

Tuesday March 11, 2025

Kat Taylor Public Hearing Testimony on:

LD 596 - *Resolve, to Provide Legislative Approval of Northern Maine Transmission Infrastructure*

LD 810 - *An Act Regarding the Approval of Transmission Lines*

LD 469 - *An Act to Prioritize State Access to Electricity Generated in Canada via High-impact Electric Transmission Lines*

LD 197 - *Resolve, to Direct the Governor's Energy Office to Conduct a Study Regarding the Future of Electric Transmission Infrastructure in the State*

Good Afternoon Members of the Energy, Utilities and Technology Committee:

My name is Kat Taylor and I am a resident and property owner in Argyle Twp., an unorganized township about 20 miles north of Bangor. I am opposing the four listed bills/resolves as they are not based on current technologies and strategies.

LD 596 *Resolve, to Provide Legislative Approval of Northern Maine Transmission Infrastructure*

Ought Not to Pass:

Poor to Marginal Wind Power: (slides 1 & 2)

Sites proposed in the *Northern Maine Transmission Infrastructure* have **very low potential to generate electricity**. Wind Power potential **needs to be reevaluated** as the maps are outdated.

See Slide 2 of maps for the NREL study on wind power in Maine

No Energy Generation source connected (slide 3)

The proposed routes of the ARG and MEPCO corridors currently **do not have any wind farms or other generation sources connected**.

<https://energy.usgs.gov/uswtodb/viewer/#9.57/45.4578/-68.612> for updated maps

No Defined Route: (slides 4-6)

When the *Aroostook Renewable Gateway* (ARG) project bid was accepted many lawmakers were surprised that **it was passed with no defined route**. This does not allow public participation in the planning process. **A transmission line's route needs to be displayed in any bill before a public hearing is scheduled.**

MEPCO (slides 5 & 6)

News | July 7, 2014

Maine's Two Largest Utilities Agree To Co-Develop Transmission Projects In New England <https://www.electricnet.com/doc/maine-two-largest-utilities-agree-co-develop-transmission-projects-england-0001>

"Emera Maine (now Versant) and Central Maine Power (CMP) recently signed a memorandum of understanding (MOU) for joint project development which identified a number of potential projects that could be developed together."

There may be multiple uses for this MEPCO line. Evidence on the ground shows that a **utility corridor is planned, not just a transmission line**, that could carry petroleum products.

LD 596 gives CMP and Versant a rubber stamp of approval to **any projects** with **undefined routes, costs and purposes**. Furthermore, there **needs to be an updated assessment of actual wind power potential in all of the Expedited Wind Energy Development Area** by an **objective entity** before any permitting of new wind farms.

LD 469 *An Act to Prioritize State Access to Electricity Generated in Canada via High-impact Electric Transmission Lines*

LD 810 *An Act Regarding the Approval of Transmission Lines*

Ought Not to Pass:

Transmission lines will cost the American Ratepayers **\$200-600 billion annually** and are a thing of the past. Rather, energy generation should be **colocated** at the site where the **power will be used** in either a **behind the meter or limited distance T&D** scenario to **cut costs and speed development**.

The following video is a discussion from Energy Industry experts on the feasibility of transmission corridors, and energy projections meeting the evolving **need for more energy driven by data centers and Artificial Intelligence**.

CSIS Mar 5, 2025

Energy Security and Climate Change Program

The Electricity Supply Bottleneck on U.S. AI Dominance

*“A conversation with **Vivian Lee**, Managing Director and Partner at **Boston Consulting Group (BCG)** and **Shanu Mathew**, Portfolio Manager and Research Analyst at **Lazard Asset Management**. Vivian and Shanu will discuss **Cy McGeady**, Fellow with the CSIS Energy Security and Climate Change Program, will **moderate** the conversation:*

<https://www.youtube.com/live/GfpB7VQnoQ4?si=kKaQZY6W8ydy0qN0>

This video is an excellent discussion on the state of **AI electricity demand**, the **implications of DeepSeek**, the trend towards **colocation**, prospects for **nuclear**, and other **key dynamics** at the **intersection of AI and electricity**.

At **24m:00s** the panelists start to talk about **over-development of energy generation**, the **ROI** and the **sustainability of investments** by Big Tech. At **28m:41s** they begin to discuss **EIA projections of energy usage** which are wildly over projected. Then **they double down on the need for growth due to data center (AI) growth**.

The panelists next discuss the only thing **holding back energy growth is the lack of data centers**. There are no more available data centers and the location of new centers currently **depends on access to reliable energy from Transmission and Distribution (T&D) which are driving up costs**.

The **conversation gets really interesting** when they discuss **"colocation"** **33m:15s**.

