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BEFORE THE ARIZONA CORPORATION COMMISSION

COMMISSIONERS

SUSAN BITTER SMITH, Chairman
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AZ CORP COMMISSION
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IN THE MATTER OF THE APPLICATION OF
UNS ELECTRIC, INC. FOR THE
ESTABLISHMENT OF JUST AND
REASONABLE RATES AND CHARGES
DESIGNED TO REALIZE A REASONABLE
RATE OF RETURN ON THE FAIR VALUE OF
THE PROPERTIES OF UNS ELECTRIC, INC.
DEVOTED TO ITS OPERATIONS
THROUGHOUT THE STATE OF ARIZONA
AND FOR RELATED APPROVALS.

DOCKET NO. E-04204A-15-0142

**NOTICE OF FILING RATE-
DESIGN TESTIMONY**

**ARIZONA UTILITY RATEPAYER
ALLIANCE**

1 The Arizona Utility Ratepayer Alliance ("AURA") hereby files rate-design testimony by
2 its witnesses, Patrick J. Quinn and Thomas Alston.

3 Respectfully submitted on December 9, 2015, by:

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Arizona Corporation Commission
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1 **Original** and 13 copies **filed**
2 on December 9, 2015, with:

3
4 Docket Control
5 Arizona Corporation Commission
6 1200 West Washington
7 Phoenix, Arizona 85007

8
9 **Copies emailed**
10 on December 9, 2015 to:

11
12 **Service List**

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DOCKET NO. E-04204A-15-0142

**RATE DESIGN TESTIMONY
OF
PATRICK J. QUINN
ON BEHALF OF
ARIZONA UTILITY RATEPAYER ALLIANCE
DECEMBER 9, 2015**

1 **I INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TELEPHONE**
3 **NUMBER.**

4 A. My name is Patrick J. Quinn. My business address is 5521 E. Cholla St., Scottsdale, AZ
5 85254, and my phone number is (602) 579-1934.

6 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS MATTER?**

7 A. I am testifying on behalf of the Arizona Utility Ratepayer Alliance (“AURA”).

8 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE.**

9 A. I have a BS in Mathematics and a MBA from the University of South Dakota.
10 Additionally, I have 30-plus years’ experience in the Telecommunications Industry and
11 the Consulting business dealing with utility regulation. Most recently, I served as
12 Director of the Residential Utility Consumer Office from January 2013 until February
13 2015.

14 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

15 A. Yes. Overall, I have testified over 50 times before state and federal regulatory
16 commissions on issues including finance, economics, pricing, policy, rate design, and
17 other related areas.

18 **Q. WHAT IS THE ARIZONA UTILITY RATEPAYER ALLIANCE?**

19 A. The Arizona Utility Ratepayer Alliance was founded in 2015 to advise and represent
20 utility ratepayers on vital issues affecting their pocketbooks. AURA is a nonpolitical,
21 non-partisan organization advocating on behalf of everyday Arizonans to ensure that
22 utilities act responsibly with affordable rates, subject to transparent regulation, while
23 providing sustainable utility services. Independent from the Governor’s Office,

1 Legislature, or any other government entity, AURA is unique in its commitment to all
2 Arizona ratepayers, advocating effective and efficient utility oversight. AURA does not
3 advocate any particular alternative energy production or efficiency measures; rather it
4 believes that all such prudent measures should be part of Arizona's energy portfolio, with
5 rates set accordingly but without undue ratepayer subsidies.

6 **II PURPOSE OF TESTIMONY**

7 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS MATTER?**

8 A. AURA has serious concerns about several aspects of the 2015 Unisource Electric, Inc.
9 ("UNSE") rate-case application, which are expressed in this testimony.

10 **III RATE-DESIGN TESTIMONY**

11 **Q. WHAT IS RATE DESIGN?**

12 A. Generally speaking, there exist two basic parts of a rate case, revenue-requirement
13 determination and rate design. Methodologies and polices for setting the revenue
14 requirement are well-established and are being addressed by other parties in the docket.

