

DOCKETED

Docket Number:	19-SB-100
Project Title:	SB 100 Joint Agency Report: Charting a path to a 100% Clean Energy Future
TN #:	234646
Document Title:	California Pool & Spa Association Comments - on Charting a Path to a 100% Clean Energy Future
Description:	Comments are jointly submitted by the California Pool & Spa Association and Pool & Hot Tub Alliance
Filer:	System
Organization:	California Pool & Spa Association and Pool & Hot Tub Alliance
Submitter Role:	Public
Submission Date:	9/9/2020 3:19:21 PM
Docketed Date:	9/9/2020

*Comment Received From: California Pool & Spa Association
Submitted On: 9/9/2020
Docket Number: 19-SB-100*

Comments on Docket No 19-SB-100 from California Pool and Spa Association and Pool and Hot Tub Allilance

Additional submitted attachment is included below.



September 9, 2020

California Energy Commission
Docket Unit, MS-4
Docket No. 19-SB-100
1516 Ninth Street
Sacramento, California 95814-5512

RE: SB 100 Joint Agency Report: Charting a Path to a 100% Clean Energy Future

The following comments are jointly submitted by the California Pool & Spa Association and its national affiliate the Pool & Hot Tub Alliance. Both organizations are nonprofit trade associations representing all segments of the swimming pool, spa, and hot tub industry, including manufacturers, residential and commercial builders, distributors, and the pool maintenance and service industry.

The California pool, spa, and hot tub market is the largest in the world. According to 2017 data, obtained by PK Data, California has the largest number of in-ground installed pools in the country at 1.2 million. In addition, there were 13,689 new in-ground construction projects underway in California in 2017.

According to the same 2017 data, California also leads the nation in:

- Number of aboveground pools installed (331,939)
- New aboveground pool sales (20,236)
- Hot tubs installed (1.2 million)
- New hot tub sales (87,890)
- Commercial pools installed (41,438)
- New commercial pool sales (662)

Nationally, the pool and hot tub industry contributes \$36.5 billion and accounts for 382,000 job equivalents to the U.S. economy, with a large portion attributed to the market size in California. The industry accounts for approximately 55,000 jobs in California. In addition, our California members bolster local economies by purchasing building materials, equipment, and supplies from local sources within their communities.

COMMENTS

In 2018, the California Legislature passed, and the Governor signed SB 100. The bill set an aspirational goal for California to reach a 100% renewable and carbon-free energy portfolio by December 31, 2045. More specifically, SB 100:

- Established state policy that RPS-eligible and zero-carbon resources supply 100% of all retail sales of electricity to California end-use customers no later than December 31, 2045.

Protect • Educate • Promote

RE: SB 100 Joint Agency Report: Charting a Path to a 100% Clean Energy Future

Page 2

September 9, 2020

- States achieving this policy shall not increase carbon emissions elsewhere in the western grid and shall not allow resource shuffling.
- Requires the California Public Utilities Commission (CPUC), California Energy Commission (CEC), California Air Resources Board (CARB), and other state agencies to incorporate this policy into all relevant planning.
- Requires the CPUC, CEC, and CARB to ensure that in furthering this policy the agencies:
 - maintain and protect the safety, reliability, and balancing of the electric system;
 - prevent unreasonable impacts on customer rates and bills;
 - adopt policies or actions to ensure equity in greenhouse gas (GHG) emissions reductions between the electricity sector and other sectors, to the extent feasible and lawfully authorized; and
 - ensure equivalent RPS and integrated resource plan rules and requirements for all retail sellers and POU. Clarifies nothing in this policy shall affect a retail seller's ability to comply with the federal Public Utility Regulatory Policies Act of 1978.
- Requires the CPUC, CEC, and CARB to:
 - utilize existing programs to achieve this policy;
 - prepare, in consultation with all California balancing authorities, a joint report to the State Legislature by January 1, 2021, and every four years thereafter, which includes a review of the 100% clean energy policy including forecasts, costs, resources, barriers, and impacts on reliability related to achieving the goal and alternative scenarios to achieve the goal.

