

**Regional Energy Resource Council (RERC) Minutes**  
**Tennessee Valley Authority**  
**July 16, 2024**  
**8:30 a.m. Eastern**

**Meeting location:**  
**Downtown Knoxville Marriott**  
**Knoxville, Tennessee**

The Tennessee Valley Authority (TVA) Regional Energy Resource Council (RERC, or Council) convened for the 4<sup>th</sup> meeting of the 6<sup>th</sup> term, beginning at 8:30 a.m. Eastern on Tuesday, July 16, 2024. Meeting presentations are available at [www.tva.gov/merc](http://www.tva.gov/merc).

**Council members attending in-person:**

Jan Berry, Marquita Bradshaw, Monte Cooper, Erin Gill (Chair), Rodney Goodman, Chassen Haynes, Dan Miller, Doug Peters, Boyd Pettit, Erik Schmidt, Patricia Sims, Alexa Voytek

**Council members attending virtually:**

Rebecca Goodman, Pete Mattheis

**Designated Federal Officer:** Melanie Farrell

**Designated Federal Officer Alternate:** Althea Jones

**Facilitator:** Jo Anne Lavender

- Appendix A – TVA staff and stakeholders who attended the meeting
- Appendix B – Agenda

**Purpose**

The purpose of the meeting was to provide updates on TVA’s Integrated Resource Plan (IRP) and to obtain an RERC Advice Statement related to IRP scenarios, strategies, resource assumptions, and IRP public and stakeholder engagement.

**1. Welcome and Introductions**

- A.** Melanie Farrell, Vice President, Valley Engagement & Support, TVA, welcomed everyone to the meeting and thanked them for their time and dedication. She noted that the last time the group was together, it was for a virtual meeting during a peak winter weather event, and that this meeting was taking place during a peak summer event.
- B.** Erin Gill, RERC Chair, welcomed everyone to the meeting and said that RERC members’ thoughtful dialogue will help shape the RERC’s Advice Statement to the Board about the IRP.

**2. Designated Federal Officer Briefing — Melanie Farrell**

(Presentation can be found at [www.tva.gov/merc](http://www.tva.gov/merc))

Melanie Farrell explained that during the current heat wave, TVA is seeing some of the highest peak loads it has seen this season. TVA has invested in its power system, and the system is performing well. Other topics she discussed include:

- The region is growing at three times the national average, and the Valley Pathways Study predicts the region will see the population grow as much as 22%. The demand for energy is growing significantly, and with retiring its coal fleet in the next decade, TVA is making hard asset decisions about what is needed to meet demand.
- TVA will invest \$15 billion over the next three years, including about \$11 billion on new construction, environmental projects and strategic transmission projects.
- TVA plans to use energy efficiency and demand response programs to offset nearly 30% of its anticipated load growth and peak demand spikes through FY 2033.
- TVA stays focused and grounded in its mission of providing affordable, reliable energy; protecting the environment; and promoting economic prosperity.
- RERC advice helps the Board shape TVA's strategic direction.

### **3. TVA's Integrated Resource Plan Update**

(Presentation can be found at [www.tva.gov/lerc](http://www.tva.gov/lerc))

#### **IRP Overview**

##### **Clifton Lowry, Director, Resource Planning & Strategy**

(Presentation can be found at [www.tva.gov/lerc](http://www.tva.gov/lerc))

Clifton Lowry explained that the IRP is a study of how TVA could meet customer demand for electricity between now and 2050 across a variety of futures. A programmatic Environmental Impact Statement (EIS) accompanies the IRP to evaluate its environmental effects.

The key objective of the IRP process is to establish a strong resource planning foundation. This is accomplished by exploring a broad range of future scenarios and evaluating strategies designed to construct portfolios that leverage a range of resource options. The result will be a strategic portfolio direction that guides TVA's future asset decisions under a least-cost planning framework. TVA's IRP process ensures public involvement and direct engagement with a diverse group of stakeholders.

The 2025 IRP, which looks out to 2050, will serve as the foundation for future TVA strategies related to power-generation assets, commercial programs and financial plans. As mandated through the Energy Policy Act of 1992, Section 113, TVA applies fundamental least-cost planning principles – low cost, risk informed, environmentally responsible, reliable, and resilient, diverse and flexible. The IRP serves as a compass that guides strategic direction, and it does not make site-specific decisions.

Lowry reviewed key milestones in the IRP process to date, which began in spring 2023 with a Notice of Intent that initiated a 45-day public scoping comment period. During that time, TVA gathered public input that helped frame the IRP effort. In summer 2023, TVA convened the IRP Working Group, a diverse group of stakeholders who are helping guide the architecture of the IRP. TVA currently is conducting modeling and is working closely with the Working Group to evaluate results. TVA also is performing an environmental review of IRP modeling in the accompanying EIS. When the draft IRP and EIS are published, a 60-day public comment period will begin. TVA will review and evaluate public input and conduct further analysis to appropriately incorporate feedback provided during the public comment period into the final IRP. The final EIS will evaluate the final IRP recommendations to determine the

environmental impacts. After the Board reviews and makes a decision on the final IRP recommendations, TVA will publish a Record of Decision.

## **QUESTIONS/ANSWERS**

**One of the key takeaways you mentioned is that TVA is not permitted to direct a specific resource mix or adopt firm policy decisions regarding what resources are to be included in or excluded from that mix. Can you explain that in terms of the IRP planning process?**

*Lowry: When we get to resources available for selection, we can't bias one resource for selection over another. Decisions are based on reasonable costs, reasonable characteristics and reasonable assumptions on how different resources will work together in a portfolio. We can promote resources in a strategy to understand the impact of that promotion. We promote a resource by requiring the model to pick a certain amount of a resource OR by reducing the cost of that resource so we get more of it in the portfolio. That is not us biasing one resource over another. That is the mechanism we use to get a portfolio that we can then evaluate and ask ourselves, "How much does that cost? What are the reliability implications of that? What are the environmental impacts?" But we have to start with a foundation that resources are appropriately positioned for selection based on factors such as cost and their capability to contribute to seasonal peak and energy demands.*

**Who is the "we" you mention?**

*Lowry: I am referring to TVA and the IRP Working Group. It is a collective effort to construct the framing of the IRP, do the modeling, review the modeling results and deliver a draft IRP for public input.*

**At some point, someone needs to select the specific resources.**

*Lowry: The TVA Board and leadership make these decisions with a great degree of stakeholder evaluation. The robust engagement process carries through to the specific decisions as well.*

**For the \$1.5 billion in energy efficiency and demand response subsidies, when will they be available?**

*Farrell: It is out now. It was announced as a five-year plan. On the energy efficiency side, there is a bit of a ramp-up to encourage engagement, get contractors on board to execute on programs, etc. For demand response, we are working with industrial customers, direct-serve customers and local power company customers that are interested in increasing their demand response options.*

