

STAND Quickstart Guide

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STAND Quickstart Guide

INTRODUCTION TO STAND

STAND is a flexible web application designed to identify and examine potentially feasible sites where advanced nuclear facilities might be welcomed by host communities. STAND allows the user to explore and provide insight on socioeconomic, proximity, and safety data, generate county reports, review regulatory data, and complete a comparative analysis across multiple sites by following several paths, either individually or sequentially based on the user's needs and where they are in the deployment process. STAND is not a substitute for the in-depth studies required to qualify a site for hosting a nuclear facility, nor is it a substitute for the necessary community engagement to build trust and seek consent. It can, however, be a valuable resource to aid in the siting process. The paths are:

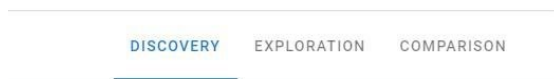
- **Site Discovery:** Start here to identify counties or states that may be good candidates for reactor development.
- **Site Exploration:** Start here if general areas for deployment have already been identified but exploring regulatory data or adding sites for Site Comparison is desired.
- **Site Comparison:** Start here if site coordinates for deployment have been identified to compare them against each other.


SYSTEM REQUIREMENTS AND SUPPORTED BROWSERS

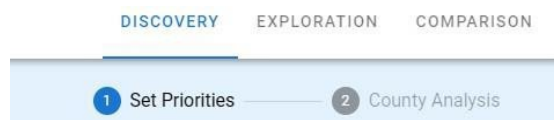
STAND is designed to be used on desktop computers and will not function properly on smartphones or tablets. STAND is optimized for the latest 2023 versions of Firefox, Chrome, and Edge. Use of any other browser may result in poor functionality.

GENERAL NAVIGATION

Users can navigate between paths using the top navigator.




To return to the home page, clicking the upper left-hand STAND icon . Within the Discovery, Exploration, and Comparison paths, use the stepper to navigate between the steps of these paths.

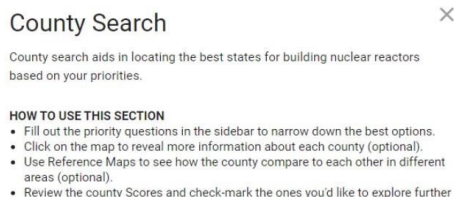



If a lower-numbered step has not been completed by the user, the following steps might be grayed out. Complete the initial steps to proceed. Users are always able to go back to previous steps to adjust user inputs. These changes will be immediately reflected in subsequent steps.

INFORMATION BOXES

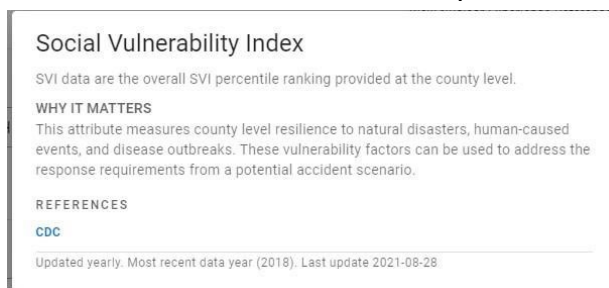
Information boxes provide useful contextual information. There are two primary types of information boxes:

Page information boxes are represented by . Page information boxes provide background information, explain the overall process of that page, and provide instructions.



Indicator level information boxes are represented by . Indicator level information boxes provide information for the indicator with which they are associated, including:

- An overview of the indicator.
- Why it matters.
- Instructions (if applicable).
- Data source references.
- Data currency – the rate of scheduled updates. This can be yearly, monthly, or quarterly. For some data sources, the exact date of future updates may be unknown. In this case, the data currency will list the most recent year of the source data as well as how often that data is checked for updates.
- Last update – the most recent date that source was updated or checked for an update.



REFERENCE MAPS

Reference maps are available for each applicable indicator. Links to these reference maps are located below each indicated in underlined text.

7. How important is it that generators within a county are entering retirement? ⓘ

Low

Which technologies interest you?

