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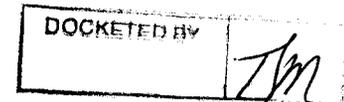
AZ CORP COMMISSION  
DOCKET CONTROL  
August 31, 2012

Arizona Corporation Commission

**DOCKETED**

AUG 31 2012

Docket Control  
Arizona Corporation Commission  
1200 West Washington Street  
Phoenix, AZ 85007



Re: UNS Electric, Inc.'s 2012 Renewable Energy Standard and Tariff Format Report  
Docket No. E-04204A-11-0267

Pursuant to Decision No. 72738 (January 18, 2012), UNS Electric, Inc. ("UNS Electric") is required to participate in the newly formed "REST Format Working Group" with Arizona Public Service Company ("APS") and Tucson Electric Power Company ("TEP") to develop a standardized template format for both the REST Implementation Plans and the REST Compliance Reports in addition to a template for detailed spreadsheets that would be made available to the public on both UNS Electric's website and the ArizonaGoesSolar.org website. Please find attached the joint report and recommendations on the REST Plan formats ("Plan") for Commission Staff approval. Attachment A to the Plan is the Compliance Report template and Attachment B to the Plan is the Implementation Plan template. Each template contains spreadsheet templates for posting on the above-mentioned websites.

The other members of the working group, APS and TEP, will file this report in their respective dockets.

If you have questions or comments please contact me at (520) 884-3680.

Sincerely,

Jessica Bryne  
Regulatory Services

Enclosure: REST Plan Format Report

cc: Bob Gray, Utilities Division, ACC  
Ray Williamson, Utilities Division, ACC  
Compliance Section, ACC

# Report on Renewable Energy Standard (RES) Plan Formats

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Decision Nos. 72736, 72737 and 72738 ordered Tucson Electric Power Company, Arizona Public Service, and UNS Electric, Inc. to submit a report for Staff approval on the Companies' joint RES plan formatting standardization efforts. The enclosed report includes recommendations developed in collaboration with other Arizona utilities and stakeholders. The report contains two sections: 1) Required reporting information which will be standardized to use identical templates, and 2) Utility-specific reporting which will be unique to each utility.

## I. Required Reporting Information

### a. Compliance Report Templates

The annual Compliance Report spreadsheet tables (See Attachment A) encompass energy capacity and production, overall compliance, above market renewable resource costs by technology, and cash incentive costs. The compliance templates will be posted annually, in native format, at [www.arizonagoessolar.org](http://www.arizonagoessolar.org) after each compliance filing is made.

Definitions and descriptions of the tables provided in Attachment A are provided below.

#### **Table 1a**

This table reports renewable energy production including projects installed under cash incentive programs, PPA contracts, and utility-ownership projects.

*Resource* – Generation line items would include individual renewable energy facilities. Distributed Energy (DE) residential line items would include any Up Front Incentives (UFI) and Non-Cash Incentives (installations in place without cash incentives). Non-residential line items will include *any* UFIs, Production Based Incentives (PBI), Non-Cash Incentive installations, and any utility-owned resources listed by program.

*Technology* – Approved renewable energy resources in portfolio, listed as solar (i.e. solar electric), solar thermal, wind, geothermal, landfill gas, and other.

*MW (Capacity)* – Reported as MWac for generation resources and MWdc for DE resources (MWdc will thus be blank for generation and MWac will be blank for DE).

*Total MWac equivalent* – Note that the total capacity in the utility's RES portfolio is converted and shown as MWac. Utilities should state the assumption used for the dc-ac conversion factor applied to capacity reported as MWdc.

*Production (Actual)* – Represents actual meter reads from systems with production meters in place on or before January 1 of the compliance year.

*Production (Annualized)* – Represents production estimates normalized to reflect a full year of production for any system A) placed into service after January 1 of the compliance year, or B) without a production meter currently installed, including systems installed without a cash incentive. Assumptions for annualizing applicable residential and non-residential systems are listed in the footnotes as a kWh/kW-yr production factor.

*Total MWh or Equivalent* – Renewable resources eligible to be counted towards compliance.

*Gross Total/Adjustments* – If needed, adjustments lines can be used to account for wholesale power allocations, Green Choice program or other sales reductions, etc. If no adjustments are needed, the Gross total and Adjustments lines may be omitted.

### **Table 1b**

Compliance Report Table 1b accomplishes two key reporting components. First, the table identifies the utility's retail energy sales for the compliance year and corresponding compliance energy requirements. Second, the table identifies the RES resources that can be used for compliance (including the prior year's carrying balance plus current year RES resources), how those resources were applied to fulfill compliance targets, and any year-end amounts carried forward for the next compliance year.