**The IRP was originally the 2024 IRP, and now it is the 2025 IRP? Why was it delayed?**

*Lowry: We were working toward initially releasing the draft in the early spring of this calendar year. In the time moving toward the draft IRP release, we became aware that the Environmental Protection Agency's new Greenhouse Gas (GHG) Rule would be released this spring in its final form. The prior draft rule included regulation on new gas and existing gas; the final rule does not include regulation around existing gas. That will come later. In consultation with TVA leadership and the Board, the decision was made to pause the release and go back to the IRP Working Group with the new regulations in place to understand how to incorporate that final rule in the IRP. It provided us a little time to understand the rule and collect feedback and to engage with the Working Group on some other elements that we would typically address between the draft and final. We are going to end up with a more robust draft when it is released.*

**Regarding community engagement, have you asked students or other groups to participate personally in those community engagement? How did that work?**

*Farrell: We haven't specifically targeted college students. We try, through our regional field teams, to get the word out. Later in the meeting, we will talk about our planned stakeholder engagement for when the draft IRP is released. If you have recommendations on public engagement, we would love to hear more.*

## **IRP Process and Scenarios and Strategies**

### **Candy Kelly, Senior Manager, Resource Strategy**

(Presentation can be found at [www.tva.gov/rerc](http://www.tva.gov/rerc))

Candy Kelly reviewed how the IRP process works. It begins with evaluating scenarios (future worlds that are outside TVA's control), developing strategies (business strategies TVA could employ in those scenarios), and evaluating resource options. TVA modeled five strategies in six scenarios, generating 30 unique potential resource "portfolios" – the power supply mix that results from assessing a particular strategy in a particular scenario. Ultimately, the study will lead to a recommended strategic portfolio direction that would guide TVA decisions for decades to come.

Kelly described the detailed process TVA and the IRP Working Group used to develop the scenarios, which are:

- Scenario 1 – Reference Case
- Scenario 2 – Higher Growth Economy
- Scenario 3 – Stagnant Economy
- Scenario 4 – Carbon Regulation
- Scenario 5 – Carbon Regulation Plus Growth
- Scenario 6 – Reference Case with Greenhouse Gas Rule

She reviewed energy demand forecasts, peak demand forecasts and major assumptions in the carbon regulation scenarios.

Kelly also described the detailed process TVA and the IRP Working Group used to identify the strategies, which are:

- Strategy A – Baseline Utility Planning
- Strategy B – Carbon-free Innovation Focus
- Strategy C – Carbon-free Commercial Ready Focus
- Strategy D – Distributed and Demand-Side Focus
- Strategy E – Resiliency Focus

Kelly reviewed the Strategy Design Matrix, which provides the roadmap for how resource promotions are applied in the strategies. She also provided a detailed review of the metrics that will be used to help evaluate performance of the IRP core portfolios and associated tradeoffs.

## **QUESTIONS/ANSWERS**

### **In the Reference Case with GHG Rule, there is a significant drop in demand forecast. What drives that?**

*Kelly: What we're seeing from our forecasters is that with the GHG Rule, utilities are adding more expensive new generation to meet demand due to the requirements of the rule. So, essentially, you have a higher cost of electricity, and that dampens demand.*

**Can you talk about elasticity?**

*Kelly: Regarding elasticity, we study the economic cycle, then we move into a more commodity price-driven load forecast. Then, we start to develop the load forecast. The forecasters do iterations back and forth until they get to a steady state. This is a modeling exercise. There is not a significant amount we know about how customer preference will be affected; this is the model effect.*

*Hunter Reed: There are three main drivers. The assumption is that in meeting regulatory requirements, electricity prices increase higher than they would have otherwise. That encourages greater natural adoption of energy efficiency programs. As an end user, if I think my bill may increase, I may be more likely to adopt energy efficiency measures. There is also the substitution effect. It is particularly pronounced for industrial and electric vehicles. If I have the option to go with an electric vehicle that's costing more now to charge in comparison to a more traditional hybrid or internal combustion, I might stick with the traditional, non-electric version. There is also less incentive for industrial entities to switch from, say, a natural gas or coal-fired process to an electrified one.*

**What have you cued in on that is different between the rules that were adopted versus what you would have expected under a more robust regulation framework?**

*Reed: The regulation case assumes broad decarbonization, so we see higher electric vehicle adoption that's pushing up demand. We also see higher levels of electrification in the carbon regulation case because there are other macroeconomic forces that are pushing them. So there may be other regulations that are focusing folks on electrification.*

**Is that true even with the carbon tax not coming until 2034? Is there a carbon tax assumption?**

*Reed: It is part of the carbon tax. Part of the general scenario narrative would be that there is a greater push to electrification to reduce carbon emissions.*

**If there is a requirement now based on the finalized EPA GHG Rule, why isn't that the Reference Case? If it is the final rule and a requirement, then it's not an option. Are you assuming the rule might be overturned in the future?**

*Kelly: We have had a lot of conversations with the Working Group on whether – and how – the rule stands. Because we are not sure how the future will unfold, we opted for a reference case with the GHG Rule and one without it. It could be a potential outcome that the rule is overturned.*

**I have seen presentations where people mention there is anxiety about whether their refrigerators and AC are going to work if electric vehicles are sucking up all the energy. In terms of assumptions, what is causing the growth?**

*Kelly: With the Carbon Regulation Plus Growth scenario, clean technology advancement is prominent in that scenario. We've also got high electric vehicle adoption. And we have cheap energy. So, industry is moving forward and there is the premise that with the growth you've got productivity increasing. Productivity is increasing because you have better interest rates, favorable economic cycle, small businesses created and industry ramp-up.*

**Can you give us a sense of how much of that is going to be auto manufacturing and EV and battery manufacturing, how much will be data centers and AI, how much will be new residential – a breakdown like that. They all have different impacts on the grid. How do you get to these forecasts?**

*Lowry: For the construct of where the load comes from today, it is one-third residential, one-third smaller commercial and industrial, and one-third larger commercial and industrial. How they are*

*served, whether it's through the local power companies or direct services from TVA, is a different mathematics exercise. Your point is well-made that the basis of how you build a load forecast for each scenario starts from that point. Given these types of scenarios or these types of futures, we certainly could see that fabric of small commercial and industrials and larger industrials evolving, depending on what type of regulatory regime you're in. When we build load forecasts, we create a statistically adjusted end-use model. There is a great deal of uncertainty when you're going out this far, so there is a lot of data and detail that considers how things might fall.*

**Do you combine strategies? It seems like you get the biggest impact if you use demand response and distributed together with the carbon-free strategies.**

*Kelly: In the modeling exercise with the IRP framework, we are evaluating the tradeoffs, so we keep the strategies as distinct and separate as we can to determine the risks and the benefits.*

**I noticed the Reference Case speaks to weather normal trends. Where are non-weather normal trends accounted for?**

*Kelly: We used a weather normalized load forecast in all of these scenarios. The reserve margin handles things like extreme weather and forced outages.*

**In the metrics, is CO<sub>2</sub> the only greenhouse gas emission that is evaluated?**

*Kelly: CO<sub>2</sub> is on the metrics scorecard. We are doing a life cycle analysis on all greenhouse gases, and that will be included in the EIS. Since CO<sub>2</sub> is the largest component, we are using that one on the metrics scorecard.*

**Related to the metrics scorecard, I am assuming that in the "diverse, reliable and flexible" category, the model is not constrained by having to maintain a resource coverage ratio. It's not constraining the model based on a particular limit of that ratio, correct?**

