

2020 Election – Consequences to USA Energy Policy

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THE VIEWS EXPRESSED HEREIN BY MR. O'CONNOR ARE HIS OWN AND ARE NOT MADE ON BEHALF OF SALT RIVER PROJECT.

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- Presidential Elections - Trump v Biden
- Congressional Elections - Senate/House – Democratic?
- State Elections - California policies?
- Regulatory Body Election - CPUC policies?
- Technological Developments - Battery Storage?
- Climate Change - Perception and Impacts
- Economic Factors - Impact on the Grid

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Overview of Salt River Project

SRP is two entities:

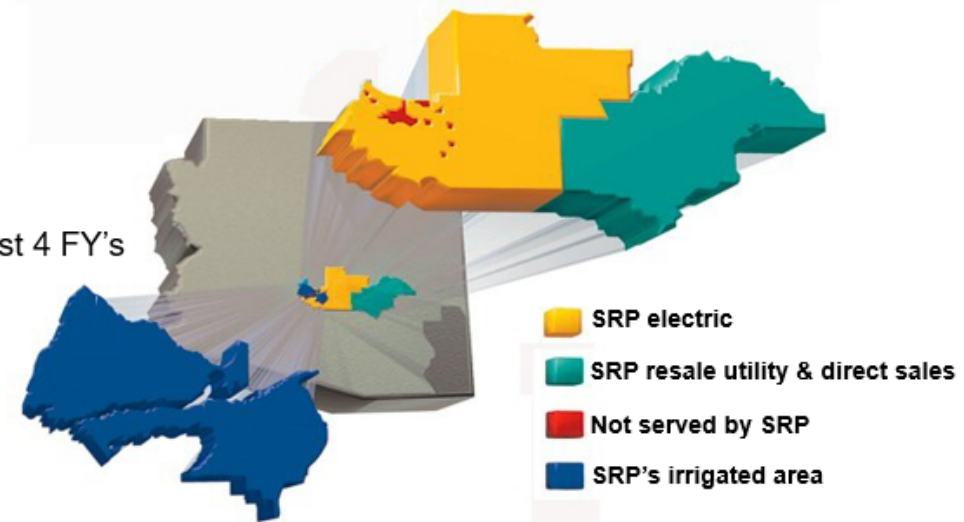
- The Salt River Project Agricultural Improvement and Power District, a political subdivision of the state of Arizona (the “District”)
- The Salt River Valley Water Users’ Association, a private corporation

Summary Statistics (FY 2020):

- Operating Revenues: \$3.1 billion
- 1,074,866 Retail Customers
- 4,966 Employees
- Aa1 & AA+ Ratings* (Moody’s & S&P)
- Steady economic growth
- All-time system peak, July 2020 (7,615 MW)
- Debt Service Coverage Ratio has exceeded 3.5x over last 4 FY’s

Highest ranked utility in the West Large Region by JD Power in Residential Customer Satisfaction Survey for 20 out of the last 21 years

*Current



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In the last 10 years, USA has been undergoing an historic transition in its electric generation resources.

This has been due to significant reductions in “renewables” cost, lower natural gas prices (fracking) and significant social/political demands to decarbonize the electric sector.

The 2020 USA Election will determine the pace of this historic change – and that will have significant consequences to the electric industry and the economy as a whole.

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United States Primary Energy Consumption By Source

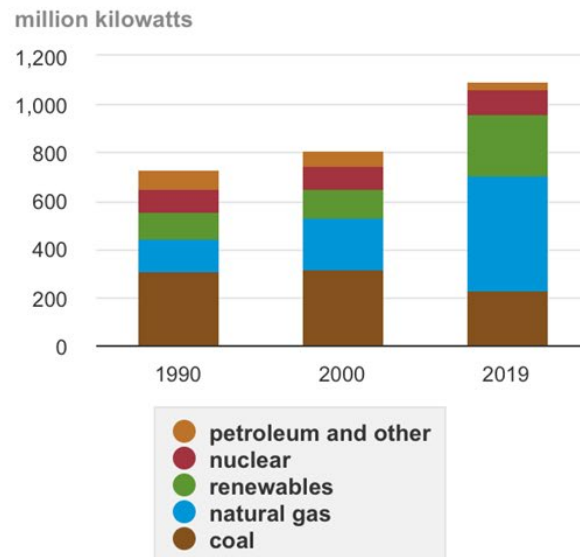
Year	<u>2010</u>	%	<u>2014</u>	%	<u>2019</u>	%
Total	4,135		4,093		4,118	
Fossil Fuel	2,882	69.8%	2,700	65.9%	2,580	62.7%
Coal	1,848		1,581		966	
Natural Gas	987		1,127		1,581	
Nuclear	806	19.5%	797	19.4%	809	19.7%
Renewables	430	10.4%	536	13.1%	720	17.5%
Wind	40		65		107	
Solar	1		18		72	

Source: US Department of Energy. Numbers are in thousands of megawatt hours of energy produced.

