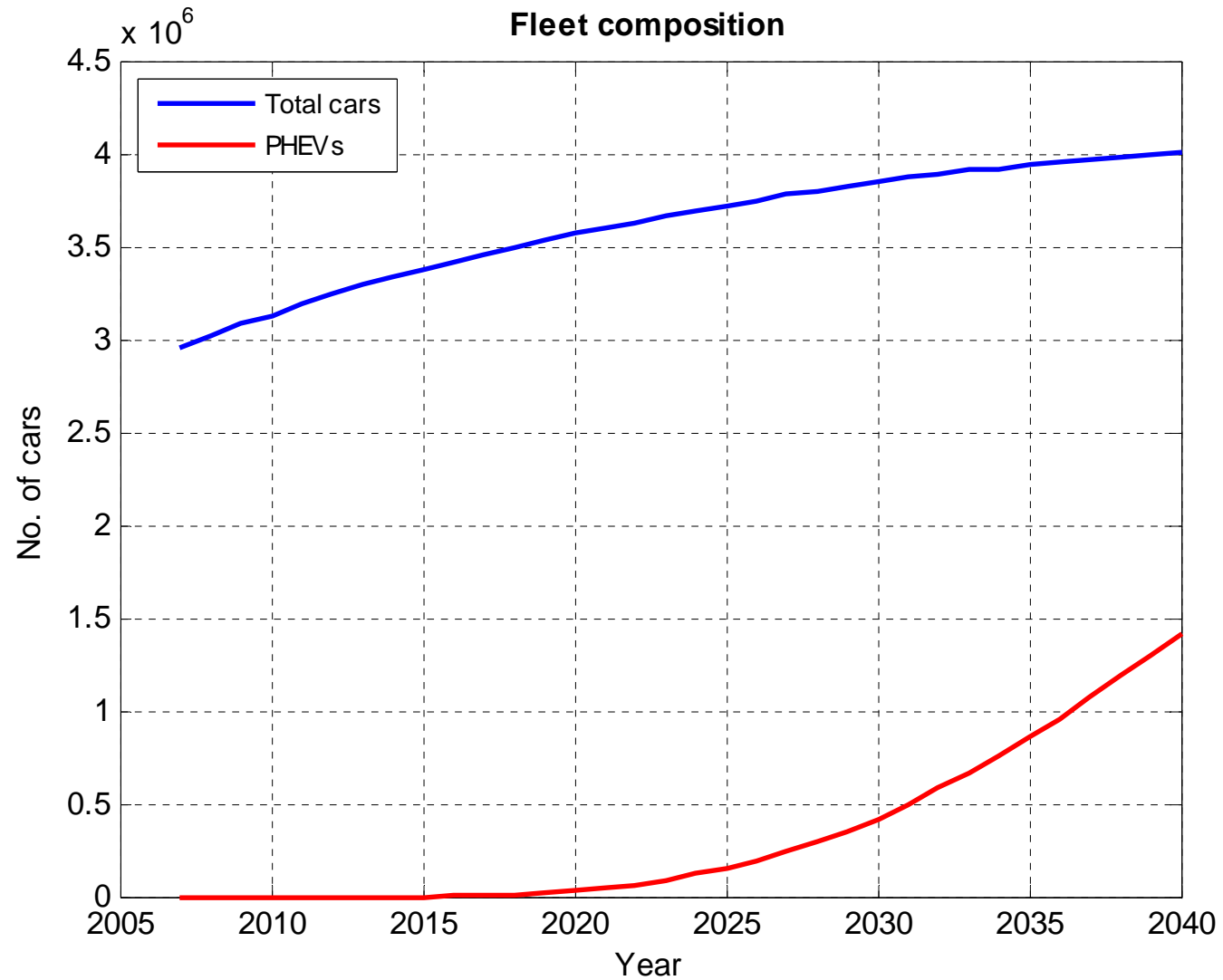


# Impact of Plug-in Hybrid Vehicles on the NZ Electric Grid

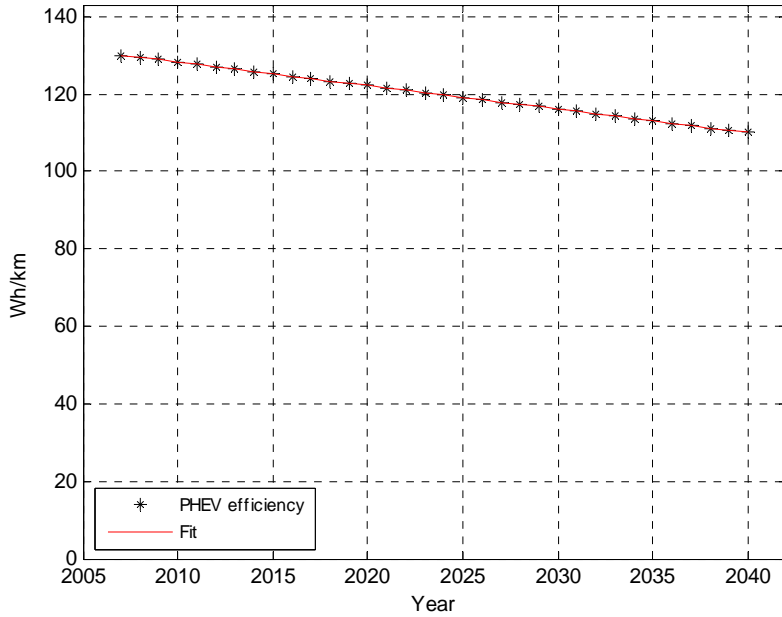
