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JANUARY - APRIL 2020

PUBLISHED BY VOLUNTEERS FROM THE LOWER HUDSON GROUP SIERRA CLUB

RENEWABLE ENERGY COMES TO ROCKLAND COUNTY: BRING YOUR COMMUNITY ON BOARD!

by Peggy Kurtz

Rockland communities are moving ahead with an exciting program which will bring renewable energy at reduced costs to Rockland residents and small businesses. You can help by making sure your community participates now, while they can still join the Rockland energy group. The Rockland group will launch early in 2020.

The reason many of us are so enthusiastic about Community Choice energy is that this program makes a very substantial and even measurable difference by moving entire communities over to renewable energy for electricity at once. It is the kind of bold, transformative action that we need in order to transition quickly enough as a society away from fossil fuels and to renewable energy.

NOT ANOTHER ESCO: Community Choice Aggregation (CCA) is NOT another ESCO (alternative natural gas or electricity suppliers), the companies that are calling and mailing to you constantly. CCA is a state sponsored program, promoted by NYSERDA and overseen by the Public Service Commission.

BENEFITS:

- Cost savings for electricity
- Consumer protection, with guaranteed prices
- 100% renewable energy
- Local choice for energy supply
- More choices for consumers
- Points toward state funding

HOW IT WORKS: Currently our default energy supply source is provided by Orange & Rockland. With CCA, your municipality creates a buying group in this state program, through which residents and small businesses can purchase 100% renewable energy at lower costs than from O & R.

Consumers can always opt out at any time with no penalty. CCA provides more choices to customers.

WHERE IT'S BEING DONE ALREADY: About 63% of Westchester communities are participating, with 27 municipalities. A second group of eight communities in Ulster and Dutchess Counties launched recently. A third program, Finger Lakes Community Choice, also launched recently.

SAVINGS SO FAR: Since 2016, the 110,000+ homes and small businesses in the Westchester CCA have collectively saved 500,000 tons of CO2 and \$17 million. Over one year, Hastings collectively saved \$100,000.

ROCKLAND GROUP FORMING: A Rockland CCA group will begin the launch process early in 2020. So far, the Rockland group includes: Clarkstown, Orangetown, and the villages of Nyack, South Nyack, Upper Nyack, and the Village of Haverstraw. Rockland Sierra Club is very proud to have played a lead role in making all of this happen.

HOW YOU CAN HELP: If you live in Rockland County in a town or village not listed above, please get in touch to help bring Community Choice Aggregation to your municipality. You can reach out to Rockland Sierra Club at rocklandclimate@gmail.com or 845 709-0802.

COME TO A ROCKLAND SIERRA CLUB MEETING TO LEARN MORE:

Mike Gordon, CEO of Joule Assets

RENEWABLE ENERGY FOR ROCKLAND: Getting to Clean Energy Fast Enough
Monday, January 6, at 7 pm
Suffern Free Library, 210 Lafayette Ave, Suffern, NY 10901

Membership Meeting Schedule

Visit SierraLowerHudson.org > Events

Visit RocklandSierraClub.org

Join us to work on environmental issues in Rockland County!

Rockland Sierra Club was one of the groups leading the successful effort to defeat plans to desalinate Hudson River water for Rockland's drinking water. We are now helping the County craft a sustainable water management policy. We are also working to limit new fossil fuel infrastructure such as Pilgrim crude oil pipelines, and have partnered with 350.org on efforts to address climate change through divestment and through promoting Climate Smart/Clean Energy Communities programs for towns and villages.

Rockland Sierra Club usually meets during the first week of each month. Check RocklandSierraClub.org for dates and locations. For more information: pkurtz9@gmail.com or deby1012@gmail.com. Or call 845-358-3386.

RESULTS OF THE 2019 LOWER HUDSON GROUP EXECUTIVE COMMITTEE ELECTION

By Gale Pisha

Thank you to all the Lower Hudson Group members who voted online or by paper ballot in the 2019 Executive Committee election! The votes were counted on November 5, 2019. Fifty six valid ballots were submitted, nine from joint members, so 65 members voted in total. The following members will begin their two-year terms in January 2020:

Sarah Wilson
Linda Brunner
Laura Burkhardt
Bill Meyer
George Klein

The ExCom consists of nine members who serve two-year overlapping terms. We meet monthly to carry on the business of our local Sierra Club group. ExCom members who have one year left of their current two-year term are Ed Berry, Peggy Kurtz, Jerry Ravnitzky and Gale Pisha.

