

SHADING EYES AT THE DAWN

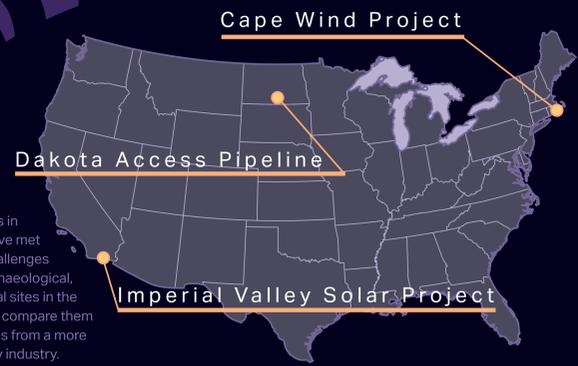
Accounting for Human Heritage in the Transitioning Energy World

Mason D. Miller, M.A., Senior Archaeologist, AmaTerra Environmental, Inc.

As momentum builds for solar energy, we are witnessing the rays of a new dawn in our human experience. Like all of the developmental "dawns" that came in the centuries and millennia before, with that first light, people - their eyes accustomed to the darkness - must squint and look away as they get used to the sun. As we push forward, the remains of our collective past persist. For some, archaeological sites, historic places, and religious and ritual sites - our connection to that past - are boxes to tick off on a checklist. For others, these resources are their heritage personified - sometimes chipped away piece by piece. Unlike us, sites can not adapt to change. These resources either permanently give way or people learn to adjust as effective stewards for future generations.

One day, solar facilities will be as 'normal' as any highway. In the meantime, new developers will pursue opportunities in unfamiliar areas, local communities and Tribes will grapple with what these facilities will mean for their way of life, and government officials will apply one-size-fits-all regulations to new technologies. Couple all of this uncertainty with our steady strides into the Information Age, replete with social media and "fake news," and it is a situation primed for a few costly stumbles that could reverberate permanently. All the while, remnants of our heritage sit and wait for all of us to grope here and there but eventually figure it out as we go.

This poster will review how new technologies in renewable energy have met with pronounced challenges associated with archaeological, historic, and cultural sites in the United States, and compare them to similar problems from a more traditional energy industry.



A Strong Push for Clean Energy Bypasses Tribal Rights IMPERIAL VALLEY SOLAR PROJECT



Project success or failure may hinge on something as simple as following the old rules in spite of a drive to adopt the new. The Imperial Valley Solar project was initially proposed as thousands of acres of Dish Stirling generators in the desert. The Obama Administration pushed to advance renewable energy projects across the country with particular interest in solar development on Bureau of Land Management (BLM) lands in the

southwest. The law requires that the BLM work with Native American Tribes before approving a project like this in order to know what such an approval might do to important archaeological and cultural sites.

In this instance, the programmatic drive to adopt new, clean energy caused them to put the cart before the horse, approving the project first and then inquiring what impacts it might have, and, it turns out, there were potentially many.



The Fort Yuma Quechan Tribes, whose traditional lands the site would be located upon, did not have enough opportunity to assure that hundreds of important sites and ceremonial centers were avoided or mitigated. In the Quechan Tribe's view, the BLM dictated versus collaborated to find a solution. The Tribe sued in federal court and won, delaying construction and crippling the development.



Common Sights can be Forgotten in Sacred Views CAPE WIND OFFSHORE WIND FARM



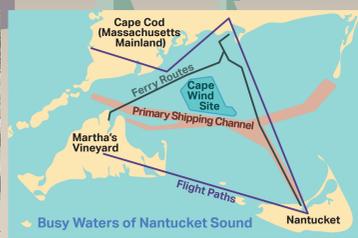
One example of how fear of the unfamiliar can frame people's understanding is the Cape Wind Offshore Wind Project. Planned as the first of its kind in the United States, the project was heralded by its proponents as an energy paradigm shift with developers harnessing winds in the shallows of Nantucket Sound.