*Compliance Requirement (MWh)* – Identifies total Company retail sales in MWh for the compliance year as the basis for compliance requirements. Subsequent MWh targets are calculated based upon each line item's compliance category and metric.

*RES Resources* – Lists the resources available for compliance from current year and prior year carry-over, and then subtracts the resources used to meet each compliance category.

*End YYYY Carrying Balance* – Represents the remaining resources after accounting for compliance targets.

## **Table 2a**

Costs reported in this table represent the RES-attributable costs incurred for each technology during the Compliance year, broken out separately for generation and DE resources.

*Generation cost data, represented by solid boxes in the table, will be redacted for public documents as competitively confidential information, but will be provided to Staff and the Commission.*

*Technology* – Represents the approved renewable energy resources in the portfolio. Generation resources will be detailed as solar (i.e. solar electric), solar thermal, wind, geothermal, landfill gas, and other. For generation, solar is separated out as Solar (PPA) and Solar (Utility-owned). Each DE technology will be listed separately (for example, Solar (Distributed), Solar Thermal (Distributed), etc.).

DE technology costs will represent aggregate costs across all programs within the specified technology.

## **Table 2b**

This table provides DE Compliance year incentive cost data disaggregated by non-residential and residential categories, as well as up-front incentive (UFI) and production based incentive (PBI) cash incentive categories, using the same technology headings as listed in prior Compliance Report tables.

Cost per MW and Cost per MWh data will be calculated as an aggregate of incentives paid across all DE incentive offerings (e.g. 15 year PBI, 20 year PBI, etc. will be added together) within the specified technology.

### b. Implementation Plan Templates

The annual Implementation Plan's spreadsheet tables (See Attachment B) encompass proposed and expected new energy capacity and production, pro forma above market renewable resource costs by technology, and a pro forma budget proposal. Each utility will specify in its reporting tables in kilowatt-based or megawatt-based compliance reporting conventions based upon the Company's size and the amount of resources the utility has within its portfolio.

## **Table 1**

Per the RES rules, this table focuses exclusively on new resources proposed or expected to be added, by year, across the Implementation Plan period.

*Targeted Generation Resources* – Data will be reported by proposed facility under each technology header.

*Targeted Distributed Energy Resources* – Sub-headings will use the technology description as recommended in the Compliance Report Templates section for third

Party ownership resources. For utility-owned resources, data will be reported by facility or program, as appropriate.

*Ownership* – Represents the third Party or Utility ownership. Note that all resources for APS and TEP are currently developed and built via third party companies.

*Total MW* – Reported as MWac for generation resources and MWdc for DE resources. Note that total MW is reported as MWac. Utilities will state the assumption used for the dc-ac conversion factor applied to capacity reported as MWdc.

## **Table 2**

For standardization purposes, this RES cost table uses the same resource and ownership headings as used in Table 1. Costs include RES-attributable pro forma data only for new proposed and expected resources.

*Generation cost data, represented by the solid box in the table, will be redacted for public documents as competitively confidential information, but will be provided to Staff and the Commission.*

### **Implementation Plan Budget**

Given that each utility has its own unique set of programs and related administration and implementation needs that change annually, the RES format working group recommends that, for the standardized component of the Implementation Plan budget, each affected utility includes the five major line items outlined below as part of its overall budget layout. Additional line items with supporting program-level detail should be provided as appropriate depending on the proposed programs and support needed within each Implementation Plan. This will ensure consistency across core budget categories while allowing sufficient flexibility for each utility's program planning needs.

Line items that shall be included in the Implementation Plan budget table are:

1. *Total Generation Costs* – Includes third party generation contracts, utility-owned RES-attributable generation project costs, operations & maintenance, and any other utility-scale generation costs.
2. *Subtotal Distributed Energy Cash Incentive Payments* – Includes any DE-related cash incentive costs such as: new UFI incentive payments, new PBI incentive payments, legacy incentive commitments including expected PBI and UFI payments. It does not include the cost of non-incentive DE contracts or other DE programs.
3. *Total Distributed Energy Costs* – Cash incentive costs, new DE contract and program costs, legacy DE program costs, and any additional DE cost components needed for the proposed budget.
4. *Other Program Costs* – Interconnection and metering, information technology support, training and outreach, renewable administration and implementation costs, studies, and other related RES budget needs.
5. *Total RES Budget* – Covers the total RES program budget cost prior to any accounting adjustments such as prior year funding carryovers, ancillary revenues, and miscellaneous financial offsets.

