

Large vibrations in your wind turbine measurements or in simulations (in blades and/or tower)?

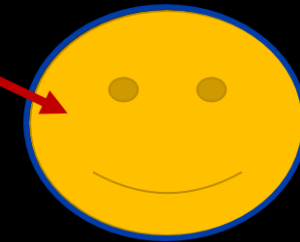
Yes

No

Is the vibration frequency close to a natural frequency?

Yes

No



Is it also at an nP value? (1P= rpm/60)

Yes

No

Is it at an nP value?

Yes

No

A case of resonance, where the mode involved also has little damping

Negative damping of the natural mode.
E.g. badly damped edgewise mode, stall induced vibration, classical flutter (at high rpm,...)

A strong excitation, but there will probably be a natural frequency close

That is a mystery... some excitation from electrical system or controls?
Check your natural frequencies calculation

Solutions:

- Add damping to mode
- Change natural frequency
- Change rpm
- Contact JEHO BV for expert advise

Solutions:

- Add damping to mode
 - Change mode shape
 - Change AOA
 - Change aerofoil
 - ...
- Contact JEHO BV for expert advise

Solutions:

- Find out how a mode is still involved and add damping to mode
- Reduce the excitation
- Contact JEHO BV for expert advise

Solutions:

- Contact JEHO BV for expert advise