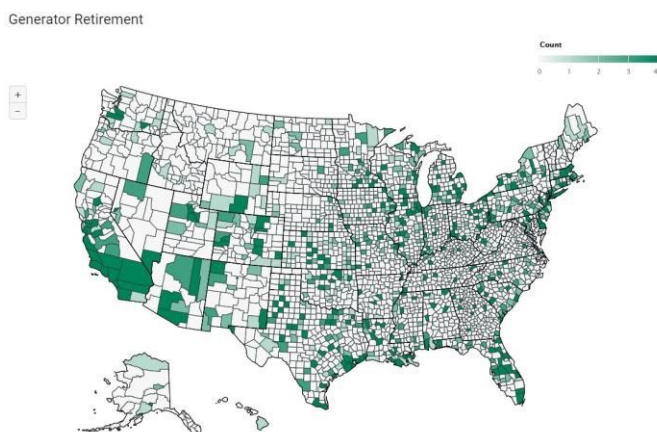
☒ Coal ☒ Natural Gas ☒ Nuclear

In how many years should a generator be retiring?

0 10 25 40 50

[View Generator Retirement Reference Map](#)

Clicking this link will bring up a national map of that indicator on the geographic scale associated with it. The Generator Retirement reference map below can be accessed by clicking on the highlighted link shown in the figure above.




Each reference map provides a relevant scale in the upper right-hand corner. Reference maps are also clickable. In this example, click on a county to display even more granular information for that county.

Oakland, MI Retiring Generators

| Utility | Facility | Generator ID | Technology | Retirement Status | Retirement Year | Nameplate Capacity (MWh) |
|-------------------------|-----------------------|--------------|--------------------------------------|-------------------|-----------------|--------------------------|
| DTE Electric Company | Hancock | 2 | Natural Gas Fired Combustion Turbine | Retired | 2019 | 19 |
| DTE Electric Company | Hancock | 4 | Natural Gas Fired Combustion Turbine | Retired | 2019 | 20 |
| DTE Pontiac North LLC | DTE Pontiac North LLC | GEN1 | Conventional Steam Coal | Retired | 2009 | 29 |
| JHP Pharmaceuticals LLC | Par Sterile Products | 38-1 | Natural Gas Fired Combustion Turbine | Retired | 2020 | 3 |

STAND HOME SCREEN

Once the user has been provided access, and agreed to the terms of use, the Home Page will be the first page displayed to the user at each login. Clicking on the STAND icon  in the upper left corner of the application will always bring the user back to the Home Page. The Home Page provides a brief overview of the application, a brief description of each path, and documentation downloads. Users can click on any path in the Get Started section to begin or use the top navigation.

Get Started



DOCUMENTATION

There are documentation downloads available on the Home Page:

- **Quickstart Guide:** This document
- **Slides for Usage:** Step-by-step directions for how to use STAND.

SITE DISCOVERY

Site Discovery is the best place to start for users who are at the beginning stages of investigating deployment options and want to more generally identify counties or states which may be candidates for deployment. There are two steps to the Site Discovery process: (1) Setting Priorities and (2) County Analysis.

At the end of the Site Discovery process, the user will be able to download reports on counties of interest or save up to five counties to be bookmarked in Site Exploration. In Site Exploration, the user can view geospatial regulatory and infrastructure data or add sites for Site Comparison within those counties or beyond.

SET PRIORITIES

Fill out the Priority Questionnaire to indicate the relative importance of each parameter displayed. Parameters are numbered from 1–12. For each numbered parameter, there may be several associated tasks. (Tip: Use the page-level information boxes for further instructions.)

1. Read the question located after each numbered parameter. Depending on the indicator there may be additional selection options:
 - a. For Priority Question 1, decide which state restrictions would be considered a dealbreaker for the project. If the box is checked for a given restriction it will be removed from consideration.

Priority Questionnaire

Answer the questions below to identify counties with the best conditions for deploying your advanced nuclear reactor technology. Results will be based on your priorities.

1. Which State nuclear restrictions would you consider dealbreakers for your project? ⓘ

- ☒ Moratorium (i.e. ban)
- ☒ Geographically limited moratorium
- ☐ Required approval by State legislature
- ☐ Required approval by the State Commissioner of Environmental Protection
- ☐ Voter approval
- ☐ Finding (i.e. proof) that the construction of a nuclear facility will be economically feasible for ratepayers
- ☒ Demonstrable technology or a means for high level waste disposal or reprocessing
- ☒ Finding that the proposed method for disposal of radioactive waste material (to be produced or generated by the facility) will be safe

[View Nuclear Restrictions Reference Map](#)

- b. For Priority Question 7, identify which technologies are of interest for replacement. Select coal, natural gas, and nuclear with the checkboxes. Use the slider to set the range of years into the future for these retirements.