There are numerous challenges to California achieving the goals set forth by SB 100. In particular, it is highly questionable whether the goal of 100% renewable energy can be achieved while, at the same time, protecting the safety and reliability of California's energy needs and preventing unreasonable impact on customer rates and bills.

SAFETY & RELIABILITY OF ELECTRICAL SYSTEM

California has one of the most expensive and least reliable electric grid in North America. Recent blackouts, coupled with the state's history of similar blackouts, demonstrates the California electrical grid is hard-pressed to handle its current electrical load, much less the enormous amount of a new demand that would have to be met to achieve 100% renewable, carbon-free, electrical portfolio and to electrify all residential and commercial buildings.

For California to reach its renewable goal, the electrical grid would have to be increased substantially in its ability to handle the additional strain that would be placed on the system. It is estimated electrical energy generators will have to produce double the amount of energy currently being produced. This would require hundreds of miles of high voltage electrical lines to be strung through California's wildland-urban interface. High voltage lines cause one in ten of California's wildfires and have been the source of several of the largest fires in California's history, each causing losses that well exceed \$10 billion each. This is not a minor issue. The State of California suffers an average of 7,500 wildfires annually. These wildfires not only undermine the reliability of the electrical grid, but the greenhouse gas

RE: SB 100 Joint Agency Report: Charting a Path to a 100% Clean Energy Future

Page 3

September 9, 2020

emissions resulting from these fires have all but wiped out any gains California has made in reducing greenhouse gases.

In addition to increasing the size of the grid by running new high voltage lines, in order to have energy reserves necessary to back up the electrical system on days when the sun does not shine, there is no wind, or there are smoky days, the system would require up to one million huge lithium-ion batteries placed throughout the system. Furthermore, new laws and regulations affecting the internet, cable, telephone, and emergency response communication systems will require the placement of additional battery systems to meet the requirement of providing 72 hours of emergency backup power. These batteries are themselves fire hazards and will only add to the risk of a wildfire which will undermine the safety and reliability of California's electrical grid.

As has been demonstrated from 2017 through the current wildfire season, California's wildland-urban interface is a tinderbox. Already this year, more than two million acres have been charred by wildfires in California, and the state is only at the beginning of its fire season. Testimony from legislative and regulatory hearings on the topic is clear, it will take at least a decade of resources and state financial commitment to make even a small dent in clearing forest lands, bush, and canyons adjacent to some of California's most populous cities and urban areas. COVID-19 has had a massive effect on the California economy and the state's financial situation. This economic downturn could divert or restrict state and federal plans to spend the tens of millions of dollars necessary to meet even the long-term goals relating to managing the sources of wildfires in California.

Comments made by panelists as part of these proceedings:

Land-use management and the build-out of commercial-scale renewable energy resources are other issues that could well undermine the safety and reliability of the state's electrical system. The issues associated with this topic are many. For California to rely on the resolution to these challenges in order to meet the aspirational goal of SB 100, while not expanding and utilizing existing energy resources, is unwise.

Reimagining Buildings for a Carbon Neutral Future, the EPIC Forum held by the CEC on September 2-3, 2020, indicated the major components necessary to achieve an all renewable energy future are offshore wind and expanded commercial-scale solar power. Offshore wind is not currently an available option in California, let alone at a commercial scale in order to be useful as a significant contributor to an all-electric future.

For California to depend on energy from solar resources as an even larger component of its energy future, presenters indicated it would take an additional 660,000 acres of land in the state dedicated to commercial solar facilities. To even build these facilities, it was indicated it would take coordinated planning to approve these locations between state and local governments. This type of coordinated land-use planning does not exist today. Moreover, even if coordinated land-use planning was a reality, the projects will have to overcome local opposition, NIMBYism, and environmental challenges that could tie

RE: SB 100 Joint Agency Report: Charting a Path to a 100% Clean Energy Future

Page 4

September 9, 2020

such projects up in litigation for decades. The same is true as it relates to projects to expand the grid so that it is capable of transmitting and distributing the energy needed from these resources.

Bottom line, the combination of wildfire risks and the challenges associated with doubling energy production and expanding the state's electrical grid are such that the electrical system in California will become less, not more reliable than today.

