



Ancillary services support the reliable operation of the transmission system as it moves electricity from generating sources to retail customers. PJM Interconnection currently operates several markets for ancillary services – regulation, synchronized reserve and non-synchronized reserve, enabling market participants to receive payment for providing these reliability services to the grid.

Regulation service corrects for short-term changes in electricity use that might affect the stability of the power system. It helps match generation and load and adjusts generation output to maintain the desired frequency. Load-serving entities can meet their obligation to provide regulation to the grid by using their own generation, by purchasing the required regulation under contract with another party or by buying it through the Regulation Market.

Currently participating in PJM's Regulation Market are several energy storage resources, including battery installations, flywheels and a group of electric vehicles, along with more traditional fossil fuel-fired and renewable resource types. These resources are paid for providing frequency regulation when called upon by PJM.

Regulation resources are paid for their performance – how quickly and how accurately they respond to PJM's signal. This performance-based approach rewards faster and more accurate resources with higher compensation.

Synchronized reserve and **non-synchronized services** supply electricity if the grid has an unexpected need for more power on short notice. The power output of generating units supplying synchronized and non-synchronized reserve can be increased quickly to supply the needed energy to balance supply and demand; demand resources also can bid to supply synchronized reserve by reducing their energy use on short notice. Units providing non-synchronized reserve are offline but able to be brought online quickly.

Load-serving entities can meet their obligation to provide synchronized reserve or non-synchronized reserve to the grid by using their own generation, by purchasing it under contract with another party or by buying it through the Synchronized Reserve Market or Non-Synchronized Reserve Market.

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