



Salt River Project (SRP) Integrated System Plan Advisory Group Meeting #4- Summary

Prepared by Kearns & West

Advisory Group – Meeting #4 Overview

Meeting Objectives

- Gather feedback on the future scenarios and sensitivities to evaluate in the Integrated System Plan
- Gather input on strategic approaches to test in the Integrated System Plan
- Inform on the customer research initiative within the Integrated System Plan and early results

Topic: Scenario Planning Framework – Part 2 & Strategic Approach Options – Part 1

Date: February 15, 2022

Time: 9:00 a.m.-12:00 p.m. MST

Location: Virtual

Please see the appendix for the Advisory Group member roster and attendance information. The [meeting agenda](#) and [presentation](#) are available at the [Integrated System Plan portal](#).

Welcome and Agenda Overview

Kelly Barr, Associate General Manager & Chief Strategy, Corporate Services & Sustainability Executive at SRP, thanked the Advisory Group members for their time and introduced the SRP Board and Council observers.

Joan Isaacson, facilitator from Kearns & West, welcomed the Advisory Group members and reviewed the meeting objectives ([slide 7](#)), [meeting agenda](#) and the subgroup criteria included in the updated Advisory Group charter ([slide 10](#)). She then reported out from the Advisory Group Modeling Subgroup meeting on February 11, 2022 ([slides 11-13](#)) and invited Advisory Group members who had attended to add to her report. A member commented that the recap captured her thoughts.

Recap of Scenario Proposal and Overview of Proposed Sensitivities

Nick Schlag, consultant from E3, the Integrated System Plan's technical consulting group, began by recapping definitions for terms and the proposed scenarios presented at the last Advisory Group meeting on January 19, 2022 ([slides 15-17](#)). He described how E3 proposes to model sensitivities under the Current Trends scenario ([slide 18](#)) and presented the proposed sensitivities ([slide 19](#)). Schlag then paused for questions.

Question: Without a national policy on mass-based emissions reductions, what might internal SRP climate policies look like under the Strong Climate Policy scenario?

Response [Schlag]: The Strong Climate Policy scenario has a mass-based target for emissions. Other scenarios do not have specific targets but all scenarios would meet SRP's 2035 Sustainability Goals.

Question: Is the Strong Climate Policy scenario the only scenario that considers a mass-based emissions reduction target?

Response [Schlag]: Yes.

Roundtable Discussion on the Scenario and Sensitivities Proposal

Isaacson invited feedback on the proposed scenarios and sensitivities by posing three questions to the Advisory Group members ([slide 21](#)). Advisory Group members provided written responses to all three questions using a virtual whiteboard ([slides 22-24](#)) as well as verbal responses. Verbal responses are recapped below.

Question 1: What do you like about the proposed Integrated System Plan scenarios?

Comment: The way the switches are set up clearly shows the differences in the scenarios.

Comment: Looking at the slide with ten categories for levers ([slide 17](#)), it's not clear if electrification is just for electric vehicles (EVs) or also for buildings. If it's just for EVs, it would be helpful to have the ability to change the switches on these different levers. Exploring low, medium or high for each lever would be worthwhile.

Response [Schlag]: On the levers, the low, medium and high indicate directionality. Switches might represent different things in different scenarios. High electrification in the Strong Climate Policy scenario reflects policy changes whereas in the Desert Boom scenario the increase in electrification is due to economic growth.

Comment: More information about low, medium and high definitions would be helpful.

Response [Lakshmi Alagappan, consultant from E3]: Information about proposed scenario assumptions is included in the appendix of the pre-read material. The next Advisory Subgroup meeting will include a more robust discussion of the inputs.

Comment: Significant funding from the infrastructure bill will go toward changing the energy system. Change may occur very quickly to reduce energy consumption, promote electrification, etc. Maintaining flexibility in upcoming years will be important.

Question 2: Do the proposed scenarios and sensitivities adequately capture the range of possibilities for the future through 2035 that should be analyzed in the Integrated System Plan? If not, what is missing?

Comment: I'm concerned only one scenario uses a mass-based carbon target. On customer programs and sensitivities, the model should assume that SRP will have high adoption of energy efficiency and commit to implementing distributed generation, which is the best thing for climate change.

