

ABENGOA SOLAR

Arizona Solar One LLC

ORIGINAL



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July 22, 2011

- Chairman Gary Pierce
- Commissioner Paul Newman
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AZ CORP COMMISSION
DOCKET CONTROL

Arizona Corporation Commission
 1200 West Washington Avenue
 Phoenix, Arizona 85007

Arizona Corporation Commission
DOCKETED

JUL 22 2011

DOCKETED BY	
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Re: Construction Mitigation and Restoration Plan
 Docket No. L-00000GG-08-0407-00139, Case No. 139, Decision No. 70638
 Docket No. L-00000GG-08-0408-00140, Case No. 140, Decision No. 70639

Dear Honorable Commissioners:

On December 8, 2008, the Arizona Corporation Commission granted a Certificate of Environmental Compatibility (CEC) to Arizona Solar One LLC. Condition No. 10 of Decision 70639 requires that:

"Before Construction on this Project may commence, the Applicant, or its assignee(s), must file a construction mitigation and restoration plan ("Plan") with commission Docket Control. Where practicable, the plan will specify the Applicant's plans for construction access and methods to minimize impacts to wildlife, to minimize vegetation disturbance outside of the Project right-of-way, and to revegetate native areas following construction disturbance."

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Consistent with this requirement, we are pleased to convey to you a copy of the construction mitigation and restoration plan.

Please contact me if you have any questions regarding this information.

Sincerely,

A handwritten signature in black ink, appearing to read 'Emiliano Garcia', with a long horizontal stroke extending to the right.

Emiliano Garcia

Statutory Agent

Arizona Solar One LLC

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Solana Generating Facility
Gila Bend, AZ

Rev.	Description	Date	by	Check	Approv.
1	For Construction (Comments from Abener Teyma Included)	06-13-11	APT	GTR	GTR
0	For Construction	06-03-11	APT	GTR	GTR
A	For Review	02-25-11	APT	GTR	GTR

230 KV Transmission Line for the Solana Solar Power Plant Project, Maricopa County, Arizona

ABENGOA SOLAR

ABENER TEYMA

ABENGOA T&D

Mitigation Plan for the Construction of the Transmission Line

This drawing is of the exclusive property of Abengoa T&D Inc and cannot be disclosed, copied or modified without previous written authorization

4521-ESP-ATD-26-30-G001

ESC. -----

JOB : 120006



Revision

230 KV Transmission Line for the Solana Solar Power Plant

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Mitigation Plan for the Construction of the
Transmission Line

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1	Mitigation Plan for the Construction of the Transmission Line	06-13-11	APT	GTR

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Mitigation Plan for the Construction of the
Transmission Line

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1 Scope

The purpose of this document is to ensure that the impact minimization and mitigation measures required by the Project are properly implemented as required under the project requirements. A table summarizing the mitigation measures is attached. This table is a tool for use in monitoring and reporting on implementation of mitigation measures.

Mitigation measures shall be implemented within the time periods indicated in the table that appears below. Abengoa T&D has the primary responsibility for monitoring compliance with all mitigation measures and for reporting to Abener Teyma on the progress in implementing those measures. These monitoring and reporting requirements are summarized at the front of the attached table.

Abener Teyma may, at its sole discretion, verify compliance with any mitigation measure or independently assess the effectiveness of any mitigation measure.

The following items are identified for each mitigation measure: Mitigation Measure, Source, Implementation Schedule, Responsible Party, and Status/Date/Initials. The "Implementation Schedule" column shows the date, if known, or phase when each mitigation measure is scheduled to be implemented. The "Responsible Party" column identifies the person or agency that is primarily responsible for ensuring the mitigation measure is implemented. The "Status/Date/Initials" column shall be completed by Abener Teyma during preparation of each Status Report and the Final Mitigation Report, and must identify the implementation status of each mitigation measure, the date that status was determined, and the initials of the person determining the status.

Abengoa T&D and its Subcontractors are to be aware of, and comply with, all environmental requirements as outlined in this document and by all the applicable laws, ordinances, regulations, standards and permits.

Abengoa T&D will ensure that all employees and Subcontractors employees are made available for Environmental training requested by Abener Teyma, keep trash in covered receptacles, provide for weekly trash pick-up, install required bird diverters, and observe and enforce a maximum of 25mph speed limit in work areas.

Dead, dying or trapped animals will be reported to the designated person from Abener Teyma. No animals are to be trapped, or moved by Abengoa T&D without first notifying Abener Teyma.

No construction activities will be conducted at night or when winds are in excess of 25mph.