*Kelly: Resource planning has to maintain a certain amount of capacity over demand. It does not restrain any selection to an operating stability or flexible coverage ratio.*

**For the metrics, are you evaluating them together? Does that track with least-cost planning?**

*Kelly: Yes. We evaluate them all together. It shows the tradeoffs between the various goals of least-cost planning.*

**When you do a risk analysis, each scenario has a contingency associated with it and that can be monetized, especially when you do a Monte Carlo assessment. I assume you're saying that one scenario has more risk associated with it than another and you would have a contingency associated with your different scenarios. How do you handle contingency?**

*Kelly: The metrics scorecard helps us define what contingencies we may need. This is an exercise to help us think about what kind of assets we need for the future. We are not planning contingencies from any of these scenarios or strategies outcomes. Contingency comes in actionable steps. We have scenarios; strategies; stochastics, which look at volatility; and sensitivities, which take a discreet portfolio and change one input, which gives us what contingency we need to think about.*

**My understanding is that the Greenhouse Gas Rule doesn't impact your coal plants, because you are retiring them anyway, and it doesn't impact your plans for new gas, because you are going to build them capable of burning hydrogen and/or capturing carbon. The only unknown at this point is the impact on existing gas, and the rule isn't final on this. In terms of daylight between the Reference Case and the Reference Case with the GHG Rule, I would expect it to be very small right now.**

*Reed: That is an accurate summary. The final Greenhouse Gas Rule focuses on existing coal and new gas. For future assets, we are future-proofing as much as we can so they are hydrogen capable and capable of being retrofitted. We expect potential additional legislation on existing gas later this year.*

## **IRP Resource Assumptions**

**Hunter Reed, IRP Project Manager**

(Presentation can be found at [www.tva.gov/rerc](http://www.tva.gov/rerc))

Hunter Reed presented information on the resource options TVA could use to fill its needs in the future. The IRP considers a broad range of resource options, including traditional supply side resources such as nuclear, gas, coal, renewables and storage. It also looks at demand side programs such as energy efficiency and demand response.

Reed explained that generating resources work together to reliably meet electricity demands at the lowest cost. Most resources can be thought of in terms of their operational mission – baseload (designed to run continuously), variable (runs intermittently), intermediate (is flexible and runs as demand requires) and peaking (supplies additional power to meet high demand). He described the ways all IRP scenarios incorporate tax credits available through the Inflation Reduction Act (IRA).

He reviewed each of the resources being considered, the technologies available within each resource, their key characteristics, capital cost assumptions and benchmark comparisons for the resources. He also explained distributed generation resources methodology, demand-side programs modeled in the IRP and demand-side resources methodology. The combination of IRP scenarios, strategies, and resource options will help TVA and stakeholders evaluate a broad range of potential future conditions, business strategies, and portfolios.

## **QUESTIONS/ANSWERS**

**The capital cost and life cycle cost are important, especially when you're thinking about the rate structure. The graphic for nuclear resources shows overnight capital costs. Are you considering other costs associated with the life cycle?**

*Reed: Yes. We incorporate a number of different costs. We have the overnight capital cost, ongoing fixed costs that happen every year (staffing, maintenance needs) and variable costs associated with fuel and variable operations and maintenance. Every hour that unit is operating, there is going to be some sort of cost associated with it.*

**When some early gas units were deployed, neighborhoods complained about the noise. Is that a factor now with newer technology?**

*Farrell: What I am going to say is anecdotal based on conversations with some of our construction folks, but I believe TVA has done noise studies and that this is not a factor now. I will take this as a follow-up action item to find the answer.*

**On the gas resources slide, what dictates the upper limit of summer net dependable capacity? Cost? Siting? Availability? Hydro would be fixed but what determines the others?**

*Reed: These represent one plant's construction. We could build two plants in one year if the model needs it, subject to reasonable limits. This is based off the typical configuration for that technology type.*

**For the cumulative limits on combined cycle with carbon capture and storage (CCS), what is driving that limit?**

*Reed: We have been working with colleagues in TVA's Innovation & Research group and other industry partners to understand the potential for CCS in the Tennessee Valley. Based off some of our early studies of where we think we could pipe that carbon to and put it in the ground to permanently sequester it, we felt like an 11 plant total limit for CCS was reasonable – just to make sure that we're not allowing the model to overbuild CCS units when we might not be able to find a home for all of that sequestered carbon. We are continuing to study that, so that will be further refined in the future.*

**What is your assumption for solar regarding the purchase of land and new transmission lines?**

*Reed: All of that is bundled as part of the assumed costs. The way we model solar is, traditionally, TVA has utilized purchased power agreements where we pay on a per unit of delivered megawatt hour energy to us. All of that cost is included, so the cost of land would be included in the capital costs to build the asset and then the transmission costs are also incorporated.*

**On the renewables slide, are the 1,000 megawatt (MW) cumulative build limits, except the last wind category, the annual limit? What is that based on? What are some of the factors on that limit?**

*Reed: The 1,000 MW limit in the reference case is based off our expectation of what we could reasonably expect to execute on. This is a long-term assumption. We would certainly not say that TVA would never do more than 1,000 a year. But if you look over the five-year horizon, that's something that – at this point – we think is sustainable. There are a number of factors. Transmission is a large one. When you look at the transmission investment required for solar resources, there are the lines running from the solar facility and connecting to existing lines. But that may also require upgrades elsewhere on the system, and we have to incorporate the time required for that. And we also have to incorporate factors like labor availability and supply chain availability. All of that goes into the 1,000 MW. That is for the reference case in the Baseline Utility Planning strategy. We do increase these amounts to explore what could happen in a higher limit. In the highest promotion cases, the highest solar limit is 1,850 MW for some of our scenario and strategy combinations.*

**You never hear about expansion of hydro. Is there zero opportunity for expansion of hydro? Would you build another dam?**

*Reed: There have been studies, and construction of a brand-new dam is quite costly. We are not exploring that in the IRP, just because of cost and the fact that the Tennessee River system is near full potential. That is why we are only looking at upgrade options. We are exploring hydro pumped storage. We are very proud of our Raccoon Mountain pumped storage facility, and we are exploring the potential of an additional 1,600 MW of pumped storage.*

**I am thinking about the workforce perspective. Is that something you consider as you rollout new technology and build out this new infrastructure? Is the cost of skilled labor calculated in the cost?**

*Reed: The overnight capital cost is meant to incorporate the cost of labor with building an asset. As we get into more specifics beyond the IRP and as we develop our asset strategy and start to determine the assets we plan to build over the horizon, that is when we start working with human resources and partners such as colleges and trade associations to say, "This is what is coming and this is the type of skilled labor that we need." We incorporate that cost into our assumptions.*



**When it comes to gas plants and hydrogen and how it possibly fits in the generation mix, is that largely dependent on existing or planned infrastructure around combined cycle plants? Is there other pipeline work, or is it an external factor that you can do it if the resource can get to us?**

*Reed: Most modern gas combustion turbines are hydrogen capable, so that when you say hydrogen capable, that could be a blend percentage (a certain amount of hydrogen and natural gas). In the IRP, when we look at these hydrogen units, particularly in our carbon regulation scenarios, we are assuming that there's hydrogen that is available to be purchased on some sort of green hydrogen market. There are things that need to happen in the broader world to make it a reality. From an IRP perspective, we have an assumed cost using benchmarks on what green hydrogen would cost. We assume we can get that and burn it in these hydrogen capable units.*