## **II. Utility-Specific Reporting Content**

The following items represent potential utility-specific reporting outside of the RES rules, which the Companies' may disclose in their annual compliance filings. The content represented is not standardized like the shared reporting templates, but instead remains flexible to meet the Companies' reporting needs.

### **COMPLIANCE REPORT**

1. Community Solar Program
  - a) Sales (MWh)
  - b) Customer Participation
2. Schools Program Results
3. Distributed Energy Reservations

### **IMPLEMENTATION PLAN**

1. Other Programs to be filed in future implementation plans

**Attachment A**

**Compliance Report Templates**

**Table 1a - Renewable Resources**

| Resource                                       | Technology | Ownership | MWac <sup>1</sup> | MWdc <sup>1</sup> | Production (Actual) + (Annualized) <sup>2</sup> | Multiplier Credits | Production + (Annualized) <sup>2</sup> + Multiplier Credits = | Total MWh or Equivalent |
|--|------------|-----------|-------------------|-------------------|---|--------------------|---|-------------------------|
| <b>GENERATION:</b>                             |            |           |                   |                   |   |                    |   |                         |
| <i>Gross Total (if needed)</i>                 |            |           |                   |                   |   |                    |   |                         |
| <i>Adjustments (if needed)</i>                 |            |           |                   |                   |   |                    |   |                         |
| <b>Subtotal Generation (A)</b>                 |            |           |                   |                   |   |                    |   |                         |
| <b>DISTRIBUTED ENERGY (DE):</b>                |            |           |                   |                   |   |                    |   |                         |
| <i>Residential:</i>                            |            |           |                   |                   |   |                    |   |                         |
| <i>Gross Total (if needed)</i>                 |            |           |                   |                   |   |                    |   |                         |
| <i>Adjustments (if needed)</i>                 |            |           |                   |                   |   |                    |   |                         |
| <b>Subtotal Residential (B)</b>                |            |           |                   |                   |   |                    |   |                         |
| <i>Non-Residential:</i>                        |            |           |                   |                   |   |                    |   |                         |
| <i>Gross Total (if needed)</i>                 |            |           |                   |                   |   |                    |   |                         |
| <i>Adjustments (if needed)</i>                 |            |           |                   |                   |   |                    |   |                         |
| <b>Subtotal Non-Residential (C)</b>            |            |           |                   |                   |   |                    |   |                         |
| <b>Subtotal Distributed Energy (B + C) (D)</b> |            |           |                   |                   |   |                    |   |                         |
| <b>Total RES Resources (A + D) (E)</b>         |            |           |                   |                   |   |                    |   |                         |
| <b>Total MWac equivalent<sup>3</sup></b>       |            |           |                   |                   |   |                    |   |                         |

**Notes to Table 1:**

- <sup>1</sup> Generation capacity is generally reported in MWac and DE is generally reported in MWdc.
- <sup>2</sup> Assumes XXXX kWh per installed kW for non-metered or current year installed residential PV systems, and XXXX kWh per installed kW for similar non-residential systems.
- <sup>3</sup> Represents the total RES portfolio capacity in MWac. Assumes a XX% dc-ac conversion factor applied to MWdc capacity.

**Table 1b - Compliance Summary**

| Category  | Metric                    | % | Compliance Measure (MWh) | RES Resources (MWh or Equivalent) |
|---|---------------------------|---|--------------------------|-----------------------------------|
| Retail Sales                                    | Actual MWh Sales for YYYY |   |                          |                                   |
| Prior year carrying balance <sup>1</sup>        |                           |   |                          | (F)                               |
| YYYY Total RES Resources [From (E) in Table 1a] |                           |   |                          | (E)                               |
| YYYY Total RES Requirement                      | % of Retail Sales         |   |                          |                                   |
| DE Requirement                                  | % of RES Requirement      |   |                          |                                   |
| <i>DE Sub-Requirements:</i>                     |                           |   |                          |                                   |
| Residential DE                                  | % of DE Requirement       |   |                          | (G)                               |
| Non-Residential DE                              | % of DE Requirement       |   |                          | (H)                               |
| Non-DE Target                                   | % of RES Requirement      |   |                          | (I)                               |
| Resources Used for YYYY Compliance (G+H+I)      |                           |   |                          | (J)                               |
| End YYYY carrying balance (F+E-J)               |                           |   |                          | (K)                               |

Notes to Table 1b:

<sup>1</sup>The RES-eligible resource carrying balance is accounted for using FIFO methodology, wherein the entire carrying balance is applied to the RES requirement and the year-end carrying balance consists of current year remaining resources.