The idea of *colocation* is topical now as **the immense investment in infrastructure to transmit energy is slowing development**. According to Vivian Lee, **generation costs** run around **\$10-20b annually** where **T&D costs** to service demand are **projected to be \$200 to \$600b annually**.

Colocating, facilities next to generation sources, lessens the demand on T&D development and has less environmental impact.

While not yet a scalable solution, **colocation could allow easier permitting, quicker deployment of serviced while the T&D Utilities** work on **upgrading** their **infrastructure** to eventually meet the need.

Kind of like running your new house on solar panels and wood heat until you can get connected to the grid. But time is money and tech companies are losing money every hour they wait to set up a data center.

As a result, **the demand for gas turbines is increasing**; but the backlog is at least 5 years out just to get into the production queue. **Gas, solar/battery storage** are seen as **the best near term solutions**.

The Tech Bros are now in competition when before their platforms worked symbiotically. It's a clash of the Titans and Zuckerberg has stated he doesn't care if META overdevelops, he is unwilling to lose the race. With this attitude of "*damn the torpedoes, full speed ahead*" **legislators must be cognizant that misleading information will be used to pursue this agenda.**

At **43m:40s** the **discussion turns to nuclear being at least 10+ years before available which doesn't solve near term problems**. Only existing reactors are feasible but facilities still need government approval and access to the grid which involves T&D utilities. Opposition from the public will delay deployment as it does with transmission corridors. Cost overruns and delays are inherent in nuclear development.

Much like nuclear energy proponents, the panelists cherry pick the benefits while downplaying the negatives. **The elephant in the room that didn't get discussed is nuclear waste and our inability to address its storage or 'recycling'.**

Colocation

Colocation is trending as a **solution** since **data centers** are not available and **need to be built**. Better to **build both center and generation on the same site** which would alleviate the need for expensive, unpopular transmission corridors.

The future of colocation:

<https://gridbeyond.com/the-importance-of-co-location-and-hybrid-projects-in-the-energy-transition/>

Despite these challenges, the trend toward **hybrid and collocated projects** is expected to **accelerate**. The **integration of renewable energy generation and storage** is becoming increasingly attractive to investors, developers, and policy-makers alike, as it **provides a more reliable, cost-effective, and sustainable energy solution**.

Governments are offering increasing support for hybrid projects through initiatives such as the *Capacity Investment Scheme* (CIS) in Australia. These policies **recognize**

the value that hybrid projects bring in terms of both system reliability and economic benefits. <https://www.dccew.gov.au/energy/renewable/capacity-investment-scheme>

Colocation Data Centers

<https://betterbuildingssolutioncenter.energy.gov/data-center-toolkit/colocation>

In **Colocation data centers**, also known as "colos", the **owner leases space, power, and cooling to multiple tenants**. Each customer has varying IT hardware and needs.

Misinformation regarding the true benefits of AI, the inescapable public relations telling us it is inevitable, the impact it is having on the climate and the massive T&D investments on solutions that will delay actual renewable energy progress and will lock us into paying stranded costs indefinitely.

Transmission Corridors (slides 3-7):

Transmission lines from Canada only serve Hydro Quebec and states beyond Maine.

Allowing ratepayers to purchase 50% of Canadian Hydro through *new* transmission lines is exactly like the **failed Aroostook Renewable Gateway (ARG)** differing only in the generation source and possibly the route. The **ARG** followed **existing Canadian ROWs** from the Haynesville area to Howland when it abruptly changed course west creating a new transmission corridor over highly contested farmland.

(See testimony on LD 596)

The ARG developers, LS Power, were ultimately denied the project since cost overruns due to public opposition, and subsequent delays, put even the **paltry promise of \$2.33 a month savings** out of reach. **This project would have cost Maine ratepayers \$1.4b without any ownership.**

Given the uncertainty surrounding Canadian tariffs and the increasing cost of developing T&D resources this is not the best scenario for Maine.

Instead we **need to invest in Distributed Energy Resources (DER's) powered by local renewable energy when feasible or existing** nonrenewable resources (Natural Gas, WtE, Hydroelectric Dams, and methane through anaerobic digestion) until those resources can be replaced by new technologies.

DERs – Distributed Energy Resources

Distributed energy resources (DERs) are local sources of electricity generation, storage or services that can lower bills, reduce emissions and enhance grid resilience. Learn how federal actions, local governments and communities can deploy more DERs and reap their rewards.

Combining this type system with local ownership (Community Choice Aggregation) and choice over large Competitive Energy Producers give local control back to ratepayers. Given the diverse resources available in Maine, (wind, solar, water) it only makes sense to choose site-specific solutions instead of *one size fits all* scenarios.

