

PSCAD V5 TRANSITION

Fact Sheet

Summary of change

AEMO uses PSCAD studies to support network operation, connections, and security. AEMO is in the process of uplifting its PSCAD modelling capability and is requesting industry support with the transition from PSCAD V4 to PSCAD V5 and the latest Intel OneAPI Fortran Compiler Classic 2021.x.

What are the benefits?

The transition will resolve key obsolescence issues and enable AEMO to continue operating the Australia wide network model for the foreseeable future. It will also provide a wide range of benefits which include:

- improved modelling performance, efficiency & cost,
- reduced simulation time,
- improved IT supportability.

What is the timeline for the transition?

AEMO presently anticipates that the full transition to PSCAD V5 and the Intel Fortran Compiler Classic 2021.x will be completed by July 2022.

What will this change mean for industry?

The transition will require a coordinated effort from industry, including NSPs, applicants/developers and OEMs. Based on a July 2022 target, this includes:

- Existing Generator models: AEMO is currently transitioning all existing generator models to version 5 independently. No action is expected from current generation asset owners.¹
- New & Current Applicants: models submitted throughout the connection and registration process will be needed in both PSCAD V4 & V5 formats with new compiler until 01 July 2022.²
- Future Applicants: models will no longer need to be delivered in PSCAD V4 format from 02 July 2022.
- NSPs: NSPs are recommended to transition to PSCAD V5 to maintain alignment with AEMO modelling capability.

Next steps

AEMO will be holding a Q&A session with industry on the 09 February 2022 to provide participants the opportunity to further engage with AEMO on this transition. Please register your interest for this session [here](#).

AEMO appreciates your support with the ongoing operation and maintenance of this critical modelling capability.



Technical facts – Modelling requirements

- ✓ Models compatible with PSCAD V5.
- ✓ Models compiled with Intel OneAPI Fortran Compiler: Classic 2021.x (32-bit & 64-bit).
- ✓ Models delivered in a format that allows for maintenance for life of asset. (e.g. .dll, support files).
- ✓ Recommend use of the latest version of development and compilation support tools [e.g. Visual studio].

AEMO Guidelines

The power system modelling guidelines will be updated to reflect future modelling requirements in due course.

Please contact the vendors directly to obtain a quotation for licensing:

PSCAD: sales@pscad.com

Fortran Compiler:

- [Intel Fortran Compiler Download](#)
- [Intel Resellers](#)

For any further enquiries, please contact National Connections via:

Nem.connections@aemo.com.au

¹ Should any issues with model conversion of existing generation assets arise AEMO will contact those specific generators directly to work through the issue.

² AEMO intends to transition to full 64-bit simulations, until that point both 32-bit & 64-bit models will be needed.