

Call for Papers

Energy Systems

Special Issue on Hydropower Scheduling

The scheduling of generation resources is a key component of the electricity industry all over the world. In hydro-dominated systems the generation scheduling problem becomes a very complex task due to the need to coordinate reservoirs with multiple water uses in an environment of uncertainties in inflows and with a detailed modelling of system components in an optimization model that runs in a reasonable computational time. In a market environment this complexity is compounded by uncertainties in electricity prices, the need for risk management, integration with other markets and, more recently, the integration with intermittent resources such as wind and solar has created new challenges and opportunities for hydro-dominated systems. The particularities of the hydro scheduling also introduce several challenges for transmission and generation expansion.

This special issue on *Hydropower Scheduling* in the *Energy Systems* journal aims to gather original research articles addressing current problems and future challenges within the field of hydropower scheduling. The potential topics for this special issue include but are not limited to:

- Computational and methodological advances in hydro scheduling
- Hydro scheduling in decarbonized power systems
- Practical experiences and best practices in hydro scheduling
- Investment and expansion planning in hydro-dominated systems
- Value of digitalization and new measurements in hydro scheduling
- Analysis of maintenance and refurbishment in hydro scheduling
- Environmental challenges and multiple water usages in hydro scheduling
- Application of hydrological models in hydro scheduling
- Risk management in hydro scheduling

Submission guidelines:

We invite you to submit your original as a full paper to this special issue. When preparing your manuscript, please follow the Instructions for Authors of Energy Systems, which can be downloaded from the journal website (<https://www.springer.com/journal/12667>).

Submit your paper online at <https://www.editorialmanager.com/ensy> and select article type “**S. I. : Hydropower-Scheduling**” in the submission process.

Papers selected for this special issue are subject to a rigorous peer review procedure, as outlined at the journal's web page <https://www.springer.com/journal/12667/submission-guidelines>.

Important Dates:

- Submission deadline of full papers: **November 18, 2022**
- Completion of the first-round review: **January 16, 2023**
- Issue publication target year: **2023**

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