Erwan Hemery and Bruce Smith

# Fleet composition

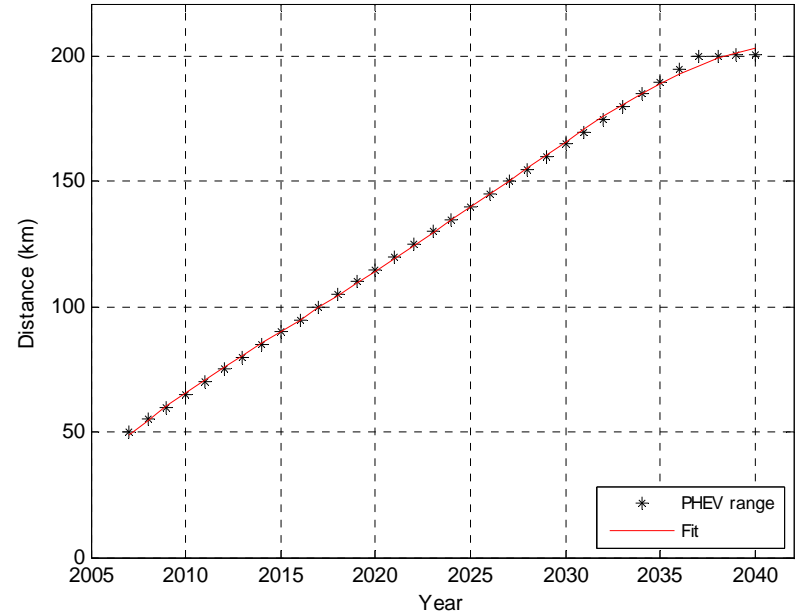


# PHEV specifications

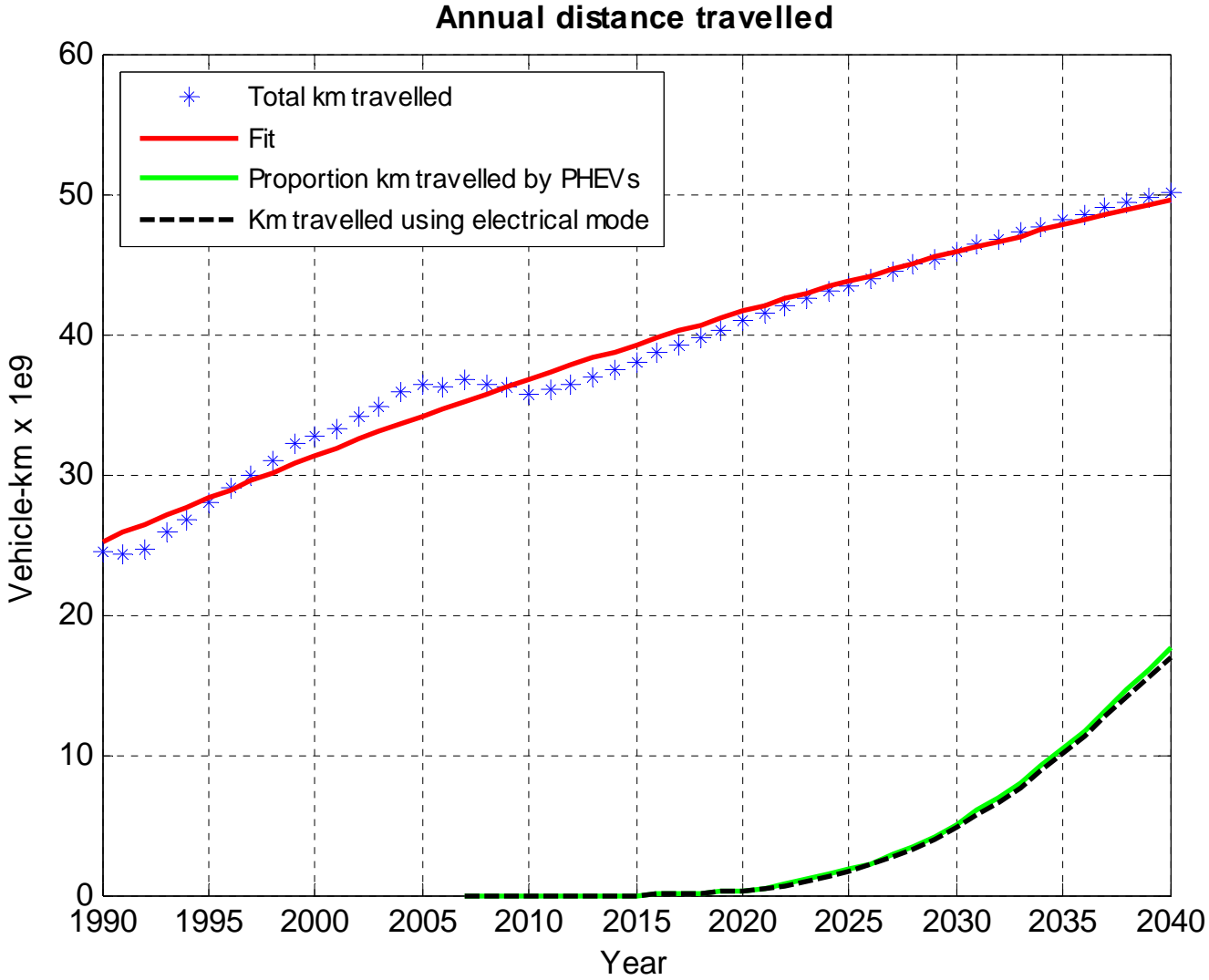
PHEV efficiency forecast



