

# Utility of the Future Information Exchange (UF-IX) Report

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October 2022-July 2023



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## Executive Summary

This document provides a compilation of recommended considerations developed by the Utility of the Future Information Exchange (UF-IX) over nine months for use by the 2024 Integrated Resource Plan (IRP) Working Group and TVA's Leadership.

[The 20 UF-IX participants](#) represented local power companies and direct serve partners, environmental Non-Government Organizations (NGOs) and academia, state & community leaders, and social justice advocates. The UF-IX was led by TVA's External Strategy & Regulatory Oversight team and was facilitated by a non-profit third party, Future 500.

The UF-IX was designed to be conversations between people with diverse perspectives and TVA regarding key themes they believe should be considered for the 2024 IRP. This provided an opportunity for rich, in-depth discussions

of varying viewpoints in a collaborative environment. Solutions to issues or topics raised were not sought from the group.

With the different perspectives represented within the UF-IX, the discussions were often broader than the defined scope of TVA's 2024 IRP. Early in the process, TVA and the UF-IX members aligned on capturing the valuable ideas and insights into two distinct categories: 1) considerations specific to the current IRP study cycle and 2) considerations for broader TVA strategy and policy. This final report includes both outcomes.

## UF-IX Outcomes

The goal of these meetings was to elicit feedback from individual stakeholders to guide TVA as it prepares to begin the process to update the 2024 IRP. Again, solutions were not sought. To this end, the UF-IX created a report with two (2) deliverables:

- 1 / A summary of IRP-related recommended considerations, grouped by topic. These considerations come from individual stakeholders participating in UF-IX and consensus was not sought. However, strong alignment often occurred. This summary is being provided to TVA's staff informing the IRP and shared with the IRP Working Group. The considerations are outlined in the following sections of this report.
- 2 / A summary of topics, and considerations that went beyond the scope of the IRP. The UFIX members have reviewed the summary of individual perspectives on these topics. This summary will be provided to TVA's leadership.

UF-IX participants requested follow-up from TVA as a part of their participation to better understand how their feedback was being used both by the IRP Working Group and TVA, generally. This follow up was agreed upon by TVA and participants in the form of:

- One virtual meeting between the UF-IX participants and members of the IRP Working Group (of which there is member overlap) for a handoff of the IRP-related considerations.
- Quarterly emails and/or virtual meetings updating on the status of the considerations throughout the IRP development.

## UF-IX Recommended Considerations

The recommended considerations outlined in this document are defined as suggestions made from individual stakeholders to TVA. Consensus was not required in creating these considerations. It is noted when different stakeholders strongly disagreed with specific considerations.

## UF-IX Process

The following provides a brief overview of the process for developing the two summaries of considerations:

### PRE-MEETING PROCESS:

TVA contracted with non-profit Future 500 to design UF-IX agendas and facilitate meetings. TVA selected most stakeholders to invite to participate in UF-IX (based on location and expertise to provide a broad spectrum of views, while a coalition of Environmental Non-Government Organizations self-selected its representatives). Future 500 conducted pre-calls with all participants to anticipate meeting goals, manage participant expectations, and determine meeting agenda topics. Upon completing pre-calls, Future 500 created a summary of the call feedback which was provided to participants and TVA.

- a. Key concepts from the pre-calls included 1) the desire for trust building between stakeholders and TVA, 2) commitment from TVA that stakeholder feedback would be used and their time was valued, 3) transparency throughout the process, 4) alignment on the goals of the UF-IX meetings.



### 1. MEETINGS:

Meetings were held in person every other month November - July over a two-day period at different cities across the TVA region. More details of the five meetings are included below. Each meeting focused on different topics to be presented by stakeholders and TVA. Meeting discussions focused on members providing considerations for TVA and the IRP Working Group.

### 2. POST-MEETING PROCESS:

Future 500 compiled all considerations following UF-IX meetings. These considerations were used to create two final reports, outlined in the [Outcomes](#) section.

