

# Salt River Project (SRP) Integrated System Plan Advisory Group Modeling Subgroup Meeting #3- Summary

*Prepared by Kearns & West*

## Advisory Group – Modeling Subgroup Meeting #3 Overview

### Meeting Objectives

- Review a selection of inputs and assumptions for scenarios and sensitivities for Transmission and Distribution Planning
- Review stakeholder feedback provided on Forecasting, Customer Programs and Resource Planning

**Topic:** Inputs for the Integrated System Plan Study Plan – Part 2

**Date:** April 4, 2022

**Time:** 1:00-2:30 p.m.

**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

Angie Bond-Simpson, Director of Integrated System Planning & Support at SRP, welcomed Advisory Group members and thanked them for joining in discussion of inputs and assumptions continued from the March 21, 2022, Modeling Subgroup meeting. After Bond-Simpson noted the attendance of SRP Board and Council observers, Jed Cohen, Integrated System Planning Lead at SRP, introduced Lakshmi Alagappan, consultant from E3, the Integrated System Plan’s technical consulting group, as the meeting facilitator. Alagappan reviewed the [meeting objectives](#) and [agenda](#).

### Transmission Planning Inputs and Assumptions

Justin Lee, Manager of Transmission Planning at SRP, described cost adders for remote resources ([slide 9](#)), including new and upgraded transmission. He also shared transmission planning cost estimates for materials and construction ([slide 10](#)), noting these figures are slated for update in May or June 2022, and illustrated how cost estimates are made ([slide 11](#)).

**Question:** Are these estimates for infrastructure wholly owned by SRP?

**Response:** These estimates assume 100% SRP ownership. If we share infrastructure, it’s about the same cost per MW.

**Question:** With all the recent wildfires in Arizona, has it changed how SRP plans transmission corridors?

**Response:** No. In general, we try to avoid placing lines close together where possible. We have not recently had the need to build new transmission lines in heavily forested areas, so the planning hasn't changed much.

**Question:** Are transmission lines only for new generation and reliability, or does SRP look at lines that may reduce system costs as well? For example, connecting high LMP [locational marginal price] areas to lower LMP areas?

**Response:** We mainly consider reliability. However, SRP also participates in WestConnect. We look at larger projects that may benefit regional needs for reliability.

**Question:** Is cryptocurrency [mining] having an effect on load? Are there pockets of excess generation to pair a lower price LMP to your area? One consideration is shifting load and looking ahead at potential excess generation that is later used for cryptocurrency.

**Response:** I do not have an answer on cryptocurrency. We try to anticipate system growth in the load forecast to build a system to meet demands and maintain reliability.

## Distribution Planning Inputs and Assumptions

Melissa Martinez, Manager of Distribution Planning at SRP, described the criteria and assumptions ([slide 13](#)) and the planning cost estimates for distribution planning ([slide 14](#)).

**Question:** [Slide 13](#) indicates that the load and distributed generation are not separated in net load. When might SRP disaggregate the load?

**Response:** We are working with the forecasting team to understand how we can disaggregate the load forecast and complete that modeling in the next few years.

**Question:** For both distribution and transmission, how is SRP using non-wires alternatives to help alleviate some of these costs?

**Response:** On transmission, we have looked at strategic battery placement to alleviate or negate the need to upgrade infrastructure. It's not yet beneficial in the modeling we have done. We have looked at Smart Wires but have not found an effective application. We anticipate there will be one in the future.

**Response:** Distribution planning is in the same position. These options are not yet as economical or reliable as compared to traditional solutions, but we keep exploring them to understand where and when we can use them as a solution in the future.

Alagappan asked if SRP may have better information in future Integrated System Plans on these non-wires alternatives and Martinez replied yes.

## Recap and Discussion of Study Inputs and Assumptions

Alagappan recapped Advisory Group member suggestions from the March 21, 2022, meeting of the Modeling Subgroup ([slide 16](#)). Bond-Simpson then described the actions SRP has taken in response to feedback on CO<sub>2</sub> targets ([slide 17](#)) and the proposed update to the Strong Climate Policy scenario, including an interim 2030 milestone ([slide 18](#)).

**Question:** Thank you for the update. How does SRP plan to review and incorporate the interim 2030 milestone? How would that impact the back-end assumptions in the modeling?

**Response:** Achieving consistency is our goal, including exploring a straight line to net zero by 2050. We want to use those first learnings to see how that looks.

**Comment:** I like where this is going and would want this to just be a board-approved directive, rather than for planning in one scenario for the Integrated System Plan.

