Thank you for your comment, Bradley Albert.

The comment tracking number that has been assigned to your comment is SolarM60246.

Comment Date: September 14, 2009 17:48:09PM Solar Energy Development PEIS Comment ID: SolarM60246

First Name: Bradley Middle Initial: Last Name: Albert Organization: Arizona Public Service Address: P.O. Box 53933 Address 2: Address 3: City: Phoenix State: AZ Zip: 85072 Country: USA Email: bradley.albert@aps.com Privacy Preference: Don't withhold name or address from public record Attachment: APS BLM Solar Energy Study letter to Solar Energy PEIS_091409.pdf

Comment Submitted:

Please see the attached letter submitted on behalf of Arizona Public Service Company.



Bradley J. Albert Director Resource Planning

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September 14, 2009

Solar Energy PEIS Argonne National Laboratory 9700 S. Cass Avenue EVS/900 Argonne, IL 60439

RE: Bureau of Land Management Solar Energy Study Areas Selection in Arizona

Dear Sir or Madam:

Arizona Public Service Company (APS) appreciates the opportunity to provide comment on the recently announced Solar Energy Study Areas for Arizona as part of the Bureau of Land Management's (BLM) and U.S. Department of Energy's (DOE) initiative to expedite the processing of solar energy projects on federal land. We believe that the Solar Energy Study Areas program is essential to furthering renewable energy in Arizona. We also believe there is significant evidence of great potential for solar resources in Arizona. It is for this reason that APS encourages the DOE and BLM to expand its evaluation of potential solar resource areas in Arizona from those proposed in the June 29, 2009 initiative to accommodate Arizona's significant potential for solar resource development.

Disproportion of Solar Interconnection Requests to Arizona Solar Energy Study Areas

The emergence of renewable resources as key components of future electrical generation resulted in a significant increase of requests for interconnection into the Arizona electrical transmission system. As of August 10, 2009, utilities in Arizona have more than 11,800 megawatts of proposed solar generation seeking interconnection into the state's electrical transmission system.¹ Comparing this figure with that of Nevada (approximately 3,000 megawatts) and New Mexico (approx. 3,800 megawatts) for the same time period, Arizona has about 3 times as many solar projects seeking interconnection into the electrical transmission system than our neighboring states included in the BLM study.

^{&#}x27;Generator Interconnection Queues as of August 10, 2009

<http://www.westconnect.com/init_trans_provider.php>.

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Contrasting these interconnection queue figures, the BLM identified three Solar Energy Study Areas in Arizona totaling 16,492 acres, while solar energy zones totaling 149,375 acres and 120,584 acres were identified in neighboring Nevada and New Mexico respectively.² This represents approximately 7 to 9 times the amount of area proposed for study in Arizona, yet the commercial solar development market has more than 3 times as many interconnection requests into the Arizona transmission system.

Arizona Participation in Regional Solar Resource Planning Initiatives

The 2008 Biennial Transmission Assessment (BTA) issued by the Arizona Corporation Commission (ACC) directed state-regulated utilities "to identify new transmission projects that will support the development of renewable generation resources in Arizona."³ APS played a key role in a multi-jurisdictional planning committee formed in response to the BTA, called the Arizona Renewable Resource and Transmission Subcommittee (ARRTIS). This group was tasked with conducting a high-level analysis of potentially developable areas for solar and wind generation projects throughout Arizona. The information gathered by ARRTIS was used as background resource data and provided to a parent committee called the Renewable Transmission Task Force (RTTF), which then developed a network of conceptual transmission linkages throughout the state to aid the utilities in meeting the ACC's directive in the BTA. Both the ARRTIS and the RTTF were part of the broader Southwest Area Transmission Study Group, a sub-regional planning organization comprised of utilities throughout the Southwest, of which APS is a participant.

