

SERTP FERC Order 1920 Stakeholder Engagement
Webinar:
LTRTP Scenario Development

April 30, 2025



PARTICIPANTS

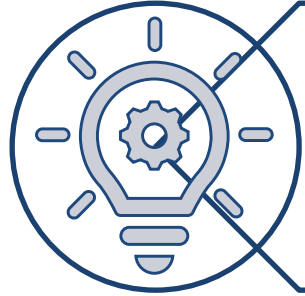


ATTENDANCE

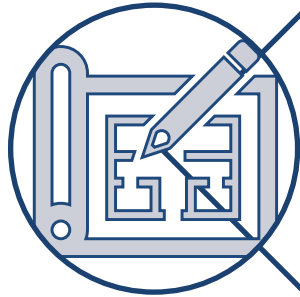


PROTOCOLS

Opening Remarks and Agenda



FERC Order 1920
Long-Term Regional Transmission
Planning



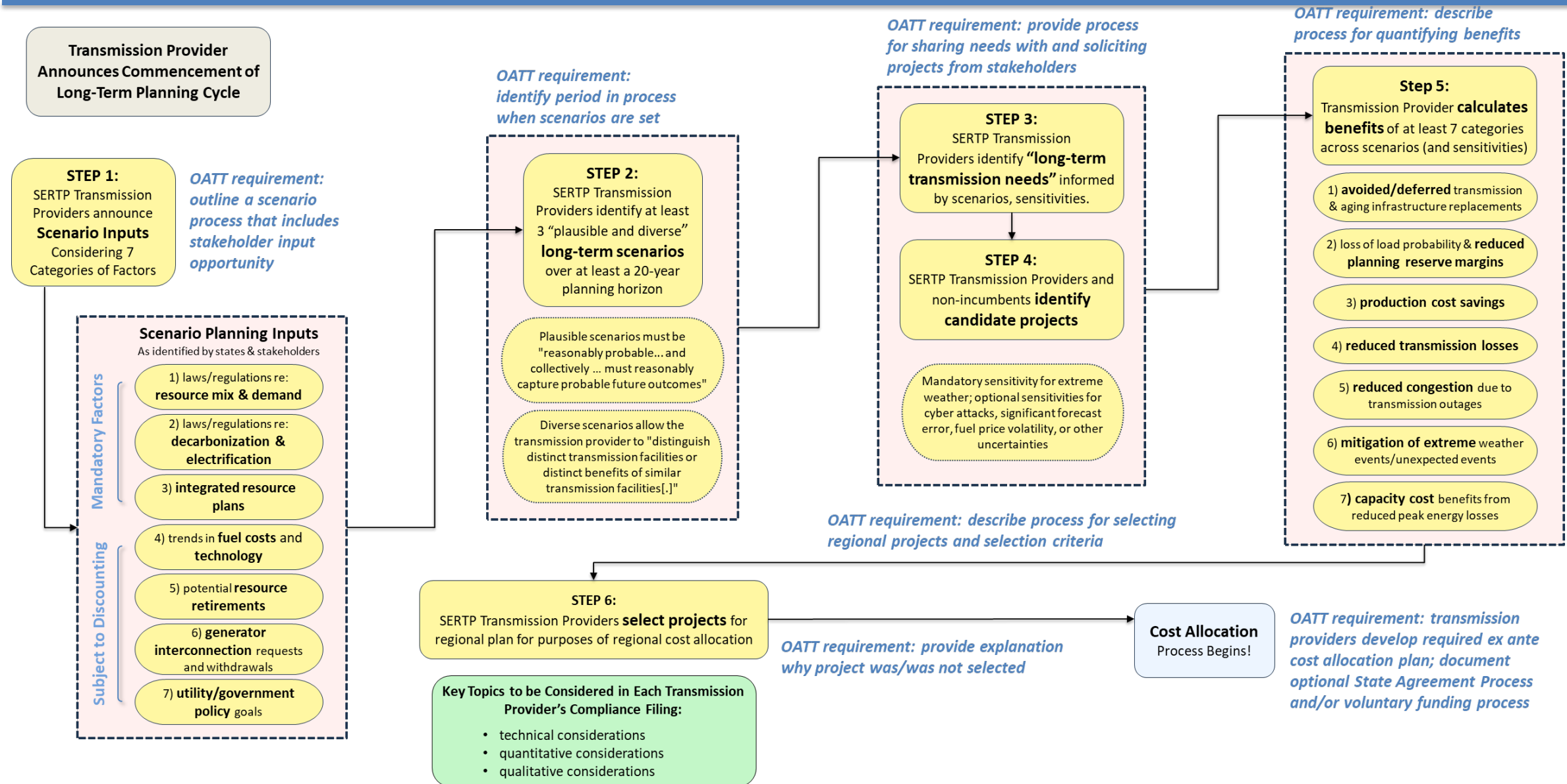
Development of Scenarios



Future
Stakeholder Engagement
Events

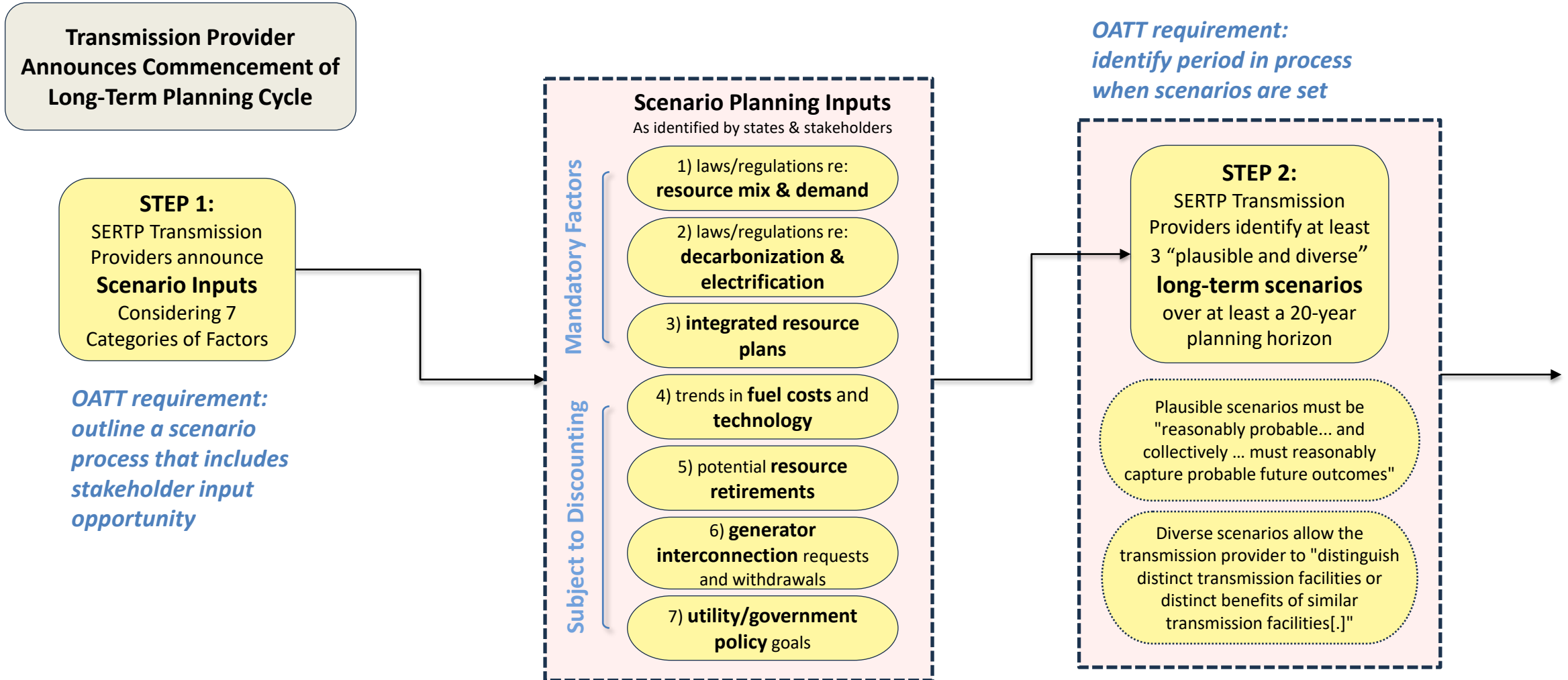
FERC Order 1920: Long-Term Regional Transmission Planning

LTRTP Overview



FERC Order 1920: **Long-Term Scenario Development**

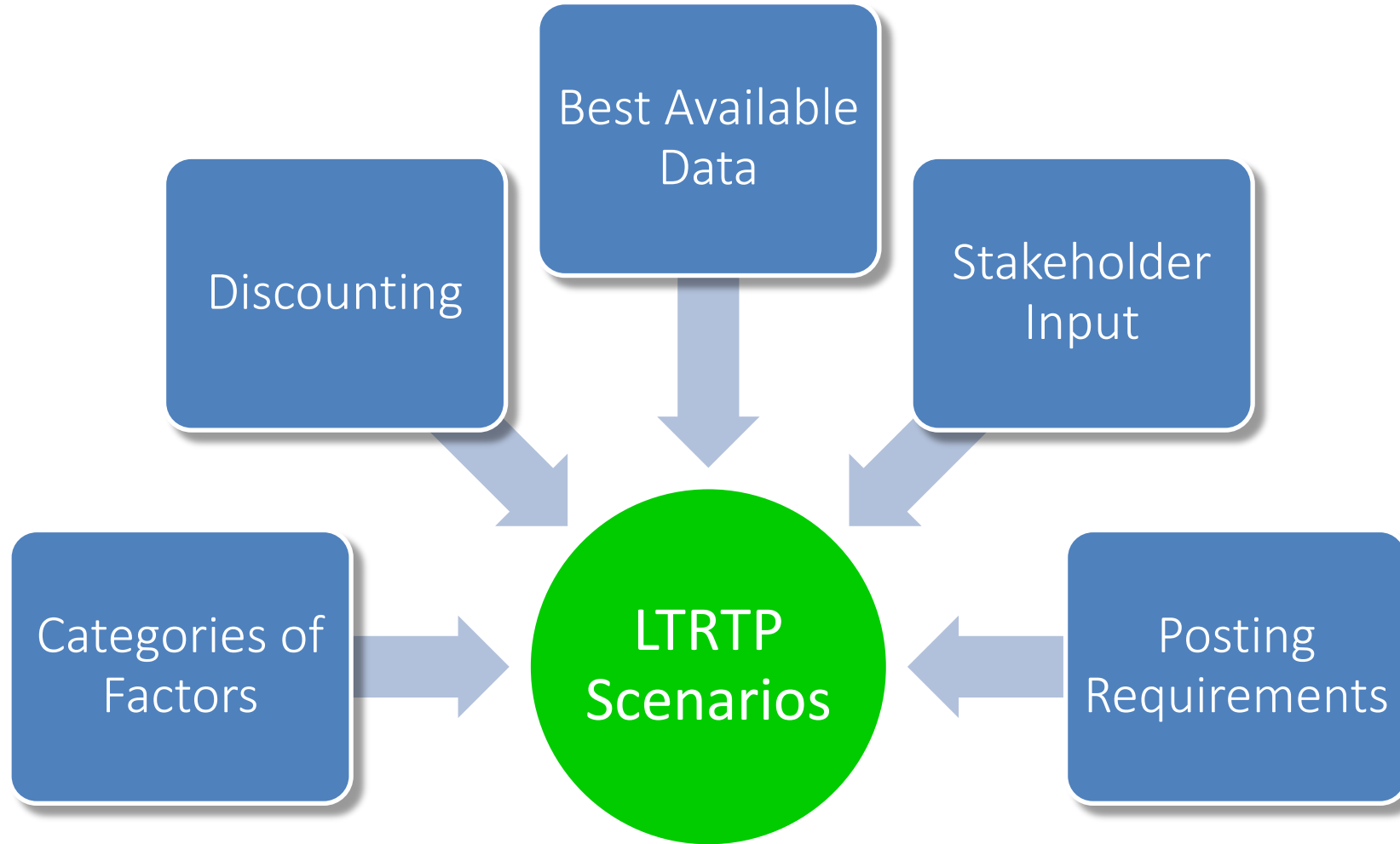
Requirements for Scenario Development



Overview of Scenario Development

- FERC requires TPs in each transmission planning region to develop Long-Term Scenarios as part of LTRTP using no less than a 20-year transmission planning horizon, meaning that TPs must develop Long-Term Scenarios to identify LTTNs that will materialize in the 20 years or more following the commencement of the LTRTP cycle.
- TPs must plan for the entire duration of the 20-year transmission planning horizon and as such, must develop and use Long-Term Scenarios to identify LTTNs occurring in any period of the 20-year transmission planning horizon and to evaluate potential transmission solutions to those needs.
- The transmission planning horizon starts at the beginning of the LTRTP and ends 20 years from that date.