### Meeting 1

November 2022:  
UF-IX Exchange  
Expectations & Alignment



### CONTENT SUMMARY

UF-IX conducted its first in-person meeting in November 2022, bringing together representatives from 15 organizations and two members of TVA's leadership team and a TVA staff member with experience in previous IRPs and Working Groups.

Throughout two days, participants established communication expectations and targeted outcomes for these meetings. TVA staff provided an overview of the IRP process. TVA asked participants what areas of focus TVA should consider in its IRP process, including where to get good data on solar or wind, and how to model

Distributed Energy Resources (DER) to give full recognition to its benefits.

Participants determined that UF-IX meetings would culminate in a final report that would include recommended considerations for the 2024 IRP Working Group. The considerations would not require group consensus. The group determined these meetings would not be limited to just what is applicable to the 2024 IRP and could also include feedback applicable to TVA's larger strategy. Participants determined the topics to be covered in the remaining meetings:

### Meeting 2

January 2023:  
DER &  
Distribution



### Meeting 3

March 2023:  
Generation &  
Transmission



### Meeting 4

May 2023:  
Community  
Impact



### Meeting 5

July 2023:  
Modeling &  
Assumptions



MEETING 2 - TOPIC:

# Distributed Energy Resources & Distribution

## Summary & Guiding Questions

The UF-IX members brought diverging perspectives and ideas on how TVA should think about DER & Distribution. There was general agreement that DER should be a critical part of TVA's long- and short-term planning. Discussion fell into two categories, how DER & Distribution impacts the IRP, and how they should impact TVA's larger strategy. Key takeaways were that TVA should create more programming and incentives to promote DER to lower energy costs and increase resilience across the region. This meeting agenda was intended to answer the following guiding questions:

What does this look like from a Local Power Company (LPC) perspective?

What is aspirational and what technologies aren't fully proven yet?

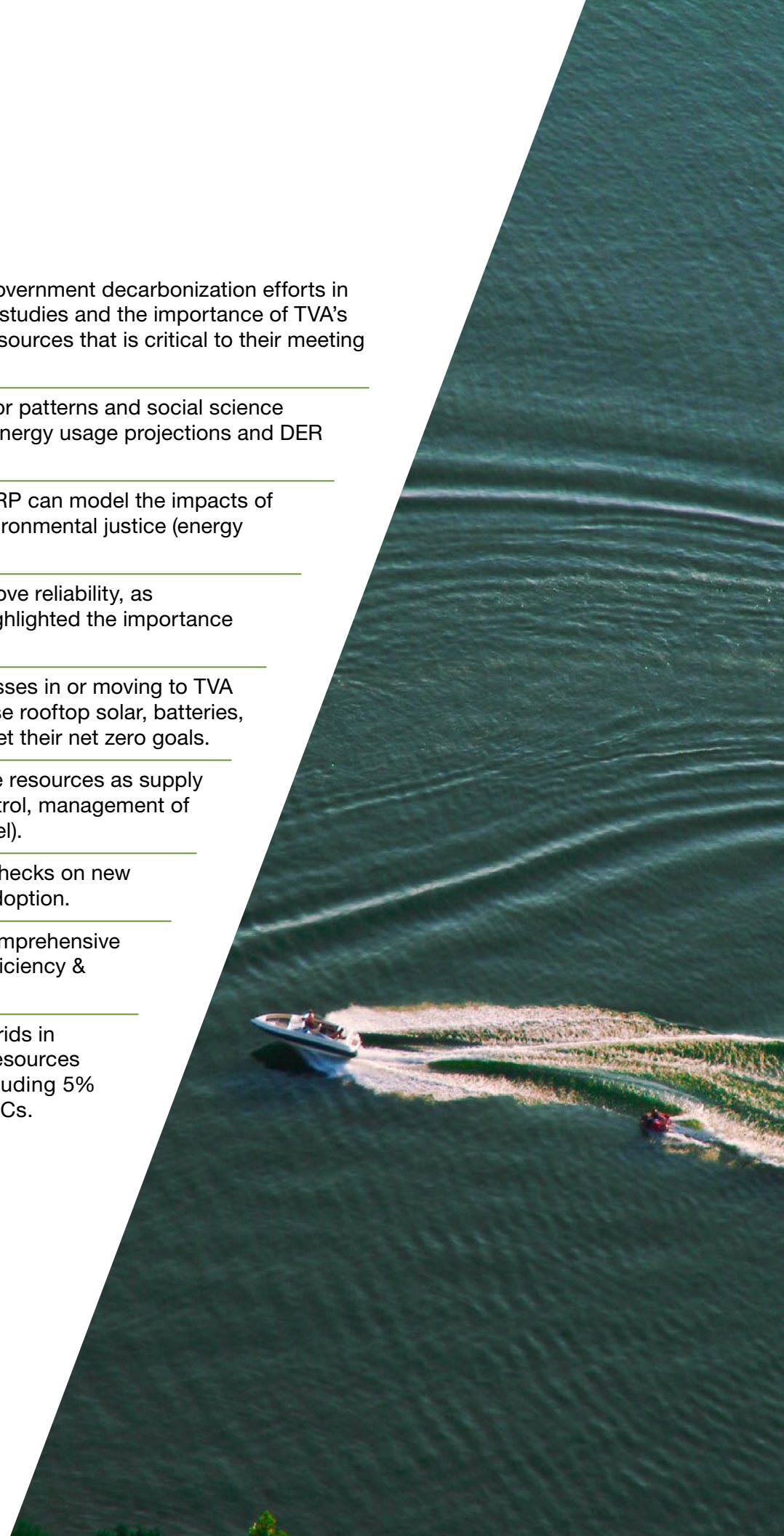
What's your vision for the future?