15 Accordingly, AURA'S concerns lie primarily with aspects of the proposed rate design,
16 which has historically been based on Commission polices. Rate design has traditionally
17 been used by rate regulators to implement their preferences for cross-class subsidization,
18 which is prevalent throughout the various customer classes. Commission general policy
19 is typically to keep rates affordable for residential customers. Rate design usually starts
20 with the determination of what price the residential customer should pay, how much
21 revenue that will generate, and the remaining revenue requirement is then generated by
22 the non-residential customers. There is some variation between residential rates. Again,
23 rate design has historically been based on Commission policies to minimize residential
24 rate increases through subsidies from other rate classes.

1 **Q. WHAT ASPECTS OF THE UNS ELECTRIC APPLICATION PRIMARILY**
2 **CONCERN AURA?**

3 A. AURA raises the following issues:

- 4 • Before the issue of cross subsidies and fixed cost coverage can be appropriately
5 addressed by the Commission, a comprehensive cost study of revenues generated by
6 types of customers is necessary. This will allow the Commission to make informed
7 decisions on new polices about proposed rate design changes for any customer class.
- 8 • UNS proposes significant and burdensome increases in base charges for residential
9 and small business customers and the introduction of demand charges for Distributed
10 Generation (“DG”) customers.
- 11 • A valuation of the benefits of DG should be included in any assessment of the costs
12 of DG.
- 13 • The changes in rate design for the DG customer class are overly punitive and anti-
14 competition. Modifications include an increase in the basic charge, a new demand
15 charge, a reduction in net-metering payments and a change in credit distribution from
16 annually to monthly.
- 17 • Increased fixed costs for residential customers punish low-income customers.
- 18 • Demand charges are likely to be extremely confusing for many customers, especially
19 elderly residential customers.
- 20 • The proposed Economic Development Rate (“EDR”) is directly counter to UNS’
21 stated goal of setting rates based on the cost of providing service to each customer
22 group. A decrease in revenues from one class of customers has the same effect on

1 other customers as a cost shift. Other customers have to cover the loss and it is
2 unclear who covers these decreased revenues.

- 3 • Robust funding for energy-efficiency programs should be achieved through a more
4 stable cost recovery in base rates.

5 **Q. WHAT ISSUES OF CONCERN WILL YOU DISCUSS?**

6 A. I will discuss the proposed EDR and Energy Efficiency funding. AURA witness Tom
7 Alston will address the remaining issues.

8 **Q. WHAT CONCERNS DOES AURA HAVE ABOUT UNS' PROPOSED**
9 **ECONOMIC DEVELOPMENT RATE?**

10 A. At the same time that UNSE proposes significant rate increases for DG customers,
11 UNSE's proposes an EDR with lower prices for large businesses users meeting certain
12 requirements. To be fair, UNSE should not base the EDR cost shift on alleged economic
13 development benefits, while taking the opposite view concerning DG despite the proven
14 and well-studied economic development benefits associated with adoption of DG.

15 The lower revenue received from these EDR customers has the same effect as the cost
16 shifts caused by certain other customers. Less of the total revenue requirement will be
17 covered by EDR customers than if they paid the normal rate. This means non-EDR
18 customers will have to make up additional lost revenue. It is unclear which customers
19 will be subject to increased prices to produce this missing revenue. Will those customers
20 see price decreases as the EDR rates phase out?

21 While on the surface EDR seems like a good idea there remain too many unanswered
22 questions, particularly when it proposes to increase costs to DG customers.

1 There are many lessons to be learned from the Arizona Public Service Trial AG1 rate
2 about implementation, cost recovery and termination. Because of the cap on megawatts
3 that qualify for both AG1 and EDR programs, some qualified customers will be left out
4 once the cap is reached. APS had a lottery and only 8 of 13 qualified companies received
5 the AG1 rate. How will UNS handle this issue. APS absorbed lost revenues from their
6 original trial but wants full recovery if the trial is extended beyond original termination
7 date. It was extended and so, like EDR, which customers are going to cover the lost
8 revenues? Unlike APS, the EDR rates increase to full rates over time. Will the
9 customers covering the lost revenues see rate reductions as the EDR rates increase over
10 time? These are some of the major issues that arose in the APS AG1 trial and should be
11 addressed.