**For distributed generation resources, I know TVA is starting some vehicle-to-grid pilots with school buses and has spoken of EVs as a potential grid resource. Was that included in the analysis of distributed storage?**

*Reed: We do not have vehicle-to-grid as a specific program. It has the characteristics of distributed storage, so when we look at distributed storage and when we calculate these forecasts over time, we don't know exactly what that looks like. We are assuming the combination of distributed storage across the Valley equals a sum total amount that we then have future programs to dispatch off of. We don't get that specific in the IRP. As we continue to work with Innovation & Research and with partners, that will flesh out over time.*

**With storage resources and lithium ion battery technology, are you looking at that as a non-distributed utility scale option? Battery potential is pushed into this vague demand response option.**

*Reed: Yes, in a way. When it comes to distributed generation, we make some generic assumptions around four-hour duration, but we're assuming that it could be rolled into a program where we can dispatch it based off system needs.*

**In the system cost or in total resource cost, are you accounting for grid benefits of things like batteries and storage where you are providing some ancillary system benefits other than just raw kilowatt hours to the system?**

*Reed: In terms of the costs we are capturing, our storage resources get a credit – that's a flexibility resources credit that is accounting for intra-hour benefits. Our modeling is done from a long-term perspective on an hourly basis. There are sub-hourly benefits of being able to smooth out solar or wind variability or demand variability; that is captured from a generation utility perspective. Some of the other benefits may not be, but that is where follow-on studies like the Integrated Transmission Plan may hone in on some of those.*

*Kelly: We are including what it would cost to add that resource net of any tax credits or reduced bills. We are not capturing it on their side; we are capturing it on our side.*

**The slides show some costs for distributed generation and demand response. They were dollars per kilowatt. Can you compare those to the cost of central generation assets? The data is in the slides.**

*Reed: The tricky part, especially when it comes to the demand side resources, is that they offer different benefits. So it's difficult to come up with one cost metric that really says, "This one graph shows you which resource is best," because they really work together. Taking it to the extreme, you couldn't have a system that's fully demand response, because then there's nothing being generated.*

**I thought I saw the actual cost per kilowatt in the appendix?**

*Reed: That is the cost to maintain that program. It represents the credit we would pay an industrial facility to be interruptible on that demand response. We would pay them a monthly credit, and then whenever we do call on them, then we also pay them for their downtime.*

**That wouldn't include the cost of any equipment like a solar panel on a facility? That's not comparable to the overnight capital cost?**

*Reed: No, in the case of demand response, it is a separate thing.*

**If you want to encourage distributed generation, do you look at changing your net metering policy to encourage more distributed generation?**

*Reed: That is outside what the IRP looks at.*

**In modeling, how do you account for fielding out a bi-directional system to make sure that as people do community solar and different things like that, that that is in this model?**

*Reed: Those investments are something that, depending on scale, would be part of the Integrated Transmission Plan or a distribution-level plan. The IRP is more focused on the generation side.*

**Do you look at large pockets of generation from micro-energy sources that could come from community solar?**

*Reed: We do from the standpoint of the distributed generation adoption forecast. But the IRP is location agnostic. We do not say from the IRP study where that would be locationally. We are saying that if at a system level we had this level of distributed resources, this is how the rest of the system needs to operate and build out around it.*

*Farrell: Distributed resources could be a microgrid, community solar, those sorts of things, and they are all captured in that distributed resources definition.*

**Can you explain the gas generation portion of the distributive model?**

*Reed: On the distributed side, we have a forecast for what's called combined heat and power. Large facilities like a hospital may install this local CHP that provides them some benefit and provides distributed generation sort of off-grid. We do look at that growth. But the slide on gas resources was focused on resources that TVA would build.*

**Does it consider the Allen aeroderivative combustion turbines, New Caledonia and Cheatham gas plants as existing resources?**

*Reed: In general, if we have announced an approved project, it is included in the study. However, non-approved projects are generally not included.*

**Are there published drafts of the EIS for New Caledonia?**

*Farrell: The New Caledonia EIS is posted on the TVA website.*

**I have a concern about nuclear being labeled as carbon free. In the slides, it doesn't actually account for the environmental impact or storage for whatever type of waste comes from the new technologies or existing technologies. Can we include that next time?**

*Lowry: The EIS will characterize some of those issues, particularly with regard to life cycle greenhouse gas cost. I know you are referencing nuclear waste, but that is covered in the EIS. Certainly, if we get comments during the public comment period that we need to do more with that, we can expand that opportunity.*

## Stakeholder Engagement Opportunities

Amy Edge, Director, External Relations

(Presentation can be found at [www.tva.gov/rerc](http://www.tva.gov/rerc))

Amy Edge said stakeholder engagement is critical to many of the strategic decisions TVA makes, and it wants to provide as many opportunities as possible for people to share their thoughts and concerns about the IRP. She asked RERC members to provide input on what else TVA could do to ensure that it is informing the public, bringing awareness about the IRP and soliciting input from all stakeholder sectors.

Edge reviewed the opportunities that TVA has provided and continues to provide for stakeholder engagement, including the Utility of the Future Information Exchange, a stakeholder group that provided recommendations and considerations prior to the start of the IRP; public scoping, which took place at the onset of the IRP to gather public input; public outreach and briefings such as webinars; Board public listening sessions, held quarterly; two Federal Advisory Councils – the RERC and the Regional Resource Stewardship Council (RRSC), whose meetings are open to the public and provide public listening sessions; IRP Working Group; TVA regional field team and Federal Affairs engagement at the local level; and 10 open houses across the region and two online public webinars that will take place during the public comment period after the draft IRP and EIS are published.

Edge noted that the [TVA website](#) has been revamped and provides the latest information on meeting recaps, materials such as FAQs and fact sheets, reports, meeting announcements and registration links. She said stakeholders and the public can sign up for the IRP mailing list on the site, and they will be notified when documents are released. People are invited to submit comments on the draft IRP and EIS after they are released.

## QUESTIONS/ANSWERS

**Regarding the scoping process and the public comments during that process, who was that commentary delivered to and how is it taken into account?**

*Edge: The Scoping Report is on the IRP website. It was provided to the TVA executive team and others across TVA, and it was presented to the TVA Board at a lunch and learn session. It is a critical information source for TVA, the IRP team and the IRP Working Group.*

**When you receive public comments after the draft IRP and EIS are released, how will you document that they were listened to and how they were positioned?**

*Clifton Lowry: The final EIS will include responses to comments. At the public open houses, there will be a mechanism to submit comments as part of the NEPA process.*

*Edge: There are the official comments that come through the NEPA process, but the conversations we're having throughout the process are also being taken into consideration. We're sharing the information with the right folks, so you are being heard in a way that will have an impact.*

## 4. Public Listening Session

**John Todd Waterman**

Membership in the world isn't a choice we can make. We all live here. I am appalled by TVA's refusal to acknowledge any responsibility beyond the Tennessee Valley or past the next 20 years, to admit its share of upstream methane leakage that makes frack gas worse than coal for the climate, to admit the

massive harm of CO<sub>2</sub> generation. Those emissions will have devastating effects on every child to come and every ecosystem they depend on everywhere in the world for as close to forever as we can imagine.

