



CRS

center for
resource
solutions

Docket No. E-0000Q-16-0289

November 30, 2016

Commissioners
Arizona Corporation Commission
1200 West Washington Street
Phoenix, AZ 85007-2927

RE: Comments of Center for Resource Solutions (CRS) regarding the Arizona Corporation Commission's (ACC's) Docket No. E-0000Q-16-0289, on An Examination into the Modernization of the Expansion of the Arizona Renewable Energy Standard and Tariff

Dear Commissioners,

Center for Resource Solutions (CRS) appreciates the opportunity to provide comments on the Arizona Corporation Commission's (ACC's) Examination into the Modernization of the Expansion of the Arizona Renewable Energy Standard and Tariff (REST). The issues being considered in this docket are important to the future of renewable energy in Arizona and we appreciate this opportunity to provide information to the ACC.

CRS is a nonprofit organization that creates policy and market solutions to advance sustainable energy. To this end, we are committed to state, national, and international policies that support both voluntary and compliance markets. CRS also administers Green-e® Energy, North America's leading independent certification and consumer protection program for renewable energy (RE) sold in the voluntary market. Green-e Energy certifies and verifies over half of the U.S. voluntary RE market and approximately 90% of U.S. voluntary renewable energy credit (REC) sales.¹ CRS's role in this market is to protect the consumer against double counting and false claims, and ensure that the purchaser of RE is receiving all of the attributes of RE generation that they were promised. CRS also has a long history of working with state and federal agencies to design and implement consumer protection policies that ensure accurate marketing and avoid double counting of individual resources towards multiple end uses.

Arizona's Renewable Energy Markets

CRS is committed to RE markets in Arizona, and to the benefits that strong RE markets provide to all market participants in Arizona—from generators to retail suppliers to customers. CRS has

¹ National Renewable Energy Laboratory. (2016). *Status and Trends in the U.S. Voluntary Green Power Market (2015 Data)*, p.3. Available at: <http://www.nrel.gov/docs/fy17osti/67147.pdf>; and Center for Resource Solutions. (2016). *2015 Green-e Verification Report*, p.4. Available at: <http://green-e.org/docs/2015%20Green-e%20Verification%20Report.pdf>.

been an active participant in previous ACC rulemakings and has worked with the ACC and Affected Utilities to preserve the state's voluntary RE market. CRS submitted comments in 2012, 2013, and 2014 when the commission was investigating modifications to REST rules, and CRS Executive Director Jennifer Martin also provided expert testimony in 2011 in regards to the proposed modifications. After the final rule was announced in 2014, CRS worked closely with the ACC and Affected Utilities to ensure that Arizona RE could still be used to meet demand in the voluntary market.²

Arizona currently has a thriving voluntary market due to the consistency of Arizona state RE policy with Green-e Energy and other voluntary market standards and programs. There are two Green-e Energy certified electricity products in Arizona—Arizona Public Service Company's Green Choice Program and Salt River Project's EarthWise program—and Green-e Energy verification data reveals that there are thousands of customers, both residential and commercial, purchasing certified voluntary RE products in Arizona. These numbers represent a conservative estimate of the RE being offered and the customers purchasing in Arizona, as there may be in-state sales and purchases that are not Green-e Energy certified.

CRS has an interest in ensuring that the Green-e Energy National Standard and the RE policies in Arizona align to guarantee that generators and customers in Arizona can continue to voluntarily contribute to demand for Arizona RE. A key component of Green-e Energy is a requirement for undisputed ownership of and title to RE attributes, including REC ownership. Arizona RE market participants benefit from a RE mandate that is consistent with other state compliance markets, as well as voluntary standards (i.e. Green-e), and voluntary RE recognition programs (e.g. the Environmental Protection Agency's [EPA's] Green Power Partnership, The Association for the Advancement of Sustainability in Higher Education's [AASHE's] Sustainability Tracking, Assessment & Rating System [STARS], and Leadership in Energy and Environmental Design [LEED] certification).

Comments

CRS is commenting in response to a subset of the topics and questions set forth by ACC staff in their September 14th letter. Our comments are overall in support of a continued REST with clear compliance instruments and processes that ensure no double counting and promote the growth of RE in Arizona through both the voluntary and compliance market.

