Type of service →

Defined by ↓

Cigré

South Africa

Australia

Other

international

6s

raise

Frequency support

Reserves

Secondary Frequency Control

AS-2

Regulation

Regulating

reserve

Regulation (AGC)

FCR

Lower

Raise

AS-3

Reserves

(Spinning)

10-minute

reserve

aFRR, mFRR

AS-4

Reserves

(Non-

Spinning)

Emergency

reserves

RR

Primary Frequency Control

AS-1 Primary Frequency Control

Instantaneous reserves

Contingency (generator governor and load shedding)

FFR

60s

lower

5 min

raise

5 min

lower

60s

raise

6s

lower

FCAS Frequency control ancillary service

Other

Constrained generation

Congestion

management

(L)

Other

services

System restoration

System restoration facilities

Unit Islanding

Islanding (L)

System

stability

services

Black Start

AS 7

Black Start

SRAS

System

restart ancillary

services

Black Start

Black start (L)

Voltage support

Voltage Control

AS 6

Reactive Power and Voltage Control

NSCAS

Network support and control ancillary

services

VCAS

Voltage

control

ancillary

service

NLAS

network

loading

ancillary

services

Fast

reactive

current

injection

TOSAS

Transient

and

oscillatory

stability ancillary

service

Slow PF, U,

Q control (L)

Tertiary Network Control

AS-5

Replacement reserves