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SEED Coalition
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Strengthen Carbon Rule

- Thanks to EPA for designing a rule that will help the nation transition to cleaner, less polluting and affordable energy
- Climate change is real, and impacts are being felt already through intensified storms, flooding, hurricanes, drought and wildfires
- We cannot afford the costs of NOT taking action
- The rule should be strengthened to require the percentage of energy produced by renewable energy to be 20% by 2020 and 30% by 2030.
- Decrease the amount of energy needed. Increase energy efficiency annual increments to be 2% by 2020 and 3% by 2030.

Coops Can and Should Benefit from the Rule

- Ensure that electric coops, which serve 75% of the U.S. electric service area, can benefit from the rule.
- They are among the most vocal opponents of the rule, but should be looking at economic opportunities and ways to make more water available by using cleaner energy.
- Many of the Generation and Transmission coops serve several states.
- Allow excess renewable energy generation or credits to be sold to utilities in other states in order to meet requirements of the rule.
- Create a special subchapter in the rule to ensure that coops benefit from the transition to clean energy.

Nuclear Power Incentives Should be Cut

Nuclear power is not clean or affordable. The rule pushes states to preserve, expand and subsidize nuclear reactors. Safety risks increase with aging reactors – which should instead be phased out and replaced by affordable and safe renewable energy.

- The rule provides unwarranted support for nuclear power, which should be cut - including incentives for new reactor construction and to keep aging, uneconomic reactors operating at nearly any cost to ratepayers and taxpayers. It pressures states to complete building five new reactors, despite them being billions of dollars over budget and years behind schedule.
- Nuclear power is expensive and dangerous. Accidents put our health and safety at risk and reactors routinely emit radionuclides.
- Vast water consumption worsens the threat to our water supply – a serious concern as drought worsens.

Economic Opportunity

- The National Rural Electric Cooperative Association has been fighting carbon rules, but if they play their cards right, electric coops can benefit from a once-in-a-generation opportunity to repower their communities, and create new local industries and businesses
- The EPA rule proposes an option to allow offsets of carbon if the utility or coop invests in energy efficiency or renewable energy. Coops can create local jobs to harness renewable energy and benefit financially by selling excess electric power to the grid for use in urban areas.
- Agriculture Secretary Tom Vilsack has helped create a new loan program to do this and has said that “energy efficiency retrofitting can shrink home energy use by 40 percent, saving money for consumers and helping rural utilities manage their electric load more efficiently.”

Coal Powered Coops

Existing Plants

<u>Alabama</u>	<u>670 MW</u>
<u>Alaska</u>	<u>25 MW</u>
<u>Arizona</u>	<u>390 MW</u>
<u>Arkansas</u>	<u>3,601 MW</u>
<u>Colorado</u>	<u>2,545 MW</u>
<u>Delaware</u>	<u>441 MW</u>
<u>Florida</u>	<u>650MW</u>
<u>Illinois</u>	<u>570 MW</u>
<u>Iowa</u>	<u>366 MW</u>
<u>Kansas</u>	<u>1,199 MW</u>
<u>Kentucky</u>	<u>3,259 MW</u>
<u>Michigan</u>	<u>565MW</u>
<u>Minnesota</u>	<u>1,290 MW</u>
<u>Mississippi</u>	<u>400 MW</u>
<u>Missouri</u>	<u>2,472 MW</u>
<u>North Dakota</u>	<u>4,348 MW</u>
<u>Ohio</u>	<u>1,230 MW</u>
<u>Oklahoma</u>	<u>648 MW</u>
<u>Texas</u>	<u>1,435 MW</u>
<u>Utah</u>	<u>550 MW</u>
<u>Wisconsin</u>	<u>1,513 MW</u>

TOTAL **28,167 MW**



Largest G&T Coops

Rural Electric G&T cooperatives own 160 generating units totaling 38,604 Megawatts of generation capacity of which roughly 59% is from coal fired steam plants and about 6% represent partial ownership in nuclear plants and about 32% is primarily gas fired peaking or intermediate units.

Owned capacity represents 57% of the energy supplied to member distribution cooperatives. Purchases from other sources represent the other 43%.

