It will be recognized that the specific pitch adjustment system of the invention may be widely varied, as regards its constituent components. For example, referring again to FIG. 5, the adjustment pulleys **242** and **244** may be of cam or other noncircular shape, to provide a "neutral" position of adjustment.

Further, the tower employed with the wind turbine of the present invention may be widely varied in structure and operation. For example, it may be desirable in some instances to employ a pivoting booming tower capable of 360° damped yaw operation, which is provided with a redundant limited yaw damping system mounted at the upper end of the tower, with such redundant system being of a type as employed in the illustrative embodiment of FIG. 3. The tower may be constructed to accommodate limited yaw damping outside of a zone of free yaw operation, which may be of any desired angular extent, e.g., 270°, outside of which the damping means would effect damping retardation of the yaw movement. In an upwind configuration, the tower is preferably of a driven yaw character, with solid yaw damping at the upper end of the tower in connection with the coupling of the tower to the nacelle of the wind turbine.

It will be further recognized that the specific arrangement of the hydraulics in the illustrative embodiments herein described may be varied, to place such hydraulics in the proximal end of the nacelle, and with the control rod intermediate the rotor body and the nacelle being coupled with a mono-shock or other suitable damping means to provide additional damping capability to the turbine.

Accordingly, while the invention has been described with respect to specific features and embodiments, it will be appreciated that numerous variations, modifications, and embodiments are possible, and all such variations, modifications, and embodiments are therefore to be regarded, as being within the spirit and scope of the invention.

What is claimed is:

1. A wind turbine assembly including a rotor body having mounted thereon a plurality of rotor blades, wherein each of the rotor blades is joined at an inner extremity thereof to a blade stem projection extending interiorly into the rotor body and secured therewithin to the rotor body by torsional- and axial-shock damping connection means, wherein each blade stem projection comprises a hollow cylindrical housing defining a central longitudinal axis therein, with a support member interiorly disposed in the housing at an intermediate position along its axis and fixedly secured to the housing, a shaft fixedly secured at one end thereof to the rotor body and coupled at its other end with the support member in a manner allowing limited axial and rotational movement of the housing relative to the rotor body, and a longitudinally outwardly biasing means between the support member and the rotor body, extending along the axis of the housing and outwardly abuttingly biased against the support member, whereby the biasing means provides torsional and axial shock damping to the rotor blade.

2. A wind turbine according to claim **1**, wherein the tortional- and axial-shock damping connection means comprise a helical coil spring as a shock damping element and said biasing means.

3. A wind turbine assembly according to claim **1**, wherein each of the rotor blades is secured to the rotor body by independent torsional- and axial-damping connection means, to provide independent suspension to each of the rotor blades.

4. A wind turbine assembly according to claim **1**, comprising from 2 to 6 rotor blades.

5. A wind turbine assembly according to claim **1**, comprising from 2 to 8 power generator units coupled in power generating relationship to the rotor body.

6. A wind turbine assembly according to claim **1**, wherein the rotor body is coupled to a nacelle for rotation with respect to the nacelle, wherein the rotor body comprises a circumferentially extending ring gear gearingly engaging a generator mounted in said nacelle.

7. A wind turbine assembly according to claim **1**, wherein the rotor body is coupled to a nacelle for rotation with respect to the nacelle, and further comprising a self-guying tower to which the nacelle is secured, wherein the self-guying tower comprises: a shaft securable to a support structure; a tubular support member telescopically mounted on the shaft for rotation thereon; a flange connector mounted on the tubular support member at an upper end thereof; a sleeve pivotally mounted on the flange connector; a main tubular member extending through the sleeve and having a lower end and an upper end; nacelle mounting means joined to the upper end of the main tubular member and connected to the nacelle; a transverse strut extending transversely outwardly from the sleeve and secured to the sleeve to form a conjoint structure therewith; a first guying cable secured at a first end thereof to the nacelle mounting means at the upper end of the main tubular member, extending downwardly over the tranvsverse strut and the lower end of the main tubular member and secured at a second end thereof to the tubular support member; and a second guying cable secured at a first end thereof to the nacelle mounting means at the upper end of the main tubular member and secured at a second end thereof to the tubular support member.

8. A wind turbine assembly according to claim **7**, wherein the nacelle mounting means comprise:

- a cylindrical sleeve secured to the upper end of the main tubular member;
- a shaped yoke swivel mounting member comprising upper legs joined to the nacelle at opposite sides thereof by mechanical fastening means, and a lower stem telescopically positioned in the cylindrical sleeve, to permit rotation of the nacelle and rotor body relative to the tower; and
- a pitch biasing and damping member interconecting the nacelle and the yoke swivel mounting member.

9. A wind turbine assembly including a rotor body having mounted thereon a plurality of rotor blades, wherein each of the rotor blades is joined at an inner extremity thereof to a cylindrical blade stem projection extending interiorly into a cylindrical receiving cavity in the the rotor body and secured therewithin to the rotor body in a manner allowing limited rotation of the blade stem projection relative to the rotor body, said limited rotation corresponding to a selected range of pitch of the associated rotor blade, and means for selectively rotating the cylindrical blade stem projections of each of said rotor blades by corresponding degrees of rotation to provide a predetermined pitch of said rotor blades, including torsional and axial biasing and damping means mounted within the cylindrical blade stem projection and connection means interconnecting the biasing and damping means in the cylindrical blade stem projection with the rotor body, said biasing and damping means serving to maintain the cylindrical blade stem