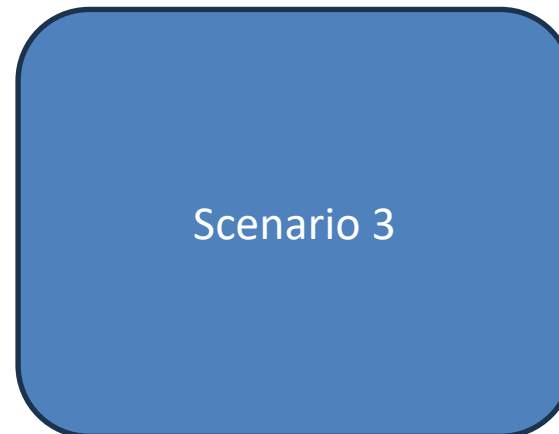
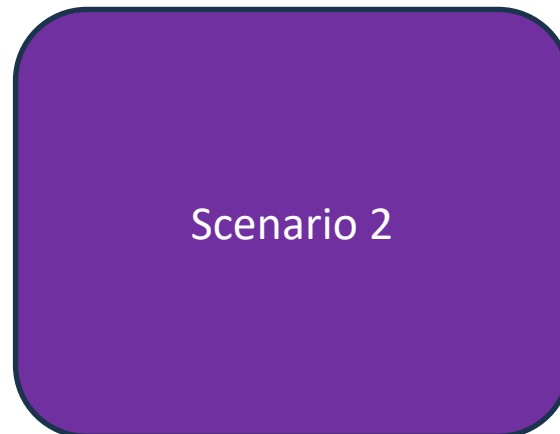
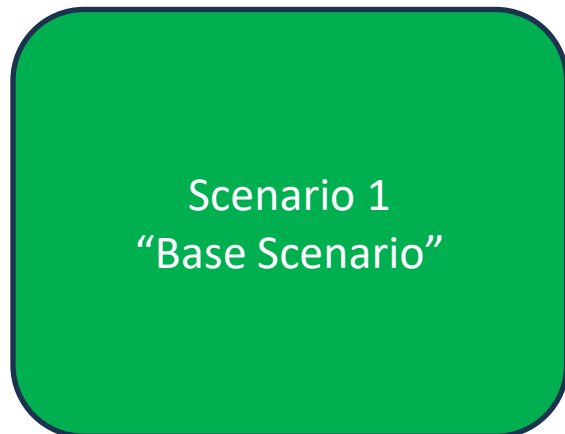
Overview of Scenario Development



Long-Term Scenario Development

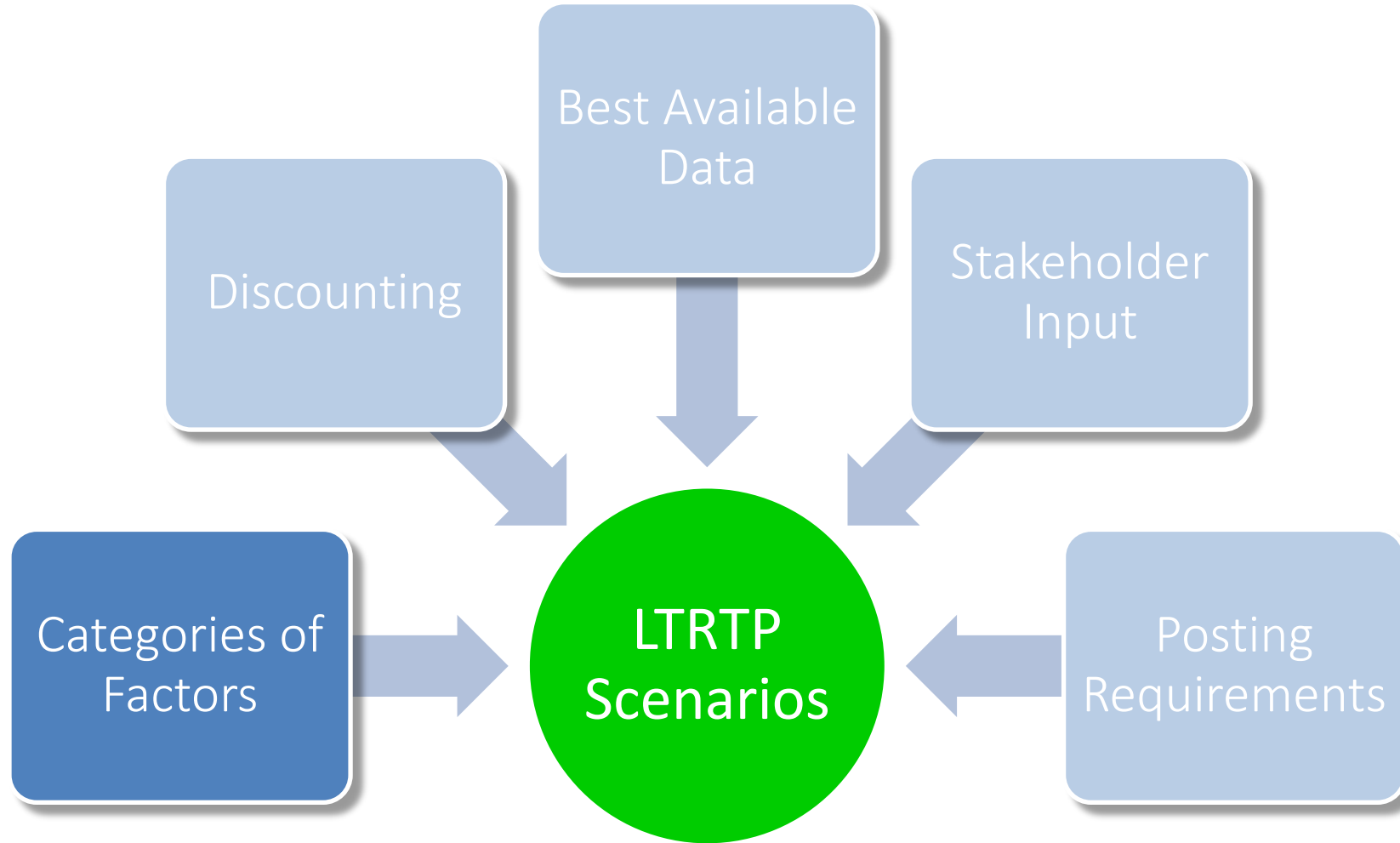
3 Plausible and Diverse Scenarios will be developed

- Plausible - must itself be reasonably probable, and collectively that the set of plausible scenarios must reasonably capture probable future outcomes
- Diverse – must represent a range of probable future outcomes based on the assumptions about factors and data inputs



- **Base Scenario**
 - “Most Likely” scenario
 - FERC: *If TPs produce a base-case Long-Term Scenario in LTRTP, that base case should be consistent with what the TP determines is the most likely scenario to occur.*
 - Development of the Base Scenario based on:
 - State Approved IRPs
 - Load Forecasts from LSEs
 - Input on expected usage from OATT Customers
- **Scenarios 2 & 3** – will be developed based on input from and collaboration with Stakeholders.