**Table 2a - RES Resource Costs**

YYYY RES-Attributable Energy Costs<sup>1</sup> COMPETITIVELY CONFIDENTIAL<sup>2</sup>

| Technology                    | MW | MWh | RES Cost (\$/MW) <sup>2</sup> | RES Cost (\$/MWh) <sup>2</sup> | Total RES Cost <sup>2</sup> |
|-------------------------------|----|-----|-------------------------------|--------------------------------|-----------------------------|
|                               |    |     |                               |                                |                             |
| <b>Total RES Energy Costs</b> |    |     |                               |                                |                             |

Notes to Table:

<sup>1</sup> Represents only compliance year costs incurred under new and legacy projects within the RES budget and is not comparable to a true levelized cost

<sup>2</sup> Redacted due to the competitively confidential nature of the information.

## Table 2b - RES Cash Incentive Costs

### YYYY Distributed Energy Cash Incentive Program Costs

|                                  |  | Up-Front Incentives |     | YYYY Total                  |                       |                      |          |                      |
|----------------------------------|--|---------------------|-----|-----------------------------|-----------------------|----------------------|----------|----------------------|
|                                  |  | MW                  | MWh | (\$/MW) <sup>1</sup>        | (\$/MWh) <sup>1</sup> | Incentives Paid (\$) |          |                      |
| <b>Residential:</b>              |  |                     |     |                             |                       |                      |          |                      |
| <i>Subtotal: Residential</i>     |  |                     |     |                             |                       |                      |          |                      |
|                                  |  | Up-Front Incentives |     | Production-Based Incentives |                       | YYYY Total           |          |                      |
|                                  |  | MW                  | MWh | (\$/MW) <sup>1</sup>        | (\$/MWh) <sup>1</sup> | (\$/MW)              | (\$/MWh) | Incentives Paid (\$) |
| <b>Non-Residential:</b>          |  |                     |     |                             |                       |                      |          |                      |
| <i>Subtotal: Non-Residential</i> |  |                     |     |                             |                       |                      |          |                      |
| <b>Total DE Incentive Costs</b>  |  |                     |     |                             |                       |                      |          |                      |

Notes to Table:

<sup>1</sup>Based on expected annual system production.

**Attachment B**

**Implementation Plan Templates**

**Table 1 - Targeted Resources**

| Line No. | Targeted Generation Resources:                | Ownership <sup>1</sup> | Targeted Completion | YYYY-YYYY Total MW | Targeted Energy Production (MWh or Equivalent) |      |      |      |      |       |
|----------|---|------------------------|---------------------|--------------------|--|------|------|------|------|-------|
|          |   |                        |                     |                    | 2014   | 2015 | 2016 | 2017 | 2018 | Total |
| 1        | <b>Solar:</b>                                 |                        |                     |                    |  |      |      |      |      |       |
| 2        |   |                        |                     |                    |  |      |      |      |      |       |
| 3        |   |                        |                     |                    |  |      |      |      |      |       |
| 4        |   |                        |                     |                    |  |      |      |      |      |       |
| 5        | <b>Wind:</b>                                  |                        |                     |                    |  |      |      |      |      |       |
| 6        |   |                        |                     |                    |  |      |      |      |      |       |
| 7        |   |                        |                     |                    |  |      |      |      |      |       |
| 8        | <b>Geothermal:</b>                            |                        |                     |                    |  |      |      |      |      |       |
| 9        |   |                        |                     |                    |  |      |      |      |      |       |
| 10       |   |                        |                     |                    |  |      |      |      |      |       |
| 11       | <b>Biomass/Biogas:</b>                        |                        |                     |                    |  |      |      |      |      |       |
| 12       |   |                        |                     |                    |  |      |      |      |      |       |
| 13       |   |                        |                     |                    |  |      |      |      |      |       |
| 14       |   |                        |                     |                    |  |      |      |      |      |       |
| 15       |   |                        |                     |                    |  |      |      |      |      |       |
| 16       | <b>Total Targeted Generation</b>              |                        |                     |                    |  |      |      |      |      |       |
| 17       |   |                        |                     |                    |  |      |      |      |      |       |
| 18       |   |                        |                     |                    |  |      |      |      |      |       |
| 19       | <b>Targeted Distributed Energy Resources:</b> |                        |                     |                    |  |      |      |      |      |       |
| 20       | <b>Residential:</b>                           |                        |                     |                    |  |      |      |      |      |       |
| 21       |   |                        |                     |                    |  |      |      |      |      |       |
| 22       |   |                        |                     |                    |  |      |      |      |      |       |
| 23       | <b>Subtotal Residential</b>                   |                        |                     |                    |  |      |      |      |      |       |
| 24       |   |                        |                     |                    |  |      |      |      |      |       |
| 25       | <b>Non-Residential:</b>                       |                        |                     |                    |  |      |      |      |      |       |
| 26       |   |                        |                     |                    |  |      |      |      |      |       |
| 27       |   |                        |                     |                    |  |      |      |      |      |       |
| 28       |   |                        |                     |                    |  |      |      |      |      |       |
| 29       | <b>Subtotal Non-Residential</b>               |                        |                     |                    |  |      |      |      |      |       |
| 30       |   |                        |                     |                    |  |      |      |      |      |       |
| 31       |   |                        |                     |                    |  |      |      |      |      |       |
| 32       | <b>Total Targeted DE</b>                      |                        |                     |                    |  |      |      |      |      |       |
| 33       |   |                        |                     |                    |  |      |      |      |      |       |
| 34       |   |                        |                     |                    |  |      |      |      |      |       |