Response [Schlag]: These topics relate to the conversation on strategic approaches and SRP's future options and will be discussed later in the meeting.

Comment: Rising temperatures and heat island effects impact communities in varying degrees. Some communities are suffering from disproportionate impacts from generations of decisions.

Comment: More scenarios need to account for rising temperatures. Using an average over the long term doesn't show the huge temperature increases experienced in recent years. Temperatures are expected to continue to increase and shouldn't only be explored in the Desert Boom or Desert Contraction scenarios.

Comment: More information about the different cost levers (e.g., operating, customer, gas volatility) would be helpful. It's unclear what the different pricing assumptions are and how they will play out. The Arizona Corporation Commission's direction to Arizona Public Service and Tucson Electric Power included removing hard-coded inputs. SRP should consider removing must-run commitments for coal resources.

Question 3: Which sensitivities do you see as higher priority? Which are lower priority?

Comment: In reference to the cost per kilowatt hour, consumers still have to pay for electricity, so if we are raising rates to the level of California it's not going to go over well. It's important to understand the cost impacts across scenarios.

Response [Alagappan]: This will be explored further in future Advisory Group meetings.

Comment [chat]: Pricing is important to model. Note this discussion of distributed generation for example: <https://energyathaas.wordpress.com/2022/02/14/everyone-should-pay-a-solar-tax/>

Recap of Advisory Group Input to Scenarios and Sensitivities

After a break, Schlag provided a recap of the previous discussion ([slide 27](#)), explaining that the project team would use feedback to adjust the proposed scenarios and explain any changes they were unable to make. He clarified that all scenarios include some degree of temperature rise (as described in the scenario assumptions in the pre-read material) and invited Advisory Group members to comment on whether the project team had accurately captured their input.

Comment: It's helpful that the scenario assumptions note the RCP 4.5 [Representative Concentration Pathway greenhouse gas concentration trajectory model]. Having insight into the values and sensitivity ranges is important.

Response [Alagappan]: We haven't given the full values and sensitivity ranges, but the appendix of the pre-read material provides some details.

Comment: People on my team indicate that RCP 8.5 is more realistic.

Comment: Not all communities are starting from the same place as far as the heat island effect.

Question: Does water factor into any of the scenarios?

Response [Schlag]: Yes. The Current Trends scenario represents current hydropower and cooling water availability. The Desert Contraction scenario considers a more severe climate situation and diminished water availability, which would constrain hydropower.

Question: How does SRP see the potential for overlap between the 2035 Sustainability Goals and the Integrated System Plan?

Response [Alagappan]: The Integrated System Plan includes the goals from the 2035 Sustainability Goals process to determine how the system can meet those goals 10 years out.

Comment: Water does not show up here as much as in the 2035 Sustainability Goals process. If it's included in the 2035 Sustainability Goals, it should be included in the Integrated System Plan.

Response [Barr]: We will go through that mapping exercise.

Question: How do these models come together? Is SRP using production cost modeling or capacity expansion modeling or both for this exercise?

Response [Michael Reynolds, SRP Manager of Resource Analysis & Planning]: Using Aurora, capacity expansion will be modeled in the region and we will have the model suggest resources to include. We then will feed in the cost sensitivities.

Comment: To determine the mix of resources needed to meet needs at the least cost, it will be important how Aurora gets paired with other third-party models.

Response [Reynolds]: With Aurora we will do system-level modeling to include the transmission costs, which will be captured in the total cost of the system.

Comment: We want to make sure the costs also consider future benefits and the impacts 5 and 10 years out.

Response [Alagappan]: Yes, impacts such as sustainability and reliability are considered; it's not just about cost.

Strategic Approaches

Schlag introduced the discussion of strategic approaches by reviewing the scenario design framework ([slide 29](#)) and how the scenarios and strategic approaches relate to one another ([slide 30](#)). He then showed how a matrix of distinct system plans allows comparison across multiple scenarios for level of risk and across strategic approaches for best performance ([slides 31-33](#)). He explained the guidelines for strategic approaches ([slide 34](#)) and provided an example of a technology neutral strategic approach ([slide 35](#)).