Scenario Development



7 specific categories of factors will be used in development of LT scenarios

1. Laws and regulations affecting the resource mix and demand
2. Laws and regulations on decarbonization and electrification
3. State-approved IRP and expected supply obligations for LSEs
4. Trends in fuel costs and in the cost, performance and availability of generation, ESR and building and transportation electrification technologies
5. Resource retirements
6. Generator interconnection requests and withdrawals
7. Utility commitments and federal, tribal, state and local policy goals that affect Long-Term Transmission needs

Important Note on Factors

- TPs need not account for a factor, stakeholder-identified or otherwise, if they determine that factor is unlikely to affect LTTNs.
- FERC finds that TPs must use best available data when determining whether each factor is likely to affect LTTNs.

Factor Fundamentals

Incorporation of a category of factors should have a measurable impact on the LTS

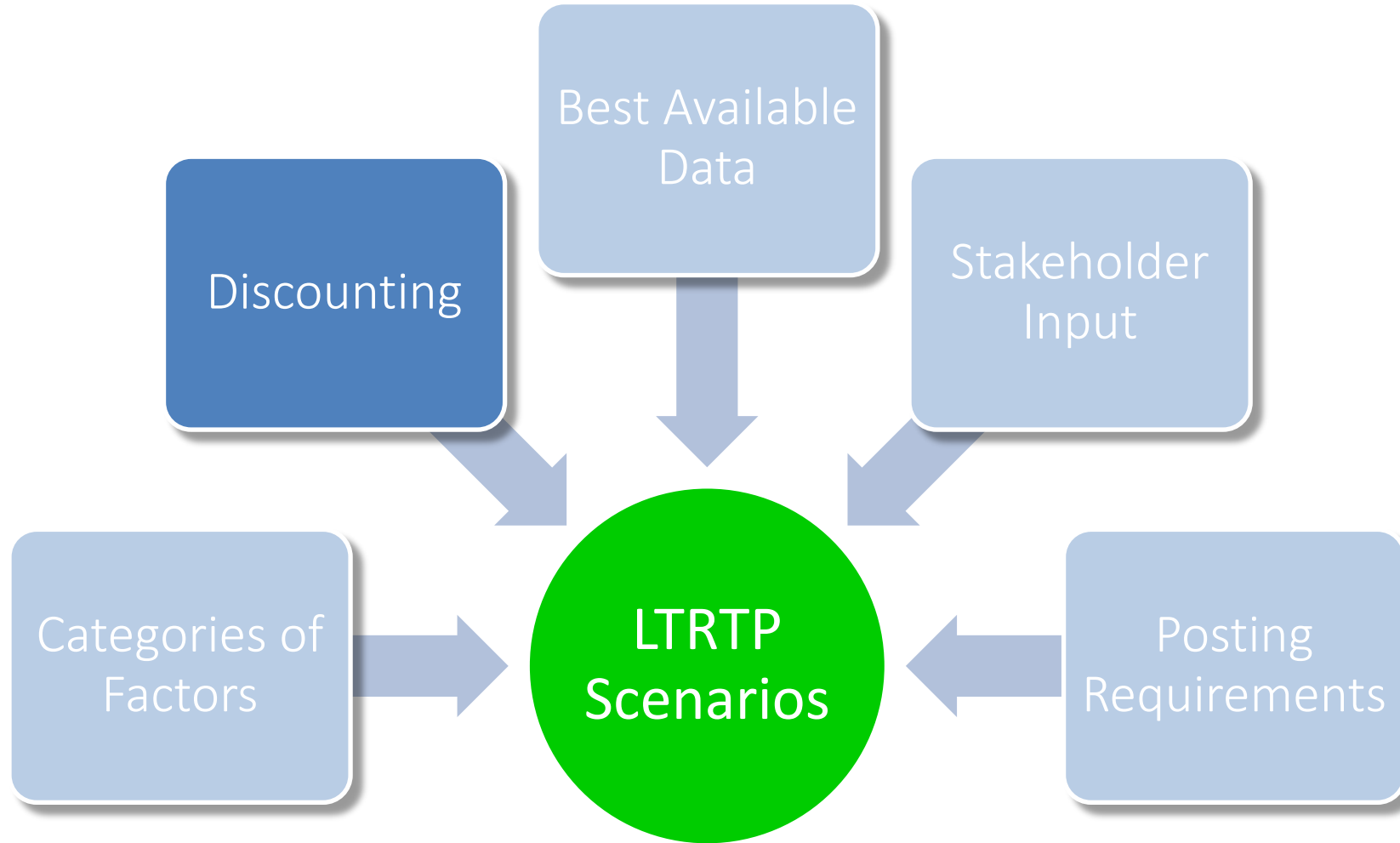
Factors do not have to be incorporated if determined to be unlikely to affect LTTN

