

The Twin States Clean Energy Link Proposal



The Twin States Clean Energy Link (Twin States) is a proposed, 211-mile renewable energy transmission project in Vermont and New Hampshire. The project is designed to deliver existing Canadian hydropower to all of New England to support our region's climate goals and increase our supply of affordable clean energy, which has the potential to save customers billions over the first fifteen years of operation alone.

Twin States is designed to minimize visual and environmental impacts: The proposed project will utilize existing transmission corridors in New Hampshire and buries new lines along state roadways in both states.

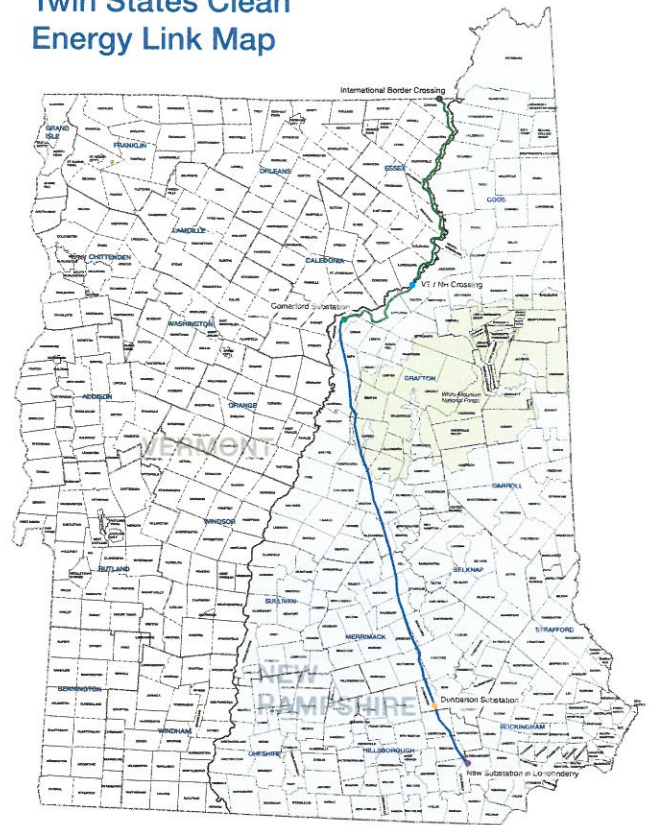
Twin States will build a bridge to a clean energy future: By providing 1,200 MW of bi-directional transmission capacity with neighboring Quebec, Twin States can deliver an abundant source of existing, affordable, and dependable clean energy to meet customer demand at times solar/wind output is low, thereby securing a reliable power system and saving customers billions of dollars over the coming decades.

Twin States will help create good-paying green jobs and make greater use of the region's renewable energy: By allowing regional renewable energy producers to export excess power to Quebec during periods of low customer demand and working in tandem with New England clean energy producers, Twin States would allow the region to reliably and cost-effectively harness its vast renewable energy potential over the next decade to the benefit of New England customers and workers, and the environment.

Twin States has the potential to:

- Provide 1,200 MW of bi-directional transmission capacity with neighboring Quebec, delivering an abundant source of existing, affordable, and dependable clean energy to New England.
- Help New England to meet customer demand at times when solar/wind output is low, thereby securing a reliable power system.
- Save customers billions of dollars over the coming decades.
- Further the growth of New England's emerging clean energy economy, including the offshore wind sector, by allowing regional renewable energy producers to export excess power to Quebec during periods of low customer demand.
- Provide significant economic benefits to Vermont and New Hampshire, creating thousands of new construction jobs, generating hundreds of millions of dollars in new property tax revenues, and deliver comprehensive benefit programs to route communities.
- Dedicate \$100 million toward community benefit programs by non-profit partner Citizens Energy Corporation.

Twin States Clean Energy Link Map



Map Legend	
— Underground Cable Along State Roads	● New Converter Station on Existing Comerford Substation
— Existing Overhead Transmission Corridor	● Vermont/New Hampshire Crossing Under Connecticut River
● Existing Substation	● International Border Crossing
● New Substation in Londonderry	

Map Not Drawn To Scale - Updated 4/6/23

To support the potential construction of the project, Twin States is proud to partner with the International Brotherhood of Electrical Workers (IBEW).

The Process

Twin States is pursuing selection by the United States Department of Energy's Transmission Facilitation Program, part of the Infrastructure Investment and Jobs Act, which is aimed at accelerating investments in clean energy infrastructure and creation of new jobs. Twin State's selection in this process would expedite the project's ability to bring benefits to customers, workers and the environment.

Why do we need Twin States Clean Energy Link?

New England faces a critical shortage of clean, reliable energy resources that will enable its states to meet their ambitious carbon emissions goals over the next several decades. Filling this need requires both local sources of renewable energy, such as solar and offshore wind, along with clean hydropower from Canada, which can serve to "balance" the region's power load. However, moving that clean energy from

continued >

Updated 5/2/23

The Twin States Clean Energy Link Proposal *continued*

Canada to the New England grid requires significant new transmission capacity. Without new clean energy transmission, the region's efforts to reduce fossil fuel generation as its source of balancing power will be delayed.

The Twin States project is unique because it will provide the full array of benefits that New England needs—the bidirectional flow of 1,200 MW of clean, dispatchable power between New England and Canada that will lower carbon emissions and customers' utility bills and boost New England's clean energy economy—while having minimal environmental or visual impacts for communities.

