Release notes for Bladed 4.5.0.61

19/11/2013

New features in 4.5 include:-

Base module:

• Brand new batch facility:

Make use of multiple cores without having to open multiple instances of Bladed More reliable network batch options with automatic failover in case of network glitches Add/Remove nodes from the batch network remotely

Refer to the "Batch Framework Usermanual.pdf" in the batch installation folder or - access from the batch

- Extreme load extrapolation:
 - Option for aggregation before fitting
 - Binomial and Bootstrapping options for confidence intervals
- Evolving turbulence important when modelling Lidar
- Wind veer vertical direction shear
- Performance coefficients can now be run across multiple pitch angles in one go
- User defined applied blade loads
- Auto set default parameters for IEC Kaimal turbulence
- Option to generate and use a sea state file for some sea conditions rather than generate the sea state at run time
- Option to turn on or off the geometric stiffening calculation on the support structure

Control module: (used to be Linearisation module)

• Lidar (access from the "Specify" – "Control systems" menu item)

Lidar mounted on blade, hub, nacelle or support structure

Fixed, circular or rosette scan modes

Offshore support structure module:

 Ability to turn off Morrison loads or specify viscous drag only for specified support structure members

Hardware test module:

- Ability to define and execute Test Sets (an ordered collection of test procedures with configurable start-up and clean-up actions)
- Support for parameterized procedures with optional parameters Allows for better reuse of utility procedures
- Better device life cycle management easier to detect changes in and reload autogenerated devices
- Improved plug-in interface
- Improved license handling. Uses the new HASP licensing framework.
- Support for use of relative paths in devices and other settings

Tidal Bladed:

• Auto-tune for PI controllers for pitch-speed and torque-speed control



