

## TESTIMONY OF RALPH CAVANAGH

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### BEFORE THE LITTLE HOOVER COMMISSION

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#### *Introduction*

I appreciate your invitation, and the opportunity to appear again before the Little Hoover Commission. Your invitation graciously acknowledged that I had “testified before the Commission and served on a Commission advisory committee nearly two decades ago that focused in part on this same topic.” I begin by quoting the conclusion that I offered you then:

My focus today is a California success story: we lead the nation in progress and innovation in sustainable energy resources, including energy efficiency and renewable energy. As one result, California has relatively low electricity bills, measured as a fraction of the state economy, and electricity contributes less to our environmental problems than is true almost anywhere else. This may come as a surprise, given all that other witnesses have told you about California’s relatively high electricity rates . . . I don’t ask you to be complacent about the cost of kilowatt-hours, but the efficiency of energy use is at least as important – and California is second to nobody there.<sup>1</sup>

I stand by and renew these sentiments, eighteen years later. California’s enviable record has been built over decades. A distinguished former member of the California Energy Commission, Dr. Arthur Rosenfeld, put it well in response to a reporter’s question (in 2006) about when the benefits from the state’s climate policy leadership would start showing up. “About 1975,” he replied.<sup>2</sup> Highly cost-effective energy efficiency in all sectors has created a statewide competitive advantage that was aptly captured in the 2013 California Green Innovation Index:

A state’s energy productivity can be illustrated in the total amount spent on electricity compared to the state’s total economic output. Money not spent on energy costs, whether by a household, business or public entity, can be invested in capital upgrades that boost productivity or can be invested in the creation of new jobs. California’s statewide electricity bill as a share of its GDP is significantly lower than states with comparable economies, population and geographic area . . . California’s state-wide electricity bill equated to 1.4 percent of the state’s GDP in 2011 . . . In comparison with other large

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<sup>1</sup> “California’s Energy-Related Agencies,” Statement of Ralph Cavanagh before the Little Hoover Commission (April 25, 1996), p. 1.

<sup>2</sup> See R. Cavanagh, “Graphs, Words and Deeds: Reflections on Commissioner Rosenfeld and California’s Energy Efficiency Leadership,” (Fall 2009), p. 81.

states, the statewide electricity bill in Texas was 2.6 percent of GDP, while Florida's bill equated 3.2 percent of GDP and New York's bill was two percent of GDP in 2011.<sup>3</sup>

All of California's energy agencies contributed to this record, which attests the enduring importance of a three-part efficiency policy that involves utility incentives, government standards, and technology innovation. Energy efficiency progress has gone hand in hand with a renewable energy surge that has put California on track to meet and exceed the statutory goal of achieving 33 percent of our electricity supply from renewable sources (excluding large hydropower generation) by 2020. In sum, the Little Hoover Commission was entirely right in its 2012 conclusion that "Californians have benefited from cutting edge energy policies in the past, succeeding spectacularly in energy efficiency programs."<sup>4</sup> The attachments provide further details.

And California's progress has helped spur nationwide progress in energy security and pollution reduction that was almost unimaginable when I joined NRDC in 1979. California's insistence on continuous upgrades in vehicle and appliance efficiency helped ensure that U.S. energy productivity more than doubled between 1979 and 2012, allowed the U.S. to cut oil use over the past forty years even as the economy tripled in size, and pushed the nation's total 2012 energy use below the 1999 level, even though the economy grew by more than 25 percent from 1999-2012, adjusted for inflation.<sup>5</sup>

None of this is an invitation to complacency; now and in earlier years, the Little Hoover Commission has asked a host of good questions about how best to sustain and accelerate California's progress. It is a privilege to be part of that process today.

### *Questions from the Commission*

My invitation framed three basic questions, to which I have appended responses below:

1. *Comment on the state's exposure to "piecemeal policies with potentially conflicting goals that might unnecessarily increase costs or prove detrimental to the environment."*

RESPONSE: I can answer this (and the other) questions with the benefit of 35 years of continuous exposure to California energy policymaking at the legislature and the agencies. Our moment of maximum peril was in the aftermath of AB 1890's enactment in 1996, which abandoned years of integrated policy in order to experiment with what one agency termed "the genius of the marketplace." A subsequent trainwreck of "piecemeal policies" almost wrecked the California economy, and spurred a swift and effective remedial response from the legislature and

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<sup>3</sup> Next 10, 2013 CALIFORNIA GREEN INNOVATION INDEX, p. 24. And the same source (p. 24) notes that long-term trends in California's electricity bills have been positive, with electricity bills down by 67 percent, 8 percent and 5 percent for our industrial, residential and commercial sectors over the past twenty years, a record that was better in every case than those for Florida, Texas and New York.

<sup>4</sup> Little Hoover Commission, REWIRING CALIFORNIA: INTEGRATING AGENDAS FOR ENERGY REFORM (December 2012), p. ii.

