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NOMENCLATURES

κ	Von Kármán constant
ρ_a	Density of air
σ_O	Standard deviations of observations
σ_P	Standard deviations of predictions
A	Turbine rotor swept area
B	Backshift operator
d	Level of differencing
g	Acceleration due to gravity
GR	Global solar radiation
h	Hour
H	Kinematic surface heat flux
L	Monin-Obhukov length
LT	Local time
$LSTD$	Land-sea temperature difference
N	Number of prediction and observation pairs
O_i	i^{th} observed value
p	Order of the non-seasonal AR process
P_i	i^{th} predicted value
P_{wind}	Power in the wind
\bar{O}	Mean values of the observations
\bar{P}	Mean values of the predictions
q	Order of the non-seasonal MA process
Q	Ljung-Box, statistic
S	Hourly wind speed
SS	Skill score
T_v	Absolute virtual temperature
u	Horizontal wind speed
u^*	Friction velocity
VTD	Vertical temperature difference
z	Height above ground level

NOMENCLATURES (Continued)

z_0	Roughness length
α	Wind shear exponent
θ_i	Non-seasonal MA parameters
Θ_Q	Seasonal MA parameters
ρ	Pearson's correlation coefficient
ϕ_i	Non-seasonal AR parameters
Φ_P	Seasonal AR parameters
ω	White noise term
ACF	Autocorrelation function
AGL	Above ground level
AIC	Akaike information criterion
ANN	Artificial neural network
AR	Autoregressive model
ARIMA	Autoregressive integrated moving average model
ARMA	Autoregressive moving average model
ARX	Autoregressive model with exogenous variables
CCF	Cross-correlation function
CRMSE	Centered root mean square error
dARIMA	Dediurnalized ARIMA model
DEDE	Department of Alternative Energy Development and Efficiency, Ministry of Energy, Thailand
GW	Giga-watts
HIRLAM	High resolution limited area model
MA	Moving average
ME	Mean error
MM5	Fifth-generation Penn State/NCAR mesoscale model
msl	Mean sea level
MW	Mega watts
NCEP	National Centers for Environmental Prediction, U.S
NESDB	National Economic and Social Development Board, Office of the Prime Minister, Thailand

NOMENCLATURES (Continued)

NWP	Numerical weather prediction
PACF	Partial autocorrelation function
PCD	Pollution Control Department, Ministry of Natural Resources and Environment, Thailand
PS	Persistence model
RAMS	Regional atmospheric modeling system
RTG-SST	Daily real-time global sea surface temperature
SARIMA	Seasonal autoregressive integrated moving average model
SST	Sea surface temperature
TMD	Thai Meteorological Department, Ministry of Information and Communication Technology, Thailand
VAR	Vector autoregressive model
WRF	Weather research and forecasting model