Best of all, Twin States delivers clean energy directly to where it's most needed to serve the greater New England grid.

Developer and Partners:

Twin States is a project developed by National Grid, the unrivaled global leader in HVDC project development, construction, and operation. Partnering with National Grid on this project are Citizens Energy Corporation, IBEW and the Northeastern Vermont Development Association (NVDA).

Purpose:

Deliver 1,200 MW of affordable, reliable clean energy to New England, while allowing for transport of domestic renewable energy to Canada during times of surplus, supporting the growing New England offshore wind industry.

Components:

Approximately 75 miles of new, buried lines primarily along Vermont Route 102 with small sections along Routes 141, 114 and US Route 2.

Underground crossing into New Hampshire, below the Connecticut River.

Approximately 26-miles of new, underground lines along New Hampshire Route 135 from Dalton to Monroe.

Nearly 110 miles of upgrades to the existing AC overhead transmission corridor from Monroe to Londonderry in the form of replacement of the existing wires, minimizing visual changes by re-using a vast majority of existing structures.

New converter station in Monroe on the site of the Comerford station, upgrades to the Dunbarton, NH substation and new substation in Londonderry, NH.

Greening the New England Grid:

Reduces the region's GHG emissions by millions of metric tons per year.

Provides an integrated approach to regional climate goals by helping to reduce New England's dependence on natural gas-fired generation and advances our region's offshore wind goals.

Affordability:

Would save customers in New England billions of dollars over the first 15 years of operation alone in their electricity costs. The cost of Twin States will not increase the region's

transmission rates but will be paid for by energy companies that deliver energy over the line.

About National Grid

National Grid (NYSE: NGG) is an electricity, natural gas, and clean energy delivery company serving more than 20 million people through our networks in New York and Massachusetts. National Grid is focused on building a path to a more affordable, reliable clean energy future through our fossil-free vision. National Grid is transforming our electricity and natural gas networks with smarter, cleaner, and more resilient energy solutions to meet the goal of reducing greenhouse gas emissions.

About Citizens Energy

Citizens Energy has over 40 years of experience channeling profits from successful energy ventures into community benefits. The company got its start by using revenues from successful oil deals in global markets to write down the cost of heating oil for families reeling from the shocks of fuel hikes in the late 1970s. Citizens Energy has since shifted from fossil fuels to renewable energy development, including utility-scale low-income community solar arrays, green transmission lines, battery storage projects and microgrids. The company currently owns over \$500 million in energy assets and has generated over \$600 million in benefits for families in need here in the U.S. and wherever it does business abroad.

Community Benefits

As co-developer of this project, Citizens Energy will reinvest \$100 million into local, community-identified projects in Vermont and New Hampshire route towns. Projects developed in collaboration with local communities may include direct energy assistance, weatherization, panel upgrades for future household electrification, and municipal-focused renewable energy projects to work towards greening the local energy grid and improving resiliency.

As the project advances, National Grid and Citizens Energy will be assembling community benefits programs totaling hundreds of millions of dollars for Vermont and New Hampshire towns and cities along the project route. Our goal is to work with communities and local economic development partners to understand how programs can be tailored to support local needs. We look forward to detailed listening sessions to understand how Twin States can maximize its benefits for the region, beyond creating jobs, lowering energy costs, and combatting climate change.

Added jobs, state and local tax revenue

In addition to energy cost savings across New England, when completed, Twin States will provide significant economic benefits to Vermont and New Hampshire, creating a significant number of new construction jobs. Twin States is also projected to generate hundreds of millions in new property tax revenues for route communities.

The Twin States Clean Energy Link Proposal *continued*

Over the first forty years of operation, if the project is put into service, Twin States is expected to contribute hundreds of millions of additional dollars in lease payments to Vermont and New Hampshire for underground burial of the lines along state roadways.

Added advantage for New Hampshire's North Country

Twin States can help to solve a decades-long challenge in the North Country of New Hampshire by completing necessary system upgrades in Grafton County, which will allow for new renewable generation opportunities to the north, along the Coös Loop, an existing transmission line which spans a significant portion of Coös County. With Twin States completing system upgrades to the south, future costs for North Country renewable energy generators are reduced, with economic development and new job creation as just some of the potential benefits of projects on this line being realized.

Partnership with Northeastern Vermont Development Association

Twin States has partnered with NVDA and is making a significant long-term commitment to supporting their community-driven work in economic growth and advancement for the Northeast Kingdom and beyond.

Our pledge: community collaboration and communication

Twin States Clean Energy Link is committed to working with host communities, residents, businesses, landowners, elected officials, and community groups throughout the application, proposal, siting, and construction processes. We know from our past work that burying lines and using existing transmission corridors are important ways to minimize visual and environmental impacts.

We also understand that communities deserve comprehensive conversations and two-way communication about our work. Through local presentations, town-based community meetings, one-on-one discussions, mailings, a comprehensive website, toll-free hotline number, and other methods we will provide timely, comprehensive information to individuals and groups interested in the proposal. Above all, the Twin States team is committed to ongoing, open conversations about our work every step of the way.

Stay in touch

Please visit, email, or call any time with questions or comments. We look forward to speaking with you!

www.twinstatescleanenergylink.com

800-886-8239

outreach@twinstatescleanenergylink.com



nationalgrid