12 These questions need to be resolved before the EDR is approved.

13 **Q. WHAT IS AURA'S POSITION ON ENERGY EFFICIENCY?**

14 A. AURA agrees with most of what the Southwest Energy Efficiency Project ("SWEEP")
15 stated in their filing to this docket. We support Energy Efficiency ("EE") as a low-cost
16 energy resource and recognize the need for both an increase in funding and a more
17 streamlined method of approving the Integrated Resource Plan. To ensure continued
18 funding of EE programs a more stable cost-recovery mechanism than is currently utilized
19 must be approved. AURA believes that SWEEP's proposal to fund EE in base rates is a
20 viable alternative.

21 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

22 A. Yes.

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DOCKET NO. E-04204A-15-0142

**RATE DESIGN TESTIMONY
OF
THOMAS ALSTON
ON BEHALF OF
ARIZONA UTILITY RATEPAYER ALLIANCE
DECEMBER 9, 2015**

1 **I INTRODUCTION**

2 **Q. PLEASE STATE YOUR NAME, BUSINESS ADDRESS, AND TELEPHONE**
3 **NUMBER.**

4 A. My name is Thomas Alston. My business address is 5521 E Cholla St. Scottsdale, AZ
5 85254, and my phone number is 602-524-9978.

6 **Q. ON WHOSE BEHALF ARE YOU TESTIFYING IN THIS MATTER?**

7 A. I am testifying on behalf of the Arizona Utility Ratepayer Alliance (“AURA”).

8 **Q. PLEASE SUMMARIZE YOUR EDUCATION AND WORK EXPERIENCE.**

9 A. I hold a BA from the University of Arizona and an MBA from the Thunderbird School of
10 Global Management. Most recently, I was the energy policy advisor for the Mayor of
11 Tucson. Before that, I was a congressional legislative assistant focusing on energy issues
12 for Southern Arizona’s Congresswoman Gabriele Giffords and Congressman Ron Barber.

13 I have also served as the vice-president of the Arizona Solar Industries Association
14 (AriSEIA) and the Arizona state lead for the Solar Alliance.

15 **Q. HAVE YOU PREVIOUSLY TESTIFIED BEFORE THIS COMMISSION?**

16 A. No. However, I have participated in many open dockets before the Arizona Corporation
17 Commission.

18 **II PURPOSE OF TESTIMONY**

19 **Q. WHAT IS THE PURPOSE OF YOUR TESTIMONY IN THIS MATTER?**

20 A. As discussed by Mr. Quinn in his testimony, AURA has serious concerns about several
21 aspects of the 2015 UNS Electric Inc. (“UNSE”) rate-case Application.

1 **III RATE DESIGN TESTIMONY**

2 **Q. WHAT ASPECTS OF THE UNS ELECTRIC APPLICATION WILL YOU**
3 **DISCUSS?**

4 A. I will address the issues, other than those associated with EDR and EE, identified in Mr.
5 Quinn's testimony.

6 **Q. WHY IS FURTHER STUDY OF CROSS-SUBSIDIZATION WARRANTED?**

7 A. In the UNS filing, DG customers are singled out as a significant source of under-recovery
8 of fixed costs despite the statistic in the UNS filing indicating that 70% of their
9 residential customers do not cover associated fixed charges. In 2015, UNS residential
10 customers installed 229 DG systems for a total of 404 systems since 2012.¹ This
11 represents under a half of one percent of the Company's 81,000 residential customers.
12 Yet, two of the proposed rate design changes apply solely to DG customers. UNS
13 disproportionately focuses on a very small customer class, while ignoring cross-
14 subsidization of the remaining residential customers. UNS does not explain why it would
15 discriminate against DG customers.

