Brilliant Energy Institute

Office of the Vice President Research and Innovation

Ontario Tech University

BEI Energy News

Weekly newsletter

September 20, 2024

Top News

BEI News

Westinghouse Executive Discusses Nuclear Innovations at Ontario Tech

Jeffrey Bradfute, senior vice-president of Westinghouse Americas delivered a presentation at Ontario Tech University on Sept. 17, focusing on insights on the status of global new builds, and the Nuclear Fuel Division's product lines and facilities. The discussion highlighted cutting-edge innovations in fuel performance and the development of accident-tolerant technologies. Attendees had the opportunity to participate in a Q&A session and network with Bradfute following the presentation. This opportunity connected researchers and industry.

Ontario Tech and Brilliant Energy Institute Participate in OPG Community Power Expo

The Brilliant Energy Institute and Ontario Tech University participated in Ontario Power Generation's Community Power Expo on Sept. 14 at the Darlington Energy Centre. The event showcased innovations in clean energy through family-friendly exhibits and interactive demonstrations. Ontario Tech highlighted its role as Canada's energy-training partner, offering nuclear engineering and industry-level programs. The event brought together alumni and future energy leaders.

Energy Policy

Canada Invests in Net Zero Atlantic to Create Jobs and Support Clean Energy for Atlantic Canadians - EnergyCentral

https://energycentral.com/news/canada-invests-net-zero-atlantic-create-jobs-and-support-clean-energy-atlantic-canadians

Canada is investing $9.25 million in two clean energy projects led by Net Zero Atlantic to support the region's transition to clean energy. The funding includes $6 million for the Atlantic Canada Offshore Wind Integration and Transmission Study, which aims to assess the region's offshore wind energy potential and help clean up the local power grid. Additionally, $3.25 million will support the Net Zero Emerging Concepts and Technologies Research Program. These initiatives are part of a broader effort to decarbonize Atlantic Canada's energy system. The projects will create 100,000 clean energy jobs by mid-century.

Refurbishment of Hydro One transformer station in Niagara Falls complete - ReNew Canada

https://www.renewcanada.net/refurbishment-of-hydro-one-transformer-station-niagara-falls-complete/

The Government of Ontario and Hydro One have completed refurbishments at the Beck #2 Transformer Station in Niagara Falls. The $135 million project extends the station's life by 40 years and supports clean, affordable energy for southwestern Ontario. The station connects more than 1,500 MW of hydroelectric power and is vital for Ontario's energy grid. Work on the project began in 2016, including the replacement of key switchyard equipment. The upgrades

help meet growing electricity demand, which will rise 60 per cent by 2050.

B.C.'s first call for power in 15 years overdelivers, signals strong future for renewables - Clean Energy Canada
https://cleanenergycanada.org/b-c-s-first-call-for-power-in-15-years-overdelivers-signals-strong-future-for-renewables/
BC Hydro received proposals for three times the energy it requested in its 2024 call for power — the company's first such request in more than 15 years. 70 per cent of the 21 proposals are wind projects, with solar, biomass and hydro making up the remainder. The projects could begin operations as early as 2028, with future calls expected every two years. A 2023 study found wind and solar are now cost-competitive with natural gas, with solar projected to be 16 per cent cheaper by 2030.

Climate and Construction: Canada joins global drive towards green steel - Daily Commercial Steel
https://canada.constructconnect.com/dcn/news/government/2024/09/climate-and-construction-canada-joins-global-drive-towards-green-steel
Canada is joining the global push for green steel, an essential material in construction and low-carbon technologies. Steelmaking traditionally involves high carbon emissions, but new methods, like Electric Arc Furnaces (EAF), offer greener alternatives. Algoma Steel in Sault Ste. Marie is transitioning to EAFs, reducing emissions by 70 per cent, supported by $420 million in federal funding. Meanwhile, ArcelorMittal Dofasco's green steel project in Hamilton, backed by $900 million, remains in the planning phase, with emission reduction targets still on track.

Irish company plans renewable energy megaproject for rural Nova Scotia - CBC
https://www.cbc.ca/news/canada/nova-scotia/irish-company-plans-renewable-energy-megaproject-for-rural-nova-scotia-1.7322635
Simply Blue Group, an Irish renewable energy firm, plans a renewable energy megaproject in rural Nova Scotia. The project will convert wind, solar, and biomass energy into sustainable jet fuel. It includes a wind and solar farm in St. Mary's and a plant in Goldboro, Guysborough County. The company expects the project to create local jobs and boost the forestry industry using wood chips. Simply Blue estimates the project will cost several billion dollars, with production to start in 2029, pending funding and approvals.

Biomass Energy

New deal will keep Atikokan biomass plant running for next 5 years - CBC
https://www.cbc.ca/news/canada/thunder-bay/atikokan-power-plant-1.7322518
A new agreement between Ontario Power Generation and the Independent Electricity System Operator will keep the Atikokan Generating Station operational for another five years. The deal will maintain 400 jobs at the biomass facility, the largest of its kind in North America.. The agreement is part of efforts to meet growing energy demand in the province. The Atikokan plant was converted from coal to biomass in 2014.

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)