### Session Overview

- **Federal Support for TVA Distributed Energy Resources:** Jan Berry, Tennessee State Coordinator, Citizen Climate Education
- **DER in TVA:** Chris Hansen, VP, Origination and Renewables, TVA & Cindy Herron, VP, EnergyRight Solutions, TVA
- **DER & LPCs:** Tom Suggs, Chief Operating Officer, Middle Tennessee Electric
- **DER, Local Government, and Meeting Climate Goals in Tennessee & Kentucky:** Laurel Creech, Kendra Abkowitz, Chief Sustainability & Resilience Officer for Nashville, and member of Southeast Sustainability Directors Network. Kenya Stump, Executive Director, Kentucky Office of Energy Policy
- **Economics of DER:** Charles Sims, Director Energy and Environment Program, Baker School for Public Policy

### CONSIDERATIONS

- Accounting for local government decarbonization efforts in system-wide planning studies and the importance of TVA's reduction of carbon resources that is critical to their meeting those goals.
- Accounting for behavior patterns and social science insights in consumer energy usage projections and DER selection/deployment.
- Determining how the IRP can model the impacts of energy equity and environmental justice (energy poverty/burden).
- Modeling DER to improve reliability, as Winter Storm Elliott highlighted the importance of reliability.
- Accounting for businesses in or moving to TVA territory that plan to use rooftop solar, batteries, and other DERs to meet their net zero goals.
- Modeling demand side resources as supply side (water heater control, management of load at distribution level).
- Integrating DER with checks on new technologies before adoption.
- Incorporating more comprehensive modeling of energy efficiency & demand response.
- Accounting for microgrids in whatever distributed resources are accounted for, including 5% flexibility cap from LPCs.



