

Brilliant Energy Institute

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BEI Energy News

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Energy Policy

Alberta government announces new rules for electricity generators

<https://www.theglobeandmail.com/business/industry-news/energy-and-resources/article-alberta-government-announces-new-rules-for-electricity-generators/>

Alberta's government announces temporary measures to address "economic withholding" by electricity generators, aiming to reduce consumer utility bills. Utilities Minister Nathan Neudorf stated that the current market rules, designed 25 years ago, no longer suit the system. These measures include limiting offer prices for natural gas generating units and ensuring availability during peak demand. The changes mark the beginning of potential significant reforms to the province's electricity market amid shifts towards natural gas and renewables, necessitated by grid reliability concerns and federal Clean Electricity Regulations.

Building Infrastructure

Alberta power market braces for shakeup as province commits to electricity overhaul

<https://www.cbc.ca/news/canada/edmonton/alberta-electricity-market-regulations-1.7142330>

Alberta's electricity market faces a significant overhaul, with new rules anticipated by 2027, raising concerns over investor uncertainty. Amidst soaring consumer energy bills, the Alberta Electric System Operator aims to restructure the market to meet current and future needs, collaborating with stakeholders for detailed design. While the shift maintains the energy-only model, focusing on competition, concerns linger regarding the impact on renewable energy sectors and the need for investor clarity amidst evolving market dynamics and decarbonization targets.

Nuclear

NWMO reports reinforce confidence in potential repository sites

<https://www.world-nuclear-news.org/Articles/NWMO-reports-reinforce-confidence-in-potential-rep>

The Nuclear Waste Management Organization (NWMO) affirms confidence in potential repository sites for Canada's intermediate and high-level radioactive waste, citing updated annual reports. Laurie Swami, NWMO President, emphasizes safety as paramount, highlighting meticulous research by science and engineering teams. The proposed deep geological repository, located 650-800 meters underground, incorporates engineered barriers for long-term isolation of nuclear fuel. Following years of technical assessment and community engagement, two sites remain under consideration: the Revell Site and the South Bruce Site, both boasting stable, seismically quiet environments with suitable rock formations. These reports inform ongoing dialogue with host communities as a site selection is anticipated later this year, with further technical studies and regulatory review expected over the next decade.

Canadian study looks at nuclear's potential to decarbonise heating

<https://www.world-nuclear-news.org/Articles/Canadian-study-looks-at-nuclear-s-potential-to-dec>

A study by McMaster University, the Boltzmann Institute, and the Canadian Nuclear Association suggests Thermal Networks (TNs) could aid Canada's decarbonization goals. TNs, utilizing buried water pipes, could potentially serve 70 per cent of the population. Leveraging non-emitting combined heat and power generators, including nuclear energy, could play a significant role. Collaboration is proposed among Canadian governments to develop a Thermal Network Strategy, recognizing TNs as critical infrastructure. Recommendations include assessing nuclear plants for combined heat and power operations to support TNs.

IAEA reviews US nuclear security

<https://www.neimagazine.com/news/newsiaea-reviews-us-nuclear-security-11597928>

An International Atomic Energy Agency (IAEA) team, led by Kathleen Heppell-Masys, conducted an 11-day mission in the USA to review nuclear security regimes. After touring facilities such as the Sandia Pulsed Reactor Facility, the team confirmed the robust security measures upheld by the United States.

Recommendations were provided to further enhance nuclear security practices, with identified good practices serving as models for global improvement. NNSA Administrator Jill Hruby emphasized the alignment of the mission with NNSA's efforts to strengthen nuclear security.

Energy Storage

With Ontario Hydro's demise we lost accountability and vision for the electricity system

https://www.thestar.com/opinion/contributors/with-ontario-hydros-demise-we-lost-accountability-and-vision-for-the-electricity-system/article_9c7a347a-dbe6-11ee-a94f-e7f6b8496b68.html

The demise of Ontario Hydro left a void in accountability and vision for the electricity system. With a blend of engineering hubris and political missteps, the utility succumbed to mismanagement and waste. Attempts at privatization and market interventions have left the system in disarray, lacking clear direction. As Ontario confronts its energy future, the absence of centralized authority hampers efforts to navigate decarbonization. The legacy of Ontario Hydro serves as a reminder of the importance of strategic planning and singular accountability in shaping the province's electricity landscape. The estimated date of commencement of operations for addressing this challenge remains uncertain, with funding requirements pending.

Solar Energy

Adani Green Energy operationalizes 1,000 MW of the 30,000 MW Khavda renewable energy park

<https://nationalpost.com/pm/business-wire-news-releases-pmn/adani-green-energy-operationalizes-1000-mw-of-the-30000-mw-khavda-renewable-energy-park>

Adani Green Energy achieves a milestone by operationalizing 1,000 MW of solar energy at the Khavda renewable energy park in Gujarat, India. This addition marks the fastest greenfield solar capacity increase in the country's renewable sector. The construction timeline aligns with plans to develop 30 GW at Khavda over the next five years. By using waterless robotic module cleaning systems, the plant will generate approximately 81 billion units of electricity annually, powering over 16 million homes in India. Adani Green Energy's commitment to sustainability includes deploying waterless cleaning robots to conserve water in the arid Kutch region, aligning with the United Nations Sustainable Development

Goal 6. The project's completion within 12 months underscores Adani Green Energy's dedication to India's goal of achieving 500 GW non-fossil fuel capacity by 2030, with estimated funding requirements aligning with its ambitious growth trajectory.

Commonwealth Recreation Centre becomes latest City of Edmonton building with solar installation

<https://globalnews.ca/news/10354094/commonwealth-recreation-centre-solar-installation/>

The City of Edmonton celebrates the completion of solar photovoltaic (PV) installations at the Commonwealth Recreation Centre, marking its 12th city-owned facility equipped with solar panels. With Mayor Amarjeet Sohi emphasizing the city's commitment to climate resilience, the installation, covering 40,760 square feet with 1,128 panels, will reduce greenhouse gas emissions and foster a low-carbon urban environment. The project received \$340,000 in funding from the Municipal Climate Change Action Centre with an expected annual energy production of 708 MWh, equivalent to powering 100 residential homes annually. Environment and Protected Areas Minister Rebecca Schulz supports the initiative for its impact on emission reduction and cost savings, reflecting the province's commitment to sustainability.

Fossil Fuels

Government of Canada Announces Next Steps on Methane Centre of Excellence and Associated Call for Proposals

<https://www.canada.ca/en/natural-resources-canada/news/2024/03/government-of-canada-announces-next-steps-on-methane-centre-of-excellence-and-associated-call-for-proposals.html>

The Government of Canada is launching the Methane Centre of Excellence and invites proposals for methane emissions projects, aiming to reduce methane emissions by 75 per cent below 2012 levels by 2030. This initiative, backed by a \$30 million investment, seeks to enhance measurement accuracy, promote collaboration, and drive innovation in fighting climate change. The call for proposals, open until April 17, 2024, targets projects focusing on methane measurement, reporting, and mitigation, recognizing methane as a major contributor to climate change. Canada's commitment to methane reduction aligns with international efforts and demonstrates leadership in addressing climate challenges.

*Do you have any milestones, events, or news updates to share with the energy community?
Email your submission to BrilliantEnergy@ontariotechu.ca for consideration in an upcoming edition.*

Thank you.

The Brilliant Energy Institute news team
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(With a little help from ChatGPT)