

childClassName	collectionName	propertyName
Generator	Generators	Generation
Generator	Generators	Min Generation
Generator	Generators	Max Generation
Generator	Generators	Units Generating
Generator	Generators	Units Started
Generator	Generators	Units Shutdown
Generator	Generators	Dispatchable Capacity
Generator	Generators	Undispatched Capacity
Generator	Generators	Hours of Operation
Generator	Generators	Hours Up
Generator	Generators	Hours Down
Generator	Generators	Capacity Factor
Generator	Generators	Fuel Offtake
Generator	Generators	Start Fuel Offtake
Generator	Generators	Waste Heat
Generator	Generators	No Cost Capacity
Generator	Generators	Hours Curtailed
Generator	Generators	Capacity Curtailed
Generator	Generators	Curtailment Factor
Generator	Generators	Ramp
Generator	Generators	Ramp Up
Generator	Generators	Max Ramp Up
Generator	Generators	Minutes of Ramp Up
Generator	Generators	Ramp Up Cost
Generator	Generators	Ramp Up Price
Generator	Generators	Hours of Ramp Up Violation
Generator	Generators	Ramp Up Violation
Generator	Generators	Ramp Up Violation Cost
Generator	Generators	Ramp Down
Generator	Generators	Max Ramp Down
Generator	Generators	Minutes of Ramp Down
Generator	Generators	Ramp Down Cost
Generator	Generators	Ramp Down Price
Generator	Generators	Hours of Ramp Down Violation
Generator	Generators	Ramp Down Violation
Generator	Generators	Ramp Down Violation Cost
Generator	Generators	Fixed Load Generation
Generator	Generators	Fixed Load Violation
Generator	Generators	Hours of Fixed Load Violation
Generator	Generators	Fixed Load Violation Cost
Generator	Generators	Min Load Generation
Generator	Generators	Min Load Violation
Generator	Generators	Hours of Min Load Violation
Generator	Generators	Min Load Violation Cost
Generator	Generators	Max Energy Violation
Generator	Generators	Max Energy Violation Cost
Generator	Generators	Min Energy Violation
Generator	Generators	Min Energy Violation Cost
Generator	Generators	Max Starts Violation

Generator	Generators	Max Starts Violation Cost
Generator	Generators	Raise Reserve
Generator	Generators	Lower Reserve
Generator	Generators	Regulation Raise Reserve
Generator	Generators	Regulation Lower Reserve
Generator	Generators	Replacement Reserve
Generator	Generators	Flexibility Up
Generator	Generators	Flexibility Down
Generator	Generators	Ramp Flexibility Up
Generator	Generators	Ramp Flexibility Down
Generator	Generators	Hours at Minimum
Generator	Generators	Inflexible Generation
Generator	Generators	Auxiliary Use
Generator	Generators	Generation Sent Out
Generator	Generators	Units Pumping
Generator	Generators	Pump Units Started
Generator	Generators	Pump Load
Generator	Generators	Hours of Pump Operation
Generator	Generators	Net Sum Generation
Generator	Generators	Net Generation
Generator	Generators	Fixed Pump Load
Generator	Generators	Fixed Pump Load Violation
Generator	Generators	Hours of Fixed Pump Load Violation
Generator	Generators	Fixed Pump Load Violation Cost
Generator	Generators	Water Release
Generator	Generators	Water Pumped
Generator	Generators	Units Sync Cond
Generator	Generators	Sync Cond Load
Generator	Generators	Hours of Sync Cond Operation
Generator	Generators	Fuel Price
Generator	Generators	Fuel Cost
Generator	Generators	Fuel Transport Cost
Generator	Generators	Fuel Transition Cost
Generator	Generators	VO&M Charge
Generator	Generators	VO&M Cost
Generator	Generators	UoS Cost
Generator	Generators	Pump Cost
Generator	Generators	Sync Cond Cost
Generator	Generators	Reserves VO&M Cost
Generator	Generators	Reserves Cost
Generator	Generators	Generation Cost
Generator	Generators	Start & Shutdown Cost
Generator	Generators	Start & Shutdown Penalty Cost
Generator	Generators	Start Fuel Cost
Generator	Generators	Emissions Cost
Generator	Generators	Abatement Cost
Generator	Generators	Total Generation Cost
Generator	Generators	Total System Cost
Generator	Generators	FO&M Cost
Generator	Generators	Equity Cost

Generator	Generators	Debt Cost
Generator	Generators	Fixed Costs
Generator	Generators	Heat Rate
Generator	Generators	Marginal Heat Rate
Generator	Generators	Average Heat Rate
Generator	Generators	Efficiency
Generator	Generators	Marginal Fuel Cost
Generator	Generators	SRMC
Generator	Generators	Average Cost
Generator	Generators	Average Total Cost
Generator	Generators	Offer Base
Generator	Generators	Offer No Load Cost
Generator	Generators	Offer Quantity
Generator	Generators	Offer Price
Generator	Generators	Cost Price
Generator	Generators	Mark-up
Generator	Generators	Bid-Cost Mark-up
Generator	Generators	Offer Cleared
Generator	Generators	Cleared Offer Price
Generator	Generators	Cleared Offer Cost
Generator	Generators	Marginal Loss Factor
Generator	Generators	Price Received
Generator	Generators	Pump Bid Base
Generator	Generators	Pump Bid Quantity
Generator	Generators	Pump Bid Price
Generator	Generators	Pump Bid Cleared
Generator	Generators	Cleared Pump Bid Price
Generator	Generators	Cleared Pump Bid Cost
Generator	Generators	Pump Price Paid
Generator	Generators	Sync Cond Price Paid
Generator	Generators	Cleared Reserve Offer Cost
Generator	Generators	Spark Spread
Generator	Generators	Clean Spark Spread
Generator	Generators	Pool Revenue
Generator	Generators	Reserves Revenue
Generator	Generators	Net Reserves Revenue
Generator	Generators	Heat Market Revenue
Generator	Generators	Net Revenue
Generator	Generators	Net Profit
Generator	Generators	Shadow Generation
Generator	Generators	Shadow Pool Revenue
Generator	Generators	Shadow Price Received
Generator	Generators	Monopoly Rent
Generator	Generators	Strategic Shadow Price
Generator	Generators	Scheduled Generation
Generator	Generators	Scheduled Revenue
Generator	Generators	Constrained On Revenue
Generator	Generators	Constrained Off Revenue
Generator	Generators	Scheduled Generation Cost
Generator	Generators	Scheduled Offer Cost

Generator	Generators	Scheduled Start & Shutdown Cost
Generator	Generators	CHP Generation
Generator	Generators	Condense Mode Generation
Generator	Generators	Heat Production
Generator	Generators	CHP Heat Production
Generator	Generators	Boiler Heat Production
Generator	Generators	Heat Fuel Offtake
Generator	Generators	CHP Power Fuel Offtake
Generator	Generators	CHP Heat Fuel Offtake
Generator	Generators	CHP Heat Surrogate Fuel Offtake
Generator	Generators	Boiler Fuel Offtake
Generator	Generators	Heat Production Cost
Generator	Generators	Heat Revenue
Generator	Generators	Max Heat
Generator	Generators	Min Heat
Generator	Generators	Opening Heat
Generator	Generators	Closing Heat
Generator	Generators	Heat Withdrawal
Generator	Generators	Heat Injection
Generator	Generators	Net Heat Withdrawal
Generator	Generators	Heat Loss
Generator	Generators	Heat Withdrawal Cost
Generator	Generators	Heat Injection Cost
Generator	Generators	Heat Shadow Price
Generator	Generators	Water Offtake
Generator	Generators	Water Consumption
Generator	Generators	Water Cost
Generator	Generators	Water Price Paid
Generator	Generators	Energy Utilisation Factor
Generator	Generators	Average Heat Value
Generator	Generators	Dispatched Capacity Available
Generator	Generators	Units
Generator	Generators	Max Capacity
Generator	Generators	Installed Capacity
Generator	Generators	Rating
Generator	Generators	Raw Rating
Generator	Generators	Rated Capacity
Generator	Generators	Firm Capacity
Generator	Generators	Capacity Reserves
Generator	Generators	Units Out
Generator	Generators	Maintenance
Generator	Generators	Discrete Maintenance
Generator	Generators	Distributed Maintenance
Generator	Generators	Maintenance Hours
Generator	Generators	Maintenance Rate
Generator	Generators	Forced Outage
Generator	Generators	Forced Outage Hours
Generator	Generators	Forced Outage Rate
Generator	Generators	Operating or Forced Outage Hours
Generator	Generators	Available Capacity

Generator	Generators	Service Factor
Generator	Generators	Units Built
Generator	Generators	Units Retired
Generator	Generators	Capacity Built
Generator	Generators	Capacity Retired
Generator	Generators	Net New Capacity
Generator	Generators	Capacity Price
Generator	Generators	Capacity Revenue
Generator	Generators	Build Cost
Generator	Generators	Annualized Build Cost
Generator	Generators	Total Cost
Generator	Generators	Levelized Cost
Generator	Generators	Age
Generator	Generators	Retirement Cost
Generator	Generators	Shadow Capacity Built
Generator	Generators	x
Generator	Generators	y
Generator	Generators	z
Generator	Transition	Transition Cost
Generator	Transition	Transition Count
Fuel	Fuels	Offtake
Fuel	Fuels	Offtake Ratio
Fuel	Fuels	Generation
Fuel	Fuels	Price
Fuel	Fuels	Cost
Fuel	Fuels	Transport Charge
Fuel	Fuels	Transport Cost
Fuel	Fuels	Transition Cost
Fuel	Fuels	Marginal Heat Rate
Fuel	Fuels	SRMC
Fuel	Fuels	Hours Available
Fuel	Fuels	Offer Quantity
Fuel	Fuels	Offer Price
Fuel	Fuels	Cost Price
Fuel	Fuels	Offer Cleared
Fuel	Fuels	Hours in Use
Fuel	Start Fuels	Offtake
Fuel	Start Fuels	Price
Fuel	Start Fuels	Cost
Fuel	Start Fuels	Transport Cost
Power2X	Source Power2X	Delivered Energy
Power2X	Source Power2X	Delivered Quantity
Gas Field	Source Gas Fields	Delivered Energy
Gas Field	Source Gas Fields	Delivered Quantity
Gas Plant	Source Gas Plants	Delivered Energy
Gas Plant	Source Gas Plants	Delivered Quantity
Gas Storage	Source Gas Storages	Delivered Energy
Gas Storage	Source Gas Storages	Delivered Quantity
Gas Contract	Source Gas Contracts	Delivered Energy
Gas Contract	Source Gas Contracts	Delivered Quantity

Company	Companies	Generation
Company	Companies	Dispatchable Capacity
Company	Companies	Undispatched Capacity
Company	Companies	Fuel Offtake
Company	Companies	Start Fuel Offtake
Company	Companies	Heat Fuel Offtake
Company	Companies	Waste Heat
Company	Companies	No Cost Capacity
Company	Companies	Fixed Load Generation
Company	Companies	Min Load Generation
Company	Companies	Auxiliary Use
Company	Companies	Pump Load
Company	Companies	Raise Reserve
Company	Companies	Lower Reserve
Company	Companies	Regulation Raise Reserve
Company	Companies	Regulation Lower Reserve
Company	Companies	Replacement Reserve
Company	Companies	Heat Production
Company	Companies	Boiler Heat Production
Company	Companies	Fuel Cost
Company	Companies	Fuel Transport Cost
Company	Companies	Fuel Transition Cost
Company	Companies	VO&M Cost
Company	Companies	UoS Cost
Company	Companies	Pump Cost
Company	Companies	Reserves VO&M Cost
Company	Companies	Reserves Cost
Company	Companies	Heat Production Cost
Company	Companies	Generation Cost
Company	Companies	Start & Shutdown Cost
Company	Companies	Start Fuel Cost
Company	Companies	Emissions Cost
Company	Companies	Abatement Cost
Company	Companies	Total Generation Cost
Company	Companies	FO&M Cost
Company	Companies	Equity Cost
Company	Companies	Debt Cost
Company	Companies	Cleared Offer Cost
Company	Companies	Pool Revenue
Company	Companies	Reserves Revenue
Company	Companies	Net Reserves Revenue
Company	Companies	Heat Revenue
Company	Companies	Fixed Costs
Company	Companies	Net Revenue
Company	Companies	Net Profit
Company	Companies	Monopoly Rent
Company	Companies	Scheduled Generation
Company	Companies	Scheduled Revenue
Company	Companies	Constrained On Revenue
Company	Companies	Constrained Off Revenue

Company	Companies	Scheduled Generation Cost
Company	Companies	Scheduled Offer Cost
Company	Companies	Scheduled Start & Shutdown Cost
Company	Companies	Installed Capacity
Company	Companies	Rated Capacity
Company	Companies	Maintenance
Company	Companies	Forced Outage
Company	Companies	Available Capacity
Company	Companies	Capacity Built
Company	Companies	Capacity Retired
Company	Companies	Net New Capacity
Company	Companies	Capacity Revenue
Company	Companies	Build Cost
Company	Companies	Retirement Cost
Market	Capacity Markets	Sales
Market	Capacity Markets	Revenue
Market	Capacity Markets	Cleared Offer Price
Market	Capacity Markets	Cleared Offer Cost
Market	Heat Markets	Sales
Market	Heat Markets	Revenue
Fuel	Fuels	Price
Fuel	Fuels	Tax
Fuel	Fuels	Total Price
Fuel	Fuels	Time-weighted Price
Fuel	Fuels	Offtake
Fuel	Fuels	Max Offtake
Fuel	Fuels	Min Offtake
Fuel	Fuels	Max Inventory
Fuel	Fuels	Min Inventory
Fuel	Fuels	Opening Inventory
Fuel	Fuels	Closing Inventory
Fuel	Fuels	Delivery
Fuel	Fuels	Withdrawal
Fuel	Fuels	Net Withdrawal
Fuel	Fuels	Cost
Fuel	Fuels	Tax Cost
Fuel	Fuels	Delivery Cost
Fuel	Fuels	Inventory Cost
Fuel	Fuels	Reservation Cost
Fuel	Fuels	Withdrawal Cost
Fuel	Fuels	Total Cost
Fuel	Fuels	Shadow Price
Fuel	Fuels	Generation
Fuel	Fuels	Average Heat Rate
Fuel	Fuels	Average Heat Value
Fuel	Fuels	Installed Capacity
Fuel	Fuels	FO&M Cost
Fuel	Fuels	x
Fuel	Fuels	y
Fuel	Fuels	z

