We are here to listen!

As we plan for future power generation, TVA is interested in your needs and concerns.

The public comment period is open through April 8, 2019. Share your feedback with us online, in-person or by mail!



VIEW OUR INTERACTIVE REPORT!

To learn more about the IRP, view the meeting materials and submit a comment online!

VISIT www.tva.com/irp

Mar 20 // Wednesday:

Public Meeting

Public Meeting

Chattanooga, TN

Mar 26 // Tuesday:

Bowling Green, KY

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JOIN US AT PUBLIC MEETINGS!

Feb 27 // Wednesday: Public Meeting Knoxville, TN

Mar 18 // Monday: **Public Meeting** Memphis, TN

Mar 19 // Tuesday: **Public Meeting** Huntsville, AL

For detailed information on upcoming public meetings and meeting schedule, please visit www.tva.com/irp



PRINT & MAIL A COMMENT FORM!

Hunter Hydas IRP Project Manager Tennessee Valley Authority 1101 Market Street, MR-3C Chattanooga, TN 37402



EMAIL US!

irp@tva.gov

2019 Draft Integrated Resource Plan (IRP) Fact Sheet



What is an Integrated Resource Plan (IRP)?

When it comes to your electricity, what is important to you? That it's reliable? Low-cost? Environmentally sustainable? At Tennessee Valley Authority (TVA), we care about all of those qualities, too.

At TVA, we currently are planning our powergeneration system for the next 20 years, and your thoughts will help shape the final Integrated Resource Plan.

A critical component to developing a resource plan for our shared future in the Tennessee Valley is stakeholder and public input.

Why are we updating the IRP now?

The IRP is being updated now because the utility marketplace is changing rapidly, and long-range planning is necessary to guide TVA's decisions about power generation.



The IRP Planning Approach **SCENARIOS**

TVA's IRP is based on a "scenario" planning approach.

Scenarios are potential futures outside of TVA's control, but that, nonetheless, represent possibilities in which TVA may find itself operating.

Key uncertainties considered in the 2019 IRP are electricity demand, market power price, natural gas prices, coal prices, solar prices, storage prices, regulations, CO₂ regulation/ price, distributed generation penetration, energy efficiency adoption and economic outlook (national and regional).

STRATEGIES

The IRP then explores potential strategies to help TVA continue to provide affordable, reliable energy in any of those future scenarios.

Strategies are business decisions or direction that TVA could employ to continue to meet electricity demand in a rapidly changing utility environment.

SCENARIOS

CURRENT OUTLOOK

Represents TVA's current forecast for these key uncertainties and reflects modest economic growth offset by increasing efficiencies.

ECONOMIC DOWNTURN

Prolonged stagnation in the economy, declining demand and delayed expansion of new power generation.

VALLEY LOAD GROWTH

Economic growth driven by people moving into the Valley, new technologies or even the rise of electric vehicles.

DECARBONIZATION

Federal regulations that curb carbon emissions.

RAPID DISTRIBUTED ENERGY RESOURCE (DER) ADOPTION

Growing consumer demand for distributed generation, storage and energy management

NO NUCLEAR EXTENSIONS

6 Regulatory challenges to relicensing of existing and construction of new, large-scale nuclear.

STRATEGIES

BASE CASE

Represents TVA's current assumptions about the existing fleet and options for resource expansion.

PROMOTE DISTRIBUTED ENERGY RESOURCES

Investing in programs that encourage use of distributed resource options such as solar energy, combined heat and power, and battery storage.

PROMOTE RESILIENCY

Promoting small, agile capacity to maximize system flexibility and promote the ability to respond to short-term power disruptions

PROMOTE EFFICIENT LOAD SHAPE

- Encouraging efficient energy management to minimize energy intensive actions to our power system (e.g. ramping up and down
- for changes in demand) while continuing to support energy efficient decisions for all customers.

PROMOTE RENEWABLES

Meeting consumer demands for increased renewables by investing in renewable energy resources both at large scale, like a wind farm, or at small scale, like rooftop solar.

IRP MODELING

For the 2019 IRP, TVA simulated future scenarios and strategies to meet future electricity demand in a computer model. TVA built the model with assumptions, constraints, and certain related technologies. This results in a set of potential resource portfolios.

What is a resource portfolio?

A resource portfolio is a proposed powergeneration mix that results from evaluating a specific strategy and a specific scenario. Initial results of 30 portfolios are shown in the draft IRP available on TVA's website.

Evaluating the portfolios.

To evaluate portfolios, a scorecard is used. This helps TVA evaluate tradeoffs between portfolios or resource-generation combinations.

Strategy Performance

	COST	RISK	ENVIRONMENTAL STEWARDSHIP		OPERATIONAL	VALLEY
		nisk	C0 ₂ , Water, Waste	Land Use	FLEXIBILITY	ECONOMICS
STRATEGY A: BASE CASE	6		S	Ĩ	o	All strategies have similar impacts on the Valley economy as measured by per capita income and employment
STRATEGY B: PROMOTE DER	6		S	Ŷ	0	
STRATEGY C: Promote Resiliency	6			Ŷ	-0	
STRATEGY D: PROMOTE EFFICIENT LOAD SHAPE	6		S	Ŷ	-0	
STRATEGY E: PROMOTE RENEWABLES	6		S	Ŷ		
	Good Better					Best

CHOOSING THE OPTIMAL PORTFOLIO

The goal of the IRP is to provide the most optimal energy portfolio that will continue to deliver on the commitment to keep bills low for all Valley residents while implementing (supporting, performing, contributing to) TVA's mission of energy, environmental stewardship and economic development. TVA carefully evaluates scorecards to choose the portfolio that are:

- Reliable
- Low-cost
- Risk-informed
- Environmentally Responsible
- Diverse
- Flexible

TVA needs your input about which energy sources matter to you, and how long-term energy plans affect you!