



Nuclear Energy Modeling Tools for States

March 21st 1-2 pm ET

Moderator: Kenya Stump, Kentucky Office of Energy Policy

Panelists:

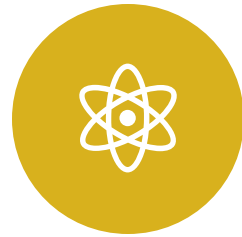
Randy Belles, Oak Ridge National Laboratory

Gabrielle Hoelzle, University of Michigan

Advanced Nuclear State Collaborative



THE ANSC WAS FORMED IN
2023 WITH SUPPORT FROM
THE U.S. DEPARTMENT OF
ENERGY



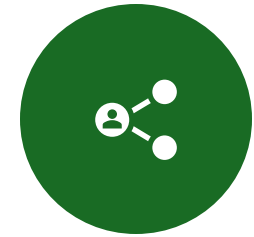
THE ANSC CONVENES STATE
ENERGY OFFICIALS AND
STATE REGULATORY
OFFICIALS



ENHANCES COLLECTIVE
UNDERSTANDING OF THE
UNIQUE REGULATORY AND
POLICY QUESTIONS RELATED
TO NEW NUCLEAR
GENERATION



ANSC SUPPORTS PEER
LEARNING ACROSS STATES.



MEMBERSHIP IS OPEN AND
ONGOING FOR INTERESTED
NARUC & NASEO MEMBERS

House Keeping



This webinar will be recorded and posted to NARUC's youtube channel

Slides will be distributed to registered attendees after today's webinar

You can submit questions for our presenters using the Q&A box in the zoom tool bar

We will time after each presentation to ask questions



STAND

Siting Tool for Advanced Nuclear Development - STAND

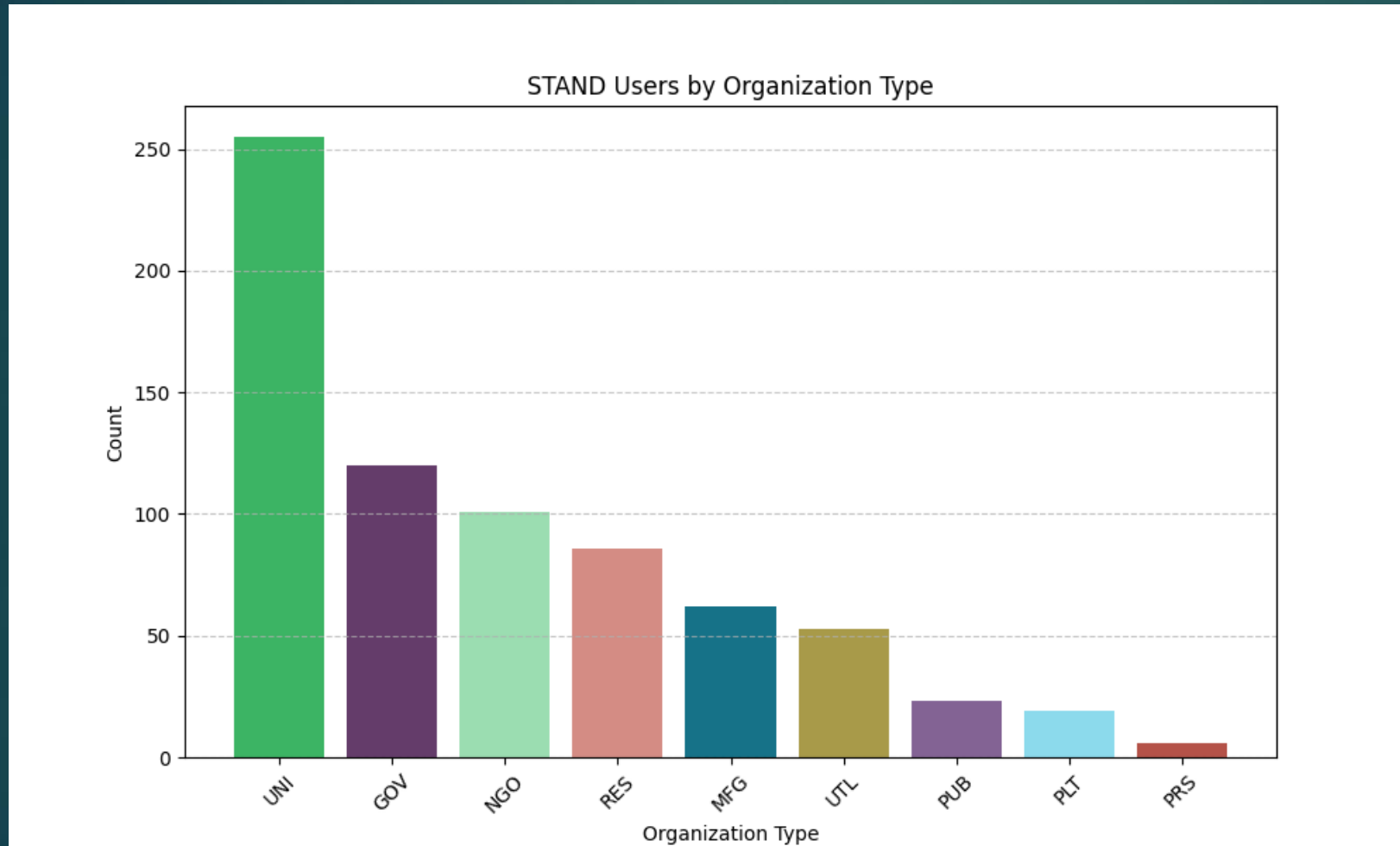
STAND is

- An integrated tool used to help **identify** and compare **possible siting locations** inside the continental U.S. for **advanced nuclear facilities** based on factors related to **Socioeconomics, Proximity, and Safety**

A tool to help answer the question of
“**Where?**” and “**Why there?**”



STAND - Users



MFG = Manufacturing

NGO = NGO

PLT = Political

PRS = Press

PUB = Public

RES = Research

UNI = University

UTL = Utility

GOV = Government

STAND: Users

- Energy Systems Network (Used for the Indiana statewide SMR study)
- Terrestrial Energy
- PSC
- Aligned Data Centers
- Mitsubishi Power
- Meta
- Endeavour
- Kairos
- Google
- ClearPath
- Terra Power
- X-Energy
- NuScale
- Constellation Energy
- Oklo
- Dominion

Siting Tool for Advanced Nuclear Development - STAND

- 3 categories of **Factors** are considered based on user priorities and preferences

Factors	Definition
Socioeconomic	Social, economic, and local energy policy factors that could potentially influence state and local acceptance of construction and operation of the facility.
Proximity	Environmental and regulatory exclusion zone criteria, distances to infrastructure that could facilitate or support construction and operation of the facility.
Safety	Regulatory guidelines for environmental and geologic safety factors, safety risks, mitigation approaches.

Identify sites for advanced nuclear facilities with STAND

Use STAND - our Siting Tool for Advanced Nuclear Development - to identify and assess potentially feasible sites for advanced nuclear facilities [Ⓢ]

Site Discovery >

Start here if you want to identify counties or states that may be candidates for reactor deployment.

Site Exploration >

Start here if you have already identified general areas for deployment but would like to explore regulatory data or drop points.

Site Comparison >

Start here if you have identified site coordinates for deployment and would like to compare them against each other.



Data Availability by Geography

Layer	Variable	CONUS	AK	HI	Source
EJ40	CEJST Climate	X	X	X	Council on Environmental Quality (CEQ)
	CEJST Energy	X	X	X	
	CEJST Health	X	X	X	
	CEJST Housing	X	X	X	
	CEJST Pollution	X	X	X	
	CEJST Transit	X	X	X	
	CEJST Water	X	X	X	
	CEJST Workforce	X	X	X	
Construction Mean Annual Wage By State		X	X	X	Bureau of Labor Statistics
Electric Energy Generators		X	X	X	EIA
Electricity Market Type By State		X	X	X	EPA
Electric Retail Service Territories		X	X	X	Homeland Infrastructure Foundation Level Data (HIFLD)
Electric Substations		X	X	X	Homeland Infrastructure Foundation Level Data (HIFLD)
Energy Intensive Facilities	Food Industry	X	X	X	HSIP GOLD 2015
	Manufacturing	X	X	X	
	Mining	X	X	X	
Fault Lines		X	X	X	USGS Quaternary Fault and Fold Database
Federal Incentives	Brownfield Sites	X	X	X	Environmental Protection Agency (EPA)
	Energy Communities	X	X	X	National Energy Technology Laboratory (NETL)
Hazardous Facilities	Airports	X	X		HSIP GOLD 2015
	Biodiesel Plants	X			
	Biological Products Manufacturing	X	X	X	
	Chemical Manufacturing	X	X	X	
	Ethanol Plants	X			
	Explosives Manufacturing	X	X	X	
	Liquefied Natural Gas Import Terminals	X	X		
	Lubricating Oils and Grease Plants	X	X	X	
	Natural Gas Compressor Stations	X			
	Natural Gas Import/Export Locations	X			
	Natural Gas Processing Plants	X			
	Natural Gas Storage Facilities	X			
	Nitrogenous Fertilizer Plants	X	X	X	
	Nuclear Fuel Plants	X			
	Oil Refineries	X	X	X	
Petroleum Pumping Stations	X	X	X		
Pharmaceutical Preparations Manufacturing	X	X	X		