Power2X	Source Power2X	Delivered Energy
Power2X	Source Power2X	Delivered Quantity
Gas Field	Source Gas Fields	Delivered Energy
Gas Field	Source Gas Fields	Delivered Quantity
Gas Plant	Source Gas Plants	Delivered Energy
Gas Plant	Source Gas Plants	Delivered Quantity
Gas Storage	Source Gas Storages	Delivered Energy
Gas Storage	Source Gas Storages	Delivered Quantity
Gas Contract	Source Gas Contracts	Delivered Energy
Gas Contract	Source Gas Contracts	Delivered Quantity
Market	Markets	Sales
Market	Markets	Purchases
Market	Markets	Net Sales
Market	Markets	Net Purchases
Market	Markets	Revenue
Market	Markets	Cost
Market	Markets	Net Revenue
Market	Markets	Net Cost
Fuel Contract	Fuel Contracts	Offtake
Fuel Contract	Fuel Contracts	Cost
Fuel Contract	Fuel Contracts	Price
Fuel Contract	Fuel Contracts	Take-or-Pay Price
Fuel Contract	Fuel Contracts	Shadow Price
Fuel Contract	Fuel Contracts	Take-or-Pay Shadow Price
Fuel Contract	Fuel Contracts	Take-or-Pay Violation
Fuel Contract	Fuel Contracts	Take-or-Pay Violation Cost
Fuel Contract	Fuel Contracts	FO&M Cost
Fuel Contract	Fuel Contracts	Total Cost
Fuel Contract	Fuel Contracts	x
Fuel Contract	Fuel Contracts	y
Fuel Contract	Fuel Contracts	z
Emission	Emissions	Production
Emission	Emissions	Gross Production
Emission	Emissions	Removal
Emission	Emissions	Removal Cost
Emission	Emissions	Abatement
Emission	Emissions	Abatement Cost
Emission	Emissions	Generation
Emission	Emissions	Intensity
Emission	Emissions	Price
Emission	Emissions	Shadow Price
Emission	Emissions	Cost
Emission	Emissions	Max Production Violation
Emission	Emissions	Max Production Violation Cost
Emission	Emissions	x
Emission	Emissions	y
Emission	Emissions	z
Generator	Generators	Generation Production
Generator	Generators	Unit Start Production
Generator	Generators	Production

Generator	Generators	Gross Production
Generator	Generators	Removal
Generator	Generators	Removal Cost
Generator	Generators	Abatement
Generator	Generators	Abatement Cost
Generator	Generators	Generation
Generator	Generators	Intensity
Generator	Generators	Cost
Generator	Generators	Incremental Production Rate
Generator	Generators	Incremental Cost
Generator	Generators	SRMC
Fuel	Fuels	Production
Fuel	Fuels	Gross Production
Fuel	Fuels	Removal
Fuel	Fuels	Removal Cost
Fuel	Fuels	Abatement
Fuel	Fuels	Abatement Cost
Fuel	Fuels	Generation
Fuel	Fuels	Intensity
Fuel	Fuels	Cost
Gas Node	Gas Nodes	Production
Gas Node	Gas Nodes	Cost
Water Plant	Water Plants	Production
Water Plant	Water Plants	Cost
Vehicle	Vehicles	Production
Market	Markets	Sales
Market	Markets	Purchases
Market	Markets	Net Sales
Market	Markets	Net Purchases
Market	Markets	Revenue
Market	Markets	Cost
Market	Markets	Net Revenue
Market	Markets	Net Cost
Abatement	Abatements	Units
Abatement	Abatements	Hours of Operation
Abatement	Abatements	Gross Emissions
Abatement	Abatements	Abatement
Abatement	Abatements	Net Emissions
Abatement	Abatements	Efficiency
Abatement	Abatements	Abatement Cost
Abatement	Abatements	Running Cost
Abatement	Abatements	VO&M Cost
Abatement	Abatements	Consumables Cost
Abatement	Abatements	FO&M Cost
Abatement	Abatements	Total Cost
Abatement	Abatements	Abatement Value
Abatement	Abatements	Abatement Net Cost
Abatement	Abatements	Units Out
Abatement	Abatements	x
Abatement	Abatements	y

Abatement	Abatements	z
Fuel	Consumables	Consumption
Fuel	Consumables	Cost
Emission	Emissions	Gross Emissions
Emission	Emissions	Abatement
Emission	Emissions	Net Emissions
Emission	Emissions	Efficiency
Emission	Emissions	Abatement Value
Storage	Storages	Max Volume
Storage	Storages	Min Volume
Storage	Storages	Initial Volume
Storage	Storages	End Volume
Storage	Storages	Initial Level
Storage	Storages	End Level
Storage	Storages	Hours Full
Storage	Storages	Working Volume
Storage	Storages	Utilization
Storage	Storages	Working Utilization
Storage	Storages	Average Utilization
Storage	Storages	Average Working Utilization
Storage	Storages	Inflow
Storage	Storages	Release
Storage	Storages	Natural Inflow
Storage	Storages	Generator Release
Storage	Storages	Downstream Release
Storage	Storages	Spill
Storage	Storages	Inflow Rate
Storage	Storages	Release Rate
Storage	Storages	Natural Inflow Rate
Storage	Storages	Generator Release Rate
Storage	Storages	Downstream Release Rate
Storage	Storages	Spill Rate
Storage	Storages	Loss
Storage	Storages	Shadow Price
Storage	Storages	Marginal Value
Storage	Storages	Marginal Cost
Storage	Storages	Potential Energy
Storage	Storages	Generation
Storage	Storages	Pump Load
Storage	Storages	Efficiency
Storage	Storages	Min Release Violation
Storage	Storages	Min Release Violation Hours
Storage	Storages	Min Release Violation Cost
Storage	Storages	Max Release Violation
Storage	Storages	Max Release Violation Hours
Storage	Storages	Max Release Violation Cost
Storage	Storages	Ramp
Storage	Storages	Ramp Price
Storage	Storages	Ramp Violation
Storage	Storages	Hours of Ramp Violation

Storage	Storages	Ramp Violation Cost
Storage	Storages	Target Violation
Storage	Storages	Target Violation Cost
Storage	Storages	Non-physical Inflow
Storage	Storages	Non-physical Spill
Storage	Storages	x
Storage	Storages	y
Storage	Storages	z
Waterway	Waterways	Flow
Waterway	Waterways	Max Flow
Waterway	Waterways	Min Flow
Waterway	Waterways	Hours Flowing
Waterway	Waterways	Shadow Price
Waterway	Waterways	Hours of Max Flow Violation
Waterway	Waterways	Max Flow Violation
Waterway	Waterways	Max Flow Violation Cost
Waterway	Waterways	Hours of Min Flow Violation
Waterway	Waterways	Min Flow Violation
Waterway	Waterways	Min Flow Violation Cost
Waterway	Waterways	Ramp
Waterway	Waterways	Max Ramp
Waterway	Waterways	Hours of Ramp Violation
Waterway	Waterways	Ramp Violation
Waterway	Waterways	Ramp Violation Cost
Waterway	Waterways	x
Waterway	Waterways	y
Waterway	Waterways	z
Physical Contract	Physical Contracts	Generation
Physical Contract	Physical Contracts	Load
Physical Contract	Physical Contracts	Net Generation
Physical Contract	Physical Contracts	Capacity Factor
Physical Contract	Physical Contracts	Load Factor
Physical Contract	Physical Contracts	Price Received
Physical Contract	Physical Contracts	Price Paid
Physical Contract	Physical Contracts	Generation Cost
Physical Contract	Physical Contracts	Load Revenue
Physical Contract	Physical Contracts	Net Generation Cost
Physical Contract	Physical Contracts	Generation Revenue
Physical Contract	Physical Contracts	Cost to Load
Physical Contract	Physical Contracts	Net Generation Revenue
Physical Contract	Physical Contracts	Fixed Cost
Physical Contract	Physical Contracts	Generation Capacity
Physical Contract	Physical Contracts	Load Obligation
Physical Contract	Physical Contracts	x
Physical Contract	Physical Contracts	y
Physical Contract	Physical Contracts	z
Purchaser	Purchasers	Load
Purchaser	Purchasers	Price Paid
Purchaser	Purchasers	Cost to Load
Purchaser	Purchasers	Bid Quantity

Purchaser	Purchasers	Bid Price
Purchaser	Purchasers	Bid Cleared
Purchaser	Purchasers	Cleared Bid Price
Purchaser	Purchasers	Cleared Bid Value
Purchaser	Purchasers	Load Factor
Purchaser	Purchasers	Max Energy Violation
Purchaser	Purchasers	Max Energy Violation Cost
Purchaser	Purchasers	Min Energy Violation
Purchaser	Purchasers	Min Energy Violation Cost
Purchaser	Purchasers	Cleared Reserve Offer Cost
Purchaser	Purchasers	Reserves Revenue
Purchaser	Purchasers	Load Obligation
Purchaser	Purchasers	x
Purchaser	Purchasers	y
Purchaser	Purchasers	z
Reserve	Reserves	Provision
Reserve	Reserves	Risk
Reserve	Reserves	Shortage
Reserve	Reserves	Hours of Shortage
Reserve	Reserves	Shortage Cost
Reserve	Reserves	Cleared Offer Price
Reserve	Reserves	Cleared Offer Cost
Reserve	Reserves	Cost
Reserve	Reserves	Price
Reserve	Reserves	Time-weighted Price
Reserve	Reserves	Available Response
Reserve	Reserves	x
Reserve	Reserves	y
Reserve	Reserves	z
Generator	Generators	Available Response
Generator	Generators	Provision
Generator	Generators	Spinning Reserve Provision
Generator	Generators	Sync Cond Reserve Provision
Generator	Generators	Pump Dispatchable Load Provision
Generator	Generators	Non-spinning Reserve Provision
Generator	Generators	Cleared Offer Price
Generator	Generators	Cleared Offer Cost
Generator	Generators	Revenue
Generator	Generator Contingenci	Risk
Generator	Generator Contingenci	Shadow Price
Generator	Generator Cost Allocati	Cost
Purchaser	Purchasers	Available Response
Purchaser	Purchasers	Provision
Purchaser	Purchasers	Revenue
Purchaser	Purchasers	Cleared Offer Price
Purchaser	Purchasers	Cleared Offer Cost
Purchaser	Purchasers	Cost
Battery	Batteries	Available Response
Battery	Batteries	Provision
Battery	Batteries	Cleared Offer Price

Battery	Batteries	Cleared Offer Cost
Battery	Batteries	Revenue
Power2X	Power2X	Available Response
Power2X	Power2X	Provision
Power2X	Power2X	Revenue
Region	Regions	Risk
Line	Line Contingencies	Risk
Line	Line Contingencies	Shadow Price
Market	Markets	Sales
Market	Markets	Purchases
Market	Markets	Net Sales
Market	Markets	Net Purchases
Market	Markets	Revenue
Market	Markets	Cost
Market	Markets	Net Revenue
Market	Markets	Net Cost
Battery	Batteries	Units
Battery	Batteries	Energy
Battery	Batteries	SoC
Battery	Batteries	Available SoC
Battery	Batteries	Generation
Battery	Batteries	Load
Battery	Batteries	Net Generation
Battery	Batteries	Losses
Battery	Batteries	Hours Charging
Battery	Batteries	Hours Discharging
Battery	Batteries	Hours Idle
Battery	Batteries	Raise Reserve
Battery	Batteries	Lower Reserve
Battery	Batteries	Regulation Raise Reserve
Battery	Batteries	Regulation Lower Reserve
Battery	Batteries	Replacement Reserve
Battery	Batteries	VO&M Cost
Battery	Batteries	UoS Cost
Battery	Batteries	Capacity Factor
Battery	Batteries	Load Factor
Battery	Batteries	Price Received
Battery	Batteries	Price Paid
Battery	Batteries	Generation Revenue
Battery	Batteries	Cost to Load
Battery	Batteries	Net Generation Revenue
Battery	Batteries	Reserves Revenue
Battery	Batteries	Offer Base
Battery	Batteries	Offer No Load Cost
Battery	Batteries	Offer Quantity
Battery	Batteries	Offer Price
Battery	Batteries	Offer Cleared
Battery	Batteries	Cleared Offer Price
Battery	Batteries	Cleared Offer Cost
Battery	Batteries	Bid Base

Battery	Batteries	Bid Quantity
Battery	Batteries	Bid Price
Battery	Batteries	Bid Cleared
Battery	Batteries	Cleared Bid Price
Battery	Batteries	Cleared Bid Cost
Battery	Batteries	Cleared Reserve Offer Cost
Battery	Batteries	Net Profit
Battery	Batteries	Shadow Price
Battery	Batteries	Installed Capacity
Battery	Batteries	Firm Capacity
Battery	Batteries	FO&M Cost
Battery	Batteries	Age
Battery	Batteries	Maintenance
Battery	Batteries	Discrete Maintenance
Battery	Batteries	Distributed Maintenance
Battery	Batteries	Units Built
Battery	Batteries	Energy Capacity Built
Battery	Batteries	Power Capacity Built
Battery	Batteries	Build Cost
Battery	Batteries	Annualized Build Cost
Battery	Batteries	Units Retired
Battery	Batteries	Retirement Cost
Battery	Batteries	x
Battery	Batteries	y
Battery	Batteries	z
Power2X	Power2X	Units
Power2X	Power2X	Installed Capacity
Power2X	Power2X	Units Out
Power2X	Power2X	Maintenance
Power2X	Power2X	Maintenance Hours
Power2X	Power2X	Maintenance Rate
Power2X	Power2X	Forced Outage
Power2X	Power2X	Forced Outage Hours
Power2X	Power2X	Forced Outage Rate
Power2X	Power2X	Units Operating
Power2X	Power2X	Units Started
Power2X	Power2X	Units Shutdown
Power2X	Power2X	Load
Power2X	Power2X	Capacity Factor
Power2X	Power2X	Max Load
Power2X	Power2X	Production Rate
Power2X	Power2X	Efficiency
Power2X	Power2X	Hours Up
Power2X	Power2X	Hours Down
Power2X	Power2X	Ramp
Power2X	Power2X	Ramp Up
Power2X	Power2X	Max Ramp Up
Power2X	Power2X	Minutes of Ramp Up
Power2X	Power2X	Ramp Up Cost
Power2X	Power2X	Ramp Up Price