MEETING 3 - TOPIC:

# Generation & Transmission

## Summary & Guiding Questions

This UF-IX meeting discussed how TVA generates and transmits energy to its local power companies (LPCs). TVA used this session to share updates on the organization’s generation portfolio and plans. This meeting had one stakeholder presentation on a review of a [2023 study](#) conducted by Synapse and sponsored by the Center for Biological Diversity, released March 8, 2023. This was a follow-up to a [2022 study](#) commissioned by Sierra Club through Synapse. During this presentation, it was determined that the study did not integrate feasibility as effectively as it could have and further assessment would be needed for the study to prove useful for TVA and its stakeholders. Also, Aidan Tuohy from the Electric Power Research Institute (EPRI) presented on its research related to reliability, resiliency, and stability concepts in an evolving portfolio as well as the integration of inverter-based resources. This meeting agenda was intended to answer the following guiding questions:

**Give a forecast on what the future looks like.**  
This information could be considered when creating IRP scenarios.

**How can TVA ensure reliability in its resource mix?**

**What technologies should TVA consider in planning?**

### Session Overview

- **Generation in TVA:** Dan Tibbs, VP, Generation Projects & Shop Services, TVA & Roger Waldrep, VP, Major Projects, TVA
- **TVA’s New Nuclear Program Overview:** Scott Hunnewell, VP, New Nuclear Program, TVA
- **Synapse Study:** Pat Knight, Senior Principal, Synapse Energy Economics, Inc.
- **EPRI:** Aidan Tuohy, Program Manager, Electric Power Research Institute

### CONSIDERATIONS

- Focusing all efforts related to future resource selection on meeting decarbonization goals and not using natural gas as replacement for coal.  
**Noted Challenge:** Reliability and affordability are part of a balance. Renewable resources can’t necessarily provide those assurances at this time.
- Setting decarbonization as a goal by 2035 to force a scenario that results in more rapid decarbonization.
- Modeling for the timeline to get resources available to deliver. Some resources that are being modeled may not be available as quickly as expected given permitting and review periods. This should be accounted for in the model.
- Modeling for the impact of electrification including what technologies are coming online and in what customer class. An example is the release of large electric vehicle trucks which can draw substantial amounts of power. They can also potentially serve like batteries, but they will be a drain on the grid.
- Running an uncertainty analysis of known unknowns where the modelers make a list of uncertainties and their values which are then reviewed by stakeholder groups. Some uncertainties may be moved to be explicitly modeled if they can be categorized as a ‘possible future’ rather than an uncertainty.
- Modeling carbon pricing as a parameter in TVA’s scenarios. Various methods for carbon pricing could be included as different functions of time (i.e., the rate of increase in price; the final price). The impact of carbon pricing on decision making would be better understood.
- Accounting for the rapid changes in technology to determine how to allow flexibility given the speed of technological advancement. SMRs, battery storage, and other technologies are evolving so quickly that they may not be something to include in modeling yet, but that opportunity and uncertainty needs to be represented in IRP planning.
- Modeling permitting and National Environmental Policy Act (NEPA) timelines for projects, specifically to get SMR’s permitted, evaluated, and approved.
- Using the CDC’s [Climate-Ready States & Cities](#) Initiative in modeling climate and weather risks and building resiliency.
- Integrating normal state vs. extreme state weather modeling.
- Integrating the growing demand for EVs due to charging and battery capacity.
- Recognizing the full cost and benefits of a generation strategy or regulatory requirements.





MEETING 4 - TOPIC:

# Community Impact

# Summary & Guiding Questions

This UF-IX meeting focused on meeting community needs and environmental justice (EJ). As defined by the Biden Administration:

“Environmental justice” means the just treatment and meaningful involvement of all people regardless of income, race, color, national origin, Tribal affiliation, or disability, in agency decision-making and other Federal activities that affect human health and the environment so that people:

- (i) are fully protected from disproportionate and adverse human health and environmental effects (including risks) and hazards, including those related to climate change, the cumulative impacts of environmental and other burdens, and the legacy of racism or other structural or systemic barriers; and
- (ii) have equitable access to a healthy, sustainable, and resilient environment in which to live, play, work, learn, grow, worship, and engage in cultural and subsistence practices.”

