

What to expect

when you're expecting an
energy transition in Virginia

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What to expect when you're expecting an energy transition in Virginia

Bills we will cover:

- Clean Energy and Community Flood Preparedness Act, HB981/SB1027 (RGGI bill)
- Virginia Clean Economy Act, HB1526/SB851 (VCEA)
- Solar Freedom, HB572/SB710
- Update to Commonwealth Energy Policy SB94/HB714

* Legislation takes effect July 1, 2020

Clean Energy and Community Flood Preparedness Act, HB981/SB1027

aka RGGI



Designed to reduce CO₂ emissions from power plants 30% by 2030
Raises money for low income EE and coastal adaptation

Virginia Clean
Economy Act,
HB1526/SB851
(VCEA)



CO₂ emissions keep falling after 2030, hit zero* in 2050



Energy
efficiency \$\$\$
savings
become
mandatory for
IOUs under
VCEA

EE savings by 2025:
5% of total load for Dominion, 2% for APCo



Energy Saving-omzsr.it

Dominion and APCo ramp up renewables and energy storage

- VCEA takes 3 approaches to renewables:
 - Renewable Portfolio Standard (RPS)
 - “In the public interest” language
 - Required build-out of wind/solar, storage

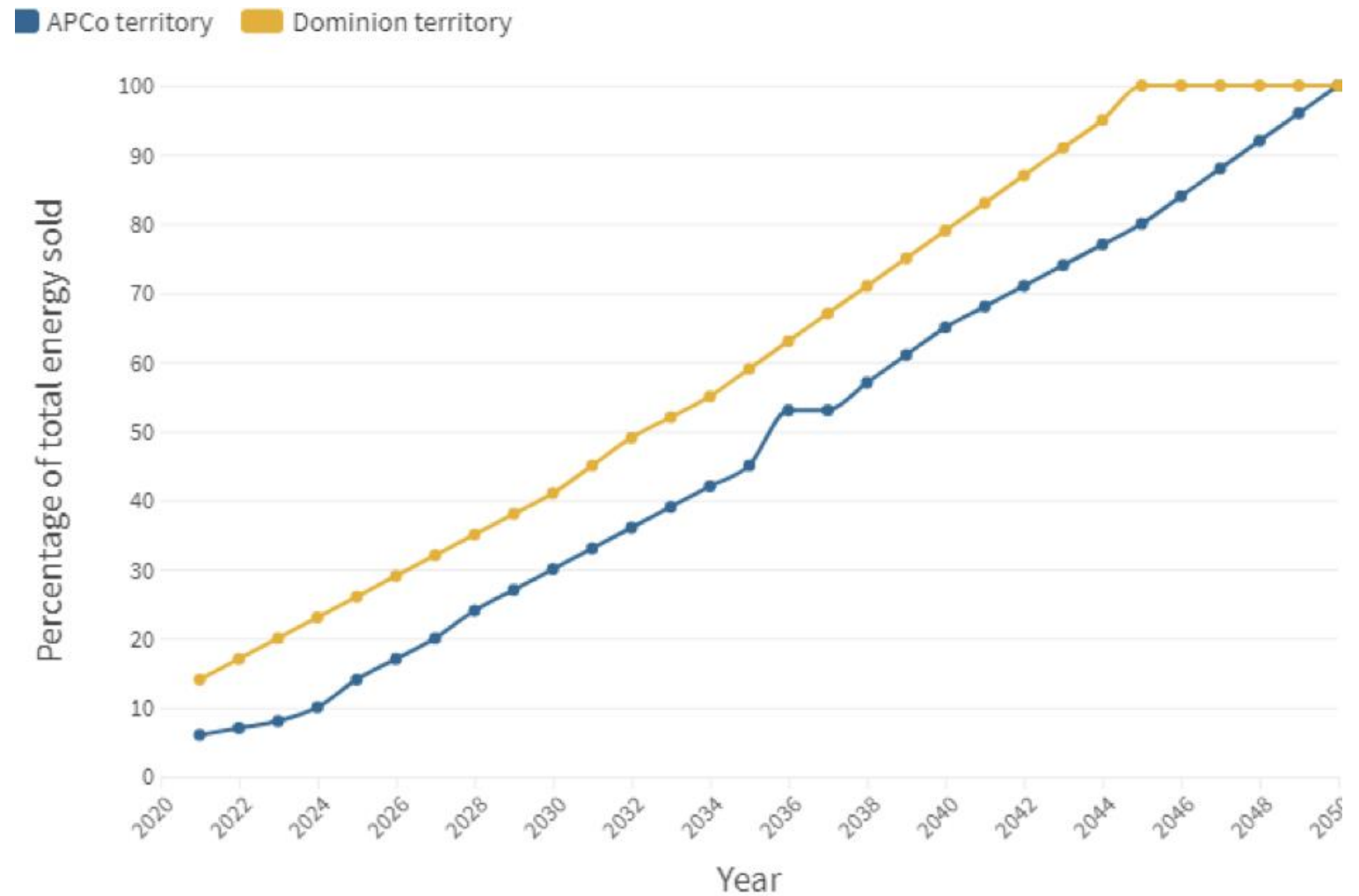
Renewable Portfolio Standard (RPS)