Group Discussion on Brainstorming Potential Strategic Approaches

Schlag invited Advisory Group members to suggest strategic approaches they would like SRP to explore by posing two questions:

1. What strategies for building a low-carbon, affordable and reliable power system should utilities consider today?
2. Which decisions available to SRP would you like to see tested in the Integrated System Plan and why?

Question: How do more subjective issues like equity get incorporated?

Response [Schlag]: This kind of process is more geared to analytical, engineering and economic principles. I would ask Advisory Group members, what strategic approach would consider equity and how might we evaluate equity?

Comment: The more subjective issues are pushed off to the side they become a bolt-on rather than fully integrated in a plan. We might think about setting equity parameters upfront, similar to meeting climate or sustainability goals.

Comment [chat]: I'd like to see a strategic approach where SRP commits to exiting coal as soon as possible and another where SRP commits to revisiting its 2035 Sustainability Goals.

Comment: If the 2035 Sustainability Goals get revisited, we could focus on where we could go further faster. Always having an all-source request for proposals (RFP) ensures we are looking at affordability. It's also important SRP isn't investing in technology that may become obsolete or fall under policy restrictions that result in stranded assets.

Comment: Transitioning to a mass-based emissions reduction goal should be a strategic approach. That includes an exit date from Springerville and studying earlier closures of Coronado.

Comment: Early closures of power plants have big impacts on those communities and it's good to understand how those transition impacts are mitigated.

Comment: I'd like to see an approach that maximizes opportunities for regional interaction. I want to see that we are working with our counterparts and using existing resources. It might be the regional transmission organization concept.

Comment: A lot of these decisions are part of a human-centered process. Having different strategic approaches is important. The least cost to meet load needs is important. Equity is an area with a huge impact for clean energy transitions. Whether it's a metric in the model or some other consideration, all of these goals will impact the economies of coal communities.

Response [Schlag]: Is that a general observation to the Integrated System Plan process, or is there an idea for strategic directions embedded in what you said?

Comment: We're still brainstorming. Maybe it's possible to use indirect job-related data to look at indicators with changes over time, such as when older plants come offline. For example, the energy efficiency standard had a huge impact on thousands of jobs being developed in Arizona. Those indicators could be helpful and we can explore how these fit into the models. **Response** [Schlag]: Are you thinking of a metric that allows for comparison?

Comment: Maybe. It could be bringing in community representatives to make sure we're getting that community impact element right.

Comment: From a climate standpoint the need is obvious, but for communities with coal jobs, they need more time to figure out what to do. This is not an SRP problem. It's a social problem in the entire state.

Comment: It is not solely the utility's responsibility, but there is a role in bringing together groups working on solutions, such as for reskilling and training the workforce. SRP should at least be at the table if not leading the effort.

Comment: Microgrids can possibly be used to enhance reliability and resiliency. We must consider emergency management and the need for reliable power for heating, cooling and water services. Reliability to account for extreme weather situations is very important and microgrids can also be a carbon reduction strategy.

Comment [chat]: Economic development is based on reliable and affordable power. I'm concerned about transmission lines in wildfire areas. We don't want a situation with shutdowns in this part of the Valley.

Schlag noted the number of comments on coal plant closures and asked Advisory Group members for other ideas for strategic approaches and specific types of transmission or resource investment for SRP to consider.

Question: Are the mini-nuclear plants that are supposed to have near-zero waste still in the theoretical phase?

Response [Schlag]: The small modular reactors are in a pre-commercial phase of development. Exploring emerging technologies is a potential strategic approach.

Comment: For building owners, redundancy and options for affordable usage are important. Long-term property owners should be able to partner with SRP to understand future impacts.

Comment: Being open to new technologies is important. The message on Coolidge is that SRP's experience with that technology factored into decision-making. No one technology is going to get us to where we want to be to be on sustainability, affordability and reliability. Burning fossil fuels is driving climate change and wildfires are being accelerated by climate change. Accounting for the full cost of technologies, such as the social cost of carbon is important.

