

## **CARB Chairman Mary Nichols' CPUC Thought Leader's Speech**

Two days ago I was in the Rose Garden at the White House watching President Obama make a historic announcement that will do more to address climate change than anything the United States has done to date.

He announced new national emissions and fuel efficiency standards for cars that will achieve a 30 percent reduction in greenhouse gases from vehicles in 2016. This standard effectively mirrors California's own, and I think everyone in this room understands that the President's announcement is really the fruit of California's seven-year long battle – in the courts, and in the court of public opinion – that was supported by both Governor Davis and Governor Schwarzenegger.

I firmly believe that had we not stood our ground, had we not adamantly fought back against the automakers' 'scorched earth' legal policy, had 13 states not joined us, that that ceremony in the Rose Garden would not have taken place at this time.

I would like to remind you of what California was up against: the unified legal onslaught of the manufacturers and the dealers, attacking us on an array of legal grounds. The lawsuits cost us millions of dollars in legal expenses. There were thousands of hours of detailed document preparation, with ARB staff and lawyers from the AG's office working late into the night to make early East Coast deadlines. Of course, the legal attacks were made on small states that had allied with us, but that could least afford a costly battle: Vermont and Rhode Island.

This made the event at the Rose Garden all the more remarkable. It was astonishing to see the CEOs of the top ten automakers in the world arrayed behind President Obama, having agreed to drop their litigation against California and commit to build a new generation of clean, fuel efficient cars.

In some ways, it felt more like the signing of a peace treaty ending the Seven-Year War, where all the dukes and earls lay down their arms, agree not to attack the state of California and its staunch 13 allies --and the little

duchy of DC -- and pledge fealty to the common goal of energy security and the fight against the enemy we all face: climate change.

But what I found even more surprising was the President's directive to the DOT and the EPA to 'harmonize' their standards.

As the veteran of policy development and policy wars for several decades it was unprecedented to see these two agencies ordered to work together to produce a coordinated, harmonized standard that reflected the two distinct metrics of miles per gallon and grams of carbon dioxide per mile.

Those of you have worked in the federal administration may understand how momentous this was. Getting departments within an agency -- say the Fish and Wildlife Service and the Bureau of Reclamation -- to work together is hard enough.

Getting two federal agencies to cooperate closely on a single standard is, to be honest, unprecedented.

When I was Assistant Administrator at the US EPA, I spent a lot of time with my counterpart at the Department of Energy over the original Energy Star designation and program for appliances. It was difficult combining different metrics, standards and baselines, and in many ways the programs are still not fully coordinated. After a period of years, we did eventually settle on one element. If you take a close look at the Energy Star logo, you'll notice in nearly microscopic letters both DOE and USEPA.

We are facing a similar situation over cars now. The National Highway Traffic Safety Administration in the DOT and the EPA both have developed standards related to automobiles -- the CAFE regulations and tailpipe criteria emissions -- and they have never worked successfully together in the past.

Now they will develop two standards in a unified, harmonized approach. This will require sharing data and test procedures, and will demand intense cooperation by career bureaucrats and staff, which will ensure that the results of the policy shift the President announced are translated into a concrete change within the agencies that will persist.

What does this have to do with California's clean energy future?

Everything.

The unified approach to reducing greenhouse gas emissions from cars is the result of a singular vision focused on addressing climate change.

In California, we are well on the way to creating a single, unified strategy for a clean energy that will drive the sort of cooperation I hope we see fulfilled at the federal level.

- AB 32 established a clear path forward on climate change policy:
- - ARB, working with our sister agencies, established the road map in the Scoping Plan, adopted last year.
  - It lays out, in broad brush strokes the measures, policies and regulations we need to wring the carbon out of the economy. The metric, of course, is millions of tons of carbon dioxide equivalent reduced, but we know while that is the stated goal of AB 32, it is also a proxy for clean energy, a cleaner environment and a more sustainable economy.
- ARB developed the scoping plan in conjunction with many other agencies, including, of course the PUC and the CEC. We simply could not have made the plan work without the dedicated involvement of both those agencies, drawing on the depth of experience of your top staff, especially in issues revolving around generation, natural gas transportation, transmission, grid stability and more.

We put the Scoping Plan together under a very aggressive timeline, and if, perhaps, we at ARB may have forgotten to say thank you to all those in the energy world who worked on your contributions I want to take this opportunity to say it now: Thank You.