Presentations explored how states and cities have successfully and unsuccessfully engaged communities and combatted environmental racism. Stakeholders provided recommendations for how TVA can meaningfully engage with communities and provide economic development to the region. This meeting agenda was intended to answer the following guiding questions:

**How do we engage diverse audiences?**

**How best to reach out to groups for engagement during the IRP process? Locations? Types of venues?**

**How do we get meaningful engagement?**

**What does life look like in 2050?**

**How do we include EJ in the IRP?**

## Session Overview

- **Understanding Environmental Justice in the TVA Region:** Kendra Abkowitz, Chief Sustainability & Resilience Officer - Nashville, Southeast Sustainability Directors Network
- **Meaningful Community Engagement:** Pearl Walker, Consultant, SACE
- **Utilities Accounting for EJ:** Dr. Nikki Luke, Assistant Professor, Department of Geography and Sustainability, University of Tennessee
- **TVA Community Engagement**
- **EJ Policy & Best Practices:** Maria Gillen, Director Environment & Energy Policy, TVA
- **Connected Communities:** Georgia Caruthers, Initiative Lead Connected Communities, TVA

## CONSIDERATIONS

- Implementing bottom up and top-down location assessment of new resource selections benefits & costs (distribution planning perspective) combined with the IRP study.
- Engaging with communities throughout the IRP processes to better reflect estimates of benefits & costs for proposed new resources on specific communities.
- Integrating locational economic impacts to capture new factors in the IRP like energy communities (IRA credit), as well as EJ, disadvantaged community burdens, etc.
- Applying impact assessments for new assets/solutions to understand potential negative outcomes on specific communities (EJ, low-income, disadvantaged).
- Modeling risks to projects and permits using community engagement as a risk management mechanism. This could take the form of proxy costs reflecting delays to siting, permitting and construction by state/subregion used as risk premium in the model. Funding can be justified based on the contingency analysis to mitigate this risk. The contingency analysis would justify funding TVA stakeholder engagement activities.
- Clarifying what indexes TVA uses to identify and map specific communities. It is unclear to stakeholders how TVA identifies high-energy burdened, low-income, and disadvantaged communities.
- Reviewing recent resource planning studies from Arkansas, Indiana, Wisconsin, North Carolina, and Virginia for examples of integrating energy efficiency, energy equity, and environmental justice into IRP.
- Modeling communities/EJ engagement as a risk or a resource, like the approach used the first time TVA modeled energy efficiency. The community-based resources/connected communities can also be risk mitigation to pick in the model. This could lead to creating a geographical visualization of indicators as it relates to generation and transmission assets. This could be done on specific projects, too.
- Comparing TVA’s IRP with screening tools like EJScreen to evaluate impact of decisions on EJ/low-income communities.
- Using visualizations for the output of the IRP beyond traditional chart data and similar graphical tools to better communicate the findings for the public. This could include infographics, comparative visualizations showing context and relevance to data.

MEETING 5 - TOPIC:

# Modeling & Assumptions

# Summary & Guiding Questions

As the concluding meeting, this served to summarize previous meetings, outline the 2024 IRP process, timeline, and objectives. Participants reviewed TVA's IRP and Valley Pathways Study plans in addition to stakeholders' evaluations of other states and companies' IRP processes and what TVA could learn from those. Key takeaways include 1) that the TVA IRP modeling could include smaller, region-specific analyses that include and value local/regional impacts, and/or 2) should happen more frequently than current practice. This meeting agenda was intended to answer the following guiding questions:

What are other utilities using?

What are some scenarios and strategies we should consider?

What technologies are off the shelf ready now?

How do we reach net zero carbon?

