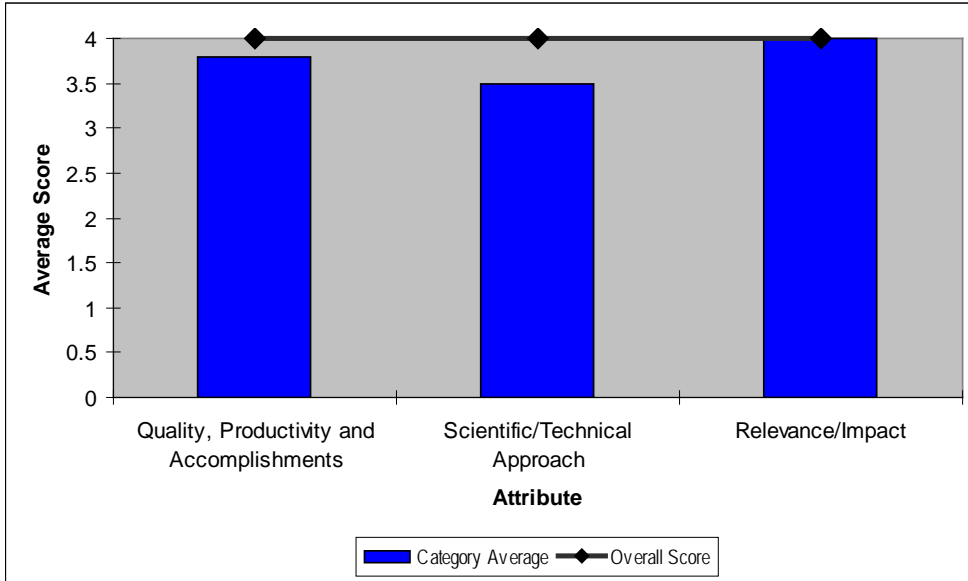


**Southwest Regional Experiment Station (SWRES) Support**  
**Principal Investigator: Andrew Rosenthal, New Mexico State University**



This task supports New Mexico State University’s role in SWRES, a three-acre test site in Southern New Mexico. SWRES includes one and two-axis trackers and a LAN-based data network for testing modules, inverters, batteries with real-time accessible data via the Web. SWRES also works with the PV industry in support of codes, standards and safety.

**Quality, Productivity and Accomplishments (Average Rating 3.8)**

**Rating      Comments**

- 4.0      Strong technical team and capability. Inverter and equipment testing is important.
- 4.0      Excellent staff and support to the clients requesting assistance. Large volume of clients served considering the resources assigned to this effort. I would like to see a greater level of staff assigned to solar thermal integration assistance if it is possible given the eligible use of funds. If not make changes in the scope to incorporate it in the future.
- 4.0      The skills and capabilities of the SWRES staff appear to be of high quality and the technical assistance activities appear to be of high value to the recipients.
- 3.0      I see this team as arguably one of the most important in the market transformation group. This team’s participation at the field level puts it in a unique position to see the issues in real time, and act as the primary feedback loop to the market transformation initiatives. Overall quality, productivity and accomplishments are excellent. The only feedback I can provide here is (a) Market Transformation should formally acknowledge and leverage this team as the primary vehicle for field level feedback to the other teams; and (b) this team should attach themselves regularly to integrator/operators within the various Solar Cities for better direct visibility into the business challenges experienced at the point of execution.

**Scientific/Technical Approach (Average Rating 3.5)**

**Rating      Comments**

- 4.0      Strong technical team with the ability to address technical problems with a high level of confidence. This is important when working with a community just starting with the process of investigating solar applications.

- 4.0 Hi marks for being a photovoltaic house and including an awareness of solar thermal in albeit small, portion of their work. I think the approach and methods could be modeled for other technologies like small wind or solar thermal.
- 3.0 The approach appears to be primarily reactive in identifying the entities that will receive technical assistance, based on the “tiger teams” and Solar America Cities activities, and other DOE directives (e.g., Solar Decathlon).
- 3.0 The overall quality of the technical approach is good. It could be substantially strengthened through better articulation of the workflow approach. Documentation of workflow from the Tiger Teams would facilitate the entire dialogue on market transformation, as stumbling blocks would be more easily identified and potential corrections recommended. This would also more readily help in identifying resource constrained areas that need additional study.

**Relevance/Impact (Average Rating 3.5)**

**Rating      Comments**

- 3.0 It is important to provide the technical and analytical support to the Cities and other DOE partners. The challenge, as stated in (4) below, is to establish the capabilities at the local level for on-going assessment, operation and maintenance of PV systems.
- 3.0 With the rapid growth and interest this work will have continued value. If they can include other distributed energy technologies into the process it would not be so single technology heavy. It’s clear they have the process map for imparting knowledge now a diversity of relevant renewable technologies needs to be folded in.
- 4.0
  - The SWRES staff provided successful technical assistance and outreach to a diverse set of entities.
  - The project should consider development of a “lessons learned” document based on the technical assistance offered, perhaps in concert with other “tiger team” performers, such as SERES, etc.
- 4.0 I believe the work of this team has the potential to positively impact market transformation in a major way. Transformation occurs when stumbling blocks are identified, articulated, exposed to the light of day and then rectified. That generally only happens when teams on the ground are “living” the problems in real time. Working from an office, these issues would never be corrected.

I do believe an area where the team could improve is leveraging workflow models, identifying time allocations in those workflow models based on actual projects, and then proposing specific solutions to other Market Transformation teams to accelerate faster adoption of solutions.

**Overall (Average Rating 4.0)**

**Rating      Comments**

- 4.0 Possibility of developing local expertise for system testing? Provides local training – has this translated into on-going training programs?
- 4.0 [none]
- 4.0 The SWRES personnel appear to be in high demand for technical assistance activities. Other valuable technical assistance opportunities are likely available with additional funding and manpower.

4.0 This team is the edge of the blade – as long as they remain grounded in real-world project experience, and communicate their challenges to the rest of the Market Transformation teams, this group has the potential to greatly facilitate change across the entire industry landscape.