Power2X	Power2X	Ramp Up Violation Hours
Power2X	Power2X	Ramp Up Violation
Power2X	Power2X	Ramp Up Violation Cost
Power2X	Power2X	Ramp Down
Power2X	Power2X	Max Ramp Down
Power2X	Power2X	Minutes of Ramp Down
Power2X	Power2X	Ramp Down Cost
Power2X	Power2X	Ramp Down Price
Power2X	Power2X	Ramp Down Violation Hours
Power2X	Power2X	Ramp Down Violation
Power2X	Power2X	Ramp Down Violation Cost
Power2X	Power2X	Max Production Violation
Power2X	Power2X	Max Production Violation Cost
Power2X	Power2X	Min Production Violation
Power2X	Power2X	Min Production Violation Cost
Power2X	Power2X	Max Starts Violation
Power2X	Power2X	Max Starts Violation Cost
Power2X	Power2X	Cost to Load
Power2X	Power2X	VO&M Cost
Power2X	Power2X	FO&M Cost
Power2X	Power2X	Production Cost
Power2X	Power2X	Start & Shutdown Cost
Power2X	Power2X	Total Production Cost
Power2X	Power2X	Total System Cost
Power2X	Power2X	Water Consumption
Power2X	Power2X	Raise Reserve
Power2X	Power2X	Lower Reserve
Power2X	Power2X	Regulation Raise Reserve
Power2X	Power2X	Regulation Lower Reserve
Power2X	Power2X	Replacement Reserve
Power2X	Power2X	Price Paid
Power2X	Power2X	Reserves Revenue
Power2X	Power2X	Net Revenue
Power2X	Power2X	Shadow Price
Power2X	Power2X	Units Built
Power2X	Power2X	Capacity Built
Power2X	Power2X	Build Cost
Power2X	Power2X	Annualized Build Cost
Power2X	Power2X	Total Cost
Power2X	Power2X	Levelized Cost
Power2X	Power2X	x
Power2X	Power2X	y
Power2X	Power2X	z
Reliability	Reliability	Firm Capacity Contribution
Reliability	Reliability	x
Reliability	Reliability	y
Reliability	Reliability	z
Financial Contra	Financial Contracts	Quantity
Financial Contra	Financial Contracts	Floor Price
Financial Contra	Financial Contracts	Cap Price

Financial Contra	Financial Contracts	Settlement Price
Financial Contra	Financial Contracts	Shortfall
Financial Contra	Financial Contracts	Settlement Quantity
Financial Contra	Financial Contracts	Settlement
Financial Contra	Financial Contracts	Hours Active
Region	Regions	Settlement Price
Region	Regions	Shortfall
Region	Regions	Settlement Quantity
Region	Regions	Settlement
Cournot	Cournots	Elasticity
Cournot	Cournots	Demand Intercept
Cournot	Cournots	Demand Slope
Cournot	Cournots	Perfect Competition Demand
Cournot	Cournots	Perfect Competition Production
Cournot	Cournots	Perfect Competition Net Import
Cournot	Cournots	Perfect Competition Price
Cournot	Cournots	Perfect Competition Producer Revenue
Cournot	Cournots	Perfect Competition Consumer Surplus
Cournot	Cournots	Perfect Competition Producer Surplus
Cournot	Cournots	Demand
Cournot	Cournots	Production
Cournot	Cournots	Net Import
Cournot	Cournots	Price
Cournot	Cournots	Producer Revenue
Cournot	Cournots	Consumer Surplus
Cournot	Cournots	Producer Surplus
RSI	RSIs	RSI
RSI	RSIs	Utility Generation
RSI	RSIs	Utility Available Capacity
RSI	RSIs	Non Utility Generation
RSI	RSIs	Non Utility Available Capacity
RSI	RSIs	Non Utility Contract Volume
RSI	RSIs	Total Internal Capacity
RSI	RSIs	Total Import Capacity
RSI	RSIs	Total Supply Capacity
RSI	RSIs	Largest Suppliers Capacity
RSI	RSIs	Import Capacity
RSI	RSIs	Demand
RSI	RSIs	Lerner Index
RSI	RSIs	Bounded Lerner Index
RSI	RSIs	Bid-Cost Mark-up
RSI	RSIs	Price-Cost Mark-up
RSI	RSIs	Load Unhedged
RSI	RSIs	Load Capacity Ratio
RSI	RSIs	Capacity Factor
RSI	RSIs	Load Variation
RSI	RSIs	Summer Period
RSI	RSIs	Peak Period
Line	Lines	Supply Capacity
Interface	Interfaces	Supply Capacity

Company	Companies	Supply Capacity
Company	Companies	Bid-Cost Mark-up
Region	Regions	Load
Region	Regions	Native Load
Region	Regions	Fixed Load
Region	Regions	Fixed Generation
Region	Regions	Generation
Region	Regions	Generator Auxiliary Use
Region	Regions	Generation Sent Out
Region	Regions	Pump Generation
Region	Regions	Pump Load
Region	Regions	Battery Generation
Region	Regions	Battery Load
Region	Regions	Net Generation
Region	Regions	Purchaser Load
Region	Regions	Contract Generation
Region	Regions	Contract Load
Region	Regions	Net Contract Load
Region	Regions	Charging Station Load
Region	Regions	Charging Station Deferred Load
Region	Regions	Charging Station Hours Deferred
Region	Regions	Charging Station Generation
Region	Regions	Net Market Sales
Region	Regions	Customer Load
Region	Regions	Imports
Region	Regions	Exports
Region	Regions	Net Interchange
Region	Regions	Transmission Losses
Region	Regions	Demand Curtailed
Region	Regions	Hours of Unserved Energy
Region	Regions	Unserved Energy
Region	Regions	Max Unserved Energy
Region	Regions	Unserved Energy Factor
Region	Regions	Cost of Unserved Energy
Region	Regions	Hours of Dump Energy
Region	Regions	Dump Energy
Region	Regions	Cost of Dump Energy
Region	Regions	No Cost Generation Capacity
Region	Regions	Hours Generation Curtailed
Region	Regions	Generation Capacity Curtailed
Region	Regions	Raise Reserve
Region	Regions	Lower Reserve
Region	Regions	Regulation Raise Reserve
Region	Regions	Regulation Lower Reserve
Region	Regions	Replacement Reserve
Region	Regions	Flexibility Up
Region	Regions	Flexibility Down
Region	Regions	Ramp Flexibility Up
Region	Regions	Ramp Flexibility Down
Region	Regions	Hours at Minimum

Region	Regions	Inflexible Generation
Region	Regions	Generation Cost
Region	Regions	Generator Pump Cost
Region	Regions	Generator Start & Shutdown Cost
Region	Regions	Emissions Cost
Region	Regions	Abatement Cost
Region	Regions	Total Generation Cost
Region	Regions	Total System Cost
Region	Regions	Generator FO&M Cost
Region	Regions	Total Fixed Costs
Region	Regions	SRMC
Region	Regions	Price
Region	Regions	Uplift
Region	Regions	Price-Cost Mark-up
Region	Regions	Time-weighted Price
Region	Regions	Load-weighted Price
Region	Regions	Generation-weighted Price
Region	Regions	Cost to Load
Region	Regions	Generator Pool Revenue
Region	Regions	Transmission Rental
Region	Regions	Settlement Surplus
Region	Regions	Interregional Transmission Losses
Region	Regions	Intraregional Transmission Losses
Region	Regions	Contract Volume
Region	Regions	Contract Settlement
Region	Regions	Net Cost to Load
Region	Regions	DSP Bid Quantity
Region	Regions	DSP Bid Price
Region	Regions	DSP Bid Cleared
Region	Regions	Cleared DSP Bid Price
Region	Regions	Cleared DSP Bid Cost
Region	Regions	Cost of Curtailment
Region	Regions	Generator Net Pool Revenue
Region	Regions	Cleared Offer Cost
Region	Regions	Cleared Reserve Offer Cost
Region	Regions	Generator Net Revenue
Region	Regions	Shadow Load
Region	Regions	Shadow Generation
Region	Regions	Shadow Price
Region	Regions	Shadow Cost to Load
Region	Regions	Generator Monopoly Rent
Region	Regions	Utility Monopoly Rent
Region	Regions	Non-Utility Monopoly Rent
Region	Regions	Utility Contract Settlement
Region	Regions	Non-Utility Contract Settlement
Region	Regions	Utility Net Revenue
Region	Regions	Non-Utility Net Revenue
Region	Regions	Constrained On Cost
Region	Regions	Constrained Off Cost
Region	Regions	Generator Net Profit

Region	Regions	Net Market Profit
Region	Regions	Export Cost
Region	Regions	Import Revenue
Region	Regions	Net Cost of Exports
Region	Regions	Wheeling Revenue
Region	Regions	Wheeling Cost
Region	Regions	Intraregional Transmission Rental
Region	Regions	Interregional Transmission Rental
Region	Regions	Transmission Control Rental
Region	Regions	Balancing Area Interchange Exports
Region	Regions	Balancing Area Interchange Imports
Region	Regions	Net Balancing Area Interchange
Region	Regions	Balancing Area Interchange Exports Revenue
Region	Regions	Balancing Area Interchange Imports Cost
Region	Regions	Net Balancing Area Interchange Revenue
Region	Regions	Peak Load
Region	Regions	Generation Capacity
Region	Regions	Firm Generation Capacity
Region	Regions	Curtailed Load
Region	Regions	Contract Generation Capacity
Region	Regions	Contract Load Obligation
Region	Regions	Import Capacity
Region	Regions	Export Capacity
Region	Regions	Net Capacity Interchange
Region	Regions	Min Capacity Reserves
Region	Regions	Max Capacity Reserves
Region	Regions	Capacity Reserves
Region	Regions	Max Capacity Reserve Margin
Region	Regions	Min Capacity Reserve Margin
Region	Regions	Capacity Reserve Margin
Region	Regions	Min Load
Region	Regions	Maintenance
Region	Regions	Forced Outage
Region	Regions	Available Capacity
Region	Regions	Available Capacity Reserves
Region	Regions	Available Capacity Margin
Region	Regions	Dispatchable Capacity
Region	Regions	Undispatched Capacity
Region	Regions	Discrete Maintenance
Region	Regions	Distributed Maintenance
Region	Regions	Maintenance Factor
Region	Regions	EENS
Region	Regions	EDNS
Region	Regions	LOLE
Region	Regions	LOLP
Region	Regions	Multi-area LOLE
Region	Regions	Multi-area LOLP
Region	Regions	Planning Peak Load
Region	Regions	Generation Capacity Built
Region	Regions	Generation Capacity Retired

Region	Regions	Import Capacity Built
Region	Regions	Import Capacity Retired
Region	Regions	Export Capacity Built
Region	Regions	Export Capacity Retired
Region	Regions	Capacity Shortage
Region	Regions	Capacity Excess
Region	Regions	Capacity Shadow Price
Region	Regions	LRMC
Region	Regions	Capacity Payments
Region	Regions	Capacity Price
Region	Regions	Capacity Shortage Cost
Region	Regions	Capacity Excess Cost
Region	Regions	Total Generator Revenue
Region	Regions	Generator Build Cost
Region	Regions	Generator Retirement Cost
Region	Regions	Transmission Build Cost
Region	Regions	Transmission Retirement Cost
Region	Regions	Annualized Build Cost
Region	Regions	Total Cost
Region	Regions	Levelized Cost
Region	Regions	Shadow Generation Capacity Built
Region	Regions	x
Region	Regions	y
Region	Regions	z
Emission	Emissions	Production
Emission	Emissions	Gross Production
Emission	Emissions	Removal
Emission	Emissions	Removal Cost
Emission	Emissions	Abatement
Emission	Emissions	Abatement Cost
Emission	Emissions	Generation
Emission	Emissions	Intensity
Emission	Emissions	Cost
Region	Regions	Available Transfer Capability
Region	Regions	Available Transfer Capability Back
Region	Regions	Imports
Region	Regions	Exports
Region	Regions	Net Interchange
Region	Regions	Balancing Area Interchange Exports
Region	Regions	Balancing Area Interchange Imports
Region	Regions	Net Balancing Area Interchange
Region	Regions	Balancing Area Interchange Exports Revenue
Region	Regions	Balancing Area Interchange Imports Cost
Region	Regions	Net Balancing Area Interchange Revenue
Region	Regions	Wheeling Cost
Pool	Pools	Load
Pool	Pools	Generation
Pool	Pools	Imports
Pool	Pools	Exports
Pool	Pools	Transmission Losses

Pool	Pools	Unserved Energy
Pool	Pools	Cost of Unserved Energy
Pool	Pools	Dump Energy
Pool	Pools	Cost of Dump Energy
Pool	Pools	Total Generation Cost
Pool	Pools	Price
Pool	Pools	Load-weighted Price
Pool	Pools	Generation-weighted Price
Pool	Pools	Cost to Load
Pool	Pools	Generator Pool Revenue
Pool	Pools	Export Cost
Pool	Pools	Import Revenue
Pool	Pools	Customer Load
Pool	Pools	Net Generation
Pool	Pools	x
Pool	Pools	y
Pool	Pools	z
Zone	Zones	Load
Zone	Zones	Native Load
Zone	Zones	Fixed Load
Zone	Zones	Fixed Generation
Zone	Zones	Generation
Zone	Zones	Generator Auxiliary Use
Zone	Zones	Generation Sent Out
Zone	Zones	Pump Generation
Zone	Zones	Pump Load
Zone	Zones	Battery Generation
Zone	Zones	Battery Load
Zone	Zones	Net Generation
Zone	Zones	Purchaser Load
Zone	Zones	Contract Generation
Zone	Zones	Contract Load
Zone	Zones	Net Contract Load
Zone	Zones	Charging Station Load
Zone	Zones	Charging Station Deferred Load
Zone	Zones	Charging Station Hours Deferred
Zone	Zones	Charging Station Generation
Zone	Zones	Net Market Sales
Zone	Zones	Customer Load
Zone	Zones	Imports
Zone	Zones	Exports
Zone	Zones	Net Interchange
Zone	Zones	Transmission Losses
Zone	Zones	Demand Curtailed
Zone	Zones	Hours of Unserved Energy
Zone	Zones	Unserved Energy
Zone	Zones	Max Unserved Energy
Zone	Zones	Unserved Energy Factor
Zone	Zones	Cost of Unserved Energy
Zone	Zones	Hours of Dump Energy