The Wampanoag Tribes of the region stated that, though the turbines would be low on the horizon from their vantage, Cape Wind would fundamentally alter their sacred connection with the unobstructed view of the sunrise.



Some government regulators agreed, mirroring the project in delays that (among other issues) eventually caused its termination.

The Cape Wind project was actually proposed for a conspicuously busy area, adjacent to shipping and ferry lanes and below several airport flight paths. The Tribes had not had an unobstructed view of the



horizon for decades, but they had acclimated to the noise of planes and the movement and lights from ferries and commercial vessels. With no frame of reference, the effects from the turbines could not be imagined, and those opposed assumed the worst.



Social Media and Cultural Resources Make a Potent Mix DAKOTA ACCESS PIPELINE



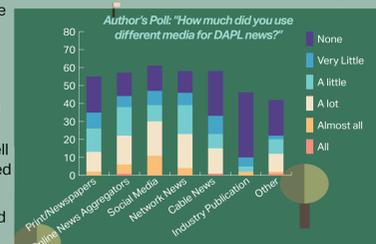
Dakota Access Pipeline: What's Behind the Protests?

For better or worse, the public today has ready access to more data than ever before. They can learn about a project, connect with others, and mobilize with a few simple taps. This unfiltered information flood means that facts can be overshadowed by an unverified but popular narrative, particularly as political views have become so polarized.

Archaeological and cultural sites were central to the Standing Rock Sioux's protests against the Dakota Access Pipeline in North Dakota. The Tribe stated that the oil pipeline was another in a long series of ancestral land impacts that would mar their connection with important cultural sites on the Missouri River bank. As headlines showed protesters and police, stories circulated on social media that the pipeline trench had cut through a burial ground. In fact, the pipe would be drilled well below archaeological resources, and the purported burial ground was only modern cow bones.

An informal poll conducted by the author revealed how such bad information can spread as the

majority of respondents got most - if not all - of their news online, a source of varied accuracy.



WHAT CAN YOU DO?

It is evident that for all of their environmental and financial benefits, solar installations may not be immune to the prospect of problems if cultural heritage impacts are possible. Here are some tips to avoid these situations on your project.



Author's Poll: "How likely is it that a solar project would face protests like the Dakota Access Pipeline?"

GOVERNMENT REGULATORS

Cultural resource specialists gain proficiency as solar projects become more common. Regulators are familiar now with their construction components but are beginning to raise questions about facilities' long-term life cycle (decommissioning, bankruptcy, etc.). As you plan your project be sure to:

- Provide numerous, detailed images and descriptions early and provide a thorough explanation of the project's full life cycle.
- Be prepared to reconfigure your layout to accommodate important resources that may be identified; this is particularly effective for archaeological sites.

NATIVE AMERICAN TRIBES AND THE GENERAL PUBLIC

With regard to Tribes and the general public, don't look past them or discount their concerns. In many instances, they have a right to comment. There is likely a legitimate reason behind them that may stretch back decades or even millennia.

- Provide on-the-ground solar facility images along with more familiar oblique imagery.
- Consider using augmented or virtual reality experiences to give concerned citizens a chance to "see" a facility in the real world.
- Clarify, if needed, and be prepared to alter your plans in the interest of progress.
- Look for ways to give them a stake in the process and outcome.
- Community solar project developers have noted collective pride amongst the residents.
- Tribes have embraced solar installations as a means of employment along with the environmental benefits.



AND FINALLY...

View the process as a collaborative one. As the Honorable Larry Burns stated in his judgement for the Quechan in the Imperial Valley Solar project, "... the Defendants have confused 'contact' with required 'consultation.'" Find a solution together.

512-329-0031 MMILLER@AMATERRA.COM



WWW.AMATERRA.COM | AUSTIN, TX | DALLAS, TX | LAS CRUCES, NM