Calculating future renewable energy and storage costs using current costs as if they were static, instead of extrapolating them based on their plunging prices, would get you fired in most businesses. Neglecting to acknowledge climate destruction isn't just sloppy, short-sighted planning; it is negligent homicide. TVA is already being sued, and that is just the beginning. We and TVA have no morally defensible choice but to quit using fossil fuels as soon as we possibly can. Should TVA stay mired in the past or should it lead our great nation to a bright, livable future?

### **Sandra Kurtz**

I am a volunteer with the Sierra Club Cherokee Group. I am an environmental educator, and in the past was the education specialist for the now-closed TVA Energy Center in Chattanooga. I wanted to address the inclusion of nuclear in the IRP. I live in Chattanooga, and we are among those most exposed to radiation in the air and tridium in water, because all seven nuclear reactors are nearby. As the wind blows, we get air from as far away as Browns Ferry. I would hope that TVA in this IRP would look to phasing nuclear power out of our future. The existing ones are well beyond the 20 years of operation for which they were designed. If they receive relicensing, they will be 80 years old.

You stated that TVA has a target to be carbon-free by 2035, and it appears you are counting on nuclear to get you there. We can argue about if they are carbon-free, given the mining and fuel chain preparation required to deliver and load the pellets needed for fission. They are certainly not waste-free and not radiation-free, even on daily basis. And never mind if there is an accident. The nuclear industry says small modular reactors will get us to carbon-free by 2035. Mycle Schneider, coordinator, editor and publisher of the annual World Nuclear Industry Status Report, says, in essence, don't count on that. The nuclear industry has never met any construction timelines. They take years to build. Today, there is not one small modular reactor buildable certified design. This is a climate emergency. A reality check is needed for the IRP. I believe the scenarios should not consider nuclear in any form. It cannot save us; renewables can, at a lower cost and without radioactive waste.

### **Kent Minault**

I am a volunteer with Sierra Club. Andrea Meza, Costa Rica's former Environment and Energy Minister, explained how Costa Rica became an international leader with the highest percentage of deployable renewable energy in the world. Over 90%. First, she says start with a vision. Costa Rica shows how decades of public policies with a clear objective can reduce fossil fuels to almost nothing.

Does TVA start with a vision? TVA assumes the system it already has, then makes changes to get it a little greener. This leads to a problematic and overly complicated process. An example is the decision to replace the coal-fired power from Kingston and Cumberland with gas. TVA reasons that the emissions from burning gas are close to half the emissions of burning coal. Methane burning is actually worse than burning coal, because in the near-term, it is 80 times more destructive to our climate. And this isn't even considering the environmental impact of building hundreds of miles of pipelines through farms, across streams and next to houses. Any vision for the future of TVA that is worthy of consideration will accept the overwhelming scientific consensus on climate change and plan for an energy future without fossil fuels.

In its new draft IRP, will TVA incorporate one or more scenarios that model how TVA will achieve 100% clean energy by 2035 in line with Executive Order 14057? The EPA already told you that the request to

convert Kingston coal plant to gas was inadequate. TVA, don't let yourself put the IRP off until after the election. It should be before the election, especially if these plans are rooted in long-term energy planning instead of politics. Communities have been burdened with fossil fuel emissions from TVA's coal plants for decades, and TVA should model environmental justice in the IRP.

### **Amy Kelly**

I am the campaign manager for Beyond Coal at the Sierra Club. In May, the TVA Board discussed budget transparency. TVA has seemingly shifted how it approves large generation and capital projects. Before, these were individualized Board decisions; now, they are included as a slate of projects and budgets the public can't see. Since TVA Board regulates TVA, they asked TVA's CEO to publish the list of large capital projects to be authorized by the CEO, and there was agreement to do so at the meeting in May. That still has not been published. TVA continues to move forward with a three-year, \$15 billion budget with an outdated IRP, no transparency and has given carte blanche decision-making to the CEO. The RERC is another check on TVA and needs to provide a statement of advice to the Board to publish all of these materials openly.

TVA has delayed the draft IRP based on federal rules that require the utility sector to reduce greenhouse gas emissions in line with national and global climate goals. How is TVA reworking the plan to meet these requirements? It is also essential that the IRP correct the many years of inadequate progress of fossil fuel generation with clean, cheap, reliable renewable energy and storage. TVA should incorporate the feedback, just as the RERC recommended to the Board of Directors in the November 2022 statement of advice, on environmental justice.

TVA continues with the largest planned gas buildout in the country this decade while relying on what TVA has already stated is a dated IRP and is propping up old coal plants. TVA needs more checks and balances, more transparency to the public and a new IRP that isn't weighed down by political calculations. We are hoping that members of RERC take up this cause and become more involved as federal stakeholders that advise the Board.

### **Brady Watson**

I work at the Union of Concerned Scientists. I have a lot of questions. I noticed there was mention of release of all details ahead of IRP. Does that include all underlining assumptions as well? I wanted to touch on the planned gas buildout. A study my colleagues put out examines the role of gas blackouts and outages in the past few winter storms across the country. They led to the first blackouts in TVA's history. Why does TVA plan to double down on gas when it is susceptible to extreme weather? Are those risks and costs incorporated into the IRP?

There were fuel cost adjustments in 2022 that led to some high bill spikes. How does that impact IRP planning? I hear a lot about low-cost planning, but what does that mean when we know solar is often the cheapest form of energy per megawatt hour and it is not reflected in the planning and buildout in TVA territory. What is the enforcement of using least-cost analysis? Are there repercussions if it is not done? SMRs are high-cost for resources, yet TVA seems enthusiastic about building out SMRs? How is the \$1.5 billion allocated for energy efficiency being allocated? I looked at KUB's website, and it said the Home Uplift application is closed. Where is the money going?

Regarding net metering, where would that discussion happen, if it is not part of the IRP process? We have \$156 million to do low-income solar coming from the federal government. Does it fit into TVA's plans? I am curious about the 5,000 megawatt RFP. I heard it will be met by mostly solar, but I haven't

seen it followed up on. Public engagement. How do you plan to do that for the open houses? What does that outreach look like?

**Kevin Hensley**

I am the Tennessee Farm Bureau Federation Director of Public Policy. Our economic well-being hinges upon energy costs. The United States needs an energy policy that emphasizes the expanded production of all forms of energy. We have huge energy resources in the United States, and TVA should support utilizing all domestic energy resources, including nuclear, natural gas, coal, hydrogen, methane, hydroelectric and renewables. We support nuclear energy as a clean, safe, affordable source. The United States must be realistic as we chart a course to provide energy for future generations.

We should aggressively research, develop and expand our nuclear energy capabilities. Natural gas provides an increased opportunity to diversify energy sources with fewer gas emissions than coal. We'll need a variety of renewables – wind, hydro, solar, geothermal and others – to accomplish affordable and reliable energy production. TVA needs an energy policy that emphasizes expanded production of all forms of energy. Conservation alone is not the solution to our energy problems.

