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Our File Number 38655-00001

June 11, 2004

VIA HAND DELIVERY

Arizona Corporation Commission
Docket Control – Utilities Division
1200 W. Washington Street
Phoenix, Arizona 85007

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AZ CORP COMMISSION
DOCKET CONTROL

Re: Duke Energy Arlington Valley, LLC
Docket No: L-00000P-99-0098 and
Docket No: L-00000P-01-0117

Attached is an original and fifteen (15) copies of Duke Energy Arlington Valley, LLC's Annual Report on the Land Management Plan for the Arlington Valley Energy Project. This Report is being filed in compliance with Condition No. 13 (iv) in ACC Amended Decision No. 62995 and Condition 14 (d) in ACC Amended Decision No. 64495.

Very truly yours,

LEWIS AND ROCA LLP Arizona Corporation Commission

Thomas H. Campbell

DOCKETED

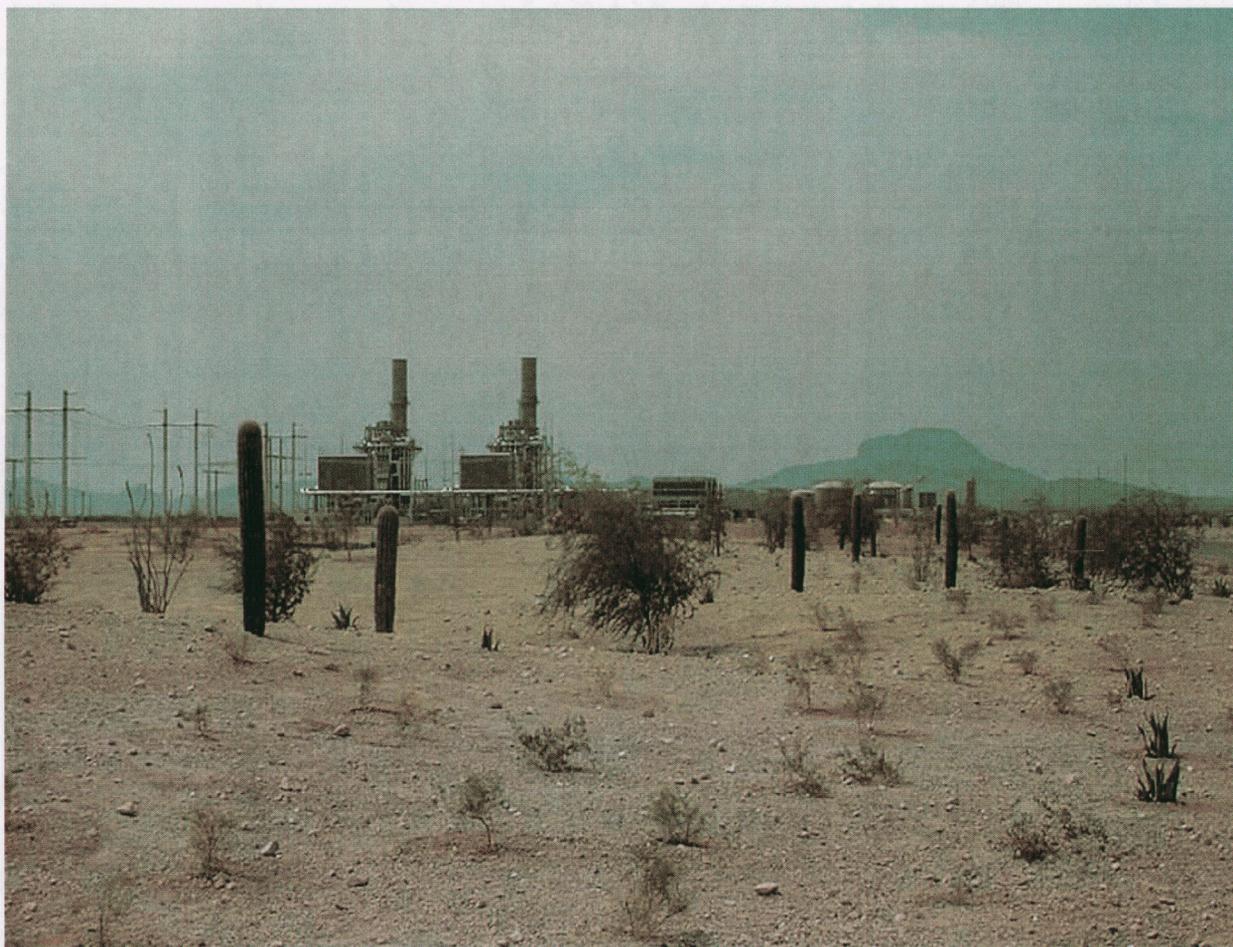
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THC/bjg
Enclosures

cc: Brian Bozzo, Manager, Compliance Enforcement (w/encs.)

