

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
Δt	1 h
η_c, η_d	0.95, 0.95
soc_{min}, soc_{max}	0.30, 0.95
α	0.001

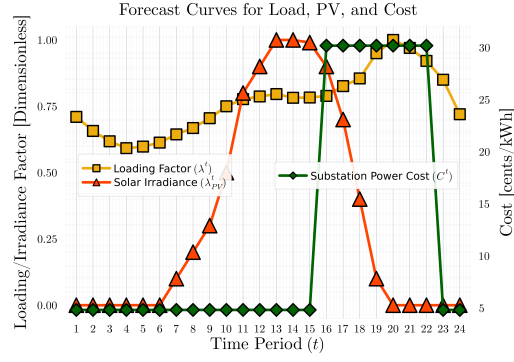


Fig. 1: Forecasts for demand power, irradiance and cost of substation power over a 24 hour horizon

I. CASE STUDY DEMONSTRATION