POWER COMMITTEE Tuesday, June 27, 2023, 9:30 AM

SRP Administration Building 1500 N. Mill Avenue, Tempe, AZ 85288

Committee Members: Mario Herrera, Chairman; Keith Woods, Vice Chairman; and Robert Arnett, Nick Brown, Kevin Johnson, Kathy Mohr-Almeida, and Stephen Williams Association Board of Governors Observer: Larry Rovey

Call to Order Roll Call

- - Request for approval of the minutes for the meeting of May 25, 2023.
- 2. <u>Coolidge Expansion Project (CEP) and Amended Certificate of Environmental</u> <u>Compatibility (CEC) Application</u>.....ROB TAYLOR and BOBBY OLSEN

Informational presentation regarding an update on the CEP, the amended CEC application process at the Arizona Corporation Commission, the SRP appeal pending at the Arizona Court of Appeals, and Board questions about the CEP. The Committee may vote to go into Executive Session, pursuant to A.R.S. §38-431(A)(3), for discussion and consultation with its attorneys.

- 4. <u>Closed Session, Pursuant to A.R.S. §30-805(B), for the Committee to Consider</u> <u>Matters Relating to Competitive Activity, Including Trade Secrets or Privileged or</u> <u>Confidential Commercial or Financial Information, with Respect to a Request for</u> <u>Approval to Enter into One or More Natural Gas Transportation Capacity</u> <u>Contracts</u>......JOE GIACALONE

6.	Report on Current Events by the General Manager	and Chief Executive Officer
	or Designees	JIM PRATT

7. Future Agenda Topics..... CHAIRMAN MARIO HERRERA

The Committee may vote during the meeting to go into Executive Session, pursuant to A.R.S. 38-431.03 (A)(3), for the purpose of discussion or consultation for legal advice with legal counsel to the Committee on any of the matters listed on the agenda.

The Committee may go into Closed Session, pursuant to A.R.S. §30-805(B), for records and proceedings relating to competitive activity, including trade secrets or privileged or confidential commercial or financial information.

Visitors: The public has the option to attend in-person or observe via Zoom and may receive teleconference information by contacting the Corporate Secretary's Office at (602) 236-4398. If attending in-person, all property in your possession, including purses, briefcases, packages, or containers, will be subject to inspection.



MINUTES POWER COMMITTEE MEETING

DRAFT

May 25, 2023

A meeting of the Power Committee of the Salt River Project Agricultural Improvement and Power District (the District) convened at 9:30 a.m. on Thursday, May 25, 2023, from the Board Conference Room at the SRP Administration Building, 1500 North Mill Avenue, Tempe, Arizona. This meeting was conducted in-person and via teleconference in compliance with open meeting law guidelines. The District and Salt River Valley Water Users' Association (the Association) are collectively known as SRP.

Committee Members present at roll call were M.J. Herrera, Chairman; and N.R. Brown, K.J. Johnson, K.L. Mohr-Almeida and S.H. Williams; and Association Board of Governors observer L.D. Rovey.

Committee Members absent at roll were K.B. Woods, Vice Chairman; and R.C. Arnett.

Also present were President D. Rousseau; District Vice President C.J. Dobson; Board Members A.G. McAfee, R.J. Miller, M.V. Pace, and P.E. Rovey; Council Vice Chairman J.R. Shelton; Council Liaisons A.S. Hatley and T.S. Naylor; Council Member
A.M. Herrera; Mmes. A.N. Bond-Simpson, A.P. Chabrier, L.F. Hobaica, L.A. Meyers, G.A. Mingura, C.M. Sifuentes, and P.L. Syrjala; Messrs. J.M. Baran, J.D. Coggins, A.C. Davis, D.W. Dreiling, J.M. Felty, C.R. Janick, R.T. Judd, K.J. Lee, A.J. McSheffrey, R. Navarro, M.J. O'Connor, B.A. Olsen, G. Saint Paul, and P.B. Sigl; Ian Calkins of Copper State Consulting Group; Joe Hooker and Arne Olson of E3 Consulting; Robin Park of Origis Energy; and Ryan Roton of Siemens Energy.

