**OpenDSS Modifications Wish List for Version 8**

1. Autotransformer object
2. Induction machine object
3. Unicode file input/output
4. Harmonics mode in MONITOR
5. Revised header in MONITOR
6. Support microgrid simulation
7. Controlled Isource
8. Isource with Loadshape (mag, angle)
9. Improved tie switch modeling
10. Firemonkey and/or Lazarus Component Library (LCL) interface on stand-alone version to enable moving to other platforms.
11. Report impedance vs distance; R, X, |Z|, X/R
12. Youtube videos (in English)
13. Support Transformer phasor group for defining connections: Dy11, Dy1, etc.
14. Fix ABORT on error messages
15. Implement Droop control (maybe part of GenController object?)
16. Make more forms non-MDI (tabbed pages interface).
17. Connect PVSystem meter to reports
18. Command to get X/R
19. Automatically export Result from standalone version so it can be accessed by EXE users.
20. Finish UPFC control
21. Finish EQUIVALENT model
22. Add Cut/ Copy to message form
23. ? Fix bug in LOAD for 3rd harmonic reporting
24. Upgrade and test Event-driven control mode
25. ? Acceleration factor (Is this needed?)
26. Implement Power Flow method capable of solving larger transmission power flow
27. Add GenController module to control power and vars to model governor and exciter controls (linked to 26)
28. Implement separate kVA rating for transformers having more than 2 windings
29. Modify combo boxes on main panel for selecting circuit elements. Go to treeview? On floating form or a tabbed page? Update contents whenever a circuit is loaded; i.e. don’t require a selection change event.
30. Add bus selection dialog
31. Fix plot zone power auto scaling
32. Report status of Recloser/Relay/Fuse/Swtcontrol
33. Add THD Column/channel in Monitor
34. Add Export THD <monitor>
35. Take EnergyMeter to filestream; Add save Action. Add tool to reconstruct CSV files from multiple solutions.
36. Check Reset on all control devices. SwtControl should revert to initial state.
37. Send error messages to a file accessible to EXE users.
38. Include loadshapes into sequential-time harmonic simulation
39. Include Control Actions into sequential-time harmonic simulation
40. Add controller sync model (routine- non mandatory): can be used to sync controllers of different types affecting the same element/zone
41. Include model design module in OpenDSS, to help user to create/interface their own models using basic elements in OpenDSS (EXE, COM and DLL).
42. Check the possibility of including the self-completing line code when scripting (EXE).
43. Create the TCP/IP OpenDSS service for OpenDSS.
44. Convert to full Unicode.
45. Cross-platform plots and circuit graphics.
46. Finish the VSC controller.
47. Linux and Mac installers.
48. Update InstallAware for Windows 10.
49. Move the version 8 source tree to GitHub, under the name opendss.