A. Issues requiring additional data and further analysis

- **Increase in interest and popularity of community solar**

CRS encourages the use of a wide variety of RE options, including community solar. Throughout the 26 states with community solar projects,³ there exists an array of program models that vary in terms of whether customers receive the RE attributes of the generation, in the form of RECs.

² See Section A.6 of *Green-e Energy National Standard* for Arizona Market Advisory and Green-e Energy Policy Update. Available online: <http://www.green-e.org/docs/energy/Green-eEnergyNationalStandard.pdf>.

³ National Renewable Energy Laboratory. (2016). *Status and Trends in the U.S. Voluntary Green Power Market (2015 Data)*, p.30. Available at: <http://www.nrel.gov/docs/fy17osti/67147.pdf>.

CRS recommends that in either case, whether customers own RECs or not, disclosure to customers related to REC ownership and RE claims must be clear and accurate. If customers do not own the RECs and/or the RE is being used to meet the REST, it must be made clear to customers prior to enrollment that they are not receiving RE. CRS recommends reviewing the following list of resources that may help advise on REC ownership and RE usage marketing: <http://resource-solutions.org/learn/rec-claims-and-ownership/>.

- **Increased focus on the deployment of renewable energy resources resulting from the Clean Power Plan released by the EPA in 2015**

Many states and organizations, including CRS, have begun to examine the role that RE and RE mandates may play in meeting state requirements under the EPA Clean Power Plan (CPP). The ACC will want to consider adjusting the REST to better meet RE goals and CPP compliance.

If Arizona chooses a mass-based state plan for CPP compliance, the REST will produce RE that reduces mass emissions at affected generating units. Increasing the REST target and extending its target date may help to achieve CPP targets. If Arizona chooses a mass-based state measures approach, the REST can be submitted to the EPA as part of Arizona's CPP plan. In this case, Arizona would need to show that the RE attributes of any out-of-state resources being used to meet the REST are not being counted in other states. The removal of RECs as the means of tracking and verifying REST compliance would make a state measures approach that includes the REST nearly impossible for Arizona. REC removal would also produce challenges for neighboring states that wish to use their Renewable Portfolio Standard (RPS) programs under such an approach, since RECs are the common compliance instrument for neighboring state RPS programs as well as the legal instrument for the voluntary market.⁴

Under a mass-based plan the state might also consider including an allowance set-aside for voluntary RE in order to protect voluntary RE demand in AZ under the CPP. A set-aside preserves regulatory surplus for voluntary purchases (i.e. that each voluntary purchase goes above and beyond state mandates, including for greenhouse gas emissions reductions), a key driver of voluntary RE purchases. For more information on VRE set-asides under mass-based state plans we recommend reviewing CRS's fact sheet available at: <http://resource-solutions.org/document/vre-set-asides-for-mass-based-states/>.

If Arizona chooses a rate-based plan for CPP compliance, ACC will need to consider REC and Emissions Rate Credit (ERC) retirement requirements as they pertain to the REST. CRS encourages Arizona to require that both the REC and ERC for each megawatt-hour (MWh) generated in-state from an ERC-eligible resource be retired in-state so that the state will keep all clean power benefits. The state could further require that an ERC be retired in association with each REC used to meet REST requirements. In this way, the two policies will support and enhance each other, leading to additive reductions in the state of Arizona. Likewise, to maintain regulatory surplus, the state could consider not allowing the issuance of ERCs for RE being used

⁴ Jones, et al. (2015). *The Legal Basis of Renewable Energy Certificates*. Available at: <http://resource-solutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>.

for voluntary purchases, or requiring that ERCs be retired with RECs used in the voluntary market.

As outlined by the Residential Utility Consumer Office (RUCO) comments in August 2014, there is concern that not requiring RECs to assess REST compliance could lead to “steeper than necessary 111(d) compliance targets.”⁵ RUCO made the argument that by not preserving REC integrity, the state risks invalidating its in-state RE supply from being used toward CPP compliance, leading to unnecessary burden in meeting compliance requirements (for instance, the state would not be able to use the REST). RUCO also makes the argument that improper RE accounting (i.e. not using RECs) would prevent Arizona from benefiting from selling RECs out of state. While RUCO’s comments specifically addressed the ACC’s proposed options to amend the REST in terms of distributed generation, the arguments made by RUCO are applicable to all RE generation in state.