In compliance with A.R.S. §38-431.02, Andrew Davis of the Corporate Secretary's Office had posted a notice and agenda of the Power Committee meeting at the SRP Administration Building, 1500 North Mill Avenue, Tempe, Arizona, at 9:00 a.m. on Tuesday, May 23, 2023.

Chairman M.J. Herrera called the meeting to order.

Consent Agenda

Chairman M.J. Herrera requested a motion for Committee approval of the Consent Agenda, in its entirety.

On a motion duly made by Board Member S.H. Williams and seconded by Board Member K.J. Johnson, the Committee unanimously approved and adopted the following item on the Consent Agenda:

• Minutes of the Power Committee meeting on April 20, 2023, as presented

Corporate Secretary J.M. Felty polled the Committee Members on Board Member S.H. Williams' motion to approve the Consent Agenda, in its entirety. The vote was recorded as follows:

YES:	Board Members M.J. Herrera, Chairman; N.R. Brown, K.J. Johnson, K.L. Mohr-Almeida, and S.H. Williams	(5)
NO:	None	(0)
ABSTAINED:	None	(0)
ABSENT:	Board Members K.B. Woods, Vice Chairman; and R.C. Arnett	(2)

Summer Preparedness

Using a PowerPoint presentation, Pam L. Syrjala, SRP Director of Supply and Trading and Fuels, stated that the purpose of the presentation was to provide information summarizing SRP's actions in preparing to meet forecasted loads and other requirements for Summer 2023.

Ms. P.L. Syrjala provided maps of SRP's water service area, power service area, and eastern mining district; and a map of SRP resources, including battery storage, coal, natural gas, nuclear, and renewable energy for summer Calendar Year 2023 (CY23). She provided a peak hour retail load forecast in Megawatts (MW) for 2023, compared to actual peak hour retail load for 2021 and 2022, and discussed planned capabilities to meet the forecasted need of 9,086 MW (peak retail load plus firm sales plus reserves) for Summer 2023.

Ms. P.L. Syrjala stated that SRP is experiencing the following resource challenges: solar delays, operational risks, supply chain constraints, interconnection challenges, and drought conditions. She provided a status for fuel, natural gas supply, and new resources. Ms. P.L. Syrjala introduced Chris R. Janick, SRP Senior Director of Power Delivery.

Continuing, Mr. C.R. Janick explained that generation, transmission, and distribution readiness includes asset management, situational awareness, emergency preparations, wildfire updates, and operational readiness. He detailed the following aspects of asset management: risk and data based approach to equipment replacements, condition and inspection based proactive and corrective maintenance, other preventive maintenance, and maintenance of cooling systems.

Mr. C.R. Janick detailed the following aspects of situational awareness: coordinating daily operational briefings – twice daily during extreme heat, inter-utility coordination and support, and outage coordination. He detailed the following aspects of emergency preparation: storm, load shed, and heat training drills; pre-storm equipment staging and staffing; and outage moratoriums and notifications.

Mr. C.R. Janick detailed the following aspects of wildfire updates: application of lessons learned, agency collaboration, grid incident command, fire season reclosing policy, and

vegetation management. He detailed the following aspects of operational readiness: bolster testing, reserves strategy, forecasting improvements, and power purchase agreement (PPA) technical requirements. In conclusion, Mr. C.R. Janick said that SRP is ready and prepared to meet 2023 forecast summer needs.

Ms. P.L. Syrjala and Mr. C.R. Janick responded to questions from the Committee.

Copies of the PowerPoint slides used in this presentation are on file in the Corporate Secretary's Office and, by reference, made a part of these minutes.

Robin Park of Origis Energy left the meeting during the presentation. Board Members R.C. Arnett and K.B. Woods; Ms. K.S. Ramaley; Nikos Bountas of Strata Clean Energy; John Deese of Origis Energy; and Brian Morad of Bright Night entered the meeting during the presentation.

Integrated System Plan (ISP) Update

Using a PowerPoint presentation, Angie N. Bond-Simpson, SRP Director of Integrated System Planning and Support, stated that the purpose of the presentation was to provide the results of the ISP analysis and key findings of the analytical process, as well as an update on the next steps for the ISP and the progress of community stakeholder engagement forums.

