

**ARIZONA CORPORATION COMMISSION**

**DISTRIBUTED GENERATION and INTERCONNECTION  
WORKGROUP**

**ACC DOCKET NO. E-00000A-99-0431**

**SITING, CERTIFICATION & PERMITTING  
COMMITTEE REPORT**

**NOVEMBER 22, 1999**

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### White Papers:

- Distribution Generation Forum from Gas Research Institute - 09/16/99
- Training and Certification – Jim Corbin – 09/14/99
- Thresholds and Jurisdiction – Brian O’Donnell/Tom Turturro – 09/29/99
- DG Application Process – Distributed Energy Association of AZ – 10/04/99
- DG Application Process – Chris Weathers – 10/06/99
- Direct Access Service Request – Jerry Smith (ACC) – 09/01/99
- Siting Certification Outline – Matt Puffer/Larry Holly – 10/19/99
- Texas: Equipment Pre-certification proposed rules on DG. – Brian O’Donnell  
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- Application Process – Brian Gernet – 10/25/99
- Comments to Meeting Minutes – Sharon Madden – 10/25/99
- Adopted State of Arizona Energy Policy – Amanda Ormond – 11/04/99
- Q- Can a Location Match be Achieved for Mutual Benefit of Customer and UDC  
Sharon Madden – 11/04/99
- DG Application Process – Draft 1 – Tony Turturro/Brian Gernet – 11/16/99
- DG Application Process – Draft 2 – Tony Turturro/Brian Gernet – 11/18/99

## **Executive Summary**

The Siting, Certification and Permitting Committee of the Distributed Generation & Interconnections Workgroup was formed to review issues relating to siting, certification and permitting of distributed generation (DG) projects within the State of Arizona under the jurisdiction of the Arizona Corporation Commission. There is currently no written set of state-wide requirements, or process for DG manufacturers to facilitate a smooth entrance to providing an alternative source of power. Each Utility Distribution Company (UDC) has individual requirements dating back to the Public Utilities and Regulatory Policies Act (PURPA).

The Siting, Certification and Permitting Committee was formed for the purpose of considering the siting, certification and permitting of new DG projects. The primary focus of its investigation was to include, but not limited to the following:

1. Identify thresholds for which siting is a public issue regarding:
  - Air quality
  - Fuel Supply
  - Noise
  - Safety
2. Establish how the above siting thresholds are affected by:
  - Type of Unit
  - Unit Size
  - Location of Project
  - Intended Operational Uses (Self-providing, emergency backup, sell excess to others, etc.)
  - Residential vs. Commercial Applications
3. Recommend circumstances warranting training, certification or licensing of personnel or pre-certification of distributed generation system packages.
4. Recommend a standardized application process and identify required information.
5. Recommend jurisdiction appropriate for each siting, certification and permitting issue.

## **Recommendations**

1. A statewide-standardized application process/requirements would have a positive impact, since it would help to ensure DG is installed correctly, safely, and expeditiously.
2. Educational information needs to be available to DG applicants listing other government entities, which might have requirements, or require approval of DG projects.
3. Certification of DG equipment should be an option. This allows manufacturers to pursue approval, if they feel that certification would be beneficial because of multiple installations. The committee did not feel that the “installation” itself should be certified since unique conditions might exist at each site.
4. No ACC regulatory oversight is required for siting, permitting, or personnel issues. The committee found that government entities (federal, state and local) already exist and have jurisdiction over these issues.

## Workscope Items

### 1. SITING:

Siting requirements were discussed and the following was agreed upon:

Types of units, location of project, types of distributed generation, intended operational use and residential vs. commercial applications could all impact air quality, fuel supply, noise and safety issues, and UDC operations, with each being site specific.

The committee found that government entities (federal, state and local) already exist and have jurisdiction over these issues.

Large power plants have to be reviewed by the State Power Plant Siting Committee.

No further action or regulation is required of the ACC at this time.

### 2. CERTIFICATION:

#### **Certification of Personnel:**

The group discussed training and certification of individuals installing DG equipment with a white paper submitted on this issue.

It is the consensus of the group that qualified contractors are required for distributed generation installations. Adherence to federal and state law ensure the safety of installers and operators. This is currently not applicable to homeowners for private use.

#### **Certification of Equipment:**

The Committee believes that certification should be an optional process since not all equipment is normally certified (e.g., larger generators). Applicants should be provided a flow chart outlining the agencies that would need to approve a product to have it certified. This could be provided by the Distributed Energy Association of Arizona, a non-profit organization. The Distributed Power Coalition of America might also be used a reference source.

The question came up as to whether a small generator, for example less than 10 kW, could be exempt from local jurisdiction for certification and permitting. The group in general, felt that residential units, 10 kW or smaller, should not require certification and permitting, other than a normal building permit required by the applicable city or jurisdiction.

Also discussed were the benefits of pre-certification of distributed generation system packages. Applicants who will be installing distributed generation equipment may find it advantageous to have their equipment certified by a 3<sup>rd</sup> party testing agency (i.e. UL/ETL, which is primarily testing for fire hazards) and then request that entities accept this certification for future installations. The UDC contends that this does not certify the internal protective functions, which are necessary for the UDC interface, or if the equipment will work at a specific site.