	Ammonia	X	X	X	Argonne National Lab (ANL)
	Refinery	X	X	X	Argonne National Lab (ANL)
Hydrogen Demand	DRI	X	X	X	Argonne National Lab (ANL)
	Natural Gas Electric	X	X	X	Argonne National Lab (ANL)
	Syngas: Ethanol	X	X	X	Argonne National Lab (ANL)
Landslide Hazard	POL Terminals, Storage Facilities, Tank Farm	X			USGS, Source from report
NERC Regions		X			Homeland Infrastructure Foundation Level Data (HIFLD)
Net Electricity Imports By State		X	X	X	EIA Net Interstate Flow of Electricity, EIA Electricity Net Imports
Nuclear Facility Summary By County		X	X	X	EIA
Nuclear Inclusive Policy By State		X	X	X	NCSL, DSIRE
Nuclear R And D By County		X	X	X	FPTZ
Nuclear Restriction By State		X	X	X	NCSL
Nuclear Sentiment By County		X			University of Oklahoma Center for Risk and Resilience & FPTZ
One Hundred Year Flood		X		X	ORNL collected from state and county level floodplain data.
Open Water And Wetlands		X	X	X	NLCD 2016 Land Cover (CONUS)
Population	2018	X			
	2020		X	X	ORNL Landscan data and US Census data
	2030	X			
Protected Lands	American Indian reservations	X	X		
	Correctional facilities	X	X		
	Critical habitat	X	X		
	Forests	X	X		
	Hospitals	X	X		USFWS Critical Habitat, Wild and Scenic River Lines (ArcGIS), USFWS National Cadastral Data, US Census,
	National monuments	X	X		HIFLD Hospitals, HIFLD Prison Boundaries, HIFLD Colleges and Universities, USDA 2001 Roadless Rule GIS Data, BLM
	National, state, and local parks	X	X		Navigator

	Volume (gpm)	✓	✓	✓	
Retail Energy Price By State		X	X	X	EIA
Retiring Generator Summary By County		X	X	X	EIA
Safe Shutdown Earthquake	0.3g	X			USGS National Seismic Hazard
	0.4g	X			
	0.5g	X			
	0.6g	X			
	6.5g			X	
	10g			X	
	15g		X		
Slope	12%	X	X	X	Digital Terrain Elevation Database Intelligence Agency
	18%	X	X	X	
Social Vulnerability Index By County		X	X	X	CDC
Streamflow	15kgpm	X			Low-flow statistics (7-day, 10 ye National Water Information Syst National Hydrologic Dataset Plu
	20kgpm		X		
	50kgpm	X			
	65kgpm	X			
	84kgpm		X		
Transmission Lines		X	X	X	Homeland Infrastructure Foundi
Transportation	Major Roads	X	X	X	HSIP GOLD 2015
	Navigable Waterways	X	X	X	
	Rail Lines	X	X	X	
Utility Nuclear Experience By County		X	X	X	EIA augmented by additional FF documentation for more informa

How important is state electricity market regulation? User can select deregulated or traditionally regulated. ⓘ MAP

Not Important



How important is nuclear inclusive state energy legislation? ⓘ MAP

Low



How important is positive sentiment towards building new reactors in a county? ⓘ MAP

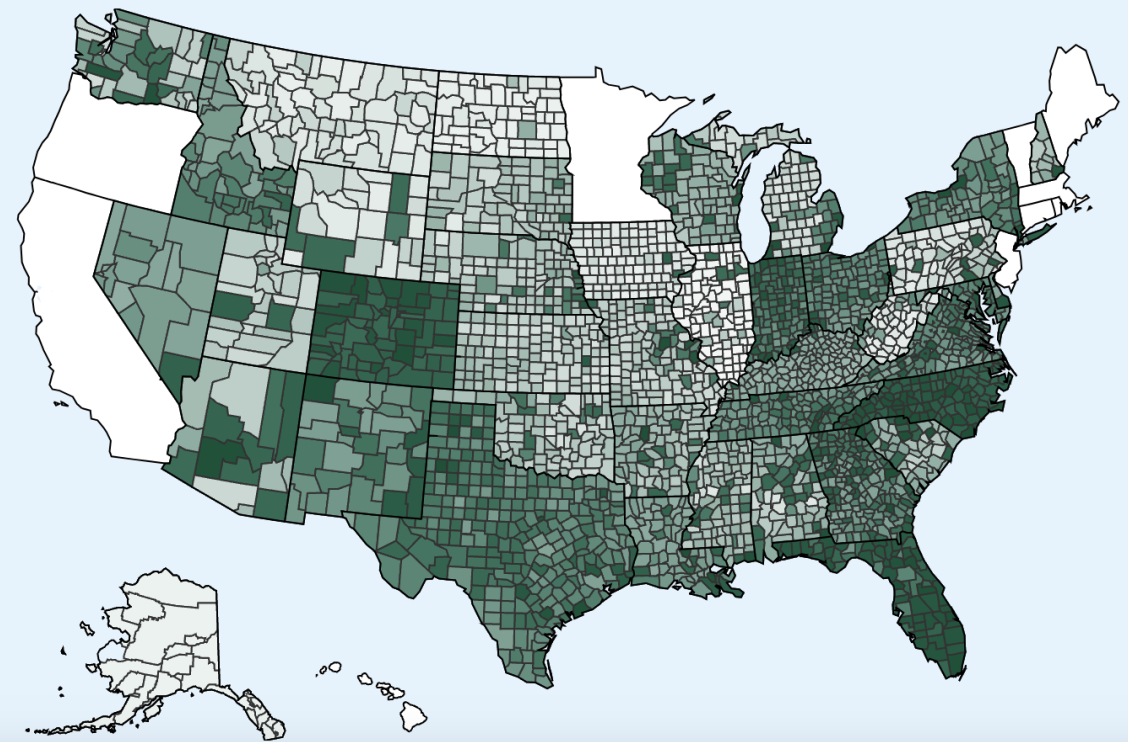
High



Priority Match Map

This custom heat map shows the Development Rank for each county based on your priorities. Click a county to see ranking details, select a county to analyze, or download a report.

MODIFY PRIORITIES



Highcharts.com

Top Matches

These are the top-ranking counties based on your p county name for details about its rank. Select up to to analyze.

	County	State
<input checked="" type="checkbox"/>	Wake	North Carolina
<input checked="" type="checkbox"/>	Brunswick	North Carolina
<input checked="" type="checkbox"/>	Mecklenburg	North Carolina
<input checked="" type="checkbox"/>	Monroe	Michigan
<input checked="" type="checkbox"/>	St. Lucie	Florida
<input checked="" type="checkbox"/>	Gaston	North Carolina
<input checked="" type="checkbox"/>	Catawba	North Carolina
<input checked="" type="checkbox"/>	Citrus	Florida
<input checked="" type="checkbox"/>	Appling	Georgia
<input type="checkbox"/>	Miami-Dade	Florida

Rows per page: 10 1-10 of 2878

Selected Counties:

- Citrus, FL
- St. Lucie, FL
- Appling, GA
- West Feliciana, LA
- Monroe, MI
- Brun

Layers



Phosphatic Fertilizer Plants

Max. layers visible

POL Terminals, Storage Facilities, Tank Farms

Max. layers visible

Fault Lines ⓘ

Max. layers visible

Landslide Hazard (CONUS only) ⓘ

Max. layers visible

Safe Shutdown Earthquake ⓘ

0.3g peak ground acceleration (CONUS ...)

