CASCABEL WORKING GROUP
SUNZIA DEIS COMMENTS

ATTACHMENT A

Cascabel Working Group letter dated July 24, 2012 to President Obama's top energy and environmental policy advisers documenting the conflict between the SunZia preferred alternative and the environmental values of the San Pedro Valley.

Cascabel Working Group
6590 N. Cascabel Road
Benson, AZ 85602
Sent via Certified U.S. Mail and Electronic Mail July 24, 2012

Mr. Ken Salazar, Secretary
Department of the Interior
1849 C Street NW
Washington, DC 20240

Dr. Steven Chu, Secretary
Department of Energy
1000 Independence Ave., SW
Washington, DC 20585

Ms. Nancy Sutley, Chair
Council on Environmental Quality
755 Jackson Place, NW
Washington, DC 20506

Ms. Lisa Jackson, Administrator
Environmental Protection Agency
Ariel Rios Building, Mail Code 1101A
1200 Pennsylvania Avenue, NW
Washington, DC 20460

Ms. Heather Zichal, Deputy Assistant to the President on Energy and Climate Change
The White House, 1st Floor, West Wing
1600 Pennsylvania Avenue, NW
Washington, DC 20500

Dear Secretary Salazar, Secretary Chu, Ms. Sutley, Administrator Jackson, and Ms. Zichal:

Subject: Environmental conflicts between the SunZia Southwest Transmission Project and the San Pedro River Valley, Arizona

As co-chairs of the Cascabel Working Group, we are writing to express our organization's concern and dismay over the preferred alternative chosen for the SunZia Southwest Transmission Project in Arizona. This alternative follows the San Pedro River Valley for more than 40 miles. The mission of the Cascabel Working Group is to educate others about the Middle San Pedro River Valley and to advocate for the protection of the valley's environment, culture and traditional land uses. We work closely with the Natural Resource Conservation Districts in the valley and other concerned valley residents. You can learn more about our organization at http://cascabelworkinggroup.org/CWGabout.html.

A stated purpose of the SunZia Project is to facilitate development of renewable energy resources in the Southwest. However, should this project be sited within the San Pedro Valley watershed, it would overturn three decades of conservation investments that federal, state, county and non-governmental agencies have made in the valley (see the attached summary)[1]. The selected route would open an entirely new utility corridor for a minimum of 30 miles parallel to the San Pedro River, the last free-flowing river and richest wildlife corridor in the Desert Southwest.[2]

[1] Government agencies and NGOs holding conservation fee lands or easements in the San Pedro Valley include Archaeology Southwest, Arizona Game and Fish Department, Bellota Preservation Corporation, Bureau of Land Management, Bureau of Reclamation, the Nature Conservancy, Pima County, Saguaro-Juniper Corporation, and the Salt River Project.

[2] See the Cascabel Working Group's *Draft Environmental Impact Statement Contributions for the Proposed SunZia Transmission Line Routes Traversing the San Pedro River Valley* and *Draft Environmental Impact Statement Contributions for the Proposed SunZia Transmission Line Route Traversing the Aravaipa Watershed and Lower San Pedro River Valley*, both available at http://cascabelworkinggroup.org/SZprimer.html.

This decision to route the SunZia Project down the San Pedro River Valley overrides overwhelming public opposition as well as the objections of Congresswoman Gabrielle Giffords, Congressman Raul Grijalva, Pima County Administrator Chuck Huckelberry, Cochise County Supervisor Richard Searle, the U.S. Fish and Wildlife Service, all major Arizona environmental organizations, and local Natural Resource Conservation Districts. Public scoping comments received for the project are dominated by opposition to routes through the San Pedro River Valley. The BLM received more negative comments about using the valley for SunZia than for any other section of the proposed route.

What is equally dismaying is the conflict between a San Pedro River Valley route for Sunzia and the Obama Administration's own initiatives to protect the valley. The U.S. Fish and Wildlife Service is actively proposing a National Wildlife Refuge and Collaborative Conservation Initiative for the Lower San Pedro River Valley. The SunZia preferred alternative, routed on the west side of the San Pedro River, parallels the refuge acquisition boundary for more than 40 miles (see the attached summary and map). This initiative cannot begin to offset the enormity of the environmental impacts of SunZia in the San Pedro River Valley.

In addition, America's Great Outdoors Program, which includes the Federal Interagency Council on Outdoor Recreation (FICOR), composed of seven federal agencies, has chosen the Lower San Pedro River as one of its three principal focal areas in the Desert Southwest for 2012. In 2009 the Forest Service selected the lower San Pedro River as its top priority for its Forest Legacy Program. The purchase of conservation easements with funds from this program is currently being completed. The valley is also the focus of long-standing conservation efforts by a host of governmental and private entities, the Bureau of Land Management being one of them (see the attached list, with valley attributes)[3]. This decision is schizophrenic on the part of the Department of the Interior.

The Obama Administration has ardently supported and pushed this project because of SunZia's claims to facilitate renewable energy development largely in New Mexico[4]. SunZia would purportedly export this New Mexico energy to Arizona and presumably on to California, but both California's and Arizona's solar potential dwarfs New Mexico's renewable energy potential. Both states will easily meet their Renewable Portfolio Standards requirements without New Mexico energy, and they are very unlikely to purchase any of it (see attached email from Michael Picker and articles)[5,6,7,8,9]. This fact alone undermines the principal justification for this

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[3] See footnote 1.

[4] See numerous presentations by the SunZia Southwest Transmission Project at http://sunzia.mtninet.com/resources_presentations.php. Note that the first two years of presentations have now been removed from this website. Some of these older presentations are available through the WestConnect website at http://www.westconnect.com/filestorage/.

[5] Email message from Michael Picker, Senior Adviser to Governor Brown of California for Renewable Energy Facilities, to Norman Meader dated June 14, 2012.

[6] Letter from Michael Picker, Senior Adviser to Governor Brown of California for Renewable Energy Facilities, to Mr. Brad Nickell, Director, Transmission Expansion Planning, Western Electricity Coordinating Council, dated August 3, 2011. Subject line "Reflecting current California trends and policies in regional transmission planning," available from http://www.wecc.biz/committees/BOD/TEPPC/20110809/Lists/Minutes/1/Letter%20to%20TEPPC%20from%20California.pdf. Accessed July 1, 2012.

[7] Bill Opalka, "PG&E says it will meet California's renewable energy goals," *Renewablesbiz*, May 31, 2012, http://www.renewablesbiz.com/article/12/05/pge-says-it-will-meet-california-s-renewable-energy-goals. Accessed July 1, 2012.

project. Even if California were to purchase New Mexico power, SunZia could not deliver it without exhausting transmission capacity vital to meeting Arizona's own in-state needs (see attached letter to the Arizona Corporation Commission from the Cascabel Working Group.)

In addition, the project has essentially no investors except the MMR Group, the parent company of the Southwestern Power Group (SWPG), which initially proposed SunZia to provide transmission capacity for its yet-to-be-built Bowie, Arizona, power station. The Salt River Project is the only major entity that SWPG was able to convince to join the project and has just a 13% interest in it. Tucson Electric Power and Tri-State Generation and Electric have only token 1% interests each and are not genuine partners. Shell Wind Energy at 5% also is not a significant investor. Of the ten or more major utilities in the New Mexico to California region, only the Salt River Project is willing to support SunZia. Energy Capital Partners (ECP), which was to provide 40% of the project's investment capital, withdrew in the fall of 2010, forcing the MMR Group to assume this additional interest, bringing its share of the project to 80%. SWPG has yet to find investors to replace ECP, placing an enormous financial risk on a single company.

This project needs to be seriously reconsidered. It is not economic to build no matter how appealing it has appeared to the Obama Administration. The Southline Project, which is currently being permitted, will cover two-thirds the distance of SunZia, beginning near Las Cruces and ending at nearly the same point as SunZia, and is a far better project to support. Its environmental impacts in southeastern Arizona are negligible, and it will strengthen the east-west grid in the region in the same way as SunZia. It will reduce congestion, increase grid reliability, and provide many more interconnections for renewable energy facilities across this area. Building both of these projects would be redundant and economically foolhardy. It would be far wiser to combine the eastern part of SunZia with Southline to make a single composite project rather than to build both.

We urge each of you to rethink what you are doing with this project. You, as President Obama's top energy and environmental policy advisers, have vigorously pushed this project without apparent regard for its environmental impacts or economic difficulties. We strongly urge you to review your actions and goals. The environmental damage that this project inflicts upon southeastern Arizona and the San Pedro River Valley cannot be justified in light of the little, if any, renewable energy it is likely to deliver to Arizona and California.