Zone	Zones	Dump Energy
Zone	Zones	Cost of Dump Energy
Zone	Zones	No Cost Generation Capacity
Zone	Zones	Hours Generation Curtailed
Zone	Zones	Generation Capacity Curtailed
Zone	Zones	Raise Reserve
Zone	Zones	Lower Reserve
Zone	Zones	Regulation Raise Reserve
Zone	Zones	Regulation Lower Reserve
Zone	Zones	Replacement Reserve
Zone	Zones	Flexibility Up
Zone	Zones	Flexibility Down
Zone	Zones	Ramp Flexibility Up
Zone	Zones	Ramp Flexibility Down
Zone	Zones	Hours at Minimum
Zone	Zones	Inflexible Generation
Zone	Zones	Generation Cost
Zone	Zones	Generator Pump Cost
Zone	Zones	Generator Start & Shutdown Cost
Zone	Zones	Emissions Cost
Zone	Zones	Abatement Cost
Zone	Zones	Total Generation Cost
Zone	Zones	Total System Cost
Zone	Zones	Generator FO&M Cost
Zone	Zones	Total Fixed Costs
Zone	Zones	SRMC
Zone	Zones	Price
Zone	Zones	Time-weighted Price
Zone	Zones	Load-weighted Price
Zone	Zones	Generation-weighted Price
Zone	Zones	Energy Charge
Zone	Zones	Congestion Charge
Zone	Zones	Marginal Loss Charge
Zone	Zones	Marginal Loss Factor
Zone	Zones	Cost to Load
Zone	Zones	Generator Pool Revenue
Zone	Zones	Transmission Rental
Zone	Zones	Settlement Surplus
Zone	Zones	Cost of Curtailment
Zone	Zones	Cleared Offer Cost
Zone	Zones	Cleared Reserve Offer Cost
Zone	Zones	Generator Net Revenue
Zone	Zones	Generator Net Profit
Zone	Zones	Net Market Profit
Zone	Zones	Export Cost
Zone	Zones	Import Revenue
Zone	Zones	Net Cost of Exports
Zone	Zones	Wheeling Revenue
Zone	Zones	Wheeling Cost
Zone	Zones	Balancing Area Interchange Exports

Zone	Zones	Balancing Area Interchange Imports
Zone	Zones	Net Balancing Area Interchange
Zone	Zones	Balancing Area Interchange Exports Revenue
Zone	Zones	Balancing Area Interchange Imports Cost
Zone	Zones	Net Balancing Area Interchange Revenue
Zone	Zones	Peak Load
Zone	Zones	Generation Capacity
Zone	Zones	Firm Generation Capacity
Zone	Zones	Curtailed Load
Zone	Zones	Contract Generation Capacity
Zone	Zones	Contract Load Obligation
Zone	Zones	Import Capacity
Zone	Zones	Export Capacity
Zone	Zones	Net Capacity Interchange
Zone	Zones	Min Capacity Reserves
Zone	Zones	Max Capacity Reserves
Zone	Zones	Capacity Reserves
Zone	Zones	Max Capacity Reserve Margin
Zone	Zones	Min Capacity Reserve Margin
Zone	Zones	Capacity Reserve Margin
Zone	Zones	Min Load
Zone	Zones	Available Capacity
Zone	Zones	Available Capacity Reserves
Zone	Zones	Available Capacity Margin
Zone	Zones	Dispatchable Capacity
Zone	Zones	Undispatched Capacity
Zone	Zones	Discrete Maintenance
Zone	Zones	Distributed Maintenance
Zone	Zones	Maintenance Factor
Zone	Zones	EENS
Zone	Zones	EDNS
Zone	Zones	LOLE
Zone	Zones	LOLP
Zone	Zones	Multi-area LOLE
Zone	Zones	Multi-area LOLP
Zone	Zones	Planning Peak Load
Zone	Zones	Generation Capacity Built
Zone	Zones	Generation Capacity Retired
Zone	Zones	Import Capacity Built
Zone	Zones	Import Capacity Retired
Zone	Zones	Export Capacity Built
Zone	Zones	Export Capacity Retired
Zone	Zones	Capacity Shortage
Zone	Zones	Capacity Excess
Zone	Zones	Capacity Shadow Price
Zone	Zones	LRMC
Zone	Zones	Capacity Payments
Zone	Zones	Capacity Price
Zone	Zones	Capacity Shortage Cost
Zone	Zones	Capacity Excess Cost

Zone	Zones	Total Generator Revenue
Zone	Zones	Generator Build Cost
Zone	Zones	Generator Retirement Cost
Zone	Zones	Transmission Build Cost
Zone	Zones	Transmission Retirement Cost
Zone	Zones	Annualized Build Cost
Zone	Zones	Total Cost
Zone	Zones	Levelized Cost
Zone	Zones	x
Zone	Zones	y
Zone	Zones	z
Emission	Emissions	Production
Emission	Emissions	Gross Production
Emission	Emissions	Removal
Emission	Emissions	Removal Cost
Emission	Emissions	Abatement
Emission	Emissions	Abatement Cost
Emission	Emissions	Generation
Emission	Emissions	Intensity
Emission	Emissions	Cost
Zone	Zones	Available Transfer Capability
Zone	Zones	Available Transfer Capability Back
Zone	Zones	Balancing Area Interchange Exports
Zone	Zones	Balancing Area Interchange Imports
Zone	Zones	Net Balancing Area Interchange
Zone	Zones	Balancing Area Interchange Exports Revenue
Zone	Zones	Balancing Area Interchange Imports Cost
Zone	Zones	Net Balancing Area Interchange Revenue
Zone	Zones	Wheeling Cost
Node	Nodes	Load
Node	Nodes	Native Load
Node	Nodes	Fixed Load
Node	Nodes	Fixed Generation
Node	Nodes	Generation
Node	Nodes	Generator Auxiliary Use
Node	Nodes	Generation Sent Out
Node	Nodes	Pump Generation
Node	Nodes	Pump Load
Node	Nodes	Battery Generation
Node	Nodes	Battery Load
Node	Nodes	Purchaser Load
Node	Nodes	Net Contract Load
Node	Nodes	Charging Station Load
Node	Nodes	Charging Station Deferred Load
Node	Nodes	Charging Station Hours Deferred
Node	Nodes	Charging Station Generation
Node	Nodes	Net Market Sales
Node	Nodes	Demand Curtailed
Node	Nodes	DSP Bid Quantity
Node	Nodes	DSP Bid Price

Node	Nodes	DSP Bid Cleared
Node	Nodes	Cleared DSP Bid Price
Node	Nodes	Cleared DSP Bid Cost
Node	Nodes	Customer Load
Node	Nodes	Imports
Node	Nodes	Exports
Node	Nodes	Net DC Export
Node	Nodes	Net Injection
Node	Nodes	Unserved Energy
Node	Nodes	Dump Energy
Node	Nodes	Losses
Node	Nodes	Flow
Node	Nodes	Price
Node	Nodes	Energy Charge
Node	Nodes	Congestion Charge
Node	Nodes	Marginal Loss Charge
Node	Nodes	Marginal Loss Factor
Node	Nodes	Voltage
Node	Nodes	Phase Angle
Node	Nodes	Injection Mismatch
Node	Nodes	Peak Load
Node	Nodes	Generation Capacity
Node	Nodes	Firm Generation Capacity
Node	Nodes	Curtable Load
Node	Nodes	Contract Generation Capacity
Node	Nodes	Contract Load Obligation
Node	Nodes	Import Capacity
Node	Nodes	Export Capacity
Node	Nodes	Net Capacity Interchange
Node	Nodes	Min Capacity Reserves
Node	Nodes	Capacity Reserves
Node	Nodes	Min Load
Node	Nodes	Discrete Maintenance
Node	Nodes	Distributed Maintenance
Node	Nodes	Maintenance Factor
Node	Nodes	EENS
Node	Nodes	EDNS
Node	Nodes	LOLE
Node	Nodes	LOLP
Node	Nodes	x
Node	Nodes	y
Node	Nodes	z
Market	Markets	Sales
Market	Markets	Purchases
Market	Markets	Net Sales
Market	Markets	Net Purchases
Market	Markets	Revenue
Market	Markets	Cost
Market	Markets	Net Revenue
Market	Markets	Net Cost

Load	Loads	x
Load	Loads	y
Load	Loads	z
Line	Lines	Flow
Line	Lines	Flow Back
Line	Lines	Net Flow
Line	Lines	Export Limit
Line	Lines	Import Limit
Line	Lines	Loading
Line	Lines	Loading Back
Line	Lines	Hours Congested
Line	Lines	Hours Congested Back
Line	Lines	Shadow Price
Line	Lines	Shadow Price Back
Line	Lines	Hours Violated
Line	Lines	Hours Violated Back
Line	Lines	Violation
Line	Lines	Violation Back
Line	Lines	Violation Cost
Line	Lines	Violation Cost Back
Line	Lines	Ramp
Line	Lines	Ramp Cost
Line	Lines	Max Flow
Line	Lines	Min Flow
Line	Lines	Fixed Flow
Line	Lines	Fixed Flow Violation
Line	Lines	Hours of Fixed Flow Violation
Line	Lines	Fixed Flow Violation Cost
Line	Lines	Export Cost
Line	Lines	Import Cost
Line	Lines	Export Revenue
Line	Lines	Import Revenue
Line	Lines	Rental
Line	Lines	Rental Back
Line	Lines	Wheeling Cost
Line	Lines	Wheeling Cost Back
Line	Lines	Loss
Line	Lines	Loss Back
Line	Lines	Marginal Loss
Line	Lines	Marginal Loss Factor
Line	Lines	Voltage
Line	Lines	Offer Base
Line	Lines	Offer Quantity
Line	Lines	Offer Price
Line	Lines	Offer Quantity Back
Line	Lines	Offer Price Back
Line	Lines	Offer Cleared
Line	Lines	Offer Cleared Back
Line	Lines	Cleared Offer Price
Line	Lines	Cleared Offer Cost

Line	Lines	FO&M Cost
Line	Lines	Equity Cost
Line	Lines	Debt Cost
Line	Lines	Net Profit
Line	Lines	Units
Line	Lines	Firm Capacity
Line	Lines	Capacity Reserves
Line	Lines	Units Out
Line	Lines	Maintenance
Line	Lines	Maintenance Back
Line	Lines	Discrete Maintenance
Line	Lines	Discrete Maintenance Back
Line	Lines	Distributed Maintenance
Line	Lines	Distributed Maintenance Back
Line	Lines	Maintenance Rate
Line	Lines	Forced Outage
Line	Lines	Forced Outage Rate
Line	Lines	Service Factor
Line	Lines	Available Transfer Capability
Line	Lines	Available Transfer Capability Back
Line	Lines	Units Built
Line	Lines	Units Retired
Line	Lines	Export Capacity Built
Line	Lines	Import Capacity Built
Line	Lines	Export Capacity Retired
Line	Lines	Import Capacity Retired
Line	Lines	Build Cost
Line	Lines	Retirement Cost
Line	Lines	x
Line	Lines	y
Line	Lines	z
Transformer	Transformers	Flow
Transformer	Transformers	Flow Back
Transformer	Transformers	Export Limit
Transformer	Transformers	Import Limit
Transformer	Transformers	Loading
Transformer	Transformers	Loading Back
Transformer	Transformers	Loss
Transformer	Transformers	Loss Back
Transformer	Transformers	Voltage
Transformer	Transformers	Hours Congested
Transformer	Transformers	Shadow Price
Transformer	Transformers	Hours Violated
Transformer	Transformers	Hours Violated Back
Transformer	Transformers	Violation
Transformer	Transformers	Violation Back
Transformer	Transformers	Violation Cost
Transformer	Transformers	Violation Cost Back
Transformer	Transformers	Max Flow
Transformer	Transformers	Min Flow

Transformer	Transformers	Export Cost
Transformer	Transformers	Import Cost
Transformer	Transformers	Export Revenue
Transformer	Transformers	Import Revenue
Transformer	Transformers	Rental
Transformer	Transformers	Rental Back
Transformer	Transformers	Maintenance
Transformer	Transformers	Maintenance Back
Transformer	Transformers	Discrete Maintenance
Transformer	Transformers	Discrete Maintenance Back
Transformer	Transformers	Distributed Maintenance
Transformer	Transformers	Distributed Maintenance Back
Transformer	Transformers	Maintenance Rate
Transformer	Transformers	Forced Outage
Transformer	Transformers	Forced Outage Rate
Transformer	Transformers	Service Factor
Transformer	Transformers	Available Transfer Capability
Transformer	Transformers	Available Transfer Capability Back
Transformer	Transformers	x
Transformer	Transformers	y
Transformer	Transformers	z
Flow Control	Flow Controls	Angle
Flow Control	Flow Controls	Min Angle
Flow Control	Flow Controls	Max Angle
Flow Control	Flow Controls	Flow
Flow Control	Flow Controls	Flow Back
Flow Control	Flow Controls	Impedance
Flow Control	Flow Controls	Hours Binding
Flow Control	Flow Controls	Shadow Price
Flow Control	Flow Controls	Rental
Flow Control	Flow Controls	Penalty
Flow Control	Flow Controls	Units Built
Flow Control	Flow Controls	Build Cost
Flow Control	Flow Controls	x
Flow Control	Flow Controls	y
Flow Control	Flow Controls	z
Interface	Interfaces	Flow
Interface	Interfaces	Flow Back
Interface	Interfaces	Net Flow
Interface	Interfaces	Export Limit
Interface	Interfaces	Import Limit
Interface	Interfaces	Loading
Interface	Interfaces	Loading Back
Interface	Interfaces	Hours Congested
Interface	Interfaces	Hours Congested Back
Interface	Interfaces	Shadow Price
Interface	Interfaces	Shadow Price Back
Interface	Interfaces	Rental
Interface	Interfaces	Violation
Interface	Interfaces	Violation Back