Duke Energy Arlington Valley, LLC



**Annual Report on the Land Management
Plan for the
Arlington Valley Energy Project**

June 2004

Background

On July 25, 2000, the Arizona Corporation Commission (“A.C.C.”) issued Decision No. 62740, amended in Decision No. 62995, November 3, 2000 granting a Certificate of Environmental Compatibility (“C.E.C.”) to Duke Energy Arlington Valley, LLC (“Duke Energy”). This Certificate was granted with 14 specific conditions. Condition 13 was added to address concerns raised by the Power Plant and Transmission Line Siting Committee regarding the manner in which Duke Energy was to manage the property it had acquired for water rights.

Specifically, Condition 13 states:

Applicant shall implement a Land Management Plan that includes:

- (i) Installation of a professionally designed landscape plan for the entrance of the facility and along Elliot Road.
- (ii) A comprehensive revegetation program that will restore a large portion of the property with plant communities similar to the adjacent desert lands.
- (iii) A partnership with The Arizona Game and Fish Department to provide enhanced wildlife habitat on lands that border Centennial Wash.
- (iv) An annual report (for six years) submitted to the Arizona Corporation Commission setting forth the status of the Land Management Plan.

A similar condition was included in A.C.C. Decision No. 64717 approving the C.E.C. for Arlington Valley Energy Facility II.

In April 2000, Duke Energy prepared a document entitled Land Management Plan for the Arlington Valley Energy Project. This document was entered into the record, as Exhibit A-6, during Duke Energy’s CEC hearing before the Power Plant and Transmission Line Siting Committee. The Land Management Plan divides the property into five distinct zones. Duke Energy and its partners in the Land Management Plan set forth unique management plans for each of the five zones. The five zones and management objectives were set forth in the Land Management Plan as follows:

Zone 1: Landscape Plan

Duke Energy will retain a professional landscaping firm to design and implement a landscape plan for the southern edge of Elliot Road in front of the facility and both sides of the entrance road to the facility to help screen the facility from view.

Zone 2: Agricultural Lands Reclamation – actively farmed

This zone will remain in active agricultural production as long as reasonable to maintain the irrigation ditches in good working order and prevent potential dust and weed problems. When it is no longer reasonable to keep the land in agriculture, the land will be folded into the active reclamation activities described under Zone 3.

Zone 3: Agricultural Lands Reclamation – fallow agricultural land

This zone includes fallow agricultural lands. In order to better understand how to effectively implement a long-term revegetation strategy, Duke Energy contracted with the University of Arizona. Pursuant to this contract, the University will undertake a study that would investigate revegetation on arid lands. The preliminary plan for the investigation was set forth in the April 2000 Land Management Plan. A revised plan is included in the detailed discussion below.

Zone 4: Wildlife Habitat Management Area

This zone was set aside for cooperative efforts to utilize the land for a wildlife habitat area. To that end, Duke Energy has partnered with the Arizona Game and Fish Department to find appropriate uses of this property.

Zone 5: Centennial Wash

The Land Management Plan proposes to leave this area intact.

Management Plan Report

Zone 1: Elliot Road and Facility Entrance Road.

Goal: Develop a visual buffer between the facility and Elliot Road.

Progress:

As described in the previous Management Plan Report, Duke Energy worked with Todd & Associates, Inc. in upgrading the initial landscape concept plans for the Elliot Road frontage and entry road to include substantially more landscape area along the entirety of the Elliot Road frontage. This allowed for additional berming and plant material to provide visual buffering from the roadway.

