

LIST OF ABBREVIATIONS

AR	Allowed range.
CR	Control range.
OR	Operative range.
DG	Distributed generation power plant.
DN	Distribution network.
$\varepsilon_d, \varepsilon_u$	Down and upper threshold values for each DG.
ΔP_{DG}	DG active power variations at the PCC.
ΔQ_{DG}	DG reactive power variations at the PCC.
I_C	DG converter output current.
I_{DN}	DN feeder current.
N_B	Total number of DN branches.
N_G	Total number of DGs.
PCC	Point of common coupling.
P_{DG}	DG active power.
$P_{DG_maxavail}$	DG maximum available active power.
PF	Power factor.
PQR	Power quality and reliability standards.
PV	Photovoltaic system.
Q_{DG}	DG reactive power.
Q_{DG}^c	Q_{DG} Constraint due to the converter current.
Q_{DG}^i	Total amount of reactive Q_{DG} at the i^{th} DG PCC.
Q_{DG}^v	Q_{DG} Constraint due to the converter voltage.
Q_{DG_cap}	DG maximum reactive power capability.
RES	Renewable energy sources.
ρ_P	Voltage versus active power sensitivity coefficient.
ρ_Q	Voltage versus reactive power sensitivity coefficient.
V_c	DG converter output voltage before X_c
$V_{c,max}$	Maximum DG converter output voltage before X_c .
V_{DG}	DG output voltage at the PCC.
$V_{DG,max}$	Maximum allowed DG output voltage.
$V_{DG,min}$	Minimum allowed DG output voltage.

EKF	Extended Kalman Filter
GPV	Grid-Connected Photovoltaic
HCC	Hysteresis Current Controller
MNP	Modified Nominal Power
MPC	Modal Predictive Controller
MPPT	Maximum Power Point Tracker
MRAC	Modal Reference Adaptive Control
PLL	Phase locked loop
PCC	Point of Common Coupling.
VSI	Voltage Source Inverter
ZCC	Zero crossing Detector

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