## Session Overview

- **TVA Resource Planning Overview:** Clifton Lowry, Director Resource Planning and Strategy, TVA
- **ClearPath's Perspective of previous TVA IRPs:** Spencer Nelson, Managing Director of Research, ClearPath
- **How Other Utilities do IRPs:** Daniel Tait, Executive Director, Energy Alabama
- **Valley Pathways Study:** Laura Duncan, Manager, Origination & Renewable Support, TVA

## CONSIDERATIONS

- Engaging in modeling that reflects aggressive climate projections and unlikely use cases to anticipate extreme events.
- Modeling various methods of implementing a price on carbon.
- Modeling some scenarios using another software program other than the model TVA uses, Plexos for example, to check outcomes and investigate any modeling limitations that might impact resource choices. This could include modeling what joining a Regional Transmission Organizations (RTO) would look like for TVA's generation and total revenue requirements. Bonneville Power Administration is in an Energy Imbalance Market and studying joining an RTO.
- Ensuring that the most up-to-date parameters are used to model technology resources (e.g., availability of wind resources in Tennessee; solar life cycle carbon emissions).
- Breaking up the modeling by different zones/subregions within the overall TVA region. This allows modeling based on load profile, creating a more place-based model including sustainability planning done by cities. Different loads shapes by subregion/zone show what profile of resources would be more appropriate in that zone
- Representing all 153 LPCs and how they can be an asset in modeling. This supports a place-based approach and allows LPCs to 'bid' on TVA capacity by combining their resources for a zone/subregion.
- Improving IRP visuals to be more accessible to the broader public.
- Weighting the metrics (e.g., affordability, reliability, EJ etc.) differently depending on the relative importance of each metric. This could be challenging and members acknowledge that stakeholders would prioritize each metric differently.
- Modeling or rating emerging technology based on the likelihood that the technology will be commercially available and financially feasible.
- Modeling transmission as a resource, this is important for load growth electrification, DER, etc.
- Modeling the relationship of TVA's support for energy efficiency and load growth. Modeling deliverability as a risk. Two challenges are:  
The deliverability of power, particularly during extreme weather, for example, is gas flowing to the power plant at full capacity and is the power plant frozen and unable to run. Not all LPCs have the technological capabilities during severe weather events. Modeling this would require all LPCs to have a minimum standard of technology.
- Ensuring that the technology selected for inclusion in the resource portfolio is available in the time frame that TVA needs to implement it.
- Accounting for technology changes and evolving appliance standards in energy efficiency measures in modeling.



# Utility of the Future

## Going beyond the 2024 IRP

UF-IX meeting discussions extended beyond the 2024 IRP to broader enterprise-wide strategies and policies. Stakeholders shared what they suggest TVA consider to become the Utility of the Future. These “strategic considerations” were categorized separately from those intended for the 2024 IRP cycle. They will be shared with internal TVA stakeholders and leadership.

# UF-IX Strategic Considerations

## DISTRIBUTED ENERGY RESOURCES & DISTRIBUTION

- Removing or increasing the 5% LPC generation cap as it might limit LPCs and local governments in their net zero and resiliency goals. Encouraging LPCs to install utility-scale solar as it is more cost effective than rooftop solar while still providing opportunities for rooftop solar to be pursued if an LPC chooses.
- Accounting for DER like a vertically integrated company: change requirements for minimum feeder load and power flowing back to TVA (one-way DER transmission from LPCs to TVA).
- Ensuring TVA's policies incentivize electrification and energy efficiency for all users.
- Ensuring TVA's policies and programs incentivize DER on the transmission and distribution side including solar and storage. Presentations from Kentucky show that DER has slowed down substantially in TVA territory as opposed to non-TVA territories in Kentucky.
- Working with TVPPA to set minimum standards, common goals, and incentives to help all LPCs advance DER.
- Expanding systematic programming and incentives around behavior change mechanisms like demand response and energy efficiency.
- Increasing DER at the transmission level in lieu of adding more generation in addition to the transmission to distribution interface between TVA and LPCs.
- Incentivizing heat pumps and heat pump water heaters to increase resiliency and ultimately reduce consumer energy bills. These need to be high-efficiency and cold weather-capable to support elimination of electric resistance heat.
- Pursuing renewable energy solutions that benefit renters and property managers for mutual benefit, addressing the split incentive issue.
- Using DER to build resilience across the TVA territory.
- Implementing a virtual power plant to leverage DER around the Valley.
- Implementing real-time pricing of electricity and time-of-use pricing for everyone rather than asking people to opt-in.  
**Noted challenge:** Tennessee has a law that prevents utilities from instituting policies that require 'opting out' instead of 'opting in.' This makes it difficult for TVA / LPCs to implement real time pricing.
- Investing in microgrids and grid intelligence to support resilience across the territory and generally increase DER.

