1. As for the issue of property rights, is it really an issue of property rights, or is it more an issue of reliability in terms of potentially taking a market away; should the property rights ultimately carry weight in the final analysis, or is it more an issue of regulatory certainty? (2:23:00 - Chairman Bob Stump)

*RUCO*

- Without having done exhaustive legal analysis, as to whether a change to the way RECs are distributed would result in a deprivation of property rights, under the law there is an argument that can be made that this would result in a deprivation of property rights.
- Main thrust of RUCO's argument is not about the property right, but about cutting off Arizona to the voluntary market and opportunities that may come down the road, even if they do not exist today; the main concern is doing this in a way that does not burden ratepayers.

*The Solar Energy Industries Association (SEIA)*

There are two answers: (1) Yes, it is a property rights issue; and, (2) It does not really even matter if it is a property rights issue.

- From a policy standpoint, a REC is a thing of value; the government does not just take things of value just because they are not a property right. There are markets for RECs so they clearly have value.
- Any regulation, which takes away the ability of an individual to enter into a transaction and create value out of something, should be carefully considered.
- The sale of RECs on the voluntary market benefits Arizona because DG customer (or solar developer) may hold on to it and sell it out of state to help finance solar investments in Arizona.

2. Is a REC merely an accounting mechanism as TEP and others would argue? (2:25:34 - Chairman Bob Stump)

*The Solar Energy Industries Association (SEIA)*

- It can be an accounting mechanism as used the way the utilities use them; but there are markets for RECs beyond how Arizona utilities use them in meeting their compliance standards.

3. What government created the value of the REC? (2:26:08 - Commissioner Gary Pierce)

*The Solar Energy Industries Association (SEIA)*

- Different REC markets may recognize different governmental bodies as having created the value of those RECs.
- A REC exists on a 1:1 basis with kWh of renewable energy resource - Arizona's standard established in REST is the same standard recognized in REC markets across the United States.
• Had the ACC not implemented a REC market through REST, it would not mean the RECs have no value in other states.

**RU CO**
• It depends, it can be a state (yours or another state); the company (Wal-Mart or Department of Defense values their RECs) not to necessarily sell to a market, but to have as part of their corporate strategy. People derive value in different ways, not just selling in voluntary markets.

4. So the REST plan didn't establish value? (2:29:02 - Commissioner Gary Pierce)

**RU CO**
• The REST plans established value for the compliance market but not the voluntary market.

**APS**
• The only circumstance associated with this proceeding in which a REC might be "taken" or deprived of value, is if CRS, a private entity, subsequently took action and said they would not certify the RECs within their own program.
• Only the government can take and have it be a compensable taking. Ultimately then, it is irrelevant whether RECs are property because there is no compensable taking if the taking is at the hands of a private entity.

5. Typically, are RECs sold from state to state, or aren't they actually valued as a REC (especially DG) because it doesn't go very far, its not an accounting mechanism, but truly really where the kwh (or power) goes and where kwh are created somewhere else; isn't it difficult to sell RECs outside of the community where the energy is generated? (2:27:17)

*The Solar Energy Industries Association*
• Around the country there are really robust REC markets; in AZ we have not had a situation yet where the ready purchaser (utility) has not purchased RECs. So now we are in a situation where we can see whether Arizonans can accumulate RECs and take them to the market; we have an opportunity to see how they'll be received in the market.

**RU CO**
• There are bundled and unbundled RECs. The unbundled don't have to be in the physical proximity of the system production.

**APS**
• A key distinction we haven't discussed is the difference between distributed generation RECs and utility scale REC's. Utility-scale RECs are absolutely sold out of state. No one has been able to point to an example of DG RECs being sold in the voluntary market; The issue of decoupling or unbundling RECs occurs, but that is in the context of utility-scale RECs only.