Please come to our monthly activist/ExCom meetings and get involved in local environmental issues or in helping with our newsletter, website, fundraising, or any of the many things we do! Meeting information is on our website at SierraLowerHudson.org (click on the Events tab).

VITAL NUMBERS LOWER HUDSON GROUP SIERRA CLUB

Local Sierra Club website: SierraLowerHudson.org

Rockland Sierra Club website: RocklandSierraClub.org

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SIERRA CLUB MILITARY OUTDOORS: A CAMPAIGN TO HELP VETERANS' TRANSITION

By Aaron Leonard

Launched in 2006 and originally known as the Military and Family Initiative, the Sierra Club Military Outdoors (SCMO) provides meaningful outdoor experiences to veterans and their families to help participants transition from active duty to active citizenship, to heal emotionally and physically, and to create a new generation of leaders and environmental stewards willing and equipped to protect America's public lands. Since SCMO's inception, more than 85,000 veterans have participated in outings led by Sierra Club volunteers.

SCMO is an evidence-informed outings program design based on research that shows nature-based programs have measurable, positive effects on participants' sense of belonging, sense of loneliness, and overall wellness. We regularly observe that veterans who participate in our program are more likely to make sustainable positive changes in their civilian life. In fact, SCMO has completed two research projects over the last five years measuring these positive changes and is currently entering the 2nd year of a study run by the University of Utah examining the effects of our community based, volunteer led outings program in New York City.

Our work in New York City has also allowed us to examine the many barriers people regularly face to accessing nature and public lands, resulting in the development of an outings planning process that better identifies and mitigates common barriers. In support of our work, SCMO recently completed a survey of veterans in Bronx County, NY to identify the most common barriers to accessing nature, results are found in Table 1 and Figure 1 below.

When asked "how long" since they last spent a day or more outside hiking, camping, fishing, or participating in any other outdoor activity they might enjoy	
More than 1 year	Less than 1 year
43%	42%
When asked if they feel there are barriers to their participation in outdoor activities like hiking, camping, fishing, or any other outdoor activity they might enjoy	
Yes	No
69%	31%
When asked if they were invited to spend a day or more outdoors hiking, camping, fishing, or participating in any other outdoor activity they might enjoy with a small group of veterans from their community would they go?	
Yes	No
99%	1%

Figure 1. Percentage of barrier types

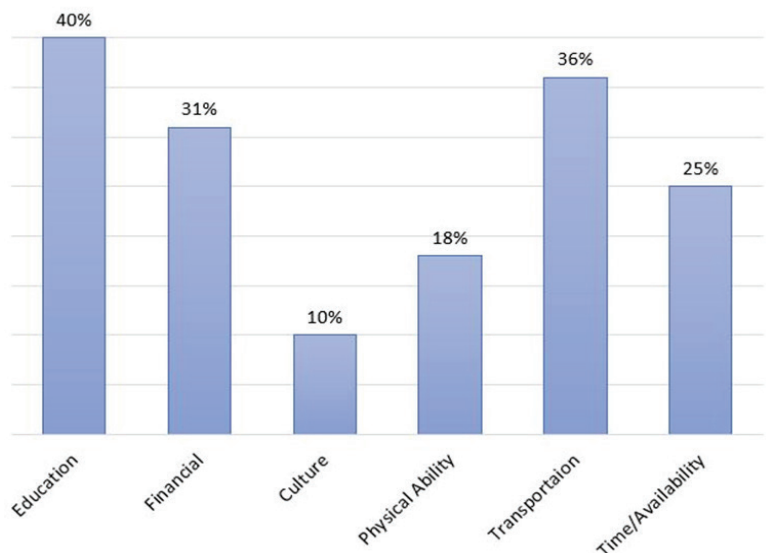


Table 1. Results from a survey of 100 veterans in NYC regarding barriers to participating in outdoor programs.

In addition to new outings designs, SCMO is aggressively working to pass the Accelerating Veterans Recovery Outdoors Act, currently making its way through Congress, which would establish an interagency task force to study and make recommendations on how to use public lands to support medical therapy for veterans. And here in New York, the Outdoors Rx bill would require the NY State Division of Veterans Affairs to examine the known benefits of exposure to the outdoors, the effects of outdoor therapeutic programs, and to eliminate barriers relating to veterans' abilities to access state parks, lands and facilities.