For more detailed information on the interaction between RPS and the CPP, we recommend reviewing the following:

Holt, E. (2016). *The EPA Clean Power Plan and State RPS Programs*. Available at <http://cesa.org/assets/Uploads/CESA-RPS-CPP-report-May-2016.pdf>.

For more detailed information on the interaction between RE markets and the CPP, we recommend reviewing the following:

Jones, T., (2015). *Renewable Energy in the EPA Clean Power Plan, Part 2: Interactions With and Impacts on RECs and Renewable Energy Markets*. Available at <http://resource-solutions.org/wp-content/uploads/2015/10/Renewable-Energy-In-the-EPA-CPP-2.pdf>.

B. Specific questions for stakeholders

3. Review the appropriateness of continuing the Renewable Energy Credits (“RECs”) as currently constituted. Do we need RECs to assess compliance or is there a simpler/better way?

CRS strongly recommends the continued use of RECs to determine compliance with the REST. RECs are the primary and most precise means of tracking RE in both compliance and voluntary markets across the U.S. and are therefore the appropriate means of assessing compliance with a policy put in place to ensure that a certain amount of RE is delivered to Arizona customers. All states with RE mandates or goals that track and allocate generation to users (35 states) use RECs as the means of complying with the state RE mandates.⁶ Additionally, participants in the voluntary market, including utilities, corporate customers, electricity providers, state agencies,

⁵ Residential Utility Consumer Office (RUCO). (Aug. 1, 2014). *RUCO’s COMMENTS*, p.2. Available at: <http://images.edocket.azcc.gov/docketpdf/0000155144.pdf>.

⁶ Jones, et al. (2015). *The Legal Basis of Renewable Energy Certificates*. Available at: <http://resource-solutions.org/wp-content/uploads/2015/07/The-Legal-Basis-for-RECs.pdf>.

and individuals across the country, use RECs to ensure delivery and use of RE on the grid. Multiple governmental entities at different levels, state legislation and regulation, regional electricity transmission authorities, non-governmental organizations (NGOs), trade associations, and market participants have recognized that RECs represent and convey the renewable, environmental and/or social attributes of renewable electricity generation to the owner, along with the legal right to claim usage of that renewable electricity. Not using RECs would either (a) fail to achieve the goals of the REST, or (b) require undue burden to ensure the goals of the REST are met.

In order to improve and simplify the process of using RECs to assess compliance, Arizona could require the use of the Western Renewable Energy Generation Information System (WREGIS) tracking system for assessing compliance. WREGIS was created specifically to help with compliance reporting and verification associated with state renewable energy mandates:

“The commission [...] shall ensure that the tracking system established [...] is capable of independently verifying that electricity earning the credit is generated by an eligible renewable energy resource, and can ensure that renewable energy credits shall not be double counted by any seller of electricity within the service territory of the WECC.”⁷

WREGIS was created in consultation with numerous western states and the Western Electricity Coordinating Council (WECC) and is now used for compliance reporting and verification for renewable energy mandates in California, Colorado, Montana, New Mexico, Oregon, and Washington.

With WREGIS, only one REC is created in association with each MWh of renewable energy. It is assigned a serial number and the tracking system then tracks changes in ownership. The REC can only be in any one account at any given time, and is placed into a “retirement account” from which it cannot be removed and traded once it is used. WREGIS would ensure that the REST aligns with its intended goal and would reduce the costs of compliance for Affected Utilities and ACC verification staff.

10. Is it important to have annual REST requirements in place or is establishing a requirement for the end date sufficient?

CRS supports maintaining interim goals rather than only establishing a requirement for the end date. Interim goals and reporting make it easier to reach the end goal and allow for assessment on an ongoing basis of whether Affected Utilities are on track to succeed by the end date. Interim goals also create certainty and structure in the market by making it clear to market participants how much capacity is needed over certain periods of time. As the Clean Energy States Alliance (CESA) states: “Renewable energy targets should be of sufficient duration and stability to minimize risk and accommodate long-term contracting. Increases in target levels

⁷ CA Public Utilities Code § 399.21, available at: <http://www.leginfo.ca.gov/cgi-bin/displaycode?section=puc&group=00001-01000&file=399.11-399.32>.

should be adopted with sufficient lead time for program participants to respond efficiently.”⁸ Interim goals and reporting also make integration with other RE markets possible, in that Arizona generation that is built for Arizona compliance is delivered to Arizona customers every year and not just in the final year of compliance.

