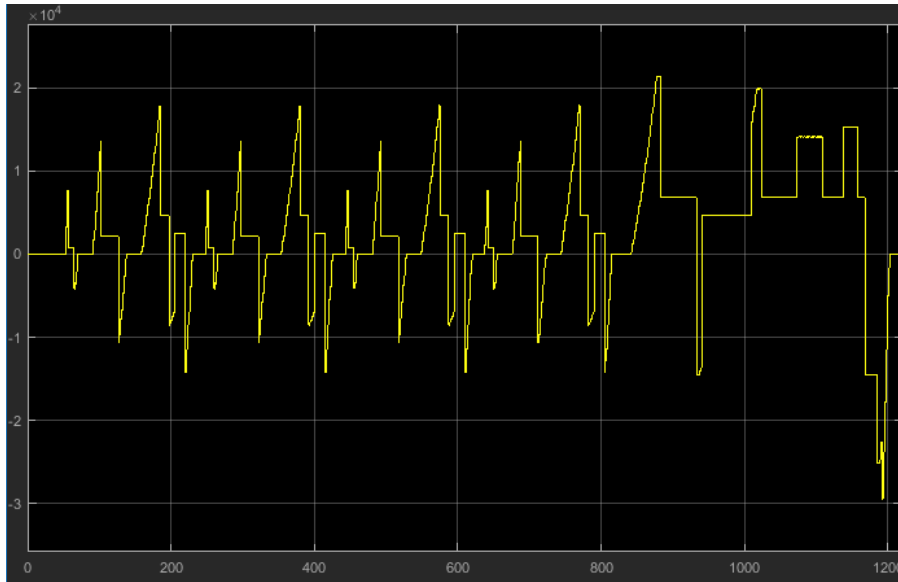
Force Vs. Speed Diagram

NEDC Drive cycle input speed limited to 60kmph (Distance of 10.93 km)

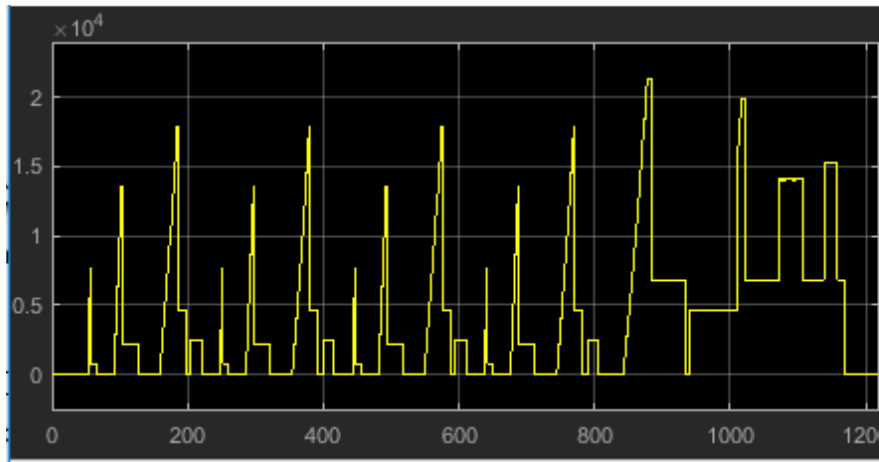


Traction Power Output vs Time

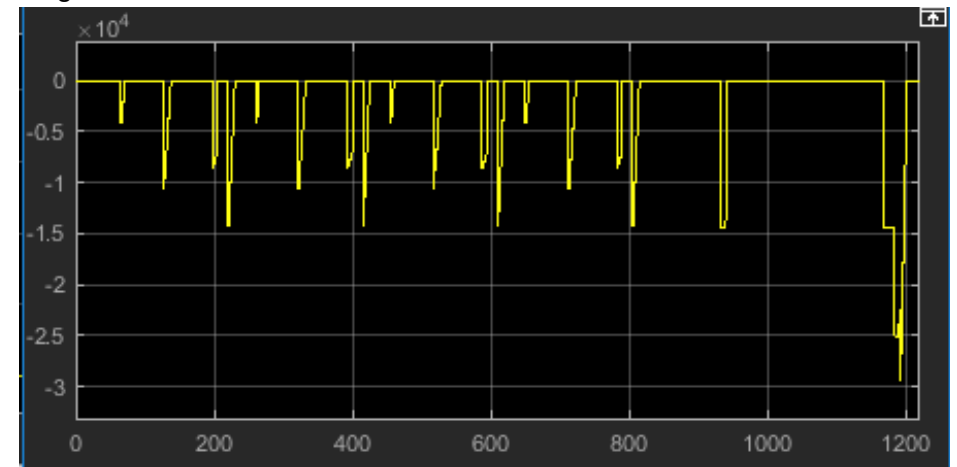




Positive Traction Power:



Negative Traction Power:



By integrating area under the curve for positive traction force we get the **Traction Energy** for acceleration to be **1299 Watt-Hour**

By integrating area under the curve for negative traction force we get the **Braking Energy** for deceleration to be **434.4 Watt-Hour**

**The total distance in the drive cycle is 10.93 hence average energy required for 1 km is 118.4 Watt-hour/km**