Sincerely,

Norm "Mick" Meader Pearl Mast

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[8] Cherly Kaften, "California on track to exceed 2020 RE goals, but issues still exist," *PV Magazine – Photovoltaic Markets and Technology*, March 9, 2012, http://www.pv-magazine.com/news/details/beitrag/california-on-track-to-exceed-2020-re-goals--but-issues-still-exist-_100006045/#ixzz1ySkTA1cC. Accessed July 1, 2012.

[9] Susan Whittington, "Arizona Solar: Victim of Success," *Energy Prospects West*, December 6, 2011, http://www.energyprospects.com/archives/230-print.html (must have account). Accessed July 1, 2012.

Enclosures (4)

cc: Mr. David Hayes, Deputy Secretary**,** Department of the Interior
Ms. Lauren Azar, Esq., Senior Advisor to the Secretary of Energy
Mr. Bob Perciasepe, Deputy Administrator, Environmental Protection Agency
Mr. Gary Guzy, Deputy Director, Council on Environmental Quality
Mr. Dan Ashe, Director, U.S. Fish and Wildlife Service
Dr. Benjamin Tuggle, Southwest Regional Director, U.S. Fish and Wildlife Service
Mr. Mike Pool, Acting Director, Bureau of Land Management
Mr. Jesse Juen, Acting Director, New Mexico Bureau of Land Management
Mr. Adrian Garcia, BLM Project Manager, SunZia Southwest Transmission Project

Lower San Pedro Valley Conservation Investments and Environmental Values

Current and Recent Conservation Initiatives

- U.S. Fish and Wildlife Service Lower San Pedro River Wildlife Refuge and Collaborative Conservation Initiative
- America's Great Outdoors Lower San Pedro River conservation initiative
- NRCS/USFWS joint Working Lands for Wildlife Habitat initiative
- Resolution Copper Mine Land Exchange (7B Ranch)
- USDA Forest Service Forest Legacy Program's #1 preservation objective in 2009

Other Agencies/Organizations with Conservation Lands and Easements

- Archaeology Southwest– Bingham Cienega, Redington Ball Court (fee lands) and easements
- Arizona Game and Fish Department – newly acquired fee lands from ASARCO and John Smith near Aravaipa; holder of Forest Legacy conservation easements near Cascabel; other easements near ASARCO properties.
- Bellota Preservation Corporation – lower Beuhman Canyon (multiple fee parcels)
- Bureau of Land Management – Cascabel conservation area (fee and easement)
- Bureau of Reclamation – San Pedro Preserve at Dudleyville, Cook's Lake, Spirit Hollow, Three Links Farm (fee and easement mitigation lands)
- Nature Conservancy – San Pedro Preserve at Dudleyville, H&E Farm, lower Hot Springs Wash, Three Links Farm (fee and easement lands)
- Pima County – A-7 Ranch, Buehman Canyon, Bingham Cienega, Six Bar Ranch (fee lands)
- Saguaro Juniper Corporation – lower Hot Springs Canyon (fee lands)
- Salt River Project – Adobe Preserve North, Black's Farm, Spirit Hollow (fee mitigation lands)

Summary of Lower San Pedro River Valley Environmental Values

- One of the Nature Conservancy's "Last Great Places"
- Last free-flowing river in the Desert Southwest
- Part of the largest unfragmented landscape in Arizona outside the Grand Canyon region
- One of the three principal desert life corridors in the Southwest (along with Colorado and Rio Grande Rivers)
- Exceeds the Rio Grande River Valley in biological richness
- Hosts the largest mammal species diversity in North America
- Recognized as a Globally Important Bird Area by the American Bird Conservancy
- Principal north-south migration corridor for Central American birds
- Habitat for numerous threatened and endangered species
- Hosts one of the largest remaining intact mesquite forests in the world
- Rich archaeological history dating from earliest North American human occupation (Clovis)

July 3, 2012

CASCABEL WORKING GROUP
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ATTACHMENT B

Communications from Michael Picker, Senior Adviser to Governor Jerry Brown of California for Renewable Energy Facilities, regarding California renewable energy needs.

1. Email message from Michael Picker to Norm Meader of the Cascabel Working Group dated June 14, 2012 stating that California is unlikely to purchase New Mexico renewable energy because of rapidly developing in-state renewable generation.

2. Letter from Michael Picker to the Western Electricity Coordinating Council dated August 3, 2011 warning against building long interstate transmission lines to deliver out-of-state renewable energy to California because California is projected to meet its renewable energy portfolio standards with its own resources.

Subject: SunZia
From: Michael Picker <Michael.Picker@GOV.CA.GOV>
Date: 6/14/2012 11:35 AM
To: nmeader@cox.net <nmeader@cox.net>

I was surprised to get your letter regarding SunZia, and the suggestion that the purpose of the power line might be to sell power into California. That seems like a risky business bet.

Most California utilities report that they are already oversubscribed for renewable power generation (see, for example, the article in Renewablesbiz on the link below). Although there's no requirement that they share all their business relationships with me, I'm not aware that any of the California utilities have contracts for power from renewable generators in New Mexico.

http://www.renewablesbiz.com/article/12/05/pge-says-it-will-meet-california-s-renewable-energy-goals

In fact, the California Public Utilities Commission reports that the state's investor-owned utilities have enough contracts from renewable power projects to supply 40% of the state's electricity needs. Much of that will come from the 151 projects, representing some 16 GW of wind, solar and geothermal that were permitted within California during 2010 and 2011.

In fact, California has become an exporter of renewable power to neighboring states. The Hudson Ranch 1 geothermal plant in California's Imperial County recently completed construction and has begun selling power to the Salt River Project.

We've made this point to regional transmission bodies in the past, urging caution on planning regional transmission solely for bulk power sales of renewables to help meet California's 33% Renewable Portfolio Standard. See my letter to WECC of August 3, 2011, which is also attached.

Please feel free to check in if you have further questions.

Michael Picker
Senior Advisor to the Governor for Renewable Energy Facilities
Office of the Governor
State Capitol
Sacramento, CA 95814
(916) 445-7665
Michael.Picker@gov.ca.gov

Attachments:
Final WECC letter 6-21-11.pdf 1.5 MB

OFFICE OF THE GOVERNOR

August 3, 2011

Mr. Brad Nickell
Director, Transmission Expansion Planning
Western Electricity Coordinating Council
155 North 400 West, Suite 200
Salt Lake City, Utah 84103

Re: Reflecting current California trends and policies in regional transmission planning

Dear Mr. Nickell:

In the time since the Western Electricity Coordinating Council (WECC) embarked on its process of preparing the western interconnection Regional Transmission Plan, much has occurred in California. Significant reductions in the technology cost of solar generation and the availability of investment tax credits have resulted in large scale resource development within the borders of our state. We also have a new Administration that has put into place strong policies supporting additional in-state and distributed local generation. Taken together these recent trends significantly affect the outlook for California as an import market for power in the western United States.

In 2010 alone, the State of California approved eleven large solar and wind projects together totaling over 5,000 megawatts (MW) of renewable generation capacity.[1] In 2011, the state has already permitted an additional 1,000 MW of solar PV projects; we anticipate that by the end of the year we will have permitted another 5,000 MW of solar and wind, bringing the total amount of large-scale renewable energy projects permitted in the state in only two years to approximately 10,000 MW. This surge in permitting moves California closer to bringing online the additional 15,000 to 20,000 MW of renewable generation capacity needed to meet our goal of generating one-third of our power from renewable energy resources by 2020.

The pipeline of projects seeking future approval is robust. The California Energy Commission has recently found 513 projects seeking permits to construct and operate in the State of California representing over 49,775 MW of nameplate renewable generation capacity. This is in addition to the 5,300 MW of large-scale (200 MW plus) projects

[1] Of these 5,000 MW, approximately 3,500 of them were a direct result of the historic collaboration between California and the U.S. Department of the Interior.

permitted in California last year, the 1,000 MW permitted to-date this year and several other smaller projects that have already begun construction in California.

This success in attracting and permitting projects complements progress in other elements of project development, including interconnection, contracting and transmission development. The California Independent System Operator (CAISO) indicates that renewable projects totaling 70,000 MW of installed capacity are seeking to connect to the CAISO-managed grid.

Additionally, investor owned utilities in California have executed power purchase agreements in excess of 33 percent of their expected 2020 retail sales.[2] The CAISO, in concert with the California Transmission Planning Group's 2010 planning, has recently adopted a statewide transmission plan that identifies the transmission needed to deliver sufficient resources to meet 33 percent. Several of the significant elements of the plan are already under construction or in the permitting process.