Hydrokinetics and Run of the River Hydroelectric (slide 8)

Hydrokinetics and Run of the River are technologies that produce energy using rivers without impeding the flow of water and nutrients, fish passage and avoid the release of methane and water vapor from impounded rivers contributing to climate change.

Canadian Hydro-dams are contributing to the warming of the Arctic and Sub Arctic seas causing the tundra to defrost while starving the oceans from much needed nutrients that feed our aquatic species.

Modifications for fish passage have proven inadequate with dams that have impoundments (reservoirs). No new hydroelectric dams can be built and existing dams are at **high risk for failure** according to the *American Society of Civil Engineers (Maine Section ASCE) 2024 Maine Infrastructure Report Card* which gives **Maine a D+.**

*"The **average age of Maine's 672 dams is 108 years**; of the **54%** of these dams whose conditions have been assessed, **half are in satisfactory condition.** Overall, **159 Maine dams are classified as significant- and high-hazard potential dams, meaning failure would result in considerable damage and/or loss of life.***

*Unfortunately, **a quarter of these high-hazard dams are in poor or unsatisfactory condition.** Despite **inconsistent funding and three years without a State Dam Safety Inspector, the Maine Dam Safety Program has achieved 100% compliance with emergency action plans** for significant- and high-hazard dams, exceeding the national average of 75%.*

*However, **to raise the grade, the Maine Dam Safety Program needs increased and dedicated funding, additional staff, and increased authority to continue ensuring public safety and oversee nearly \$1 billion of estimated repairs** to improve the condition of Maine's dams."*

Loring AFB (slides 9 &10)

If we are looking for a **near term solution for siting renewable wind and solar/battery** solutions, we need look no further than **Loring Air Force Base in Limestone.** The decommissioned base is perfect for the Colocation scenario.

Economically depressed Limestone hosts **Loring Air Force Base** https://en.wikipedia.org/wiki/Loring_Air_Force_Base with its **9000 acre campus**, a newly minted (2025) **Loring Development Authority** <https://www.mainelegislature.org/legis/statutes/5/title5sec13080.html> an **international airport**, a willing **Loring Energy**, <https://loringcommercecentre.com/sectors/renewable-energy/> and a **community looking for work** with lots of **empty spaces for wind, solar and battery storage.** The climate is cold and Loring is a brownfield site with a few incubator businesses.

It is the start (or end) point of the **Searsport/Loring pipeline.** A **200 mile**, underground energy corridor that is **underutilized**; only **40 miles** is used by **Bangor Natural Gas.**

Since Loring AFB is a **quasi-governmental site, developing aviation biofuels, potential space launches and a military history**, Senator Collins, President Trump and Elon Musk should all be onboard. Add to the mix Troy Jackson who has all but thrown his hat into the ring for governor, and supported the ill-fated Aroostook Renewable Gateway project, and we have a **supportive government in favor of funding energy development utilization and aerospace technologies**.

Repurposing this piece of Maine's history, rejuvenating Limestone into a model of a 'green' community, could set the standard for future DERs and colocation centers. Funding it should be low hanging fruit for the Appropriations Committee. **Maine could help set the environmental standards for AI development, data centers, and energy technology for the future.**

If the state is going to use **Eminent Domain to acquire land or easements** for a new corridor, they may find it easier to **gain the pipeline lease from Bangor Natural Gas**, a limited, fossil fuel source of energy, **instead of ruining miles of forest, wetlands and farmland.**

Green Energy

This **Vox video** addresses the question, **Can AI be powered by green energy?**
Spoiler Alert: **the answer is yes.** <https://youtu.be/YGfJeH5HRDQ?si=7DNyxkpaZ2jWhhbM>

Vox - Oct 1, 2024

“Can clean energy handle the AI boom?” *How our digital lives are impacting our climate goals.*

“Crypto, AI and cloud storage are all a part of the carbon footprint of data centers. *In this video we unpack what exactly we know about data centers’ growing electricity demands, how AI is factoring into that picture, and whether clean energy can keep up.”*

LD 197 *Resolve, to Direct the Governor's Energy Office to Conduct a Study Regarding the Future of Electric Transmission Infrastructure in the State* **Ought Not to Pass:**

As already stated, Transmission corridors are a thing of the past. They are invasive, expensive, highly contentious, and do not address energy reliability Maine needs immediately and in the future.

The state has already done a partial study of improving energy reliability and efficiency: This study should continue as it addresses the need for local control of energy and its distribution.

