WE CLAIM:

1. A hydraulic continuous variable speed system has a turbine output shaft and electrical generator input shaft and comprises:

a hydraulic system having first hydraulic chamber linked to the turbine output shaft and a second hydraulic chamber linked to the electrical generator input shaft, the first and second hydraulic chambers in hydraulic communication with each other, the first and second hydraulic chambers for macro level speed adjustment of the electrical generator input shaft;

a pneumatic system having a first pneumatic chamber linked to the turbine output shaft for producing compressed air and storing it in at least one storage tank, a second pneumatic chamber linked to the electrical generator input shaft and the at least one storage tank for one or more of micro speed adjustment of the electrical generator input shaft, braking of the electrical generator input shaft, and direct drive of the electrical generator input shaft, and

a controller for monitoring the output of an electrical generator connected to the electrical generator input shaft, comparing the output to a load/line of an electrical distribution grid, and adjusting the speed of the electrical generator shaft based on measurements of the load/line of the electrical distribution grid using one or more of the hydraulic system and pneumatic system to manage power supplied to the electrical distribution grid.

2. The system of claim 1, further comprising a series of hydraulically powered paddle wheels, at least one paddle wheel associated with the first hydraulic chamber and a plurality of paddle wheels associated with the second hydraulic chamber, each paddle wheel having an input and output valve, operation of the input and output valves controlled by the controller.

3. The system of claim 2, wherein the paddle wheels in the second hydraulic chamber are differently sized.

4. The system of claim 3, wherein the paddle wheels in the second hydraulic chamber range in size from smallest to largest in a direction toward the electrical generator so as to increase or decrease the speed of the electrical generator input shaft.

5. The system of claim 1, further comprising a reservoir in communication with the first and second hydraulic chambers.

6. The system of claim 1, wherein the pneumatic system includes at least one paddle wheel associated with the first pneumatic chamber and at least one paddle wheel associated with the second pneumatic chamber.

7. A method of controlling the output of an engine comprising providing the hydraulic continuous variable speed system of claim 1 between the engine and an electrical generator and controlling the speed of an electrical generator input shaft using the controller, the hydraulic system, and the pneumatic system.

8. The method of claim 7, wherein the engine is a wind turbine.