MI POWER GRID

Making the Most of Michigan's Energy Future

Integration of Resource, Distribution, and Transmission Planning

Advanced Planning Stakeholder Meeting

November 18, 2020

MPSC

Michigan Public Service Commission

Workgroup Instructions

1. This meeting is being recorded.

2. Please be sure to mute your lines.

3. There will be opportunities for question/comments after each of the sections identified in the agenda. Please type questions into the chat function or use the “raise hand” function during this time. We will open it up to those on the phone after those using the chat function.

4. Questions will be addressed at the end of each presentation segment.

5. We will be requesting comments after all of the meetings which will be posted to the webpage.

6. The presentations for all the meetings are posted to the Advanced Planning webpage.

7. If you are having technical difficulty, please contact Jon DeCooman at DeCoomanJ@michigan.gov.

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Agenda Items		
9:30 pm	Introduction/Review Feedback/Group Discussion	Naomi Simpson (MPSC)
10:00 am	Transmission View on Planning Integration from a Michigan Perspective	Kwafo Adarkwa (ITC) Chuck Marshall (ITC)
10:20 am	Enhancements to MIRPP/Filing Requirements to Better Align Planning Processes	Margrethe Kearney (Joint Stakeholders[1])
10:40 am	How to Think About the Grid Differently and Iterative Processes	Brady Cowiestoll (NREL)
11:30 am	Staff Presentation	Sarah Mullkoff (MPSC)
11:45 am	Closing	Naomi Simpson (MPSC)
12:00 pm	Adjourn	

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Stakeholder Discussion

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Summarized Stakeholder Comments from 10/21 Meeting

In what ways could resiliency be addressed and modeled in an IRP?

- Start by clearly defining resiliency, establish the goals to be accomplished, and metrics by which to measure it.
- Quantitative and qualitative measures could be included in an analysis.
- May be best addressed in distribution planning processes.

Stakeholder Discussion

Commenters highlighted the need for a definition of *resiliency*.

- National Infrastructure Advisory Council's definition of resilience, adopted in 2009, is

  "the ability to reduce the magnitude and/or duration of disruptive events. The effectiveness of a resilient infrastructure or enterprise depends upon its ability to anticipate, absorb, adapt to, and/or rapidly recover from a potentially disruptive event."

- NARUC defines resilience as

  "the robustness and recovery characteristics of utility infrastructure and operations, which avoid or minimize interruptions of service during an extraordinary and hazardous event."

Information obtained from Statewide Energy Assessment Report

Stakeholder Discussion

Commission's guidance in U-20147, pp 48-49.

- Agrees with DTE Electric on the description of resilience, in terms of the ability to restore power following a major catastrophic event.

- Commission also thinks about this term more broadly:
  - Planning to mitigate more localized, high-impact outages caused by equipment issues, access limitations, or system configurations that inhibit timely restoration or backup capabilities;
  - Resilience should consider the vulnerability of loads that would affect public health, safety, or security under an extended outage, and related mitigation strategies to ensure continuity of service;
  - Commission underscores the importance of robust, risk-based resilience evaluations and mitigation strategies as part of distribution planning efforts.

Stakeholder Discussion

With respect to *resilience* regarding aligning planning processes and reflecting that in the MIRPP/Filing Requirements;

- Is resilience accounted for in sensitivities analysis and risk assessment? If not, should it be and if so, how?
- Is resilience accounted for through the MISO planning process by meeting PRMR requirements? If not, should it be and if so, how?
- Is the N-1-1 planning criteria used in transmission planning useful for distribution planning?
- Should resiliency investments be identified in distribution planning feed into IRP or vice versa?
- What are the touchpoints between distribution planning and IRP that will align the processes when addressing resiliency?

Summarized Stakeholder Comments from 10/21 Meeting

What specific externalities do stakeholders think should be addressed that are not currently addressed in the Michigan Integrated Planning Parameters (MIRPP) document? What specific changes to the MIRPP would address these externalities?