IMPACT ON CUSTOMER RATES AND BILLS

The potential cost impact of going to 100% renewable, carbon-free electrical future on ratepayers in California is dire. California's existing energy costs are among the highest in the nation according to a report written for the Foundation for Research on Equal Opportunity. According to that report, the average cost of residential electricity in the state last year was 19.2 cents per kilowatt-hour, which is 47% higher than the national average.

According to United Way's 2018 report, The Real Cost of Living, nearly 40% of California households are rent-burdened spending more than 30% of their income on housing. This is particularly relevant for low-income families who often spend 20% or more on energy costs. These statistics are significant for California which is the home of the highest poverty and homeless rates in the country. Can California afford to exacerbate the cost burden of moving to an all renewable energy platform on the poor and working-class in order to meet its "ideal" for electrical energy resources?

The state's largest electrical utility, PG&E, just came out of bankruptcy due to its inability to pay losses sustained as a result of causing some of California's worst wildfires. The repayment of losses to wildfire victims, to local governments for costs incurred by wildfires, and paying subrogation costs to homeowners and commercial insurance companies have cost the company close to \$40 billion. Moreover, California lawmakers and regulators have imposed billions of dollars of additional mandates on California's electrical utilities for the costs of future fire mitigation, system hardening, and back up liability insurance. Not all these costs will be passed through to ratepayers, but a substantial portion will be, including additional ongoing costs to pay for long-overdue maintenance issues.

A recent letter from the Chair of the Assembly Utilities and Energy Committee pleaded with colleagues not to extend a bond surcharge on consumers of less than a dollar, in response to a legislative proposal to extend the expiration of existing bonds to fund new wildfire resiliency costs. In that letter, Assemblymember Chris Holden said, "...the demands being put upon ratepayers in these times are *extraordinary*. Electric bills are *only beginning* to reflect the tremendous cost of hardening the grid to prevent wildfire ignition. We also expect a *tremendous wave of new costs* on these ratepayers going forward to electrify buildings and transportation."

Commentators in these present proceedings have indicated the cost of expanding the electrical grid in California alone would be in excess of \$75 billion. Add to that, the costs associated with retiring older energy facilities, the unneeded cost of taking natural gas power plants off the grid, and the high cost of

RE: SB 100 Joint Agency Report: Charting a Path to a 100% Clean Energy Future

Page 5

September 9, 2020

renewable energy mandates imposed on electrical utilities in California. Ratepayers are looking at "*a tremendous wave of new costs*" that will greatly exacerbate what are already the highest costs in the nation for electrical power. These facts paint a bleak future for ratepayers in a state that has the highest poverty rate in the nation, and where 40% of its population earns \$40k annually or less. Where 43% of voters feel they cannot afford to live, according to a poll done for Quinnipiac University, which also indicated that the worst financial fears and stress among Californians is the general cost of living.

The *tremendous wave of cost increases* is contrary to the legislative intent expressed in SB 100.

SOCIAL JUSTICE ISSUES

Social justice issues have been at the forefront of public policy discussions in 2020. Many of the issues are relative to this topic. As indicated previously, California has the highest poverty rate in the nation and the highest number of homeless individuals, whereby affordable housing is one of the state's most vexing problems. As such, California has the highest number of underserved communities, and very often, these are underserved communities of color.

Advocates for a 100% renewable energy future argue that implementing such as policy is in their best interest of underserved communities because it will address air quality and other issues of environmental pollution as these communities are often adjacent to current forms of carbon-emitting energy production. While some aspects of this argument may be true, there is little doubt the implementation of an all-electric policy will exacerbate social justice issues relative to housing and homelessness.

The previous section of this document regarding "the impact on consumer rates and bills" outlines the potentially massive increase in consumer electrical rates that are likely to result from the implementation of an all-electric policy in California. This will certainly widen the income gap for those wage earners who earn \$40,000 or less annually and even many of those in the \$60,000 annual wage bracket living in higher-cost geographic regions of the state. Also, the increased cost of building and maintaining homes will result in substantial increases in housing costs which Californians can ill afford.