7. How important is it that generators within a county are entering retirement? ⓘ

Low

Which technologies interest you?

- ☒ Coal
- ☒ Natural Gas
- ☒ Nuclear

In how many years should a generator be retiring?



[View Generator Retirement Reference Map](#)

2. Use the drop-down menu to set the relative importance of each indicator. (Tip: Use the parameter level information box to access additional information about each indicator. View reference maps to provide additional context.)
3. When the Priority Questionnaire is completed, click Submit to proceed to County Analysis.

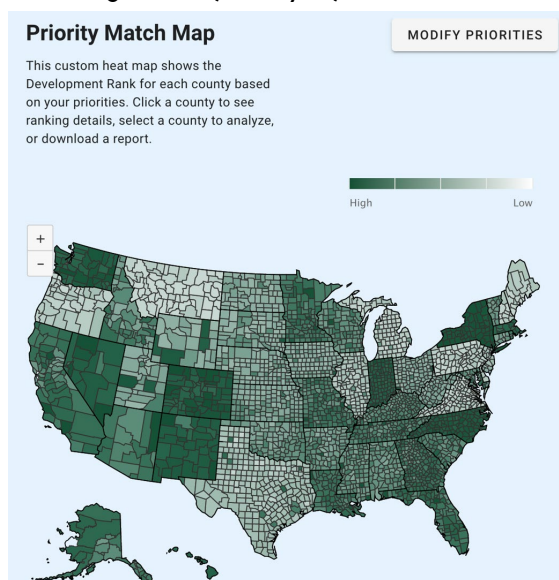
COUNTY ANALYSIS

County Analysis displays a national Priority Match Map and Top Matches leaderboard calculated from user inputs gathered in the Priority Questionnaire.

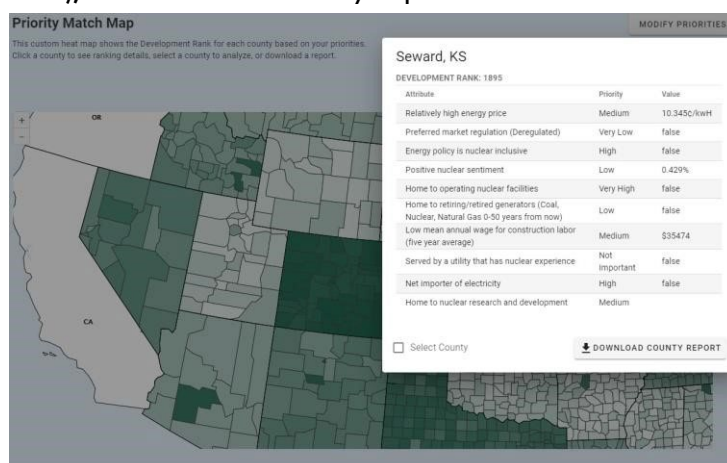
PRIORITY MATCH MAP

This custom heat map shows the Development Rank for each county based on the priorities.

1. Click a county to see ranking details, analyze, or download a report.



2. Adjust the zoom with the +/- icon on the left of the map. Reposition by clicking and dragging.
3. Click Modify Priorities to return to the Priority Questionnaire.
4. Click on a county to display a pop-up report card, select a county for the Exploration Path (maximum of five), or download a county report.














TOP MATCHES

Top Matches displays the top-ranking counties based on the priorities.