13. Should energy purchased via Power Purchase Agreements or from out of state (through long or short term contracts or through wholesale spot markets) count towards the REST?

CRS is neutral on a decision by Arizona to limit certain purchasing types or restrict the geographic locations of RE generators. However, all purchasing options counted towards the REST must include RECs in order to ensure sole claim of RE attributes and no double counting.

C. Questions specific to particular sections in the REST.

R14-2-1801: Are any new definitions needed? [...] Do any definitions need to be changed? Specifically, should [...] Should “Distributed Generation” (and related definitions) be changed so that it is no longer necessary for the relevant facility to be at a “customer premises”?

CRS recommends a few adjustments to the definition of a REC to (a) help with compliance reporting, and (b) match industry standards. CRS recommends revising the REC definition to state that, for the purposes of the regulation, a WREGIS certificate is a REC. This change aligns with requiring the use of the WREGIS tracking system to show REST compliance, which would make assessing REST compliance more efficient. CRS also recommends adjusting the definition of a REC to be denominated in MWh rather than kWh. This change would align the definition of a REC with WREGIS as well as with the industry overall. The states surrounding Arizona, into which the Arizona generators might wish to sell their RECs, define a REC as representing one MWh of renewable energy generation.

CRS does not have an opinion on whether the definition of Distributed Generation is broadened such that the facility does not need to be at a “customer premises.” However, CRS does not support any measure that automatically counts any type of generation or contract towards the REST without requiring that the utility own the RECs in association with that generation, that the utility provide fair compensation and disclosure about REC ownership, and requiring that the customer choose to sell the RECs to the utility. If Arizona chooses to automatically count generation falling within this category towards REST compliance, CRS does not support broadening this definition.

R14-2-1802: Are there any new types of Renewable Energy Resources that need to be added to this list? Should any of these resources be removed?

CRS recommends requiring Low Impact Hydropower Institute (LIHI) certification for eligible hydropower. LIHI is an independent organization that certifies hydropower facilities as low impact. Other states, such as Massachusetts and Oregon, require LIHI certification for hydropower eligible to be used in their RPS, as does the Green-e Energy National Standard for

⁸ Clean Energy States Alliance (CESA). (Jan 2009). *Recommended Principles and Best Practices for State Renewable Portfolio Standards*, p.3. Available at <http://cesa.org/assets/Uploads/Resources-post-8-16/Principles-Best-Practices-RPS-2.pdf>.

Green-e certified sales in the voluntary market. For more information on LIHI's standard, please see the LIHI Certification Handbook: <http://lowimpacthydro.org/wp-content/uploads/2014/08/2nd-edition-handbook-20160307-FINAL-CLEAN.pdf>.

R14-2-1803 and 1804: Are Renewable Energy Credits (RECs) the best way to assess compliance? Are there other ways to assess compliance that are more efficient or less burdensome? Are there unintended consequences associated with using RECs?

RECs are the most effective and efficient way to assess compliance for the REST. While CRS can foresee no unintended consequences associated with using RECs, there would be many consequences as a result of not using them. Since RECs are the instrument that represents specifically what the REST aims to track, any other instrument would be less effective and more administratively burdensome. As such, a primary consequence of not using RECs would be the inability to achieve the desired results of the REST.

Not using RECs would also have the consequence of essentially disqualifying Arizona generation from use in other state compliance markets. If Arizona does not require RECs for compliance, purchasers of Arizona generation would need some other assurance that this RE is not being counted within Arizona. For example, in their *RPS Eligibility* Book the California Energy Commission (CEC) states that they verify that a REC is not double claimed, and that:

“LSEs may be required to submit supporting documentation to verify procurement from facilities or demonstrate that the LSE has not also claimed RECs in another program. The Energy Commission may use any information or records submitted to the Energy Commission or obtained in cooperation with other agencies or voluntary markets to verify compliance with the RPS[.]”⁹

Were Arizona to stop using RECs for compliance, out-of-state utilities that use Arizona generation to meet their RPS might not be able to continue to do so. A REST that does not require RECs will either (a) disqualify all Arizona generation from being eligible for other renewable energy markets, or (b) require additional paperwork to ensure that the renewable energy is not being counted towards the Arizona REST. This could make Arizona generation too administratively burdensome and/or risky to purchase. Arizona generators would likely lose access to the state RE compliance markets in which they are currently eligible to participate.

