Salt River Project (SRP) Integrated System Plan Technical Working Session: Inflation Reduction Act (IRA)

Prepared by Kearns & West

Technical Working Session – Meeting Overview

As part of the Integrated System Plan (ISP), Salt River Project (SRP) is hosting Technical Working Sessions where experts from around the country and from SRP explore special topics. This session focused on the Inflation Reduction Act (IRA). The purpose was to gather expert opinions, hear stakeholder questions and discuss the IRA to better understand its impacts.

Meeting Objectives

- Understand the impacts of the IRA to utility planning and SRP specifically
- Understand the key uncertainties of the IRA from a variety of perspectives
- Discuss stakeholder questions about the IRA
- Identify any gaps in how SRP is considering the IRA in planning

Topic: Inflation Reduction Act: Impact of the Inflation Reduction Act on Planning Date: January 17, 2023 Time: 9:00-11:30 a.m. MST Location: Virtual

All ISP stakeholders from the Large Stakeholder Group and Advisory Group were invited, totaling more than 140 organizations. Approximately 60 stakeholders from 40 organizations attended the Technical Working Session with additional consultants and SRP staff members joining the webinar. The meeting <u>agenda</u> and <u>presentation</u> are available at the <u>ISP portal</u>.

Welcome and Overview of the Inflation Reduction Act

Bobby Olsen, Senior Director of Corporate Planning, Environmental Services and Innovation at SRP, welcomed attendees to the webinar, reviewed the agenda, and introduced key members of the ISP team. He then introduced Robert Cogan, Senior Manager in Federal Affairs at SRP, who provided an overview of the IRA. In his overview, Cogan focused on direct-pay renewable energy tax credits and implementation of the new law, noting that federal guidance from the Treasury Department is pending (<u>slide 8</u>).

Cogan summarized the clean energy tax credits in the legislation, including credits for standalone storage and a green hydrogen tax credit, and the shift to a technology neutral policy on zero-carbon resources (<u>slide 9</u>). He drew attention to provisions directly linked to the tax credits, including domestic content requirements that phase in beginning in 2024 (<u>slide 10</u>). Cogan concluded by describing the new tax incentives available to end-use customers, the associated potential impacts to energy demand and SRP's efforts to determine how best to move forward (<u>slide 11</u>).

Incorporating the Inflation Reduction Act in Planning at SRP

Angie Bond-Simpson, Director of Integrated System Planning and Support at SRP, provided an overview of how SRP is incorporating the potential impacts of the IRA in the ISP. She outlined both SRP's IRA-related efforts and examples of uncertainties in planning, such as impacts to resource costs and supply chains (<u>slides 13-14</u>). Bond-Simpson noted that although the ISP Study plan was published in June 2022, the scenario design did capture impacts consistent with some aspects of the IRA, which was signed into law in August 2022. Notably, the Strong Climate Policy planning scenario in the ISP envisioned federal legislation that would incentivize energy efficiency, electrification and distributed generation (<u>slides 15-16</u>).

Bond-Simpson explained that some aspects, such as increases in energy demand, were captured in the ISP Study Plan and will not be updated (<u>slides 17-18</u>), whereas uncertainties related to resource costs mean that a wide range must be considered to ensure they are appropriately captured in the modeling assumptions (<u>slides 19-20</u>). This means resource cost inputs will be adjusted in the model to better capture the impacts of the IRA. She described how the panelists would offer a diversity of perspectives from across the nation on these uncertainties so SRP can appropriately capture IRA considerations in the ISP Study Plan.

Grant Smedley, Director of Resource Planning, Acquisition and Development at SRP, offered comments on how SRP is incorporating the IRA into its resource planning efforts. He explained that SRP has traditionally contracted for renewable and energy storage projects through power purchase agreements with developers, who were able to take advantage of tax credits. Because the IRA provides SRP and other public power entities with access to direct pay credits for the first time, this may create the opportunity for SRP to build and own renewable and energy storage resources. He also noted that many questions and uncertainties remain about implementation details, such as the domestic content requirements and definitions of energy communities, which may be addressed in forthcoming guidance from the Treasury Department (slides 21-22). He noted that SRP is closely monitoring the guidance and providing comments and input to Treasury. He also explained that SRP is implementing its first owned solar project at the Copper Crossing Energy and Research Center, which will allow SRP to gain experience with design, construction and operation of a solar facility. Finally, he explained that SRP is likely to continue to implement projects using both approaches - through power purchase agreements with developers and by self-building and owning resources – given the significant resource needs in the coming years.