Ms. A.N. Bond-Simpson said since the last ISP update, the bulk system analysis has been completed; the residential customer research phase 3 has been launched; and customer and community stakeholder engagements continue. She discussed the increasing bulk system transformation involving technology neutral, no new fossil, and minimizing coal with respect to the following scenarios: desert contraction, current trends, strong climate policy, and desert boom. She introduced Arne Olson of E3 Consulting.

Continuing, Mr. A. Olson provided a background of E3 Consulting. He said that E3 Consulting has 100 consultants across four offices with expertise in economics, mathematics, policy, and modeling. Mr. A. Olson introduced Joe Hooker of E3 Consulting.

Mr. J. Hooker detailed E3 Consulting's long-term capacity expansion modeling utilizing the PLEXOS software. He highlighted the key finding as follows: Without new firm capacity, the system cannot satisfy reliability requirements under a high load growth scenario (desert boom scenario) and all other cases satisfy the Planning Reserve Margin (PRM) requirement.

Mr. J. Hooker provided a range of modeled capacity additions needed for 2025 through 2035 and a range of sustainability metrics for 2035. He said that all system plans result in significant improvements in carbon emissions and water usage relative to today's system. Mr. J. Hooker stated that the current trends scenario dictates that natural gas

(when available) and renewables are part of a least-cost portfolio and that without firm resource options, higher levels of renewables and battery storage are required. He said that the desert contraction scenario dictates that lower load growth greatly reduces additional capacity needs, particularly for renewables when natural gas is available.

Mr. J. Hooker stated that the desert boom scenario dictates that high load growth requires significantly more capacity additions and that without firm resource options, the system is unable to meet reliability requirements. Lastly, he said that the strong climate policy scenario dictates that meeting strong climate goals requires higher levels of renewables and energy storage and that new firm capacity resources (hydrogen and when available, natural gas) help ensure reliability.

In conclusion, Mr. J. Hooker explained that with existing and planned capacity, the desert boom scenario does not meet reliability standards; and he summarized E3 Consulting's key findings.

Ms. A.N. Bond-Simpson concluded with a discussion of transmission planning key findings and ISP next steps.

Ms. A.N. Bond-Simpson; and Messrs. J. Hooker and A. Olson of E3 Consulting responded to questions from the Committee.

Copies of the PowerPoint slides used in this presentation are on file in the Corporate Secretary's Office and, by reference, made a part of these minutes.

Board Member P.E. Rovey; Ms. P.L. Syrjala; and Mr. C.R. Janick left the meeting during the presentation. Council Member R.W. Swier; Mr. C.W. Campbell; and Robin Park of Origis Energy entered the meeting during the presentation.

Advanced Customer-Grid Applications

Using a PowerPoint presentation, Chris W. Campbell, SRP Senior Director of Distribution and Technology Operations, stated that the purpose of the presentation was to provide information regarding the current outlook for advanced customer applications that integrate with the electric grid.

Mr. C.W. Campbell reminded the Committee that one of SRP's corporate goals includes enabling the interconnection of all customer-sided resources without technical constraint, while ensuring current levels of grid integrity and customer satisfaction. He said that Fiscal Year 2024 (FY24) roadmap includes 50 projects organized across the following six initiatives: advanced planning, advanced operations, sensing and control, interconnection improvements, research and development, and the workforce.

Mr. C.W. Campbell stated that customer-grid applications refer to customer-owned resources that integrate with the grid via active control. He explained the potential for the following advanced customer-grid applications: managed electric vehicle (EV)

charging, customer storage, microgrids, virtual power plants, vehicle-to-grid, and wholesale markets. Mr. C.W. Campbell discussed SRP's customer-grid application approach as follows: establishing a grid foundation, performing opportunity assessments, ensuring grid readiness, and deploying customer programs.

Mr. C.W. Campbell concluded with a summary of grid foundation key projects for FY24 through FY29 and responded to questions from the Committee.

Copies of the PowerPoint slides used in this presentation are on file in the Corporate Secretary's Office and, by reference, made a part of these minutes.