TPs must incorporate factors in a way that results in plausible and diverse LTS

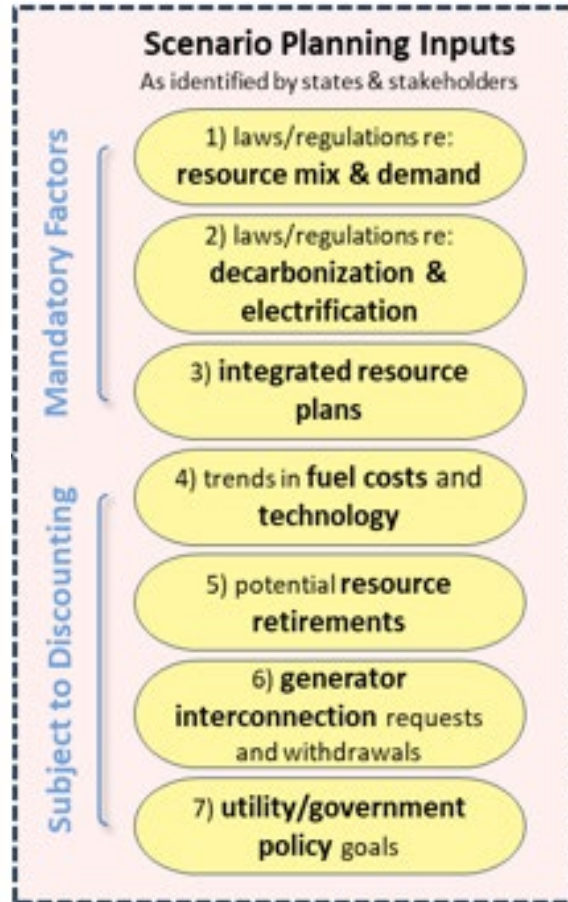
Factors in Categories 4-7 can be discounted

***Open Access
Transmission
Tariff***

Scenario Development

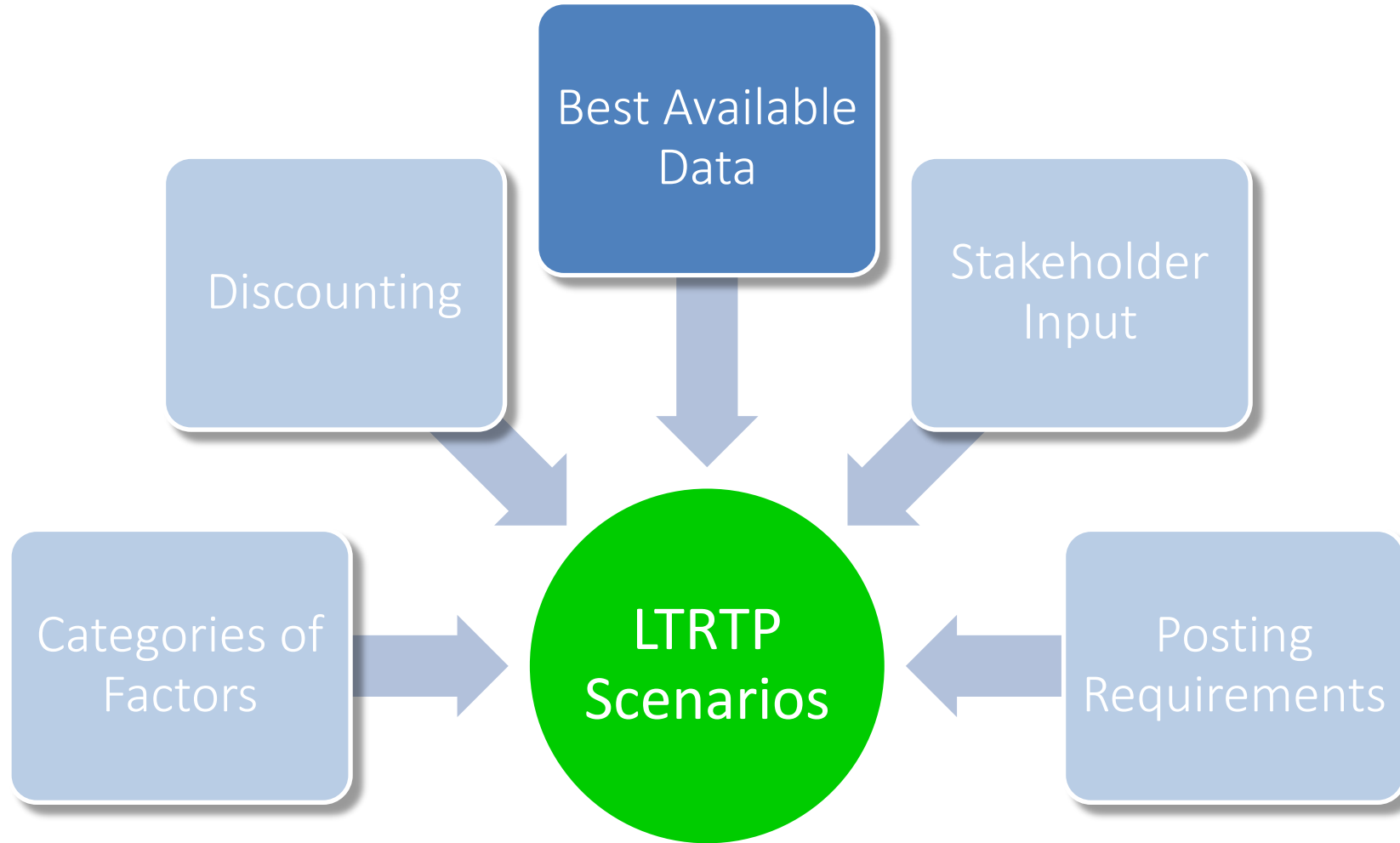


Discounting



- For Factors 4-7, Order No. 1920 provides transmission providers the flexibility to “discount” the anticipated effects of these factors to manage uncertainties.
- *Discounting here does not mean excluding a factor entirely; rather, for Factors 4-7, “discounting” means the factor may be weighted less heavily or partially reflected in the scenarios, depending on its assessed likelihood and significance.*
- Transmission providers have latitude to determine how much to discount a factor but must ensure that it remains incorporated to some degree if it is expected to influence LTTNs at all.
- Full exclusion is only acceptable if the factor is completely irrelevant to LTTNs.