DSO – Distributed System Operator Study

<https://www.maine.gov/energy/studies-reports-working-groups/current-studies-working-groups/distribution-system-operator-study>

Study Outcome

“GEO retained Strategen Consultants to prepare an initial DSO Feasibility Study as described in Section 2 of the Resolve. The legislation directed GEO to (1) review and evaluate the Feasibility Study, and (2) determine whether a formal design proposal for a DSO should be pursued. GEO shared the initial DSO Feasibility Study and its determination not to pursue the formal creation of a DSO design proposal as described in Section 3 of the Resolve with the public along with a request for public feedback.

The DSO Feasibility Study was submitted, along with GEO’s determination, to the Joint Standing Committee on Energy, Utilities, and Technology on January 17, 2024, and is available online [here](https://www.maine.gov/energy/sites/maine.gov.energy/files/2025-01/DSO%20Study%20Final.pdf).
<https://www.maine.gov/energy/sites/maine.gov.energy/files/2025-01/DSO%20Study%20Final.pdf>

While GEO’s determination was to not pursue the formal creation of a DSO design proposal as described in the legislation, GEO intends to consider the information and findings contained in the Feasibility Study to inform future prioritized areas of analysis to support achievement of the broader objectives of the state related to grid planning, infrastructure, and management.”

Conclusion:

In closing, I hope this information will help the EUT Committee members and sponsors of these bills in redirecting their focus towards truly sustainable solutions that will promote prosperity in the northern regions of Maine instead of outdated methods that will hold us back from achieving our renewable energy economy.

We rural residents are tired of depending on handouts to keep our economy afloat and legislation, however well-intentioned, directed towards addressing climate change that has a detrimental effect on our district.

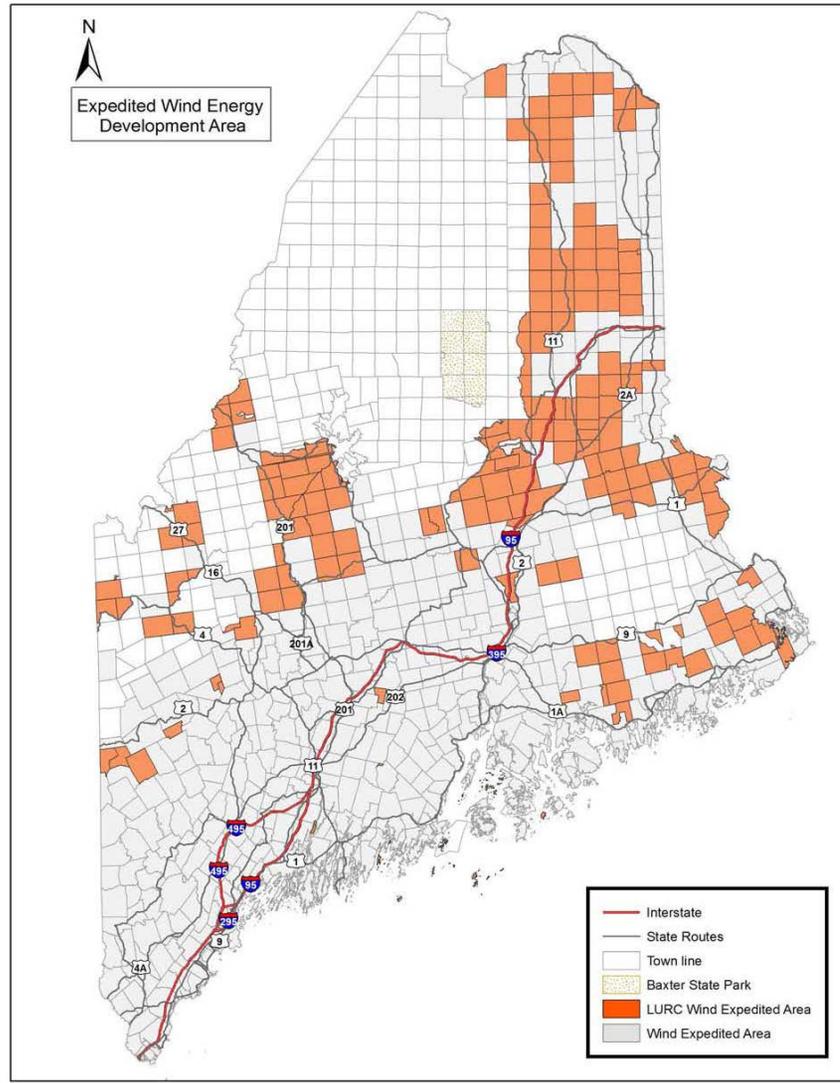
The largest contiguous forest east of the Mississippi serves as our shield against pollution from the west and is responsible for capturing carbon that would otherwise contribute to our increasingly unpredictable weather. We do not want to carve up that forest to profit large corporations by their exploitation of our natural resources, claiming a need to increase our energy supply to serve their own needs.

