



International Journal of Environmental Studies >

Volume 69, 2012 - Issue 4

447 | 32 | 0
Views | CrossRef citations to date | Altmetric

Articles

Distensible air accumulators as a means of adiabatic underwater compressed air energy storage

Brian Cheung, Ning Cao, Rupp Carriveau & David S.-K. Ting

Pages 566-577 | Published online: 22 Jun 2012

Cite this article <https://doi.org/10.1080/00207233.2012.699360>



Full Article Figures & data References Citations Metrics
 Reprints & Permissions Read this article Share

Abstract

In the near future, the electricity industry is likely to face historically significant changes. The onset of distributed generation, micro and smart grids will change the entire structured industry. An influx of intermittent renewable generators will make traditional grid balancing notably more difficult. The novel concept of underwater compressed air energy storage is a potentially promising solution that may be used to meet these challenges, especially during the current period of electrical infrastructure renewal and modernisation. Early results from a Lake Ontario Pilot Study point to the potential viability of the concept.

Keywords:

Acknowledgements

The research and development of the UWCAES system is in partnership with Hydrostor Inc., with funding from the Ontario Centres of Excellence and Sustainable Development Technology, Canada.

Related research

People also read

Recommended articles

Cited by
32

Information for

Authors

R&D professionals

Editors

Librarians

Societies

Opportunities

Reprints and e-prints

Advertising solutions

Accelerated publication

Corporate access solutions

Open access

Overview

Open journals

Open Select

Dove Medical Press

F1000Research

Help and information

Help and contact

Newsroom

All journals

Books

Keep up to date

Register to receive personalised research and resources
by email

 Sign me up

  

  

Copyright © 2026 Informa UK Limited Privacy policy Cookies Terms & conditions

Accessibility



Registered in England & Wales No. 01072954
5 Howick Place | London | SW1P 1WG