## GENERATION AND TRANSMISSION

- Moving beyond least-cost modeling, as it may not account for important factors including long-term decarbonization technologies and that overall, least-cost modeling in an IRP study doesn't ensure equitable low costs. An alternative could be a more inclusive/comprehensive approach to monetizing costs of failure to decarbonize and associated social impacts.  
**Noted challenge:** TVA is required to conduct least cost planning by law and TVA Act calls for "rates as low as feasible."
- Addressing the speed of permitting. Investment with new assets adds a significant timeline to TVA's decarbonization efforts - this is a concern around small modular reactor development as well. Preparing for the impact of potential permitting reform currently being considered at the federal level.
- Setting up targets 'predicted' by the IRP and establishing 'signposts' then scoring performance against these signposts.
- Creating more opportunities for vertical integration beyond solar and battery, including nuts and bolts of transmission. Encourage standardization and vertical integration within the region as utility-scale solar can be more cost effective than rooftop solar.
- Ensuring broadband throughout the Valley. The purpose is to collect metering data for visibility at the distribution level and integrate that information with TVA, which requires connectivity and additional broadband to manage the information.
- Creating a chart of capacity on the TVA system outlining what's going away and what's coming on under these certain circumstances and making this available publicly.
- Sharing information on the location of red zones (where interconnection is constrained) with LPCs so they can understand where the crossovers are. Have LPCs indicate if these areas are low income/economic development opportunities when applicable.  
**Noted challenge:** This information could pose security risks if information were made public.
- UF-IX suggests at least making information available between TVA and LPCs, given that TVA and non-market IOUs are the only utilities that do not make this information publicly available.

## COMMUNITY ENGAGEMENT

- Engaging communities frequently and often to develop strong relationships well in advance of decisions that will impact the community. It takes time to build trust.

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- Engaging communities before retiring old assets or adding new assets to get community perspectives on what they need in the transition.

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- Following up with stakeholders on major decisions like Kingston and Cumberland, beyond general reports, to make decisions and rationale clear.

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- Creating community benefits agreements like those used in permitting or labor disputes.

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- Balancing system decarbonization goals with the needs of communities to help them meet their decarbonization goals.

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- Overlaying data available from states Supplemental Nutrition Assistance Program (SNAP) and other low-income/disadvantaged programs to pinpoint high-need populations/disadvantaged communities to engage.

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- Assessing TVA's community engagement and community understanding of utilities and using this information to prioritize community engagement on the front end of projects or efforts that might have an impact on local communities and EJ.

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- Identifying target communities for economic development or increased support e.g., EJ, disadvantaged, energy affected, low-to-moderate income. Developing clear outcomes for each specific group engaged.

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- Understanding the basic needs, in addition to needs that related to electricity, of specific communities and creating outreach and development programs specialized to those needs, integrating a place-based approach. This can create a more tailored approach to engaging with each community, so that TVA is more responsive to community needs rather than perceived as projecting its needs and activities onto each community.

Ensuring community engagement is consistent and frequent.

Having ways to test the accessibility of TVA and LPC programs for target communities to ensure those communities can easily get services designed for them.

Tracking where and when you are connecting with communities to identify what works.

Creating programs to support energy burdened populations, including addressing housing stock (leverage federal/state/local resources for improving).

Ensuring education programs exist across age groups.

