

TABLE I: Parameter values

Parameter	Value
$V_{min}, V_{max}$	0.95 pu, 1.05 pu
$p_{D_{R,j}}$	$0.33p_{L_{R,j}}$
$S_{D_{R,j}}$	$1.2p_{D_{R,j}}$
$P_{B_{R,j}}$	$0.33p_{L_{R,j}}$
$S_{B_{R,j}}$	$1.2P_{B_{R,j}}$
$B_{R,j}$	$T_{fullCharge} \times P_{B_{R,j}}$
$T_{fullCharge}$	4 h
$\Delta t$	1 h
$\eta_c, \eta_d$	0.95, 0.95
$soc_{min}, soc_{max}$	0.30, 0.95
$\alpha$	0.001

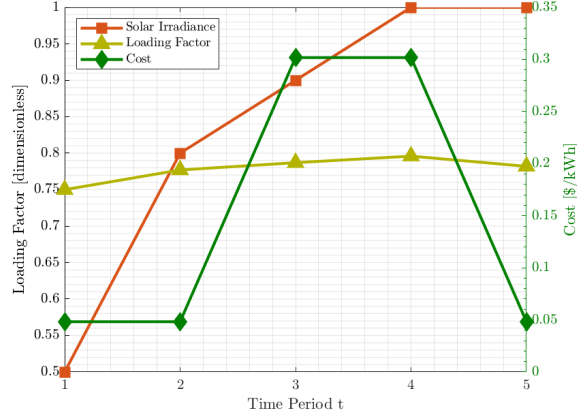


Fig. 1: Forecasts for demand power, irradiance and cost of substation power over a 5 hour horizon

## I. CASE STUDY DEMONSTRATION