The ARRTIS process benefited from the active participation of personnel from a wide variety of federal and state agencies, including those listed below, which also provided Geographic Information System (GIS) data to the studies:

- Bureau of Land Management
- Department of Energy National Renewable Energy Laboratory
- United States Forest Service
- United States Fish and Wildlife Service
- Arizona Game and Fish Department

Data received by the ARRTIS was categorized by a corresponding level of potential environmental sensitivity ranging from "exclusion" to "low sensitivity" based on the designation assigned to each layer by the agency providing the data. For the purposes of the process, no objection was raised as to the appropriateness of the sensitivity designation. The ARRTIS sought only to compile available resource data and consider the state resource conditions that were identified.

One of the primary assumptions of the ARRTIS process was that although four areas of resource sensitivity were defined; only Exclusion Areas would be considered unsuitable for utility-scale

² BLM Solar Energy Study Areas, 2009

<http://www.blm.gov/wo/st/en/prog/energy/solar_energy/Solar_Energy_Study_Areas.html>.

³ Arizona Corporation Commission Decision #70635.

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generation in the state. All non-Exclusion Areas would be considered viable options for generation and transmission development subject to site-specific conditions and jurisdictional review and approval.⁴ The results demonstrate that Arizona has tremendous potential for solar development, with approximately half the state falling outside of the conceptual Exclusion Areas and potentially being suitable for solar development.

Use of Arizona Game and Fish Department Information In Determining Solar Energy Zones

As noted above, the Arizona Game and Fish Department (AGFD) provided data for the ARRTIS process and suggested a "high sensitivity" designation for specific areas. Similar AGFD data layers appear to have been provided to the broader Western Renewable Energy Zone (WREZ) initiative administered by the Western Governors' Association and were considered by the BLM and DOE in their Solar Energy Study Area identification process.⁵ The AGFD is currently in the process of refining the resource data evaluation used to define high sensitivity resource areas and have advised utilities and state agencies that additional renewable resource development planning should not be made based on information provided to the WREZ or ARRTIS initiatives. A new refined data set will soon be released by the AGFD that is expected to serve as a more useful resource for planning purposes, including the evaluation of renewable resource development and state resource considerations.

Arizona's Viable Solar Future

Arizona has a strategic role to play in the development of renewable resources in the Southwest. Our own growth, combined with that of our neighboring states, remains the highest in the nation and will require that infrastructure continue to be developed to support the region's growing energy needs. The National Renewable Energy Laboratory's own analysis of Concentrating Solar Power (CSP) potential in Arizona concluded that *"significant resources exist in Arizona for economic development of CSP within the State"* and that these CSP resources *"are located near existing transmission and near existing and growing loads"* further strengthening Arizona's position as a renewable energy consumer and potential net exporter to the region.⁶ The Western Governor's Association's Solar Task Force identified Arizona as having the *"largest solar resource potential"* of all the Western states evaluated in its analysis.⁷

The Arizona transmission system is robust and continues to be enhanced to support the development of the significant solar resource potential of Arizona. In 2008 and again in 2009, APS announced the development of two of the largest utility-scale concentrating solar projects in the world, designed to utilize Arizona's vast solar resource to power clean energy generation facilities capable of producing 570-megawatts, or enough electricity to serve approximately

⁷ Western Governors' Association Solar Task Force Recommendations

⁴ Draft Final Report of the Arizona Renewable Resource and Transmission Identification Subcommittee (September 2009).

⁵ Arizona BLM Renewable Energy Conflict Analysis.

⁶ Analysis of Solar Resource Potential and Siting Opportunities for the State of Arizona - NREL, 2006

<<u>http://www.cc.state.az.us/divisions/utilities/electric/4%20-%20ACC-WGA%20recs%201%20Oct.ppt#257,1,WGA</u> Solar Task Force Recommendations>.

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143,000 customers. With this in mind, APS encourages the BLM to consider the potential that exists for the development of solar energy resources in Arizona and to incorporate additional Solar Energy Study Areas into the ongoing solar initiative.

Respectfully,

BJ aut

Bradley Albert

Cc: Chairman Mayes Commissioner Pierce Commissioner Newman Commissioner Kennedy Commissioner Stump Steve Olea Janice Alward Rebecca Wilder Ray Williamson Mike Anable, Office of Arizona Gov. Jan Brewer