Board Members A.G. McAfee and R.J. Miller; Council Members A.S. Hatley and T.S. Naylor; Nikos Bountas of Strata Clean Energy; Ian Calkins of Copper State Consulting Group; John Deese of Origis; Joe Hook and Arne Olson of E3 Consulting; Robin Park of Origis Energy; and Ryan Roton of Siemens Energy left the meeting during the presentation. Council Member I.M. Rakow; and Messrs. B.J. Koch and J.I. Riggs entered the meeting during the presentation.

Report on Current Events by the General Manager and Chief Executive Officer or Designees

Aidan J. McSheffrey, SRP General Manager and Chief Financial Officer, reported on a variety of federal, state, and local topics of interest to the Committee.

Future Agenda Topics

Chairman M.J. Herrera asked the Committee if there were any future agenda topics. District Vice President C.J. Dobson, on behalf of Board Member J.M. White Jr., requested a presentation on the impacts of cloud cover on solar generation at increasing levels of grid integration. Vice Chairman K.B. Woods requested a presentation and field demonstration of vehicle to grid and vehicle to home technology.

There being no further business to come before the Power Committee, the meeting adjourned at 11:44 a.m.

John M. Felty Corporate Secretary

Coolidge Expansion Project Update

Power Committee

Rob Taylor and Bobby Olsen | June 27, 2023

Agenda

- Certificate of Environmental Compatibility (CEC) Timeline
- Summary of Agreement with Randolph Parties
- Summary of Coolidge Expansion Project Benefits
- Understanding Capacity Factor and Air Permits
- Responses to Questions
- Next Steps

Certificate of Environmental Compatibility Timeline

September 13, 2021	SRP Board Approves Coolidge Expansion Project
December 13, 2021	SRP files application for Coolidge Expansion Project
February 16, 2022	Line Siting Committee approves Certificate of Environmental Compatibility
April 12, 2022	ACC votes to deny the Certificate of Environmental Compatibility
May 16, 2022	SRP files request for Rehearing & Reconsideration
June 6, 2022	ACC votes to deny rehearing of the Certificate of Environmental Compatibility
July 6, 2022	SRP files complaint with Maricopa County Superior Court
January 18, 2023	Maricopa County Superior Court decision upholds the ACC
February 23, 2023	ACC directs ACC Staff to open conversations with SRP and parties
June 14, 2023	SRP and Randolph intervenors execute settlement agreement
June 21, 2023	ACC votes to issue the amended Certificate of Environmental Compatibility

06/27/2023 Power Committee, R. Taylor

Community Support and Mitigations

Rehearing

for

Request

Road Paving to offset PM-10 emissions (\$6m)

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Original

Community Working Group

Visual Screening (\$1.1m)

Scholarship Program (\$100k annually – 20 years)

Job Training Program (\$100k annually – 20 years)

Grant writing support (\$100k)

Support for Randolph historical designation (\$270k)

Commitment \$11,470,000

06/27/2023 Power Committee, R. Taylor

Reduce number of units from 16 to 12

Community Center construction (up to \$2m)

Construct block wall (\$1.2m)

Home Rehabilitation (\$375k)

Additional road paving for emissions offsets

<u>Commitment</u> \$15,075,000 Double scholarship funding (\$200k annually – 20 years)
Community Center Land (\$50k) and operations (\$200k annually – 20 years)
Reallocate block wall funding to educational & recreational activities and Community Center construction
Landscaping and historical

markers (\$100k)

greement

A

Settlement

Increase Home rehabilitation (\$1.5m total)

Community development plan (\$550)

In-home air monitors (\$20k)

Additional road paving(\$500k) Attorneys' fees (up to \$221k)