Michael Reynolds, Manager of Resource Analysis & Planning at SRP, presented on the gas price forecast and how the input has been adjusted using data available from March 3, 2022 ([slide 19](#)). He also described the sensitivity for gas price volatility and how the input has been adjusted with technical support from E3 ([slide 20](#)).

**Comment:** Thank you for the update and detail so stakeholders can see the monthly prices.

**Question:** On the hedging strategy, is there a situation where SRP hedges more than normal, or is it always the same strategy?

**Response:** We stay with our current strategy.

**Question:** I appreciate SRP taking our feedback. Do these adjustments affect different scenarios differently?

**Response:** We will include the adjusted gas price data in the modeling of the Current Trends scenario. Our goal in the volatile gas price sensitivity is to evaluate if using a simplified forecast is creating problems.

Reynolds described the feedback received on energy efficiency ([slide 21](#)) and how demand side management will be included as a resource option ([slide 22](#)).

**Comment:** It's important to allow the model to select energy efficiency. I would like the opportunity to explore beyond the Current Trends scenario any hard coded inputs that change the modeling pathways. A better understanding of hard coded inputs and thresholds in the model would be helpful.

**Response:** We are using energy efficiency as a load forecast modifier and would explore different levels in the sensitivities. We can't yet include it in capacity expansion.

**Question:** It sounds like energy efficiency is handled by resource planning, but this can also be a non-wires alternative for distribution planning. How is SRP working internally to make sure energy efficiency is being utilized optimally?

**Response:** This question demonstrates the importance of an Integrated System Plan. We want SRP's planning groups to work as a team to allow for evaluating those opportunities, which is why we treat energy efficiency as a load modifier. The benefits should flow through the whole system; in addition to the distribution benefits referenced in the question, we are hoping to see transmission benefits as well.

Reynolds then addressed the request for more detail on modeling constraints ([slide 23](#)), recapped the resource analysis inputs ([slide 24](#)) and examples of model inputs from the March 21, 2022, meeting ([slide 25](#)) and explained that some inputs cannot be shared due to contractual restrictions or business sensitivities.

**Comment:** We have not seen assumptions on Springerville and how that is represented in the model, on fuel prices, on must-run vs. retirement.

**Response:** We need to protect the data on fuel prices. We are not exploring economic retirements. In the Current Trends scenario, Springerville is not retired by 2035 and there will be a sensitivity to run the model without coal in 2035. In the modeling, coal stays on unless under maintenance and is configured as a must-run resource because the plants do not ramp up or down quickly. We are exploring seasonal shutoffs but are concerned about maintaining reliability. We can continue to discuss the modeling but not all of the cost estimates.

**Question:** Is SRP hearing talk about a rise in solar costs? Is there concern about cost or availability due to supply chain constraints?

**Response:** Yes, we have the NREL [National Renewable Energy Laboratory] estimate, but information from IHS Global Insight reflects a possible near-term price shock of 25%. We are working with developers to address supply chain issues.

**Question:** Are you concerned about near-term supply shortages or bottlenecks?

**Response:** We believe we will achieve our goals, but SRP has the same concerns as everyone else.

**Question:** SRP sets coal as a must-run resource and does not use economic retirement. Why would SRP not retire coal if it's economic?

**Response:** The capacity expansion model selects future resources based purely on economics. We also consider the community and reliability impacts. We believe that the Integrated System Plan will help us transition from coal, but we have to make sure not to leave anything out of the modeling.

Bond-Simpson recapped Advisory Group member responses, showing where feedback has been incorporated in the Integrated System Plan and indicating considerations for future Integrated System Plans ([slide 26](#)). She then shared the dates for upcoming meetings and thanked those who have provided feedback via the stakeholder communication email: [IntSysPlan@srp.net](mailto:IntSysPlan@srp.net)

## Upcoming Meetings

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

## Appendix

### Meeting Attendance

Advisory Group Member Organizations (members in attendance on 4/4 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

Angie Bond-Simpson, Director of Integrated System Planning & Support

Jed Cohen, Integrated System Planning Lead

Justin Lee, Manager of Transmission Planning

Melissa Martinez, Manager of Distribution Planning

Michael Reynolds, Manager of Resource Analysis & Planning



#### Key Facilitation Team

Lakshmi Alagappan, E3

Joe Hooker, E3

Nick Schlag, E3

Eunice Lee, Kearns & West

Joan Isaacson, Kearns & West

Karen Lafferty, Kearns & West

Taylor York, Kearns & West

#### SRP Board and Council Observers

Anda McAfee, SRP Board Member

Larry Rovey, SRP Board Member

Victor Flores, SRP Board Member

Rocky Shelton, SRP Council Member

Suzanne Naylor, SRP Council Member