ARB is now tasked with implementing that plan, though we are often looking to other agencies (like the CPUC and the Energy Commission) to implement pieces within their existing expertise and authority.

The Scoping Plan serves as our guide in this effort.

Because so much of the scoping plan revolves directly around energy – certainly energy efficiency, and renewables – I believe that California needs a similar clear path forward on energy policy to meet our combined energy and climate goals

And the lodestone that guides us on that path is climate change. But in the same way we developed the Scoping Plan under AB 32, I see a greater need for a partnership with other agencies, especially those involved in the area of energy.

With AB32 in effect, the intersections of energy with other agencies and jurisdictions are growing exponentially.

Here's one recent example. We just passed a Low Carbon Fuel Standard, requiring a 10 percent reduction in the carbon intensity of transportation fuels by 2020. This creates a constant demand for low-carbon fuels no matter what the price of oil. We included hydrogen as a fuel, to continue to drive the development of fuel cell vehicles.

But we took the additional step of including electricity as one of the attractive low carbon transportation fuels. This will invite electric utilities, both investor owned, and municipal, as new players in the new low-carbon fuels market.

As a result, ARB envisions a steady growth in plug-in hybrids and even, perhaps, full battery electric vehicles in coming years, which, in turn, will require a more extensive infrastructure to charge them.

Under AB 32 measures also cut across political jurisdictions. Local communities are involved in funding and developing renewable sources of energy, prompting calls for feed-in tariffs. This leads directly to the issue of distributed generation, and begs the question, as Commissioner Chong put

it so delightfully just a couple of weeks back, Is our Electric Grid Smarter than a Fifth Grader? As it happens, the answer is, at present, no – but it certainly needs to get smarter, faster. As has been pointed out, Edison himself could easily recognize today's grid as not too dissimilar from what he knew a century ago. He would not have the same luck with today's cellphone.

There are many other examples of measures in the Scoping Plan that directly impact the issues of generation and transmission statewide, and cut across agencies, jurisdictions and investor-owned and municipal utilities.

Combined heat and power in the industrial sector and in dozens of facilities across the state results in challenges regarding the sale and distribution of the electricity generated.

We see the same challenges regarding dairy digesters, and landfill gas generation.

I believe we cannot move forward in addressing climate change in California unless there is a unified plan and approach to the state's energy needs and planning.

To put it in Rose Garden terms, we need to harmonize the roles of the PUC and the CEC – and the ARB -- so they serve the common goal of addressing climate change.

Put another way: **The demands of global warming should direct California's energy future.**

And I think that one of the ways of accomplishing it is to begin work on a coordinated and effective statewide energy plan predicated on addressing climate change.

On that front, we do have a good start underway.

- After the electricity crisis at the start of this decade, the legislature recognized the need for a comprehensive energy policy document for

California, and in 2002 gave responsibility for creating an Integrated Energy Policy Report to the Energy Commission

- The Energy Commission has worked closely with the PUC, with ARB and all the other agencies that touch on the State's energy policy, and those agencies are directed to use the information and analyses in carrying out their energy-related duties and responsibilities whenever possible
  
- The Energy Commission recognized the need to incorporate climate change, and made it a major focus of its 2007 IEPR "Meeting California's Energy Needs in a Carbon-Constrained World"
  
- While AB 32 gave ARB both the authority and responsibility to implement those measures we deemed necessary to achieve California's greenhouse gas emission reduction goals, SB 1389, which created the IEPR, did not provide a clear path forward for implementing and achieving the State's energy policy goals.
  
- what we need now is for the State to have an energy counterpart to AB 32 and the Scoping Plan – an IEPR with clear authority and responsibility for how it will be implemented

Governor Schwarzenegger proposed some years ago to create a California Department of Energy to consolidate the lines of responsibility and authority for developing and implementing energy policy.

That idea is under consideration again, and could provide the means to ensure that California's energy policy goals are met. Creation of a new department with responsibility for both development of the State's Energy Plan and for implementing its recommendations would ensure that a bold vision for the State's energy future can not just be articulated, but can be turned into a reality.

This is critical for California's success in achieving the aims of AB 32. If we fall short on our energy goals, we will not be able to do what's needed for climate policy

I think we should continue to consider a unified Dept. of Energy that would focus on a coordinated approach to energy planning and implementation that emphasizes the need for developing and maintaining supplies of clean energy resources for California's future, while continuing to work to minimize costs and protect the rights of the ratepayers.

