

PLANNING FOR SUCCESS OR FAILURE?

The release of New Jersey Governor Chris Christie's Energy Master Plan sparks debate and anxiety

IN JUNE, NEW JERSEY GOVERNOR CHRIS CHRISTIE RELEASED HIS MUCH-ANTICIPATED ENERGY MASTER PLAN, WHICH IS SUPPOSED TO SERVE AS AN ENERGY BLUEPRINT FOR THE STATE OVER THE NEXT DECADE. HOME TO THE NATION'S SECOND-LARGEST SOLAR MARKET, THE STABILITY OF NEW JERSEY IS CRITICAL TO THE INDUSTRY. YET MANY IN THE STATE GREETED THE GOVERNOR'S PLAN WITH DISMAY, DISAPPOINTED BOTH BY ITS EMPHASIS ON NATURAL GAS AND ITS POINTED CRITICISM OF SOLAR.



Charting a course: Gov. Christie's Energy Master Plan was released in June, drawing praise and criticism from the solar industry.

Anyone who thinks that it is needlessly hyperbolic to describe American politics as blood sport should take a close look at the recent spat between New Jersey's Republican Governor Chris Christie and State Senate President Stephen Sweeney, a Democrat. Like most states, New Jersey faces a daunting fiscal crisis, which has made crafting a budget a particularly nettlesome affair. According to news reports, just before the July 4 holiday, already tense negotiations between the two policy makers erupted when Sweeney learned that the governor

slashed funding for programs that were near and dear to his heart.

Sweeney reacted by equating Christie with Mr. Potter, that icon of nastiness from the movie »It's a Wonderful Life,« and saying that he wants to »punch him in his head.« While not exactly the equivalent of the famous duel between Aaron Burr and Alexander Hamilton – which left Hamilton, the nation's first secretary of the treasury, dead – the personal feud between Sweeney and Christie is indicative of the toxic political atmosphere prevailing these days in Trenton, the state capital.

An explosive ingredient was added to that cauldron of animosities with the release in June of New Jersey's much-anticipated draft Energy Master Plan, which lays out the Christie administration's vision for the use, management and development of energy in the Garden State over the next decade. At the press conference unveiling the plan – and in subsequent statements and interviews – the governor, who is being touted as a potential Republican candidate to challenge President Barack Obama in 2012, pitched it as having struck the right balance between environmental protection,

economic development and relief for the state's ratepayers. »This plan represents my administration's commitment to changing the way we produce, distribute and use energy, as part of a broader emphasis on renewable sources of energy and economic growth,« he said, adding, »Considering our state has some of the highest energy rates in the nation, reducing these rates and making them comparable to costs in other regions and states are important steps in facilitating economic growth and lowering the cost of living for New Jerseyans.«

Solar rhetoric versus solar details

At the same time, the plan singles out solar for support in both general and specific terms. Generally, Christie said he wants to continue New Jersey's support for solar for both economic and environmental reasons. More specifically, the governor noted that solar projects on brown field and landfill sites are beneficial because their development offsets costs involved to reclaim the polluted land. Christie also praised solar as well-suited at commercial and industrial sites and as a way for local governments to control energy costs. The provisions outlined in the plan were enough to convince Jamie Hahn, a managing director at Solis Partners, which develops turnkey solar projects, of Christie's commitment to solar. »I think it made it clear that New Jersey is still fully behind developing solar projects,« says Hahn.

But others, especially Dennis Wilson, president of the Mid-Atlantic Solar Energy Association (MSEIA), are far less sanguine. To him, there are many details in the 128-page document that deserve outright scorn. In particular, the plan, which is an update of a 2008 draft developed under former Governor Jon Corzine, has been lambasted for proposing to scale back the state's Renewable Portfolio Standard (RPS) mandate from 30 percent to 22.5 percent by 2021. To Jeff Tittel, director of the New Jersey Sierra Club, another unwelcome idea suggested by Christie is ratcheting back the societal benefits charge that appears on



Forever cheap? Gov. Christie's energy plan envisions cheap natural gas into the future, especially from Marcellus Shale sites, like this one in Pennsylvania.

ratepayers' bills and is used to fund clean energy projects, including solar. Instead, the governor wants to establish a revolving loan fund.

But even more troubling to Tittel is language throughout the plan highlighting the Christie administration's skepticism regarding the viability and cost-effectiveness of solar as part of the state's future energy mix. There is concern that it signals an effort to undermine New Jersey's solar industry, which has installed almost 10,000 projects totaling 330 MW and has been adding between 20 and 30 MW per month recently. »It would be laughable if it wasn't so serious,« says Tittel. »I can't believe we have an administration that wants to put solar in the shade.«

Public hearings on the plan – much of which would require legislative action to implement – take place this summer.