<sup>5</sup> These and related trends are addressed in a recent NRDC report, AMAZINGLY GOOD ENERGY NEWS (2013): <http://www.nrdc.org/energy/energy-environment-report/files/energy-environment-report-2013.pdf>

the energy agencies; both are chronicled in reports coauthored by NRDC and the Silicon Valley Leadership Group.<sup>6</sup> The trend since has been one largely of improved integration and coordination, which received a boost from the comprehensive inter-agency cooperation needed to implement California's Climate Solutions Act (AB 32, 2006). As AB 32 continues its advance today, the capable leadership in particular of ARB Chair Mary Nichols and Cabinet Secretary Nancy McFadden represents the strongest possible rebuttal to claims that California climate and energy policy are at risk of stalling due to "piecemeal policies with potentially conflicting goals."

2. *"The Commission is interested in your perspective on how the state might develop an overarching energy plan and would welcome any recommendations you might have on how the state can prioritize and best invest its resources to achieve its stated goals."*

RESPONSE: I do not believe that the State of California lacks today for "overarching energy plans." Long-term planning is a core function of the agencies that figure most prominently in the Little Hoover Commission's 2012 Report: the ARB, CPUC, CEC, and ISO. All pay careful attention to cost and reliability concerns. I believe that the agencies are better coordinated today than at any point during the 35 years of my work at NRDC, in no small part because of the sustained commitment of all the agencies' leadership and the convening power of the Governor's office. We don't need yet another "overarching energy plan;" we need instead to redouble our efforts to improve the quality and execution of the ones we have.

3. *"The Commission would welcome any recommendations on governance you might offer in today's environment where technology and consumer choices are rapidly changing the landscape for the regulated utilities."*

RESPONSE: I don't think that the agencies need to be reorganized, but I do have one strong recommendation: internal agency interpretations of statutory requirements on open meetings have made it almost impossible for individual Commission members to talk one-on-one with each other outside hearing rooms equipped with court reporters. However well intended, these requirements make decisionmaking far more cumbersome than necessary, and detracts from the kind of collegial engagement that leads over time to better informed and balanced results. I urge the Little Hoover Commission to draw attention to the problem and encourage the legislature to clarify that open meeting laws were never intended to constrain policy discussions that do not involve enough Commission members to constitute a quorum for decisionmaking purposes.

### *Additional Observations*

#### *1. Technology Innovation and R&D*

The Commission will likely hear much in today's hearing about the importance of technology innovation and R&D in meeting the state's ambitious energy and environmental goals. For me this underscores the importance of California's longstanding commitment to the nation's largest non-federal research and development (R&D) energy program, which was launched in 1996

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<sup>6</sup> See, e.g., NRDC & SVLG, ENERGY EFFICIENCY LEADERSHIP IN A CRISIS: HOW CALIFORNIA IS WINNING (August 2001); NRDC & SVLG, ENERGY EFFICIENCY LEADERSHIP IN CALIFORNIA: PREVENTING THE NEXT CRISIS (April 2003).

under AB 1890 and renewed and reaffirmed under the auspices of the Electric Program Investment Charge (EPIC), which is now a joint venture of the CPUC and the CEC.

## *2. Measurement and Evaluation*

I also expect significant emphasis today on the importance of rigorous measurement and evaluation of our clean energy progress. Here it is important for me to note NRDC's appreciation for the efforts of all California's energy agencies to create a new statewide initiative to ensure consistent and rigorous evaluation of energy savings, the California Technical Forum. The forum, modeled on a highly successful Pacific Northwest counterpart, addresses concerns that savings estimates have been inconsistently calculated historically in California, with insufficient engagement by independent experts operating outside adversarial contexts.

## *3. The Future of Renewable Energy*

Today's proceeding includes a representative of E3, which undertook a widely cited review of the implications of additional renewable energy for California. I have read and generally admire the study,<sup>7</sup> and venerate E3's distinguished witness today, but I wanted to note a few additional observations on its conclusions. Some have construed this study of a 40% and 50% RPS as implying relatively little carbon reduction from adding renewables above the current 33 percent target (along with significant over-generation).

The ostensible reason emissions do not decrease much in the E3 study is that gas generation will have to run more to keep the system balanced as variable renewables are added. But this is based on the assumption that the ISO and utilities will continue to rely on the current inflexible and inefficient gas fleet. I do not expect them to do that.

In fact, the scheduled retirement of aging Once Through Cooling plants and their replacement with fewer and much more efficient gas units that are forecast to run fewer hours is likely to reduce net electric sector emissions while better complementing added solar, wind and geothermal output. This transition is well underway already. But the more efficient gas fleet that will be in place around 2020 remains to be modeled, and the Commission should not assume that there are likely to be diminishing emissions returns from adding renewables.

The E3 report is careful to point out that there are many possible solutions for avoiding over-generation and for minimizing the cost of integrating higher levels of renewables. The point for decision-makers is that policies necessary to ensure California realizes the full benefits of adding low-carbon resources must be put in place in the next few years. I am confident that the California agencies will rise to this challenge, as they have to so many others since my 1996 appearance before this Commission.

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<sup>7</sup> For a summary, see [https://ethree.com/documents/E3\\_Final\\_RPS\\_Report\\_3pg\\_Summary\\_201401.pdf](https://ethree.com/documents/E3_Final_RPS_Report_3pg_Summary_201401.pdf).