We need to support upgrading the electric grid to ensure security, reliability and survivability. This must be of utmost importance in finalizing the IRP. We urge TVA to ensure affordability, security, reliability and survivability of energy production. TVA has a history of providing quality, affordable energy to almost all Tennesseans. We appreciate our relationship and TVA making sure farmers' electricity needs are met. We appreciate TVA's leadership in providing flood control and energy production throughout its history.

**Gabby Sarri-Tobar**

I work at the Center for Biological Diversity. As the largest federal utility, TVA plays an outsized role in advancing federal climate priorities and paving the way for utilities across the country to abandon fossil fuels in favor of renewable power. TVA is falling short on both fronts. TVA has one of largest planned gas buildouts in the country this decade. TVA falls well behind peers on solar and wind power generation. And TVA is obstructing climate progress at the federal level.

I encourage TVA to deliver on its promise to improve the quality of life for people in the Valley, and the RERC can make sure of this in three ways: First, the RERC should urge TVA to put together a long-term energy plan to achieve 100 percent renewable energy by 2035. This IRP is TVA's chance to reverse course and model how it can ramp up distributed renewable energy and phase out fossil fuels. TVA must incorporate environmental justice metrics in the plan and ensure the scenarios maximize solutions like energy efficiency. Second, the RERC must demand TVA stop delaying the IRP. TVA is making decisions right now based on a severely outdated IRP that fails to incorporate new federal rules on greenhouse gas reductions, executive orders on climate and environmental justice. This type of decision-making is risky and will weigh communities down with fossil fuels when renewable energy is cheaper, safer and cleaner.

Lastly, the RERC should urge TVA to hold accessible and robust hearings on the 2025 IRP. TVA is a public energy provider, yet its energy planning is one of the most difficult to access. To fulfill its duty as a public power utility and engage in transparent energy planning, TVA must release all modeling assumptions and hold public meetings that are accessible, similar to the People's Voice on TVA's Energy Plan hearing.

**Joe Franklin**

Folks can Google “House of Representatives Legislation 7595,” which would allow for greater transparency and accountability in TVA’s IRP process. This should become modus operandi for the agency. It would increase public participation and input and make the process more transparent in an effort to ensure the most efficient, affordable, environmentally conscious and reliable plan for meeting customers’ energy needs into the future. Energy democracy will be necessary to ensure all voices and stakeholders are heard in the IRP process. TVA’s poor public process and lack of transparency are flawed and increase the risk of decision-making, because TVA is insulating itself from input. The goal of achieving net-zero carbon emissions by 2050 is far too late.

Since the last IRP, Congress passed the Inflation Reduction Act. By delaying an IRP that would account for the IRA tax credits, TVA is not engaging in least-cost planning, especially for current projects. TVA should pause all actions on major generation projects under the 2019 IRP until it has a new IRP in place, since there are so many assumptions that are no longer true in 2024. Data modeling from the 2019 IRP will need to be examined and compared to new renewable energy metrics, especially concerning the social cost of greenhouse gases in the Tennessee Solar for All program.

TVA seems to be slow walking the IRP to 2025. It is inappropriate to delay the release based on an election schedule. The RERC and the Board should push for an initial draft release before the election, especially if these plans are rooted in long-term planning and data instead of politics. The energy system and IRP needs to be durable enough to function well in a rapidly changing climate instead of being modeled for a fossil fuel-based economy.

**Claire Kaufman**

Delivering a statement on behalf of Senator Ed Markey:

“It is an honor to speak to this group that works on issues that mean so much to the dream of a more affordable, clean and reliable energy future in the Tennessee Valley region. As climate disasters ravage our communities, we need to be meeting our national clean energy goals, not missing them. Unfortunately, TVA only aspires to be net-zero by 2050. That is 20 years later than the Biden Administration’s 2030 zero-carbon target for the entire country’s electricity grid. Only 3% of TVA’s energy portfolio is currently comprised of wind and solar. By contrast, more than 20% of energy produced in Massachusetts comes from solar, and the Tennessee Valley is a much sunnier region. Even when TVA has the option to replace retiring coal plants with cleaner alternatives, it has chosen to replace them with expensive gas-powered plants, including the recent proposed Kingston gas plant and pipeline, based on an inadequate environmental impact statement.

As I wrote in a letter with Congressman Cohen in March, TVA has planned the largest fossil fuel buildout of any utility in the nation this decade. And this dirty energy has not kept prices lower. TVA has an opportunity this year to change course with its Integrated Resource Plan. TVA’s IRP has the power to shape the future of energy in the Tennessee Valley thru 2050. TVA must update its resource assumptions to reflect current cost and capacity realities. These assumptions must also incorporate how the Inflation Reduction Act’s new clean energy tax credits will continue to make wind, solar and storage more available and affordable and should factor in the disproportionate and harmful impacts that fossil fuels have on environmental justice communities.

I’ve long advocated for more equitable and transparent resource management processes and policies. As our largest public utility, TVA can and should show the rest of the nation how to we can chart a path

to a clean, reliable and cost-effective future. TVA customers deserve to have cheap, renewable megawatts on the grid for their financial wealth and for their physical health.”

## 5. Advice Questions and Discussion

### Advice Questions

- The key objective of the IRP process is to establish a strong resource planning foundation. How well do the IRP scenarios and strategies and resource assumptions meet this objective?
- Has the approach taken to public and stakeholder engagement supporting the IRP been effective thus far? Are there suggestions for enhancing the approach, particularly for plans on communication and engagement following release of the draft IRP?

RERC members were asked to weigh in on these topics before the Council’s draft Advice Statement was prepared. Their comments are captured in the Final Advice Statement that is shared with the TVA External Stakeholders and Regulation Committee.

### ***RERC members’ comments and suggestions included:***

- The one thing I am still not hearing is a strong basis for decision-making between what the EPA brought up about whether or not resources should be put in distributed generation and demand respond versus centralized generation. The Utility of the Future Information Exchange made a strong recommendation about including city plans, because cities like Knoxville, Nashville and Chattanooga all have really good plans to reduce carbon emissions. There were also recommendations about local power companies with the 5% and being able to generate their own power and being able to combine capacity needs and getting LPCs to bid on it. I still don’t see the ability to make a decision between distributed generation and centralized generation.
  - *TVA: I might point back to the Distributed and Demand Side Focus strategy. You get six portfolios out of that strategy when you put it against the six scenarios that comprise one specific direction that TVA could take. There’s likely a hybrid between all of these strategies that needs to be considered when we build that asset strategy. It is important that we are focused on the distributed and demand side in this IRP. It sets the foundation to deliver the type of structure you discussed, with city planning in mind.*
- I understand this exercise to be defining the factors and parameters that are included in the IRP. Related to decarbonization and where capacities lie with each of the strategies and the technologies, it might be helpful to have a couple slides that speak to the capacities and what they can do relative to each other.
- In modeling, did you run scenarios on if policy said you can no longer use a particular technology – like gas or nuclear – and have to take it offline rapidly?
  - *IRP Working Group member: Yes. The IRP takes that into consideration. And discussion around the EPA greenhouse gas rule has been factored into that. We expect TVA to meet federal regulations. If a new regulation called for gas to be retired, we would expect TVA to do that.*
- I worry about load growth. If you think about what the next 30 or 40 years hold, I think we are going to see an explosion of load growth.
- There is talk of bringing data centers into West Tennessee, and I wonder about supporting those industries and the impact it will have on water. Do you take the indirect impact of water usage and indirect pollution from industry into account? I think about what we need to do holistically.