Duke Energy contracted with Valley Crest to install the final landscape and irrigation per plans prepared by Todd and Associates, Inc. The landscape and irrigation was 100% complete and fully operational in November 2002.

The landscape palette, consisting of arid adapted plant species, and specifically those tolerant to salt and alkalinity, has proven to be successful. The landscape is flourishing, and the loss of plant materials has been minimal. The largest contributor to loss and damage has come from rabbits, primarily to the Brittle Bush (*Encelia farinosa*) shrubs closest to the roadway and at the far east end of the frontage near Wintersburg Wash. The shrubs were replaced in kind during the maintenance period, and have since grown to sufficient size to better withstand damage. In addition to the Brittle Bush, some of the Saguaro Cacti have been lost due to a "sunburn" condition that is believed to have resulted from transplantation. Duke Energy is currently working with its landscape partners to assess the condition of the Saguaro Cacti and to develop appropriate modifications to its landscape management practices. Native vegetation seedlings have begun to grow within the landscape area, including Brittle Bush, Mesquite, and Acacias.

Duke Energy's contractor, Valley Crest, continues to provide ongoing landscape maintenance and maintain the landscape in a naturalized character. It is the intent to allow the trees and shrubs to naturalize in form and character. More specifically, the trees shall be allowed to remain low branching as per their native character to provide maximum screening potential, as well as to provide shading and habitat for wildlife. Shrubs shall also be allowed to grow in their natural state, and under no circumstances be sheared or artificially pruned. In addition, native seedlings and starts from the new landscape materials shall be allowed to grow to further naturalize the landscape. Maintenance is basically limited to control of weed growth and removal of dead or diseased material.

Valley Crest continues to operate the irrigation system as part of their maintenance contract. The pump station and irrigation system are fully automated via a "Tucor" controller. Seasonal schedules have been installed into the controller programming to provide maximum watering efficiency and to insure maximum growth potential to the new landscape. As plants continue to mature, schedules have been and will be adjusted accordingly to minimize the water usage, while still ensuring the health and appearance of the landscape.

Zone 2 and 3: Agricultural Lands.

Goal: Reestablish arid adapted vegetation that is self-sustaining and representative of adjacent plant communities.

As set forth in the April 2000 Land Management Plan, Duke Energy will revegetate a large portion of the fallow agricultural lands. In order to understand how to effectively implement a long-term revegetation strategy, Duke Energy contracted with the University of Arizona, Office of Arid Lands Studies. Pursuant to this contract, the University has undertaken a study that investigates the best methods for large-scale revegetation on arid lands. The preliminary plan for the investigation was set forth in the April 2000 Land Management Plan. The University of Arizona's updated report, prepared specifically for this document, is included below.

FOURTH ANNUAL REPORT ON REVEGETATION OF ABANDONED FARMLAND AT ARLINGTON VALLEY ENERGY

T. M. Bean and M. M. Karpiscak
University of Arizona
May 2004

Summary of revegetation efforts

The University of Arizona has continued to study and implement a comprehensive revegetation program to restore a large portion of the Arlington Valley Energy property with self-sustaining plant communities similar to the adjacent desert lands. The primary purpose of the revegetation program is to return these former agricultural lands to beneficial use as open space that will attract wildlife and enhance the surrounding environment. The scope of the project is large: approximately 1,810 ac of retired agricultural land exists on the site, having lain fallow for a period of 5-15 years, as well as an additional 910 ac of currently farmed agricultural lands.

A total of approximately 850 ac has been revegetated thus far. A small experimental planting of 16 ac was made in March 2001, followed by a scaled-up planting of 206 ac in November 2001, and a large-scale implementation planting of 630 ac in March 2003. Table 1 presents species included in each of the revegetation plantings. Results of the March 2001 and November 2001 plantings and preliminary results from the March 2003 planting were presented in previous reports. Areas revegetated through March 2003 are displayed in Figure 1.

No additional plantings occurred since the last report but irrigation and plant materials have been ordered to seed 40 acres and plant 60 acres this fall using the standard method of drip irrigated one-gallon transplants of native Sonoran Desert species. This report briefly describes recruitment (successful self-seeding) of transplanted natives on past plantings and also discusses future plantings on the retired agricultural lands owned by Arlington Valley Energy. Please refer to past reports for detailed descriptions of the March and November 2001 plantings and preliminary observations from the March 2003 planting.