The ability for Arizona generators to participate in the voluntary RE market would also be in question if the ACC chooses not require RECs for REST compliance. The voluntary market exists as a way for individuals and organizations to make purchases of RE that go above and beyond what is required by law. If the attributes of RE generation, that which is conveyed with the REC, are claimed by Affected Utilities for the REST, then the REC has no value in the voluntary market. Even if the REC contractually remains with the generator owner, the value of RECs from

⁹ California Energy Commission (CEC). (June 2015). *Renewables Portfolio Standard Eligibility, Eighth Edition, Commission Guidebook*, p.66. Available at: <http://www.energy.ca.gov/2015publications/CEC-300-2015-001/CEC-300-2015-001-ED8-CMF.pdf>.

Arizona facilities is eroded. This would reduce private investment in RE in Arizona as RECs from in-state generators would not be useable or valuable.

On the other hand, not using RECs could lead to double counting of RE attributes by Affected Utilities. Not requiring that RECs be procured for REST compliance would not preclude the creation of RECs by generators, and would not prevent a generator from selling RECs into alternate markets. As a result, a single RE MWh could be counted toward the REST without the REC and again toward another state RPS or voluntary purchase using the REC. In this case, the owner of the REC has the legal claim to RE use, and not the Affected Utility in Arizona nor their customers. In a 2014 letter to Vermont utility Green Mountain Power Corporation, the Federal Trade Commission (FTC) warns utilities against double counting of attributes:

“[P]roviders that sell null electricity to their customers, but sell RECs based on that electricity to another party, should keep in mind that their customers may mistakenly believe the electricity they purchase is renewable, when legally it is not. Accordingly, [the FTC] advised such generators to exercise caution and qualify claims about generation by disclosing that their electricity is not renewable.”¹⁰

Many other organizations agree with the FTC that only the entity that owns RECs can legally claim to be using or delivering renewable energy. The Solar Energy Industry Association (SEIA), the Interstate Renewable Energy Council (IREC), and other state and national consumer protection agencies and organizations have published guidance and requirements that reiterate that sole REC ownership is required for renewable energy ownership.¹¹

R14-2-1803 and 1804: Should RECs that originate from distributed energy generators not owned by the utility be eligible (or be required) to be counted towards the utility’s REST requirement?

CRS strongly recommends that the ACC not require that all distributed energy generators that are not owned by the utility be automatically counted to meet the utility’s REST requirements. Only the entity that owns the RECs can claim to be using RE. Customers with on-site generation who own the RECs produced by the system and who have not sold the RECs are the sole owners of that RE. The ACC could choose to allow this generation to be eligible under the REST, but

¹⁰ US Federal Trade Commission (FTC). (February 5, 2015). *Letter from James A. Kohm, Associate Director, Division of Enforcement, Bureau of Consumer Protection, to R. Jeffrey Behm, Esq., Sheehey, Furlong & Behm, P.C.*, pp.3-4. Available at: https://www.ftc.gov/system/files/documents/public_statements/624571/150205gmpletter.pdf.

¹¹ For example, see: Solar Energy Industry Association (SEIA). (2015). *SEIA Solar Business Code*. Available at: <http://www.seia.org/policy/consumer-protection/seia-solar-business-code>.
Interstate Renewable Energy Council (IREC). (2015). *IREC’s Clean Energy Consumer Bill of Rights*. Available at: <http://www.irecusa.org/consumer/bill-of-rights.pdf>.
Federal Trade Commission (FTC). (2012). *Guides for the Use of Environmental Marketing Claims; final rule*. Available at: https://www.ftc.gov/sites/default/files/documents/federal_register_notices/guides-use-environmental-marketing-claims-green-guides/greenguidesfrn.pdf.

utilities must be required to acquire any RECs from generation owners and provide fair compensation.