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CAPACITY VS ENERGY

U.S. electricity generation capacity by major energy source, 1990, 2000, and 2019

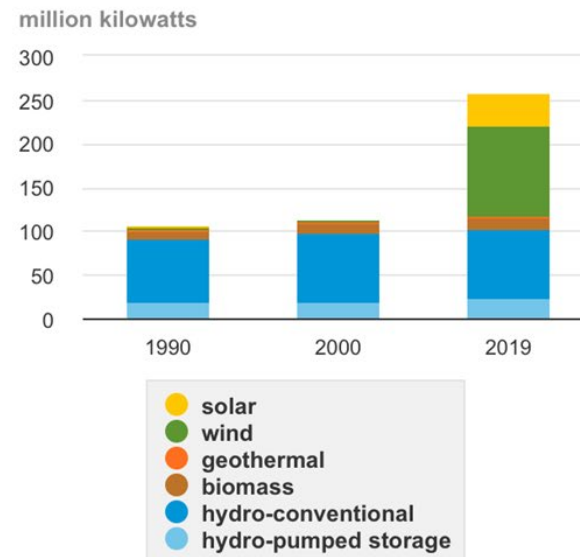


Note: Net summer capacity of utility-scale generators. Hydro includes conventional and pumped-storage hydro.

Source: U.S. Energy Information Administration, *Annual Energy Review 2011* and *Electric Power Monthly*, February 2020



U.S. renewable electricity generation capacity by type, 1990, 2000, and 2019



Note: Net summer capacity of utility-scale generators. Hydro includes conventional and pumped-storage hydro.

Source: U.S. Energy Information Administration, *Annual Energy Review 2011* and *Electric Power Monthly*, February 2020



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Potential Paths Forward:

- 2050 “Net Zero”
- 2050 “Carbon Free”
- 2035 “Net Zero”
- 2035 “Carbon Free”

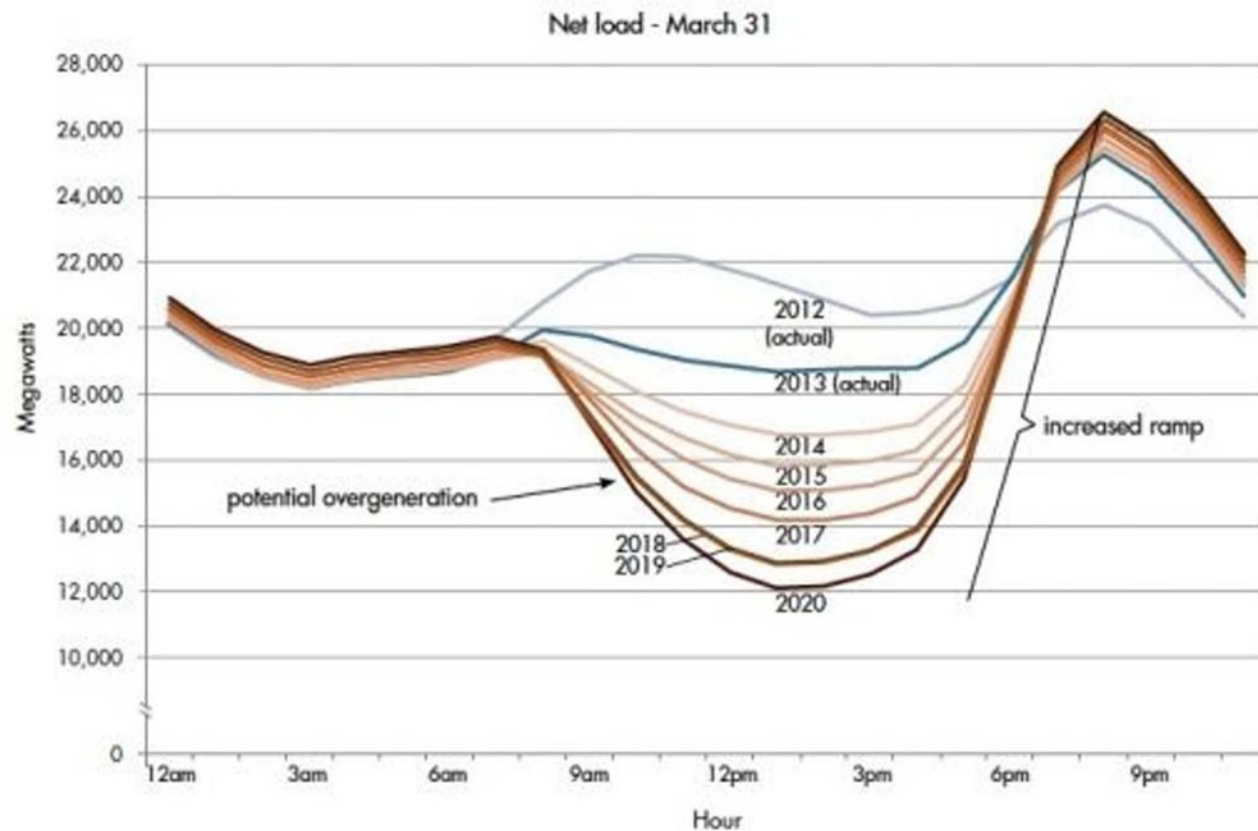
- Republican v Democrat Proposals
- Technological Limitations/Constraints