While these are by no means perfect metrics or forecasts of the future, they all point to the same consideration - that California is taking necessary steps to meet its 33 percent renewable portfolio standard (RPS). Should we be able to develop higher levels than 33 percent (hopefully a 40 percent goal), we will be positioning ourselves for relationships with other load areas outside California and can hopefully provide mutual benefit in cost-efficient renewable market transfers.[3]

Looking back, until the first solar project was approved last year, California had not permitted a large-solar project since 1989. Thus, we fully understand that to-date there would be no reason to assume that California would be able to pursue its renewable energy needs in-state. However, things are progressing here in California at an unprecedented pace.

What does all of this mean for the regional planning process?

California's large market for electrical power and the state's renewable portfolio procurement policy will be central in delineating need for new renewables and transmission outside of the state. We are concerned that several of the scenarios considered in the Transmission Expansion Planning Policy Committee (TEPPC) studies for 2019 and 2020 time horizons were defined before very recent siting successes, ARRA incentives, transmission development, procurement activity and the new Brown Administration's policies for distributed generation. We are also particularly concerned when we see proposals for large renewable energy resource development outside of California interconnecting across long distances directly into California balancing authorities. This may be problematic for three primary reasons:

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[2] While not all of these PPAs and interconnection requests are for California-based resources, to date, approximately 75% of them have been within California's borders.

[3] The potential of exports is strengthened by Governor Brown's goal of installing 12,000 MW of distributed renewables across the state - investments that will help CA meet its peak needs.

1. **Cost:** The west-wide benefits that WECC's studies attribute to several of these projects are driven by assumptions about generation and transmission costs, capacity factors, and other key considerations. As you know, the developer of at least one significant line, TransWest Express, expects the project to cost about 70 percent more than WECC's original assumptions for transmission capital costs would indicate. We thus appreciate the ongoing efforts of WECC staff to review these and other assumptions and to revise capital cost assumptions upward.[4] We look forward to working with you in the next study cycle to ensure that all such assumptions reflect the best-available information gleaned from developers, utilities, regulatory filings, independent estimates and other sources.

2. **Risk:** When procuring energy for their RPS goals, California utilities consider several factors in addition to cost, including the risk associated with particular generation and related transmission services. Transmission lines proposed to stretch hundreds of miles over private and public lands face significant permitting and development risk – perhaps most so in the case of DC lines, which offer few electrical benefits to the states they cross. The WECC final plan should report not only the potential costs and benefits associated with transmission and generation options, but also the risks associated with those options, and how those risks, and potential delays in siting and permitted the lines, affect procurement priorities and decisions.

3. **Importance of a Dynamic Western Grid:** With high penetrations of renewable energy, customers across the West will benefit most from a grid that is truly dynamic and allows for the flexible importing and exporting of power and ancillary services in real time among balancing authorities.[5] We encourage the efforts WECC has underway on initiatives supporting such a future. These include movement toward sub-hourly scheduling, which would assist with integrating intermittent renewable generation across the West, with significant benefits for California. We are also supportive of WECC's efforts to study energy imbalance markets. By enabling additional renewable generation output while helping to minimize reserve requirements and load following requirements, such initiatives balance responsible and prudent system operation with the increasing need for flexibility.

We recognize the importance of regional planning for the interconnected western system. We are all part of one grid and moving toward more efficient regional markets should enhance our ability to integrate more renewables at lower cost. As you progress forward in finalizing the first Regional Transmission Plan, we would note that 10 years is not too distant, and most procurement to meet statutory RPS mandates is already well underway by load serving entities and states. The relevance and usefulness of the first plan will

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[4] We note, however, that the revised WECC value of approximately $2.4 million per mile is still well below that of the developer (at $3.3 million per mile), and a depicted sensitivity range suggests a potential cost as low as $1.5 million per mile. Thus, we remain concerned that WECC's current modeling may not reflect realistic infrastructure options.

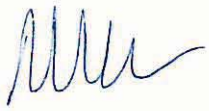
[5] We would point out that DC lines into California may be less expensive than AC lines over long distances, but they allow a much narrower range of opportunities for trading of power, and thus offer less versatility of west-wide energy system benefits across a range of uncertain future conditions.

largely depend on how closely it reflects trends and results on the ground in the western states and utilities.

The State of California is committed to working closely with WECC to plan for and build out the energy infrastructure needed to move the West and the nation towards a cleaner energy future. We understand that as a region you must plan within the federal framework of Federal Energy Regulatory Commission Order 890. At the same time we urge you to undertake planning in a manner that is cognizant of the rapidly changing dynamics in California. It is especially important that alternative generation and transmission futures are evaluated in a way that captures the many factors that influence actual procurement decisions.

Should you have any questions or wish to discuss this further please do not hesitate to contact me at (916) 445-7665.

Sincerely,



Michael Picker,
Senior Advisor to the Governor for Renewable Energy Facilities

Cc:

Steven Chu, United States Secretary of Energy
Ken Salazar, United States Secretary of the Interior
Nancy Sutley, Chair, White House Council on Environmental Quality
Thomas Vilsack, United States Secretary of Agriculture
John Wellinghoff, Chair, Federal Energy Regulatory Commission

CASCABEL WORKING GROUP
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ATTACHMENT C

Published articles confirming that Arizona, California, and Nevada will meet their renewable portfolio standards with their own or other renewable resources.

1. Susan Whittington, "Arizona Solar: Victim of Success," *Energy Prospects West*, December 6, 2011. Available from http://www.energyprospects.com/archives/230-print.html.

2. Cherly Kaften, "California on track to exceed 2020 RE goals, but issues still exist," *PV Magazine – Photovoltaic Markets and Technology*, March 9, 2012. Available from http://www.pv-magazine.com/news/details/beitrag/california-on-track-to-exceed-2020-re-goals--but-issues-still-exist-_100006045/#ixzz1ySkTA1cC.

3. Bill Opalka, "PG&E says it will meet California's renewable energy goals," *Renewablesbiz*, May 31, 2012. Available from http://www.renewablesbiz.com/article/12/05/pge-says-it-will-meet-california-s-renewable-energy-goals.

4. Mavis Scanlon, "California utilities on their way to meeting 33-Percent RPS," *Energy Prospects West*, August 7, 2012. Available from http://www.energyprospects.com/cgi-bin/package_display.pl?packageID=3874.

5. John Edwards, "Nevada utilities flush with renewable energy credits, *Energy Prospects West*, June 26, 2012. Available from http://www.energyprospects.com/cgi-bin/package_display.pl?packageID=3844.

ENERGY Prospects West
Western Interconnection Policy & Resource News

Arizona Solar: Victim of Success?

December 6, 2011

The Arizona Corporation Commission is preparing to rule on 2012 implementation plans for Arizona Public Service and other investor-owned utilities under the state's renewable energy standard (RES) program.

Regulators will weigh in on some of the newer policy questions confronting renewable energy programs. If utilities are beating their targets, should incentives be cut back? If they are, will solar businesses brought to life by the portfolio standards shut down or move out of state?

Originally adopted in 2006, Arizona's RES program calls for utilities to meet yearly targets on a path to having 15 percent renewables in their portfolios by 2025. Since the law has been in effect, it has survived a court challenge by the Goldwater Institute, spawned a host of solar projects and helped make Arizona the third-ranking state in the number of solar-industry jobs.

"We are victims of our own success and are on the path to achieve overcompliance," said Ryan Hurley of the Arizona Solar Energy Industries Association during hearings at the ACC on Nov. 8 and 9.

"We are getting more solar year after year and meeting the objectives of the RES," ACC chairman Gary Pierce said. "This is a debate about how we balance getting more solar for the money and making sure ratepayers are not paying more than they need to," he added.

Pierce asked why more money should be collected "if we've reached compliance." Some ratepayers might say "let the incentive go away and relieve us of this expense," he said.

ACC staff released proposed orders to inform commission decisions, expected to be made Dec. 13 or 14. For APS, staff is recommending a budget of $25 million for residential photovoltaic incentive programs and $5 million for non-residential for 2012. APS proposed options ranging from $20 million for residential PV installations and nothing for non-residential programs, to a highest-cost option of $40 million for residential and $2.3 million for non-residential.

The staff proposes lowering solar incentives in 2012 due to changes in the residential PV marketplace, including the "greatly reduced cost of PV panels and the significant reduction in PV system installed costs." The order recommends setting the residential solar incentive at $0.85/watt, with an automatic trigger that would cut it to $0.70/watt if 45 percent of the funds are reserved by June 30, 2012. For non-residential projects, staff recommends a decrease from $1.75/watt to $0.85/watt. While this would maintain a "limited" non-residential program, the order says unless non-residential incentives are reduced, they will drive ratepayer monthly charges "to unacceptable levels."

In written comments, Hurley said AriSEIA can support staff recommendations, but he called them "the absolute minimum needed for industry survival" and said a larger investment in solar would be a better policy.