The solutions lie in distributed resources, local ownership and control which will bring true prosperity to our people. Creating large isolated energy generation sources, connected by fragile and expensive T&D, do little to improve the lives of rural Mainers. They are not the answer.

Respectfully,

~Kat Taylor
Argyle Twp.

Map 18 – Expedited Wind Energy Development Area



Slide1

Expedited Wind

This map from the *Comprehensive Land Use Plan (CLUP)* last updated in **2010** shows the *Expedited Wind Energy Development Area* for the entire state.

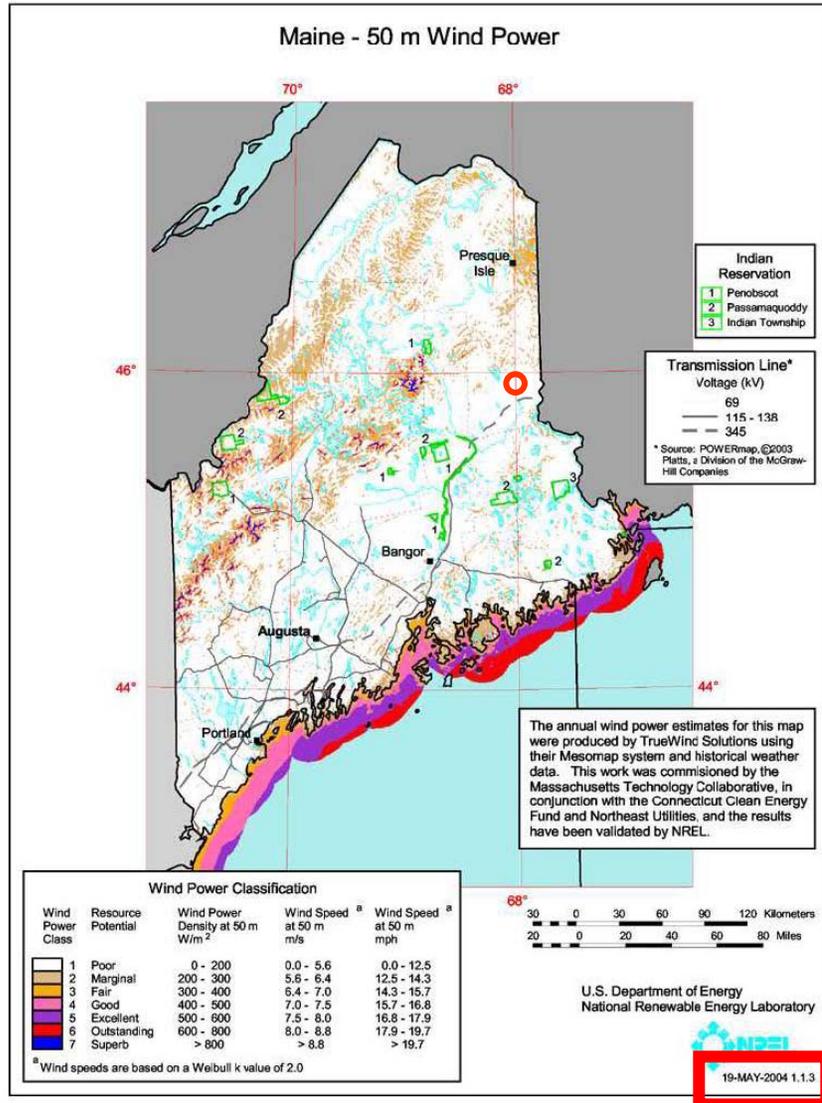
https://www.maine.gov/dacf/lupc/plans_maps_data/clup/index.html (pg 190)

LUPC Jurisdiction is in orange.

Note: as of **2004** the *Expedited Area* is **Poor** or **Marginal** for wind power according to The **U.S. Department of Energy National Renewable Energy Lab (NREL)**. See Slide 2.

This map is **at least 15 years old**.