TVA only controls a certain amount but there is a mix of what needs to happen from households to industry for this modeling to work.

- *IRP Working Group member: Yes. The work of the IRP covers those things.*
- The scenarios are good and thorough, but if the IRP is meant to be a public-facing document, Scenario 6 is confusing. Is Scenario 6 the reference case with just the Greenhouse Gas Rule and nothing else? And is Scenario 4 regulation without the Greenhouse Gas Rule?
  - *TVA: That is correct. When we were relatively close to releasing the draft in March, there were only five scenarios. When we learned the EPA was on the cusp of releasing the final Greenhouse Gas Rule, that is when we said, "It's going to feel like a little bit of a gap if we release this and a month later, you have this final rule drop and we have not incorporated it." That's what became the sixth scenario – Reference with Greenhouse Gas Rule. The final rule doesn't include existing gas plants, but it does include new gas plants and coal plants. Scenario 4 incorporates the EPA's proposed Greenhouse Gas Rule, which includes rules around existing gas, which the final rule does not include.*
- I think it would be less confusing if Scenario 6 was the baseline. The new Greenhouse Gas Rule is a rule and it should be the baseline, rather than having two different reference baselines – one that complies with the law and one that doesn't.
  - *TVA: One clarification: We are not characterizing the baseline. We are characterizing scenarios that we will then build plans around. The reference point is actually not the portfolios or scenarios within this IRP, but the IRP strategic direction relative to 2019, which did not have the IRA and some of this regulation.*
- The IRP metrics should be updated to include an environmental justice metric. There is not clarity about energy waste or pollution that will come from the different processes and what communities that would impact. With an environmental justice metric, we would be able to see how the other metrics stack up based on how it really affects people.
  - *TVA: The IRP is not location-based; we don't drive to a specific location to assess a community until we get to a specific project. We capture capital costs and operational costs, and within those cost characteristics we capture costs for things like handling and managing known waste. We do have a metric for waste on the metrics scorecard. The EIS is more of the environmental review and captures more of the nuclear waste and the things you are talking about.*
- A phrase that resonates with me is, "The most innovative thing you can do is listen." In hearing the public comments, it is clear there are still outstanding questions. If you're getting certain questions frequently, posting a Frequently Asked Questions on the website can be helpful. It also is good to have a mechanism where people can submit questions and the question and a response get posted. That can help increase engagement and transparency.
  - *TVA: We have a recently refreshed IRP website which has FAQs and a mailbox where questions can be sent. They are added to the FAQs. The fact that you weren't aware that the IRP website is available and has that information speaks to the fact that we need to promote it in a more effective way.*
- How do you promote public webinars? Do you have metrics that measure engagement? Are you comparing it to engagement in 2019?
  - *TVA: The information is posted on the IRP website, shared on TVA social media feeds, and through stakeholder and customer email communications. We have Customer Connections, which goes to local power companies and direct served customers, and a stakeholder email that notifies stakeholders of meetings. It sounds like we have an opportunity to highlight the availability of that information in a more effective way. Regarding metrics, the communications team tracks metrics such as the number of*

*participants in a webinar and how many questions were asked. We are comparing it to 2019 and working to do more. We welcome suggestions from stakeholders and the public.*

- I would suggest using this group as a resource. We can lean into our connections.
- It sounds like you are doing a lot of digital outreach. I would suggest more printed materials – in senior centers, in libraries, etc. You said the public comment period would be 60 days. I would push for a longer comment period, because this is very technical stuff. For communications, make sure you are inclusive related to ability and mobility. You have partners to help push the stream of information. This IRP will shape the future of energy and how people’s bills will turn out. When you are synthesizing comments, don’t erase someone’s voice – have meaningful involvement, transparency and don’t be ablest when you design meetings. Public transportation is important. Have meetings on a bus line so someone without a car can get there.
- Are there segments of stakeholders that you think or know were missing from past IRPs? Are there areas where you know we’re missing a voice from a group of stakeholders?
  - *TVA: We can always do better. We have an opportunity to elevate our efforts with students and young people. We are involved in STEM programs, so we have inlets into some of these stakeholder dynamics that we can better leverage. I don’t think I could go back to the 2019 IRP and break down segments of where all of our input and comments came from. But we are focusing on various segments and how to engage them. We have looked at locations for the public open houses differently this time, and we are including more rural areas. We also are ensuring that we go to all seven states that we serve.*
- It would be great to find creative ways to invite people to see your facilities and how TVA generates electricity. We have the opportunity to take this scientific jargon and make it understandable – right in the places where energy is generated.
- There have been public comments around continuing to use the 2019 IRP, since the 2025 IRP has been delayed. For some of the projects, like those replacing coal, it is imperative that TVA proceeds quickly. If those projects use the new IRP, will that cause a delay? Does it mean that no decision can be made until you have a new IRP? If there’s the new rule, you can’t build a new plant without complying with the rule. So you have to modify what was in the 2019 IRP, right?
  - *TVA: We can approve decisions under the 2019 IRP, which is a valid document within the ranges of what we studied and evaluated in that IRP. Or, you can make no decision and wait until you have the new IRP. Those are the two options. We don’t have an option to make a decision under a draft of the new plan. As the TVA Board makes decisions, it evaluates the options that reflect the new rule and incorporation of the rule. Also, the IRP does not make decisions; it provides planning direction.*
- My recommendation to the Board is that any new construction of gas turbines comply with the new EPA rule.
  - *TVA: If TVA is evaluating a decision today and going through the NEPA process, it is going to incorporate the law of the land as it exists today.*
- It sounds like there is intention to share a lot of the assumptions that are behind the model as part of the next phase. I’m thinking about a little more clarity on some of the cost ranges for different resource options. The details around load forecast and what is built into the scenario process are a really important part of this whole endeavor. What have you baked into that process? Is there more information coming and at what stage would that be shared with members of the public and stakeholders?
  - *TVA: What was shared today about resource assumptions is more than has been shared thus far through the process. More will be shared when the draft document is released.*

*These advice questions are asking for feedback about what you've heard today and where we are in the process today. We will engage the RERC along the way – we can talk about sensitivities when the draft is released, and we will engage the RERC for feedback and an Advice Statement when we are approaching the final IRP.*

- Do we want to highlight potential metrics and sensitivity analyses? It would be good to have some type of sensitivity analysis that looks at extreme ranges (both high and low) on resource costs, making sure we have a sufficiently high band – looking at that resource cost consideration and then similarly going back to what if you don't constrain the model to a build limit or an adoption limit.
- Be sure to curate your message to the audience. Deliver the information to the respective audiences in a way they can understand, so it is relevant to them. Your messaging has to be distilled so it connects with communities.
- You can improve on making people more comfortable about seeing more wind and solar in the equation and what that would look like in the future.