Slope ⓘ

Greater than 12%

Open Water and Wetlands ⓘ

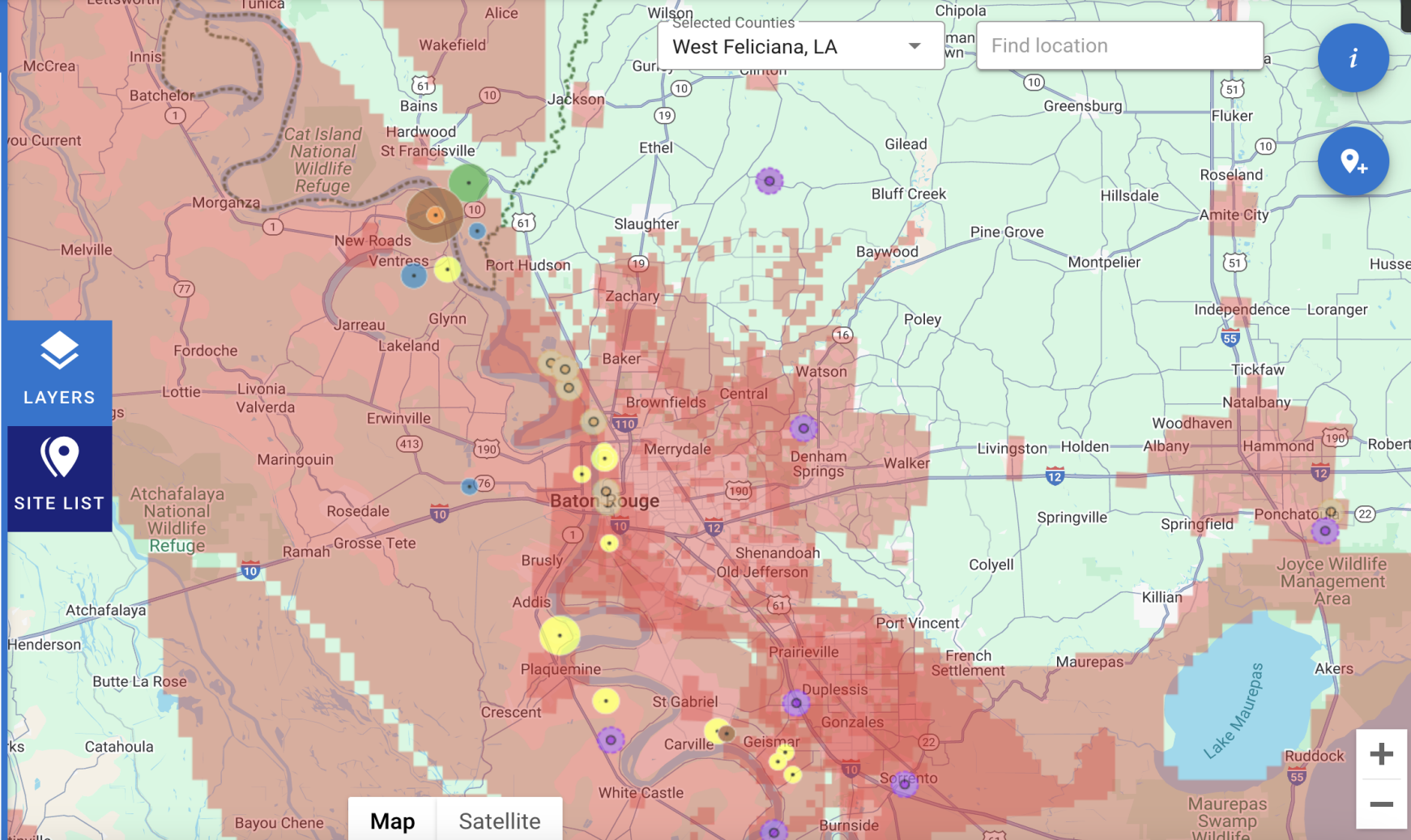
Max. layers visible

100 Year Floodplain (CONUS and HI) ⓘ

Max. layers visible

Avoidance Area

No Data



LAYERS

SITE LIST

Map Satellite

BROWNFIELDS ELECTRIC ENERGY GENERATORS **SIMPLE INTERSECTIONS**

Layer	Intersects
500 People/Sq. Mile (2030)	Yes
Landslide Hazard	Yes
100 Year Floodplain	No

Rows per page: 10 1-3 of 3

BROWNFIELDS ELECTRIC ENERGY GENERATORS SIMPLE INTERSECTIONS

Facility	Utility	Energy Source	Total Nameplate Capacity (MW)
Louisiana 1	Entergy Louisiana LLC	Natural Gas and Other Gases	451

BROWNFIELDS ELECTRIC ENERGY GENERATORS SIMPLE INTERSECTIONS

EPA ID	Site Name	Site Status	Site Type	Site Type Category	Site Ready to Use	Federal Agency	URL
LAD980869440	CAPITOL LAKES	Active	Other	Other	No	NULL	Site Home Page

Rows per page: 10 1-1 of 1

WHY IT MATTERS

The Inflation Reduction Act offers a 10% bonus on its clean energy tax credit for projects sited at designated brownfield sites. The bonus is a 10% increase on the \$25/MWh production tax credit or a 10 percentage point increase on the 30% investment tax credit.

DEFINITION

Sites designated as brownfields by the Environmental Protection Agency under the Comprehensive Environmental Response, Compensation, and Liability Act of 1980 (CERCLA)). This dataset includes sites that are National Priority List (NPL) sites with a status of final NPL site, part of NPL site, or proposed NPL site. A 1-mile buffer was applied to each site point, to compensate for the unknown spatial dimensions of the sites, which may be extensive.

REFERENCES

[SEMS Public User Database](#)

No update plan for this dataset

Layers

Max. layers visible

Navigable Waterways

Max. layers visible

Rail Lines

Max. layers visible

POPULATION

>500 People/Sq. Mile (CONUS 2018, AK and HI 2020)

2 mile buffer

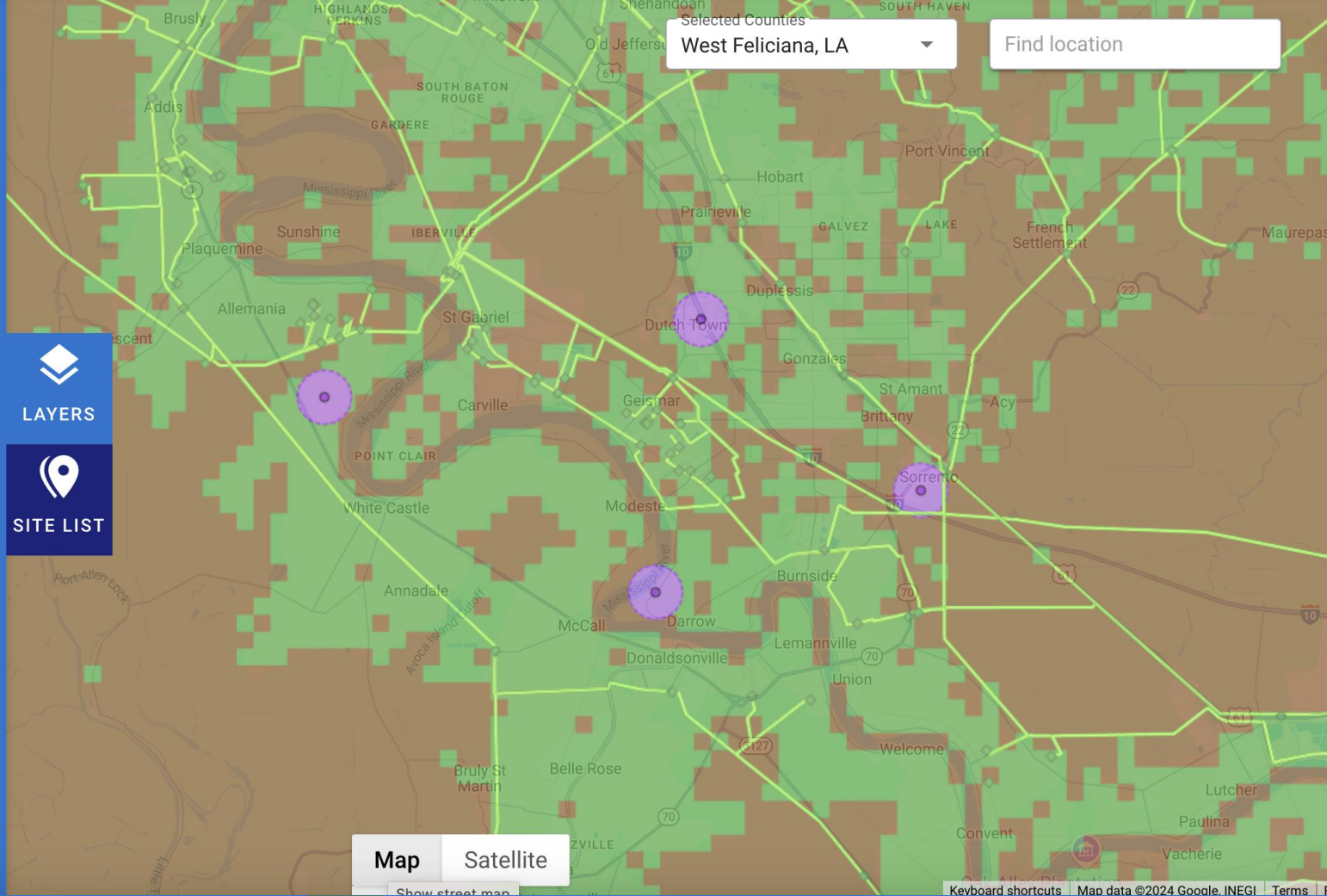
>500 People/Sq. Mile (2030) (CONUS only)

2 mile buffer

Streamflow

GPM >15K (>20K in AK) (CONUS and AK)

Safety Layers



Selected Counties: West Feliciana, LA

Find location

LAYERS

SITE LIST

Map Satellite

Show street map Keyboard shortcuts Map data ©2024 Google, INEGI Terms | Re

BROWNFIELDS ELECTRIC SUBSTATIONS SIMPLE INTERSECTIONS TRANSMISSION LINES

Owner	Status	Substation 1	Substation 2	Type	Voltage Class	Voltage
ENTERGY LOUISIANA LLC	IN SERVICE	UNKNOWN112520	SORRENTO	AC; OVERHEAD	220-287	230
ENTERGY LOUISIANA LLC	IN SERVICE	SORRENTO	UNKNOWN112526	AC; OVERHEAD	220-287	230
ENTERGY LOUISIANA LLC	IN SERVICE	UNKNOWN112514	SORRENTO	AC; OVERHEAD	220-287	230

BROWNFIELDS ELECTRIC SUBSTATIONS SIMPLE INTERSECTIONS TRANSMISSION LINES

EPA ID	Site Name	Site Status	Site Type	Site Type Category	Site Ready to Use	Federal Agency	URL
LAD980501456	CLEVE REBER	Active	Waste Management	Industrial waste facility (non-generator)	Yes	NULL	Site Home Page

BROWNFIELDS ELECTRIC SUBSTATIONS SIMPLE INTERSECTIONS TRANSMISSION LINES

Layer	Intersects
Open Water and Wetlands	Yes
Streamflow	Yes

BROWNFIELDS ELECTRIC SUBSTATIONS SIMPLE INTERSECTIONS TRANSMISSION LINES


City	County	State	Zip	Lines	Max Voltage	Min Voltage	Status	Max Voltage Inferred	Min Voltage Inferred
SORRENTO	ASCENSION	LA	70778	6	230	-999999	IN SERVICE	Y	N

You have 8 sites selected.

