Run these commands to build and execute Matlab RL code for the combine system.

1. Create a field environment.

>> QuickRunScript

1. You can skip this step if the default values are acceptable. Update battery charge and discharge rates. Default values are [21,60] = [max battery charge rate, max battery discharge rate]. Enter the values you want (“your charge rate” and “your discharge rate” in the command below) to for charging and discharging rate.

>> FieldModel.Environment.Combine.Design(4:5) = [your charge rate, your discharge rate]

1. Create RL model. I did not make the model design an input. It needs to be manually changed in the code for the CombineRL object. I can show what lines to change if needed. Saved settings are TD-DDPG with 128 node single hidden layer for actor and critic networks.

>> FieldModel = FieldModel.BuildRLModel

1. Train RL networks. I did not make training options variable inputs. I can show what lines in the CombineRL object need to change to change training options.

>> TrainingStats = FielModel.TrainRLModel

1. Run trained policy through environment.

>> FieldModel = FieldModel.OperateCombineRL

1. Plot results if desired. Argument for the command shown below is 0 = plot manual baseline only, 1 = plot RL model results only, 2 = plot both.

>> FieldModel.PlotResults(2)