The chart to the right represents G&T generation

U.S. Department of Agriculture Rural Development Utilities Programs - Rural Electric Power Generation And Capacity Expansion, August 25, 2008

Coop	Headquarter State	2010 EIA Form 821 MWh of Generation	2009 EPA EGrid Data % Coal Generation Mix
Deseret G&T	Utah	4,153,408	99.90%
Minnkota Power Cooperative, Inc.	North Dakota	5,110,416	99.60%
Basin Electric Power Cooperative	North Dakota	23,500,000	99.52%
Southern Illinois Power Cooperative	Illinois	1,795,375	99.34%
Hoosier Energy REC, Inc.	Indiana	8,405,515	99.30%
Central Iowa Power Cooperative	Iowa	2,534,155	99.08%
Dairyland Power Cooperative (Alma/JP Madgett Units 1,2 &3) scheduled for retirement)	Wisconsin	5,201,496	98.83%
Tri-State G&T Assn., Inc.	Colorado	13,372,317	98.58%
Great River Energy	Minnesota	10,387,455	97.20%
East Kentucky Power Cooperative	Kentucky	12,570,249	96.95%
Prairie Power, Inc.	Illinois	52,709	96.75%
Arizona Electric Power Co-op, Inc. - Generation	Arizona	2,187,394	93.21%
South Mississippi Electric Power	Mississippi	3,600,878	82.15%
Sunflower Electric Power Corp.	Kansas	2,690,843	78.11%
Lower Colorado River Authority	Texas	12,389,104	68.05%
Oglethorpe Power Corporation	Georgia	19,574,145	
Arkansas Electric Co-op Corp.	Arkansas	13,300,000	
Alaska Electric and Energy Cooperative, Inc. (subsidiary of Homer Electric)	Alaska	469,918	
Wolverine Power Supply Co-op, Inc.	Michigan	191,586	
Associated Electric Co-op, Inc.	Missouri	13,857,542	85.32%
Big Rivers Electric Corporation	Kentucky	9,895,512	81.61%
Corn Belt Power Cooperative	Iowa	156,216	74.00%
Seminole Electric Co-op, Inc.	Florida	11,850,763	70.67%
Western Farmers Electric Co-op	Oklahoma	4,487,191	67.25%
PowerSouth Energy Cooperative	Alabama	7,006,855	55.81%
North Carolina EMC	North Carolina	6,290,702	
Old Dominion Electric Co-op	Virginia	5,848,557	
Brazos Electric Power Cooperative, Inc. (does not show new coal plant)	Texas	4,937,470	
South Texas Electric Cooperative, Inc.	Texas	4,138,024	
Buckeye Power, Inc.	Ohio	2,760,615	
Wabash Valley Power Assn., Inc.	Indiana	2,260,163	
Allegheny Electric Cooperative, Inc.	Pennsylvania	1,935,255	
Kansas Electric Power Co-op	Kansas	573,884	
Sho-Me Power Electric Cooperative	Missouri	4,631	