Further observations from the March 2003 planting

The March 2003 planting utilized one-gallon transplants hand-planted into drip-irrigated fields. Over 60,000 nursery-grown plants of native species were transplanted. With the exception of 20 ac of double-planted rose pots, no other container sizes were used. To further increase plant species richness and growth-form diversity on the site we included three additional native species in this planting, two grasses and a small shrub: *Aristida purpurea*, *Muhlenbergia porteri*, and *Senna covesii*.

All species were planted into moist soil and have shown high survival. Survival and total cover of transplants in recently farmed fields appeared lower than in fields that had been fallow longer. This was likely due to the initial outbreak of weedy annuals that commonly occurs when farmland is retired from agriculture. These weedy species were able to suppress the initial growth of the transplants. Because these species thrive on the frequent soil disturbances associated with conventional agriculture, they are expected to greatly decrease in abundance as time since the last soil disturbance increases. When possible, we recommend that fields be left fallow for at least one year prior to attempting revegetation. Russian thistle (*Salsola kali*) appeared to be playing the largest role in suppressing transplanted species. This annual plant is a warm-season germinator, so we may be able to avoid initial problems with Russian thistle by planting in the fall instead of the spring.

Cover and density of plantings and volunteer recruitment

Permanent monitoring stations have been established to evaluate planting success in terms of plant cover and densities of transplants and their offspring (Table 2). Different plantings have resulted in different levels of species richness, but it is important to note that this is partially a result of species availability at the time. Seedlings of many species planted in the revegetation effort have been observed, especially in fields planted with one-gallon transplants. We suspect that the larger plants are able to reproduce more rapidly than the smaller plants. All three species of *Atriplex*, and to a lesser degree *Ambrosia* and *Sphaeralcea*, were the most successful at naturally increasing their population densities. The most recent planting in March 2003 has resulted in a diverse (14 species) community dominated by *Larrea*, *Lycium*, and *Atriplex canescens*. Thus far, recruitment has been low, but will likely increase as established plants continue to grow and are able to increase their reproductive effort. *Prosopis* was observed to be increasing in some fields where it was not planted, suggesting recruitment from remnant stands.

Future plantings

We are currently scheduled to seed approximately 40 acres in November of this year to investigate a way of reducing plant material costs in the revegetation program, as well as providing a method that is much less time consuming and strenuous for the planters. However, this method will only be effective if we can gain more predictability over the resulting stand of vegetation from a given seed mixture seeded at a given time of year. Until such information is obtained, we will continue to utilize the proven method of drip-irrigated, hand-planted one-

gallon transplants. We will also plant approximately 60 acres north of the generating facility using the standard one-gallon transplants.

Much of the property south of the railroad has begun to recover naturally, and we will not intervene. To do so would probably cause more damage than good because of the soil disturbances involved in planting and infrastructure installation. However, about 500 acres of fallow agricultural lands that do not appear to be recovering on their own occur in Parcel 1 and have been scheduled to be revegetated using the standard approach (Figure 2). We will plant 250 acres in 2005 and the remainder in 2006.