<u>Commitment</u> \$23,751,000

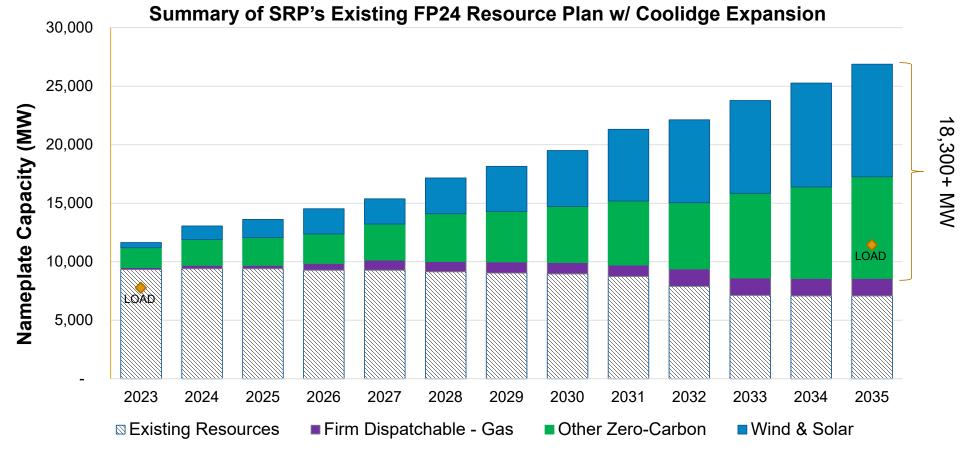
Summary of Total Coolidge Expansion w/ 12 Units

Total Amended CEC Mitigation Conditions	\$23,751,000
Total Coolidge Expansion Costs (Inclusive of CEC conditions, 12 Units)	\$775,000,000

Summary of Coolidge Expansion Project (CEP) Benefits

- SRP has a need for an additional 500 MW of capacity in 2026-2027; CEP will meet these requirements in the same timeframe
- CEP will help integrate over 3,000 MW of renewables and complement ~1,100 MW of battery storage online/under contract
- CEP is lowest cost option for capacity as determined through 2021 RFP, 2021 All-Source RFP, 2023 All-Source RFP
- CEP is lowest development risk as majority of long-lead equipment is secured, land has been secured, interconnection queue position, availability of existing infrastructure, experience with developers with ongoing projects
- Substantial majority of resource additions for the foreseeable future will be zero carbon resources and Coolidge will provide firm capacity

CEP will enable integration of additional renewables



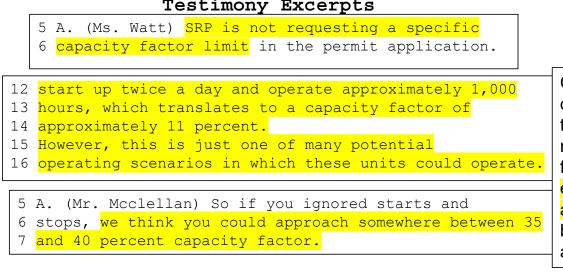
CEP Remains the Lowest Cost Option of Capacity

Project	Resource Type	Nameplate / Peak MW	LCOC \$/kW-yr	LCOC _{effective} \$/kW-yr
Zero-Carbon 2023 All- Source RFP Projects *	Battery Assets with/without Solar Generation	Varies	>\$140	>\$280
Coolidge Expansion Project	Twelve GE LM6000 Aeroderivative Natural Gas Turbines	575/500	\$108	\$124

* Pricing represents the lowest cost projects and do not represent projects fully evaluated for risk of development or other criteria in the 2023 All-Source RFP.

Capacity Factor Limitation as a CEC Condition

- SRP never offered nor accepted a specific capacity factor limit
- Line Siting CEC did not include a capacity factor limit as a CEC condition