Ann arbor 42.2882, -83.6671	California 41.9422, -122.6449	Iowa 42.5798, -93.9350
Maine 45.3060, -70.6216	North Carolina 36.5086, -81.6985	Texas 34.3247, -100.9764
Wyoming 42.4019, -110.4198	Illinois test site 41.1025, -88.6492	

COMPARE SITES

Add Sites:

 **CLICK ON MAP**

 **UPLOAD A CSV**

 **ENTER COORDINATES**

Fault Lines ⓘ

Medium



Landslide Hazard ⓘ

High



Safe Shutdown Earthquake ⓘ

High



Peak ground acceleration: 0.3g 0.4g 0.5g 0.6g 6.5g (HI only) 10g (HI only)
 15g (AK only)

Socioeconomic



Nuclear Restrictions i MAP

Best	Worst	Site Avg	National Avg	Best - Worst
0 relevance sum	37 relevance sum	10.5 relevance sum	3.431 relevance sum	37 relevance sum

Medium



Energy Price i MAP

Best	Worst	Site Avg	National Avg	Best - Worst
26.047 cents/kWh	8.701 cents/kWh	13.844 cents/kWh	13.631 cents/kWh	17.346 cents/kWh

Medium



Net Electricity Imports i MAP

Best	Worst	Site Avg	National Avg	Best - Worst
75504 million kWh/year	-34739 million kWh/year	5222.875 million kWh/year	765.509 million kWh/year	110243 million kWh/year

High



All Sites

Ann Arbor

California

Iowa

Maine

North Carolina

Texas

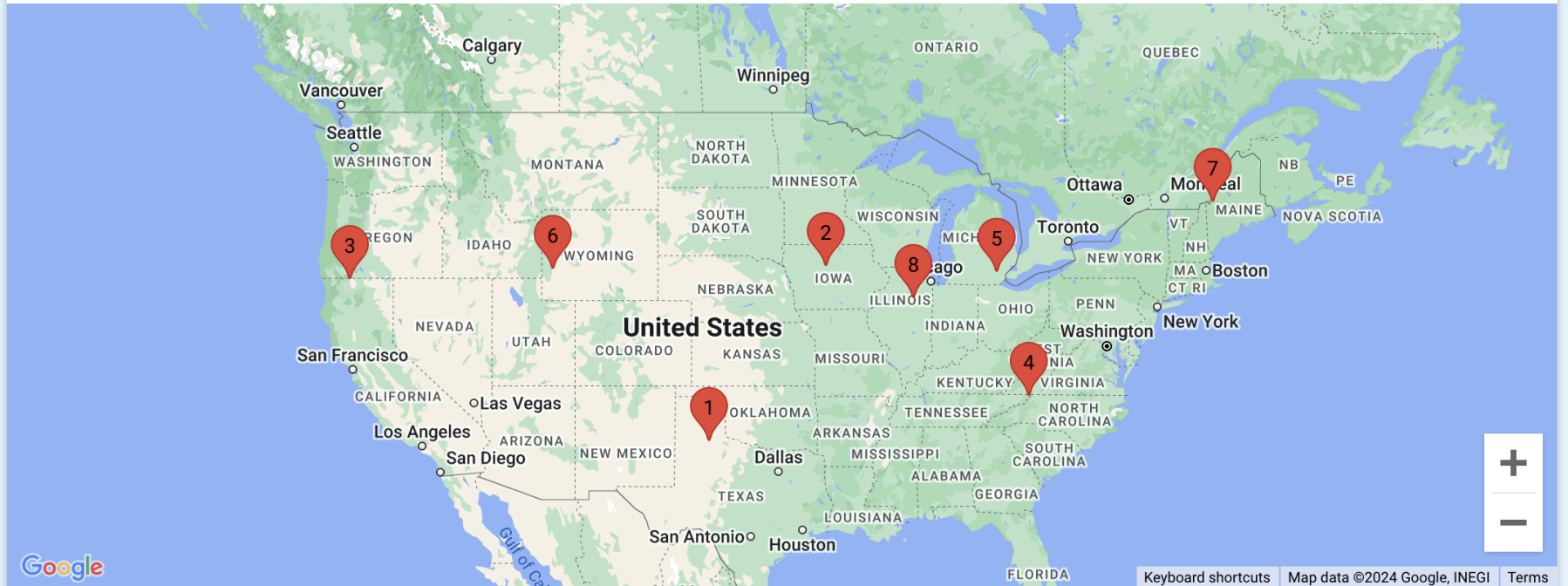
Wyoming

Illinois Test Site

Settings Snapshot

↓ RESULT DATA (CSV)

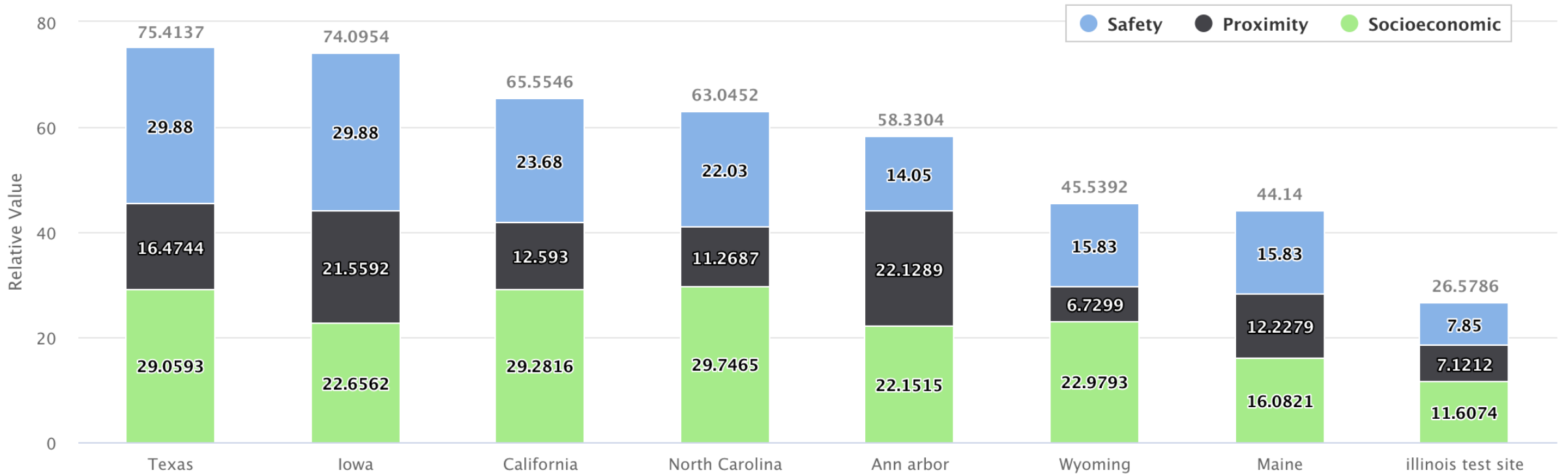
Site Locations



Your site locations labelled by rank according to their composite values. Click on a marker for more information.

Site Attributes

Contribution of Primary Objective to Composite Value



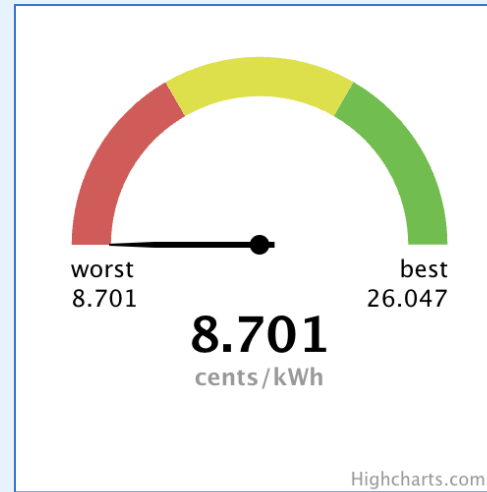
Stacked bars show the contribution of each comparison objective to the total value of each potential site

