

PSS®E Update - WECC Modeling and Validation Subcommittee Meeting May 22-24, 2024

PSS®E – Recent and upcoming releases

Current release

- PSS®E 36.0.1 March 2024
- PSS®E 35.6.2 May 2024 (maintenance mode)
- PSS®E 34.9.6 August 2023 (end of life)

Upcoming Releases

- PSS®E 36.0.2/36.1 Summer 2024 (Planned)
- PSS®E 35.6.3 Fall/Winter 2024 (Planned end of life)
- PSS®E 37.0.0 May 2025 (Planned as early as)

PSS®E v36 Key Features

Version Independent User Defined Modeling (UDM):

- Highlight of v36 is Version Independent (VINDP) dll for User Defined Models (model dll created for v36 would be usable for all future versions of PSS®E without the need for creating the dll again for use in v37 and beyond)

Study Projects:

- New mode of operating within PSS®E to keep files, case variants, simulation definitions, and results all organized withing a single folder or archive file. Plans to also provide parallel simulation execution and Model Management tie-in.

Key Steady State Enhancements:

- Bypass option is added for branch records
- Each device (machine/load/fixed shunt/switched shunt/induction machine) can have a name up to 40 characters or blank. If not blank, it must be unique within the devices in the same type.
- A load type table is added. Each load type has a unique name of 12-characters and description of 72-characters. Loads can be assigned to a load type or None, and the loads can be grouped by a load type.
- Interface flow models is added. An interface flow model consists of branches/transformers/loads/generators/DC lines/Area ties, etc.
- Switching Device rating tables are added. A rating table contains 12 ratings and can be referred by one or multiple switching devices.

PSS®E Dynamics Enhancements in upcoming PSS®E releases of 36

Dynamics Engine Changes:

- STATE & VAR Descriptions, VINDP additions

New Dynamic Models :

- REPC_D, REGFM_B1, Beacon Flywheel Model

Thank you!

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