Interface	Interfaces	Ramp
Interface	Interfaces	Ramp Cost
Interface	Interfaces	Max Flow
Interface	Interfaces	Min Flow
Interface	Interfaces	Fixed Flow
Interface	Interfaces	Fixed Flow Violation
Interface	Interfaces	Hours of Fixed Flow Violation
Interface	Interfaces	Fixed Flow Violation Cost
Interface	Interfaces	Offer Base
Interface	Interfaces	Offer Quantity
Interface	Interfaces	Offer Price
Interface	Interfaces	Offer Quantity Back
Interface	Interfaces	Offer Price Back
Interface	Interfaces	Offer Cleared
Interface	Interfaces	Offer Cleared Back
Interface	Interfaces	Cleared Offer Price
Interface	Interfaces	Cleared Offer Cost
Interface	Interfaces	Available Transfer Capability
Interface	Interfaces	Available Transfer Capability Back
Interface	Interfaces	Firm Capacity
Interface	Interfaces	Capacity Reserves
Interface	Interfaces	Capacity Built
Interface	Interfaces	Expansion Cost
Interface	Interfaces	x
Interface	Interfaces	y
Interface	Interfaces	z
Contingency	Contingencies	Hours Binding
Contingency	Contingencies	Shadow Price
Contingency	Contingencies	x
Contingency	Contingencies	y
Contingency	Contingencies	z
Line	Monitored Lines	Post-Contingency Flow
Transformer	Monitored Transforme	Post-Contingency Flow
Hub	Hubs	Price
Hub	Hubs	Customer Load
Hub	Hubs	Net Generation
Hub	Hubs	Cost to Load
Hub	Hubs	Generator Pool Revenue
Hub	Hubs	Load-weighted Price
Hub	Hubs	Generation-weighted Price
Hub	Hubs	Marginal Loss Charge
Hub	Hubs	Energy Charge
Hub	Hubs	Congestion Charge
Hub	Hubs	x
Hub	Hubs	y
Hub	Hubs	z
Transmission Rig	Transmission Rights	Quantity
Transmission Rig	Transmission Rights	Settlement
Transmission Rig	Transmission Rights	Net Profit
Transmission Rig	Transmission Rights	Source Price

Transmission Rig	Transmission Rights	Source Energy Charge
Transmission Rig	Transmission Rights	Source Congestion Charge
Transmission Rig	Transmission Rights	Source Loss Charge
Transmission Rig	Transmission Rights	Sink Price
Transmission Rig	Transmission Rights	Sink Energy Charge
Transmission Rig	Transmission Rights	Sink Congestion Charge
Transmission Rig	Transmission Rights	Sink Loss Charge
Transmission Rig	Transmission Rights	Price Delta
Heat Plant	Heat Plants	Heat Production
Heat Plant	Heat Plants	Heat Production Cost
Heat Plant	Heat Plants	VO&M Cost
Heat Plant	Heat Plants	Start & Shutdown Cost
Heat Plant	Heat Plants	Start Fuel Cost
Heat Plant	Heat Plants	Fuel Offtake
Heat Plant	Heat Plants	Start Fuel Offtake
Heat Plant	Heat Plants	Electrical Usage
Heat Plant	Heat Plants	Units Producing Heat
Heat Plant	Heat Plants	Ramp
Heat Plant	Heat Plants	Ramp Up
Heat Plant	Heat Plants	Ramp Down
Heat Plant	Heat Plants	Operating Hours
Heat Plant	Heat Plants	Efficiency
Heat Plant	Heat Plants	Marginal Heat Rate
Heat Plant	Heat Plants	Average Heat Rate
Heat Plant	Heat Plants	SRMC
Heat Plant	Heat Plants	FO&M Cost
Heat Plant	Heat Plants	Installed Capacity
Heat Plant	Heat Plants	Units Built
Heat Plant	Heat Plants	Build Cost
Heat Plant	Heat Plants	Units Retired
Heat Plant	Heat Plants	Retirement Cost
Heat Plant	Heat Plants	x
Heat Plant	Heat Plants	y
Heat Plant	Heat Plants	z
Fuel	Fuels	Offtake
Fuel	Fuels	Offtake Ratio
Fuel	Fuels	Price
Fuel	Fuels	Cost
Fuel	Fuels	Marginal Heat Rate
Fuel	Fuels	SRMC
Fuel	Fuels	Hours in Use
Fuel	Start Fuels	Offtake
Fuel	Start Fuels	Price
Fuel	Start Fuels	Cost
Heat Node	Heat Nodes	Heat Withdrawal
Heat Node	Heat Nodes	Heat Injection
Heat Node	Heat Nodes	x
Heat Node	Heat Nodes	y
Heat Node	Heat Nodes	z
Market	Markets	Sales

Market	Markets	Purchases
Market	Markets	Net Sales
Market	Markets	Net Purchases
Market	Markets	Revenue
Market	Markets	Cost
Market	Markets	Net Revenue
Market	Markets	Net Cost
Heat Storage	Heat Storages	End Heat
Heat Storage	Heat Storages	Initial Heat
Heat Storage	Heat Storages	Heat Injection
Heat Storage	Heat Storages	Heat Injection Cost
Heat Storage	Heat Storages	Heat Loss
Heat Storage	Heat Storages	Heat Shadow Price
Heat Storage	Heat Storages	Heat Withdrawal
Heat Storage	Heat Storages	Heat Withdrawal Cost
Heat Storage	Heat Storages	Net Heat Withdrawal
Heat Storage	Heat Storages	Max Heat
Heat Storage	Heat Storages	Min Heat
Gas Field	Gas Fields	Initial Volume
Gas Field	Gas Fields	End Volume
Gas Field	Gas Fields	Production
Gas Field	Gas Fields	Production Cost
Gas Field	Gas Fields	Price
Gas Field	Gas Fields	Dispatch Price
Gas Field	Gas Fields	FO&M Cost
Gas Field	Gas Fields	Fixed Costs
Gas Field	Gas Fields	Shadow Price
Gas Field	Gas Fields	Units Out
Gas Field	Gas Fields	Maintenance
Gas Field	Gas Fields	Maintenance Hours
Gas Field	Gas Fields	Forced Outage
Gas Field	Gas Fields	Forced Outage Hours
Gas Field	Gas Fields	Service Factor
Gas Field	Gas Fields	Units
Gas Field	Gas Fields	Units Built
Gas Field	Gas Fields	Build Cost
Gas Field	Gas Fields	x
Gas Field	Gas Fields	y
Gas Field	Gas Fields	z
Company	Companies	Production
Company	Companies	Production Cost
Company	Companies	FO&M Cost
Company	Companies	Fixed Costs
Company	Companies	Shadow Price
Company	Companies	Net Revenue
Company	Companies	Net Profit
Gas Plant	Gas Plants	Raw Gas
Gas Plant	Gas Plants	Production
Gas Plant	Gas Plants	Production Cost
Gas Plant	Gas Plants	Dispatch Price

Gas Plant	Gas Plants	Consumption
Gas Plant	Gas Plants	Energy Consumption
Gas Plant	Gas Plants	VO&M Cost
Gas Plant	Gas Plants	FO&M Cost
Gas Plant	Gas Plants	Fixed Costs
Gas Plant	Gas Plants	SRMC
Gas Plant	Gas Plants	Average Heat Value
Gas Plant	Gas Plants	Capacity Factor
Gas Plant	Gas Plants	Units Out
Gas Plant	Gas Plants	Maintenance
Gas Plant	Gas Plants	Maintenance Hours
Gas Plant	Gas Plants	Forced Outage
Gas Plant	Gas Plants	Forced Outage Hours
Gas Plant	Gas Plants	Service Factor
Gas Plant	Gas Plants	Installed Capacity
Gas Plant	Gas Plants	Rated Capacity
Gas Plant	Gas Plants	Units
Gas Plant	Gas Plants	Units Built
Gas Plant	Gas Plants	Capacity Price
Gas Plant	Gas Plants	Capacity Revenue
Gas Plant	Gas Plants	Build Cost
Gas Plant	Gas Plants	Units Retired
Gas Plant	Gas Plants	Retirement Cost
Gas Plant	Gas Plants	x
Gas Plant	Gas Plants	y
Gas Plant	Gas Plants	z
Power2X	Source Power2X	Delivered Energy
Power2X	Source Power2X	Delivered Quantity
Gas Field	Source Gas Fields	Delivered Energy
Gas Field	Source Gas Fields	Delivered Quantity
Gas Plant	Source Gas Plants	Delivered Energy
Gas Plant	Source Gas Plants	Delivered Quantity
Gas Storage	Source Gas Storages	Delivered Energy
Gas Storage	Source Gas Storages	Delivered Quantity
Gas Contract	Source Gas Contracts	Delivered Energy
Gas Contract	Source Gas Contracts	Delivered Quantity
Gas Pipeline	Gas Pipelines	Flow In
Gas Pipeline	Gas Pipelines	Flow Out
Gas Pipeline	Gas Pipelines	Max Daily Flow
Gas Pipeline	Gas Pipelines	Max Observed Flow
Gas Pipeline	Gas Pipelines	Hours Congested
Gas Pipeline	Gas Pipelines	Hours Congested Back
Gas Pipeline	Gas Pipelines	Max Volume
Gas Pipeline	Gas Pipelines	Min Volume
Gas Pipeline	Gas Pipelines	Initial Volume
Gas Pipeline	Gas Pipelines	End Volume
Gas Pipeline	Gas Pipelines	Volume Imbalance
Gas Pipeline	Gas Pipelines	Imbalance Cost
Gas Pipeline	Gas Pipelines	Production Cost
Gas Pipeline	Gas Pipelines	FO&M Cost

Gas Pipeline	Gas Pipelines	Fixed Costs
Gas Pipeline	Gas Pipelines	Reservation Cost
Gas Pipeline	Gas Pipelines	Loss
Gas Pipeline	Gas Pipelines	Total Cost
Gas Pipeline	Gas Pipelines	Total Variable Costs
Gas Pipeline	Gas Pipelines	Pressure
Gas Pipeline	Gas Pipelines	Units Out
Gas Pipeline	Gas Pipelines	Flow Capacity Outage
Gas Pipeline	Gas Pipelines	Maintenance
Gas Pipeline	Gas Pipelines	Hours of Maintenance
Gas Pipeline	Gas Pipelines	Forced Outage
Gas Pipeline	Gas Pipelines	Hours of Forced Outage
Gas Pipeline	Gas Pipelines	Service Factor
Gas Pipeline	Gas Pipelines	Max Daily Flow Built
Gas Pipeline	Gas Pipelines	Build Cost
Gas Pipeline	Gas Pipelines	Max Daily Flow Retired
Gas Pipeline	Gas Pipelines	Retirement Cost
Gas Pipeline	Gas Pipelines	x
Gas Pipeline	Gas Pipelines	y
Gas Pipeline	Gas Pipelines	z
Gas Node	Gas Node From	Participation Factor
Gas Node	Gas Node To	Participation Factor
Gas Node	Gas Nodes	Production
Gas Node	Gas Nodes	Demand
Gas Node	Gas Nodes	Flow
Gas Node	Gas Nodes	Imports
Gas Node	Gas Nodes	Exports
Gas Node	Gas Nodes	Net Interchange
Gas Node	Gas Nodes	Net Market Sales
Gas Node	Gas Nodes	Initial Volume
Gas Node	Gas Nodes	End Volume
Gas Node	Gas Nodes	Flow Cost
Gas Node	Gas Nodes	Hours of Shortage
Gas Node	Gas Nodes	Shortage
Gas Node	Gas Nodes	Shortage Cost
Gas Node	Gas Nodes	Hours of Excess
Gas Node	Gas Nodes	Excess
Gas Node	Gas Nodes	Excess Cost
Gas Node	Gas Nodes	Shadow Price
Gas Node	Gas Nodes	Price
Gas Node	Gas Nodes	Delivered Price
Gas Node	Gas Nodes	Delivered Cost
Gas Node	Gas Nodes	FO&M Cost
Gas Node	Gas Nodes	Fixed Costs
Gas Node	Gas Nodes	Emission Cost
Gas Node	Gas Nodes	Maintenance Factor
Gas Node	Gas Nodes	Units
Gas Node	Gas Nodes	Units Built
Gas Node	Gas Nodes	Build Cost
Gas Node	Gas Nodes	Units Retired

Gas Node	Gas Nodes	Retirement Cost
Gas Node	Gas Nodes	x
Gas Node	Gas Nodes	y
Gas Node	Gas Nodes	z
Market	Markets	Sales
Market	Markets	Purchases
Market	Markets	Net Sales
Market	Markets	Net Purchases
Market	Markets	Revenue
Market	Markets	Cost
Market	Markets	Net Revenue
Market	Markets	Net Cost
Gas Storage	Gas Storages	Max Volume
Gas Storage	Gas Storages	Min Volume
Gas Storage	Gas Storages	Initial Volume
Gas Storage	Gas Storages	End Volume
Gas Storage	Gas Storages	Working Volume
Gas Storage	Gas Storages	Utilization
Gas Storage	Gas Storages	Working Utilization
Gas Storage	Gas Storages	Average Utilization
Gas Storage	Gas Storages	Average Working Utilization
Gas Storage	Gas Storages	Withdrawal
Gas Storage	Gas Storages	Max Withdrawal Available
Gas Storage	Gas Storages	Injection
Gas Storage	Gas Storages	Max Injection Available
Gas Storage	Gas Storages	Net Utilization
Gas Storage	Gas Storages	Withdrawal Cost
Gas Storage	Gas Storages	Injection Cost
Gas Storage	Gas Storages	Production Cost
Gas Storage	Gas Storages	Carrying Cost
Gas Storage	Gas Storages	Shadow Price
Gas Storage	Gas Storages	Dispatch Price
Gas Storage	Gas Storages	FO&M Cost
Gas Storage	Gas Storages	Fixed Costs
Gas Storage	Gas Storages	Reservation Cost
Gas Storage	Gas Storages	Injection Fuel
Gas Storage	Gas Storages	Withdraw Fuel
Gas Storage	Gas Storages	Net Injection
Gas Storage	Gas Storages	Net Injection Cost
Gas Storage	Gas Storages	Net Withdrawal
Gas Storage	Gas Storages	Net Withdrawal Cost
Gas Storage	Gas Storages	Loss
Gas Storage	Gas Storages	Total Variable Costs
Gas Storage	Gas Storages	Initial Inventory Value
Gas Storage	Gas Storages	Ending Inventory Value
Gas Storage	Gas Storages	Initial Energy
Gas Storage	Gas Storages	Ending Energy
Gas Storage	Gas Storages	Initial Carbon Quantity
Gas Storage	Gas Storages	Ending Carbon Quantity
Gas Storage	Gas Storages	Average Heat Value