Aaron Leonard is a combat veteran who retired in 2014 as a lieutenant colonel after more than 27 years in the U.S. Army. He is a member of the Atlantic Chapter, a National staff member with the Sierra Club Military Outdoors, and has been leading wilderness adventures for service members and veterans since 2012.

THE NEW YORK STATE ELECTRIC GRID – PART 3

by Laura Burkhardt

Supply and Demand: Providers and Consumers of New York’s Electricity

Load Zones and Capacity Zones. For purposes of quantifying the demand for electricity in New York State, the state is divided into Load Zones. A map of the Load Zones is shown in Figure 1 below.

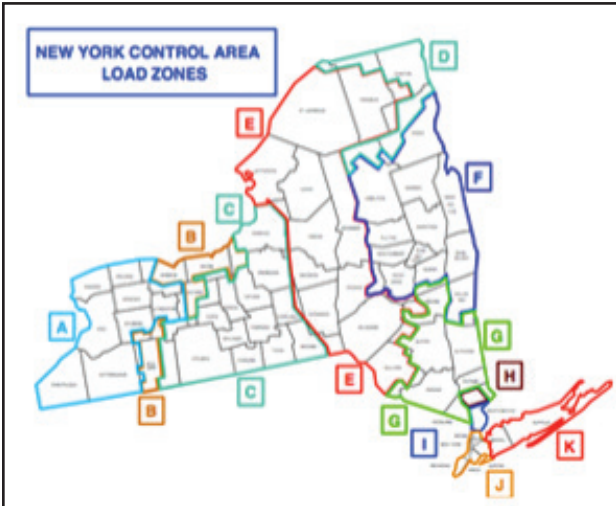


Figure 1. Load Zones in New York State.
Source: <http://nyarea.org/issue-briefs/new-yorks-transmission-challenges-opportunities-overview/>

Load Zones are grouped into Capacity Zones, where capacity represents the potential supply of electricity for the load zones. The following table for 2018 shows the amount of electricity generated in each Capacity Zone and used in each Load Zone. These Capacity Zones correspond roughly to the upstate and downstate parts of the state. From this table we can see that more electricity is generated upstate (due to a plentiful supply of wind and hydro power) than is generated downstate. Conversely, more electricity is needed downstate (due to a denser population and more industrial activity) than is needed upstate.

Upstate Sends Energy To Downstate. The shortfall in downstate generation is compensated for by the transfer of excess energy that is generated upstate. However, the amount of energy that can be transferred is limited due to the capacity of the AC transmission lines.

Transmission Upgrades Will Allow More Upstate Energy to Get Downstate. These transmission limitations were addressed by the PSC in 2012 as one part of a response to Governor Cuomo’s Energy Highway Blueprint issued by the Energy Highway Task Force in October of that

Generation vs. Load 2018
Data from 2019 Gold Book: Load and Capacity Data published by NYISO 2019

2018 Annual Generation/Load All numbers in GWh	Solar	Wind	Hydro	Nuclear	Fossil Fuel	Other	Total Net Generation	Annual Load
NYISO Load Zone								
Zone A (Buffalo)		347.9	18,152.5	0.0	1,385.2	769.0	18,654.6	15,894
Zone B (Rochester)		4.6	57.2	4,706.6	72.2	99.7	4,940.3	10,090
Zone C (Syracuse)		1,266.1	620.5	21,962.5	5,591.5	447.3	29,787.9	16,661
Zone D (Plattsburgh)		1,365.4	7,928.9	0.0	72.5	28.8	9,395.6	4,670
Zone E (Utica, Watertown)		1,001.1	2,153.0	0.0	68.3	268.3	3,480.7	7,985
Zone F (Albany)			2,013.5	0.0	12,206.5	561.0	14,781.0	12,375
Total Upstate Capacity Zone	0.0	3,985.1	28,825.6	26,669.1	19,386.2	2,174.1	81,040.1	67,585
Zone G (Hudson Valley)			219.5	0.0	2,369.7	23.4	2,613.4	9,965
Zone H (Upper Westchester)				16,334.0	0.0	392.0	16,726.0	2,807
Zone I (Lower Westchester)				0.0	0.0	0.0	0.0	6,071
Zone J (New York City)				0.0	24,956.2	0.0	24,956.2	53,360
Total Lower Hudson Valley Capacity Zone	0.0	0.0	219.5	16,334.0	27,325.9	415.4	44,295.6	72,203
Zone K (Long Island)	48.8			0.0	9,249.9	950.7	10,249.4	21,326
Total Long Island Capacity Zone	48.8			0.0	9,249.9	950.7	10,249.4	21,326
TOTAL NEW YORK IN-STATE	48.8	3,985.1	29,045.1	43,003.1	55,962.0	3,540.2	135,585.1	161,114
Scheduled Out-of-State Transactions (Actuals Not Available)							Net Imports	
Hydro Quebec							11,640.0	
Independent Electricity System Operator (IESO)							7,074.0	
ISO New England (ISO-NE)							-3,525.0	
PJM Interconnection LLC							11,574.0	
Total Out-of-State Transactions							26,763.0	
TOTALS	48.8	3,985.1	29,045.1	43,003.1			162,348.1	161,114.0