Testimony Excerpts

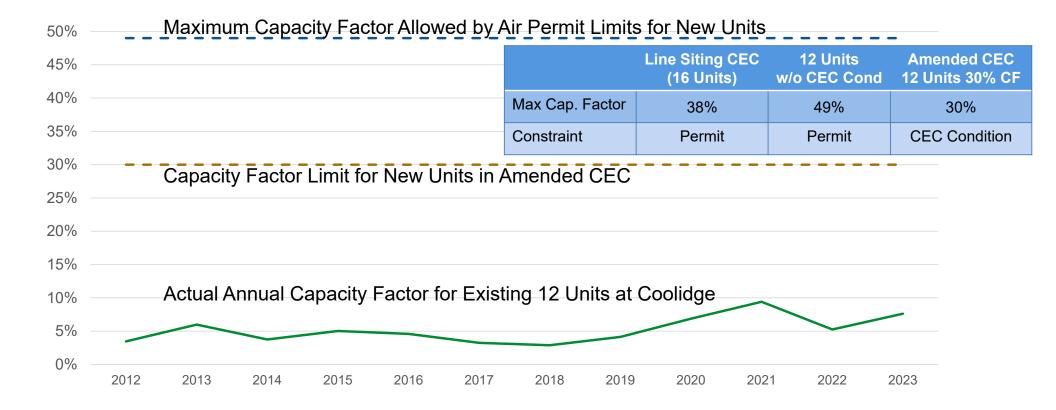
Excerpt from Letter to Commissioner Kennedy (12/21/21)

Coolidge is a peaking facility and when considering dispatch cost, SRP would not have an incentive to run the Coolidge units any more than necessary to maintain reliability or as a resource to keep costs low for its customers. In addition, the air quality permit has emission limits that preclude the CEP from operating at high-capacity factors. Therefore, SRP does not believe a capacity factor limitation is necessary or appropriate.

Air Permit Limitations

- Regulated pollutants (PM, Nox, Sox, VOC, and CO) are specifically capped on an annual basis regardless of number of units or plant operations
- Pollutant caps are established by EPA regulations for Non-attainment New Source Review (NNSR) and Prevention of Significant Deterioration (PSD) programs
 - These caps were incorporated into the draft project permit that had previously been issued by Pinal County Air Quality Control District
- Plant operation scenarios will cause permit to constrain operations on different pollutants
 - Example: Frequent starts and stops (cycling) will constrain operations due to CO caps
 - Example: Long run times will constrain operations due to PM caps
- Actual Coolidge plant operations are expected to be primarily driven by reliability requirements set by SRP, WECC, and NERC and anticipated to have low capacity factors

Air Permit CEC impacts on Capacity Factor of New Units



Next Steps

- Prepare and issue construction engineering bid packages
- Resume permitting efforts to incorporate new units at Coolidge Generating Station
 - Pinal County Air Quality Control District
 - Arizona Dept of Environmental Quality
- Order long-lead equipment, including generator step-up transformers
- Continue Implementation of Mitigation and Commitments for Randolph Community
 - Continue work with Community Working Group (CWG) on ongoing commitments
 - Work to implement new commitments in Amended CEC
- Expect 6 units online by summer 2026, 6 units by summer 2027

Questions submitted by Director Miller

Are we installing an additional 12 more units at Coolidge along with the 2 that were already placed at Copper Crossing? So that we are actually at a total of 14 not 12?

- Yes, we are installing an additional 12 units at Coolidge along with the 2 [units] that were already placed at Copper Crossing
- In SRP's Request for Rehearing filed with ACC May 16, 2022, SRP stated that reducing to twelve units at the Coolidge site "would not obviate the need for the other four units – SRP would have to find location(s) for the other four units, as all sixteen are needed to serve SRP's customers."

Color Context: Question submitted by Director R. Miller / Response provided in writing by CEO J. Pratt / Additional context and information 06/27/2023 Power Committee, B. Olsen

Running 12 units at 30% capacity factor has a higher environmental impact than running 16 units at the 10% capacity factor that was in the original CEC. Also, this was specifically asked during our Board meetings as well, so management has substantially changed the proposal that was approved by the Board.

- SRP never proposed a 10% capacity factor in the initial CEC, and there was no 10% capacity factor limitation in the CEC for CEP that was approved by the Line Siting Committee
- SRP declined to agree to a 10% capacity factor limit and explained its reasons in a response to ACC Commissioner Kennedy filed on December 21, 2021
- SRP management informed the Board as to the historical capacity figures at Coolidge and that such were in that 5-10% range.
- The capacity factor limit accepted, and the mitigations proposed for the expansion, will reduce both the potential to emit and the actual emissions of PM10 directly affecting the community of Randolph. In addition, SRP anticipates operating the new turbines similarly to the existing turbines at Coolidge.