Socioeconomic

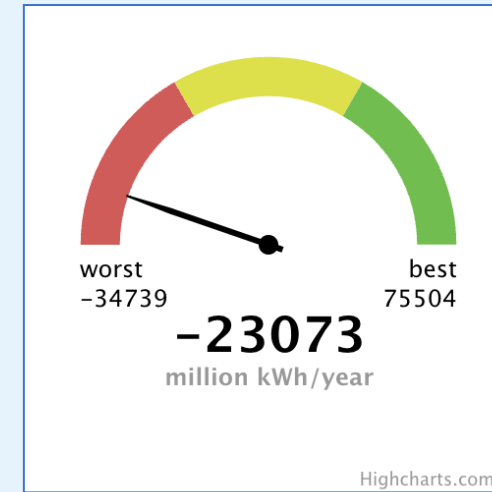
Nuclear Restrictions

✓ No restrictions

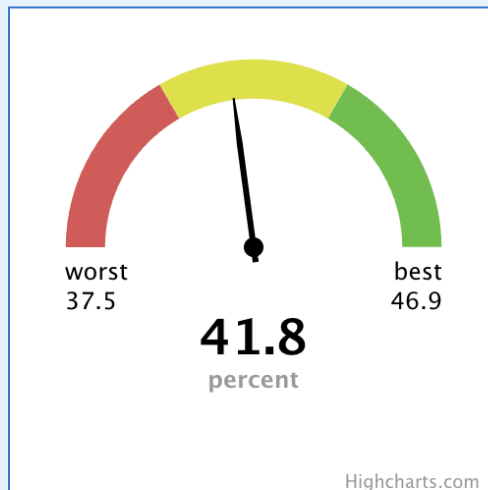
Energy Price



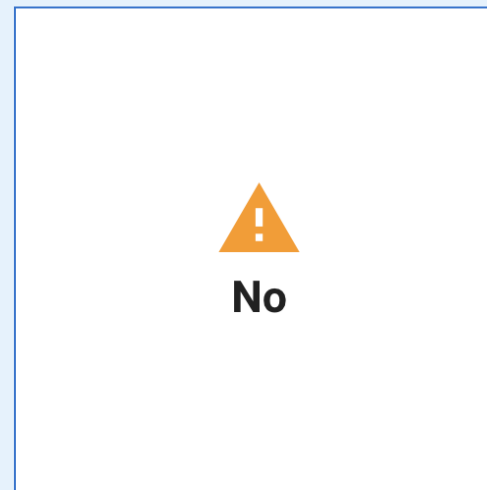
Net Electricity Imports



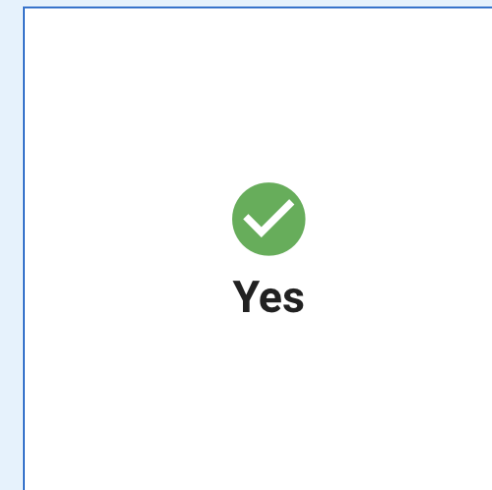
Nuclear Sentiment



Nuclear Inclusive Policy

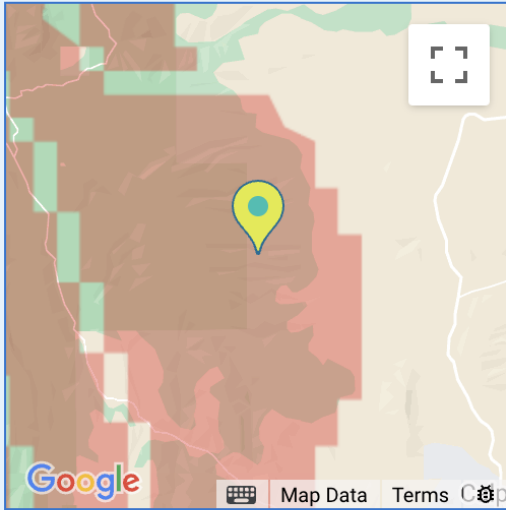


Traditionally Regulated Market

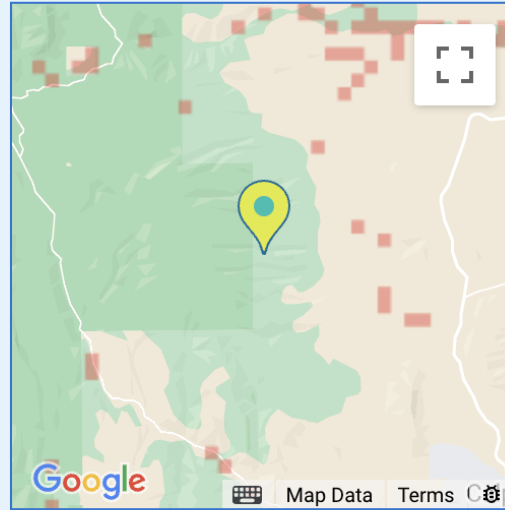


Safety

⚠️ Landslide Hazard



✅ Open Water And Wetlands



⚠️ 18% Slope



Hazardous Facilities

⚠️ Natural Gas Compressor Stations: 1

Hazardous Facilities

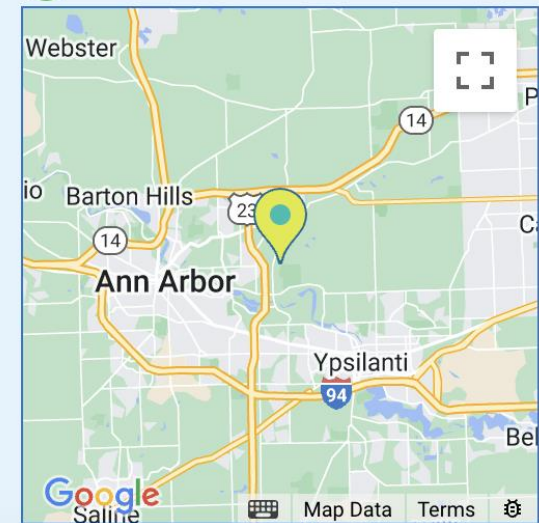
- ⚠ Biological Products Manufacturing: 1
- ⚠ Chemical Manufacturing: 1
- ⚠ Lubricating Oils and Grease Plants: 1
- ⚠ Pharmaceutical Preparations Manufacturing: 1

Proximity

Electrical Substations



✓ Streamflow < 15K GPM





STAND

To Access STAND Visit:

<https://nric.inl.gov/stand-tool/>

OR-SAGE: Oak Ridge Siting Analysis for power Generation Expansion

Olufemi Omitaomu – OR-SAGE PI
Randy Belles – Analysis Support

March 2025

ORNL is managed by UT-Battelle, LLC for the US Department of Energy

ORNL Collaborators

- Femi Omitaomu, ORNL
- Randy Belles, ORNL
- Andy Worrall, ORNL
- Brandon Miller, ORNL
- Abi Adeniyi, ORNL
- Eva Davidson, ORNL

Funding Sources

- DOE-NE
- DOE-OE
- DOE's Gateway for Accelerated Innovation in Nuclear (GAIN) Program
- DOE's National Reactor Innovation Center (NRIC)
- ARPA-E's MEITNER Program
- EPRI

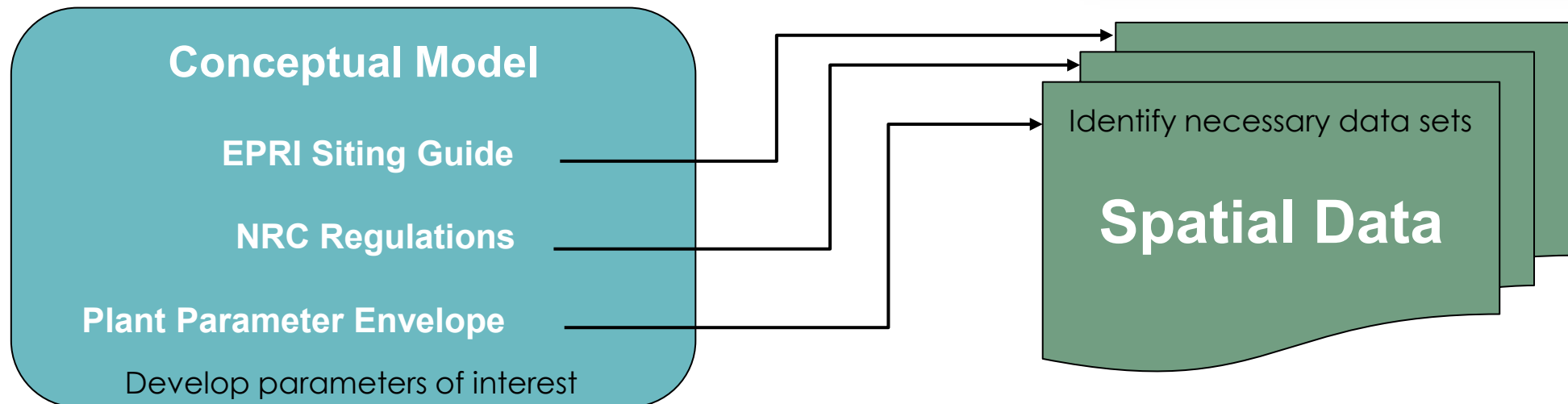
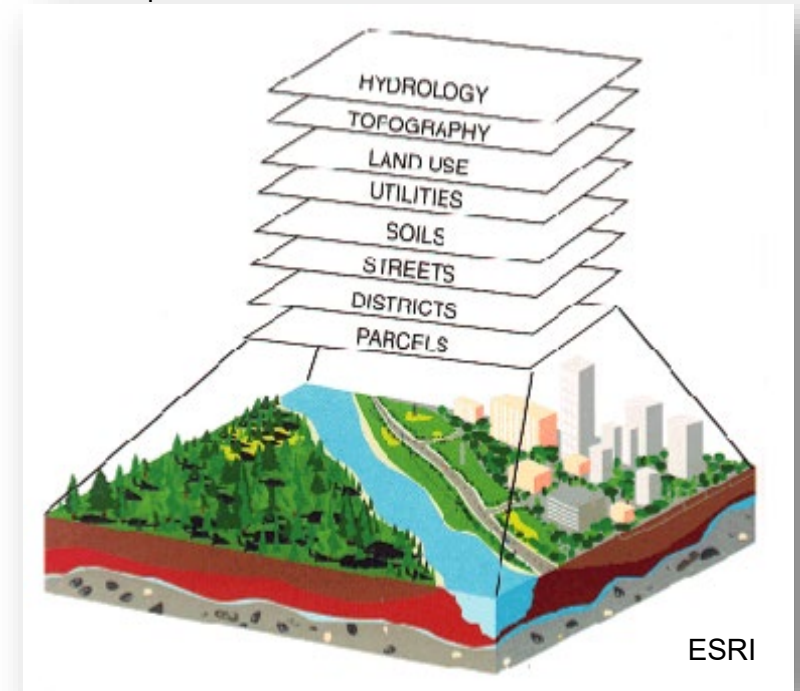
Genesis for creating a siting tool

- **Late 2008:** In-house and national studies indicated an increased demand for electricity in the United States
- Estimates of as much as **300 GWe of new nuclear generation** was envisioned along with other generation technologies
- This begged numerous questions:
 - **Can we site** 300 GWe of new nuclear in the US?
 - Is there an optimization among large and small reactors?
 - And eventually: Do technology breakthroughs such as “dry cooling,” advanced reactors, and micro-reactors change the siting mindset?
- Development of a database that allows for **visualization of complex sets of data** was seen as the key ➡ **GIS**

OR-SAGE GIS data modeling

- Describe desired attributes at a specific location
- Match appropriate reactor siting criteria to the best available datasets
- Overlay multiple layers
- Relationships between features, processes and locations

Multiple data sets describe land areas



OR-SAGE focuses on Licensing Requirements

Regulations: What to look at...