Table 1.
2018 Energy Generation and Load in New York State

Note: Other includes Pumped Storage Hydro, Internal Combustion (Methane), Steam Turbine (Wood), Steam Turbine (Refuse)

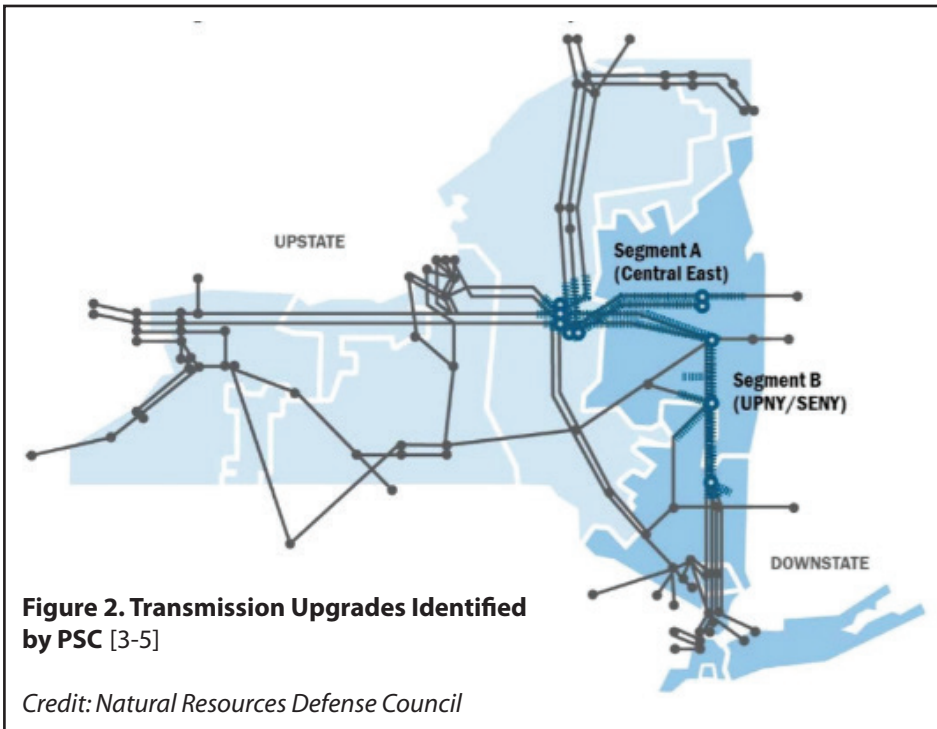


Figure 2. Transmission Upgrades Identified by PSC [3-5]

Credit: Natural Resources Defense Council

year [3-1]. At that time the PSC was also concerned about the effect of Indian Point's pending closure in 2015 (which didn't happen then but is now slated to occur in the next two years). The PSC subsequently began a proceeding (Case 12-T-0502) to review specific proposals from utilities and private developers for new transmission lines and upgrades to existing facilities in the AC electric transmission corridor that traverses the Mohawk Valley Region, the Capital Region, and the Lower Hudson Valley. The corridor includes facilities connected to Marcy, New Scotland, Leeds, and Pleasant Valley substations, and two major electrical interfaces (i.e., groups of circuits) that are often referred to as "Central East" (also referred to as Segment A) and "UPNY/SENY" (also referred to as Segment B). [3-2]. Refer to Figure 2 to the left.