Gas Storage	Gas Storages	Units Out
Gas Storage	Gas Storages	Maintenance
Gas Storage	Gas Storages	Maintenance Hours
Gas Storage	Gas Storages	Forced Outage
Gas Storage	Gas Storages	Forced Outage Hours
Gas Storage	Gas Storages	Service Factor
Gas Storage	Gas Storages	Max Volume Built
Gas Storage	Gas Storages	Build Cost
Gas Storage	Gas Storages	Max Volume Retired
Gas Storage	Gas Storages	Retirement Cost
Gas Storage	Gas Storages	x
Gas Storage	Gas Storages	y
Gas Storage	Gas Storages	z
Power2X	Source Power2X	Delivered Energy
Power2X	Source Power2X	Delivered Quantity
Gas Field	Source Gas Fields	Delivered Energy
Gas Field	Source Gas Fields	Delivered Quantity
Gas Plant	Source Gas Plants	Delivered Energy
Gas Plant	Source Gas Plants	Delivered Quantity
Gas Storage	Source Gas Storages	Delivered Energy
Gas Storage	Source Gas Storages	Delivered Quantity
Gas Contract	Source Gas Contracts	Delivered Energy
Gas Contract	Source Gas Contracts	Delivered Quantity
Gas Demand	Gas Demands	Demand
Gas Demand	Gas Demands	Hours of Shortage
Gas Demand	Gas Demands	Shortage
Gas Demand	Gas Demands	Shortage Cost
Gas Demand	Gas Demands	Hours of Excess
Gas Demand	Gas Demands	Excess
Gas Demand	Gas Demands	Excess Cost
Gas Demand	Gas Demands	Net Demand
Gas Demand	Gas Demands	Cost
Gas Demand	Gas Demands	Price Paid
Gas Demand	Gas Demands	Bid Quantity
Gas Demand	Gas Demands	Bid Price
Gas Demand	Gas Demands	Bid Cleared
Gas Demand	Gas Demands	Cleared Bid Price
Gas Demand	Gas Demands	Cleared Bid Value
Gas Demand	Gas Demands	Baseline Demand
Gas Demand	Gas Demands	Total DSM Reduction
Gas Demand	Gas Demands	Served Demand
Gas Demand	Gas Demands	Peak Served Demand
Gas Demand	Gas Demands	Peak Unserved Demand
Gas Demand	Gas Demands	Unaccounted Demand
Gas Demand	Gas Demands	Gross Emissions
Gas Demand	Gas Demands	Average Heat Value
Gas Demand	Gas Demands	x
Gas Demand	Gas Demands	y
Gas Demand	Gas Demands	z
Power2X	Source Power2X	Delivered Energy

Power2X	Source Power2X	Delivered Quantity
Gas Field	Source Gas Fields	Delivered Energy
Gas Field	Source Gas Fields	Delivered Quantity
Gas Plant	Source Gas Plants	Delivered Energy
Gas Plant	Source Gas Plants	Delivered Quantity
Gas Storage	Source Gas Storages	Delivered Energy
Gas Storage	Source Gas Storages	Delivered Quantity
Gas Contract	Source Gas Contracts	Delivered Energy
Gas Contract	Source Gas Contracts	Delivered Quantity
Company	Companies	Demand
Company	Companies	Shortage
Company	Companies	Shortage Cost
Company	Companies	Excess
Company	Companies	Excess Cost
Company	Companies	Net Demand
Company	Companies	Cost
Gas DSM Progra	Gas DSM Programs	Reduction Amount
Gas DSM Progra	Gas DSM Programs	Variable Cost
Gas DSM Progra	Gas DSM Programs	FO&M Cost
Gas DSM Progra	Gas DSM Programs	Fixed Costs
Gas DSM Progra	Gas DSM Programs	x
Gas DSM Progra	Gas DSM Programs	y
Gas DSM Progra	Gas DSM Programs	z
Gas Basin	Gas Basins	Initial Volume
Gas Basin	Gas Basins	End Volume
Gas Basin	Gas Basins	Production
Gas Basin	Gas Basins	Production Cost
Gas Basin	Gas Basins	FO&M Cost
Gas Basin	Gas Basins	Fixed Costs
Gas Basin	Gas Basins	Shadow Price
Gas Basin	Gas Basins	Units
Gas Basin	Gas Basins	Units Built
Gas Basin	Gas Basins	Build Cost
Gas Basin	Gas Basins	x
Gas Basin	Gas Basins	y
Gas Basin	Gas Basins	z
Gas Zone	Gas Zones	Production
Gas Zone	Gas Zones	Peak Served Zone Demand
Gas Zone	Gas Zones	Demand
Gas Zone	Gas Zones	Imports
Gas Zone	Gas Zones	Exports
Gas Zone	Gas Zones	Net Interchange
Gas Zone	Gas Zones	Initial Volume
Gas Zone	Gas Zones	End Volume
Gas Zone	Gas Zones	Hours of Shortage
Gas Zone	Gas Zones	Shortage
Gas Zone	Gas Zones	Shortage Cost
Gas Zone	Gas Zones	Hours of Excess
Gas Zone	Gas Zones	Excess
Gas Zone	Gas Zones	Excess Cost

Gas Zone	Gas Zones	Net Demand
Gas Zone	Gas Zones	Cost
Gas Zone	Gas Zones	Price Paid
Gas Zone	Gas Zones	Weighted Average Cost
Gas Zone	Gas Zones	Total Fixed Costs
Gas Zone	Gas Zones	Total Variable Costs
Gas Zone	Gas Zones	Grand Total Cost
Gas Zone	Gas Zones	Total System Cost
Gas Zone	Gas Zones	Net Total Cost
Gas Zone	Gas Zones	Net Injection Cost
Gas Zone	Gas Zones	Net Withdrawal Cost
Gas Zone	Gas Zones	Costs of Gas Delivered
Gas Zone	Gas Zones	Net Variable Cost
Gas Zone	Gas Zones	Forward Zone Flow
Gas Zone	Gas Zones	Back Zone Flow
Gas Zone	Gas Zones	Net Zone Flow
Gas Zone	Gas Zones	Gas Supply Total Commodity Costs
Gas Zone	Gas Zones	Gas Storage Total Variable Costs
Gas Zone	Gas Zones	Gas Pipeline Total Variable Costs
Gas Zone	Gas Zones	Gas Storage Total Reservation Costs
Gas Zone	Gas Zones	Gas Pipeline Total Reservation Costs
Gas Zone	Gas Zones	Gas Contract Total Reservation Costs
Gas Zone	Gas Zones	Emission Cost
Gas Zone	Gas Zones	x
Gas Zone	Gas Zones	y
Gas Zone	Gas Zones	z
Gas Contract	Gas Contracts	Take Quantity
Gas Contract	Gas Contracts	Supply Excess
Gas Contract	Gas Contracts	Cost
Gas Contract	Gas Contracts	Price
Gas Contract	Gas Contracts	Dispatch Price
Gas Contract	Gas Contracts	Shadow Price
Gas Contract	Gas Contracts	Total Cost
Gas Contract	Gas Contracts	Commodity Cost
Gas Contract	Gas Contracts	Differential Cost
Gas Contract	Gas Contracts	Take-or-Pay Violation
Gas Contract	Gas Contracts	Take-or-Pay Violation Cost
Gas Contract	Gas Contracts	Reservation Cost
Gas Contract	Gas Contracts	Min Daily Take
Gas Contract	Gas Contracts	Max Daily Take
Gas Contract	Gas Contracts	x
Gas Contract	Gas Contracts	y
Gas Contract	Gas Contracts	z
Gas Node	Gas Nodes	Take Quantity
Gas Node	Gas Nodes	Cost
Gas Node	Gas Nodes	Commodity Cost
Gas Node	Gas Nodes	Differential Cost
Gas Node	Gas Nodes	Price
Company	Companies	Gas Supply
Gas Transport	Gas Transports	Imports

Gas Transport	Gas Transports	Exports
Gas Transport	Gas Transports	Losses
Gas Transport	Gas Transports	Contract Imports
Gas Transport	Gas Transports	Spot Imports
Gas Transport	Gas Transports	Shipping Cost
Gas Transport	Gas Transports	Maintenance
Gas Transport	Gas Transports	x
Gas Transport	Gas Transports	y
Gas Transport	Gas Transports	z
Gas Capacity Rel	Gas Capacity Release	O Capacity Released
Gas Capacity Rel	Gas Capacity Release	O x
Gas Capacity Rel	Gas Capacity Release	O y
Gas Capacity Rel	Gas Capacity Release	O z
Water Plant	Water Plants	Raw Water
Water Plant	Water Plants	Production
Water Plant	Water Plants	Production Cost
Water Plant	Water Plants	VO&M Cost
Water Plant	Water Plants	FO&M Cost
Water Plant	Water Plants	Fixed Costs
Water Plant	Water Plants	SRMC
Water Plant	Water Plants	Energy Consumption
Water Plant	Water Plants	Cost of Energy Consumption
Water Plant	Water Plants	Electric Load
Water Plant	Water Plants	Cost of Electric Load
Water Plant	Water Plants	Heat Load
Water Plant	Water Plants	Cost of Heat Load
Water Plant	Water Plants	Auxiliary Use
Water Plant	Water Plants	Units Operating
Water Plant	Water Plants	Capacity Factor
Water Plant	Water Plants	Capacity Curtailed
Water Plant	Water Plants	Curtailement Factor
Water Plant	Water Plants	Water Availability
Water Plant	Water Plants	Incremental Fuel Offtake
Water Plant	Water Plants	Units Out
Water Plant	Water Plants	Maintenance
Water Plant	Water Plants	Maintenance Hours
Water Plant	Water Plants	Forced Outage
Water Plant	Water Plants	Forced Outage Hours
Water Plant	Water Plants	Service Factor
Water Plant	Water Plants	Installed Capacity
Water Plant	Water Plants	Rated Capacity
Water Plant	Water Plants	Units
Water Plant	Water Plants	Units Built
Water Plant	Water Plants	Capacity Price
Water Plant	Water Plants	Capacity Revenue
Water Plant	Water Plants	Build Cost
Water Plant	Water Plants	x
Water Plant	Water Plants	y
Water Plant	Water Plants	z
Water Pipeline	Water Pipelines	Flow

Water Pipeline	Water Pipelines	Hours Congested
Water Pipeline	Water Pipelines	Hours Congested Back
Water Pipeline	Water Pipelines	Production Cost
Water Pipeline	Water Pipelines	FO&M Cost
Water Pipeline	Water Pipelines	Fixed Costs
Water Pipeline	Water Pipelines	Energy Consumption
Water Pipeline	Water Pipelines	Units Out
Water Pipeline	Water Pipelines	Flow Capacity Outage
Water Pipeline	Water Pipelines	Maintenance
Water Pipeline	Water Pipelines	Maintenance Hours
Water Pipeline	Water Pipelines	Forced Outage
Water Pipeline	Water Pipelines	Forced Outage Hours
Water Pipeline	Water Pipelines	Service Factor
Water Pipeline	Water Pipelines	Max Capacity Built
Water Pipeline	Water Pipelines	Build Cost
Water Pipeline	Water Pipelines	Max Capacity Retired
Water Pipeline	Water Pipelines	Retirement Cost
Water Pipeline	Water Pipelines	x
Water Pipeline	Water Pipelines	y
Water Pipeline	Water Pipelines	z
Water Node	Water Nodes	Production
Water Node	Water Nodes	Demand
Water Node	Water Nodes	Flow
Water Node	Water Nodes	Imports
Water Node	Water Nodes	Exports
Water Node	Water Nodes	Net Interchange
Water Node	Water Nodes	Initial Volume
Water Node	Water Nodes	End Volume
Water Node	Water Nodes	Flow Cost
Water Node	Water Nodes	Shortage Hours
Water Node	Water Nodes	Shortage
Water Node	Water Nodes	Shortage Cost
Water Node	Water Nodes	Excess Hours
Water Node	Water Nodes	Excess
Water Node	Water Nodes	Excess Cost
Water Node	Water Nodes	Shadow Price
Water Node	Water Nodes	FO&M Cost
Water Node	Water Nodes	Fixed Costs
Water Node	Water Nodes	Energy Consumption
Water Node	Water Nodes	Units
Water Node	Water Nodes	Units Built
Water Node	Water Nodes	Build Cost
Water Node	Water Nodes	Units Retired
Water Node	Water Nodes	Retirement Cost
Water Node	Water Nodes	x
Water Node	Water Nodes	y
Water Node	Water Nodes	z
Water Storage	Water Storages	Max Volume
Water Storage	Water Storages	Min Volume
Water Storage	Water Storages	Initial Volume

Water Storage	Water Storages	End Volume
Water Storage	Water Storages	Working Volume
Water Storage	Water Storages	Utilization
Water Storage	Water Storages	Working Utilization
Water Storage	Water Storages	Average Utilization
Water Storage	Water Storages	Average Working Utilization
Water Storage	Water Storages	Withdrawal
Water Storage	Water Storages	Injection
Water Storage	Water Storages	Net Withdrawal
Water Storage	Water Storages	Shadow Price
Water Storage	Water Storages	FO&M Cost
Water Storage	Water Storages	Fixed Costs
Water Storage	Water Storages	End Level
Water Storage	Water Storages	Units Out
Water Storage	Water Storages	Maintenance
Water Storage	Water Storages	Maintenance Hours
Water Storage	Water Storages	Forced Outage
Water Storage	Water Storages	Forced Outage Hours
Water Storage	Water Storages	Service Factor
Water Storage	Water Storages	Max Volume Built
Water Storage	Water Storages	Build Cost
Water Storage	Water Storages	Max Volume Retired
Water Storage	Water Storages	Retirement Cost
Water Storage	Water Storages	x
Water Storage	Water Storages	y
Water Storage	Water Storages	z
Water Demand	Water Demands	Demand
Water Demand	Water Demands	Shortage Hours
Water Demand	Water Demands	Shortage
Water Demand	Water Demands	Shortage Cost
Water Demand	Water Demands	Excess Hours
Water Demand	Water Demands	Excess
Water Demand	Water Demands	Excess Cost
Water Demand	Water Demands	Net Demand
Water Demand	Water Demands	Cost
Water Demand	Water Demands	Price Paid
Water Demand	Water Demands	Bid Quantity
Water Demand	Water Demands	Bid Price
Water Demand	Water Demands	Bid Cleared
Water Demand	Water Demands	Cleared Bid Price
Water Demand	Water Demands	Cleared Bid Value
Water Demand	Water Demands	x
Water Demand	Water Demands	y
Water Demand	Water Demands	z
Water Zone	Water Zones	Production
Water Zone	Water Zones	Demand
Water Zone	Water Zones	Imports
Water Zone	Water Zones	Exports
Water Zone	Water Zones	Net Interchange
Water Zone	Water Zones	Shortage Hours