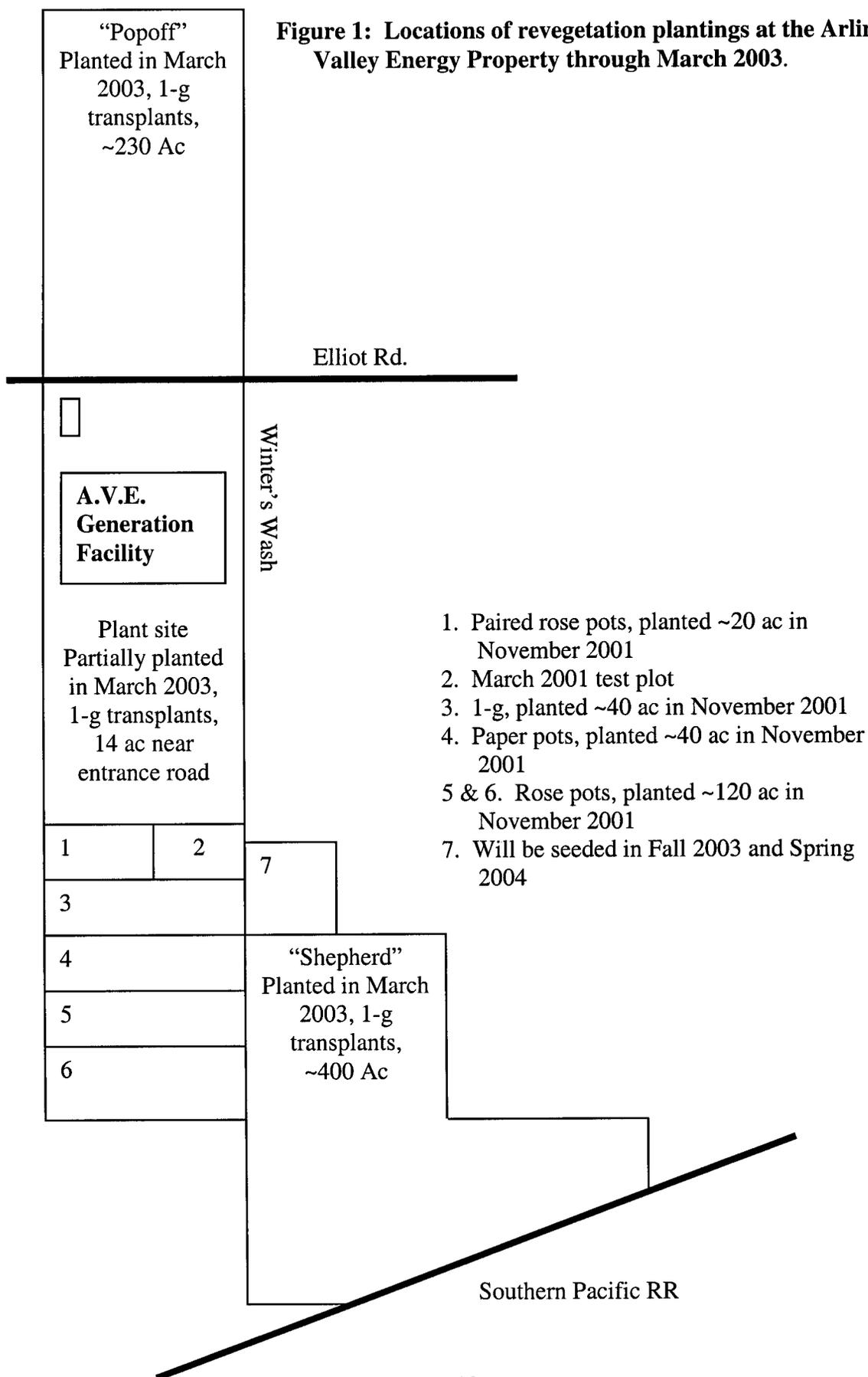
We are also planting 17 acres of desert riparian vegetation in a cooperative project with Ducks Unlimited. This effort is an opportunity to investigate the use of different native community assemblages and different irrigation methods. The plantings will occur in flood-irrigated level basins that occur next to seasonal wetlands holding food crops for migrating waterfowl and shorebirds. The desert riparian vegetation will provide cover and an additional food source for wildlife.

Table 1: Species included in each of the revegetation plantings at Arlington Valley Energy to date.