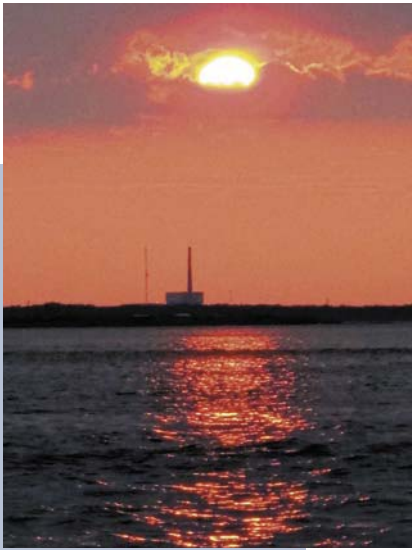
Mixed messages

How is it that the same document could be interpreted in such drastically different ways? There's no doubt that one's views on the solar elements of the Energy Master Plan are at least partially influenced by one's feelings toward the controversial governor. And there are a number of legitimate reasons why envi-

ronmentalists and solar advocates in the Garden State would think only the worst of his intentions. Indeed, last year Christie raided the Clean Energy Trust Fund, using \$158 million that was set aside to provide rebates for residential solar systems in order to help balance the state budget. In May, Christie further antagonized greens in the state by pulling New Jersey out of the Regional Greenhouse Gas Initiative (RGGI), a cap-and-trade compact among Northeastern states aimed at fighting global warming.

It was easy, then, for those negatively predisposed toward Christie to see ulterior motives in the Energy Master Plan, regarding it more as a way for him to campaign for president than as a good-faith effort to chart the course of the state's energy policy. »Many people [commenting on the plan] said they believed some things in it and his press comments were for an audience outside of New Jersey,« says MSEIA's Wilson »Let's just say for a Tea Party, conservative Republican audience,« Wilson adds.

All speculation aside, though, observers are able to have divergent views of the plan because it contains a mélange of messages, not all of them entirely consistent. For instance, the plan's executive summary begins in a manner one might



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Nuclear renaissance in New Jersey? The 654 MW Oyster Creek nuclear power plant will be decommissioned in 2019, but Governor Chris Christie forcefully advocates for more nukes as part of his state's »clean« energy future.

expect from a report issued by an environmental NGO making the case for renewable energy. Pointing to the nuclear disaster at Japan's Fukushima Daiichi plant, the lives lost as a result of last year's explosion at the Big Branch coal mine in West Virginia, and the environmental damage caused by the BP oil spill in the Gulf of Mexico, the plan concludes that »technology choices present risks to society and the environment.«

With that as a preface, it would be reasonable to assume that an ambitious vision for a clean energy future might follow. And in some ways, the plan outlines measures that support that assumption, including a ban on coal power plants in the state. There are also aspects of the administration's plan for solar that receive plaudits from developers and installers in the state – especially the Christie administration's clear opposition to the development of large solar farms on agricultural land. »It's pretty clear in the plan that they're looking to promote net-metered and behind-the-meter applications, versus taking perfectly good farmland and feeding the grid with 20 MW and benefiting foreign investors,« says Hahn.

But any encouraging language about clean energy is more than offset by other proposals that actually promote nuclear power and fossil fuel development. Indeed, the Christie administration's plan contends that the state's goal of meeting 70 percent of its electricity needs from clean sources by 2050 is only achievable if the definition of »clean« is expanded to include nuclear power, natural gas and hydroelectric facilities. While acknowledging the unlikelihood that a new nuclear facility will be constructed to replace the 654 MW Oyster Creek plant, which will be retired in 2019, the plan emphasizes the importance of continuing to pursue nuclear as an energy source.

With nukes off the table for the moment, Christie and his energy team put more immediate stock in the potential of natural gas – especially from nearby Marcellus Shale drilling – to meet the state's growing energy needs. »The stable outlook for natural gas prices in the decade ahead, largely due to prolific gas production from shale gas formations, portends stable wholesale energy prices in New Jersey,« the report says. To take advantage of this, the plan pushes for an expansion of the state's gas pipeline system.

Shining a spotlight on the dangers of nuclear power in Japan in the early pages of the report and then pushing for its expansion later on strikes some in the state as odd and misguided. »I think the energy plan is extremely naive in terms of what it's going to take in the energy mix for a state like New Jersey moving forward,« says Gaurav Naik, a principal at GeoGenix, an Old Bridge-based solar developer, which has installed around 500 residential and commercial systems in New Jersey.

Perhaps even more problematic is the plan's reliance on natural gas, says Upendra Chivukula, a New Jersey Assemblyman who is actively involved in energy policy issues. »They are putting the focus on natural gas and betting on natural gas prices to be low,« he notes, adding, »These are commodi-

ties and international markets drive them.« Chivukula also points out that the controversy over hydro-fracking, a technique used to extract natural gas from shale, and potential regulation by the federal Environmental Protection Agency (EPA) could derail the Christie administration's rosy projections for natural gas prices. »I wish they had a more diversified portfolio of energy resources,« he says.