Water Zone	Water Zones	Shortage
Water Zone	Water Zones	Shortage Cost
Water Zone	Water Zones	Excess Hours
Water Zone	Water Zones	Excess
Water Zone	Water Zones	Excess Cost
Water Zone	Water Zones	Net Demand
Water Zone	Water Zones	Cost
Water Zone	Water Zones	Price Paid
Water Zone	Water Zones	x
Water Zone	Water Zones	y
Water Zone	Water Zones	z
Water Pump Sta	Water Pump Stations	Head
Water Pump Sta	Water Pump Stations	Flow Rate
Water Pump Sta	Water Pump Stations	Power
Water Pump Sta	Water Pump Stations	Energy
Water Pump Sta	Water Pump Stations	Volume Pumped
Water Pump	Water Pumps	Units Operating
Water Pump	Water Pumps	Power
Water Pump	Water Pumps	Start & Shutdown Cost
Vehicle	Vehicles	Units
Vehicle	Vehicles	Installed Capacity
Vehicle	Vehicles	Distance
Vehicle	Vehicles	Energy Consumption
Vehicle	Vehicles	Efficiency
Vehicle	Vehicles	Range
Vehicle	Vehicles	Energy
Vehicle	Vehicles	SoC
Vehicle	Vehicles	Charging
Vehicle	Vehicles	Discharging
Vehicle	Vehicles	Losses
Vehicle	Vehicles	Hours in Use
Vehicle	Vehicles	Hours Charging
Vehicle	Vehicles	Hours Discharging
Vehicle	Vehicles	Hours Idle
Vehicle	Vehicles	Raise Reserve
Vehicle	Vehicles	Lower Reserve
Vehicle	Vehicles	Regulation Raise Reserve
Vehicle	Vehicles	Regulation Lower Reserve
Vehicle	Vehicles	Replacement Reserve
Vehicle	Vehicles	Charge Price
Vehicle	Vehicles	Discharge Price
Vehicle	Vehicles	Charge Cost
Vehicle	Vehicles	Discharge Revenue
Vehicle	Vehicles	UoS Cost
Vehicle	Vehicles	Reserves Revenue
Vehicle	Vehicles	Net Charge Cost
Vehicle	Vehicles	VO&M Cost
Vehicle	Vehicles	FO&M Cost
Vehicle	Vehicles	Units Purchased
Vehicle	Vehicles	Capacity Added

Vehicle	Vehicles	Purchase Cost
Vehicle	Vehicles	Annualized Purchase Cost
Vehicle	Vehicles	Units Disposed
Vehicle	Vehicles	Capacity Removed
Vehicle	Vehicles	Disposal Cost
Vehicle	Vehicles	Total Cost
Vehicle	Vehicles	x
Vehicle	Vehicles	y
Vehicle	Vehicles	z
Commodity	Commodities	Consumption
Commodity	Commodities	Energy Consumption
Charging Station	Charging Stations	Units
Charging Station	Charging Stations	Installed Capacity
Charging Station	Charging Stations	Charging
Charging Station	Charging Stations	Deferred Load
Charging Station	Charging Stations	Hours Deferred
Charging Station	Charging Stations	Discharging
Charging Station	Charging Stations	Losses
Charging Station	Charging Stations	Raise Reserve
Charging Station	Charging Stations	Lower Reserve
Charging Station	Charging Stations	Regulation Raise Reserve
Charging Station	Charging Stations	Regulation Lower Reserve
Charging Station	Charging Stations	Replacement Reserve
Charging Station	Charging Stations	Charge Price
Charging Station	Charging Stations	Discharge Price
Charging Station	Charging Stations	Charge Cost
Charging Station	Charging Stations	Discharge Revenue
Charging Station	Charging Stations	UoS Cost
Charging Station	Charging Stations	Reserves Revenue
Charging Station	Charging Stations	Net Charge Cost
Charging Station	Charging Stations	FO&M Cost
Charging Station	Charging Stations	Units Built
Charging Station	Charging Stations	Capacity Built
Charging Station	Charging Stations	Build Cost
Charging Station	Charging Stations	Annualized Build Cost
Charging Station	Charging Stations	Units Retired
Charging Station	Charging Stations	Capacity Retired
Charging Station	Charging Stations	Retirement Cost
Charging Station	Charging Stations	Total Cost
Charging Station	Charging Stations	x
Charging Station	Charging Stations	y
Charging Station	Charging Stations	z
Fleet	Fleets	Installed Capacity
Fleet	Fleets	Distance
Fleet	Fleets	Charging
Fleet	Fleets	Discharging
Fleet	Fleets	Losses
Fleet	Fleets	Raise Reserve
Fleet	Fleets	Lower Reserve
Fleet	Fleets	Regulation Raise Reserve

Fleet	Fleets	Regulation Lower Reserve
Fleet	Fleets	Replacement Reserve
Fleet	Fleets	Charge Price
Fleet	Fleets	Discharge Price
Fleet	Fleets	Charge Cost
Fleet	Fleets	Discharge Revenue
Fleet	Fleets	UoS Cost
Fleet	Fleets	Reserves Revenue
Fleet	Fleets	Net Charge Cost
Fleet	Fleets	VO&M Cost
Fleet	Fleets	FO&M Cost
Fleet	Fleets	Units Purchased
Fleet	Fleets	Capacity Added
Fleet	Fleets	Purchase Cost
Fleet	Fleets	Annualized Purchase Cost
Fleet	Fleets	Units Disposed
Fleet	Fleets	Capacity Removed
Fleet	Fleets	Disposal Cost
Fleet	Fleets	Total Cost
Fleet	Fleets	x
Fleet	Fleets	y
Fleet	Fleets	z
Company	Companies	Generation
Company	Companies	Fuel Offtake
Company	Companies	Waste Heat
Company	Companies	Start Fuel Offtake
Company	Companies	Dispatchable Capacity
Company	Companies	Undispatched Capacity
Company	Companies	No Cost Capacity
Company	Companies	Capacity Curtailed
Company	Companies	Fixed Load Generation
Company	Companies	Min Load Generation
Company	Companies	Raise Reserve
Company	Companies	Lower Reserve
Company	Companies	Regulation Raise Reserve
Company	Companies	Regulation Lower Reserve
Company	Companies	Replacement Reserve
Company	Companies	Auxiliary Use
Company	Companies	Pump Load
Company	Companies	Load
Company	Companies	Purchaser Load
Company	Companies	Net Generation
Company	Companies	Net Load
Company	Companies	Fuel Price
Company	Companies	Fuel Cost
Company	Companies	Fuel Transport Cost
Company	Companies	Fuel Transition Cost
Company	Companies	Fuel Inventory Cost
Company	Companies	VO&M Cost
Company	Companies	UoS Cost

Company	Companies	Pump Cost
Company	Companies	Reserves VO&M Cost
Company	Companies	Reserves Cost
Company	Companies	Generation Cost
Company	Companies	Generator Start & Shutdown Cost
Company	Companies	Start Fuel Cost
Company	Companies	Emissions Cost
Company	Companies	Abatement Cost
Company	Companies	Total Generation Cost
Company	Companies	Total System Cost
Company	Companies	Fuel Contract Cost
Company	Companies	FO&M Cost
Company	Companies	Equity Cost
Company	Companies	Debt Cost
Company	Companies	Fixed Costs
Company	Companies	Cost to Load
Company	Companies	SRMC
Company	Companies	Price Received
Company	Companies	Price Paid
Company	Companies	Pool Revenue
Company	Companies	Reserves Revenue
Company	Companies	Gas Market Revenue
Company	Companies	Heat Market Revenue
Company	Companies	Fuel Market Revenue
Company	Companies	Transmission Rental
Company	Companies	Net Generation Revenue
Company	Companies	Net Cost to Load
Company	Companies	Net Reserves Revenue
Company	Companies	Net Revenue
Company	Companies	Net Profit
Company	Companies	Generation at RRN
Company	Companies	Contract Volume
Company	Companies	Net Contract Volume
Company	Companies	Contract Settlement
Company	Companies	Net Contract Settlement
Company	Companies	Net Pool Revenue
Company	Companies	Contract Generation
Company	Companies	Contract Load
Company	Companies	Contract Cost
Company	Companies	Contract Revenue
Company	Companies	Net Contract Revenue
Company	Companies	Shadow Generation
Company	Companies	Generator Monopoly Rent
Company	Companies	Strategic Shadow Price
Company	Companies	Constrained On Revenue
Company	Companies	Constrained Off Revenue
Company	Companies	Gas Demand
Company	Companies	Gas Supply
Company	Companies	Gas Imbalance
Company	Companies	Balancing Area Interchange Exports

Company	Companies	Balancing Area Interchange Imports
Company	Companies	Net Balancing Area Interchange
Company	Companies	Balancing Area Interchange Exports Revenue
Company	Companies	Balancing Area Interchange Imports Cost
Company	Companies	Net Balancing Area Interchange Revenue
Company	Companies	Load-weighted Price
Company	Companies	Generation-weighted Price
Company	Companies	Dump Energy Allocation
Company	Companies	Unserved Energy Allocation
Company	Companies	Loss Allocation
Company	Companies	Installed Capacity
Company	Companies	Available Capacity
Company	Companies	Generator Firm Capacity
Company	Companies	Capacity Built
Company	Companies	Capacity Retired
Company	Companies	Net New Capacity
Company	Companies	Capacity Revenue
Company	Companies	Capacity Price
Company	Companies	Build Cost
Company	Companies	Retirement Cost
Company	Companies	Annualized Build Cost
Company	Companies	Total Cost
Company	Companies	Levelized Cost
Company	Companies	Shadow Capacity Built
Company	Companies	x
Company	Companies	y
Company	Companies	z
Fuel	Fuels	Offtake
Fuel	Fuels	Offtake Ratio
Fuel	Fuels	Inventory Cost
Emission	Emissions	Production
Emission	Emissions	Gross Production
Emission	Emissions	Removal
Emission	Emissions	Removal Cost
Emission	Emissions	Abatement
Emission	Emissions	Abatement Cost
Emission	Emissions	Generation
Emission	Emissions	Intensity
Emission	Emissions	Allocation
Emission	Emissions	Cost
Reserve	Reserves	Provision
Reserve	Reserves	Revenue
Region	Regions	Load
Region	Regions	Installed Capacity
Region	Regions	Available Capacity
Region	Regions	Generation
Region	Regions	Marginal Cost
Region	Regions	Price Received
Region	Regions	Pool Revenue
Region	Regions	Generation at RRN

Region	Regions	Contract Volume
Region	Regions	Net Contract Volume
Region	Regions	Contract Shortfall
Region	Regions	Contract Settlement
Region	Regions	Net Contract Settlement
Region	Regions	Shadow Generation
Company	Companies	Balancing Area Interchange Exports
Company	Companies	Balancing Area Interchange Imports
Company	Companies	Net Balancing Area Interchange
Company	Companies	Balancing Area Interchange Exports Revenue
Company	Companies	Balancing Area Interchange Imports Cost
Company	Companies	Net Balancing Area Interchange Revenue
Commodity	Commodities	Consumption
Commodity	Commodities	Production
Commodity	Commodities	Net Consumption
Commodity	Commodities	Energy Consumption
Commodity	Commodities	Energy Production
Commodity	Commodities	Net Energy Consumption
Commodity	Commodities	Electric Energy Consumption
Commodity	Commodities	Electric Energy Production
Commodity	Commodities	Net Electric Energy Consumption
Commodity	Commodities	Price
Commodity	Commodities	Shadow Price
Commodity	Commodities	Cost
Commodity	Commodities	Revenue
Commodity	Commodities	Net Cost
Commodity	Commodities	Fixed Costs
Commodity	Commodities	Max Inventory
Commodity	Commodities	Min Inventory
Commodity	Commodities	Opening Inventory
Commodity	Commodities	Closing Inventory
Commodity	Commodities	Inventory Change
Commodity	Commodities	Working Inventory
Commodity	Commodities	Utilization
Commodity	Commodities	Working Utilization
Commodity	Commodities	Average Utilization
Commodity	Commodities	Average Working Utilization
Commodity	Commodities	Delivery
Commodity	Commodities	Injection
Commodity	Commodities	Withdrawal
Commodity	Commodities	Net Withdrawal
Commodity	Commodities	Injection Losses
Commodity	Commodities	Withdrawal Losses
Commodity	Commodities	Delivery Cost
Commodity	Commodities	Inventory Cost
Commodity	Commodities	Reservation Cost
Commodity	Commodities	Injection Cost
Commodity	Commodities	Withdrawal Cost
Commodity	Commodities	Units
Commodity	Commodities	FO&M Cost

Commodity	Commodities	Units Built
Commodity	Commodities	Capacity Built
Commodity	Commodities	Build Cost
Commodity	Commodities	Annualized Build Cost
Commodity	Commodities	Total Cost
Commodity	Commodities	Levelized Cost
Commodity	Commodities	Units Retired
Commodity	Commodities	Capacity Retired
Commodity	Commodities	Retirement Cost
Commodity	Commodities	Net New Capacity
Commodity	Commodities	x
Commodity	Commodities	y
Commodity	Commodities	z
Process	Processes	Consumption
Process	Processes	Production
Process	Processes	Capacity
Process	Processes	Surplus
Process	Processes	Capacity Factor
Process	Processes	Surplus Hours
Process	Processes	Surplus Factor
Process	Processes	Efficiency
Process	Processes	Cost
Process	Processes	Marginal Cost
Process	Processes	Average Cost
Process	Processes	Shadow Price
Process	Processes	FO&M Cost
Process	Processes	Build Cost
Process	Processes	Annualized Build Cost
Process	Processes	Total Cost
Process	Processes	x
Process	Processes	y
Process	Processes	z
Commodity	Secondary Inputs	Consumption
Commodity	Secondary Outputs	Production
Facility	Facilities	Consumption
Facility	Facilities	Production
Facility	Facilities	Capacity Factor
Facility	Facilities	Efficiency
Facility	Facilities	Production Cost
Facility	Facilities	Marginal Cost
Facility	Facilities	Average Cost
Facility	Facilities	Units Warming Up
Facility	Facilities	Units Operating
Facility	Facilities	Units Started
Facility	Facilities	Units Shutdown
Facility	Facilities	Warm Up Hours
Facility	Facilities	Operating Hours
Facility	Facilities	Hours Up
Facility	Facilities	Hours Down
Facility	Facilities	Ramp

