

**Call for
Competition**

**Winter
Edition**



Competition on Evolutionary Computation in the Energy Domain

**Trondheim, Norway
17-20 March 2025**

Call for Competition

Following the success of the previous editions at IEEE PES-GM, CEC, GECCO, and WCCI, we are launching another challenging edition of the competition at major conferences in the field of computational intelligence and power systems. This SSCI 2025 competition proposes one track in the energy domain associated with the risk-based optimization of aggregators' day-ahead energy resource management (ERM), considering uncertainty associated with the high penetration of distributed energy resources (DER). This testbed is constructed under the same framework of past competitions (therefore, former competitors can adapt their algorithms to this new track), representing a centralized day-ahead ERM in a smart grid with a 13-bus distribution network using a 15-scenario case study with 3 scenarios considering extreme events (high impact, and low probability). A conditional value-at-risk (CVaR) mechanism measures the risk associated with extreme events for a confidence level (α) of 95%. We also add some restrictions to the way in which initial solutions are generated. Finally, as in previous editions, manual repairs in the variables and tweak heuristics are not allowed.

Important Dates

If you wish to attend the SSCI conference, the deadlines are as follows:

- Submission deadline (Competition participants): 10th January
- Notification of acceptance (Competition participants): 20th January
- Early registration deadline (Competition attendees only): 27th January

Competition results will be announced in March 2025

If you do not wish to attend the conference you can still submit your results by 7th March 2025 (anywhere on earth)

Organizers

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If you have any questions kindly send mail to José Almeida (jorga@isep.ipp.pt)
More information: www.gecad.isep.ipp.pt/ERM-competitions/2025-2