Map 17 – Annual Wind Power Estimates for Maine



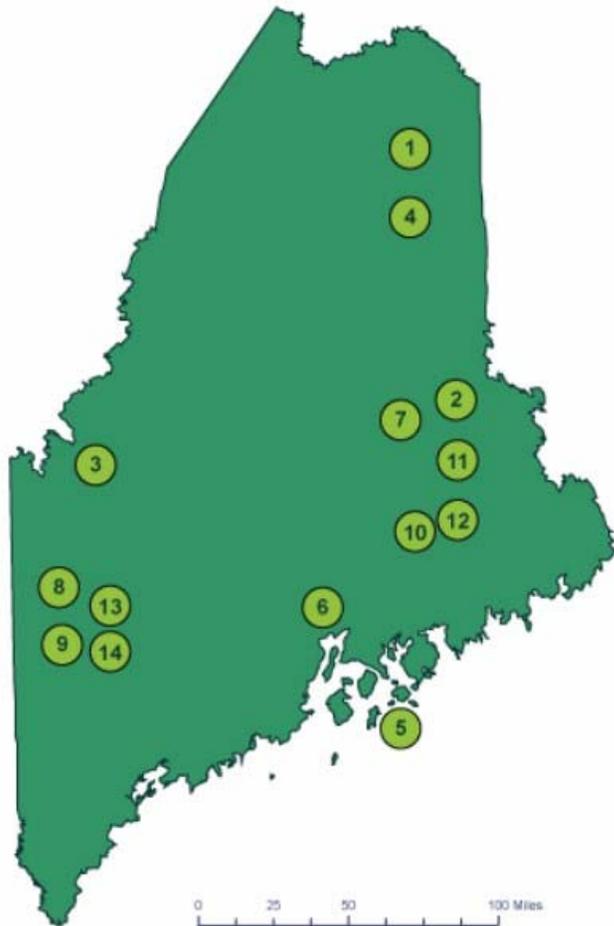
Wind Power in Maine

This map from the *Comprehensive Land Use Plan (CLUP)* last updated **2010** shows the *limited wind power* in the *entire* state. https://www.maine.gov/dacf/lupc/plans_maps_data/clup/index.html (pg 189)

The area where the *King Pine Wind Farm* would be located, in fact most of the state except for some mountain tops, is rated **Poor** or **Marginal** for wind power.

As of **2004** the **best areas** suitable for wind turbines are **offshore**.

This map is **21 years old**



1. Mars Hill (First Wind): 42MW
2. Stetson I & II (First Wind): 83MW
3. Kibby (TransCanada): 132MW
4. Oakfield (First Wind): 150MW
5. Vinalhaven (Fox Islands Wind): 4.5MW
6. Beaver Ridge (Patriot Renewables): 4.5MW
7. Rollins (First Wind): 60MW
8. Record Hill (Independence Wind): 50MW
9. Spruce Mountain (Patriot Renewables): 20MW
10. Bull Hill (First Wind): 34MW
11. Passadumkeag (Quantum): 42MW
12. Hancock Wind (First Wind): 54MW
13. Saddleback Wind (Patriot Renewables): 34MW
14. Canton (Patriot Renewables): 23MW

Note the low output of MW

NOTE: This graphic and list do not necessarily reflect the most current projects or updated project capacities.

Aroostook Renewable Gateway Transmission Corridor Proposed Route from the King Pine Wind Farm



Slide4



MEPCO Utility Corridor

Brown Lines are **Existing** Transmission Corridors

The Green Line is the **approximate proposed MEPCO Route**

No Existing Wind Farms along MEPCO route

MEPCO Utility Corridor – Green Line

Currently there are only substations no wind farms along this route

See <https://energy.usgs.gov/uswtdb/viewer/#9.57/45.4578/-68.612> for updated map

Affected Towns:

1. Chester
2. Mattamiscotis TWP
3. Howland
4. Lagrange
5. Orneville TWP.
6. Atkinson
7. Charleston
8. Corinth
9. Exeter
10. Corinna
11. Saint Albans
12. Palmyra
13. Pittsfield



A: Coopers Mills

B: Penobscot River Crossing in So. Lincoln

C: West Winterport intersection

D: Pittsfield Intersection

E: Guilford

F: Dover-Foxcroft

Pink Line: existing large corridor

Red and Blue Line: Proposed LS Power Corridor

Green line: very approximate MEPCO corridor

A-E: 65.4 miles

A-B: 96.5 miles

All corridors existing and proposed.