It is also not clear as to which approving agencies would accept certification. For example, the manufacturer of a 75 kW microturbine may desire certification from municipalities, Maricopa County and utility distribution companies (UDC's). However, one municipality may accept the certification, whereas a second may not. There are also situations where the installations, (of the distributed generation equipment and UDC required equipment) make each installation unique. UDC's do not certify equipment.

UDC's verify the interconnection requirements have been met on a site-specific basis, prior to interconnection with the distribution system.

Additional items for this discussion were presented in a white paper.

### **3. PERMITTING:**

Permitting issues were discussed under "Siting". The group has identified which agencies are involved in the permitting process to be able to install and operate distributive generation based on specific type of units and site location.

It has been suggested that a list or flow chart outlining the agencies that would need to approve a product to have it certified and/or installed could be provided by the Distributed Energy Association of Arizona, a non-profit organization. The Distributed Power Coalition of America might also be used as a reference source.

### **4. APPLICATION PROCESS**

Currently, no standardized, statewide, application process exists for an applicant wishing to install DG. Rather, the UDC can require the applicant to meet various criteria, which are not outlined in any statewide, specific document. There was general agreement that the application process should be handled expeditiously by both applicant and the UDC.

The general discussion is that a time frame of 30 days is sufficient for a sufficiency review by the UDC to evaluate, respond to an applicant and approve

application, if all documents, switchgear, and other equipment that may be required to do the interconnect is in place.

APS is not in agreement that a specific number of days are appropriate. APS has stated that in the “real world” the process is an “interactive and iterative process”.

Attached are several white papers explaining this “process” outlining the DG Application Process given to this Committee to discuss.

A lot of discussion ensued determining who needs to be contacted (government agencies, and/or the UDC), certified vs. non-certified units, are there any time frames involved to complete the UDC interconnection, etc. The Distributed Energy Association of Arizona could provide a listing of the various entities that may require approval or included as a reference on the statewide process. Manufacturers, the ACC and the UDC’s could also provide a referral to the Distributed Energy Association of Arizona when a verbal request is made for this information.

## **5. OTHER ISSUES OF DISCUSSION:**

### **DIRECT ACCESS SERVICE REQUEST (DASR):**

The Committee discussed the Direct Access Service Request (DASR) process used to transition to direct access services under electric restructuring.

It was discussed that the DASR process might be used for distributed generation (DG) applications where the customer is exporting electricity on the UDC’s distribution system.

Existing rules require an Energy Service Provider (ESP) to file a DASR to provide back-up, supplemental or maintenance power.

The DASR process is not needed if the DG is only providing power at the DG’s premise.

### **Location Matching, Mapping:**

A question presented to the Committee was “Can a location match be achieved for mutual benefit of the customer and UDC?” The Committee believes that instances may arise when installing distributed generation (DG) may benefit both the applicant and the utility distribution company (UDC). UDCs believe that they would be willing to consider such instances on a case-by –case basis and may offer a request for proposal in such an instance. A number of technical and economic issues would determine the viability of such a partnership.

Also discussed was the issue of who would keep an updated map of all DG units as they are installed. A proposal was made that the ACC could update and maintain such a map on their web site. The ACC is not favorable to this position.

The UDC's currently update maps showing DG units on their system for safety and system planning issues. It has been suggested that these maps could possibly be made public. Some UDC's consider this to be confidential, as they are proprietary information within their business and do not anticipate releasing for public use.

### **Fuel Preference Policy/Fuel Source**

The Committee was asked to discuss the issue of whether a fuel preference policy is needed. Amanda Ormond, Director of the Arizona Department of Commerce Energy Office gave a presentation on this topic. Adopted State Energy Policy page is provided as Attachment E. Ms Ormond discussed the initial legislative resolution of 1977 and the State Energy Policy recommendations of 1990. In general, the policy indicates that energy must be efficient, affordable and environmentally sound. Renewable energy is "desirable" but not mandated. It was brought to the Committee's attention that renewables were now being discussed in deregulation meetings at the ACC. The group does not believe a preference policy for distributed generation was possible.

Another discussion that was to be presented by Ms Ormond was "Delivery of H<sub>2</sub> as a By-Product of Fuel Cell Application". After further discussion, the group decided this issue is not an item that needs to be addressed by the ACC DGI Workgroup.

## Committe Members

<b><u>Name</u></b>	<b><u>Representing</u></b>
Brian O'Donnell	DEAA-Chairman
James P Barry	Tucson Elec/IBEW 1116
Jana Brandt	SRP
Linda Bueczyinski	City of Tucson
Ann Cobb	Trico
Greg Czaplewski	Cummins Southwest
Randy Despain	City of Phoenix
Art Fregoso	Tucson Electric
Tom Friddle	APS
Bryan Gernet	Arizona Public Service
Jeff Hagen	SW Gas
Larry Holly	SW Gas
Barbara Keene	ACC
Warren Louis	Allied Signal
Sharon Madden	APS
Doug Mann	
Patti Morris	TEP
Bill Murphy	City of Phoenix
Doug Nelson	DEAA
Matt Puffer	Engine World
George Rash	New Energy
Brian Sievers	Empire Power Systems
Chuck Skidmore	City of Scottsdale
Jerry Smith	ACC
Scott Swanson	APS
Tony Turturro	ICG
Chris Weathers	APS
Ray Williamson	ACC