The PSC required any proposed solution to Segment A (Central East) to provide a minimum 350 MW increase to the Central East interface transfer capability, while

proposed solutions to Segment B (UPNY/SENY) must provide a minimum 900 MW increase to the UPNY/SENY interface transfer capability. [3-3] In April 2019 two transmission projects were selected by the NYISO Board of Directors to update these two segments. [3-4] The projects are expected to be completed in 2023 for a total (at a minimum) of a 1,250 MW increase in transfer capability. [3-5]

Demand Reduction Program by ConEd Will Reduce Downstate Demand. A second program initiated by the PSC in response to the 2012 Energy Highway Blueprint was a Demand Management Program (DMP) aimed at reducing load on the grid. Case 12-E-0503 directed Consolidated Edison Company of New York, Inc. (Con Ed), as the local transmission owner, with the assistance of the New York Power Authority (NYPA), to develop a contingency plan for the potential closure of Indian Point by the end of 2015. This Reliability Contingency Plan was to take into account the potential impacts of energy efficiency (EE), demand response (DR), and combined heat and power projects (CHP). [3-6]

In February 2013 Con Ed and NYPA submitted a report that proposed to achieve an additional peak demand reduction of 100 MW; the CHP project would save an additional 25 MW. Through Quarter Three of 2019, committed and achieved EE/DR and CHP projects in the Demand Management Program account for approximately 137.5 MW, exceeding the 125 MW program goal. [3-8]

Behind the Meter

Wondering how your rooftop solar or the community solar farm that you signed up for fits into all this? We'll discuss this topic in the next issue of Terra Firma.

Sources

[3-1] "Press Release – Governor's Energy Highway Gains Momentum", 11/27/2012, <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=12-t-0502> SR # 399.

[3-2] "CASE 12-T-0502 - Proceeding on Motion to Examine Alternating Current Transmission Upgrades - Order Instituting Proceeding", 11/30/2012, <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=12-t-0502>, SR #396.

[3-3] "CASE 12-T-0502 - Proceeding on Motion of the Commission to Examine Alternating Current Transmission Upgrades", 7/16/2019, <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=12-t-0502> SR #1.

[3-4] "NYISO Board of Directors' Decision On APPROVAL OF AC TRANSMISSION PUBLIC POLICY TRANSMISSION PLANNING REPORT AND SELECTION OF PUBLIC POLICY TRANSMISSION PROJECTS", April 8, 2019, [https://www.nyiso.com/documents/20142/1390750/Board-Decision-AC-Transmission-2019-04-08.pdf/32323d32-f534-a790-1b03-](https://www.nyiso.com/documents/20142/1390750/Board-Decision-AC-Transmission-2019-04-08.pdf/32323d32-f534-a790-1b03-2cb110033320)

2cb110033320

[3-5] "NYISO approves 'historic' transmission to boost transfer capability to 900 MW", April 17, 2019, <https://www.utilitydive.com/news/nyiso-approves-historic-transmission-to-boost-transfer-capability-to-900/552910/>

[3-6] "Order Instituting Proceeding and Soliciting Indian Point Contingency Plan", Nov. 30, 2012, <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=12-E-0503>, SR #542

[3-7] "Compliance Filing of Consolidated Edison Company of New York, Inc. and New York Power Authority with Respect to Development of Indian Point Contingency Plan", Feb. 1, 2013, <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=12-E-0503>, SR #499

[3-8] "Indian Point Energy Center EE/DR/CHP Program Progress Report: Third Quarter, 2019", Nov. 26, 2019, <http://documents.dps.ny.gov/public/MatterManagement/CaseMaster.aspx?MatterCaseNo=12-E-0503>, SR #2

2019 ELECTION RESULTS, AND LOOKING AHEAD TO NOVEMBER

by Ed Berry, Political Chair
berryled3@gmail.com

Political endorsements by our group can help selected candidates win elections, as you can see from the chart below. But our endorsement is no guarantee of success.

Endorsement for election is a big deal, both for the candidates who earn it, and for us. We follow a long, formal process that includes a multipage questionnaire, an interview, and an internal discussion by our activists to make a final decision.