Top Matches

These are the top-ranking counties based on your priorities. Click a county name for details about its rank. Select up to five locations to analyze.



| | County | State | Rank  1 |
|-------------------------------------|-----------------------------|----------------|--|
| <input checked="" type="checkbox"/> | Wake | North Carolina | 1  |
| <input checked="" type="checkbox"/> | Lake | Ohio | 2  |
| <input type="checkbox"/> | Ottawa | Ohio | 3  |
| <input type="checkbox"/> | Washington | Rhode Island | 4  |
| <input type="checkbox"/> | Benton | Washington | 5  |
| <input type="checkbox"/> | Brunswick | North Carolina | 6  |
| <input type="checkbox"/> | Mecklenburg | North Carolina | 7  |
| <input type="checkbox"/> | Franklin | Ohio | 8  |
| <input type="checkbox"/> | Plymouth | Massachusetts | 9  |
| <input type="checkbox"/> | Providence | Rhode Island | 10  |

Rows per page: 10 1-10 of 2697 < >

Selected Counties:

Wake, NC 
Lake, OH 

ANALYZE LOCATIONS

- Sort counties (multi-level sorting is supported) by county name, state, and rank.
- Control pagination with the arrows at the bottom of the top 10 list.
- Click on the boxes on the left side of the county name to select that county for the Exploration Path. The counties will appear under Selected Counties (limit five counties).
- Use the  to remove a selected county. (Tip: Counties can also be added from the report card of the Priority Match Map.)
- Click the  next to the county rank to download the county report.
- If Counties is selected, then click the Analyze Locations button to proceed to the Exploration Path.

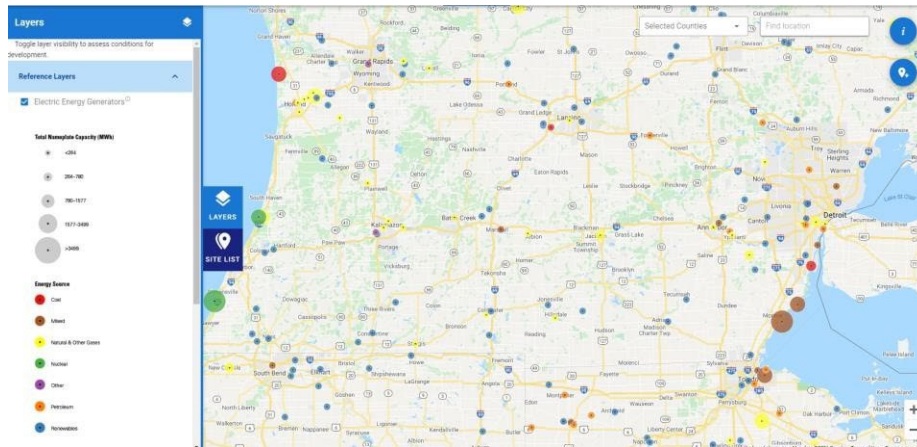
SITE EXPLORATION

Site Exploration is the best place to start for users who have a general idea of locations that may be candidates for deployment but would like to dig deeper. In Site Exploration, the user can view geospatial regulatory and infrastructure data or select sites for Site Comparison.

LAYERS

Data layers display geospatial regulatory and infrastructure data which can aid in the decision-making process. To view layers:

1. Click on the Layers tab on the left side of the screen to open the layers drawer.
2. Use the dropdowns to display the available layers for each category.
 - a. Use checkboxes to display layers in the map. Multiple layers can be selected and viewed simultaneously. Layers that display Zoom In below the layer name require the map to be zoomed further to be displayed.
 - b. Click the information boxes to display layer information.
 - c. Click on feature info on the map to show additional information.




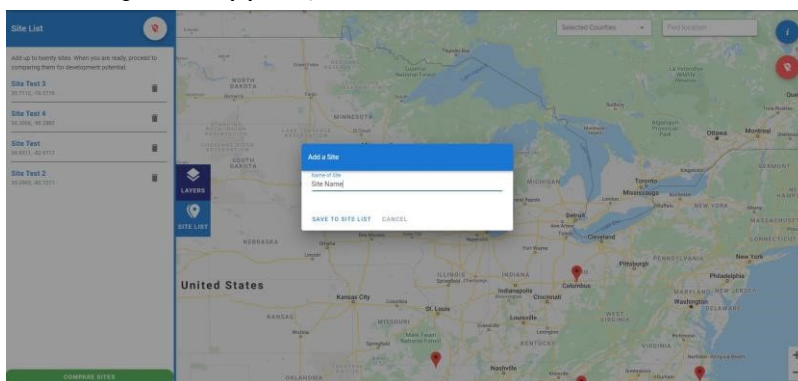
ADDING SITES

Add site names and coordinates to be used in the multi-objective evaluation model. To run the model, a minimum of two sites and a maximum of twenty sites is required. Sites can also be added manually or via CSV upload in Review Sites (the first step in Site Comparison). To add sites using Site Exploration:

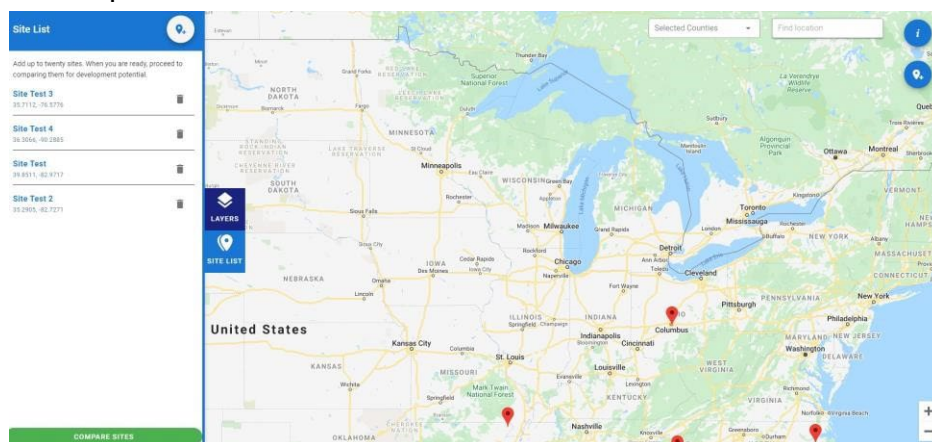
1. Center the map on the desired location.
 - a. Use the Find Location box in the upper right corner.
 - b. Click in the box and type an address, county, city, etc. This will zoom the map to that location.
 - c. Use the mouse to move and zoom the map.
 - d. Use the +/- icons in the lower right corner to zoom the map.

2. When the map is centered and zoomed to the preferred location, click the Add Sites icon.

- a. Click the Add Sites icon  to add a coordinate pair for Site Comparison.
- b. When the Add Sites icon is clicked, it will turn red to show it is activated. The next click on the map will add the site.
- c. Input a site name and save it to the site list. If a site is added outside of the U.S., then an error message will appear, and the site cannot be added.



- d. When the sites are added, then they can be viewed in the site list available for viewing in the left side drawer.
 - Click on the blue site name to zoom the map to that location for review.
 - Use the trash can to remove a site.
- e. When all sites have been selected, click the green Compare Sites button to progress to Site Comparison where the sites will be visible.



SITE COMPARISON

Site comparison uses a multi-objective evaluation model as a structured framework for identifying which proposed sites best maximize the attributes that the user values. Attribute weighting factors in the site preference model are based on the expression of two independent factors:

- How relevant each attribute is to the choice of a site.
- How significant is the difference between each attribute's best value and worst value.


An attribute's relevance is an indication of how important that attribute is in choosing a site. The best-to-worst range significance is an indication of how much the alternative sites differ in their ability to meet the objective represented by any attribute. Think of these two factors completely independent of each other. An attribute that is very important should be rated as such in indication of how relevant it is to the choice of a site. Even though this attribute may be very important to the choice of a site, if the alternative sites show very little difference between the best and worst value, it may be appropriate to indicate its range significance as relatively low on that (independent) scale. If an attribute is not at all part of the consideration in selecting a site, it is not relevant to the site selection choice and should be indicated as Not Relevant. Likewise, if the best and worst alternative site values for some attributes are the same, there is no variation and no information that will help choose between the alternative sites and should be indicated as Not Significant.

The preference model sums the indications of Attribute Relevance and Range Significance to derive a raw weight for each attribute, which are then normalized to a sum of 100. Attributes indicated with relatively high relevance and relatively high range significance will have higher combined weights than those with relatively lower indications.