Scenario Development



“Best Available” Data Sources

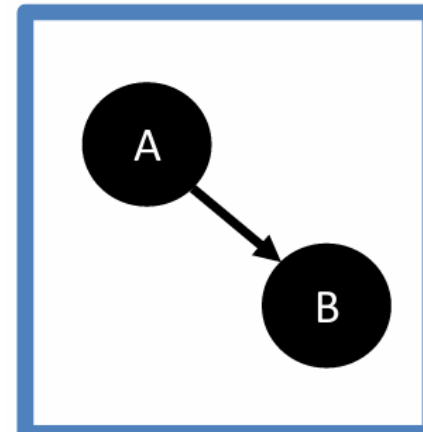
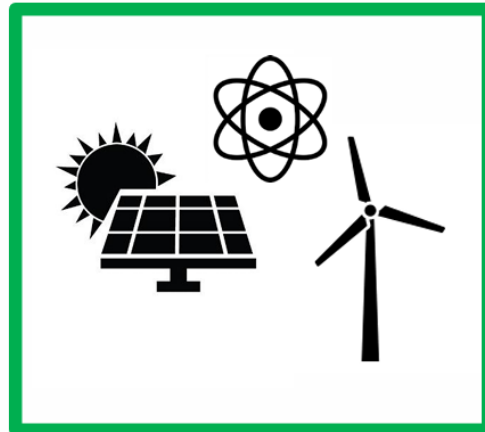
- FERC requires TPs in each region to use “best available data inputs” when developing Long-Term Scenarios.
- Per FERC, “best available data inputs” are data inputs that are timely, developed using best practices and diverse and expert perspectives, and adopted via a process that satisfies the transmission planning principles of Order Nos. 890 and 1000.
- FERC requires that best available data inputs also reflect the list of factors that transmission providers account for in their Long-Term Scenarios. By “reflect the list of factors,” FERC means the data inputs that correspond to the list of factors that transmission providers have determined might affect LTTNs.
- Transmission providers are required to update, as necessary, all data inputs each time they reassess and revise their Long-Term Scenarios.

“Best Available” Data Sources

- Transmission providers retain the ultimate authority for transmission planning and may weigh more heavily on one source of information than another.

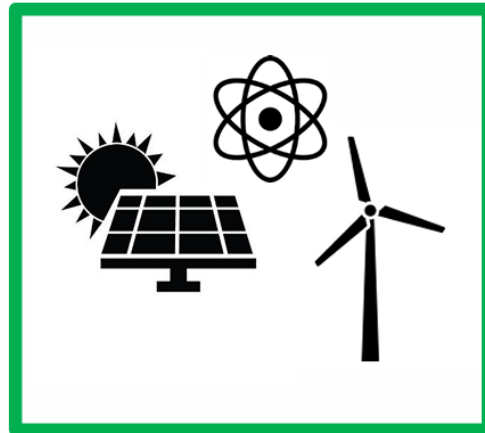
Examples of “Best Available” Data

- **Load Serving Entities will be required to submit information on a comparable basis for the development of Scenarios:**
 - Projected Loads
 - Resource Assumptions
 - Expected Interchange

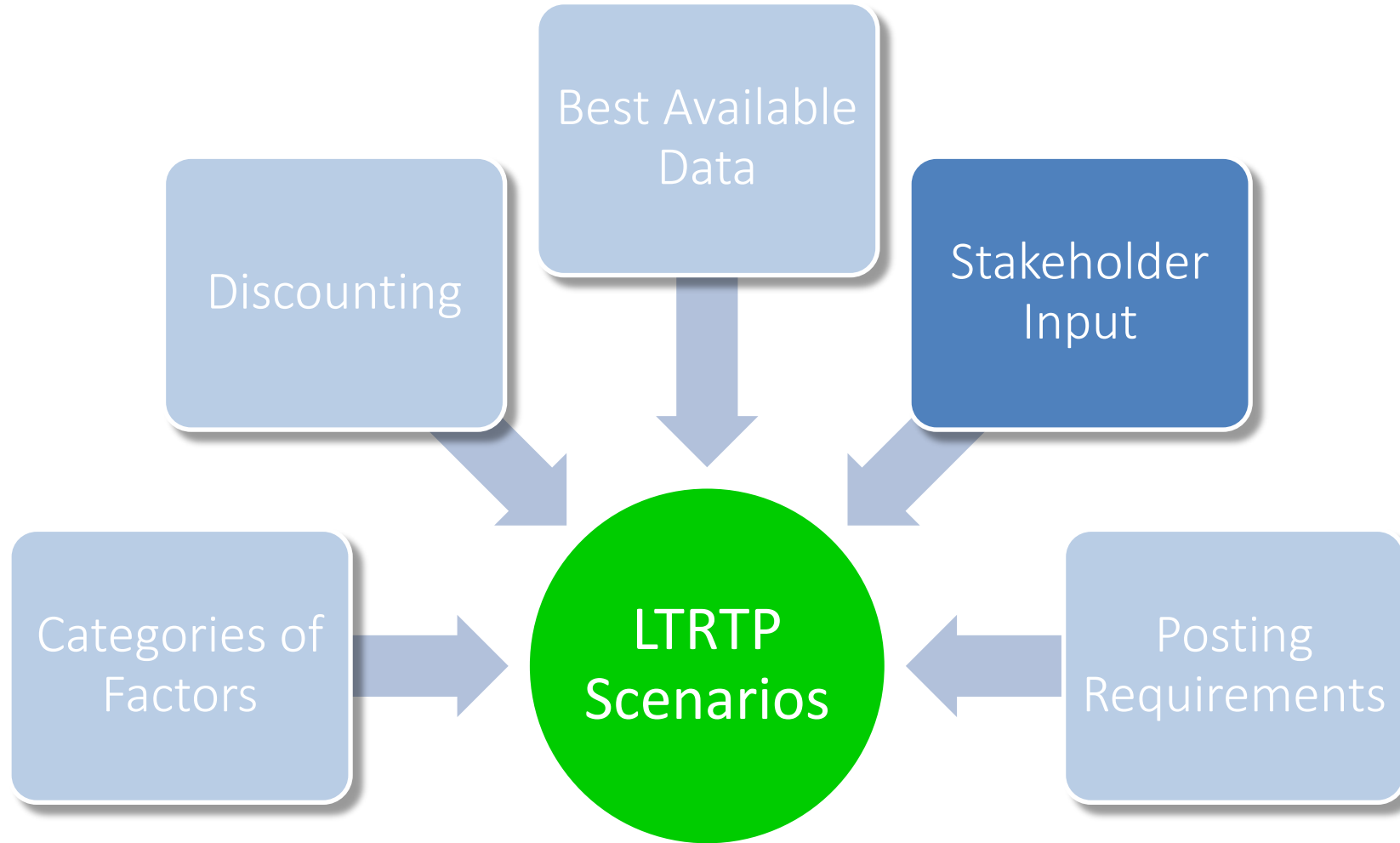


Example of “Best Available” Data

- Interconnection Customers having IAs under the Tariff will be required to submit projected changes to their generating facility that could impact the Long-Term Regional Transmission Planning studies.