The Pink Lines are existing transmission corridors from Canada – Hydro Quebec

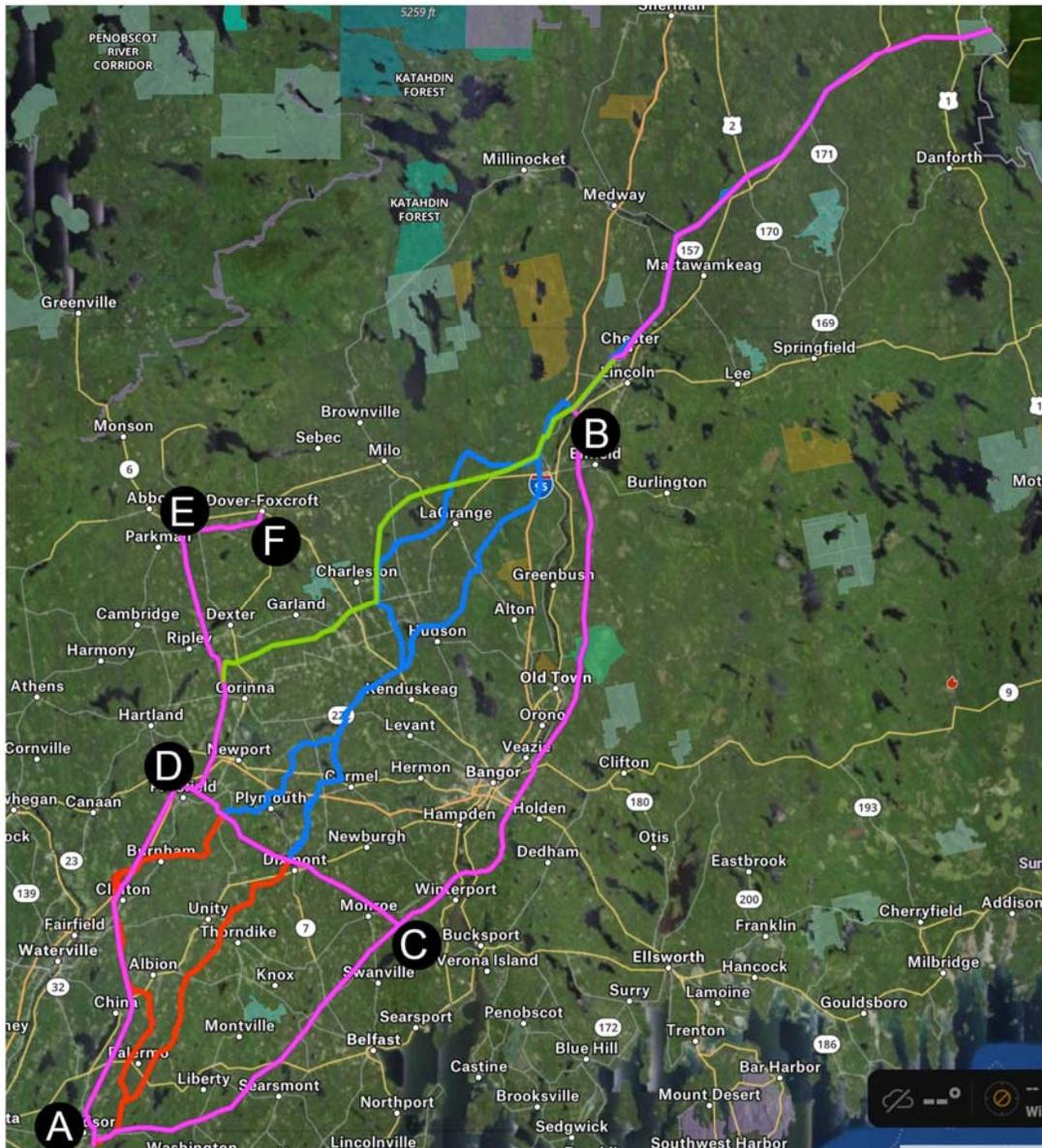
The Green Line is the proposed MEPCO Utility Corridor – Avangrid / Iberdrola