Dan Dreiling, Director of Customer Programs at SRP, described opportunities for customer programs and the potential to combine rebates and tax credits to enhance participation in SRP's portfolio of customer programs (<u>slide 23</u>). He stated that the additional IRA funding offers an opportunity to offset some of the slowing that has been experienced in select energy efficiency and electric vehicle programs due to current economic conditions. He also indicated

the importance of the state developing customer-friendly processes and securing resources from professional program administration firms, which will enable customers to take advantage of opportunities more easily. He concluded by saying that SRP is looking to coordinate with other local and state entities. Additionally, SRP will monitor the development of federal guidance and the implementation of the State Office of Resiliency to evaluate impacts to SRP.

Panelist Presentations

Bond-Simpson introduced Arne Olson, Senior Partner at E3, as the moderator for the panel presentations and discussion. Olson previewed the wide range of perspectives from the panelists, which included manufacturing, federal tax law, public finance and development. Olson introduced panelists for their presentations, noting that Q&A would occur at the end.

In their presentations, the panelists touched on common themes around the IRA, noting how it represents a significant change in funding for clean energy. These themes included the complexity of the legislation, the risks and opportunities inherent in implementation, the certainty offered by the 10-year timeline and the uncertainty that exists in the absence of guidance from the Treasury Department.

Domestic Solar Manufacturing Post-IRA

Christine Turner, Chief Commercialization and Engagement Officer at the Solar Energy Manufacturers for America (SEMA) Coalition, spoke from the manufacturing perspective. In describing factors driving a competitive US manufacturing base in solar, she cited manufacturing incentives and the certainty of the 10-year timeline to drive investments. Turner noted some new policies in the legislation, such as incentives for each manufacturing segment and direct payments, emphasizing that this comprehensive policy supports onshoring of production, which is projected to meet domestic solar needs by 2030. She also pointed to the need for more control and resilience in the supply chain. In concluding her remarks, Turner showed a comparison of carbon dioxide emissions from solar manufacturing between the US and China and stated that embedded carbon in manufacturing should be considered.

Due to another commitment, Turner answered questions immediately following her presentation. She responded to questions about the domestic content requirement, the readiness of the supply chain and the role of direct payments. Her responses addressed building a resilient supply chain so that manufacturers are not beholden to one source and creating a manufacturing and design feedback loop to support innovation. She described how the direct payments, and in particular the 10-year timeline, build in predictability, saying that domestic manufacturers are bullish on the opportunities.

Inflation Reduction Act of 2022: Federal Tax Issues for Public Power

Mitch Rapaport, partner at Nixon Peabody LLP, provided insights on federal tax law implications of the IRA, beginning with an overview of the legislative process and why the law was enacted. He described as a significant change how the IRA provides the opportunity for public utilities to own renewable energy projects and have similar federal tax incentives. He then drew attention to risks, notably the uncertainty around the amount of the direct pay credits and the risk of losing the entire credit if the domestic content requirement is not met. Rapaport described strategies for mitigating these risks, including planning well in advance and getting advice before claiming credits. He also reinforced the need for guidance from the Treasury Department on waivers, particularly for the domestic content requirement.

Inflation Reduction Act: Considerations for Public Power

Michael Mace, Managing Director at PFM Financial Advisors, presented on the financing implications of the IRA and considerations for public power utilities. He first described existing financing options (e.g., power purchase agreements) and how the direct payments under the IRA provide the opportunity for public power entities to obtain similar financial benefits without the need to contract for resources through other tax-paying entities. Next, he outlined the IRA "math" of selecting the most appropriate strategy. He said that the initial expectation of a 30% to 50% decline in renewable energy prices is unlikely because existing tax benefits are already factored into power purchase agreements, and not to expect bids to come in at 25% lower in the near future. He described the opportunities and risks for public utilities in building their projects and predicted that it will take time for public entities to begin to self-build and own resources. Mace concluded by noting the number of potential benefits in the IRA but also the uncertainty and questions that need to be answered through implementation guidance.