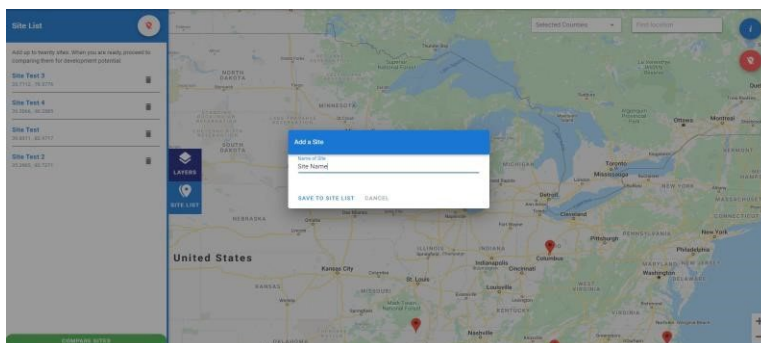
After indicating the Attribute Relevance and Range Significance choices, the preference model will display the choices in a matrix format along with the normalized weight for each attribute. Go back to either the Attribute Relevance page or the Range Significance page to change the indications until satisfied with the normalized weights.

REVIEW SITES

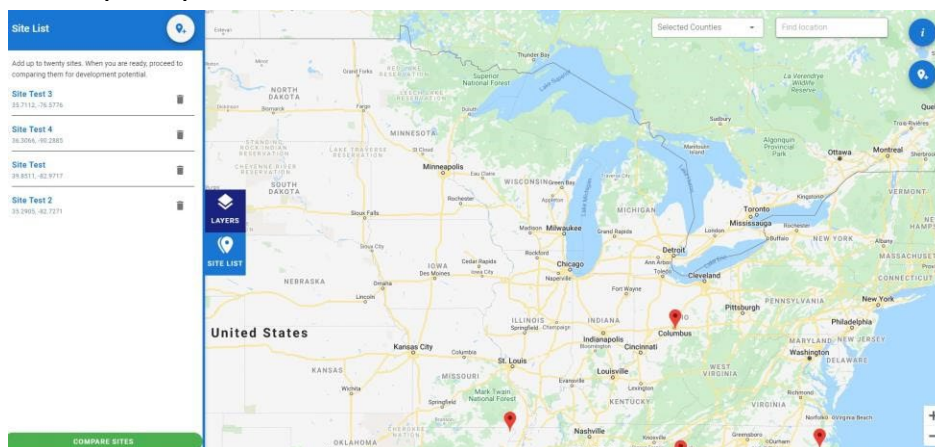
Add site names and coordinates to be used in the multi-objective evaluation model. To run the model there must be a minimum of two sites and a maximum of twenty sites. Sites can be added in two ways either exclusively or in combination.

1. Click on Map. This will connect the user to the map from Site Exploration.
2. Use the Find Location box in the upper right corner.
 - a. Click in the box and type an address, county, city, etc. This will zoom the map to that location.
 - b. Use the mouse to move and zoom the map.
 - c. Use the +/- icons in the lower right corner to zoom the map.
 - d. When the map is centered and zoomed to the preferred location, then click the Add Sites icon  to add a coordinate pair for Site Comparison.
 - a. When the Add Sites icon is clicked, then it will turn red to show it is activated. The next click on the map will add the site.

- b. Input a site name and save it to the site list.
- c. If a site is added outside of the U.S., then an error message will appear and the site cannot be added.



- e. When sites are added they can be viewed in the site list available for viewing in the left side drawer.
- f. Click on the blue site name to zoom the map to that location for review.
- g. Use the trash can to remove a site.
- h. When all sites have been selected, then click the Compare Sites button to return to Site Comparison where the sites will be visible.
 - Tip: Click on the layers tab in the left side drawer to view and print relevant analysis layers for additional context in site selection.



3. Upload CSV files in the following format: site_name, x, y.
4. To enter coordinates, manually enter each site name and coordinate pair (in decimal degrees). As sites are added they appear in blue.
5. Use the trash can to remove a site or validate a site by clicking on the blue link. This link will show the location of that site on a map.
6. When all the sites have been added and validated, click the green Compare Sites button to move on to the Relevance Form.

RELEVANCE FORM

Indicate how relevant or important each attribute is to the choice of an optimum site. Consider how relevant each attribute is without regard to how well or poorly each of the alternative sites performs with respect to the attribute. If there is little or no care about any attribute, indicate it as Not Relevant to the choice of a site. Attributes indicated as Not Relevant will result in a weighting factor of zero.