6. To date there have not been any DG RECs sold outside of Arizona, do you agree; and, can you help by defining which markets may be doable; are there states that would not be
markets for Arizona RECs; have other states put in any preclusions to Arizona RECs being sold? (2:31:28 - Commissioner Susan Bitter Smith)

The Solar Energy Industries Association
• DG RECs have been sold to someone other than the utilities in Arizona; there was public comment on that, which can be given due weight, but as far as the ability to use RECs in other markets, there are certain markets where they can be used, certain markets where it is untested.
• We are at a point where we can preserve for future solar homeowners the ability to TRY to sell the RECs to another market.
• If it is decided that ACC created RECs so we can take them away; you are missing out on an opportunity to let individuals try to make money by selling these intangible items that have value to different groups (like Wal-Mart, the department of defense, etc.).

APS
• I don't recall that, I think it might have been an antidotal statement, the person was not subject to cross-examination or under oath; I had a lot of unresolved questions about that. Not a single person has been able to a single transaction where a DG REC has been sold out of state; it seems unlikely that the industry experts would testify otherwise.

RUCO
• I did not do exhaustive research on it, because I didn't think it mattered that much. Just because something is not happening robustly now doesn't mean we can stamp everyone's RECs and call them our own. Anything can happen down the road. (Who would have ever thought there'd be a market for 140 characters).
• If we didn't have the REST at all, we'd still have RECs, they just wouldn't be compliance RECs; it's a nationally product that the FTC has issued guidelines on, as to how to account for RECs and how to state when you get them.

7. If by stating that Arizona has X number of RECs, what claim is that taking away from anyone? We're not trying to say we own them, just trying to say this many exist? (2:36:42 - Commissioner Brenda Burns)

The Solar Energy Industries Association
• First of all, in this situation there is a market for RECs and there are regulations in place at federal level and guidelines from companies such as CRS, as to how to account for the RECs; if someone says I have them, a third party can't take them and sell them to somebody else.
  • In the REC scenario, you say they are "here" in APS's service territory, CRS testified that they could not be sold elsewhere. Once a REC is counted once, it cannot be counted again.
• A workable solution that preserves the ability for the owner of the REC to do what they want, without having someone else claiming it. The solution does not count it; therefore, the owner retains the ability to decide what they want to do with it: Do they sell it, keep it, retired it to say they are green
8. So it is just a lot of semantics? Solar is already here no matter who else is counting. (2:40:44 - Commissioner Brenda Burns)

**RUCA**

- A company (T-REC) gave public comment; Instead of the utility incentive, they bought their customer's RECs for an equivalent amount, they would actually pay their own customers in order to bundle it and sell it to voluntary markets across the US.
- If there were a buyer in Alaska who wants solar; APS could say well we have X amount of solar PV systems hosted on its grid. It is about who claims those environmental attributes. If Alaska bought the environmental attributes of those systems, APS could not also claim to have those environmental attributes.

**Wal-Mart**

- If you are a horse owner, like Wal-Mart that has its own DG system and it wants to tell the world it uses solar, or is the owner of an Arabian horse; the government has told the various Arabian horse clubs in Arizona, you have to have a certain number of Arabian horses in your club.
- It is important to owners of DG systems to be able to report to the general public that they have these systems.

9. How many kWh or RECs are there in the US? When you see a list of all of the solar in the United States, that list includes all of the states without concern for who owns the RECs. (2:42:19 - Commissioner Brenda Burns)

**RUCA**

- APS and other entities have purchased unbundled RECs from out of state to fulfill REST requirements in Arizona.

10. Electric cars provide a benefit to the environment but what if we told Motor Vehicle or any other that you couldn’t count that car? The commission is concerned with what we can actually count; if homeowners do it themselves - that is energy efficiency in Arizona whether or not they get an incentive to do it. I understand that someone may own it or do something with it. Customers need to know how much we have and be able to determine if we are trying to buy too much. Customers keep footing the bill on issues and we are not able to realistically tell them whether they are getting a good bang for the buck sitting on the sideline, not being a solar customer, but paying into the system. How far are we moving that ball forward and why wouldn't we count every inch of that ball moving forward. If there is some way to make everybody happy in that, I think that is part of what is of concern, (2:46:40 - Commissioner Gary Pierce)

**RUCA**

- We are all for reporting just the way we've always; but judging whether we are at compliance, all we have to do is look at capacity. Reporting gives a mwh number, but when we judge what to do as an action, if we use capacity and we are careful in how we implement this, we can get the
best of both worlds. We can get accurate reporting and maintain the integrity of RECs so that we can attract investment from other states. Department of Defense would invest millions of dollars and they want to retain their RECs. You can report capacity and report the statistic MWh.