Post Inflation Reduction Act Western Market Outlook

Hanson Wood, Senior Vice President of West Region Development at EDF Renewables, shared the perspective of being a developer in the post IRA world. He highlighted the growth in projected renewable projects, such as grid-scale solar and onshore wind, and in light of the IRA predicted a strong shift to domestic manufacturing for solar modules in the future. He explained the new investment tax credit for standalone storage, which may lead to a trend toward separate storage and solar projects. Additionally, he commented that battery pricing is unlikely to decline in the short- or mid-term due to growth in the electric vehicle market, and that although photovoltaic pricing is beginning to stabilize, it is at risk of continuing increases due to solar tariffs and sustained demand. With regard to power purchase agreements, he noted that several recently executed agreements had been executed with adjustable pricing

mechanisms. He outlined benefits in the IRA (e.g., 10-year timeline, direct payments) in terms of certainty and also drawbacks, such as the six- to 18-month lag on the Treasury guidance on implementation. Hanson ended by noting the importance of reliability in light of significant retirements and loss of capacity for conventional resources and other challenges in the clean energy transition.

Facilitated Panel Discussion

Participants in the facilitated discussion included external panelists Mitch Rapaport, Michael Mace and Hanson Wood as well as Angie Bond-Simpson, Bobby Olsen, Dan Dreiling, Grant Smedley and Robert Cogan from SRP. Arne Olson from E3 served as moderator and began by commenting on how the IRA is a catalyst for the power industry. He asked the panelists about the complexity of the legislation, changes in project financing, risks to public utilities in constructing and owning their own projects, implications for transmission planning and IRA provisions for customers.

On complexity, panelists described how the IRA combines the desire to provide tax incentives with advancing other goals, such as those for clean energy and climate change. This opportunity to remodel tax credits, improve the process and get industry input led in part to the complexity and challenges of navigating the new law. Panelists discussed the potential for direct payments to significantly change the landscape for public power financing. A panelist added that public utilities have long sought competitive incentives but that lawmakers generally refrain from giving credits to entities that don't pay taxes.

On the question of risk for public utilities, panelists discussed how challenges in hiring and manufacturing may impose constraints. There is scarcity in the available workforce and even with increased domestic solar manufacturing, panels may already be earmarked by developers, constraining supply. Challenges in hiring may impose constraints due to scarcity in the available workforce. Other comments addressed how public power utilities lack experience in building these types of projects and cited the risk of not satisfying the domestic content requirement and losing the entire credit.

Panelists explained that the IRA does not substantially address transmission. Because the legislation does incentivize a faster clean energy transition, this suggests transmission development will lag, leading potentially to potential double-digit curtailments in some regions and a trend toward more storage projects.

On provisions that affect customer adoption, panelists highlighted the robust credits and options available and described interest from schools and local governments in rooftop solar. A key element will be ease of execution and participation with a need for programs being managed professionally and with adequate resources.

Olson concluded by asking for comments on the specific implications for SRP and the ISP. Bond-Simpson responded that the project team understands that the IRA is complex with specifics to be determined and that the industry still has many questions around the legislation. She said the project team would brief the Advisory Group for the ISP and continue the discussion about options for addressing the IRA in planning.