For Tucson Electric, ACC staff recommends both the residential and non-residential PV incentive be set at $1.00/watt, with a trigger to step down subsequent incentives. After the staff recommendations came out, TEP filed a letter in the docket that said its recent experience with higher demand for solar has convinced the utility incentives should be lowered even further, to $0.50/watt. Hurley's comments called TEP's proposed reductions

"incredibly troubling" and said they would "decimate the industry."

"I'm concerned the staff proposals won't make the public think TEP has achieved compliance, but that the ACC has decided to do away with incentives for rooftop solar," said Tom Alston, representing U.S. Rep. Gabrielle Giffords (D-Tucson).

C. Webb Crockett, representing Arizonans for Electric Choice and Competition, told the commission he has looked at solar installations in the state by zip code and found they are being made in areas where people "have the capability to pay for it without the need for tax credits or subsidies."

"There is, in my mind, very little that's fair about this program in the way incentives are structured, who's paying and who's getting the benefit," Commissioner Brenda Burns said. "There are people paying for this program who will never have an opportunity to use solar distributed generation -- there are people out of work or on fixed incomes, and people who won't live long enough to ever have DG."

One bone of contention in TEP's 2012 proposal has been its plan to provide a lower incentive to leased solar systems. Meghan Nutting of SolarCity Corp. argued against that approach, saying a recent National Renewable Energy Laboratory study shows that leasing expands the entire market of solar adopters and that people who lease are "younger, less wealthy and less educated." Commission staff is recommending no differentiation in incentives between leased and non-leased systems.

Another issue is paying for marketing programs. Staff proposes to cut hundreds of thousands out of the utilities' budgets for advertising. In its order for APS, staff said "with the significant growth in the renewable energy industry in Arizona in recent years, there are now many venues for publicizing technologies and programs, and the industry should bear the primary responsibility for marketing renewable energy."

Pierce noted that new elements, like programs for schools and homebuilders, have been created "that weren't contemplated" when the RES rules were adopted. Since the RES standard originally was just a requirement for a percentage of retail sales, I'm wondering "if we should continue to argue about what goes into the implementation plans" or revise the rules, he said.

Meanwhile, some Arizona legislators have been talking about revisiting solar policies. Rep. Debbie Lesko (R-Glendale) said in an article in the *Arizona Capitol Times* that legislators, "with input from citizens," should determine "if we want to subsidize solar energy for much longer." Subsidies are "propping up an industry that can't stand on its own legs," and "the only reason you're seeing the amount of growth you are now is because of government intervention," said Sen. Ron Gould (R-Lake Havasu City).

Arizona voters could play a solar trump card if two initiatives qualify for the ballot next year. The first "Go Solar in Arizona" initiative would create a personal tax credit valued at 50 percent of a solar system's price, up to a maximum of $12,000. The credit could be applied to a taxpayer's personal income tax over a 10-year period, and system owners would be required to sign over their Solar Renewable Energy Credits (SRECs) to the state of Arizona, according to the filing at the Secretary of State's office.

SRECS would be sold through a state-run trading exchange, created by a second initiative. It would allow the state to sell SRECs into a nationwide marketplace to recoup solar investments. One SREC would equal one megawatt-hour of solar electricity production.

"The trading exchange would allow the state to sell SRECs to utilities or to corporations, such as Google," Robert Hoskins of Go Solar in Arizona, sponsor of the initiatives, told *Energy Prospects West*. "It's a great way for the state government to make money off solar power and to create new jobs in the solar industry."

New Jersey offers no solar rebates, but has an SREC exchange. On its website, the state's Clean Energy Program attributes the fact New Jersey has an installed solar capacity second only to California's to high renewable energy standards (20 percent by 2020) and the use of SRECs.

"Instead of building expensive, high-voltage transmission lines, Arizona could just export SRECs and save

ratepayers hundreds of millions of dollars," said Hoskins, citing a 2009 R.W. Beck study, financed by APS, that showed a growth in distributed solar installations could save APS over $3 billion in fuel, purchased power, fixed O&M, generation and transmission costs over the next 15 years.

The prospects for his initiatives are good, according to Hoskins. He said one recent poll found that 91 percent of Arizonans "would gladly pay more to get solar." And he added, "You never know what's possible until you try it."

More Information:

Arizona Corporation Commission

Arizona Go Solar Initiatives

- **Susan Whittington**

PV Magazine – Photovoltaic Markets and Technology
http://www.pv-magazine.com/

California on track to exceed 2020 RE goals, but issues still exist

09. March 2012 | Top News, Global PV markets, Markets & Trends | By: Cheryl Kaften

The U.S. state of California is well on the way to overachieving its 2020 aim to generate 33 percent of its electricity from renewables, in fact by almost double. Of this, photovoltaics accounts for nearly half. There are issues, however, such as interconnection and grid infrastructure, which still need to be ironed out.

Jerry Brown signed the most ambitious clean energy law in the US last April.
Flickr/Steve Rhodes

At a time when petrol prices are rising faster than we can fill our tanks, Michael Picker, the State of California's Senior Advisor to the Governor for Renewable Energy Facilities, believes that solar generation offers a superior long-term value proposition. "The price for access to the sun is likely to be the same 20 years from now as it is today," Picker told an industry audience, including **pv magazine**, this week, adding, "Remember, we are not competing with the Chinese for the sun, itself."

Picker was the keynote speaker on March 6 at the Solar Energy Symposium, hosted by CleanTECH San Diego and the Solar Electric Power Association (SEPA) at the University of San Diego to discuss the future of solar energy in the region.

Last April, California Governor Jerry Brown signed the most ambitious clean energy law in the nation – requiring that the state obtain 33 percent of its electricity from renewable sources, such as wind and solar energy, by the year 2020. To meet his objectives, Brown intends to:

- Build 12 gigawatts (GW) of localized (distributed) electricity generation;
- Construct eight GW of large-scale renewables;
- Approve plans and permits for new necessary transmission within three years;
- Deal with peak energy needs and develop energy storage;
- Create a timeline to make new homes and commercial buildings zero net energy;
- Make existing buildings more efficient;
- Adopt stronger appliance efficiency standards; and
- Increase combined heat and power production by 6.5 GW

Picker reported that, in many respects, California already has exceeded its own expectations. Of the 12 GW of distributed electricity generation the state is targeting, 7.99 GW of power currently is online, pending, or authorized.

What's more, over 16 GW of renewable energy generation was "permitted" during the 12 months between 2010 and 2011 – nearly half of that (7.67 GW), is to be supplied by photovoltaic projects.

In fact, the queue of projects scheduled to go online by January 2017 represents more than double the capacity the state needs to achieve a 33 percent renewable portfolio standard (RPS). In California, he explained, projects are deemed compatible with renewable portfolio standards if they are sized up to 20 megawatts (MW); and either are located within a low-voltage distribution grid or supply power directly to the consumer.

"There's an imbalance of solar PV," Picker commented, with respect to the permitting. "It is over-weighted compared to, for example, solar thermal (with permits for 2.76 GW)," he noted, admitting, "I thought solar thermal would have a greater percentage of the market by now – but, with the rapid drop in the price of PV, that technology has been able to reach manufacturing capacity more quickly than thermal."

In terms of rooftop and on-site solar, San Diego generates more power from distributed energy – specifically, grid-connected solar panels on residential, commercial, and government buildings – than any other city in California. A study conducted recently by the Environment California Research & Policy Center found that there were more than 4,500 solar installations within San Diego's city limits as of August 2011, ahead of runners-up Los Angeles and San Jose. Most of the San Diego-based distributed energy projects have been funded by the California Solar Initiative (CSI), followed by the Self-Generation Incentive Program (SGIP), and the Emerging Renewables Program (ERP).

Noting that early adopters of solar generation also are apt to be early electric vehicle (EV) adopters, Picker said it was important to develop the infrastructure for demand response, transmission, energy storage, and the smart grid. "San Diego continues to be a real test bed and arena for EVs, and we will need to supply the power they demand, as well as the energy storage they need."

Another major issue on the horizon will be interconnection, as more rooftop systems become grid-connected. "By 2017, we will be able to hook all of these projects to the grid," predicted Picker. "All of the ingredients are there."

Utility scale

In terms of utility scale, Picker pointed out that nearly half of the projects permitted from 2010 to 2011 were sited in Kern County, California – an area in the southern part of the state that is nearly the size of New Jersey. The county extends east, beyond the southern slope of the Sierra Nevada range into the Mojave Desert and includes parts of Indian Wells Valley and Antelope Valley. Until the recent arrival of solar projects, Kern County had earned a reputation as a large

agricultural base; and a significant producer of oil, natural gas, hydro-electric power, wind turbine power, and geothermal power.

Project permits for Kern County at year-end 2011 included 44 MW for biogas, 2.77 GW for photovoltaics, 250 MW for solar thermal, and 4.1 GW for wind.