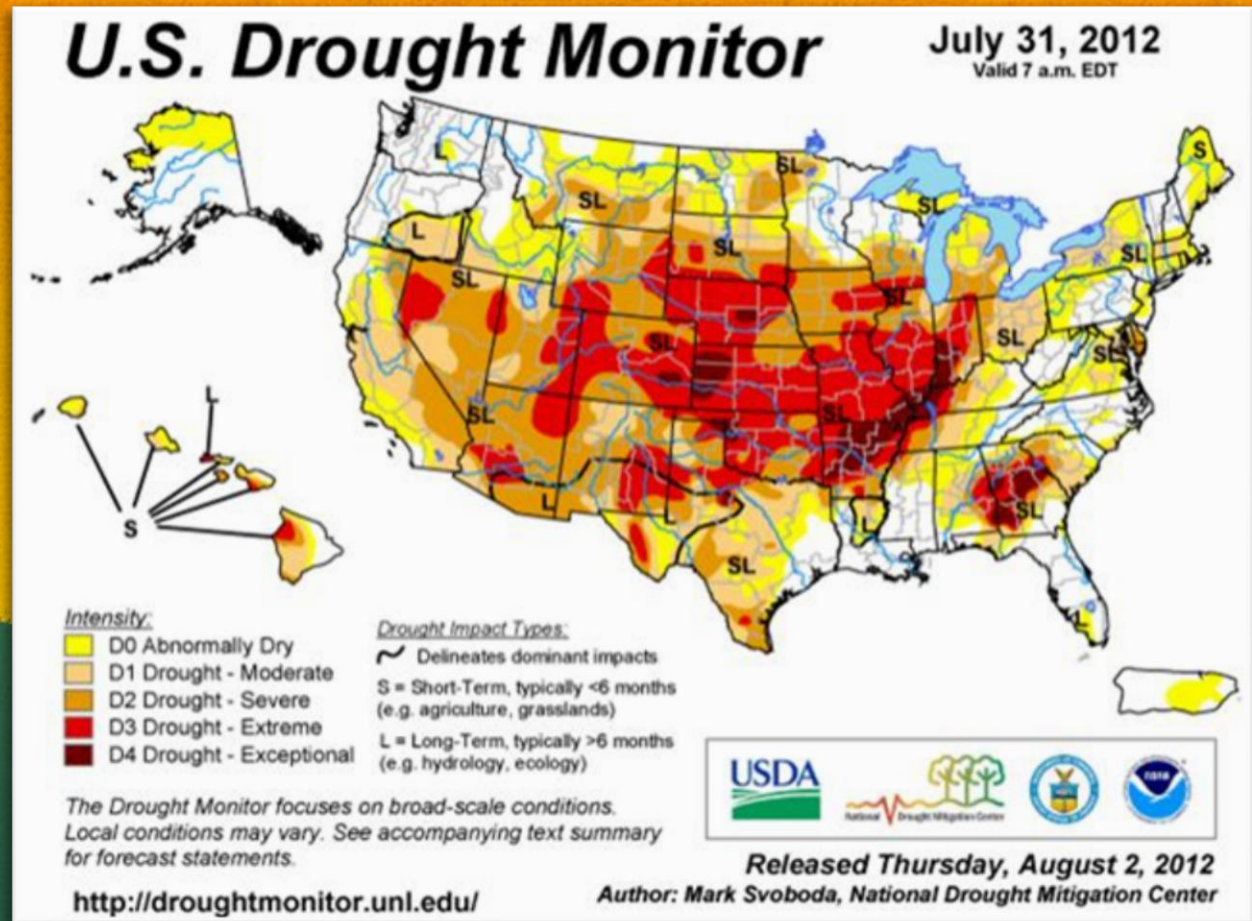
August 7,
2014

According to an Aug. 2, 2012 CNN report the area of the United States in extreme or exceptional drought grew by an area roughly the size of Alabama in just a few weeks.

Nearly half of the continental United States is in severe or worse drought.

About 93% of Missouri, more than 80% of Kansas and Nebraska and about two-thirds of Colorado fall into the two most severe categories. More than 95% of Arkansas is in severe to exceptional drought.