- Current requirements are adequate, and no changes are needed.
- Require an assessment of:
  - system weakness under various DER penetration scenarios;
  - the benefits of enhanced transmission capacity;
  - modeling to optimize system capability and investment.
- Require an *upfront* assessment of externalities in IRPs.

Stakeholder Discussion

Commenters identified the need to include externalities in planning processes.

Stakeholder Discussion

With respect to *externalities* regarding the MIRPP/Filing Requirements;

- To what extent do current scenarios, sensitivities, and risk address externalities?
- Does a probabilistic risk assessment play a role in addressing externalities?
- What externalities best lend themselves to a qualitative analysis?
- To what extent should the analysis of externalities influence the IRP filing? Transmission planning? Distribution planning?

Summarized Stakeholder Comments from 10/21 Meeting

What are appropriate ways to address the disconnect between resource needs in an IRP and future unknown resource locations? Are there studies that need to be performed, communication channels that need to be established, or other possible solutions?

- Flag locations that may no longer be optimal.
- Define scenarios that provide a range of possible outcomes instead of attempting to find the “right answer”.
- This is not necessarily a “disconnect” because IRP resources are not definitive to a particular location. If system constrains are the driver, IRPs can identify these locations.
- Hosting capacity analysis (HCA) could be an answer and utilities are working on this through the August 20, 2020 order in U-20147.

Stakeholder Discussion

When considering the disconnect between resource needs identified in an IRP and unknown future locations of those resources when installed:

- Do stakeholders feel that we need to try to identify probable resource locations? Why, why not? Is location important for certain resources and not others?
- Are there ways to begin to look at probable resource locations and have that information as part of an IRP filing?
- Are there changes to either the MIRPP and Filing Requirements needed?
- What kind of analysis should we look for in an IRP that tie the probable locations to distribution or transmission planning?

Summarized Stakeholder Comments

September 24th and October 21 comments identified the need to address Non-Wires Alternatives more specifically.

Staff Observations on NWA's

- Utilities include resources that could be NWA's as resource alternatives for the IRP model to select.
- Often these resources are seen by the model as "buckets".
- In error, Staff inadvertantly did not include energy efficiency as a Non-Wires Alternative on October 21.
- NWAs are demand or supply-side resources, but those same resources are not necessarily NWAs unless they are targeted to defer a specific grid investment.

Stakeholder Discussion

With respect to *Non-Wires Alternatives* regarding the MIRPP/Filing Requirements and aligning planning processes;

- Do stakeholders agree that non-wires alternatives includes storage, solar, wind, demand response, CVR and *energy waste reduction*?
- Do stakeholders agree that a non-wires alternative is *location specific* and alleviates some *traditional investment* in a *targeted* geographic area?
- Juliet Homer's presentation identified several types of NWA analyses identifying benefits and costs across planning processes. Do stakeholders feel one planning process drives another when evaluating and selecting NWAs?

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Making the Most of Michigan's Energy Future

ITC

Kwafo Adarkwa
Chuck Marshall

A Transmission View on Planning Integration

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FOR THE GREATER GRID

Introductions

Chuck Marshall

Vice President, Transmission Planning

Kwafo Adarkwa

Manager, Regulatory Strategy

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Overview

- Rate of change in the state, industry
- Knowns and unknowns
- Interrelated processes

How do we tie it all together?