**Notes:** <sup>1</sup>All utility-owned and Third Party generation projects are developed through a competitive RFP process, and all DE systems are built independently by Third Party developers and installers.

**Table 2 - Targeted RES Resource Costs (in \$/M) <sup>1</sup>**  
**COMPETITIVELY CONFIDENTIAL<sup>1</sup>**  
**Projected RES Cost per Year<sup>1</sup>**

| Line No. | Ownership  | 2014 | 2015 | 2016 | 2017 | 2018 | Total |
|----------|--|------|------|------|------|------|-------|
| 1        | <b>Targeted Generation Resources<sup>1</sup>:</b>          |      |      |      |      |      |       |
| 2        | <b>Solar:</b>  |      |      |      |      |      |       |
| 3        |  |      |      |      |      |      |       |
| 4        |  |      |      |      |      |      |       |
| 5        | <b>Wind:</b>   |      |      |      |      |      |       |
| 6        |  |      |      |      |      |      |       |
| 7        |  |      |      |      |      |      |       |
| 8        |  |      |      |      |      |      |       |
| 9        | <b>Geothermal:</b>   |      |      |      |      |      |       |
| 10       |  |      |      |      |      |      |       |
| 11       |  |      |      |      |      |      |       |
| 12       | <b>Biomass/Biogas:</b>                                     |      |      |      |      |      |       |
| 13       |  |      |      |      |      |      |       |
| 14       |  |      |      |      |      |      |       |
| 15       |  |      |      |      |      |      |       |
| 16       | <b>SubTotal Targeted Generation</b>                        |      |      |      |      |      |       |
| 17       |  |      |      |      |      |      |       |
| 18       | <b>Targeted and Expected Distributed Energy Resources:</b> |      |      |      |      |      |       |
| 19       |  |      |      |      |      |      |       |
| 20       | <b>Residential:</b>  |      |      |      |      |      |       |
| 21       |  |      |      |      |      |      |       |
| 22       |  |      |      |      |      |      |       |
| 23       |  |      |      |      |      |      |       |
| 24       |  |      |      |      |      |      |       |
| 25       | <b>Subtotal Residential</b>                                |      |      |      |      |      |       |
| 26       |  |      |      |      |      |      |       |
| 27       | <b>Non-Residential:</b>                                    |      |      |      |      |      |       |
| 28       |  |      |      |      |      |      |       |
| 29       |  |      |      |      |      |      |       |
| 30       |  |      |      |      |      |      |       |
| 31       |  |      |      |      |      |      |       |
| 32       |  |      |      |      |      |      |       |
| 33       |  |      |      |      |      |      |       |
| 34       | <b>Subtotal Non-Residential</b>                            |      |      |      |      |      |       |
| 35       |  |      |      |      |      |      |       |
| 36       | <b>SubTotal Targeted Distributed Energy</b>                |      |      |      |      |      |       |
| 37       |  |      |      |      |      |      |       |
| 38       | <b>Total Targeted Energy Costs</b>                         |      |      |      |      |      |       |
| 39       |  |      |      |      |      |      |       |

<sup>1</sup> Redacted due to the competitively confidential nature of the information.