16 A comprehensive comparison of levels of cross-subsidization between different types of
17 customers is necessary. For the Commission to make an informed decision, the financial
18 burden of alleged subsidizations of DG customers must be compared against the burden
19 imposed on other classes by the 70% of the residential customers that UNS identifies as
20 subsidized. An investigation of the cross-subsidization within the residential class is also
21 warranted

¹ Page "2", Utilities Division Filing November 24, 2015 (E-05204A-15-0233) UNS ELECTRIC, INC. – APPLICATION FOR 2016 REST Plan.

1 Such subsidized residential groups might include rural customers with subsidized line
2 extensions, owners of vacant properties, summer home owners, and homes owned by
3 seasonal "snowbirds." With the emphasis on volumetric rates, customers such as these
4 are not covering their own share of fixed costs, which means they are being subsidized by
5 other customers. UNS must provide and maintain generation, transmission lines, and
6 distribution lines year-round, but actual energy usage is low. In many such cases, it is
7 likely that these types of customers use fewer kWh per billing period than those utilizing
8 DG, without any off-setting economic and societal benefits.

9 Because the UNSE proposal for curbing adoption of Distributed Generation relies on the
10 assertion that, "other customer classes are supporting DG customers," any analysis of
11 cost shifts should include all subsidized customer groups, and be conducted in a non-
12 discriminatory, holistic, manner. For each group, the Commission should weigh the costs
13 and benefits of the associated subsidy.

14 **Q. WHY SHOULD THE COMMISSION BE CONCERNED WITH CUSTOMER**
15 **SUBSIDIES?**

16 **A. In its filing, UNSE states:**

17 First, the Company is experiencing declining usage per customer. This trend,
18 which is the result of many factors, results in significant under-recovery of fixed
19 costs due the current rate structure that is heavily dependent on volumetric rates to
20 recover fixed costs. Second, a significant proportion of UNS Electric's residential
21 and small general service customers have little to no volumetric usage. These
22 customers include everything from seasonal homeowners, vacant structures and
23 net metered rooftop PV systems, all of which seem more prevalent given the
24 characteristics of the UNS Electric service area.²

² Page 7 Line "14" E-04204A-15-0142 UNS ELECTRIC, INC. APPLICATION TESTIMONY AND EXHIBITS
VOLUME 1 of4

1 Cross-subsidization of customer classes is systemic throughout UNSE's rate design.
2 Further, UNSE believes that "all customers should pay their fair share of the Company's
3 service costs."³ Therefore, any claimed DG-related subsidies should not be evaluated in
4 a vacuum, but instead as part of an evaluation of all cross-subsidized customers. Any
5 other approach would be discriminatory.

6 **Q. WHY SHOULD THE BENEFITS OF DG TO THE GRID BE TAKEN INTO**
7 **ACCOUNT?**

8 A. In the UNSE Filing there is little discussion of the benefits of DG which have been well
9 proven and extensively studied.⁴ At the very least, the economic impact of DG should be
10 considered in light of proactive UNS decisions to "play a bigger role in attracting and
11 promoting the growth of businesses in its service territories."⁵ Other groups, such as The
12 Alliance for Solar Choice, have made well-reasoned cases for the value of DG. AURA
13 supports a thorough investigation of DG costs and benefits, as part of a larger
14 investigation into the costs and benefits of all customer subsidies.

15 **Q. WHAT WILL HAPPEN TO DISTRIBUTED GENERATION ADOPTION RATES**
16 **IF UNSE's PROPOSED RATE-DESIGN CHANGES ARE IMPLEMENTED?**

17 A. As stated above, UNSE chooses to ignore the vast majority of its residential customer
18 subsidies, while exclusively focusing on alleged DG subsidies. UNSE's proposed rate-
19 design changes for the DG customer class are so severe and focused that they have the
20 potential to eliminate the economic benefits of installing residential solar systems. The

³ Page 13 Line "10" "E-04204A-15-0142 UNS ELECTRIC, INC. APPLICATION TESTIMONY AND EXHIBITS VOLUME 1 of 4.