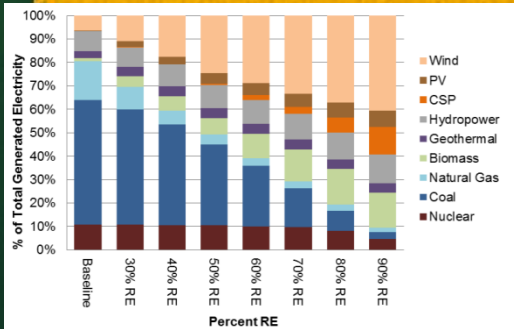
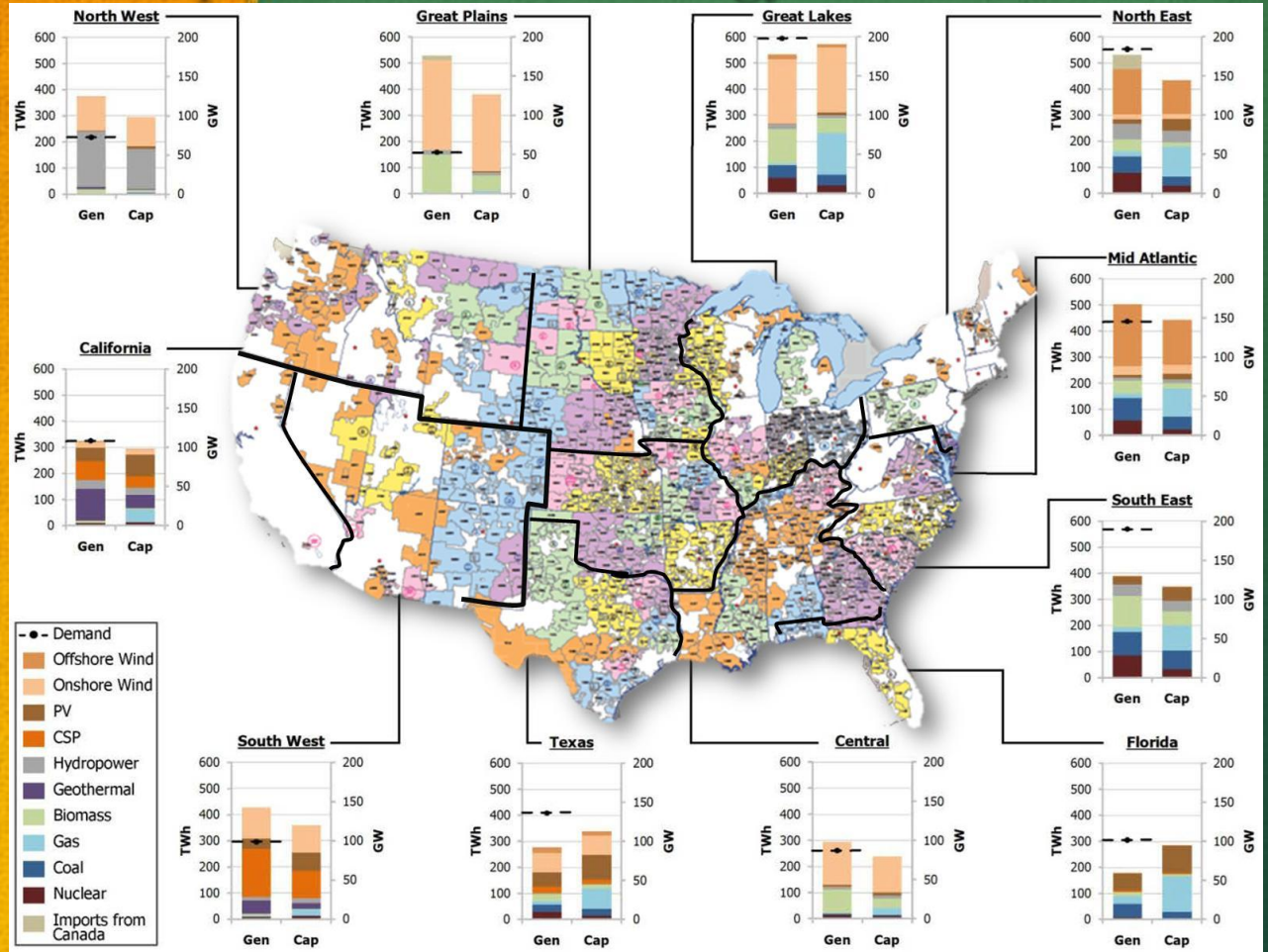
Following last year's exceptional drought in most of Texas, the state is hyper-sensitive to drought effects.



Transitioning to renewable energy and efficiency will increase the amount of water available – which is becoming increasingly crucial as drought worsens.

The More Profitable Way Forward: Coops Renewable Energy Potential

CO-OP Members will create local jobs if they transition to clean energy.



Estimated Potential for Renewable Energy by State

- Colorado ----- 21,605,816 GWh
- Iowa----- 9,391,622 GWh
- Minnesota----- 12,661,463 GWh
- Montana----- 14,160,937 GWh
- Nebraska-----18,081,392 GWh
- North Dakota----- 13,143,901 GWh
- New Mexico----- 36,040,941 GWh
- South Dakota----- 15,478,682 GWh
- Wyoming----- -13,872,721 GWh
- **Total-----154,437,475 GWh**

From NREL data

Summary

- SEED Coalition supports the rule in that moving forward to reduce carbon is essential and thanks EPA for this work.
- The rule should be strengthened and go further. The need to address climate change is real. We're already experiencing impacts to our health and safety.
- We cannot afford inaction. The costs from intensified hurricanes and tornados, drought, wildfires, and agricultural impacts are immense. We need to be able to survive and not lose other species to extinction.
- Nuclear power is not clean or affordable, and all support and subsidies for nuclear power should be eliminated
- Coops can and should benefit from renewable energy and energy efficiency and the rule should ensure this.