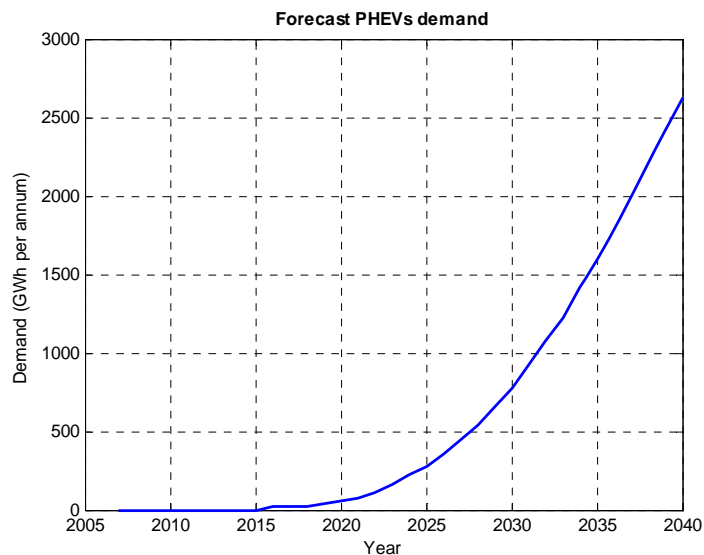
PHEV range forecast



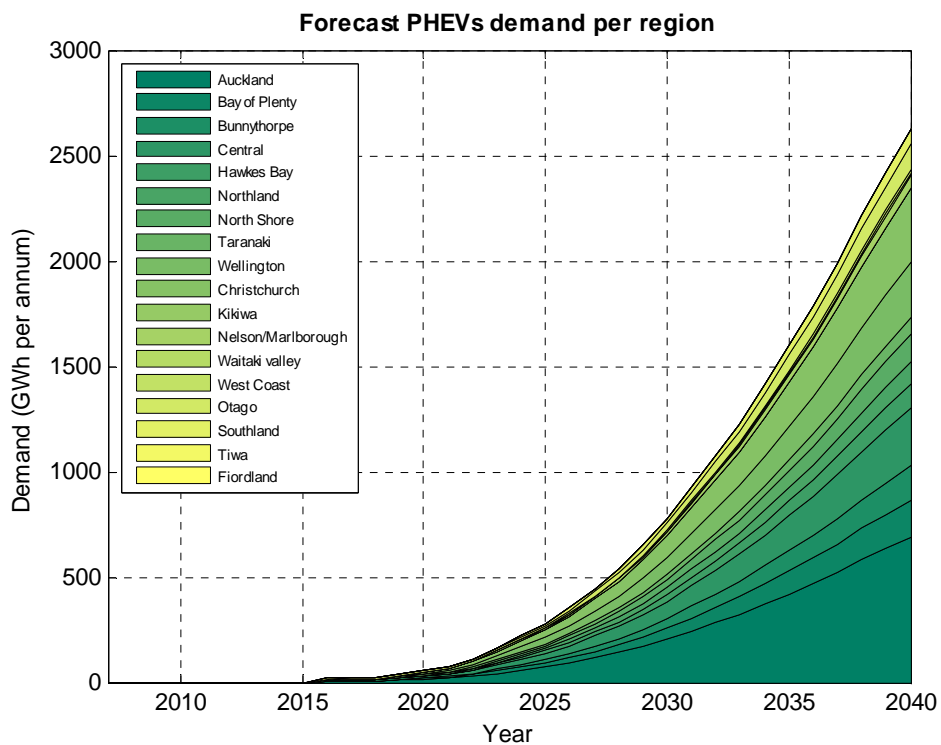
# Annual distance travelled



# PHEVs Electric demand

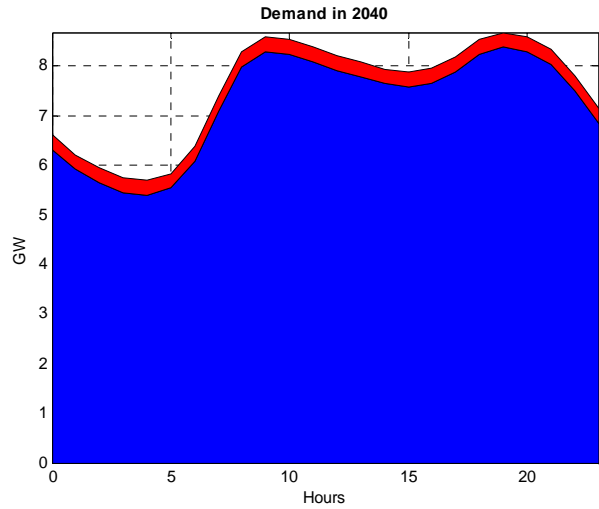


Used km travelled in the “NZ travel survey” to get the proportions of km travelled for each region