Botanical name	Common name	March 2001	November 2001	March 2003
<i>Acacia greggii</i>	Catclaw acacia	S, OG	RP	OG
<i>Ambrosia deltoidea</i>	Triangleleaf bursage	S, RP	NP	NP
<i>Ambrosia dumosa</i>	White bursage	S	RP, PP, OG	OG
<i>Aristida purpurea</i>	Purple threeawn	S	RP	OG
<i>Atriplex canescens</i>	Fourwing saltbush	S	RP, PP, OG	OG
<i>Atriplex lentiformis</i>	Quailbrush	S	RP, PP, OG	OG
<i>Atriplex polycarpa</i>	Desert saltbush	S, OG	RP, PP, OG	OG
<i>Baileya multiradiata</i>	Desert marigold	S	OG	OG
<i>Bouteloua aristidoides</i>	Needle grama	S	NP	NP
<i>Calliandra eriophylla</i>	Fairy duster	S	NP	NP
<i>Cassia covesii</i>	Desert senna	S	NP	OG
<i>Festuca microstachya</i>	Desert fescue	S	NP	NP
<i>Larrea tridentata</i>	Creosotebush	S, RP	RP, PP, OG	OG
<i>Lesquerella gordonii</i>	Gordon's bladderpod	S	NP	NP
<i>Lycium exsertum</i>	Woflberry	S, OG	RP	OG
<i>Muhlenbergia porteri</i>	Bush muhly	NP	NP	OG
<i>Olneya tesota</i>	Ironwood	S	NP	NP
<i>Opuntia acanthocarpa</i>	Buckhorn cholla	S	NP	NP
<i>Parkinsonia microphylla</i>	Littleleaf paloverde	S	RP	OG
<i>Plantago ovata</i>	Indianwheat	S	NP	NP
<i>Pleuraphis rigida</i>	Big galleta	S	RP, PP, OG	OG
<i>Prosopis velutina</i>	Velvet mesquite	S, OG	RP	OG
<i>Sphaeralcea ambigua</i>	Desert globemallow	S	RP	OG
<i>Sphaeralcea coulteri</i>	Coulter's globemallow	S	NP	NP

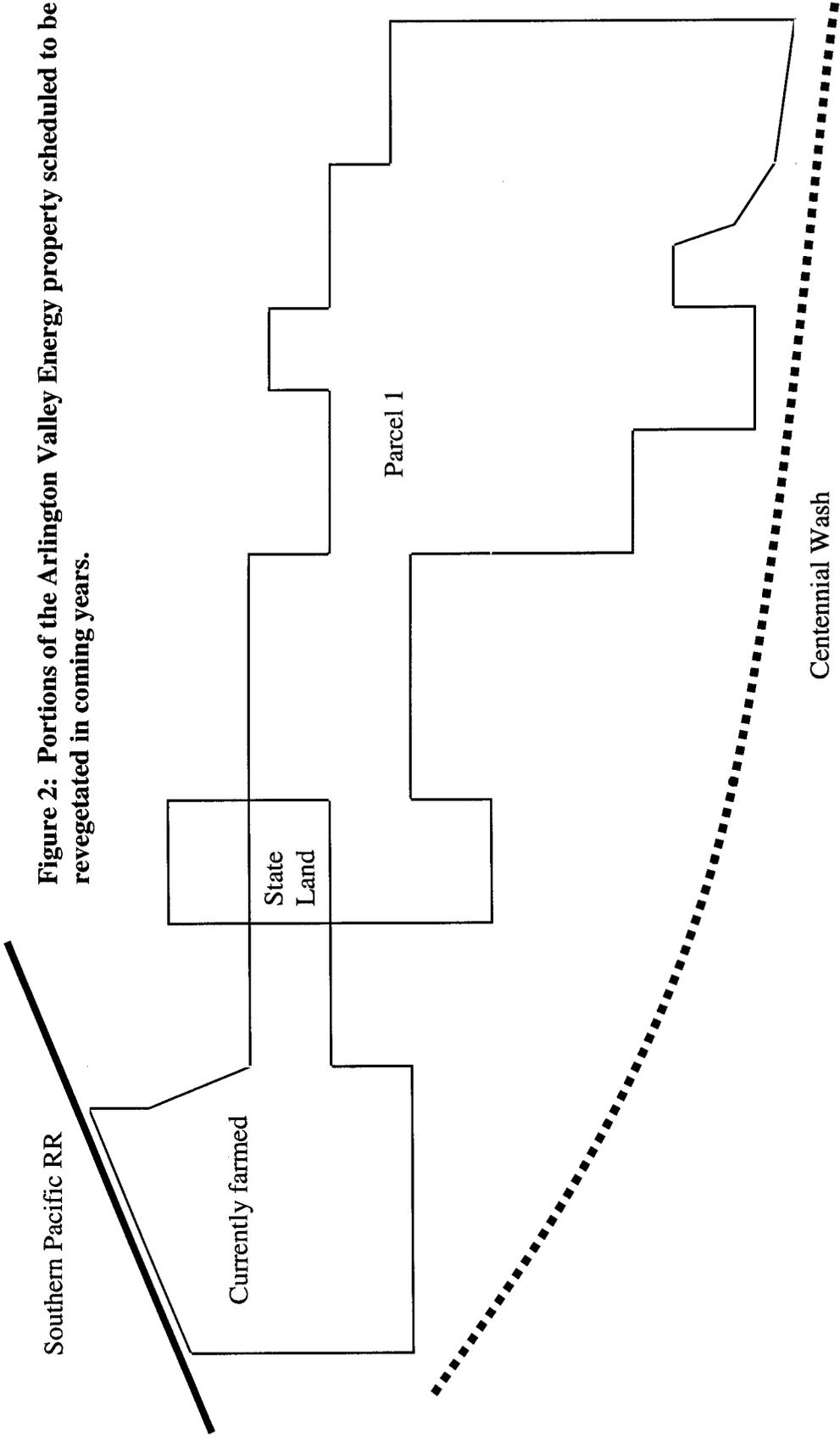
"S" = seed
 "RP" = rose pots
 "PP" = paper pots
 "OG" = 3.8-l pots
 "NP" = not planted