- Applies to “total electric energy,” after nuclear is subtracted out
- Also subtract out electricity sold to “accelerated RE buyers”
- For Dominion, nuclear is about 30% of supply
 - For Dominion, nominal RPS must be discounted 30%*
 - APCo has no nuclear, so its RE targets are lower and slower*



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RPS goals align with Northam Executive Order: 30% by 2030



(Just remember to discount for nuclear.)

What qualifies as renewable?



2021-2024: RPS can be met with RECs from dirty sources,
including from outside Virginia
2025 and after: 75% from Virginia, fewer dirty sources allowed
BUT: RECs from Virginia paper mills always allowed

What the heck is a REC?

- Renewable energy certificates are not energy!
- They are the proof that energy came from a renewable source
- They can be bought and sold separately on the open market, and in other states
- They can be generated or bought this year, and saved to use next year (or for 5 years)
- RECs from “the best” types of renewable energy usually cost more than RECs from dirty sources
- If the law allows dirty sources to qualify, a utility will use those RECs first to comply at least cost

What about
your rooftop
solar?



VCEA's second way to get renewables: declare them "in the public interest"



5,200 MW offshore wind



16,100 MW utility solar and on-shore wind



VCEA's third way to get renewables: tell utilities to buy/procure them!

- Dominion and APCo must propose projects and get SCC approval
- Annual plans must be submitted to SCC 2020-2035
- Utilities must issue annual RFPs
- APCo must propose at least 600 MW of wind/solar
 - 200 MW wind/solar by December 31, 2023
 - 200 MW additional wind/solar by 2027
 - 200 MW additional wind/solar by 2030
- Dominion must propose at least 16,100 MW wind/solar by 2035, including 1,100 MW of projects under 3 MW, and 200 MW located on previously developed project sites
 - 3,000 MW wind/solar by 2024
 - 3,000 MW wind/solar by 2027
 - 4,000 MW wind/solar by 2030
 - 6,100 MW wind/solar by 2035

Build-out of storage also included

Dominion must propose 2700 MW of storage projects

APCo must propose 400 MW storage

- 35% third-party development; competitive procurement
- “goal” of 10% behind the meter