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The Landscape

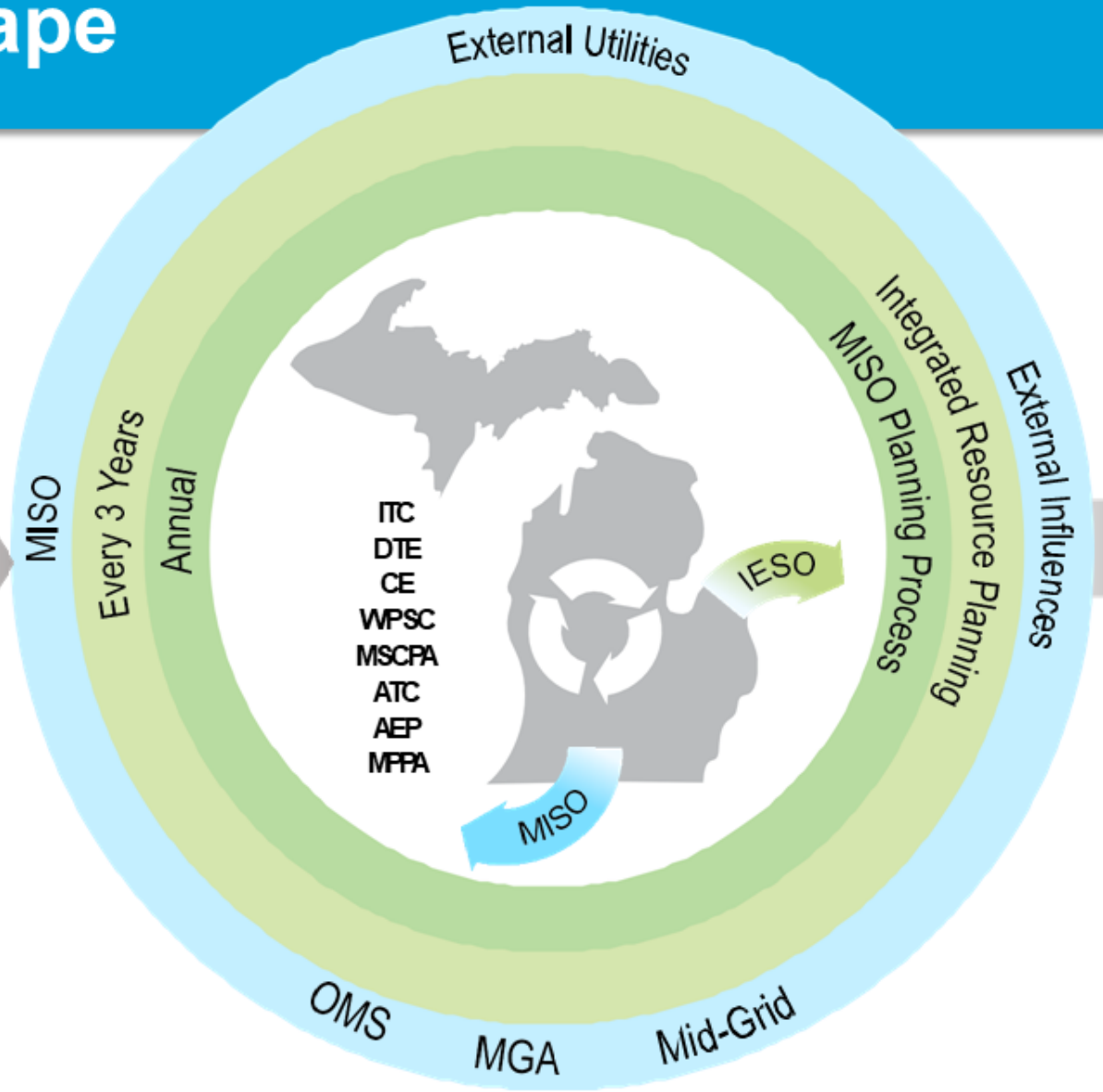
INFLUENCES / ISSUES

Policy goals

Resource adequacy

RIIA

Load



SOLUTIONS

MISO MTEP

Long-range planning

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Next Steps

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Thank You

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Joint Presenters

Margrethe Kearny
Nikhil Vijaykar

MPSC

Michigan Public Service Commission

ENVIRONMENTAL LAW & POLICY CENTER

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Fitting The Pieces Together

Integration of Distribution and Resource Planning Processes

Advanced Planning Stakeholder Meeting
Integration Of Resources/Transmission/Distribution Planning
November 18, 2020

MPSC
Michigan Public Service Commission

Roadmap For The Next 20 Minutes

- What are we learning about Distribution Planning?
- How do those pieces of the Distribution Planning puzzle fit into Integrated Resource Planning?
- When we agree on principles, how do we translate that into concrete changes?
- What is the path forward?