Scenario Development




- Stakeholders will have a meaningful opportunity to provide timely input including:
 - the opportunity to propose factors, provide information and identify sources of best available data,
 - propose how a factor may affect LTTNs, and
 - explain how that factor could be reflected in the development of Long-Term Scenarios, including the extent to which it is appropriate to discount the effects of certain factors on LTTNs
- Input will initially be provided using “Intake Forms” to be provided well in advance of the start of an LTRTP Cycle.

- **What we are thinking we will need from you:**
 - The factor to be considered under the identified category
 - Details on the factor
 - How the factor drives a Long-Term Transmission Need
 - Specificity on how this factor would be reflected in a power-flow model
- **Currently considering forms to be the best way to get initial information**



Stakeholder Factor Intake Form



PURPOSE

To allow a Stakeholder to propose for consideration factors that may be impactful in the Long-Term Regional Transmission Planning process to aid in the development of the Long-Term Scenarios. Submit the completed form via email no later than MM/DD of each Calendar Year to (southeasternrtp@southernco.com).

CONTACT INFORMATION (required)

Company Name:

Street Address:

City: State: Zip:

Primary Contact Name: Position/Title:

Phone Number: Email:

FIRST CATEGORY OF FACTORS – FEDERAL, FEDERALLY-RECOGNIZED TRIBAL, STATE, AND LOCAL LAWS AND REGULATIONS AFFECTING THE RESOURCE MIX AND DEMAND

Instructions:

- Provide the specific factor(s) that should be considered.
- Provide an explanation of how this factor(s) should be considered in the development of the Long-Term Scenario(s).
- Provide an explanation of how this factor(s) may impact Long-Term Transmission Needs.
- Provide the suggested source of best available data inputs.


SECOND CATEGORY OF FACTORS – FEDERAL, FEDERALLY-RECOGNIZED TRIBAL, STATE, AND LOCAL LAWS AND REGULATIONS ON DECARBONIZATION AND ELECTRIFICATION

Instructions:

- Provide the specific factor(s) that should be considered.

Stakeholder Factor Intake Form

Stakeholder Factor Intake Form



SEVENTH CATEGORY OF FACTORS – UTILITY COMMITMENTS AND FEDERAL, FEDERALLY-RECOGNIZED TRIBAL, STATE, AND LOCAL POLICY GOALS THAT AFFECT LONG-TERM TRANSMISSION NEEDS

Instructions:

- Provide the specific factor(s) that should be considered.
- Provide an explanation of how this factor(s) should be considered in the development of the Long-Term Scenario(s).
- Provide an explanation of how this factor(s) may impact Long-Term Transmission Needs.
- Provide the suggested source of best available data inputs.
- Provide an explanation of whether it is appropriate to discount the effect of this factor(s) on the Long-Term Transmission Need. Yes or No. If yes, explain why and explain the discount.

SENSITIVITIES

Instructions:

Stakeholders may suggest up to two sensitivities for SERTP to consider applying to each Long-Term Scenario to account for uncertain operational outcomes that determine the benefits of an/or need for transmission facilities during multiple concurrent and sustained generation and/or transmission outages due to an extreme weather event across a wide area.

For questions related to the Stakeholder Factor Intake Form please contact the SERTP at southeasternrtp@southernco.com.

Stakeholder Factor Intake Form

- **Stakeholder / Sponsor Collaboration**

- Once the Initial Intake Forms have been submitted, the information will be reviewed
- Collaboration will be accomplished through **Scenario Development Workshops.**
- The intent is to have interactive discussion with each other on the different factor submittals for the scenarios.
- The number of Scenario Development Workshops for each cycle will be determined based on the need for discussion or clarification.