"Kern County is now the center of [utility-scale] renewable energy in California," Picker stated. "A number of years ago, the town supervisors had a discussion with local oil producers and learned that oil was getting harder to extract; the oil companies had to keep drilling deeper to find it. The supervisors started to worry about losing jobs in the area, once oil 'went away'. Then, one of the supervisors took a drive and saw a wind turbine at work. He came back and, from then on, Kern was determined to be an energy county."

From that case in point, Picker said, the rest of the state and country should learn a lesson: “"You don’t have to just drift toward the future. Set a big goal and develop power to meet that goal." He singled out two counties that are not getting with the program yet – Riverside, in the southern part of the state, forming part of the border with Arizona; and San Bernadino, in southeast California, an area characterized by thinly populated deserts and mountains.

However, as an energy professional, he is adamant that conservation in these desert and mountain locales must be considered. "We want to help species such as the tortoises and big horn sheep to survive." The biggest roadblock to saving endangered animals, he noted, was the number of agencies involved, "and the difficulty of getting everybody in the same room."

Finally, Picker was optimistic about the pricing of solar projects. "We are starting to see large (and even, smaller) PV projects coming in at 'price parity', he said, adding, "In theory, the utilities should be agnostic to what type of energy they buy, whether it’s fossil fuel or solar, so long as it’s cost-efficient."

Edited by Becky Stuart.

Read more: http://www.pv-magazine.com/news/details/beitrag/california-on-track-to-exceed-2020-re-goals--but-issues-still-exist-_100006045/#ixzz1ySkTA1cC

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PG&E says it will meet California's renewable energy goals

Sub Title:
Utility releases resource plans
Bill Opalka [1]
13104365-566x849.jpg [2]

The California utility says it will comply with the state mandate for 33% renewables by 2020, but it says increased costs will start to be felt by consumers as the percentage increases.

Pacific Gas & Electric (PG&E) filed its renewable energy procurement plan for 2012 with the California Public Utilities Commission and said it will meet the requirement to source 33% of its power generation from clean sources and will also meet interim benchmarks up to that date.

California has an aggressive renewable portfolio standard (RPS) of 33% by 2020, along with the highest-in-the-nation 20% bundled RPS for power generation in the period from 2011-2013.

"In the plan, our energy forecasters project that we will achieve the requirement for an average of 20 % renewable power from 2011-2013, and 25% between 2014-2016. We also plan to continue purchasing competitively priced eligible renewable resources at a steady pace and in moderate amounts to meet our long-range needs to reach and maintain a 33% RPS requirement," the company said.

Compliance will come at a cost, as the company expects the RPS will increase rates by 1-2% each year through 2020. The costs of the RPS program have only begun to appear on customer bills, as projects begin to come online in significant quantities.

That's why PG&E said its 2012 RPS Solicitation will focus on cost-effective procurement of resources.

PG&E's 2012 RPS procurement goal is to add to its RPS portfolio approximately 1,000 GWh per year of RPS-eligible deliveries, primarily through new long-term contracts.

"These volumes would be in addition to any volumes PG&E procures through the Renewable Auction Mechanism (RAM) Program, the Feed-in Tariff (FIT) program, the Qualifying Facility (QF) program, and the Photovoltaic (PV) Program," the plan states.

While the plan says that PG&E has made progress, much uncertainty exists due to potential problems related to project development, operational risks inherent in the performance of intermittent resources and forecasts for retail sales.

“While PG&E is committed to meeting California’s RPS mandate, achieving these ambitious goals presents challenges. PG&E’s ability to comply with the RPS procurement requirement targets remains contingent on a number of factors outside of PG&E’s control, including the ability of independent power producers that have executed Power Purchase Agreements (PPAs) with PG&E to overcome development and transmission challenges,” the plan continues.

The anticipated costs of integrating the various RPS resource types need to be explicitly captured in the evaluation and selection process.

Since 2002, PG&E has signed more than 110 contracts for about 10,000 MW of renewable power.

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Popular content

ENERGY Prospects West
Western Interconnection Policy & Resource News

California Utilities on Their Way to Meeting 33-Percent RPS

August 7, 2012

Last year saw the greatest year-to-year increase in renewable generation in California, with investor-owned utilities at year-end serving 20.6 percent of electric load with renewables portfolio standard-eligible generation, up from about 17 percent in 2010.

RPS-eligible generation is expected to grow substantially this year, according to the latest Renewable Portfolio Standard Quarterly Report from the California PUC, issued July 31.

Over 300 MW of new renewables capacity achieved commercial operation in the first and second quarters of this year, and more than 2,500 MW is scheduled to come on line before the end of the year. That compares with 2,871 MW of new renewables capacity to come on line since the RPS program started in 2003.

"2011 showed the greatest year-to-year increase in the capacity of renewable generation achieving commercial operation since the beginning of the program, and 2012 is already on track to far surpass 2011," the California PUC stated.

California's 20-percent RPS was first established in 2002, and modified in 2006. Last year it was expanded to the current 33-percent-by-2020 standard. Under the current RPS, IOUs must average 20-percent renewables in the 2011-2013 compliance period.

In the first and second quarters of this year, the CPUC approved 48 contracts for 2,450 MW of capacity. Most of the contracts approved in the second quarter -- 36 contracts for a total of 273 MW -- resulted from commission approval of smaller distributed-generation projects executed under the first renewables auction mechanism auction (RAM). The average size for contracts approved in the second quarter was only 7.5 MW, according to the CPUC.

distributed generation

As the quarterly update notes, system-side DG will play an important role in the state achieving its 33-percent goal by 2020, and the commission is aggressively pursuing a number of programs to increase procurement of DG resources.

The CPUC is implementing a revised feed-in-tariff program for renewables projects up to 3 MW; the commission expects to adopt a standard contract for utilities later this year, and at that point the revised FIT program will take effect. (Under the existing FIT program, about 170 MW is under contract.)

It has established the renewables auction mechanism program, through which IOUs hold two auctions a year for projects up to 20 MW; the program is designed to produce cost-effective contracts with a target of 1,299 MW of renewable DG over two years. And IOU-specific solar programs continue to add megawatts. The programs are designed to procure 1 GW over five years.

- Mavis Scanlon

ENERGY Prospects West
Western Interconnection Policy & Resource News

Nevada Utilities Flush With Renewable Energy Credits

June 26, 2012

Nevada regulators are fielding comments on potential changes to the state's renewables portfolio standard after discovering that its two utilities have procured a surplus of renewable-energy credits that could last the next 16 years.

To comply with the state's RPS, Nevada Power and Sierra Pacific Power -- subsidiaries of NV Energy -- must obtain 15 percent of their power from renewable resources this year. The standard gradually rises to 25 percent of total sales by 2025. Utilities are permitted to use renewable-energy credits -- referred to in Nevada as portfolio energy credits, or PECs -- to reach the target. In addition, utilities can count energy-efficiency measures for 25 percent of yearly RPS targets.

The Nevada Attorney General's Bureau of Consumer Protection has reported that Sierra Pacific's oversupply of PECs would last until 2015. Nevada Power's oversupply would exceed the RPS through 2021.

The most recent estimates, from Western Resource Advocates, forecast that under a base-case scenario, Nevada Power's oversupply of PECs would cause the utility to exceed RPS requirements through 2029. If the utilities merge as planned, the combined PEC oversupply would last through 2028, WRA stated. (WRA's numbers are different from the Consumer Protection Bureau's because the group obtained data on different dates from NV Energy, and the utility is always updating its forecasts.)

WRA attributed the oversupply to regulations that allow the utilities to buy PECs for short terms of up to three years without prior approval from the Public Utilities Commission of Nevada. Nevada Power bought portfolio energy credits from existing renewable-power facilities in Idaho, Utah and Wyoming between 2010 and 2012, WRA said.

The short-term regulation was designed to help Nevada Power overcome short-term deficiencies "but instead has generated a large, artificial surplus of portfolio credits that distorts the analysis of RPS compliance both currently and for future years," WRA attorney Robert Johnston of Carson City said in March 8 comments to the PUCN. "The question is whether, at the expiration of these contracts, their use will have accomplished anything in terms of renewable energy development in Nevada or anywhere else."

The utilities offered a different perspective in their own comments, filed with the PUCN in March.

The NV Energy subsidiaries said AB 387, which became law in 2009, allowed them to buy renewable energy and PECs from any generator that transmits power into Nevada. By purchasing PECs from Idaho Power and PacifiCorp, Nevada Power was able to meet the RPS in 2011 "and to do so in an economical way that lowered the costs of renewable energy for our customers," the utilities said.

