

Establishment and Authority

The Electromagnetic Modeling Transients (EMT) Task Force (EMTTF) was established by the System Review Subcommittee (SRS). The EMTTF will disband with completion of the recommendations to the SRS listed below.

Purpose and Responsibilities

The purpose of the EMTTF is to research and document the tools, data, and techniques associated with the performance of electromagnetic transients modeling activities.

The EMTTF will:

- 1. Canvas the industry to determine and document which tools are available for modeling of electromagnetic transients associated with:
 - a. Inverter based generation;
 - b. Large switching power supply loads; and
 - c. Other applications of EMT studies relevant to the WECC system.
- 2. Prepare presentations detailing the various software tools and their data requirements, focusing on data interoperability between EMT software programs and existing power flow programs.
 - a. Emphasis will be given to understanding the syntax associated with EMT software and availability of transparent and non-proprietary models.
- 3. Identify coherency groups, or subsystems, by studying the WECC system and determining what subsystems exist within it, for detailed EMT modeling.
- 4. Make recommendations to the SRS regarding use of the coherency groups.
- 5. Make recommendations to the SRS of the top three EMT software options for which the WECC SRS may consider providing data support.
- 6. Provide a forum for discussing issues related to the creation of EMT cases and collaborate with other RAC groups and other stakeholders as needed about EMT modeling.
- 7. Perform other tasks associated with EMT modeling as assigned by SRS.

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Committee Composition and Governance

1. Membership

- a. The EMTTF will be composed of members from WECC Member organizations.
- b. Members will be selected by their organization's SRS representative or by their organization's WECC Member Representative if not SRS representative exists.
 - i. WECC Member organizations may have multiple members on the EMTTF.
 - ii. Notice of selection should be sent to the chair (or designee).
- c. Members will serve until they resign, or a successor has been selected.

2. Leadership

- a. The chair of the SRS will approve one of the EMTTF members to serve as the chair.
 - i. The chair will manage the committee and its meetings.
- b. The chair of the EMTTF will appoint an EMTTF member to serve as the vice chair for EMTTF approval.
 - i. The vice chair will perform the duties of the chair in the chair's absence or in case of a vacancy in the office of chair.
- c. The chair and vice chair will each hold office for a term of three years or for the duration of the EMTTF. The chair and vice chair may serve multiple terms.
- d. WECC staff will partner with the chair and vice chair to manage the committee and its meetings, plan the agenda, and coordinate efforts with the other technical committees to ensure alignment with WECC staff work plans and priorities.
- e. WECC staff will prepare minutes of EMTTF meetings for the committee's approval.

3. Meetings

- a. The EMTTF will meet as often as required to carry out its responsibilities.
 - i. Meetings will be held according to the WECC Meeting Policy.
 - ii. EMTTF meetings may be in person, virtual, a combination of the two (hybrid), or by conference call, as determined by the chair.
 - iii. Meetings will be open to the public except as otherwise approved by the Board.
- b. A quorum for meetings will be a majority of committee members.
- c. The EMTTF will strive to make all decisions by consensus. If consensus is not possible, action taken by the EMTTF will require a majority vote of the members present.



- i. Voting may be by any means the chair determines appropriate.
- ii. EMTTF members may not vote by proxy or absentee ballot.
- iii. Each WECC Member organization may only have one vote.
- iv. Members who vote in the minority regarding an approval item should provide an explanation for their vote. This explanation or a summary will be included in the minutes
- d. WECC will give notice to each member of the EMTTF of the time and place of all meetings and will post notice of all meetings on the WECC website. Notice will be given no less than:
 - 30 days before in-person and hybrid meetings.
 - 10 days before virtual meetings and conference calls.
- e. An agenda, containing the items for which action may be taken, will be posted no less than:
 - 10 days before in-person and hybrid meetings.
 - Three days before virtual meetings and conference calls.
- f. Any person who wants notice of EMTTF meetings may notify the chair by email. The chair (or designee) will then email a copy of the notice and agenda of future meetings to that person when the committee members receive the notice and agenda.

Reporting

The EMTTF will report to the SRS on its activities and any recommendations.

Review and Changes to the Charter

The EMTTF will review this charter every three years or as needed and discuss any changes with the Joint Guidance Committee (JGC). The EMTTF will then make a recommendation to the SRS for approval.

	Committee	Date
Approved	SRS	April 14, 2022
Endorsed	JGC	
Reviewed	EMTTF	NA

