**DMTF Minutes**

**June 07, 2017**

**Attendance:** Attached below.

Minutes of the May meeting approved as posted.

**NERC Model Review**  (Ryan d. Quint/NERC ):

Goal is for assessing models for acceptance per MOD-32 and MOD-33. Frequency response studies done on the Eastern Interconnect show case divergence for the loss of 3000-4000 MW of generation. NERC separates models into three general buckets:

* Acceptable models
* Not recommended models
* Other models: Models with issues that need to be resolved

Experts involved in the NERC process are mostly those who built these models earlier in their careers. They know the history and can sometimes tell right away that the model is obsolete or need fixing etc. NERC then identify designees for fixing models. TRE is the designee for ERCOT. Expect significant improvements to the model screening process in the next 2-3 years.

Jonathan, Muhammad and Jose/ERCOT: ERCOT is proposing to phase out User Defined Models (UDM’s) and use Generic Models in their place. The Generic Model shall represent the actual dynamic performance of the machine/device. Interconnection wide studies can use generic models. However, most TSP studies require detailed models to simulate local dynamic behavior. One example is study of areas with weak grid conditions due to relatively low short circuit ratio. These studies need detailed EMTP models such as PSCAD. EMTP models will always be black-box. They are used in networks with reduced (equivalence) number of buses.

Brad Woods/TRE: User Defined Models are acceptable as long as they are well documented. The issue is not just being UDM, but being an unacceptable model. Task is to get rid of those unacceptable models.

PTI PSS/e policy is to keep models once they are released. It is up to the user to decide using it or not.

Jo Trevino/CPS: CPS GO obtains model requirements from its TSP and then requests the equipment manufacturers to provide models per those requirements. This ensures appropriate models are provided.

**Proposal to Simplify Generator Model Collection and Maintenance Process (Jonathan/Muhammad/ERCOT):**

* **Currently there is no standard format for submission of models to ERCOT. The purpose of the proposal is to standardize the process and bring everyone on the same page.**
* **Proposed dynamic model template will be a separate file from the RARF, with separate templates for fossil units, wind units, solar units etc. It will be too much data to be embedded in the RARF.**
* **GO would have to work with the equipment manufacturers to fill the data in the template.**
* **It will not be easy to do automatic data range checking because PSS/e manual for User Defined Models do not contain any data ranges. Also, due to the wide variation of some parameters such as wind turbine data that depend on the location.**
* **Symbolic bus numbers will be used in the template such as ‘IBUS1’ instead of numbers. ERCOT will enter actual numbers as they fit into power flow cases**

**Replacement models for deprecated models** - (Chris Weldy/ Oncor):

NERC SAM process is reviewing over 200 models. We will now the replacement models once that process is over. They are also reviewing new governor models replacing those without a dead band with models with a dead band. The process will take some time.

**DMTF update to ROS**: It is appropriate for Chair of DWG to provide DMTF update to ROS since DMTF reports to DWG. Cole Dietert will do this as current DWG Chair. Juan will send an update to Cole.

**New/Open Action Items**:

1. Send an email to the TSP group asking for volunteers for Chair – Aruna
2. Replacement models for deprecated models - Work in progress - Chris Weldy/ Oncor

**Closed Action Items**:

1. Request explanation from PTI/PSS/e regarding NERC/IEEE deprecated models in PSS/e – Juan Santos/GPL – This is being addressed in the NERC process - Closed.
2. Provide links to NERC presentations on “Unacceptable” models- Brad Woods/TRE –Provided Closed

**Attendance:**

|  |
| --- |
| **WebEx Participants** |
| **Participant** | **Name** |  | **Email** |
| 1 | Jonathan Rose | ERCOT |  |
| 2 | Lyle Carter | EXELONCORP | lyle.carter@exeloncorp.com |
| 3 | Cole Dietert (LCRA) | LCRA | cole.dietert@lcra.org |
| 4 | Jennie Weatherill E.ON | EON | jennie.weatherill2@eon.com |
| 5 | Reza Yousefian | DNVGL | reza.yousefian@dnvgl.com |
| 6 | Ryan Quint | NERC | ryan.quint@nerc.net |
| 7 | Casey Petty | CENTERPOINTENERGY | casey.petty@centerpointenergy.com |
| 8 | Juan S. Santos (GP&L) | GPLTEXAS | jsantos@gpltexas.com |
| 9 | chad mulholland | NRG | chad.mulholland@nrg.com |
| 10 | Ransome | LCRA | ransome.egunjobi@lcra.org |
| 11 | Christopher Weldy | ONCOR | christopher.weldy@oncor.com |
| 12 | Louis Labatt | CPSENERGY | lslabatt@cpsenergy.com |
| 13 | Maria de arizon | CENTERPOINTENERGY | maria.dearizon@centerpointenergy.com |
| 14 | Garth Ripton | AVANGRID | garth.ripton@avangrid.com |
| 15 | Suman Debnath | ORNL | debnaths@ornl.gov |
| 16 | Satish Natti | DNVGL | satish.natti@dnvgl.com |
| **In-person Attendance** |
| 1 | Aruna Ranaweera | EON | aruna.ranaweera@eon.com |
| 2 | Gavin Bone | CPS Energy | gwbone@cpsenergy.com |
| 3 | Cody Phipps | WETT | cody.phipps@wett.com |
| 4 | Ravi Beeravalli | First Solar | ravi.beeravalli@firstsolar.com |
| 5 | Muhammad Khan | ERCOT | muhammad.khan@ercot.com |
| 6 | Jose Conto | ERCOT | jose.conto@ercot.com |
| 7 | Joe J Trevino | CPS Energy | jjtrevino@cpsenergy.com |