Figure 1: Locations of revegetation plantings at the Arlington Valley Energy Property through March 2003.



1. Paired rose pots, planted ~20 ac in November 2001
2. March 2001 test plot
3. 1-g, planted ~40 ac in November 2001
4. Paper pots, planted ~40 ac in November 2001
- 5 & 6. Rose pots, planted ~120 ac in November 2001
7. Will be seeded in Fall 2003 and Spring 2004

Figure 2: Portions of the Arlington Valley Energy property scheduled to be revegetated in coming years.



Zone 4: Wildlife Habitat Management Area

Goal: Provide enhanced wildlife habitat in the project area.

Under an agreement to provide survey and design services to Duke Energy, Ducks Unlimited, Inc. (DU) has performed engineering and survey related activities at the site of Duke Energy's Arlington Valley Energy Project, Arlington, Arizona. This effort was the first part in the development of a habitat enhancement master plan for the 1,500-acre property. Although delayed, DU is close to completing the master plan that should be done by mid 2004.

Concurrent with the master planning efforts, DU engineers and biologists completed a comprehensive engineering plan for the enhancement of wetland habitat on 62.4 acres. In December 2003, the engineering plan was implemented for the conversion of irrigated agricultural land into shallowly flooded wetlands. The "moist soil" wetland area will be supplied with water from a groundwater well and pump, as well as existing and constructed water delivery infrastructure. The wetland area is divided into eleven separate management units of which six will be managed for moist soil habitats and five will be managed for desert riparian habitats.

The final planning components for the wetland habitats are the vegetation establishment and water management plans. DU is developing the moist soils wetland vegetation planting and water management plans. Implementation of the moist soil wetland plans will begin during the summer of 2004. Six species of wetland vegetation seed have been purchased and will be planted beginning in the summer of 2004, with completion scheduled for spring 2005. Initial watering of the moist soil wetlands will occur immediately after seeding. The project is expected to provide functioning wildlife habitat by winter 2004.

The newly constructed moist soil management wetlands comprise only a small portion of the overall Project site. Additional moist soil management areas can be developed in adjacent agricultural fields in the future. However, establishment and maturation of the current wetland project is needed to fine tune future development and management of additional wetland projects.

The University of Arizona (UA) will undertake vegetation establishment in the desert riparian habitats. Planting selected species common to riparian habitat in the nearby washes will follow an aggressive weed control program. Vegetation planting is expected to occur in fall 2004. Irrigation of these habitat types will utilize the same water conveyance and delivery system of the moist soil wetland management units.

Zone 5: Centennial Wash

Goal: Protect existing riparian vegetation

The project contains only a small portion of land that has not been extensively managed for agricultural production. This area located in the southeastern portion of the site is in Centennial Wash and contains a functioning riparian ecosystem. Duke Energy continues to maintain the area in its current state.

Conclusion

The Land Management Plan for the Arlington Valley Energy Project is progressing well. Duke Energy continues to work with its outside contractors including the University of Arizona, the Arizona Game and Fish Department, and Duck's Unlimited. These efforts have resulted in the implementation of the landscape plan, the desert planting of over 850 acres, and the initial construction of an eventual 62 acre wetland habitat.