Starting this spring, we'll be gearing up for what will surely be a hugely important election. Not only is it a presidential election year, but seats in the Senate, the House, and New York Senate and Assembly will be up for grabs. We have a lot of work ahead of us. Please contact me if you want to pitch in.

Seat	Area	Endorsed Candidate	Result
Westchester County Board of Legislators District 2	Bedford, Lewisboro, Mount Kisco, North Salem, Pound Ridge, Somers	Kitley Covill	Won
Westchester County Board of Legislators District 4	New Castle and parts of Somers and Yorktown	Vedat Gashi	Won
Westchester County Board of Legislators District 6	Harrison, Port Chester, Rye Brook	Nancy Barr	Won
Westchester County Board of Legislators District 7	Harrison, Larchmont, Mamaroneck, New Rochelle, Rye	Catherine Parker	Won
Westchester County Board of Legislators District 9	Briarcliff Manor, Cortlandt, Croton-on-Hudson, Ossining, Peekskill	Catherine Borgia	Won
Westchester County Board of Legislators District 11	New Rochelle, Pelham, Pelham Manor	Terry Clements	Won
Westchester County Board of Legislators District 15	Bronxville, parts of Yonkers	Ruth Walter	Won
Rockland County Legislature District 10	Nyack, Upper Nyack, Clarkstown, Valley Cottage, parts of New City and Bardonia	Harriet Cornell	Won
Rockland County Legislature District 15	Chestnut Ridge, Clarkstown, Orangetown	Julie Goldberg	Lost
Rockland County Legislature District 17	South Nyack, Blauvelt, Orangeburg, Orangetown, Sparkill, Piermont, West Nyack	Nancy Low Hogan	Lost
Town Supervisor	Orangetown	Thom Kleiner	Lost

INDIAN POINT DECOMMISSIONING? NOT SO FAST!

Indian Point's reactors will shut down in 2020 and 2021. In an effort to learn from other US communities which are experiencing the decommissioning of nuclear reactors, NYS Senator Pete Harckham, NYS Assemblymember Sandy Galef and Westchester County Legislator Catherine Borgia invited representatives from these communities to a forum for citizens and elected officials in Westchester on October 10 that was organized by Hudson River Sloop Clearwater.

From a report presented at this forum¹, participants learned that the traditional approach has been to allow nuclear power plants 20 to 50 years for radioactivity to decay somewhat (and for decommissioning trust funds to build up) before decommissioning, but new companies that specialize in decommissioning are promising to dismantle plants in as little as five to eight years and ship the nuclear waste to "consolidated interim storage" sites in Texas and New Mexico.

While this approach may seem attractive to reactor communities, it raises important safety and economic questions. Spent fuel would be moved from cooling pools to dry cask storage in less time than before, which means the fuel is hotter². This radioactive waste would likely be shipped on barges down the Hudson past New York City and New Jersey, posing risks for people along the route. Forum participants raised concerns about the safety of the new casks and pointed out that quick decommissioning leaves more money in the decommissioning trust funds for the private specialty companies to keep as profits. Another potential problem could be that the decommissioning trust fund hasn't had time to grow and gets depleted, leaving taxpayers with the rest of the cleanup bill³.

Some scientists and watchdog groups recommend that the safest solution would be to leave the spent fuel on-site in hardened on-site storage, but since these private specialty companies also own the interim storage sites, they have an incentive to move the dangerous fuel across the country despite the risk.

For more information, see the references below and the resources on Clearwater's website at <https://www.clearwater.org/fall-2019-regional-nuclear-decommissioning-forum/>. We need to tell our elected officials that fast-tracking the Indian Point decommissioning process by license transfer to a private decommissioning firm may put us all in danger!

1 https://www.clearwater.org/wp-content/uploads/2019/10/S.Kent_.decomm-specialists-backgrounder-final.1010.19.pdf

2 <https://www.lohud.com/story/news/investigations/2019/06/19/nuclear-plant-decommissioning-is-a-gold-mine-for-some-but-at-what-risk/1269407001/>

3 Ibid



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WESTCHESTER, PUTNAM & ROCKLAND COUNTIES

*"I would encourage the president to...
admit that climate change is real!"*
--Lindsey Graham



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