Appendix Meeting Attendance

Large Stakeholder Group and Advisory Group Organizations (groups represented on 1/17/2023 are shown in **bold**)

AARP Advanced Energy Economy AEPCO **AES Clean Energy** Air Products American Lung Association AMPUA AMWUA Apache County Apache County Economic Development Apex Clean Energy Apple Inc. AriSEIA Arizona Cattle Growers Association Arizona Center for Law in the Public Interest Arizona Chamber of Commerce Arizona Commerce Authority Arizona Competitive Power Alliance Arizona Cotton Growers Association Arizona Energy Policy Group Arizona Farm Bureau Arizona Hispanic Chamber of Commerce Arizona Lodging and Tourism Association Arizona Power Authority Arizona Public Service Arizona Residential Utility Customer Office Arizona Solar Deployment Alliance Arizona Solar Energy Industries Association/Veregy Arizona State Land Department **Arizona State University Avangrid Renewables**

Atlas Renewable Power AzCPA **AZ** Thrives AZ PIRG AZ Strategies AZ Sustainability Alliance **Balanced Rock Power** Basha's **Beatitudes Campus** Boeing **Building Owners and Managers** Association (BOMA) **Bureau of Land Management** Calpine **Candela Renewables** Casa Grande Chicanos Por La Causa Christian Care Inc., Mesa District **City of Apache Junction City of Chandler** City of Mesa City of Phoenix City of Tempe **CMC Steel, AZ** CommonSpirit Health ConnectGen, LLC Coolidge **Copper State Consulting Group** Cushman & Wakefield Cyrus One **Digital Realty** DMB East Valley Chamber of Commerce East Valley Partnership **Enel Green Power North America, Inc.** Energy Exemplar, LLC

Environmental Defense Fund EPRI Facebook Forest Service U.S. Department of Agriculture Fort McDowell Yavapai Nation Freeport-McMoRan Copper and Gold Gamage & Burnham Attorneys at Law **General Electric** Gila Bend Gilbert Glendale Google **Greater Phoenix Economic Council** Greater Phoenix Leadership Greenlots Home Builders Association of Central Arizona Hospice of the Valley Innergex Intel Interwest Energy Alliance Invenergy JKL Consulting Services, LLC Kroger Co. (Ralphs and Food4Less) Kyl Center for Water Policy Local First Arizona Mercy Gilbert Medical Center/Dignity Health Mesa Community Action Network Mesa Gateway Airport **Mesa Public Schools** Microchip Technology Mitsubishi Hitachi Power Systems Americas, Inc. Navajo County New Leaf/Mesa-CAN New Life Christian Center, Coolidge NextEra Energy Resources Northern Arizona University NREL Onward Energy **Origis Energy**

Orsted Onshore North America PAC Worldwide Page Pattern Phoenix Chamber of Commerce Pinal County **Profile Precision Extrusions** Queen Creek Chamber of Commerce Queen Creek Unified School District Roosevelt Water Conservation District Salt River Pima-Maricopa Indian Community **SRP Customer Utility Panel** Scottsdale Seguro Energy Sierra Club Southwest Energy Efficiency Project Southwestern Power Group St. Johns St. Paul Church, Randolph Starwood Energy Group Global, Inc. Sustainable Energy Power Alliance The Nature Conservancy (Arizona Thrives) **Tierra Strategy** Tormoen Hickey, LLC Town of Florence **Town of Springerville Tucson Electric Power** United Dairymen of Arizona University of Arizona Valle Del Sol Strategic Initiatives: The **Real Arizona Coalition** Valley Partnership **Vote Solar** Walmart Wärtsilä North America, Inc. West Marc Western Grid Group Western Resource Advocates Wildfire

Other Organizations in Attendance

Aypa Power LLC BayWa Clarion Events NA Clearway D.E. Shaw Renewable Investments EDF Renewables Innovant Public Relations RAI Energy, Inc. Rose Law Group Strata Clean Energy Town of Queen Creek Triple Oak Power

Key SRP Staff

Angie Bond-Simpson, Director of Integrated System Planning & Support Bobby Olsen, Senior Director of Corporate Planning, Environmental Services and Innovation Dan Dreiling, Director of Customer Programs Domonique Cohen, Integrated System Plan Communications Lead Grant Smedley, Director, Resource Planning, Acquisition and Development Kyle Heckel, Senior Analyst for Integrated System Planning & Support Robert Cogan, Senior Manager in Federal Affairs

Integrated System Plan Consultants

Arne Olson, E3 Joe Hooker, E3 Brisa Aviles, Kearns & West Jack Hughes, Kearns & West Joan Isaacson, Kearns & West Karen Lafferty, Kearns & West