Color Context: Question submitted by Director R. Miller / Response provided in writing by CEO J. Pratt / Additional context and information 06/27/2023 Power Committee, B. Olsen

From an environmental emissions perspective, this amended CEC is potentially 2.25X more impactful to the environment than the original CEC and that doesn't even count the 2 additional units at Copper Crossing.

- There is no environmental impact increase associated with any capacity factor change because there never was a capacity factor constraint
- Regulated emissions are capped on an annual basis by the permit consistent with applicable standards administered by a combination of Pinal County Air Quality Control District, ADEQ, and EPA
- There are no proposed changes to the caps for regulated emissions on an annual basis from the original project to the amended project

Color Context: Question submitted by Director R. Miller / Response provided in writing by CEO J. Pratt / Additional context and information

Adding 20% to the capacity factor greatly changes the financial aspects of this project and none of those financial impacts have been communicated or approved by the Board

 There has been no addition of capacity factor. SRP's current resource plan and associated modeling already included 16 units (independent of location) of the same design. So, there is no difference in financial impacts from how the model would anticipate operating / dispatching the units.

Color Context: Question submitted by Director R. Miller / Response provided in writing by CEO J. Pratt / Additional context and information

06/27/2023 Power Committee, B. Olsen

Adding 20% to the capacity factor greatly changes the emissions of this plant and will SRP now have to get a new air quality permit from the Pinal County? This site is already in severe non-attainment area according to EPA. How does adding 12 additional units help the air quality in this area?

- There is no increase in capacity factor
- SRP will obtain other permit revisions necessary to operate the project
- This area of Pinal County is listed as severe non-attainment for PM10, and permitting approach plus road paving will further reduce emissions

Applicable Emissions Limits in Permit and Revised Permit Application		Amended CEC Mitigation: Road Paving	
Current Facility PM10 Annual Limit (12 units)	<mark><250 tons/yr</mark>	Annual Reductions to PM10	~20 tons/year
Proposed PM10 Annual Limit for Existing Units (12 units)	<69.9 tons/yr	Anticipated Total Plant	~16 tons/year
Proposed PM10 Annual Limit for New Units (12 units)	<69.9 tons/yr	PM10 emissions 2022 Actual Coolidge PM10	
Plantwide PM10 Limits after Revision (24 units)	<mark><140 tons/yr</mark>	emissions (12 Units)	~8.1 tons

Color Context: Question submitted by Director R. Miller / Response provided in writing by CEO J. Pratt / Additional context and information

06/27/2023 Power Committee, B. Olsen

How does SRP Management get to unilaterally decide to spend \$23.751M dollars in financial commitments to the Randolph Community with no input from the Board? I think this variance should need to be approved by the Board and not just a decision made by management.

- The SRP Board authorized management to proceed with the CEP with a not to exceed budget of \$953 million, and to obtain any necessary permits or modifications to existing permits for installation of the units
- Amended CEC is a permit necessary for installation of the units
- Management has notified and updated the Board many times throughout the CEP process
- The settlement as reflected in the Amended CEC conditions and mitigations, as well as implementation of the project are estimated to be approximately \$775 million, which is within the \$953 million budget established by the Board

Color Context: Question submitted by Director R. Miller / Response provided in writing by CEO J. Pratt / Additional context and information 06/27/2023 Power Committee, B. Olsen

How does this settlement impact the pending AZ supreme court case?

- If the ACC approves the Amended CEC, SRP will dismiss its pending appeal in the Court of Appeals
- SRP is in process to dismiss its appeal

According to the ACC open meeting agenda it seems they plan to decide this without taking any public comments. Could you please work with the ACC to ensure that comments will be heard?

- The ACC sets its agenda and process as to whether to take public comment, and SRP will abide by whatever the ACC decides to do on this matter.
- The ACC allowed for public comment at its open meeting on June 21st, when it approved the Amended CEC. There were public comments provided by approximately 10 people at the meeting and more than 40 written comments submitted to the docket.

Color Context: Question submitted by Director R. Miller / Response provided in writing by CEO J. Pratt / Additional context and information 06/27/2023 Power Committee, B. Olsen