## **Brilliant Energy Institute**

Office of the Vice President Research and Innovation
Ontario Tech University

## **BEI Energy News**

Weekly newsletter

March 8, 2024

### **Top News**

### **Energy Policy**

### Renewable energy developments in Alberta to face strict new rules

https://www.cbc.ca/news/canada/edmonton/renewable-energy-developments-in-alberta-to-face-strict-new-rules-1.7128236

Alberta's Premier Danielle Smith has announced new rules for renewable energy installations in the province. The new restrictions include a 35-kilometre buffer zone around protected areas and "pristine viewscapes," where new wind turbines will be forbidden, and other projects will be subject to visual impact assessments. The province will also prohibit renewable power installations on the most versatile and productive farmland, termed Class 1 and Class 2 soil unless the project can demonstrate dual use with crops or livestock. Developers are required to post a bond or security to cover potential future cleanup costs. The government aims to balance the growth of the renewable energy industry with concerns related to land use, reclamation, and grid reliability.

## **Building Infrastructure**

# BWXT-led Team Awarded \$45 Billion Environmental Management Contract for DOE's Hanford Site

https://nationalpost.com/pmn/business-wire-news-releases-pmn/bwxt-led-team-awarded-45-billion-environmental-management-contract-for-does-hanford-site-2

BWX Technologies, Inc. (BWXT) has announced a contract valued at up to \$45 billion over a 10-year ordering period from the U.S. Department of Energy (DOE) for environmental management operations at the Hanford Site in Washington. The Hanford Integrated Tank Disposition Contract (ITDC) was awarded to Hanford Tank Waste Operations & Closure, LLC

(H2C), a joint venture led by a BWXT subsidiary and includes subsidiaries of Amentum and Fluor. The scope of the ITDC includes the operation of Hanford tank farm facilities, the eventual operation of the Waste Treatment and Immobilization Plant, and responsibility for other core functions such as project management, security and emergency services, business performance, and environment, safety, health, and quality. The DOE is engaged in the cleanup and transformation of the Hanford Site, one of the largest and most complex radioactive waste cleanup projects in the United States.

RBC plans to bolster lending for decarbonization, renewable energy https://www.theglobeandmail.com/business/article-rbc-decarbonization-energy-lending/

The Royal Bank of Canada (RBC) is increasing efforts to reduce the climate impact of its lending and investment businesses. RBC plans to invest billions of dollars in decarbonization measures and triple its lending for renewable energy. The bank aims to increase lending for renewable energy projects to \$15 billion by 2030, up from \$5 billion in the previous year, and boost overall low-carbon energy lending to \$35 billion within six years. RBC's venture capital and private equity unit will invest \$1 billion by 2030 in climate-focused technologies. The bank is taking a more stringent approach to evaluating emissions from its oil and gas and power generation clients.

### **Nuclear**

AWS acquires data center campus connected to Susquehanna nuclear station <a href="https://www.power-eng.com/nuclear/aws-acquires-data-center-campus-connected-to-susquehanna-nuclear-station/#gref">https://www.power-eng.com/nuclear/aws-acquires-data-center-campus-connected-to-susquehanna-nuclear-station/#gref</a>

Amazon Web Services (AWS) has acquired the 960 MW Cumulus data centre campus connected to Talen Energy's Susquehanna nuclear station in Pennsylvania for US \$650 million. Talen Energy will supply carbon-free power directly from the Susquehanna plant to AWS through a power purchase agreement (PPA). The data centre campus will expand up to 960 MW of power consumption. AWS has contractual power commitments with fixed prices for the initial ten-year term, with capacity increments starting in 2025. The deal aligns with the growing interest of technology companies in using carbon-free nuclear energy to power data centres.

## Hydrogen

'Green' hydrogen project in Newfoundland to get \$128-million federal loan

https://www.thestar.com/politics/green-hydrogen-project-in-newfoundland-to-get-128-million-federal-loan/article facdd1da-987b-5801-807e-1f3089b48c5e.html

The federal government of Canada has agreed to lend \$128 million to World Energy GH2 for its green hydrogen project, Project Nujio'qonik, in Newfoundland. Export Development Canada will distribute the funds. Project Nujio'qonik aims to initially produce 250,000 tonnes of hydrogen annually from two to three wind farms in and around Stephenville, Newfoundland. The announcement comes after a similar agreement to provide \$166 million to Everwind Fuels in Nova Scotia. Both projects are competing to become Canada's most advanced green hydrogen plant, although neither has a specific in-service date.

### **Fossil Fuels**

#### Irving refinery can survive low-emissions future, report says

https://www.cbc.ca/news/canada/new-brunswick/irving-refinery-future-report-1.7134320

A report by the Atlantic Economic Council suggests that Irving Oil's Saint John refinery, Canada's largest, could have a viable future in a low-carbon world if policymakers recognize its importance. The report notes that the refinery's average annual investments of \$200 million in upgrades indicate its profitability and ability to navigate the net-zero transition. However, it highlights the risk of oil refining shifting to countries with less stringent emissions policies and suggests that federal clean fuel regulations must align with provincial emissions policies. The report also recommends incentives for transitioning to lower-emitting technologies such as hydrogen and biofuels.

Edmonton military base gets \$45M in energy retrofit funds from federal government <a href="https://www.cbc.ca/news/canada/edmonton/edmonton-military-base-gets-45m-in-energy-retrofit-funds-from-federal-government-1.7133582">https://www.cbc.ca/news/canada/edmonton/edmonton-military-base-gets-45m-in-energy-retrofit-funds-from-federal-government-1.7133582</a>

The Canadian Forces Base Edmonton will receive \$45.3 million in federal funding for energy retrofits. The project aims to upgrade 124 buildings at the military base, reducing energy costs by 21 per cent and saving an estimated \$2 million annually. The upgrades will include LED lighting, modernized heating and cooling equipment and replacing of fossil fuel heating systems with low-carbon alternatives. The initiative will lower greenhouse gas emissions by almost 5,200 tonnes annually. The enhancements are set to finish by 2026 and are anticipated not to affect military operations.

Do you have any milestones, events, or news updates to share with the energy community? Email your submission to <a href="mailto:BrilliantEnergy@ontariotechu.ca">BrilliantEnergy@ontariotechu.ca</a> for consideration in an upcoming edition.

Thank you.

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