The utilities said the short-term purchases of PECs help them deal with uncertainty over whether renewables developers will complete projects and whether a sudden increase in power sales would boost the renewable-energy targets, which are based on a percentage of sales. Nevada Power and Sierra Pacific requested a cushion or reserve margin to allow for those risks.

Under California's 33-percent RPS, the state uses a three-year compliance period, which "creates an averaging

effect to mitigate the impact of load or supply deviations in a single year," the utilities said.

PUCN staff recommended requiring the utilities to file short-term contracts for commission approval when those short-term contracts exceed 10 percent of the total RPS target for a year.

In addition, going forward, regulations should be revised to better define how a utility should analyze the net economic benefits to Nevada of a renewable-energy or energy-efficiency project, according to PUCN staff. The out-of-state PECs were from already-existing renewables projects, and therefore did not result in new generation that creates additional jobs or tax income.

The Nevada Legislature, which holds its next biennial session in 2013, could increase the RPS to a higher percentage of sales. Alternatively, the Legislature could reduce the percentage that energy-efficiency programs count for the RPS.

A group called Common Agenda has been discussing whether to seek legislation that would separate the energy-efficiency standard from the RPS and other legislative ways to boost renewable energy. The group includes representatives from the Nevada Conservation League, the Progressive Leadership Alliance of Nevada and the Sierra Club.

"We don't want to get rid of the energy-efficiency standard," said Jane Feldman, energy chairwoman for the Sierra Club's Toiyabe Chapter, which encompasses Nevada and an eastern segment of California. "We just don't want it to count against renewable energy."

Common Agenda, Feldman said, is waiting for the general election in November so it will know who will serve in the Legislature next year and can evaluate potential legislative interest in renewable energy. Then, the group may identify legislators willing to sponsor renewable-energy measures, she said.

- John Edwards

CASCABEL WORKING GROUP
SUNZIA DEIS COMMENTS

ATTACHMENT D

1. Letter from the Cascabel Working Group to the Arizona Corporation Commission dated May 22, 2012 noting the conflict between SunZia and the central and western Arizona transmission capacity needed to transfer New Mexico power to California.

2. Electrical District #4's (Pinal County, Arizona) Motion to Intervene in SunZia's Petition to the Federal Energy Regulatory Commission for a Declaratory Order. ED4's request was submitted out of concern for the above issue. SunZia's request was submitted January 29, 2010.

3. Excerpts from the Arizona Corporation Commission's *Sixth Biennial Transmission Assessment 2010-2019* showing the transmission capacity that would be taken from Arizona if SunZia were to deliver New Mexico power to California. Use of this transmission capacity would hinder Arizona's ability develop its own solar resources and reduce the capacity to deliver power from the Palo Verde hub to central and southern Arizona.

3443 E. Lee Street
Tucson, AZ 85716
May 22, 2012

Commissioner Gary Pierce, Chair
Commissioners Brenda Burns, Sandra D. Kennedy, Paul Newman and Bob Stump
Arizona Corporation Commission
Commissioners Wing
1200 West Washington, 2nd Floor
Phoenix, AZ 85007-2996

Dear Commissioners:

I want to alert you to a serious problem associated with the SunZia Southwest Transmission Project regarding transmission of electrical power to California westward from the project's terminus at the Pinal Central substation in central Arizona. SunZia is a 500-mile-long, double 500-kV transmission system being proposed from New Mexico to central Arizona to deliver electricity to California and Arizona. It will have a capacity of 3,000 MW. This particular situation appears unique in the development of the U.S. transmission system. The issue discussed below could result in legal problems later if not addressed by the Commission.

The fundamental problem is that SunZia does not complete the transmission circuit to California, the intended recipient of much of this energy. Neither California utilities, New Mexico power generators, nor SunZia will build or contribute to building the necessary transmission capacity[1]. In order to complete this circuit, New Mexico power providers and California utilities will have to purchase and exhaust large blocks of Arizona transmission capacity that was built by Arizona utilities explicitly to serve Arizona's needs and ratepayers. Some of that capacity is being built to develop Arizona's own renewable energy resources in central and western Arizona[2] (see attached summary). The loss of that capacity will impair development of these renewable resources.

New Mexico-generated power cannot reach California without two other 500-kV transmission lines that are being built for entirely different purposes:

1. The Salt River Project, Tucson Electric Power Company, Electrical Districts 2, 3, and 4, and the Southwest Transmission Cooperative recently completed a new 500-kV line from the Palo Verde hub to the Pinal Central substation to support growth in the Southeast Valley area and southeastern Arizona (Palo Verde–Pinal West and Pinal West–Pinal Central[3]).

[1] For an initial reference to this problem, see sections III. 2. (b), (c), and (d) of "Motion to Intervene" by Electrical District No. 4 (copy attached), submitted to the Federal Energy Regulatory Commission in response to SunZia's initial application for a Declaratory Order. This is available from Mr. Ron McEachern, District Manager, Electrical District No. 4 of Pinal County, P.O. Box 605, Eloy, AZ 85131, (520) 466-7336, ron@caidd.com.
[2] Arizona Corporation Commission, *Sixth Biennial Transmission Assessment for 2010-2019*, 6th BTA Staff Report, Docket No. E-00000D-09-0020, December 10, 2010. Available from http://www.azcc.gov/divisions/utilities/electric/biennial.asp. Accessed May 9, 2012.
[3] Salt River Project, *500 kV Transmission Line, Palo Verde–Pinal West and Pinal West–Southeast Valley/Browning 500KV/230KV* fact sheet. Available from http://www.azpower.org/pwsevbob/pdf/cec/factsheet0407.pdf. Accessed May 9, 2012.

2. Arizona Public Service must complete a new 500-kV line from the Palo Verde hub to Yuma (North Gila 2) to support growth in that area and to provide transmission capacity for solar energy development in western Arizona[4,5] (see attached map)

The Arizona grid lacks sufficient available transfer capacity from the Palo Verde hub to California[6] to support the delivery of SunZia power without this new transmission capacity. While building the previously denied Devers 2 line would allow SunZia power to reach California, delivering that power to the Devers 2 line would still depend on the new Pinal Central to Palo Verde hub line.

If New Mexico wind-energy producers were to sell 1,500 MW of power to California utilities, for example, their required purchases of central and western Arizona transmission capacity would exhaust this new transmission capacity. This would force Arizona utilities to build it again and would forestall development of Arizona's own renewable energy resources. The seizing of another state's transmission capacity in this manner to gain access to such a large block of external power appears to be unprecedented.

In previous cases, if California utilities wished to access power from remote sources located in a distant state, those utilities participated in building that capacity and had a stake in it. California utilities did so in accessing power plants in the Four Corners region and power from Grand Coulee Dam. In accessing SunZia-delivered power, however, they would, for the first time, *be buying up existing transmission capacity in an intervening state built solely to meet that state's own needs.*

I believe that certain actions are needed to protect Arizona's transmission system, energy security, and renewable energy development. The Corporation Commission should stipulate that SunZia, New Mexico power providers, and California utilities contribute to building the transmission capacity necessary to meet their own needs. They cannot be allowed to take over large blocks of Arizona transmission capacity built for in-state purposes. This requires that SunZia establish tentative agreements with New Mexico power providers and California utilities to add complementary transmission capacity to the central and western Arizona grid. If the Commission fails to act on this, public interest groups will likely sue to protect Arizona's interests and ratepayers.

Other current interstate transmission projects such as the Centennial West Clean Line Project and the Southline Project do not have this inherent problem. The Centennial West line would cross the entire state, connecting New Mexico power generators directly with California users. The Southline Project is being built explicitly to bolster the electrical grid and power delivery in southeastern and central Arizona, with the city of Tucson being the greatest beneficiary. The Southline Project will increase the state's transmission capacity in a critical area rather than weaken it.

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[4] Arizona Public Service, *Palo Verde Hub to North Gila 500kV Transmission Project*, pdf of PowerPoint presentation. Available from http://www.aps.com/files/siting/pvngpresentation_final.pdf. Accessed May 9, 2012.
[5] Arizona Public Service, *Palo Verde Hub to North Gila 500-kV Transmission Line Project* (web site), http://www.aps.com/general_info/siting/siting_14.html. Accessed May 9, 2012.
[6] Kris Mayes, Chairman, Arizona Corporation Commission, *Problems of Siting Long Distance Electric Transmission Lines*, presentation to NARUC Electricity Committee Meeting, February 16-17, 2009. Available from http://www.narucmeetings.org/Presentations/mayes2.pdf. Accessed May 9, 2012.

I thus respectfully urge the Commission to require projects such as SunZia to develop pre-construction strategies that preserve Arizona's transmission capacity for its intended use. This would help prevent legal challenges by public interest groups and subsequent project delays while protecting Arizona ratepayers and in-state power distribution. I recommend that the Corporation Commission address this situation before the Bureau of Land Management issues a Record of Decision in this case, and before SunZia applies to the Commission for a Certificate of Environmental Compatibility. Doing so would allow SunZia to formulate plans to address the problem beforehand.