11. Suppose in that reporting capacity, and we commissioners figured it out and went out and said, "Ok, we've hit our 15% compliance, because we have all this out there;" does that create a double counting problem? (2:50:20 - Commissioner Brenda Burns)

_RUCO_
- In the framework of what was put forward, you would have waivers there, so that if the market was self-sustaining and the capacity numbers hit the threshold to hold that waiver, then you could say you met the standard, the standard would be lower than the 15%.

12) Would we now have to be happy to say we've reduced our standard, and that we've hit that reduction, even though we've always been saying we want 15%? (2:51:17 - Commissioner Brenda Burns)

_RUCO_
- It could be phrased differently in official documents (ex. distributed generation equipment has equaled 4.5% of our retail load).
- Depending on what's envisioned in the recommended order, there are two options: (1) A permanent decrease in the DG portion of the REST which then decreases the entire REST; or (2) Is it just a waiver, the DG carve out, which would retain the full 15% that you have to meet.
- When you talk about it, you can say many different things but on official documents you have to be careful how you claim things. If it is not an extra cost to ratepayers then we are onboard, because then really it is just words.

_STAFF - Steve Olea, Utility Div. Director_
- The piece about using capacity; that is what is in the rules today. How that is done is the rules say you are going to estimate what the kilowatt hours are by saying you install an average 7 kw system and you say it's going to produce 1,000 kwh, which equals 1,000 RECs. But what we are trying to get to is "what is really out there?" you don't have a clue unless you measure it.
- Decision 72737: Commission changed the way that APS is going to report compliance. That decision requires APS to report compliance on ACTUAL production. Limited it to the systems that had upfront incentives. Where there is not upfront incentives what do you do with that? -
- Using capacities is not the way you want to go; the only way to know what is out there is to measure it
- Capacity is not the way to go
- Original intent of the REST rules - how much energy can you produce with renewables. The rules created a REC to measure it. Now there is an argument as to whether it has value.
- Staff believes that Staff's alternative you are not taking away the value of the REC, because the only RECs you count are the
- The only REC you are going to count are the RECs APS paid for when it gave an incentive, the other RECs aren't going to be used for compliance.
FTC said if we reduced the compliance and only count the RECs for compliance their expert said that none of the other RECs are affected.

**RU CO**
• We say absolutely, look at kwh as well, use them for reporting purposes. But when we make the decision and if we frame it as capacity then we are 100% safe and don't have to deal with the REC integrity issue. If capacity was adopted, it would not impacts these historic RECs that have been built up.

**13. How should the waivers be implemented? (2:57:05 - Chairman Bob Stump)**

**STAFF - Steve Olea, Utility Div. Director**
• The rule as written is fine, but if the other parties feel there needs to be more clarity applied to the rule, they should file something to the docket as to what they think that be, at the next meeting we can adopt what we want.

**RU CO**
• We are generally okay with it, and we just want clarity as to whether it lowers the entire renewable energy standard. Also, we thought providing guidance upfront would help parties down the road. It might be smart to throw out some broad guidelines as to when you can file, what type of dataset you use and what type of language you use. Hope that you have a full year of data and to try to use capacity and measure that up against compliance and market activity.  
• We are considering a waiver of the DG carve out; it is significant thought we want to make sure the market at the time is right. The way the Rue is written, its broad, it wouldn't hurt to set some broad guidelines up before we give the waiver, a little more direction would be helpful.

*The Solar Energy Industries Association*
• You are going to be able to report the amount of solar that exists, but we have to be careful about the way we do that; how the utilities claim them and giving them credit for this waiver.

**14. Any other closing thoughts? (3:00:58 - Chairman Bob Stump)**

**TEP and UNS Electric**
• The rule as written is acceptable and does not need to be modified given existing requirement in the rule for reporting and activity that must be taken if you are not going to hit your target.

**Next Meeting:** The parties that want the guidelines are going to submit something to the docket to be discussed at the next meeting.