If cultural resources including artifacts, features, or human remains are discovered at any time during surveying, siting, ground disturbance, construction or at any other time in the project area, all work in the area will be immediately halted, the site/resource/artifact protected, and the designated person from Abener Teyma notified.

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2 Mitigation Measures to be adopted for the Solana Transmission Line Project

2.1 Land Use

Nº	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Locate poles and roads so as not to disrupt irrigation cycles, where possible.	During Engineering	Abengoa T&D	
2	Locate poles and roads outside of agricultural fields, orchards, existing utilities, and away from existing and future roadways (minimum 50 foot buffer) to allow for widening and other road improvements	During Engineering	Abengoa T&D	
3	Coordinate with landowners for farm operations, including plowing, crop dusting, and harvesting	Prior Construction	Abener Teyma	
4	Coordinate to determine possible compensation to farmers for crop damage and restore compacted soils	Prior and During Construction	Abener Teyma	
5	Control weeds around the base of the structures	During construction	Abengoa T&D	
6	Repair damages to access roads caused by or arising out of use, leaving roads in good or better condition than prior to construction.	After Construction	Abengoa T&D	

2.2 Geology, Soils, and Seismicity

Nº	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Minimize vegetation removal.	During Construction	Abengoa T&D	
2	Avoid construction on steep slopes, where possible.	During Construction	Abengoa T&D	
3	Properly engineer cut-and-fill slopes.	During Construction	Abengoa T&D	
4	Install appropriate roadway drainage to control and disperse runoff.	During Construction	Abengoa T&D	
5	In areas of potential wind erosion, apply gravel to access road surfaces.	During Construction	Abener Teyma	
6	Apply erosion control measures such as silt fence, straw mulch, straw wattles, straw bale check dams, other soil stabilizers, and native non-weed reseeding disturbed areas as required and per the SWPP.	During Construction	Abengoa T&D	
7	Regularly inspect and maintain project facilities, including the access roads, to ensure erosion levels remain the same or less than current conditions.	During Construction	Abener Teyma	

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2.3 Waters of the U.S and the 100-year Floodplain

No	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Place poles outside of washes and utilize natural landscape features to span the conductor over existing vegetation and avoid cutting.	During engineering and prior construction	Abengoa T&D	
2	Place new access roads outside of washes, where possible.	During engineering and prior construction	Abengoa T&D	
3	Preserve existing vegetation where practical, especially next to intermittent and perennial streams	During Construction	Abengoa T&D	
4	Maximize the use of existing roads, minimizing the need for new road construction	During Construction	Abengoa T&D	
5	Avoid poles or access road construction on potentially unstable slopes, where feasible	During Construction	Abengoa T&D	
6	Use erosion control methods during construction (see mitigation measures for Geology, Soils, and Seismicity), to avoid transport of sediments to streams via runoff	During Construction	Abengoa T&D	
7	Reseed disturbed areas following construction, with native seed, where appropriate	During Construction	Abengoa T&D	
8	Keep vehicles and equipment in good-working order to prevent oil and fuel leaks	During Construction	Abengoa T&D	
9	Return staging areas to pre-construction condition	After Construction	Abengoa T&D	
10	Site staging areas away from streambeds	During Construction	Abengoa T&D	
11	Adhere to the conditions stipulated in Nationwide permit 12 utility line activities	Prior, during and after construction	Abengoa T&D	
12	Adhere to the conditions of the Flowage Easements document (dated December 15, 2010	Prior, during and after construction	Abengoa T&D	"As built" drawings must be submitted to the USACE

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2.4 Groundwater

No	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Locate structures, new roads, and staging areas so as to avoid waters of the U.S.,	Prior and During Construction	Abengoa T&D	
2	Avoid mechanized land clearing within waters of the U.S. to avoid soil compaction from heavy machinery, destruction of live plants, and potential alteration of surface water patterns to reduce groundwater turbidity risk.	During Construction	Abengoa T&D	
3	Anticipate and avoid, as required, contaminated soil and underground tanks during construction activities near pipelines and agricultural and other historic projects	During Construction	Abengoa T&D	
4	Use erosion control measures when conducting any earth disturbance within near waters of the U.S.	During Construction	Abengoa T&D	
5	Avoid refueling and/or mixing hazardous materials where accidental spills could enter surface or groundwater	During Construction	Abengoa T&D	
6	Use existing road systems, where possible, to access pole locations and for the clearing of the transmission line alignment.	During Construction	Abengoa T&D	
7	Avoid construction on steep, unstable slopes if possible.	During Construction	Abengoa T&D	