10 CFR 100



10 CFR 50.34
Dose

- Population density and use characteristics of the site, including the population distribution and site-related characteristics must be evaluated to determine whether societal risk of potential plant accidents is low
- Nature and proximity of man-related hazards (e.g., airports, dams, transportation routes, military and chemical facilities) must be evaluated
- Physical characteristics of the site, including seismology, meteorology, geology, and hydrology

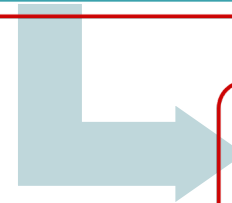
Guidance: How to meet regulations - values

RG 4.7

- Provides guidance to meet regulations
- Provides specific values in some cases



EPRI Siting Guide

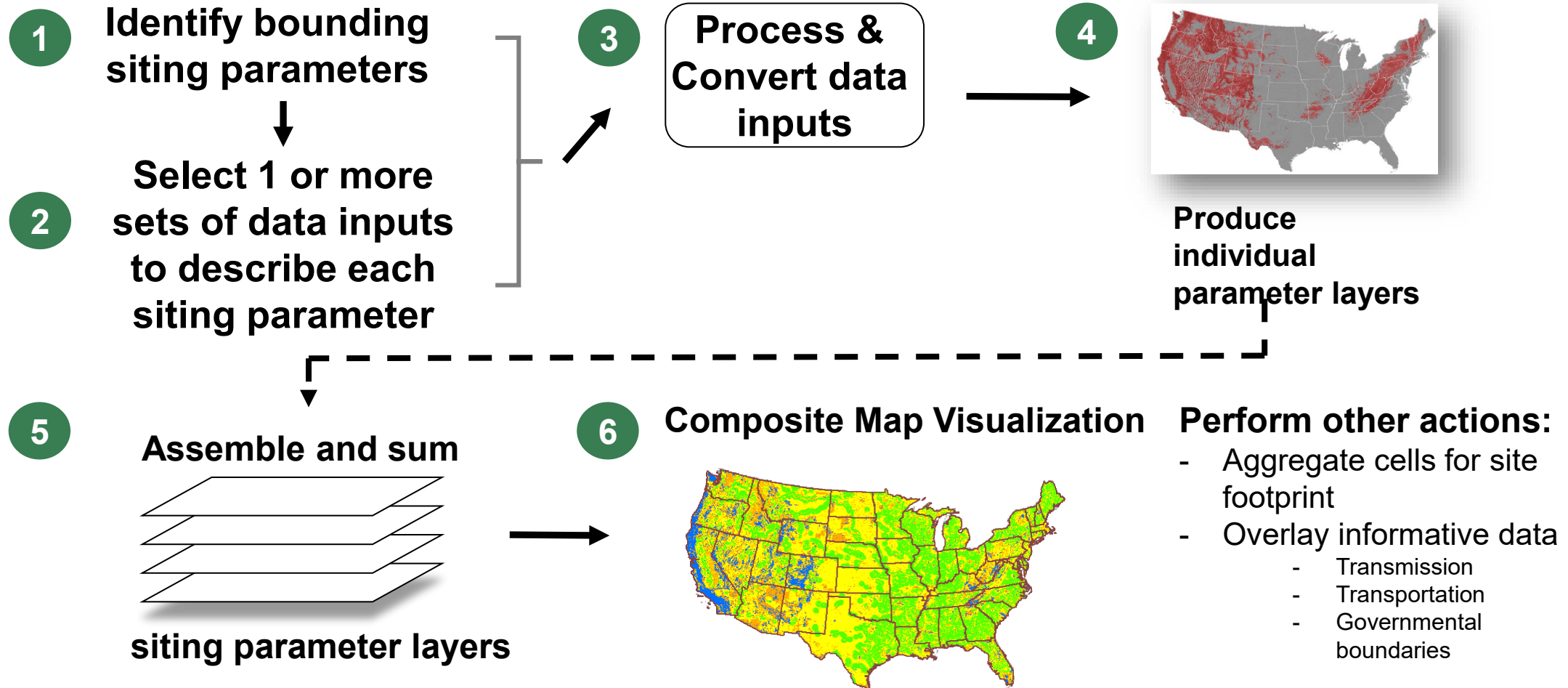


Available Data Sources

What is available to support guidance

- Industry guidance provides 50+ considerations
- Not all guidance is directly data driven
- For reactors – selected parameters to bound physical characteristics of a site
- Identify available data

Basic modeling / visualization process defines database

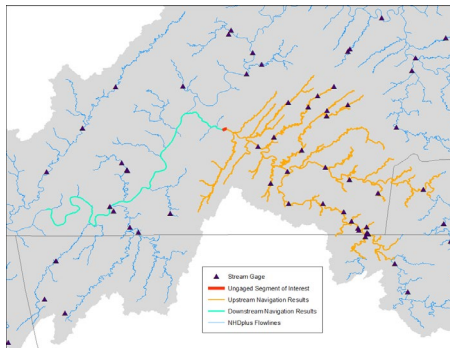


- Use ~ 60 datasets to scan the contiguous U.S. (~1.8 billion acres) using 100 m by 100 m grid cells (2.5 acres)
- Result is a 700 million cell data base
- Uses collection of publicly available data, proprietary data, and calculated data

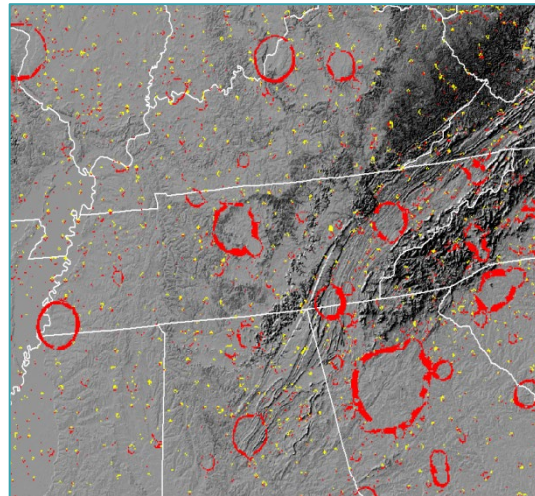
OR-SAGE includes numerous support algorithms

Thermal-Electric Cooling	Energy Demand	Plant Size
Track water resource	Population growth	Cell aggregation

- USGS data on 7-day 10-year low flow at 12,000 gaged locations
- Use approved USGS statistical approach to calculate low flow value for stream segments in each database cell
- Overlay lakes and reservoirs