The draft environmental impact statement is scheduled to be released in June. Informing SunZia and the BLM now is both urgent and timely.

This situation is unique in Arizona transmission history and perhaps U.S. transmission history. Legal guidelines are needed that address when one state wishes to access large blocks of power from a more distant state merely by purchasing an intervening state's transmission capacity. Such purchases can significantly diminish that state's ability to meet its own needs and exploit that state's ratepayers.

Sincerely,

Norm "Mick" Meader
Co-Chair, Cascabel Working Group
(520) 323-0092
nmeader@cox.net

Enclosures (3)

cc: Michael Picker, Senior Advisor to Governor Brown (California) for Renewable Energy Facilities
Mr. John H. Bemis, Secretary, New Mexico Department of Energy, Minerals and Natural Resources
Ms. Janice Alward, ACC Chief Legal Counsel
Mr. Prem Bahl, ACC Engineer, Utilities Division
Mr. John Forman, Chair, Arizona Power Plant and Transmission Line Siting Committee
Mr. Steve Olea, Director, ACC Utilities Division
Mr. Ray Williamson, ACC Engineer, Utilities Division
Advisors to Commissioners Pierce, Burns, Kennedy, Newman, and Stump (sent electronically)

UNITED STATES OF AMERICA
BEFORE THE
FEDERAL ENERGY REGULATORY COMMISSION

SunZia Transmission, LLC	Docket No. EL10-39-000

MOTION TO INTERVENE

Pursuant to Rule 214 and the Notice of Filing issued by this Commission dated February 5, 2010, Electrical District No. 4 of Pinal County, Arizona hereby moves to intervene in this docket.

I. ELECTRICAL DISTRICT NO. 4

Electrical District No. 4 ("ED4" or "the District") is an electrical district established in 1928 by the Board of Supervisors of Pinal County pursuant to the provisions of Chapter 3 of Title 30 of the Arizona Revised Statutes. ED4 was organized to provide, and has provided since 1930, electrical power and energy primarily for producing water for irrigation. ED4 obtained its original power purchase certificate from the Arizona Power Authority in 1960.

ED4 is located in Pinal County, Arizona, with a service area of approximately 108,000 acres. ED4 owns two distribution substations that are centrally located within its service territory. ED4 provides electrical service to agricultural irrigation pumping, industrial, commercial and residential consumers.

ED4 is governed by a five-member Board of Directors elected annually by freeholders of property within ED4's boundaries. The District is operated by the Central Arizona Irrigation and Drainage District through a Management Services Agreement.

II. CORRESPONDENCE AND COMMUNICATIONS

Correspondence and communications concerning this submission should be directed to:

Ron McEachern
District Manager
Electrical District No. 4 of Pinal County
P. O. Box 605
Eloy, AZ 85131
ron@caidd.com

Dennis L. Delaney, P.E.
Engineering Consultant
K. R. Saline & Associates, PLC
160 N. Pasadena, Ste. 101
Mesa, AZ 85201
dld@krsaline.com

III. STATEMENT OF ISSUES

ED4's service area is in the immediate vicinity of the planned Pinal Central Substation at which the Project will terminate. ED4 believes that Petitioner's request is premature.

1) Petitioner asserts that "[o]ther federal and state permitting activity also is underway, including the permitting processes necessary in the counties in Arizona and New Mexico that the Project will traverse."

   a) The Project will "terminate at the proposed Pinal Central Substation in Pinal County, Arizona"; and, while Petitioner indicates that "SunZia has made efforts to inform the Arizona Corporation Commission (ACC) and the New Mexico Public Regulation Commission (NMPRC) on critical Project development issues," Petitioner has failed to describe contacts with local agencies and utilities.

   b) Rather than describe the impacts that will most certainly occur by injecting up to 4,500 MW into the grid at the Pinal County location or how SunZia plans to mitigate those impacts, Petitioner simply refers to the Project's inclusion "in the WECC Regional Planning Project Review and Project Rating Process" as being sufficient to conclude that "no adverse reliability impacts to the existing transmission system" will occur. There is no evidence of this assertion.

2) As described, the Project would inject up to 4,500 MW of power at a future station in Pinal County with no specific identified markets or contracts. The Petitioner asserts that "[t]hrough strategic interconnections, utilities in New Mexico, Arizona, Nevada, and

California will have grid access to these new renewable resources to help meet their local power needs."

a) In reference to the Project's purpose, the Petitioner relies heavily on the Southwest Area Transmission Subregional Planning Group ("SWAT"), stating that in 2006 SWAT "originally identified the need for significant transmission expansion between New Mexico and Arizona to serve load growth, increase system power transfer limits and import capability requirements, and provide service for the growing demand for renewable energy resources, particularly from remote renewable energy zones." However, as late as January 2009, the SWAT Renewable Transmission Task Force had identified resource locations for 29,904 MW of potential renewable generation, including 23,572 MW in New Mexico and Arizona.[1] Although the Project has been announced at SWAT, it is not accurate that "[t]he Project originated out of SWAT" (emphasis supplied).

b) At its terminus, the Project is still remote from the referenced Nevada and California markets, and will require additional unidentified facilities and upgrades to deliver to the California market.

c) The same capacity rights sought in the petition will need to be extended to the Palo Verde Hub, or further. ED4 is concerned that Petitioner has not adequately addressed potential market power issues.

d) It is doubtful that the then existing grid in the Pinal Central area ("late 2013 or early 2014") can accommodate anything close to 4,500 MW. Without additional definition of how Project power will reach market, including additional transmission elements and/or contractual arrangements, the Project is not sufficiently defined.

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[1] The SWAT Renewable Transmission Task Force presented a Power Point presentation dated January 13, 2009 (see Renewable Transmission Task Force) which compared load growth versus renewable generation potential in New Mexico, Arizona and Nevada.

3) Finally, ED4 is concerned over the implied need for "fast tracking" under the renewables mantra. There is considerable potential for renewable generation projects in Arizona and New Mexico, including as much as 5,000 to 7,000 MW renewable generation potential in the general vicinity of Pinal Central, which will also require additional transmission upgrades. There is no adequate justification for the preferences being requested.

IV. CONCLUSION

For the foregoing reasons, ED4 respectfully requests that its Motion to Intervene be granted and that the request to expedite be denied.

Respectfully submitted,

/s/ Dennis L. Delaney, P.E.

Dennis L. Delaney, P.E.
For Electrical District No. 4

February 19, 2010

CERTIFICATE OF SERVICE

I hereby certify that I have this day caused the foregoing document to be served upon each person designated on the official service list compiled by the Secretary in this proceeding.

Dated on this 19th day of February, 2010.

