WECC Dynamic Modeling Procedure

The Western Electricity Coordinating Council (WECC) requires dynamic models and model data to represent power system components such as generators, loads, HVDC and SVC devices, etc. in dynamic simulations. The models are contained in the WECC *Master Dynamic Data File*, which is made available to all WECC members. WECC's Modeling and Validation Work Group (MVWG) is responsible for ensuring that an adequate set of dynamic models is available to WECC for planning and operating studies. The purpose of this document is to establish a procedure for the development and maintenance of models, and for the submittal of data.

The following procedure should be used for modeling of dynamic power system components in WECC:

1. All dynamic models contained in the *Master Dynamic Data File (*.dyd)* shall be those approved by MVWG. Approved models are those listed in the most current *Approved Dynamic Model Library* posted in the WECC website [1].

2. MVWG is the entity responsible for keeping the *Approved Dynamic Model Library* up to date, approving any changes or additions thereto, and working with the appropriate stakeholders to ensure that adequate and compatible models are available for use in large-scale simulation platforms supported by WECC.

3. If a generator, load or other dynamic control device cannot be appropriately represented with a model listed in the *Approved Dynamic Model Library*, the interested party is expected to consult with MVWG for further guidance. The following guidelines are applicable:

   a. Specific models that are not in the *Approved Dynamic Model Library* may be added to the *Master Data File* with MVWG approval.

   b. If MVWG determines that a new model needs to be added to the WECC *Approved Model Library,* the owners of the equipment and equipment vendors, as appropriate, are expected to work with MVWG to develop a suitable model and/or provide complete model documentation.

   c. This procedure is not intended to stifle development of new models, or discourage the use of models considered more appropriate for specific studies of local interest.

[1] [Link to WECC *Approved Dynamic Model Library* in WECC website].