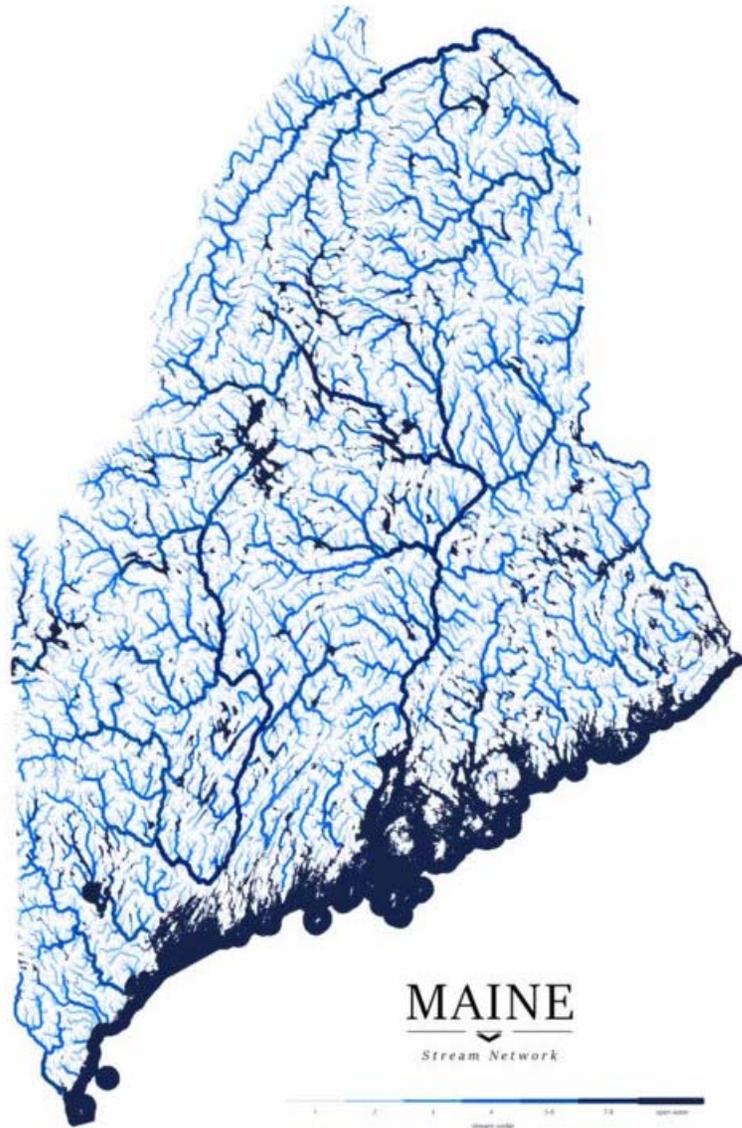
The Blue and Red lines were the proposed route for the Aroostook Renewable Gateway (ARG) – LS Power

King Pine Wind Farm is owned by LongRoad Energy to be built on JD Irving property.

Note the ARG follows existing corridor from Haynesville to Howland.

Slide 7





Hydroelectric

Hydroelectric solutions should be in the forefront of energy development in Maine given the wide range of free running rivers and strong tides

ORPC – A Maine based company with a proven track record in river and tidal generated energy

<https://orpc.co/>

Natel –

Fish friendly turbines and run of the river solutions

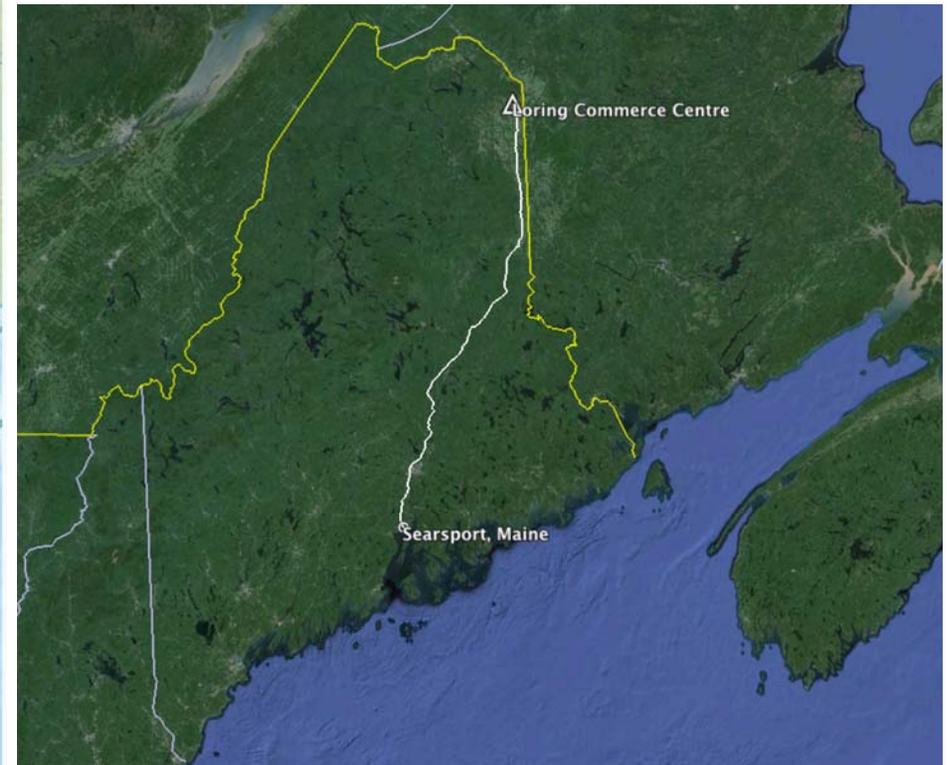
<https://www.natelenery.com/>

Loring



- Economically depressed area
- International Airport
- Aerospace Biofuel Development
- [Loring Development Authority](#) established 2025
- 200 mile underground energy pipeline to Searsport

Searsport Loring Pipeline



Slide 10