

# 1 Groups of Variables

Consumption Classes (C)	
Index	Group
CSO	Commercial, services and others
CP	Own consumption
IP	Street lighting
IND	Industrial
PP	Public power
RED	Residential
RR	Rural
RRA	Aquicultor rural
RRI	Irrigating rural
SP1	Public service (water, sewage and sanitation)
SP2	Public service (electrical traction)
TOT	Total
MED	Average

Regions (R)	
Index	Group
SE	Southeast
CO	Midwest
SECO	Southeast&Midwest
S	South
NE	Northeast
N	North
BR	Brazil

## 2 Variables

Power Electricity Consumption - 185 lagged variables	
Index	Variable
CEE_R_i	Hourly PEC of the hour i and region R (mWh) - ( $i = 0, \dots, 24,$ )
CEE_R_TOT	Sum of daily PEC of region R (mWh)
CEE_R_MED	Average daily PEC of Region R (mWh)
CEE_R_C	Daily PEC of the region R for consumption class C (mWh)

Calendar - 6 variables	
Index	Variable
DS	Day of the week (1-7)
DM	Day of the month (1-30)
Mês	Month (1-12)
Ano	Year (2017, 2018)
Feriado	Dummy for holiday
Estacao	Seasons (1-4)

Weather Variables - 180 variables	
Index	Variable
NEP_R_i	Cloudiness of region R and hour i ( $i = 9,15,24$ , AVG)
PA_R_i	Atmospheric pressure (mbar) of region R and hour i ( $i = 9,15,24$ , AVG)
TEMP_BS_R_i	Dry bulb temperature ( $^{\circ}\text{C}$ ) of region R and hour i ( $i = 9,15,24$ , AVG)
TEMP_BU_R_i	Humid bulb temperature ( $^{\circ}\text{C}$ ) of region R and hour i ( $i = 9,15,24$ , AVG)
UMID_R_i	Relative humidity (%) of region R and hour i ( $i = 9,15,24$ , AVG)
DV_R_i	Wind direction of region R and hour i ( $i = 9,15,24$ , AVG)
VV_R_i	Wind velocity (m/s) of region R and hour i ( $i = 9,15,24$ , AVG)

Electrical Energy Price Variables - 60 variables	
Index	Variable
TAR_R_C	PEC price of region R and consumption class C (R\$)
TAR_R_MED	Average PEC price of region R (R\$)

Economic Variables - 79 variables	
Index	Variable
Meta_Selic	Selic target imposed by BCB
Taxa_Selic	SELIC effective rate
CDI	CDI
DolarC	Dollar for purchase
DolarC_var	Dollar for purchase variance
DolarV	Dollar for sale
DolarV_var	Dollar for sale variance
EuroC	Euro for purchase
EuroC_var	Euro for purchase variance
EuroV	Euro for Sale
EuroV_var	Euro for sale variance
IBV_Cot	IBOVESPA quotation
IBV_min	IBOVESPA daily minimum value
IBV_max	IBOVESPA daily maximum value
IBV_varabs	IBOVESPA daily absolute variance
IBV_varperc	IBOVESPA daily percentage variance
IBV_vol	IBOVESPA daily volatility
INPC_m	INPC monthly variance
INPC_ac	INPC cumulative
IPCA_m	IPCA monthly variance
IPCA_ac	IPCA accumulated
IPA-M_m	IPA-M monthly variance
IPA-M_ac	IPA-M accumulated
IPA-DI_m	IPA-DI monthly variance
IPA-DI_ac	IPA-DI accumulated
IGP-M_m	IGP-M monthly variance
IGP-M_ac	IGP-M accumulated
IGP-DI_m	IGP-DI monthly variance
IGP-DI_ac	IGP-DI accumulated
PAB_o	Crude steel production (observed)
PAB_d	Crude steel production (seasonally adjusted)
TVP_o	Heavy vehicles traffic on toll roads (observed)
TVP_d	Heavy vehicles traffic on toll roads (seasonally adjusted)
PICV_o	Construction production inputs (observed)
PICV_d	Construction production inputs (seasonally adjusted)
CCU_o	CPS and Usecheque consultations (observed)
CCU_d	CPS and Usecheque consultations (seasonally adjusted)
CS_o	Serasa consultations(observed)
CS_d	Serasa consultations (seasonally adjusted)

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Index	Variable
UCPIIT_FGV_o	Installed capacity utilization in the manufacturing industry - FGV (observed)
UCPIIT_FGV_d	Installed capacity utilization in the manufacturing industry - FGV (seasonally adjusted)
CPCIIT_CNI_o	Installed capacity utilization in the processing industry - CNI (observed)
CPCIIT_CNI_d	Installed capacity utilization in the manufacturing industry - CNI (seasonally adjusted)
VIR_o	Real Industrial Sales (observed)
VIR_d	Real Industrial Sales (seasonally adjusted)
HTPIT_o	Production hours worked in the manufacturing industry (observed)
HTPIT_d	Production hours worked in the processing industry (seasonally adjusted)
SRIT_o	Real wage in manufacturing industry (observed)
SRIT_d	Real wage in the manufacturing industry (seasonally adjusted)
PPOB	Oil and gross oil production (monthly production in m3)
PGN	Natural gas production (monthly production in m3)
PIG_o	General industrial production (observed)
PIG_d	General industrial production (seasonally adjusted)
PIBCa_o	Industrial production - capital goods (observed)
PIBCa_d	Industrial production - capital goods (seasonally adjusted)
PIBI_o	Industrial production - intermediate goods (observed)
PIBI_d	Industrial production - intermediate goods (seasonally adjusted)
PIBCo_o	Industrial production - consumer goods (observed)
PIBCo_d	Industrial production - consumer goods (seasonally adjusted)
PIA_o	Automotive industry production (observed)
PIA_d	Automotive industry production (seasonally adjusted)
ICC	Consumer confidence index
INEC	National consumer expectations index
ICEI	Industrial entrepreneur confidence index
DBNDES	BNDES disbursements - accumulated amounts
IEG_o	Total employment index (observed)
IEG_d	Total employment index (seasonally adjusted)
IETIT_o	Total employment index- manufacturing industry (observed)
IETIT_d	Total employment index - manufacturing industry (seasonally adjusted)
IETC_o	Total employment index- commercial (observed)
IETC_d	Total employment index - commercial (seasonally adjusted)
IETS_o	Total employment index - services (observed)
IETS_d	Total employment index - services (seasonally adjusted)
IETCV_o	Total employment index - civil construction (observed)
IETCV_d	Total employment index - civil construction (seasonally adjusted)
PO	Employed people (formally)
TD	Unemployment rate (brazil)
BM	Monetary Base
PME	Currency paper issued