DISCLAIMER

We just want to talk. We might be wrong about some of these things. We might not know enough to know we are wrong about some of these things. We might change our mind going forward. Our colleagues might disagree with us. We don't speak for anyone but ourselves. This presentation will probably have side effects.

But the only way we know to find better solutions is to have open conversations.

What are we learning about Distribution Planning?

- The Location of Things Matters

- The Number of Solutions Keeps Growing
  - EWR
  - DER
  - DR
  - Grid Software and Controls

- We are learning that there are things we can do to strengthen the distribution system that ALSO serve to meet resource needs and change what resources utilities need to procure.

- All of my learning has been second-hand! (That's why Nikhil is here.)

What are we learning about Integrated Resource Planning?

- The Distribution Plan a utility has in place impacts the success of an IRP

- We need to be more granular about what is happening on the Distribution System if we want a higher quality IRP
  - (our assumptions can't be so broad and so general)

- If we don't have a Distribution Plan that gives us the right information, we can't use it in the IRP

How do those pieces of the Distribution Planning puzzle fit into Integrated Resource Planning?

- They can't fit if we don't have transparent information. It is like doing the puzzle without the picture on the box top.

- What information, at what time, and in what form, do we need from the Distribution Planning process?
  - We need as much information BEFORE modeling as possible
  - We need as much information BEFORE an RFP as possible

  - And then it needs to be iterative . . . Unlike my microphones during a zoom call, a feedback loop here may be good.

When we agree on principles, how do we translate that into concrete changes?