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- Impacts on Reliability
 - Republican v Democrat
- Impacts on Pricing
 - Republican v Democrat
- Impacts on Customer Classes
 - Large Industrial
 - Commercial
 - Residential
 - Low Income

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“The Duck Curve”



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- Nuclear Energy
- Climate Change
- Social Demand
- Generational Divide
- Energy – Water Nexus

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Questions?

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Period	Coal	Petroleum Liquids	Petroleum Coke	Natural Gas	Other Gas	Nuclear	Hydroelectric Conventional	Solar	Renewable Sources Excluding Hydroelectric and Solar	Hydroelectric Pumped Storage	Other	Total Generation at Utility Scale Facilities
Annual Totals												
2010	1,847,290	23,337	13,724	987,697	11,313	806,968	260,203	1,212	165,961	-5,501	12,855	4,125,060
2011	1,733,430	16,086	14,096	1,013,689	11,566	790,204	319,355	1,818	192,163	-6,421	14,154	4,100,141
2012	1,514,043	13,403	9,787	1,225,894	11,898	769,331	276,240	4,327	214,006	-4,950	13,787	4,047,765
2013	1,581,115	13,820	13,344	1,124,836	12,853	789,016	268,565	9,036	244,472	-4,681	13,588	4,065,964
2014	1,581,710	18,276	11,955	1,126,609	12,022	797,166	259,367	17,691	261,522	-6,174	13,461	4,093,606
2015	1,352,398	17,372	10,877	1,333,482	13,117	797,178	249,080	24,893	270,268	-5,091	14,028	4,077,601
2016	1,239,149	13,008	11,197	1,378,307	12,807	805,694	267,812	36,054	305,579	-6,686	13,754	4,076,675
2017	1,205,835	12,414	8,976	1,296,442	12,469	804,950	300,333	53,287	332,963	-6,495	13,096	4,034,271
2018	1,149,487	16,245	8,981	1,469,133	13,463	807,084	292,524	63,825	350,467	-5,905	12,973	4,178,277
2019	966,148	11,576	6,991	1,581,815	13,634	809,409	273,707	72,234	374,494	-5,261	13,302	4,118,051
Year 2018												
January	119,284	5,555	965	110,293	1,097	74,649	25,064	3,319	32,443	-547	1,109	373,230
February	82,050	804	754	98,512	1,092	64,790	24,902	3,896	29,415	-315	994	306,894
March	80,626	830	642	106,524	1,158	67,033	25,861	5,056	33,200	-490	1,108	321,547
April	73,346	872	666	98,371	1,099	59,133	28,115	6,057	32,446	-377	1,028	300,756
May	85,227	1,040	517	115,284	1,167	67,320	30,444	6,849	30,419	-390	1,070	338,948
June	101,503	1,066	834	130,826	1,091	69,688	27,597	7,415	31,193	-433	1,104	371,886