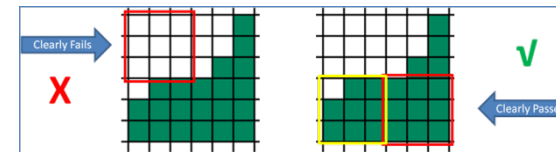


ORNL Landscan and Census data used to predict population changes



Red – growth
Yellow - contraction

Process eliminates “orphaned” cells

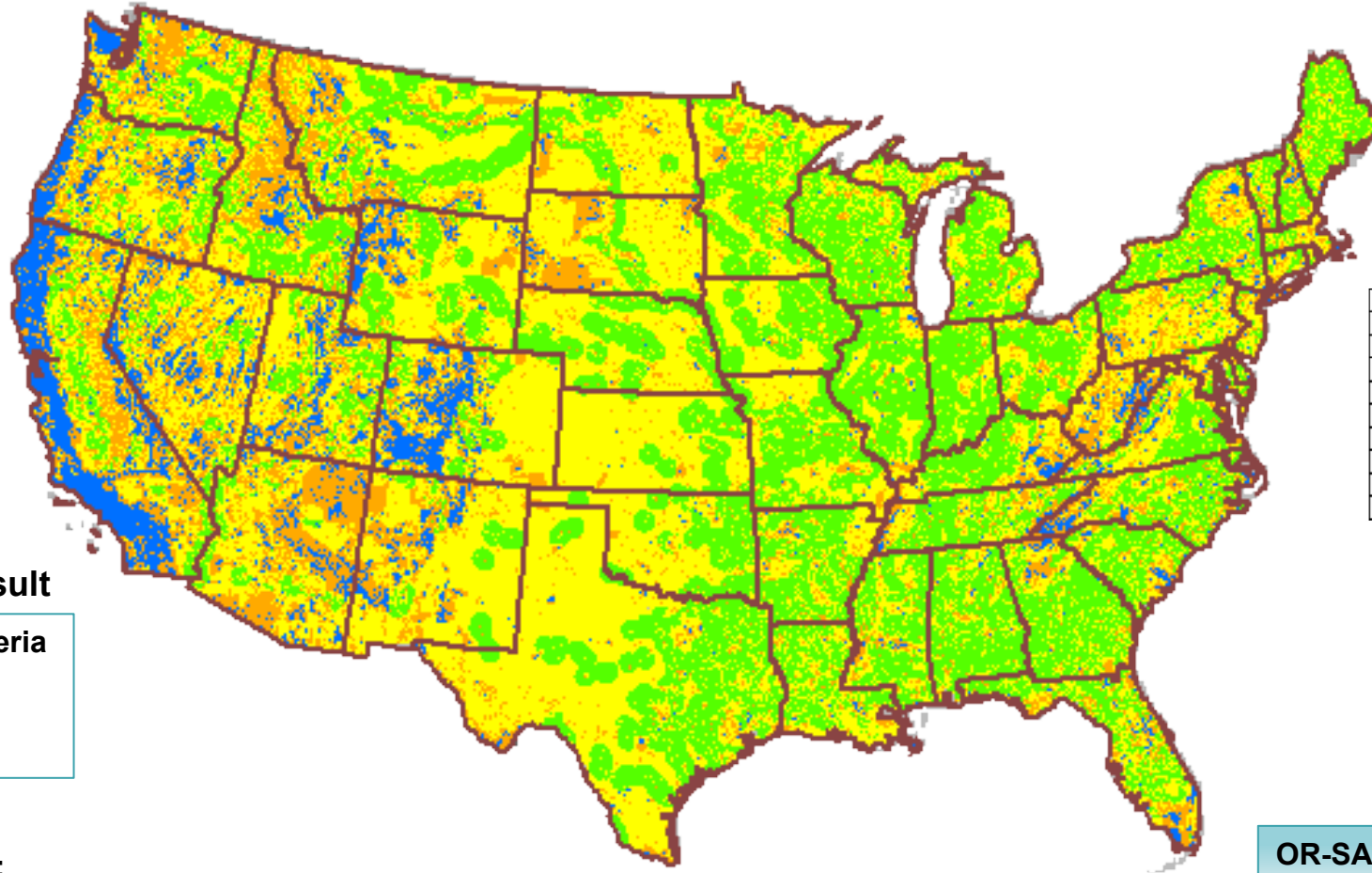


Olive Green – Land that passes all siting criteria
Dark Green – Land aggregated with no “failed” cells
Blue – Land aggregated with allowance for 10% failed cells

Baseline screening criteria (**flags**) vetted by experts

OR-SAGE Screening Criteria for Reactor Technologies	SMR (2012 DOE Study)	Advanced Reactors
Population density (people/square mile)	>500 ppsm within 10 miles	>500 ppsm within 1 mile
Safe shutdown earthquake (ground acceleration)	>0.5	>0.3, >0.5, >0.75
Wetlands/Open waters	Not allowed	Not allowed
Protected Lands	Not allowed	Not allowed
Slope	>18% grade	>18% grade
Landslide hazard (high)	Flag	Flag
100-year floodplain	Not allowed	Not allowed
Streamflow – cooling water makeup (X gallons/minute; closed cycle cooling; limited to 10% of resource)	65,000 gpm	Potentially 0 or very small
Proximity to hazards (buffer distance)	Flag 1-10 miles	Flag 1-10 miles
Proximity to fault lines (buffer distance)	Depends on length of fault	Depends on length of fault

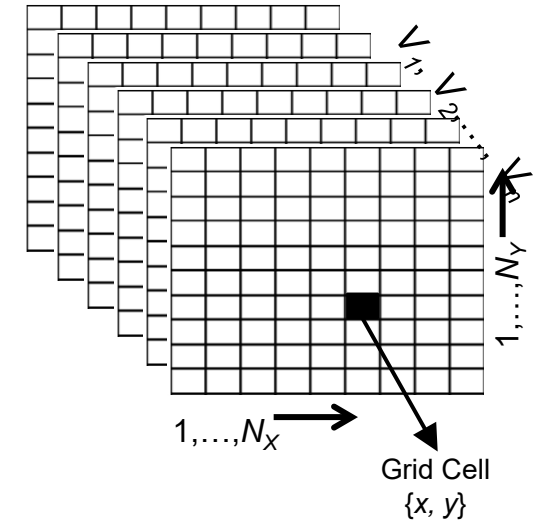
National **visualization** for a static small reactor example



Composite Map Result

- Green – Meets all Criteria
- Yellow – Single issue
- Orange – Two issues
- Blue – 3+ issues

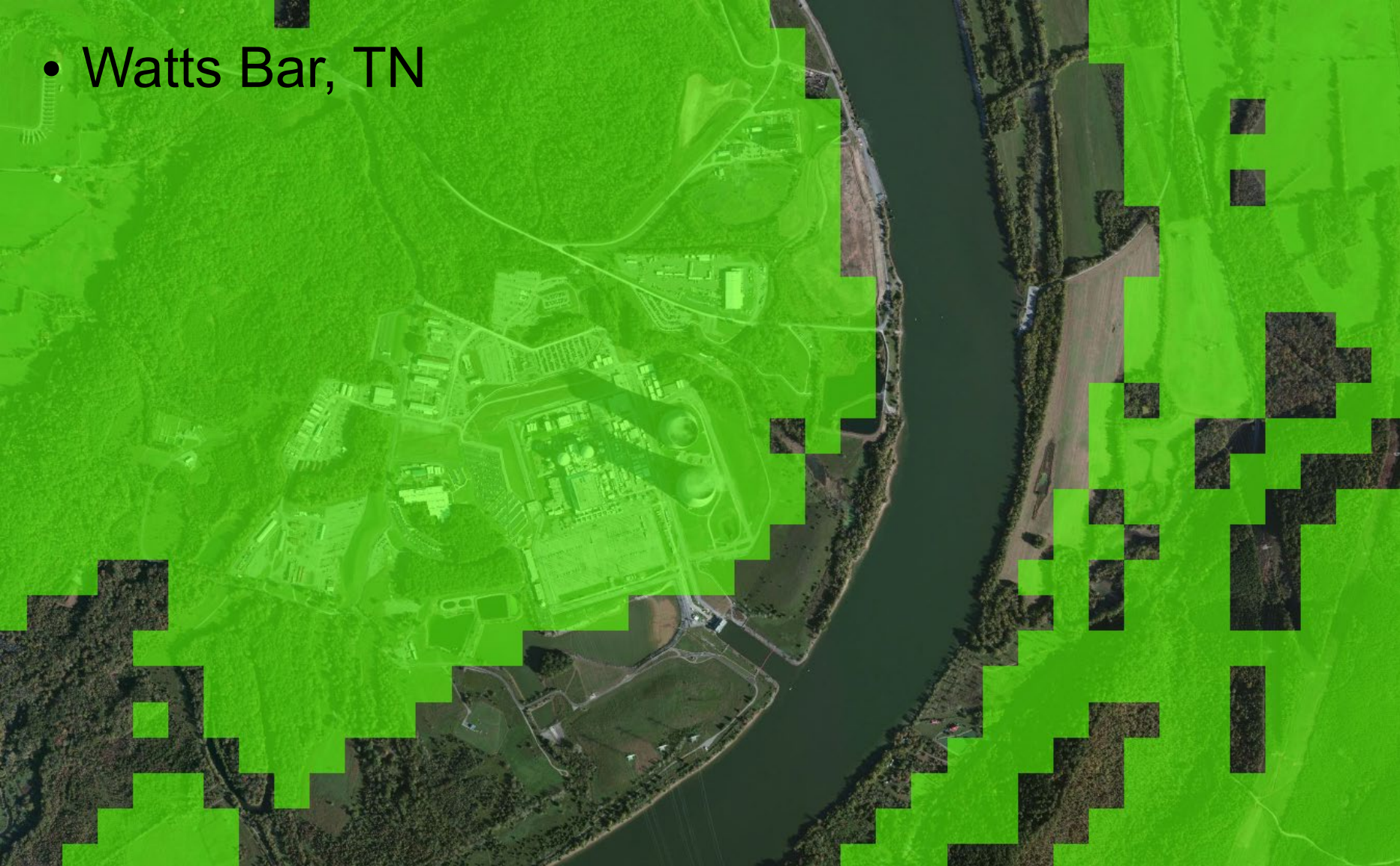
Single issue potential:
Yellow + Green = 74.7%
potentially meets criteria



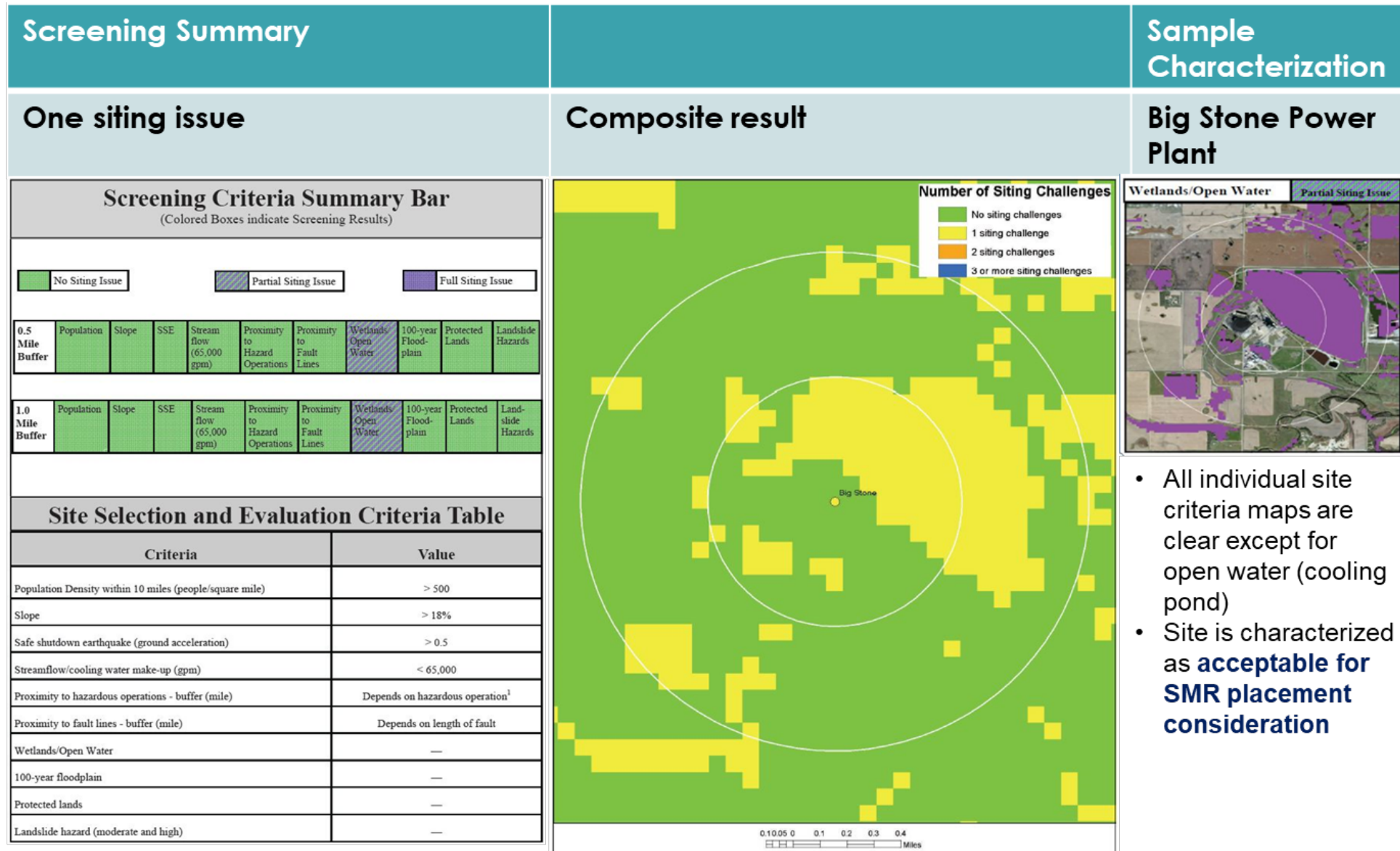
OR-SAGE provides capability to interrogate any cell to evaluate status.