Automatically counting RE from distributed generation towards the REST will have negative impacts on REC markets and on customers with on-site generation. Thirteen (13) voluntary purchasers from Arizona appear on the EPA's Green Power Partnership (GPP) list. Like other RE standards and recognition programs, the GPP requires that members procure RECs with the RE purchases they count towards GPP membership.¹² Nearly half of Arizona GPP members meet all or a portion of their RE needs with on-site solar PV generation. By not requiring that Affected Utilities own RECs from this generation in order to count it towards REST compliance, the ACC would allow Affected Utilities to double counts these attributes. This would erode the benefit that these customers expected to receive from their RE investment, as they would no longer have sole ownership of the RE. As a result, this policy would likely reduce future demand for or investment in generation that falls within the definition of distributed generation.

Overall, CRS supports REST revisions that require the use of RECs to assess compliance. As CRS has noted, one key way to make REST compliance more efficient and less burdensome would be to require use of the WREGIS tracking system. CRS would be happy to assist ACC staff and help coordinate with WREGIS and other tracking system experts should ACC decide to move forward with requiring WREGIS.

R14-2-1806: Are the extra credit multipliers discussed here still appropriate and necessary?

CRS is neutral as to whether Arizona chooses to continue to use extra credit multipliers to incentivize certain types of generation. If Arizona chooses to continue the use of multipliers, CRS recommends that the multiplier award extra credit or extra "points" for RECs, rather than creating multiple RECs for the same unit of generation. The extra credit multiplier should be awarded during compliance reporting or at the time of verification of compliance. The multiplier should not be applied at the point of generation, nor should multiple RECs, or other instruments, be awarded in a tracking system or otherwise to the generator for the same MWh of generation. The creation of additional RECs or instruments makes accounting and administration more difficult, and can make it administratively burdensome for Arizona generators to participate in other RE markets (either out-of-state compliance markets or the voluntary RE market).

R14-2-1812: Are any changes to the Compliance Reporting requirements necessary or appropriate?

CRS recommends that Arizona require the use of WREGIS for compliance, and require documentation of retirement per WREGIS procedures. Many states in the WECC, including California, Colorado, Montana, New Mexico, Oregon, and Washington, use WREGIS for RE standard compliance reporting. Requiring WREGIS will lead to ease in reporting and verification,

¹² US Environmental Protection Agency. *Green Power Partnership Resource Eligibility*. Available at: <https://www.epa.gov/greenpower/green-power-partnership-resource-eligibility>.

making the process more efficient for ACC staff. Some of the benefits of using WREGIS have been outlined within these comments.

In addition to streamlining verification, using WREGIS will align the Arizona RE market with other regional state compliance markets and the voluntary RE market. This alignment would increase liquidity in regional RE markets and allow Arizona generators to easily sell their RECs into these markets. Alignment will also increase the integrity and transparency of the market by ensuring no double counting of attributes. This provides assurance that Arizona customers are receiving the full benefits of the renewable energy required by the REST. Again, CRS would be happy to assist ACC staff in using tracking systems for RPS compliance.

If WREGIS is not required, and the required reporting stays as is or is adjusted such that all renewables on the system are reporting to the ACC, we recommend that the ACC formalize existing practice by requiring separate reporting of voluntary renewables (Green-e, GPP, on-site, and other voluntary RE purchases) and renewables used to meet RPS requirements in other states. Green-e already requires this type of reporting for Green-e Energy certification of distributed generation from Arizona, however this only benefits RE that is certified by Green-e. By requiring this type of reporting for all generation that is not used for REST compliance, ACC will allow Arizona generators to continue to participate in other markets and will allow rooftop solar customers to preserve the environmental value of their purchase, many of whom made these investments with the expectation of sole ownership of this RE to meet environmental commitments. During the previous REST rulemaking within which CRS participated, the Department of Defense noted that policies that report all renewable energy within a utility's footprint would prevent them from complying with their federal mandate to annually procure RE.¹³

CRS thanks you for accepting and considering our input. Please do not hesitate to contact us should you have any questions regarding these comments, or overall on the impact that certain program requirements could have on the voluntary RE market in Arizona.

Sincerely,



Maya Kelty

Senior Analyst, Policy & Programs

Center for Resource Solutions

415-561-2133

maya.kelty@resource-solutions.org

¹³ Arizona State University (ASU) Energy Policy Innovation Council. (February 2013). *Arizona Public Service (APS's) Track and Record for Renewable Energy Credits Proposal brief sheet*, p.2. Available at: https://energypolicy.asu.edu/wp-content/uploads/2012/03/APS-Track-and-Record-Proposal-brief-sheet_FINAL.pdf.