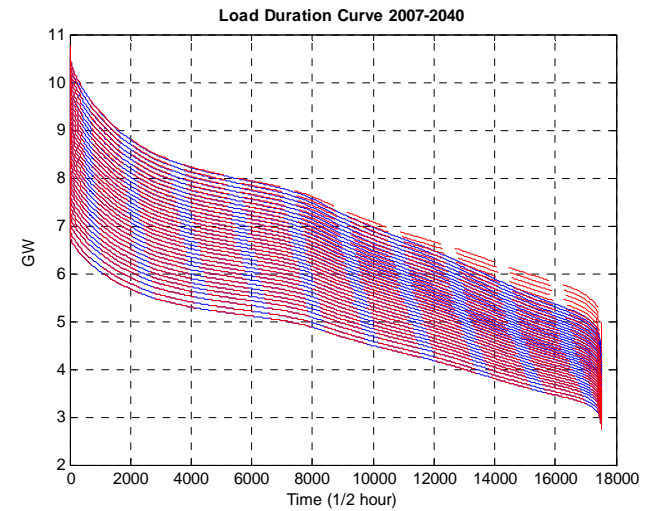
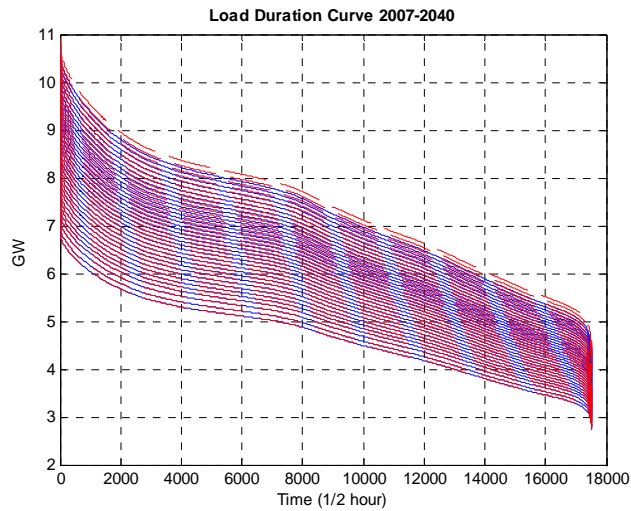
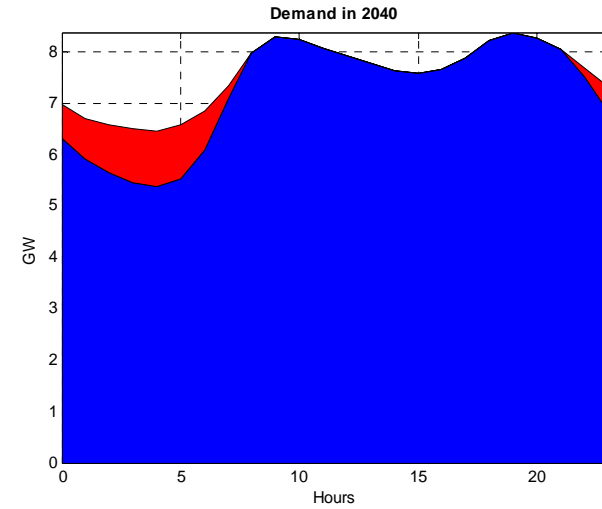