⁴ Synapse Energy Economics, Inc, "Net Metering in Mississippi: Costs, Benefits and Policy Considerations." Prepared for the Public Service Commission of Mississippi, September 19,2014.

⁵ Page "30" Line "1" "E-04204A-15-0142 UNS ELECTRIC, INC. APPLICATION TESTIMONY AND EXHIBITS VOLUME 1 of 4.

1 discriminatory combination of new demand charges, higher fixed rates, and the reduction
2 of distributed generation benefits (low net metering rate, monthly credit vs. annual)
3 suggest anti-competitive practices.

4 **Q. TURNING TO ANOTHER SUBJECT, HOW WOULD HIGHER FIXED**
5 **CHARGES AFFECT LOW-INCOME CUSTOMERS?**

6 A. Higher fixed charges would punish low-income customers who, on an average, use less
7 electricity on a monthly basis. Accordingly, any increases in fixed costs would have a
8 disproportionate effect on low-income customers. Bills would be unpredictable and
9 difficult to understand.

10 **Q. ARE THERE ISSUES WITH SUBJECTING RESIDENTIAL CUSTOMERS TO**
11 **DEMAND CHARGES?**

12 A. Yes, there are several issues. It is unclear why demand charges are only being applied to
13 DG customers who represent such a small percentage of the total customers.
14 Additionally, more information is needed about how UNSE plans to help residential
15 customers, subject to proposed demand charges, understand and predict their bills. The
16 following questions need to be addressed.

- 17
- During what hours, and for how long of a period will peak billing occur?
 - Can current UNSE meters provide customers with the information to determine when
19 the peak billing period occurs for each individual customer?

20 Without this information, managing costs associated with peak billing could be very
21 difficult.

1 As the American Council for an Energy Efficient Economy points out, adoption of
2 residential demand charges will require utilities to provide customers with “extensive
3 education” and even then, “consumers generally will not understand” how their rates will
4 be calculated.

5 **Q. WHAT IS THE PREFERRED ALTERNATIVE TO INCREASING DEMAND**
6 **CHARGES?**

7 A. Time-of-use pricing structures are far more appropriate mechanisms for residential
8 customers. They are easier to understand and do not negate the benefits of energy-
9 efficiency improvements.

10 **Q. COULD YOU PROVIDE ANY EXAMPLES OF HOW DEMAND CHARGES**
11 **COULD MAKE RESIDENTIAL BILLS UNPREDICTABLE AND DIFFICULT**
12 **TO UNDERSTAND?**

13 A. Yes. Demand charges have the potential to make residential bills much less predictable.
14 One can imagine a small business owner outside of Kingman working out of his home. If
15 this business owner has a small solar system and participates in distributed generation,
16 simply doing 15 minutes of welding for a client could skyrocket his demand peak and,
17 coupled with a new 30 dollar a month fixed fee, could cause his bill to soar.

18 Another scenario is a vacation home owner who has a solar system installed. A large
19 portion of the bill could be based on the two days a month the owner uses the home
20 regardless of how much energy was consumed over the course of a billing cycle.

1 **Q. WOULD TIME-OF-USE RATES BE EASIER TO UNDERSTAND?**

2 A. Yes. These rates send proper price signals to customers, providing incentives to reduce
3 peak consumption. Utilities also benefit by reduced usage during high demand times
4 when the utility must bring less efficient/more expensive generation on line.

5 In our example of the Kingman resident with a welding business in his home, the
6 customer would know not to use his welding equipment during times when peak time-of-
7 day rates were effective. The vacation homeowner could see the benefit of installing
8 increased storage to offset usage during on-peak times when the house is occupied.

9 **Q. DOES THIS CONCLUDE YOUR DIRECT TESTIMONY?**

10 A. Yes.