1. On the left-hand side, click on each objective (Socioeconomic, Safety, Proximity) to display a numbered list of attributes.
2. For each attribute the user can:

- Click on the to display parameter level details such as, a description of layer, data source, data currency, and why it matters.
- Click on View Reference Map to view a reference map of that parameter. Reference maps may not be available for all parameters.
- Make additional parameter level selections where applicable (buffer distance, time range, etc.).

Some parameters may not have data available for all chosen sites. If this is the case, the parameter will not be included in the analysis and there will be a message under that parameter name. **Incomplete data coverage; layer unavailable.**

- Click on the information box beside it to display an explanation for the lack of availability. The two primary causes of incomplete data coverage are:
 - Sites located in Alaska or Hawaii for which data is unavailable (see Data Availability by Geography table in Appendix A for additional information on data coverage).
 - Sites located off the coast of the U.S. or very near the coast where data alignment may be an issue. If this is the case, consider moving the site location slightly inland.
 - Select an Attribute Relevance category and then adjust the sliding scale to refine the indication. The categories and raw weight scales are:

| Category | Raw Weight Scale Range |
|--------------|------------------------|
| Very High | 50 - 41 |
| High | 40 - 31 |
| Medium | 30 - 21 |
| Low | 20 - 11 |
| Very Low | 10 - 1 |
| Not Relevant | 0 |

- When complete, click the green Submit button to proceed to the Significance Form. This will submit the selections for all objectives.


SIGNIFICANCE FORM

Range Significance shows the best and worst quantitative measures across all the alternative sites for each attribute in the preference model. In addition to the best site and worst site measures, the difference between the best and worst measures and other analytics are presented to provide context for the assessment of Range Significance. Indicate how significant the difference is between the best and worst site measures is in the choice of an optimum site for the advanced reactor demonstration. Consider the range significance of each attribute measure without regard to how relevant it was indicated that the attribute is in the previous step.

There are two situations in which the best-to-worst range is not significant, and that attribute will receive a weighting factor of zero. In each situation, the attribute measures provide no information that helps to differentiate between the alternative sites.

- When the best site measure equals the worst site measure
- When the best site measure and worst site measure are extreme values of similar magnitude and much larger or smaller than a given threshold or out of range consideration.

For example, assume that a regulatory safety buffer from some installation is 5 miles. All the alternative sites are between 50 and 100 miles from the nearest installation of this type. Although the difference between the best site and the worst site is 50 miles, they all exceed the threshold by such a great amount that the difference between them is not significant.

- On the left-hand side, click on each objective (Socioeconomic, Safety, Proximity) to display attributes.
- For each attribute the user can:
 - Click on the  to display parameter level details such as, a description of layer, data source, data currency, and why it matters.
 - Click on View Reference Map to view a reference map of that parameter. Reference maps may not be available for all parameters.
Some parameters may not have variations across sites. If this is the case, the following message will appear: **No variation among sites**. Without variation across sites, the parameter is not significant and will not be included in Site Comparison.
 - Select an Attribute Significance category and then adjust the sliding scale to refine the indication. The categories and raw weight scales are:

| Category | Raw Weight Scale Range |
|--------------|------------------------|
| Very High | 50 - 41 |
| High | 40 - 31 |
| Medium | 30 - 21 |
| Low | 20 - 11 |
| Very Low | 10 - 1 |
| Not Relevant | 0 |

- When complete, click the green Submit button to proceed to the AR-RS Matrix. This will submit the selections for all categories.

AR-RS MATRIX

This matrix presents each of the Preference Model attributes according to the Attribute Relevance and Range Significance that was indicated in the previous two steps. Also shown are the normalized weight calculated for each of the attributes. Normalized weights sum to 100.

| Measure Relevance | | | | | | |
|-------------------|-----------|-------------------------------|--|----------------------|----------|---|
| | Very High | High | Medium | Low | Very Low | Not Relevant |
| Very High | | | Nuclear Inclusive Policy 15.217 | | | |
| High | | | Net Electricity Imports 13.043 | | | |
| Medium | | Electrical Substations 13.043 | Cdc Svl 10.870 Energy Price 10.870 Generator Retirement 10.870 Nuclear R And D 10.870 | Transportation 8.696 | | Landslide Hazard 0.000 |
| Low | | | | Labor Rate 6.522 | | |
| Very Low | | | | | | |
| Not Significant | | | Market Regulation 0.000 Nuclear Restrictions 0.000 Operating Nuclear 0.000 | | | Fault Lines 0.000 Hazardous Facilities 0.000 Nuclear Sentiment 0.000 One Hundred Year Flood 0.000 Open Water And Wetlands 0.000 Population 0.000 Protected Lands 0.000 Safe Shutdown Earthquake 0.000 Slope 0.000 |