Facility	Facilities	Ramp Up
Facility	Facilities	Minutes of Ramp Up
Facility	Facilities	Ramp Up Cost
Facility	Facilities	Ramp Up Price
Facility	Facilities	Ramp Down
Facility	Facilities	Minutes of Ramp Down
Facility	Facilities	Ramp Down Cost
Facility	Facilities	Ramp Down Price
Facility	Facilities	Ramp Up Violation Hours
Facility	Facilities	Ramp Down Violation Hours
Facility	Facilities	Ramp Up Violation
Facility	Facilities	Ramp Down Violation
Facility	Facilities	Ramp Up Violation Cost
Facility	Facilities	Ramp Down Violation Cost
Facility	Facilities	Fixed Production
Facility	Facilities	Fixed Production Violation
Facility	Facilities	Fixed Production Violation Hours
Facility	Facilities	Fixed Production Violation Cost
Facility	Facilities	Min Production Violation
Facility	Facilities	Min Production Violation Hours
Facility	Facilities	Min Production Violation Cost
Facility	Facilities	Max Production Violation
Facility	Facilities	Max Production Violation Cost
Facility	Facilities	Max Starts Violation
Facility	Facilities	Max Starts Violation Cost
Facility	Facilities	VO&M Charge
Facility	Facilities	VO&M Cost
Facility	Facilities	Start & Shutdown Cost
Facility	Facilities	Start & Shutdown Penalty Cost
Facility	Facilities	Total Production Cost
Facility	Facilities	Fixed Costs
Facility	Facilities	Price Received
Facility	Facilities	Revenue
Facility	Facilities	Net Profit
Facility	Facilities	Units
Facility	Facilities	Installed Capacity
Facility	Facilities	Units Out
Facility	Facilities	Maintenance
Facility	Facilities	Discrete Maintenance
Facility	Facilities	Distributed Maintenance
Facility	Facilities	Maintenance Hours
Facility	Facilities	Maintenance Rate
Facility	Facilities	Forced Outage
Facility	Facilities	Forced Outage Hours
Facility	Facilities	Forced Outage Rate
Facility	Facilities	Available Capacity
Facility	Facilities	Service Factor
Facility	Facilities	FO&M Cost
Facility	Facilities	Units Built
Facility	Facilities	Capacity Built

Facility	Facilities	Build Cost
Facility	Facilities	Annualized Build Cost
Facility	Facilities	Units Retired
Facility	Facilities	Capacity Retired
Facility	Facilities	Retirement Cost
Facility	Facilities	Net New Capacity
Facility	Facilities	Capacity Price
Facility	Facilities	Capacity Revenue
Facility	Facilities	Total Cost
Facility	Facilities	Levelized Cost
Facility	Facilities	x
Facility	Facilities	y
Facility	Facilities	z
Commodity	Primary Inputs	Consumption
Commodity	Primary Outputs	Production
Commodity	Secondary Inputs	Consumption
Commodity	Secondary Outputs	Production
Maintenance	Maintenances	Start Date
Maintenance	Maintenances	Hours Active
Maintenance	Maintenances	Duration
Maintenance	Maintenances	Cost
Maintenance	Maintenances	Crew
Maintenance	Maintenances	Equipment
Maintenance	Maintenances	Penalty Cost
Maintenance	Maintenances	x
Maintenance	Maintenances	y
Maintenance	Maintenances	z
Flow Network	Flow Networks	Consumption
Flow Network	Flow Networks	Production
Flow Network	Flow Networks	Production Cost
Flow Network	Flow Networks	Marginal Cost
Flow Network	Flow Networks	Average Cost
Flow Network	Flow Networks	Flow
Flow Network	Flow Networks	Flow Cost
Flow Network	Flow Networks	Imports
Flow Network	Flow Networks	Exports
Flow Network	Flow Networks	Net Interchange
Flow Network	Flow Networks	Losses
Flow Network	Flow Networks	Shortage Hours
Flow Network	Flow Networks	Shortage
Flow Network	Flow Networks	Shortage Cost
Flow Network	Flow Networks	Surplus Hours
Flow Network	Flow Networks	Surplus
Flow Network	Flow Networks	Surplus Cost
Flow Network	Flow Networks	Sales
Flow Network	Flow Networks	Purchases
Flow Network	Flow Networks	Net Sales
Flow Network	Flow Networks	Net Purchases
Flow Network	Flow Networks	Price Cap Hours
Flow Network	Flow Networks	Price Floor Hours

Flow Network	Flow Networks	Price
Flow Network	Flow Networks	Revenue
Flow Network	Flow Networks	Cost
Flow Network	Flow Networks	Net Revenue
Flow Network	Flow Networks	Net Cost
Flow Network	Flow Networks	Price Received
Flow Network	Flow Networks	Price Paid
Flow Network	Flow Networks	Shadow Price
Flow Network	Flow Networks	Installed Capacity
Flow Network	Flow Networks	Available Capacity
Flow Network	Flow Networks	FO&M Cost
Flow Network	Flow Networks	Capacity Built
Flow Network	Flow Networks	Build Cost
Flow Network	Flow Networks	Capacity Retired
Flow Network	Flow Networks	Retirement Cost
Flow Network	Flow Networks	x
Flow Network	Flow Networks	y
Flow Network	Flow Networks	z
Flow Node	Flow Nodes	Consumption
Flow Node	Flow Nodes	Production
Flow Node	Flow Nodes	Production Cost
Flow Node	Flow Nodes	Marginal Cost
Flow Node	Flow Nodes	Average Cost
Flow Node	Flow Nodes	Flow
Flow Node	Flow Nodes	Flow Cost
Flow Node	Flow Nodes	Imports
Flow Node	Flow Nodes	Exports
Flow Node	Flow Nodes	Net Interchange
Flow Node	Flow Nodes	Losses
Flow Node	Flow Nodes	Shortage Hours
Flow Node	Flow Nodes	Shortage
Flow Node	Flow Nodes	Shortage Cost
Flow Node	Flow Nodes	Surplus Hours
Flow Node	Flow Nodes	Surplus
Flow Node	Flow Nodes	Surplus Cost
Flow Node	Flow Nodes	Sales
Flow Node	Flow Nodes	Purchases
Flow Node	Flow Nodes	Net Sales
Flow Node	Flow Nodes	Net Purchases
Flow Node	Flow Nodes	Price Cap Hours
Flow Node	Flow Nodes	Price Floor Hours
Flow Node	Flow Nodes	Price
Flow Node	Flow Nodes	Revenue
Flow Node	Flow Nodes	Cost
Flow Node	Flow Nodes	Net Revenue
Flow Node	Flow Nodes	Net Cost
Flow Node	Flow Nodes	Price Received
Flow Node	Flow Nodes	Price Paid
Flow Node	Flow Nodes	Shadow Price
Flow Node	Flow Nodes	Units

Flow Node	Flow Nodes	Installed Capacity
Flow Node	Flow Nodes	Available Capacity
Flow Node	Flow Nodes	FO&M Cost
Flow Node	Flow Nodes	Units Built
Flow Node	Flow Nodes	Capacity Built
Flow Node	Flow Nodes	Build Cost
Flow Node	Flow Nodes	Units Retired
Flow Node	Flow Nodes	Capacity Retired
Flow Node	Flow Nodes	Retirement Cost
Flow Node	Flow Nodes	x
Flow Node	Flow Nodes	y
Flow Node	Flow Nodes	z
Flow Path	Flow Paths	Flow
Flow Path	Flow Paths	Flow Forward
Flow Path	Flow Paths	Flow Back
Flow Path	Flow Paths	Flow Cost
Flow Path	Flow Paths	Export Limit
Flow Path	Flow Paths	Import Limit
Flow Path	Flow Paths	Loading
Flow Path	Flow Paths	Loading Back
Flow Path	Flow Paths	Hours Congested
Flow Path	Flow Paths	Hours Congested Forward
Flow Path	Flow Paths	Hours Congested Back
Flow Path	Flow Paths	Losses
Flow Path	Flow Paths	Shadow Price
Flow Path	Flow Paths	Shadow Price Forward
Flow Path	Flow Paths	Shadow Price Back
Flow Path	Flow Paths	Units
Flow Path	Flow Paths	Installed Capacity
Flow Path	Flow Paths	Units Out
Flow Path	Flow Paths	Maintenance
Flow Path	Flow Paths	Maintenance Back
Flow Path	Flow Paths	Discrete Maintenance
Flow Path	Flow Paths	Discrete Maintenance Back
Flow Path	Flow Paths	Distributed Maintenance
Flow Path	Flow Paths	Distributed Maintenance Back
Flow Path	Flow Paths	Maintenance Hours
Flow Path	Flow Paths	Maintenance Rate
Flow Path	Flow Paths	Forced Outage
Flow Path	Flow Paths	Forced Outage Hours
Flow Path	Flow Paths	Forced Outage Rate
Flow Path	Flow Paths	Available Capacity
Flow Path	Flow Paths	Service Factor
Flow Path	Flow Paths	FO&M Cost
Flow Path	Flow Paths	Units Built
Flow Path	Flow Paths	Capacity Built
Flow Path	Flow Paths	Build Cost
Flow Path	Flow Paths	Units Retired
Flow Path	Flow Paths	Capacity Retired
Flow Path	Flow Paths	Retirement Cost

Flow Path	Flow Paths	x
Flow Path	Flow Paths	y
Flow Path	Flow Paths	z
Flow Storage	Flow Storages	Max Inventory
Flow Storage	Flow Storages	Min Inventory
Flow Storage	Flow Storages	Opening Inventory
Flow Storage	Flow Storages	Closing Inventory
Flow Storage	Flow Storages	Inventory Change
Flow Storage	Flow Storages	Delivery
Flow Storage	Flow Storages	Injection
Flow Storage	Flow Storages	Withdrawal
Flow Storage	Flow Storages	Net Withdrawal
Flow Storage	Flow Storages	Injection Losses
Flow Storage	Flow Storages	Withdrawal Losses
Flow Storage	Flow Storages	Delivery Cost
Flow Storage	Flow Storages	Inventory Cost
Flow Storage	Flow Storages	Reservation Cost
Flow Storage	Flow Storages	Injection Cost
Flow Storage	Flow Storages	Withdrawal Cost
Flow Storage	Flow Storages	Shadow Price
Flow Storage	Flow Storages	Units
Flow Storage	Flow Storages	FO&M Cost
Flow Storage	Flow Storages	Fixed Costs
Flow Storage	Flow Storages	Units Built
Flow Storage	Flow Storages	Capacity Built
Flow Storage	Flow Storages	Build Cost
Flow Storage	Flow Storages	Annualized Build Cost
Flow Storage	Flow Storages	Units Retired
Flow Storage	Flow Storages	Capacity Retired
Flow Storage	Flow Storages	Retirement Cost
Flow Storage	Flow Storages	Net New Capacity
Flow Storage	Flow Storages	x
Flow Storage	Flow Storages	y
Flow Storage	Flow Storages	z
Entity	Entities	Production
Entity	Entities	Sales
Entity	Entities	Total Production Cost
Entity	Entities	Revenue
Entity	Entities	Net Profit
Entity	Entities	x
Entity	Entities	y
Entity	Entities	z
Market	Markets	Sales
Market	Markets	Purchases
Market	Markets	Net Sales
Market	Markets	Net Purchases
Market	Markets	Shortage Hours
Market	Markets	Shortage
Market	Markets	Shortage Cost
Market	Markets	Surplus Hours

Market	Markets	Surplus
Market	Markets	Surplus Cost
Market	Markets	Price Cap Hours
Market	Markets	Price Floor Hours
Market	Markets	Price
Market	Markets	Revenue
Market	Markets	Cost
Market	Markets	Net Revenue
Market	Markets	Net Cost
Market	Markets	Total Cost
Market	Markets	Price Received
Market	Markets	Price Paid
Market	Markets	Natural Revenue
Market	Markets	Natural Cost
Market	Markets	Firm Capacity
Market	Markets	Load Obligation
Market	Markets	x
Market	Markets	y
Market	Markets	z
Constraint	Constraints	Activity
Constraint	Constraints	Slack
Constraint	Constraints	Violation
Constraint	Constraints	Hours Binding
Constraint	Constraints	RHS
Constraint	Constraints	Price
Constraint	Constraints	Hours Active
Constraint	Constraints	Penalty Cost
Constraint	Constraints	Rental
Constraint	Constraints	x
Constraint	Constraints	y
Constraint	Constraints	z
Objective	Objectives	Value
Objective	Objectives	Activity
Objective	Objectives	Constant
Objective	Objectives	x
Objective	Objectives	y
Objective	Objectives	z
Decision Variable	Decision Variables	Value
Decision Variable	Decision Variables	Reduced Cost
Decision Variable	Decision Variables	Cost
Decision Variable	Decision Variables	Objective Function Coefficient
Decision Variable	Decision Variables	Lower Bound
Decision Variable	Decision Variables	Upper Bound
Decision Variable	Decision Variables	Min Value
Decision Variable	Decision Variables	Max Value
Decision Variable	Decision Variables	x
Decision Variable	Decision Variables	y
Decision Variable	Decision Variables	z
Nonlinear Constraint	Nonlinear Constraints	X Value
Nonlinear Constraint	Nonlinear Constraints	Y Value

Nonlinear Const	Nonlinear Constraints	Function Value
Nonlinear Const	Nonlinear Constraints	x
Nonlinear Const	Nonlinear Constraints	y
Nonlinear Const	Nonlinear Constraints	z
Variable	Variables	Expected Value
Variable	Variables	Raw Value
Variable	Variables	Value
Variable	Variables	Error
Variable	Variables	Volatility
Timeslice	Timeslices	Hours Included
Weather Station	Weather Stations	Temperature
Weather Station	Weather Stations	Heating Degree Days
Weather Station	Weather Stations	Wind Speed