Comment: On lifecycle and being open to new technology, in 5 years we might be talking about something that doesn't exist now. I have concerns over the costs of nuclear and hydrogen. It's important to look at upfront and lifecycle costs since those are borne by ratepayers.

Comment: Another strategy would be further exploration of using the cumulative impact of energy efficiency over time to relieve congestion on the system and reduce the peak. A strategic approach could include an expanded look at the distribution-side and demand-side resources and how these affect investments at an aggregate level.

Schlag concluded the discussion by explaining that this input would be used to develop the strategic approaches for consideration by Advisory Group members at the next meeting.

Customer Research Strategy and Preliminary Insights

Dennis Goodman, Manager of Strategic Research & Insights at SRP, shared SRP's customer research strategy and preliminary insights. He described the three stages of research and timeline ([slides 40-42](#)) and presented initial findings from the customer focus groups ([slides 43-45](#)). He noted that reliability was seen as the highest priority followed by affordability and then sustainability, but that participants did not want to choose from among the three.

Question: How does SRP respond to something like a critical newspaper editorial that is read by thousands of people?

Response [Goodman]: Our Customer Research Team is a part of SRP's Community, Communications and Marketing department that distributes communications through social media and other communication platforms to help customer stay aware of news and efforts at SRP.

Question: What is the percentage of office/industrial buildings vs. residential sites that SRP services? Were the focus groups only residential?

Response [Goodman]: The focus groups were with residential customers. We have identified seven customer types based on attitude toward topics such as pricing and sustainability and included at least two representatives from each type to form a diverse group.

Response [Domonique Cohen, SRP Integrated System Plan Communications Lead]: Residential is just under 50% of energy usage, but over 90% of customers.

Upcoming Meetings

- Advisory Group Meeting #5 on March 14, 2022, 9:00 a.m.-1:00 p.m. MST
- Advisory Group Optional Modeling Subgroup Session #2 on March 21, 2022, 10:00 a.m.-12:30 p.m. MST

- Advisory Group Meeting #6 on April 15, 2022, 12:00-4:00 p.m. MST
- Large Stakeholder Group Meeting #2 on April 29, 2022, 12:00-2:00 p.m. MST
- Large Stakeholder Group Technical Working Session #1 on April 29, 2022, 2:00-4:00 p.m. MST
- Advisory Group Meeting #7 on May 10, 2022, 9:00 a.m.-1:00 p.m. MST

Appendix

Meeting Attendance

Advisory Group Member Organizations (members in attendance on 2/15 are indicated in bold)

Arizona Hispanic Chamber of Commerce

A New Leaf

American Association of Retired Persons (AARP)

Arizona State University (ASU)

Arizona Public Interest Research Group (PIRG)

Building Owners and Managers Association (BOMA)

Chicanos Por La Causa

City of Phoenix

CommonSpirit Health

CMC Steel Arizona

CyrusOne

Environmental Defense Fund (EDF)

Intel

Kroger

Local First

Mesa Public Schools

PAC Worldwide

Pinal County

SRP Customer Utility Panel (CUP)

Salt River Pima-Maricopa Indian Community (SRPMIC)

Southwest Energy Efficiency Project (SWEEP)

Western Resource Advocates (WRA)

Wildfire

Key SRP Staff

Dennis Goodman, Manager of Strategic Research & Insights

Domonique Cohen, Integrated System Plan Communications Lead

Jed Cohen, Integrated System Plan Project Co-Lead

Kelly Barr, Integrated System Plan Project AGM Sponsor

Michael Reynolds, Manager of Resource Analysis & Planning

Vanessa Kisicki, Director of Distribution Strategy

Key Facilitation Team

Lakshmi Alagappan, E3

Joe Hooker, E3

Nick Schlag, E3

Alyson Scurlock, Kearns & West

Joan Isaacson, Kearns & West

Karen Lafferty, Kearns & West

Taylor York, Kearns & West

Observers

John Hoopes, SRP Board Vice President

Anda McAfee, SRP Board Member

Jack White, SRP Board Member

Larry Rovey, SRP Board Member

Rocky Shelton, SRP Council Member

Suzanne Naylor, SRP Council Member