## COMMUNITY ENGAGEMENT (CONTINUED)

- Meeting communities where they are at: physically (e.g., grilled cheese solar truck) and approach (different communities need different approaches, e.g., elderly, low-income, rural and hard to reach).

Attending events hosted by local groups and community-based organizations.

Finding pathways to engage communities like United Way and community-based organizations.

Have outreach materials in mainstay locations like the food bank, doctors' offices.

Developing relationships with community "gatekeepers" to build pathways to communities and understand their needs.

## MODELING AND ASSUMPTIONS

- Expanding beyond integrated resource planning (IRP) to integrated environmental, resource, and transmission planning. Explain to the public concurrent TVA planning processes and their respective scopes.

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- Increasing transparency about the IRP process and what's involved. TVA should release at least as much information about its IRP to the public as an investor-owned utility.
  - Shortening IRP cycles and increasing public engagement with the IRP process. This could be done through TVA's bi-annual system planning cycle and include signposts and triggers for a change in behavior.

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- Creating an iterative IRP modeling process with corresponding scenarios that looks at the load forecast and runs the models twice a year - one criticism of the IRP process in general is that things we decided 5 or 6 years ago are so far removed from the current reality.

## GENERAL CONSIDERATIONS

- Accelerating the timeline for projects that don't face opposition by allocating more staff for transmission planning given that the timeline for interconnection agreements for TVA is well over 3 years.
- Using formerly planned nuclear sites that were never built. That land exists somewhere in TVA territory and should be evaluated for use by solar or other energies.
- TVA should consider accounting for unused nuclear sites and associated rights-of-way. Two EIS's were reviewed and the reason solar wasn't selected was price of land and finding the land and being able to build on the land. Need to think about the impacts on that land. Some of those sites might be limited in their development to have something like solar built out there.
- Identifying what potential changes to the TVA Act would enable more and/or lower cost decarbonization, as the TVA Act may be limiting TVA's ability to decarbonize. The TVA Act places certain limits on TVA selling electricity outside of its territory.
- Compiling the body of work from each of the current TVA-stakeholder group engagements (UF-IX, Valley Pathways, etc.) and pulling out recurring themes to understand where there is consistency. Share the outcomes with participants from each stakeholder group and potentially the public.
- Improving coordination between LPCs, TVA, and local government in emergencies like Winter Storm Elliot.
- Evaluating potential need for community engagement in projects identified in the IRP and determining community engagement needed in advance.
- IRP Working Group should create ways to share their and TVA's thought process and analysis with the public throughout the planning cycle.
- Setting a low carbon intensity goal to be competitive with top quartile utilities.
- Integrating demands from business and industry for low-to-no-carbon energy who are looking to come to TVA territory. TVA needs to be able to meet the energy demands and net zero targets of companies to draw them to the Valley. These businesses bring economic growth opportunities.

## GENERAL CONSIDERATIONS (CONTINUED)

- Leveraging incentives provided in the Inflation Reduction Act (IRA) to advance TVA's DER and decarbonization efforts.
- Creating TVA specific definition of "meaningful engagement" & "disadvantaged/underrepresented groups."
- Implementing a community engagement requirement for new projects.
- Review and update TVA processes to integrate community engagement and environmental justice considerations.
- TVA should consider completing peer comparison/benchmarking. Look within and outside Southeast.
- Encouraging small and large LPCs to partner in pursuing federal funding for community engagement and program implementation.

## APPENDIX: THANK YOU TO OUR PARTICIPATING ORGANIZATIONS

Black Business Association  
 Citizens Climate Education  
 ClearPath  
 Clinton Utilities  
 Commonwealth of Kentucky  
 Energy Alabama  
 Huntsville Utilities  
 Jackson Utilities  
 Meta  
 Middle Tennessee Electric  
 Mississippi Energy Institute

Southeast Sustainability Directors Network/  
 City of Nashville  
 Southern Alliance for Clean Energy/  
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