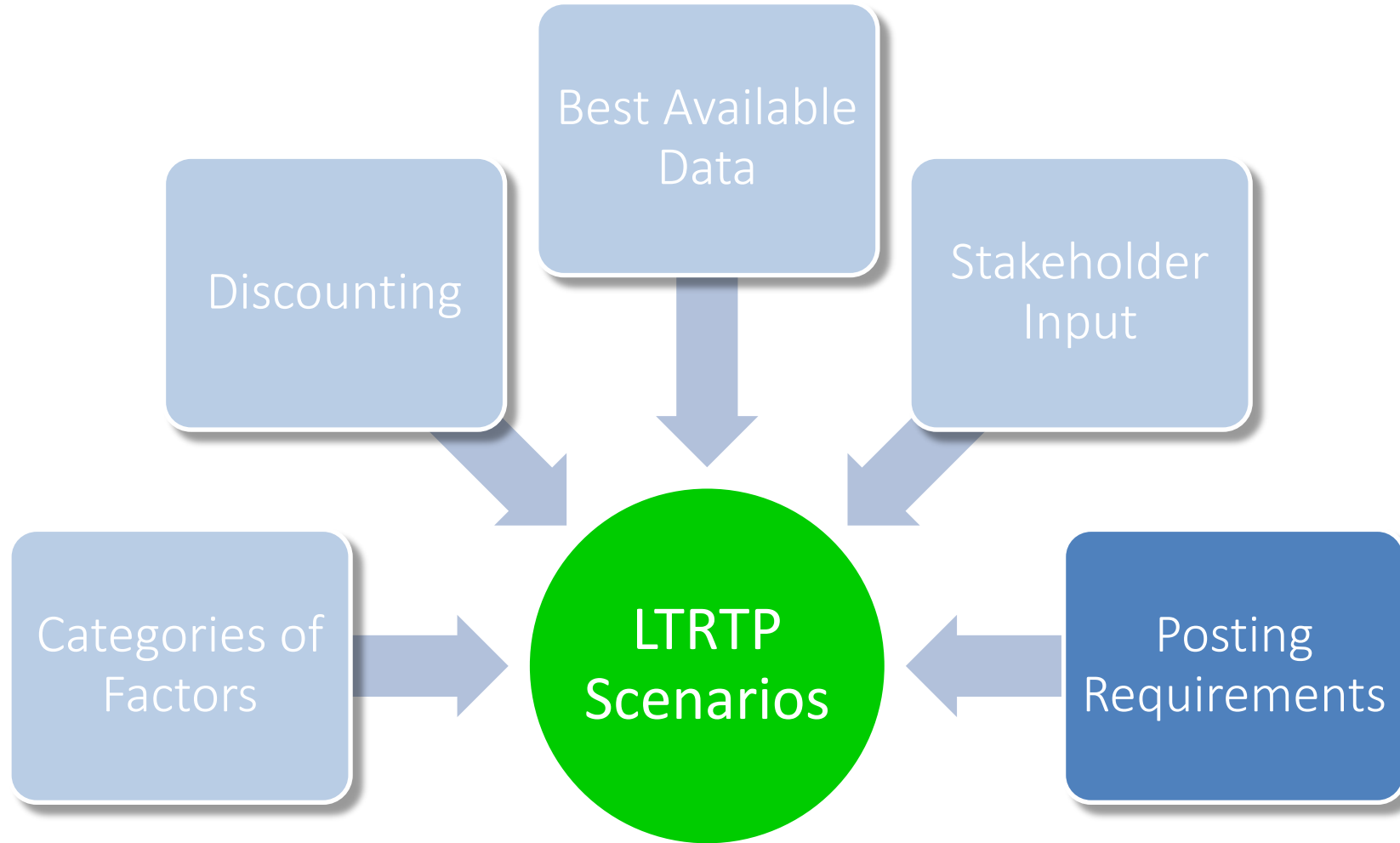


Stakeholder Engagement

- **For Thought: Should we consider expanding the RPSG role?**
 - Manage Stakeholder Intake forms for efficiency
 - Submit consolidated Stakeholder Intake forms (especially when multiple similar submittals are made)
 - Consider establishing an RPSG Chair role to ensure continuity throughout the long-term planning cycle
 - Consider extending the length of the RPSG term to encompass the duration of the LTRTP process
 - Represent individual stakeholder submitters who are not able to attend the Workshop(s)
 - Major components of the RPSG are documented in the Tariff, so we'd like Stakeholder input soon



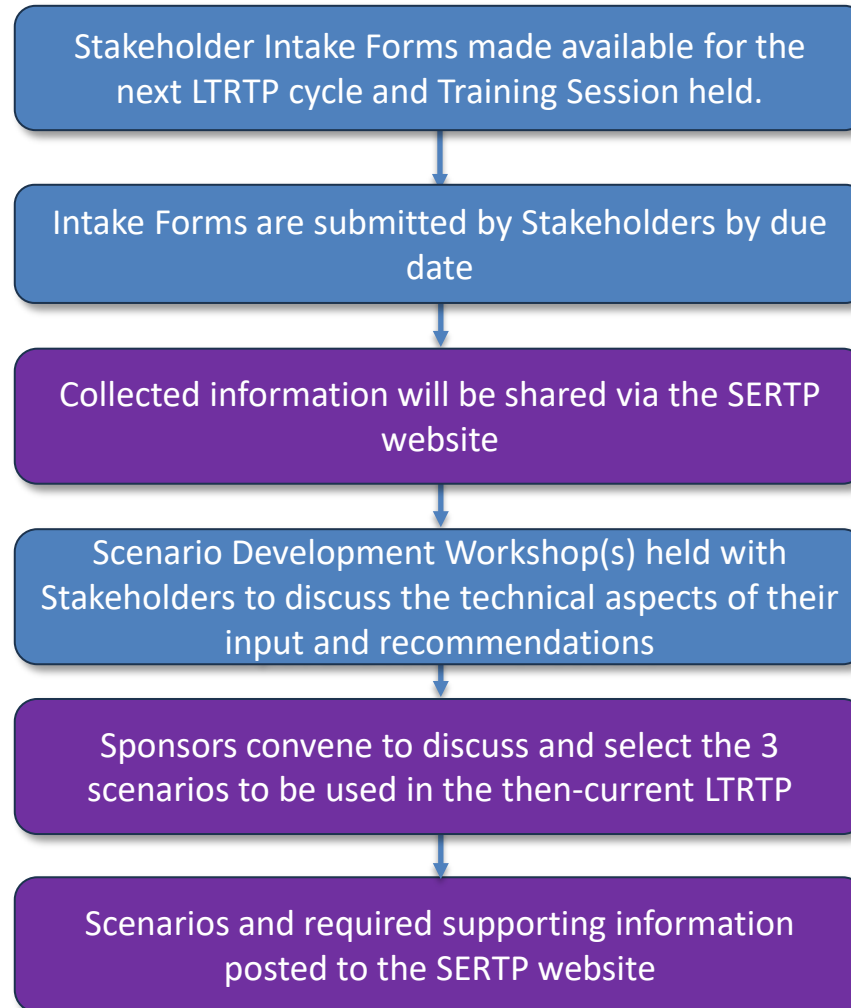
Scenario Development



- **TPs must publish on a public website following Scenario Selection:**
 - The list of factors in each category of factors that they will account for in LTS
 - A description of each factor
 - General statement explain how they account for each in LTS
 - A description of the extent they will discount any factors in 4-7
 - A list of factors that were considered but not incorporated

Scenario Development Process

Conceptual LTS Development Process

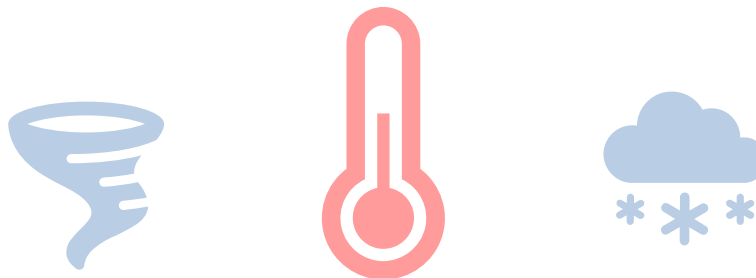


prior to start of the LTRTP Cycle

Immediately after Scenario Selection

Development of Sensitivity

- Transmission Providers are to develop at least one sensitivity to be applied to the Long-Term Scenarios.
- The sensitivity accounts for uncertain operational outcomes.
 - Modifications to scenarios will include load, generation, and outages.
- Transmission providers have the flexibility to conduct this sensitivity either **before or after** identifying potential regional transmission solutions to the LTTN.
- Extreme weather event is a required sensitivity.



Long-Term Scenario Development

Questions



Stakeholder Engagement: Future Events Schedule

Tentative* Schedule of Engagement Sessions:

- Summer 2025: Needs and Solutions
- Fall 2025: Project Evaluation Process and Selection Criteria
- Winter 2025/2026: Stakeholder Coordination Engagement Process
- Early Summer 2026: Near-Final Long-Term Regional Transmission Planning Process



Thank You!

Transmission Planning Process:

Southeastern Regional:

<https://www.southeasternrtp.com/home.cshtml>

South Carolina Regional:

<https://www.scrtp.com/>