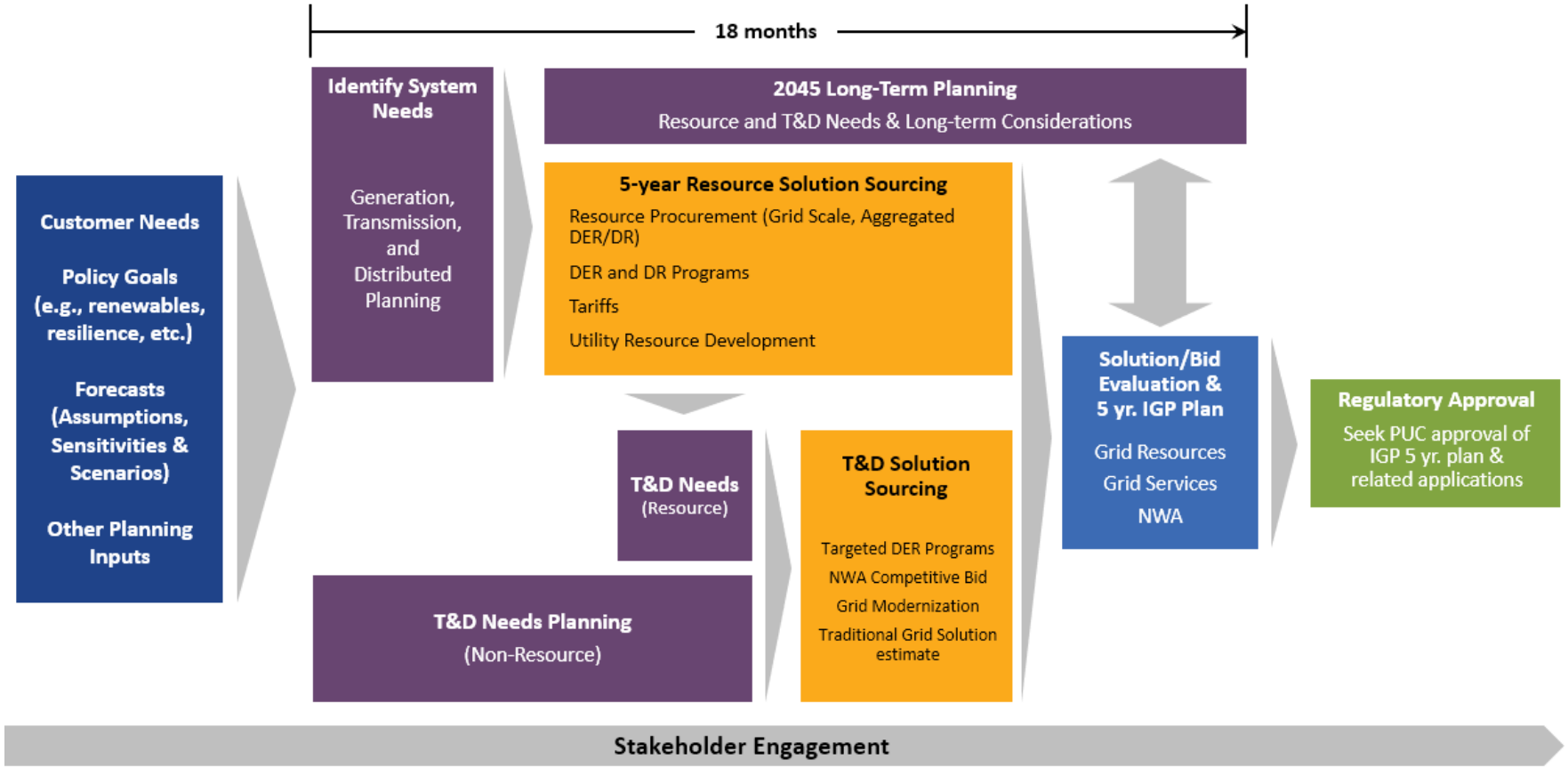
- What are the mechanisms we have to fit this information into Integrated Resource Planning?
  - Requests for Proposals
  - Modeling – sensitivities, scenarios, assumptions
  - 150 day cost updates?
  - Conditional Approval of IRPs?
  - Qualitative Considerations when optimizing?

- Where in the process do we determine if non-traditional or location specific solutions should be considered in the IRP?

- What mechanisms are required to meet the legal requirements for IRP approval?

Aligning Utility Planning Processes – the Long View

Consider Hawaii Integrated Grid Planning Process (Order 35569 in Docket 2018-0165):



Aligning Utility Planning Processes – the Less Long View

- Revisit granularity of load and generation forecasts used in distribution plans and in resource plans
- Look at complete range of options (technologies, as well as ownership) to meet distribution and resource needs
- Systematically evaluate non-traditional grid solutions in distribution plans, and account for those solutions in resource plans

Michigan Utilities and Grid Solutions

Utility	Grid Solution Screening	Connection to utility planning process
DTE	Screening process for selecting areas targeted for NWA pilots	DO, EWR and DR teams collaborate to screen for pilots; not yet a part of the distribution project review process. Summarized in distribution plan.
Consumers Energy	Exploring potential for NWAs as a LVD substation capacity solution	LVD engineers identify potential LVD substations to target for pilots; not yet a part of the distribution project review process. Summarized in distribution plan.
Indiana Michigan Power	Applies selection criteria to identify locations for pilots	Pilots; not yet a part of the distribution project review process. Summarized in distribution plan.