Eqmagpro.com

For new gas plants, the road ahead is bumpy—and may be closed off



Fossil fuel and biomass plants start closing



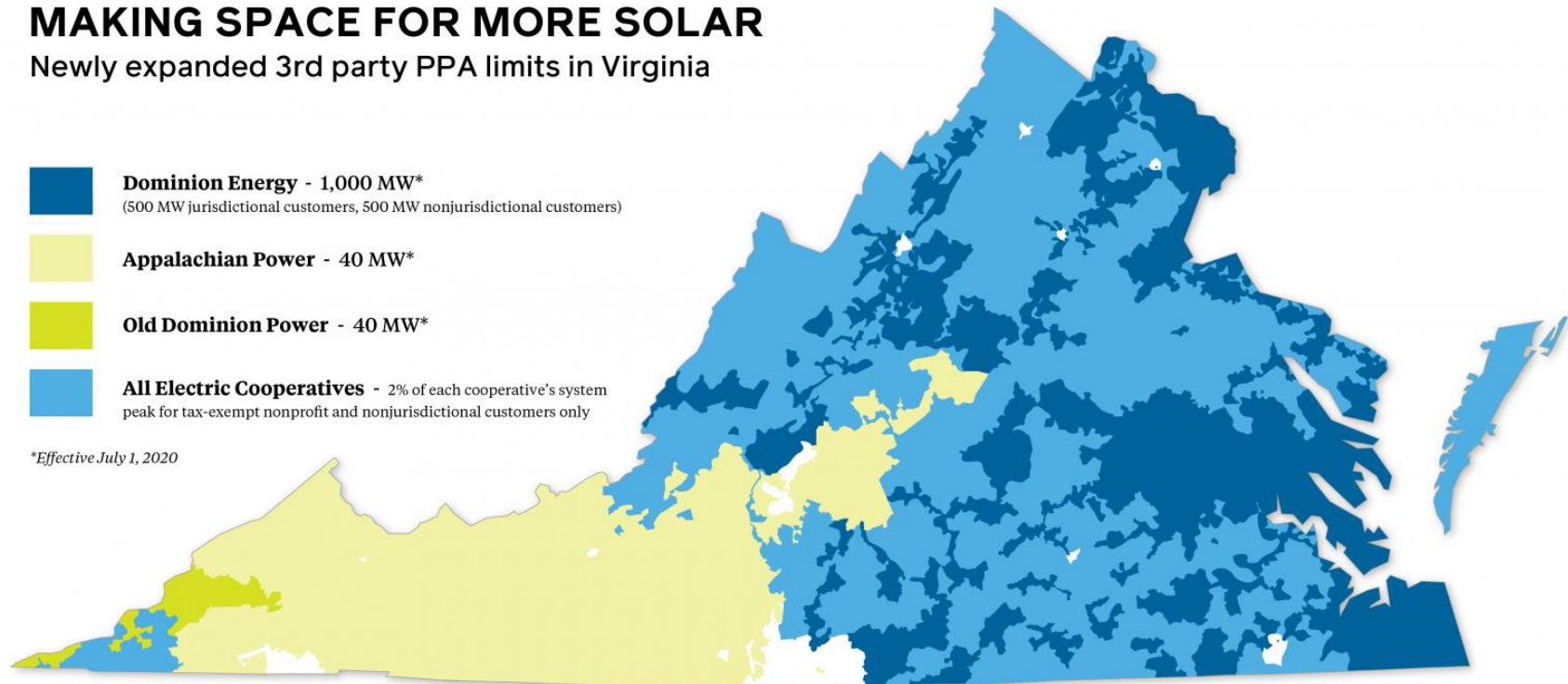
Rooftop (and other DG solar) loses its chains

MAKING SPACE FOR MORE SOLAR

Newly expanded 3rd party PPA limits in Virginia

-  **Dominion Energy** - 1,000 MW*
(500 MW jurisdictional customers, 500 MW nonjurisdictional customers)
-  **Appalachian Power** - 40 MW*
-  **Old Dominion Power** - 40 MW*
-  **All Electric Cooperatives** - 2% of each cooperative's system peak for tax-exempt nonprofit and nonjurisdictional customers only

**Effective July 1, 2020*



Source: Generation180, April 2020

Other new freedoms

- Net metering cap increased
- Standby charges apply only over 15 kW
- Residential limit now 25 kW, commercial limit now 3 MW
- Dominion customers can install 150% of previous year's demand
- Shared solar option for multi-family residential
- First landfill solar project gets GA's blessing

To the stars
and beyond



Dominion's 2020 Integrated Resource Plan (IRP)

Figure 2.2.2 - Alternative Plan B (nameplate MW)

Year	Solar COS	Solar PPA	Solar DER	OSW	Battery Storage	Pumped Storage	Natural Gas-Fired ¹	Nuclear	Retirements
2021									PP5
2022	540	240	220						
2023	600	360			14		485		YT3, CH5&6
2024	600	360	220				485		
2025	600	360							CL1&2
2026	600	360	220	852	400				
2027	600	360		1,704	500				Rosemary
2028	600	480	220						AV, HW, SH
2029	960	480			500				
2030	960	360	220			300			
2031	720	360							
2032	720	360			500			Surry 1	
2033	720	360						Surry 2	
2034	720	360		2,556	500				
2035	720	360							
TOTAL	9,660	5,160	1,100	5,112	2,414	300	970	1,676	3,183

“Plan B preserves approximately 9,700 MW of natural gas-fired generation to address future system reliability, stability, and energy independence issues.” –Page 3

Where do activists go from here?

- Clearly our work with Dominion is not done!
- Electric coops and munis must join the transition
- Improvements to RPS to remove paper company subsidies, strengthen provisions for solar on rooftops, brownfields
- Community solar, right to buy renewable energy bills need revisiting
- Buildings: stronger codes, stretch codes, all-electric, geothermal, solar
- Transportation: the end of car-centric planning?

Resources

- To get the acronym decoder: <http://vasierra.club/acronym>
- To get a copy of these slides: <img.vasierra.club/clean.transition.slides.pdf>
- To get a link to the recorded version of this presentation: <sierraclub.org/virginia/grassroots-conversations>
- To get the text behind these slides: <img.vasierra.club/clean.transition.pdf>
- To better understand REC's: <https://wp.me/p2J6aF-Y> "What the heck is a REC?"
- To get involved with Sierra Club advocacy: <sierraclub.org/virginia/optin>
- For additional information: <sierraclub.org/clean-energy-series>

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