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2.5 Vegetation

Nº	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Locate the proposed transmission line adjacent to the existing corridor to minimize additional clearing.	During engineering and prior construction	Abengoa T&D	
2	Utilize the existing access road system to the extent possible to reduce the need for new access roads	During engineering and prior construction	Abengoa T&D	
3	Keep vegetation clearing to the minimum required to maintain safety and operational standards	During Construction	Abengoa T&D	
4	Avoid construction activities or permanent poles or access road siting in native Sonoran Desert scrub communities, if possible.	During Construction	Abengoa T&D	
5	Reseed areas temporarily disturbed in higher quality Sonoran Desert scrub communities with a native seed mixture and salvage plants protected by Arizona's Native Plant Law (ARS 3-901-3-916). Reseeding should occur at the appropriate planting season. Reseed all disturbed areas with seeds recommended by the Arizona Department of Agriculture.	During Construction	Abengoa T&D	
6	Equip all vehicles with basic fire-fighting equipment including extinguishers, shovels, and other equipment deemed appropriate for fighting grass fires.	During Construction	Abengoa T&D	
7	Avoid tree removal to the extent possible	During Construction	Abengoa T&D	
8	Limit construction equipment to Poles sites, access roads, and conductor tensioning sites.	During engineering and prior construction	Abengoa T&D	
9	Conduct a pre-construction and a post-construction noxious weed survey to determine if construction contributed to the spread of noxious weed populations.	During Construction	Abengoa T&D	
10	Wash vehicles that have been in weed-infested areas (removing as much weed seed as possible) before entering areas of no known infestations	During Construction	Abengoa T&D	
11	Use certified weed-free mulching.	During Construction	Abengoa T&D	

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2.6 Wildlife

Nº	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Prior to construction, conduct raptor nest surveys (for existing and new nests)	Prior Construction	Abengoa T&D	
2	Mitigation for peregrine falcon. If possible, avoid disturbance within 0.25 mile of any active nests	Prior and During Construction	Abengoa T&D	
3	Mitigation for prairie falcon. If possible, avoid construction activities within 0.25 mile of active nests.	Prior and During Construction	Abengoa T&D	
4	Mitigation for red-tailed hawk. If possible, avoid construction activities within 320 feet	Prior and During Construction	Abengoa T&D	
5	Continue to follow the "Burrowing Owl Project Clearance for Landowners" issued by the Burrowing Owl Working Group	Prior and During Construction	Abengoa T&D	
6	Adhere to and implement avian-safe measures and design elements to minimize risk of avian electrocution	Prior and During Construction	Abengoa T&D	

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2.7 Cultural Resources

No	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Locate structures, new roads, and staging areas so as to avoid known cultural resource sites.	Prior and During Construction	Abengoa T&D	
2	Utilize existing access road system to the extent possible to reduce the need for new access roads	Prior and During Construction	Abengoa T&D	
3	Limit construction equipment to Poles sites, access roads and conductor tensioning sites	During Construction	Abengoa T&D	
4	On maps and in specifications provided By Abener Teyma, indicate cultural sites as generic avoidance areas to maintain site confidentiality.	During Engineering and prior Construction	Abener Teyma	
5	Have a monitor on site for construction activities in and around sites eligible for listing in the National Register of Historic Places (NRHP).	During Construction	Abengoa T&D	
6	Delineate offsets and buffers around NRHP-eligible archaeological sites to avoid adverse effects to historic properties	During Construction	Abengoa T&D	
7	Stop all construction activities in the immediate area should any previously unidentified cultural resources be encountered during construction until the resource can be evaluated by an archaeologist and DOE can determine its appropriate treatment	During Construction	Abengoa T&D Abener Teyma	
8	Stop construction in the area immediately should human remains and/or burials be encountered. Secure the area, placing it off limits for anyone but authorized personnel and immediately notify proper law enforcement	During Construction	Abengoa T&D Abener Teyma	
9	Span all avoidance areas. Because the avoidance area at Citrus Valley Road is too wide to span, coordinate with a qualified archaeologist to select appropriate locations within the avoidance area to place one or more transmission structures to minimize surface disturbances.	During Construction	Abengoa T&D Abener Teyma	
10	When stringing conductors through NRHP-eligible sites, pull them through by hand (as opposed to driving a vehicle).	During Construction	Abengoa T&D	