Path Forward for Michigan – Aligning Planning Processes

Possible Suitability Criteria	Possible Changes to Distribution Plan Filing Requirements	Possible Changes to Integrated Resource Plan Filing Requirements
Include projects estimated to cost at least $1M	Identify Grid Needs over 5 year horizon	Under VIII, Demand-Side Resources, add a section on "Distribution Grid Solutions". This section should include, at minimum: • Description of the utility's method for determining whether to pursue a non-traditional grid solution; • Suitability criteria; • Planned non-wires alternatives pilots; • Proposed Course of Action with respect to non-wires alternatives projects over a five-year horizon, including forecasted energy (MWh) and capacity (MW) associated with non-wires alternatives projects. Under X, add section describing impact of Distribution Grid Solutions on load and demand forecasts.
Include projects that are more than 24 months away	Provide Grid Solutions Opportunities Report: Provide planned distribution system projects filtered by Suitability Criteria OR, at minimum A list of substations requiring known capacity upgrades (normal overload or contingency) in the next 5 years, with associated estimated cost and capacity need (MW and MWh)	
Capacity, reliability, resilience or voltage/VAR support projects	Provide, for each suitable project: ○ Hour/month/year of forecasted need ○ Forecasted peak capacity need (MW) ○ Forecasted energy need (MWh)	

How do we make these concrete changes?

- **First step**: feed Distribution Planning information into IRP qualitatively
- **Second step**: use Distribution Planning in the forecasts and assumptions that feed into the IRP modeling
- Create a **system and a process** from the very beginning, rather than a set of pilots
- To bullet out some of the things we can do right now:

Sitting here today, could we require the following things in our next IRP?

- Include in the IRP a list of substations needing capacity upgrades within 5 years.
- Identify any NWAs that could be used to avoid those capacity upgrades.
- Include those NWAs in the IRP and related RFPs
- Get cost recovery approval for those NWAs in the IRP.

Questions for the group's consideration

- How nimble can we be?
- How do we create the right back and forth?
- Do we have a Distribution Planning Scenario?
- Do we have a "High Flexibility" Scenario?
- What are the key milestones on the way to more aligned planning processes?

Questions?

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NREL

Brady Cowiestoll

MI Power Grid
Advanced Planning

Brady Cowiestoll
National Renewable Energy Laboratory
November 18, 2020

Interactions of grid planning processes

Why it may be helpful to align

Categories of Grid Planning

- Transmission Planning
- Generation Planning
- Distribution Planning
- Load Forecasting

Categories of Grid Planning

- Transmission Planning
  - Upgrades to existing transmission infrastructure
  - New transmission corridors
  - Contracts and new connections for renewables
- Generation Planning

- Distribution Planning

- Load Forecasting

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- Generation Planning
  - What types of resources are needed to meet load
  - Impacts of variable renewables on other capacity needs
  - Meeting policy goals
- Distribution Planning