# Extreme Recharging times

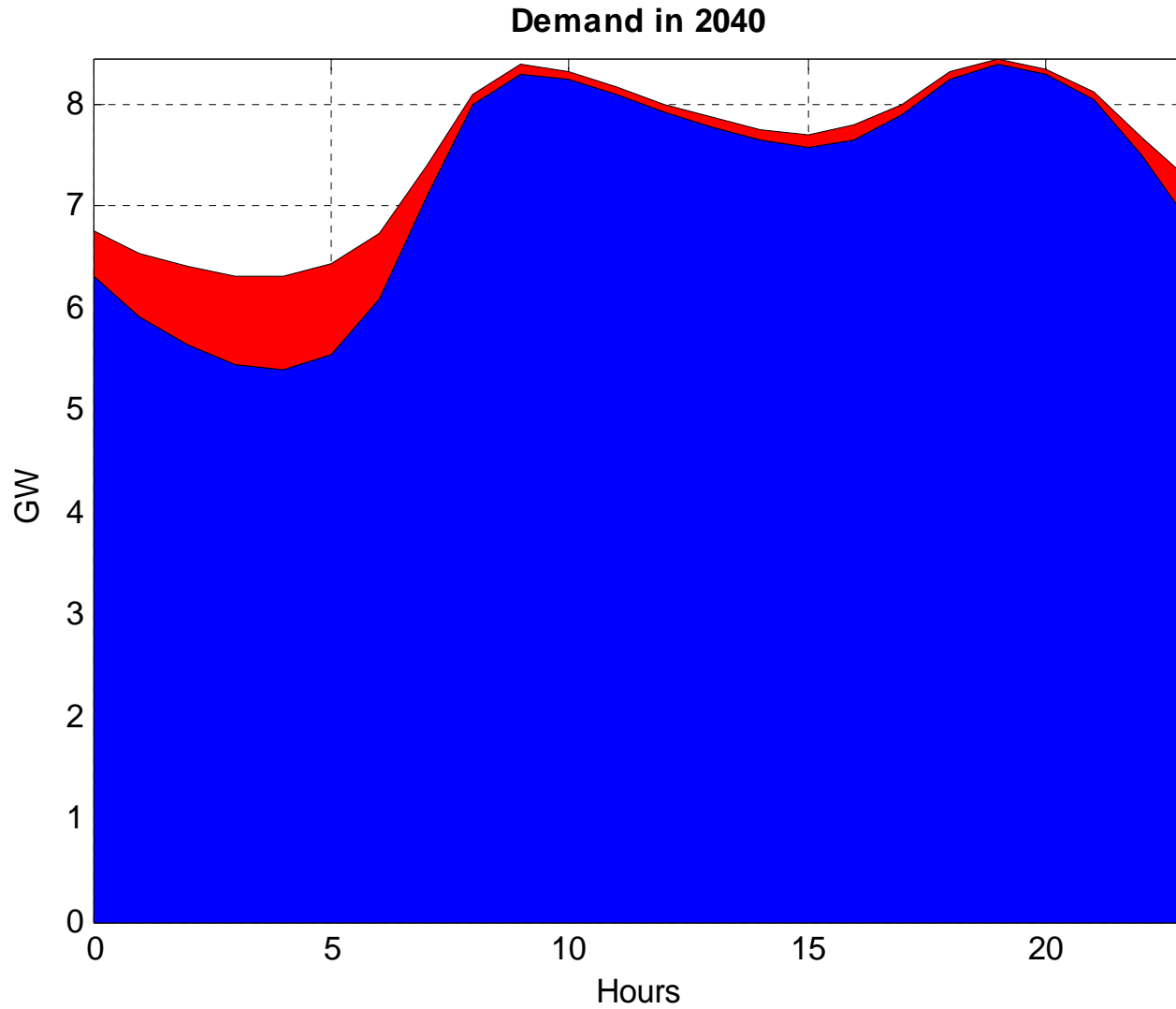
## Unregulated



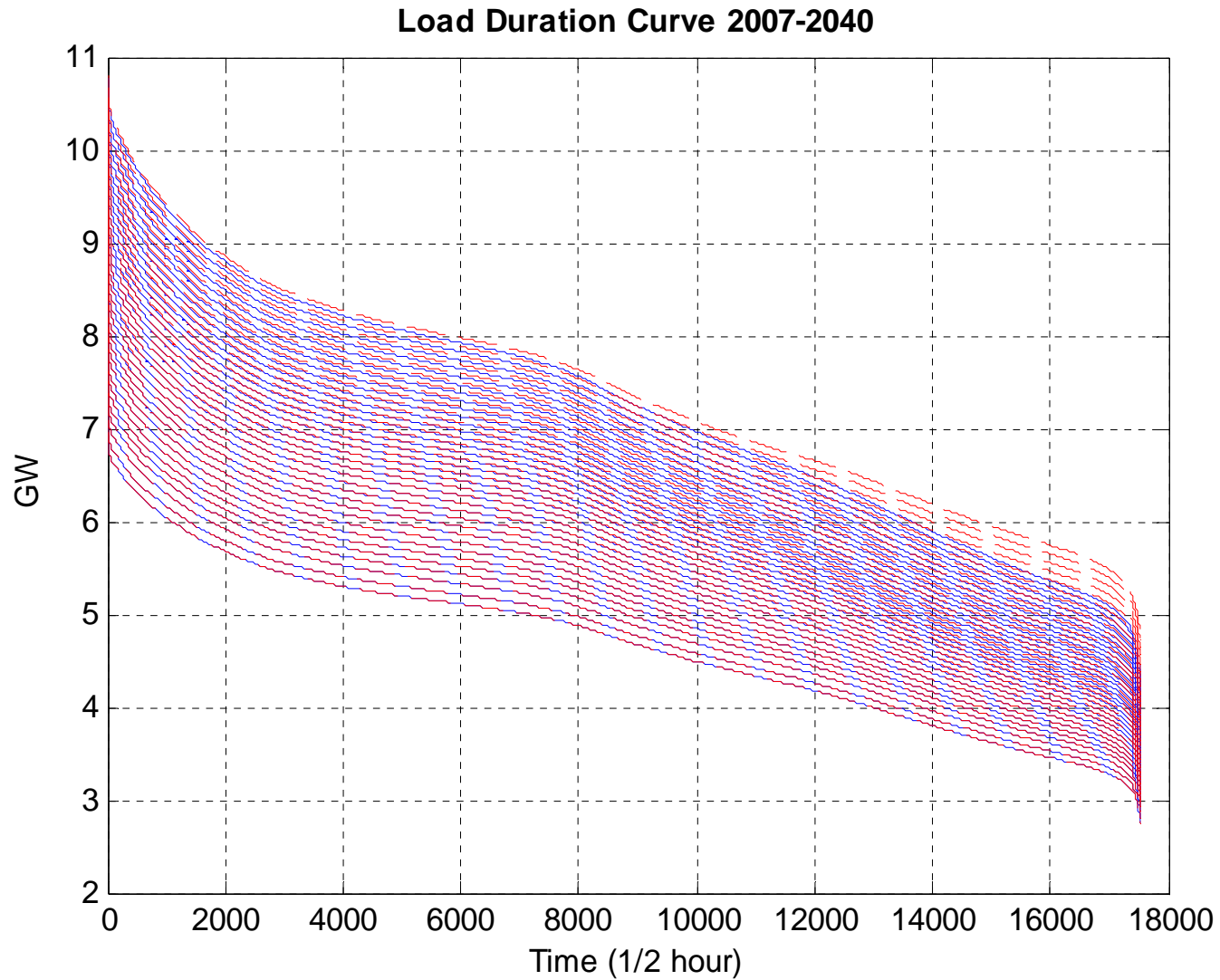
## Valley filling



# Recharging time



# Load Duration Curve (LDC)





# PHEV Load Blocks

Input for the generation Expansion Model (GEM)