One of its first and most immediate tasks will be to engage in a policy oriented needs assessment:

We need to get more specific about how much RPS is needed, and where.

Saying that an energy source is renewable is not enough; how does it fit within the larger picture of what else is being developed throughout the state?

We have not done a good enough job at showing how specific projects fit within the bigger picture, and we cannot continue to develop renewables on a project-by-project basis.

Consider how the separate efforts currently underway would be strengthened if they were set against the background of an overall climate-related statewide energy plan linked to AB32 and the Scoping Plan.

- a smart grid
- statewide energy efficiency initiative
- biomass
- cool roofs initiative
- efforts to promote statewide coordinated climate-related research.

These are currently crucial puzzle pieces that would benefit from being placed within a single picture of the state's energy future, with clear lines of responsibility drawn from planning and policy direction to implementation.

## **Energy Efficiency:**

Energy Efficiency is, without doubt, the largest of those puzzle pieces.

- AB 32 generates new thinking that can take energy efficiency to the next level
  - Past achievements – no per capita growth in energy use – are unprecedented
  - Now we must reduce total state consumption, even while population grows
- California's energy agencies worked together to plan to meet the challenge (Long Term Energy Efficiency Strategic Plan)
  - For example, aggressive goals to reduce residential energy use
    - 40 percent reduction in existing homes
    - All new homes zero energy buildings by 2020
  - New and different programs needed to achieve these goals including a new approach to revising building & appliance standards
    - Success is not incremental improvements
    - Instead, it means, how close can we get to zero energy with each new revision of standards?
  - New goals require many actors, including local governments, and a full range of private and non-profit energy efficiency service providers

## **Progress on Outreach and Education**

The PUC, has demonstrated the kind of close cooperation that a statewide effort requires with a concerted effort to include a wide range of agencies in its outreach and education to support the energy efficiency initiatives.

## **Barriers to Energy Efficiency Programs:**

- But significant barriers remain. We need to expand program scopes and better quantify emissions reductions and peak demand savings.
  - Utility-bill financing provides simple up-front financing and possibly solving split-incentive problems
  - local governments and the state have taken the lead, developing and promoting tax-roll financing for both energy efficiency and small scale renewables
- Currently, CFLs provide more than half the savings by IOUs over many years; better to focus on a whole building approach.
- Thoughtful energy efficiency providers have been pushing for deeper, more comprehensive, whole building and whole community efficiency programs for years
- ARB has responsibility for emissions reductions in all sectors, not just electricity and natural gas
  - We will be looking at tradeoffs between sectors
  - We will watch energy efficiency very closely
- ARB is considering set asides – a potential source of funding for expanded efficiency
  - If allowance value is used to support efficiency, programs must clearly lead to verifiable emissions reductions
  - Next three years should determine what kinds of programs are best
  - Best programs, replicated statewide, can help turn the corner and reduce consumption

## **Conclusion:**

A unified planning effort, and a single department to carry out a forward-looking plan for the state's clean energy future is a necessary, but not sufficient, condition on its own for us to face the challenge of an uncertain future.

We also need to continue the understanding that at this juncture in history, with the knowledge we have of the data and the modeling that presents us with disturbing scenarios in the coming decades, it is absolutely necessary that we work together, within a common framework, to achieve a future less fraught with peril.

Beyond the present, and beyond 2020, we must look ahead a full generation to 2050, when the policies we set in place today pave the way for an 80 percent reduction in greenhouse gas emissions.

That will be a very different world.

Thanks to the efforts of those in this room, and to the dedicated staff of the PUC, the CEC and all the other state agencies involved in climate change efforts we are writing a bold first chapter to achieve that goal, and lead the nation in the fight against global warming.

I want to end with a quote, from California's Climate Change Plan, the Scoping Plan. I know you're all familiar with that document -- that you have all avidly read it, and own a well-thumbed copy in your offices, and by your bedsides. But here it is, from the Executive Summary:

“Reducing our greenhouse gas emissions by 80 percent will require California to develop new technologies and shift into a landscape of new ideas, clean energy, and green technology. ...This transition will require close coordination of California's climate change and energy policies, and represents a concerted and deliberate shift away from fossil fuels toward a more secure and sustainable future. This is the firm commitment that California is making to the world, to its children and to future generations.”

I look forward to working with you all to fulfill that commitment to our shared future.

Thank you.