## **6. Discussion and approval of the Advice Statement**

Erin Gill, RERC Chair, drafted the Advice Statement based on the day's discussion and Council members' key thoughts and concerns. She read the draft statement to the group. There was discussion on points that had been made earlier in the meeting, and there were changes to the statement based on that discussion. Then, the RERC members offered unanimous support for the Advice Statement (included below) that will be provided to the TVA External Stakeholders and Regulation Committee.

## **7. Closing Comments**

In closing, Melanie Farrell thanked the Council members for their engagement and thanked TVA's Enterprise Planning team for its IRP presentations. She said she would follow up on the actions discussed during the meeting, and she asked Council members to reach out to her with suggestions for topics for future meetings. Erin Gill thanked everyone for the discussion and participation.

## RERC July 16, 2024, IRP Advice Statement

The Regional Energy Resource Council (RERC or Council) appreciates TVA involving the Council meaningfully in the development of the next Integrated Resource Plan (IRP). The RERC has heard updates on the IRP at several milestones in 2023 and 2024, which allowed members to build an understanding of the purpose, methodology, scenarios, strategies, and assumptions that have shaped the IRP process to this point.

Based on the information presented by TVA to the RERC during this process, and noting that the RERC has not formally reviewed the IRP draft or its related documents, including the Draft Environmental Impact Statement (EIS), the Council generally affirms that the IRP development process appears to be on track to meet the objective of establishing a strong resource planning foundation. The future scenarios and strategies are positioned to yield a robust set of portfolios that will enable TVA to balance the benefits, impacts and trade-offs of an appropriately broad range of resource options across a 25+ year planning horizon.

Based on the key metrics, costs, and assumption information shared with the RERC, we recommend evaluation of the following factors through sensitivity or additional metric analyses to provide additional insights to inform TVA's future resource options:

- Impact of actual resource costs falling dramatically higher or lower than assumed.
- Consideration of Environmental Justice metrics, such as waste, pollution, and energy burden impacts of different resource options.
- Expansion of Build / Annual Adoption Limits currently constraining modular (e.g. solar, aeroderivatives, etc.) and distributed resources.

The RERC discussed Scenario titles and descriptions in relation to the incorporation (or not) of enacted Federal regulation. The Council discussed the need for clarity in which scenarios include current EPA regulation of new gas-fired generation.

The RERC recognizes that public involvement and direct engagement with a diverse group of stakeholders are key elements of TVA's IRP process. We appreciate the important role of the IRP Working Group, as an informed group of diverse stakeholders, in providing detailed and thorough input to TVA at every step of the process and collaboratively developing scenarios and strategies to yield a robust set of portfolios. Transparent sharing of load forecasts, costs, and other modeling assumptions during the public draft review may serve to strengthen the information and analysis provided in the final IRP.

The RERC recognizes that many members of the public have outstanding questions about the process, methodology, assumptions, and parameters that define the IRP, including how public scoping input has been reflected. We recommend TVA continue to provide and promote opportunities for two-way communication between TVA and members of the public as it releases, explains, and seeks comment on the draft IRP. Allowing ample time for the public comment period – as well as ensuring that hosted input sessions are accessible to all – will help ensure that Valley residents and businesses have the capacity to meaningfully engage. Presenting information – including about the IRP process – in a curated, engaging way, including for non-technical audiences, will be important for achieving robust public engagement.

**Appendix A**  
**Non-Council Meeting Attendees**

<b>TVA Staff Members (In person)</b>	
Rebecca Brinkley	Candy Kelly
Jennifer Brundige	Jo Anne Lavender
Brad Chadwell	Clifton Lowry
Brian Child	Millie Callaway Parkes
Amy Edge	Amy Reagan
Ashley Farless	Marylee Sauder
Melanie Farrell	Chance Silvers
Bekim Haliti	Logan Stephens
Althea Jones	Hunter Reed
<b>TVA Staff Members (Virtually)</b>	
Nathaniel Andrews	Adam May
Robert Conley	Clarissa McClain
Elizabeth Gibson	Thomas Satkowiak
Melissa Green	Elisabeth Thompson
Cynthia Haynes	Charlotte Vickers
Cynthia Herron	Amanda West
Kendra Mansur	Julia Wise

<b>Stakeholders (In person)</b>	
Daniel Dassow	Leah McCord
John G. Franklin	Kent Minault
Richard Holland	Gaby Sarri-Tobar
Gil Hough	Maggie Shober
Claire Kaufman	John Todd Waterman
Amy Kelly	Brady Watson
Sandra Kurtz	
<b>Stakeholders (Virtually)</b>	
Alejandro Aixala	Candy Johnson
Jason Baker	Kameron Johnson
Jeff Barker	Pam Jones
Nargis Barsati	Daniel Joranko
John Bregger Jr.	Paul Klein
Kyle Bundy	Jordyn Kreucher
Trey Bussey	Timothy Lee
Mary Cawthorn	Matthew Mailloux
Mary-Margaret Chandler	Rachael Maitland
Kathryn Conner	Farah Mandich
John Dodd	Jonathan Mattise
Annalise Eiffert	Gabby Mayer

<b>Stakeholders (Virtually, continued)</b>	
Paul M. Eory	Kate Melanson
Kelly Fortin	JT Neal
Joe Franklin	Tracy O'Neill
Jensen Fuja	Jeff Palmer
Amanda Garcia	Robert Phillips
Marlin Gines	James Prentice
Courtney Grable	Connor E. Ray
Lindsay Hanna	Shelley Robbins
Kevin Hensley	Yolonda Spinks
Karen Hillin	Zachary Stines
Rob Hoskins	Liza Szot
Omar Howard	Steve Walton
Misty Huddleston	Jennifer Wildes
Alec Iaconis	

**Regional Energy Resource Council Meeting Agenda  
July 16  
Knoxville, Tennessee**

**Meeting Location:**

Downtown Knoxville Marriott  
525 Henley St.  
Knoxville, TN 37902

**Objectives:**

- Seek RERC advice on TVA's Integrated Resource Plan

<b>8:30 – 8:40</b>	<b>Welcome / Call Meeting to Order - (DFO– Melanie Farrell &amp; RERC Chair Erin Gill)</b>
<b>8:40 – 9:00</b>	<b>Introductions and Agenda Review – (<i>Facilitator – JoAnne Lavender</i>)</b>
<b>9:00 – 9:15</b>	<b>DFO Briefing (<i>Melanie Farrell</i>)</b>
<b>9:15 – 9:30</b>	<b>Break</b>
<b>9:30 – 11:00</b>	<p><b>TVA's Integrated Resource Plan Updates</b></p> <ul style="list-style-type: none"> <li>a. IRP Overview</li> <li>b. Scenario and Strategy Updates</li> <li>c. Resource Costs</li> <li>d. Stakeholder Engagement Updates</li> </ul>
<b>11:00 – 12:00</b>	<b>Advice Question Discussion</b>
<b>12:00 – 1:30</b>	<b>Lunch Chair Development of Draft Advice Statement</b>
<b>1:30 – 2:30</b>	<b>Public Listening Session</b>
<b>2:30 – 3:30</b>	<b>Finalize Advice Statement</b>
<b>3:30 – 4:00</b>	<b>Wrap Up Meeting</b>
<b>4:00</b>	<b>Adjourn Meeting</b>