The California Association of Realtors' report indicates for every \$1,000 added to the cost of a new home, over 10,000 Californians will never be able to afford to purchase a new home. The "tremendous wave of new costs" that will impact consumer electrical bills related to wildfire resiliency, electrical grid upgrade, and expansion as predicted just recently by the Chair of the Assembly Utilities and Energy Committee, will have the effect of driving homeowners who can afford it to opt for the installation of residential solar systems. As these individuals abandon the utilities, there will be fewer consumers left to shoulder the increased cost of the utilities to produce and distribute electrical power and pay for the maintenance and expansion of the electrical grid. The result will be further financial burdens on underserved communities.

Homebuilders who must comply with mandates to add residential solar systems, heat pump water heaters, electric HVAC systems, and electrical appliances such as convection ovens and stovetops will

RE: SB 100 Joint Agency Report: Charting a Path to a 100% Clean Energy Future

Page 6

September 9, 2020

increase the costs of new homes in order to recoup these expenses. It is estimated this will add thousands of dollars to the cost of a new home. These new costs, in concert with higher electrical bills, increases in local development fees, and higher rates for water, garbage, and sewer costs will substantially reduce the number of Californians who can qualify for a loan to purchase a new house, only to further the affordable housing issue in this state.

Costs associated with remodeling homes, condominiums, and apartment complexes to comply with new REACH codes and to make them attractive to new homeowners and renters will add to the increased cost of housing in California as well. Many, if not most of the existing housing stock in California, will require replacement of its existing electrical service and wiring to expand the ability to handle the addition of all-electric appliances. A study by Guidehouse and the California Building Industry Association (CBIA) indicated that switching to an all-electric house would cost the average Southern California household more than \$7,200. Moreover, electrical appliances such as heat pump water and space heaters, convection cooktops and ovens cost more to purchase and maintain and have a shorter lifespan than gas appliances.

CONSUMER CHOICE

Numerous other issues deserve to be openly discussed and debated regarding the huge gamble California policymakers are taking relative to the safety and reliability of the state's energy future by adopting a 100% carbon-free and all renewable energy portfolio. One of these is consumer choice. Consumers in this state prefer natural gas for space heating, water heating, cooking, and clothes drying according to a study conducted for the California Building Industry Association (CBIA). Some 90% of people surveyed who recently purchased or were planning to purchase a new home ranked having a new home with natural gas as "important" to them. Responses to these questions would likely be even higher if consumers were to make the connection between all-electric homes and the State of California preventing homeowners from having natural gas barbecues, decorative fireplaces, outdoor spas, fire pits, or other outdoor cooking and heating appliances. **For the swimming pool and spa industry, that builds outdoor living spaces desired by California residents, there really is no replacement for these natural gas appliances.** For heating of commercial pools, water parks, and other recreational facilities, there are no affordable replacements for natural gas water heaters and the same is practically true for residential in-ground pools and spas.

SUMMARY

SB 100 mandated that California maintains and protects the safety, reliability, and balancing of the electric system; prevent unreasonable impact to customer bills and rates; and to adopt policies or actions to ensure equity in greenhouse gas reductions between the electricity sector and other sectors. The report mandated by the California State Legislature requires the CPUC, CEC, and CARB to focus on issues relative to costs, resource barriers, and impacts on the reliability of the state's electrical system.



RE: SB 100 Joint Agency Report: Charting a Path to a 100% Clean Energy Future

Page 7

September 9, 2020

The expansion of the state's electrical grid and the necessary addition of tens of thousands of back up batteries through California's wildland-urban interface, in coordination with uncertain land-use planning issues, and questions regarding the future development of solar and offshore wind resources, will make the state's electrical system less reliable.

Similarly, the *tremendous wave of new costs* associated directly with the state adopting a 100% renewable electric portfolio will have a hugely adverse effect on consumer electrical rates and will result in fewer consumers shouldering the cost burden of supporting the electrical grid and electrical utilities. These tremendous impacts on consumer rates will increase affordable housing issues and negatively impact social justice issues relating to housing and homelessness in California. The result of this massive gamble on adopting an all-electrical all renewable energy policy is contrary to the specific legislative intent expressed in SB 100.

If you have any further questions, please do not hesitate to contact me. I can be reached at 916.225.8585.

Sincerely,

John A. Norwood
Director of Government Relations