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2.8 Visual Resources

Nº	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Site all construction staging and storage areas away from locations that would be clearly visible as much as practical.	Prior and During Construction	Abengoa T&D	
2	Provide a clean-looking facility following construction by cleaning-up after construction activities.	Prior, During and After Construction	Abengoa T&D	
3	Keep the areas around the poles clean and free of debris.	During Construction	Abengoa T&D	
4	Provide regular maintenance of the access roads and fences within and leading to the corridor	During and After Construction	Abengoa T&D Abener Teyma	

2.9 Transportation

Nº	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Coordinate routing and scheduling of construction traffic with state and county road staff. Per MCDOT permit number TC20101143, ensure that a traffic control plan is in place with MCDOT 30 days prior to construction activities.	During Construction	Abengoa T&D Abener Teyma	
2	Employ traffic control flaggers and post signs warning of construction activity and merging traffic, when necessary for short interruptions of traffic, per the approved Traffic control plan.	During Construction	Abengoa T&D	
3	Repair any damage to local roads caused by the project.	During Construction	Abengoa T&D	
4	Water exposed soil surfaces, if necessary, to control blowing dust.	During Construction	Abengoa T&D	
5	Cover construction materials if they are a source of blowing dust.	During Construction	Abengoa T&D	
6	Limit vehicle speeds along dirt roads to 15 miles per hour, unless otherwise designated in Dust Control plan.	During Construction	Abengoa T&D	
7	Shut down idling construction equipment, if feasible	During Construction	Abengoa T&D	

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2.10 Noise

Nº	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	All equipment to have sound-control devices no less effective than those provided on the original equipment.	During Construction	Abengoa T&D	
2	No equipment to have an unmuffled exhaust	During Construction	Abengoa T&D	
3	Limit construction activities to daytime hours, and per Maricopa County Ordinances.	During Construction	Abengoa T&D	
4	Do not conduct noise-generating construction activity within 1,000 feet of a residential structure between the hours of 10:00 p.m. and 7:00 a.m.	During Construction	Abengoa T&D	
5	Notify landowners directly impacted along the corridor prior to construction activities	Prior and During Construction	Abener Teyma	
6	Restore TV or radio reception to a quality of reception as good or better than before line construction	During Construction	Abengoa T&D	

2.11 Public Health and Safety

Nº	Mitigation measure	Implementation schedule	Resp.	Status /Date
1	Prior to construction, Abengoa T&D will prepare and maintain a safety plan in compliance with Project requirements. Keep plan on-site, include details on how to manage hazardous materials such as fuel, and how to respond to emergency situations.	Prior and During Construction	Abengoa T&D	
2	During construction, Abengoa T&D and its subcontractors crew safety meetings at the start of each workday to go over potential safety issues and concerns.	Prior and During Construction	Abengoa T&D	
3	Secure the site to protect equipment and the general public at the end of each workday.	During Construction	Abengoa T&D	
4	Ensure that employees are trained, as necessary, in pole climbing, cardiopulmonary resuscitation, first aid, rescue techniques, and safety equipment inspection.	During Construction	Abengoa T&D	
5	To minimize the risk of fire, fuel all highway-authorized vehicles off-site. Fuel of construction equipment, that is not highway authorized, in accordance with regulated construction practices and state and local laws. Fuel and house helicopters at local airfields or at staging areas	During Construction	Abengoa T&D	

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No	Mitigation measure	Implementation schedule	Resp.	Status /Date
6	If implosion bolts are used to connect the conductors, install in such a way as to minimize potential health and safety risks.	During Construction	Abengoa T&D	
7	Carry fire suppression equipment including (but not limited to) shovels and fire extinguishers, in vehicles	During Construction	Abengoa T&D	
8	Adhere to local fire district regulations for fire-prevention measures	During Construction	Abengoa T&D	
9	Stay on established access roads during routine operation and maintenance activities	During Construction	Abengoa T&D	
10	Keep vegetation cleared according to WECC, NERC, and FERC standards to avoid contact with transmission lines.	During Construction	Abengoa T&D	
11	Submit final Pole locations and heights to the Federal Aviation Administration, Luke Air Base Commander, and local crop dusting company for review and potential marking and lighting requirements.	During Engineering and Prior construction	Abener Teyma	
12	Construct and operate the new transmission line to meet the National Electrical Safety Code	During Engineering and Prior construction	Abengoa T&D	
13	During construction, follow project specifications for grounding fences and other objects on and near the proposed right-of-way.	During Construction	Abengoa T&D	
14	Should contaminated media be unexpectedly encountered during construction, work will stop and an environmental specialist called to characterize the nature and extent of contamination and determine appropriate Local approved measures to prevent spread and protect health and safety.	During Construction	Abengoa T&D	

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