OR-SAGE validated by review of existing plants

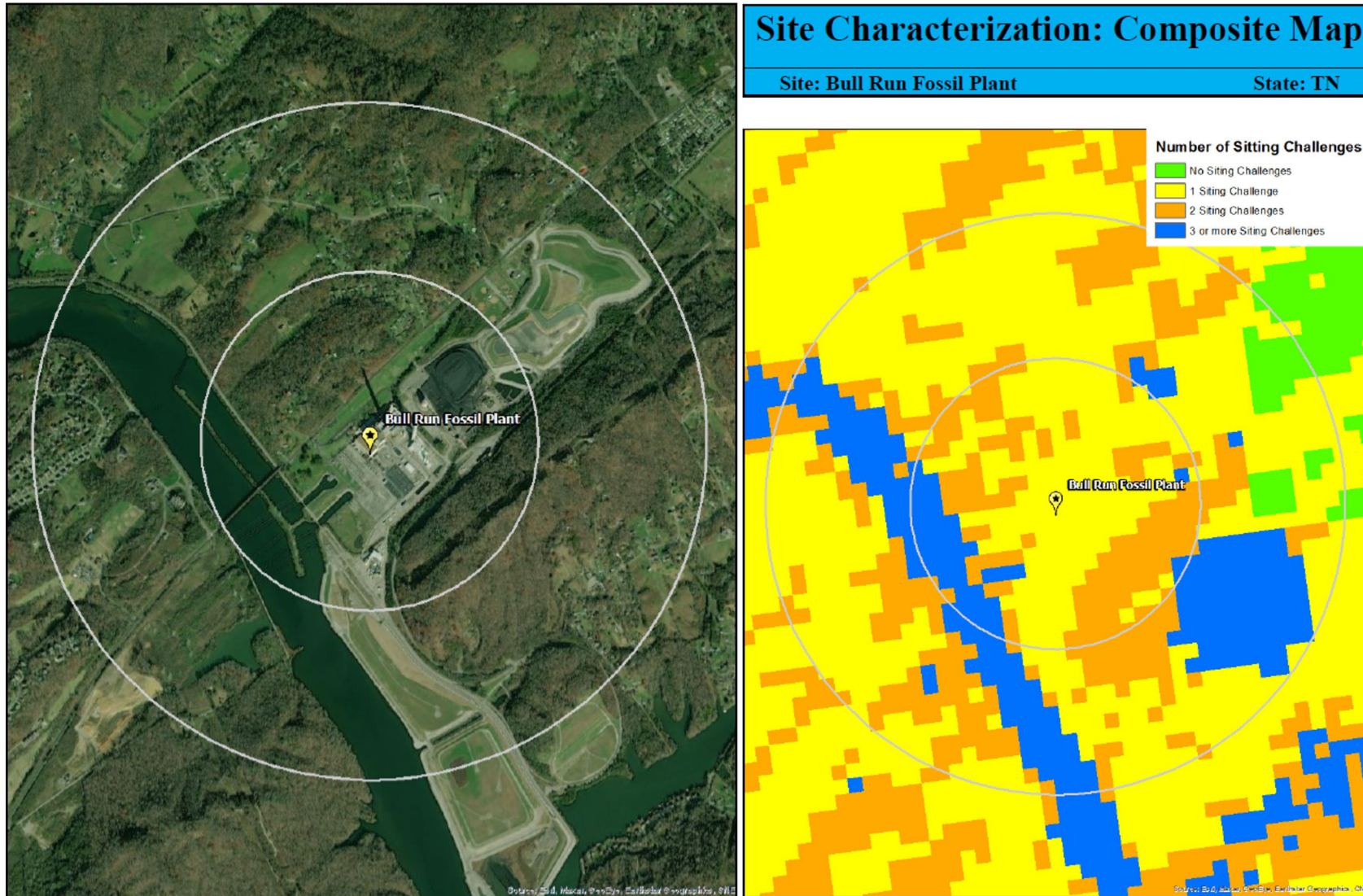
- Watts Bar, TN



Other sites, such as existing coal plants have been evaluated



Site results are not always simple



OR-SAGE can model different technologies

Technologies →	NuScale 12-Unit VOYGR	TerraPower Natrium	Westinghouse eVinci	GE Hitachi BWRX-300	X-Energy XE-100	Holtec SMR-300
Siting Parameters ↓						
Population Density	>500 ppsm within 1 mile EPZ - Site Boundary	>500 ppsm within 4 miles Not Stated	>500 ppsm within 1 mile EPZ - Site Boundary	>500 ppsm within 1 mile EPZ - Site Boundary	>500 ppsm within 1 mile EPZ - Site Boundary	>500 ppsm within 1 mile EPZ - Site Boundary
Safe Shutdown Earthquake	>0.5 g	>0.3 g	>0.75 g	>0.3 g (IAEA)	>0.5 g (IAEA)	>0.3 g (IAEA)
Makeup Cooling Flow	110,000 gpm	41,400 gpm	0	37,800 gpm	9,600 gpm/unit	36,000 gpm
Air-Cooled Option	Yes with 6,000 gpm makeup	Not stated	Reactor is air-cooled	Not stated	Yes	Yes
Slope	18%	18%	18%	18%	18%	18%
Wetlands/Open Waters	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed
100-year floodplain	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed
Protected Lands	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed	Not Allowed
Landslide Hazard	Flag High	Flag High	Flag High	Flag High	Flag High	Flag High
Proximity to Hazards	Flag 1-10 miles	Flag 1-10 miles	Flag 1-10 miles	Flag 1-10 miles	Flag 1-10 miles	Flag 1-10 miles
Proximity to Fault Lines	10 CFR 100, Appendix A, Table 1	10 CFR 100, Appendix A, Table 1	10 CFR 100, Appendix A, Table 1	10 CFR 100, Appendix A, Table 1	10 CFR 100, Appendix A, Table 1	10 CFR 100, Appendix A, Table 1
Footprint	34 acres	Protected-16 acres, Site-44 acres	Protected - 0.8 acres	Protected-10 acres, Site-34 acres	4-unit package - 13 acres	8 acres
Output	924 MWe 77 MWe per unit	345 MWe	5 MWe	315 MWe	80 MWe/unit 4-unit package - 300 MWe	300 MWe
Technology	PWR	SFR with molten salt storage	Micro Heat Pipe	BWR	HTGR	PWR

Key OR-SAGE Questions: Benefits and Access

- Types of studies and who has benefited from OR-SAGE
 - Utilities such as TVA to analyze sites of interest
 - Investment firms looking to invest in property for generation
 - Firms looking to site reliable power for datacenters
 - DOE evaluation of coal plants nationwide for potential nuclear backfit
 - White House and DOE Loan Program Office for potential generation expansion at existing nuclear sites
 - Waste transport and storage optimization
- Access to the tool
 - Direct funding of ORNL personnel
 - Use of DOE GAIN funds

OR-SAGE is not directly available via Web Interface

- Considerable amount of data to keep up to date
 - Typically done project to project and not day to day
- Better interpretation of data with lab support
 - Results can be complex
 - Less likely to have false positives or false negatives
- Better with more computing power
- No need for site registration or layered access security

Thank you



If you want to learn more about OR-SAGE, please contact us. We are happy to discuss in more detail how our process works and ways to fund our staff support:

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Nuclear Energy Modeling Tools for States

March 21st 1-2 pm ET

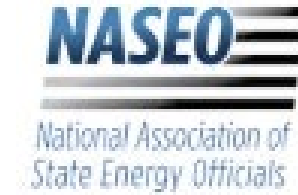
Moderator: Kenya Stump, Kentucky Office of Energy Policy

Panelists:

Randy Belles, Oak Ridge National Laboratory

Gabrielle Hoelzle, University of Michigan

Announcements



Abstract submissions open now for the NARUC Summer Policy Summit in Boston, MA July 27 – 30. [Submissions due by April 9.](#)

Registration open to NARUC and NASEO members for Charlotte, NC site visit on April 14 – 16. Tours of Catawba Nuclear Station and EPRI Charlotte offices. [Registration open through March 27.](#)