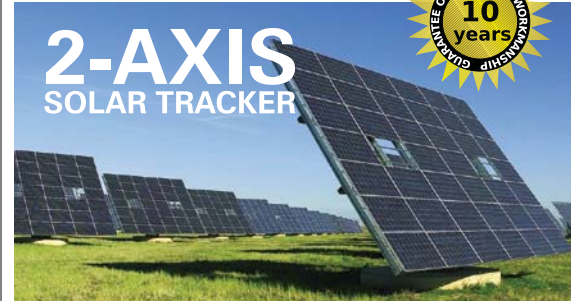
Targeting solar

Far more concerning to some solar developers than the plan's emphasis on nuclear power and natural gas, though, is its critique of solar. »It looks like Governor Christie's office has a very specific agenda when it comes to the solar industry,« says Naik of GeoGenix. That agenda, it seems, is to paint solar as pricey, with a limited role to play in the future energy mix. »Solar photovoltaic power is expensive and intermittent,« the plan flatly states. »Solar and wind require the addition of other conventional or innovative technologies to ensure grid security.«

But that's just the beginning. Over and over again, the report emphasizes the financial hit to ratepayers across the state for subsidizing solar incentives. To remedy that, the Christie administration says it's important to apply a cost-benefit test for solar incentives, as a way to ensure that solar developers and customers aren't sticking regular ratepayers with an unfair bill, although the plan doesn't spell out exactly how that assessment would be undertaken.

The plan specifically criticizes the Solar Energy Advancement and Fair Competition Act, which was enacted in 2010. Among other things, the act changed the procurement mandate utilities must meet from a percentage of electricity sales to a flat number of gigawatt-hours – in this case, from 2.1 percent by 2021 to 2,518 GWh. The plan argues that the change, coupled with the elimination of a 2-percent rate-impact cap, »guarantees high and expensive subsidies for solar in good and bad economic times.«

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No doubt, the governor is correct that the price tag for solar renewable energy certificates (SRECs) has been doggedly high, hovering between \$600 and \$700 for each 1 MWh certificate on the spot market as of late – the highest in the nation. This is because not enough SRECs have been created in the past to meet the requirements of the state's the RPS. By the governor's calculations, the cumulative cost to New Jersey's ratepayers for future solar incentives will exceed \$11 billion. In addition to the cost-benefit test, Christie urges a reduction of the solar alternative compliance payment (SACP) in order to curb these costs. The SACP is the amount a utility must pay if it doesn't meet its solar requirements under the RPS; it therefore acts as a de facto ceiling for SREC prices. SRECs currently trade at prices right around the SACP value, due to the shortage of the certificates.

Left unsaid

Naturally, many in the solar industry in New Jersey contest the conclusions reached in the energy plan and question its fairness. They argue that the document says plenty about the costs to so-called nonparticipants, or those who haven't taken advantage of incentives, but nothing about the benefits it provides in terms of grid security and shaving the price of peak power. »Solar produces during peak when electric power is most needed,« says Hahn of Solis Partners.

Hahn and others also criticize many of the cost calculations that the plan utilizes, saying that they outdated and misleading. »This plan is already obsolete; the numbers are one year behind,« points out Assemblyman Chivukula. The plan itself quietly concedes this point – albeit in a footnote on one of the later pages. After boldly claiming that each solar job in the state has cost \$386,866 to create, and that ratepayer funds utilized to foster solar reduce the New Jersey's gross product by \$206 million, a footnote says that the analysis does not take into account environ-

mental benefits, wholesale electricity rate reductions or manufacturing jobs created. If solar provides these benefits, then »the results presented in this section overstate the negative impact on New Jersey's economy.«

What's even more disappointing to some is the fact that the plan does not address the most important questions for growing low-cost solar in the state. In particular, GeoGenix's Naik wants to see some emphasis on long-term contracting, which he says is an essential element in keeping SREC prices low. Instead, Naik says there is far too much attention paid to the SREC spot market. »One of my big sticking points in talking to policy makers is that that they seem very fixated on seeing what the spot market trading values of SRECs are,« he notes. »If you are looking at the actual data of what is going on in the market, the majority of contracts being written are long term contracts, so the spot market trades each quarter are becoming [a smaller and smaller] percentage of the total number of SRECs being traded on the markets,« according to Naik. What that means, he says, is that instead of \$600 SRECs, the actual value is closer to the \$300 to \$400 range.

But long-term contracting, which has flourished under the PSEG Solar Loan program and utility auctions, is not a focus of the plan at all, even though it will become more or less impossible to obtain SRECs at the end of the year. »I'd hate to see a drop off between when they come up with an SREC auction program versus when this one expires at the end of the year – if there is a gap there, it's going to be horrible for the marketplace,« says Hahn. »That's not in the energy plan.«

For this and other reasons, Dennis Wilson of MSEIA says his organization is working on a rival plan to move the solar industry forward. »There isn't any real plan or vision for growing the industry here,« he says, adding, »That is what we are working on developing.«

Chris Warren