/s/ *Jennifer M. Torpey*

K. R. Saline & Associates, PLC

Sixth Biennial Transmission Assessment 2010-2019
Arizona Corporation Commission

Section 3.2 Utility Renewable Transmission Project Filings

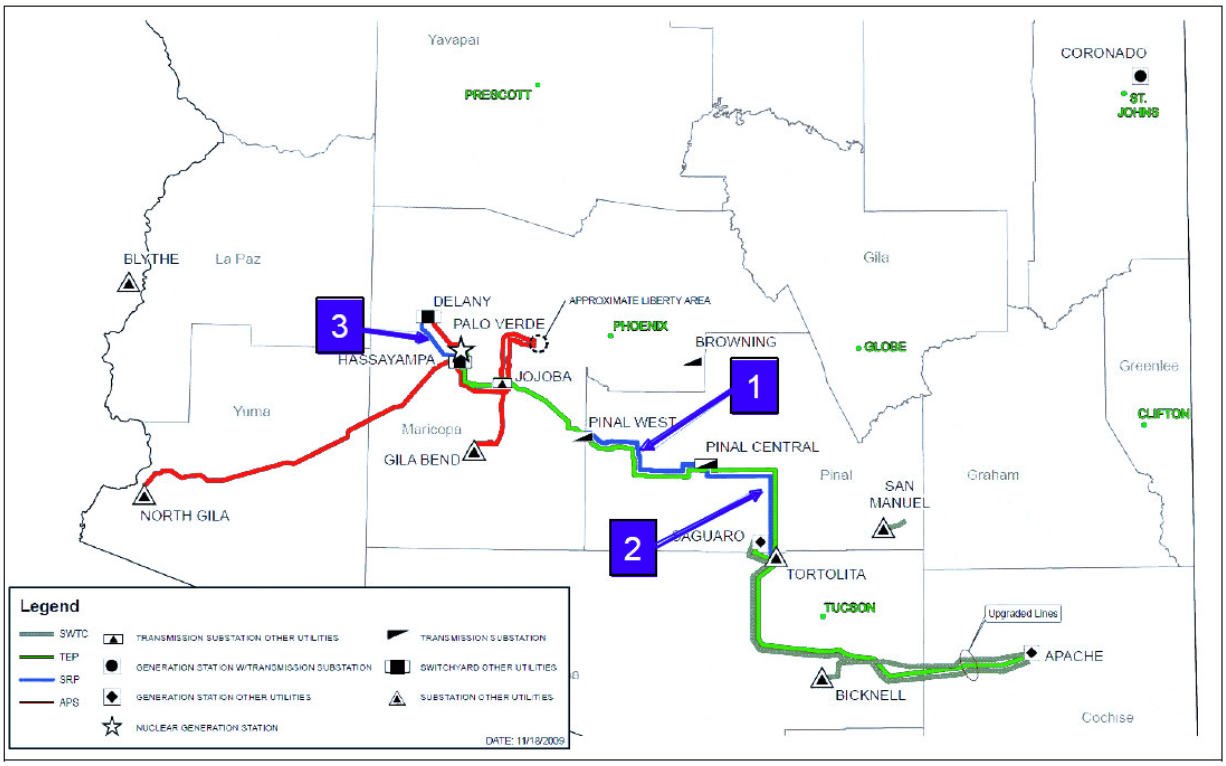


Figure 4 [expanded text]: Identified renewable transmission projects (RTPs) for Arizona Public Service (red), Southwest Transmission Cooperative (olive), Salt River Project (blue) and Tucson Electric Power Company (green). SunZia must use the Pinal Central–Pinal West–Jojoba–Palo Verde 500-kV line and the Palo Verde–North Gila 500-kV line to deliver its power to California. The blue numbers are specific Salt River Project projects (associated with the blue lines).

3.2.1.2 Palo Verde to North Gila 500 kV #2 [Arizona Public Service]

This project is a potential 500 kV transmission line from the Palo Verde hub area to the North Gila Substation, located outside of Yuma. It is approximately 114 miles in length and would parallel an existing jointly owned 500 kV line. This project also provides access to the Palo Verde hub allowing exports of renewable energy.

The area has excellent solar conditions and there are interconnection requests to the area adjacent to this line indicating a robust interest in this renewable resource area [emphasis added]. This line would also provide additional transmission to the Yuma load pocket, increasing load-serving capability in Yuma, and providing additional resource flexibility to serve both the Valley and Yuma load pockets.

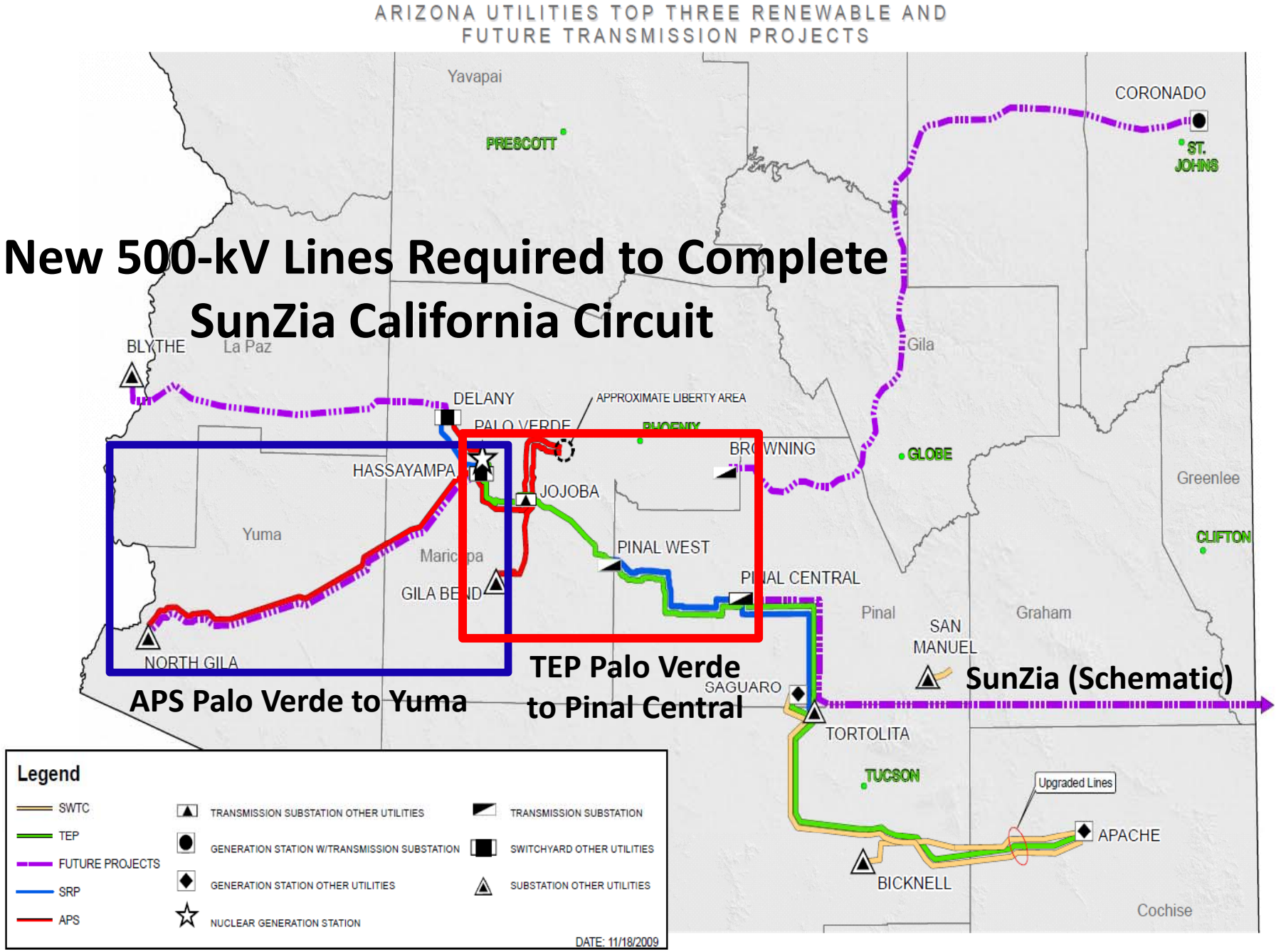
(Continued on reverse)

Due to the magnitude of project costs, this project is conceived as a participant transmission project. Salt River Project, the Imperial Irrigation District, and the Welton-Mohawk Irrigation and Drainage District are the other current participants, each holding a 20% share of the project. In addition, the Western Area Power Administration has expressed an interest in participating in the project. WAPA involvement would provide the potential for federal government funding for WAPA transmission expansions that foster renewable energy.

3.2.2.1 Pinal West–Pinal Central 500 kV

This project is a 50-mile line that is an integral piece of the Hassayampa to Pinal West to Pinal Central to Browning project. *Today there are 11 interconnection requests to that line—all solar—for 3,500 MW* [emphasis added]. The line adds a critical link from the SRP Southeast Valley to Palo Verde. It also provides another parallel path from the Palo Verde area into the Valley, and gives access for Pinal County resources to Palo Verde.

Participants: Salt River Project, Tucson Electric Power Company, Electrical Districts 2, 3, and 4, and the Southwest Transmission Cooperative, Inc.


ARIZONA UTILITIES TOP THREE RENEWABLE AND FUTURE TRANSMISSION PROJECTS
New 500-kV Lines Required to Complete SunZia California Circuit
Yavapai
PRESCOTT
CORONADO
ST. JOHNS
BLYTHE
La Paz
Gila
DELANY
APPROXIMATE LIBERTY AREA
PALO VERDE
PHOENIX
BROWNING
GLOBE
HASSAYAMPA
JOJOBA
Greenlee
CLIFTON
Yuma
Maricopa
PINAL WEST
GILA BEND
PINAL CENTRAL
Pinal
Graham
SAN MANUEL
NORTH GILA
APS Palo Verde to Yuma
TEP Palo Verde to Pinal Central
SunZia (Schematic)
SAGUARO
TORTOLITA
TUCSON
Upgraded Lines
APACHE
BICKNELL
Cochise
Legend
SWTC
TEP
FUTURE PROJECTS
SRP
APS
TRANSMISSION SUBSTATION OTHER UTILITIES
GENERATION STATION W/TRANSMISSION SUBSTATION
GENERATION STATION OTHER UTILITIES
NUCLEAR GENERATION STATION
TRANSMISSION SUBSTATION
SWITCHYARD OTHER UTILITIES
SUBSTATION OTHER UTILITIES
DATE: 11/18/2009