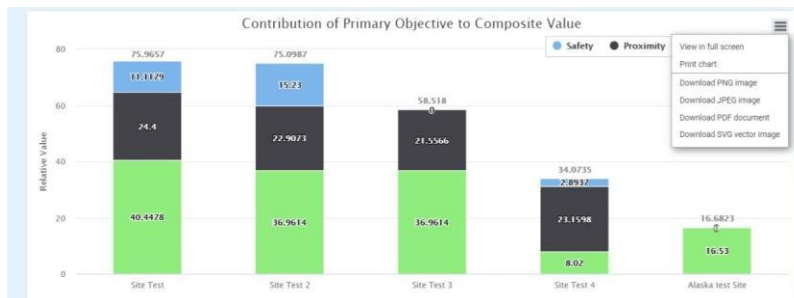
- Carefully review the placement of each attribute within the matrix and its normalized weight relative to all other weights.
- If desired, users can adjust any of the attributes by going back to either of the previous two steps to change the Attribute Relevance and/or Range Significance for any of the attributes.
- Return here to review the result of any modifications made. Remember that the amount of control the user has over any attribute's normalized weight is tempered by all the other attribute weights and the condition that normalized weights sum to 100.
- When satisfied with the normalized weights, click Submit to view results.

RESULTS

Results of the comparative analysis are visualized in a series of charts. A download of the results in CSV format is also available.



1. Click the blue Results Data (CSV) to download data for all sites. Downloaded data includes:
 - X,Y coordinates of sites
 - Raw (actual) data value and relative value for each parameter for each site.
2. Click on the three horizontal bars in the upper right of each chart to download, print, or view in full screen.



Appendix A

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 |
| 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 | |
| | Phosphatic Fertilizer Plants | X | X | X | |
| | POL Terminals, Storage Facilities, Tank Farms | X | X | X | |
| Landslide Hazard | | 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) |

STAND Quickstart Guide

| | | | | | | |
|---|----------------------------------|---|---|---|---|---|
| Population | 2018 | X | | | | ORNL Landscan data and US Census data |
| | 2020 | | X | X | | |
| | 2030 | X | | | | |
| | | | | | | |
| Protected Lands | American Indian reservations | X | X | | | USFWS Critical Habitat, Wild and Scenic River Lines (ArcGIS), USFWS National Cadastral Data, US Census, HIFLD Hospitals, HIFLD Prison Boundaries, HIFLD Colleges and Universities, USDA 2001 Roadless Rule GIS Data, BLM Navigator |
| | Correctional facilities | X | X | | | |
| | Critical habitat | X | X | | | |
| | Forests | X | X | | | |
| | Hospitals | X | X | | | |
| | National monuments | X | X | | | |
| | National, state, and local parks | X | X | | | |
| | Schools/colleges | X | X | | | |
| | Wild and scenic rivers | X | | | | |
| | Wilderness areas | X | | | | |
| | Wildlife refuges | X | | | | |
| 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 Mapping data |
| | 0.4g | X | | | | |
| | 0.5g | X | | | | |
| | 0.6g | X | | | | |
| | 6.5g | | | | X | |
| | 10g | | | | X | |
| | 15g | | X | | | |
| Slope | 12% | X | X | X | | Digital Terrain Elevation Dataset National Geospatial Intelligence Agency |
| | 18% | X | X | X | | |
| Social Vulnerability Index By County | | X | X | X | | CDC |
| Streamflow | 15kgpm | X | | | | Low-flow statistics (7-day, 10 year) calculated from USGS National Water Information System (NWIS) and USGS/EPA National Hydrologic Dataset Plus |
| | 20kgpm | | X | | | |
| | 50kgpm | X | | | | |
| | 65kgpm | X | | | | |
| | 84kgpm | | X | | | |
| Transmission Lines | | X | X | X | | Homeland Infrastructure Foundation Level Data (HIFLD) |
| 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 FPTZ research. See documentation for more information. |