- Load Forecasting

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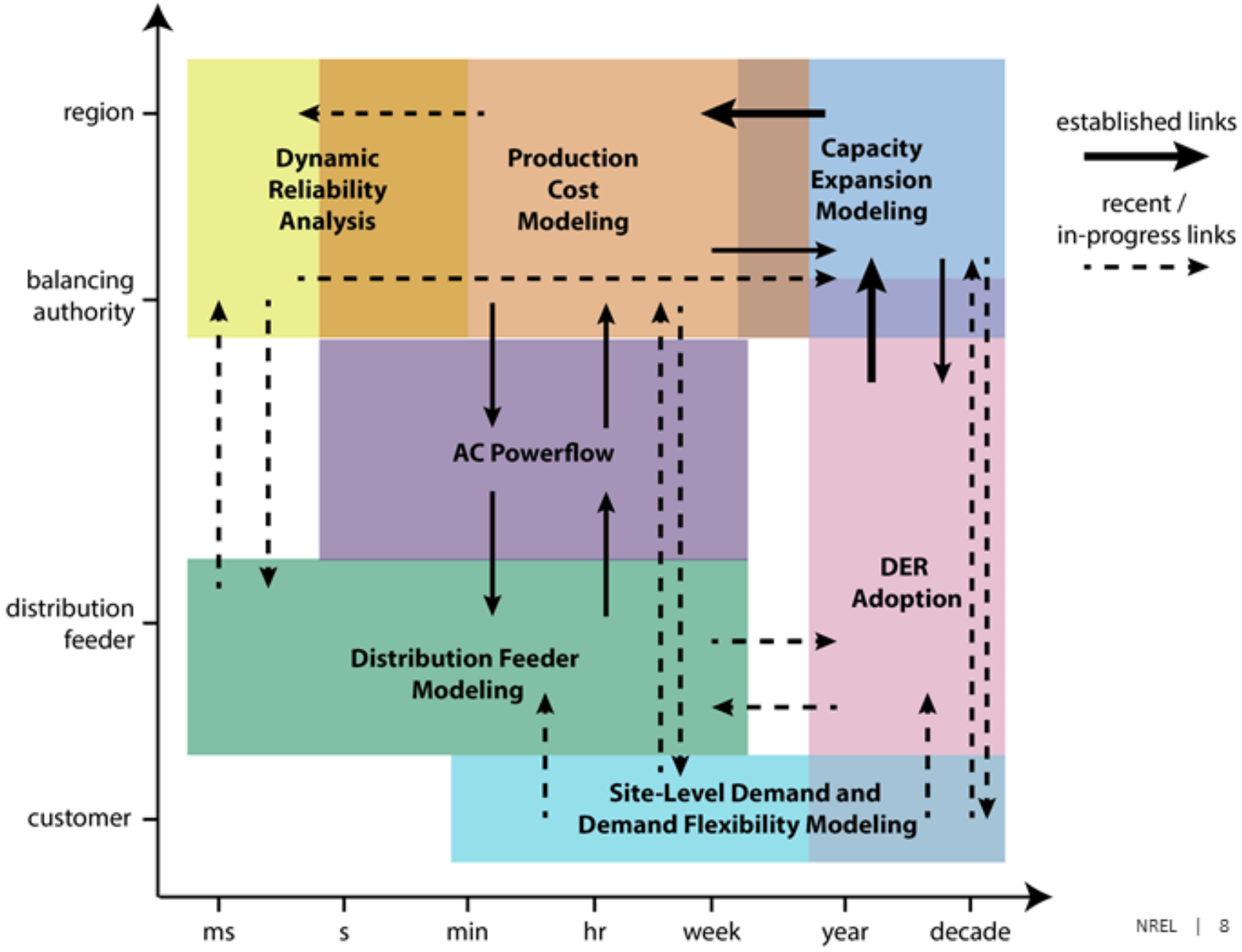
  - Meeting policy goals
- Distribution Planning
  - Upgrades to existing infrastructure
  - Impacts of demand-side resources
- Load Forecasting
  - How will load increase overall and how will load shapes change
  - Demand-side resource adoption

Interactions between modeling tools



Benefits of Integrated Planning

- Capture trade-offs between potentially more expensive generation types and building new transmission
- Better analysis of response to expected distributed energy resource adoption
- Solutions which may be approximately equivalent on the bulk power grid may have drastically different implications for the distribution grid

Planning Tools Used at NREL

- Capacity expansion models:
  - Regional Energy Deployment System--ReEDS (National/regional scale)
  - Resource Planning Model—RPM (regional/utility scale)
  - Renewable Energy Integration and Optimization—REOpt (building/campus/community/microgrid)
- Customer adoption of distributed generation and storage:
  - Distributed Generation and Market Demand Model—dGen
- Production cost models:
  - PLEXOS (commercial tool)
  - SIIP Powersimulations (NREL Developed, open source)
- Resource Adequacy:
  - Probabilistic Resource Adequacy Suite (PRAS)
- Distribution Feeder Modeling
  - Distribution grid Integration Solution COst—DISCO
- AC Powerflow:
  - PSLF/PSSE (commercial tools)

Planning Tools Discussed Today

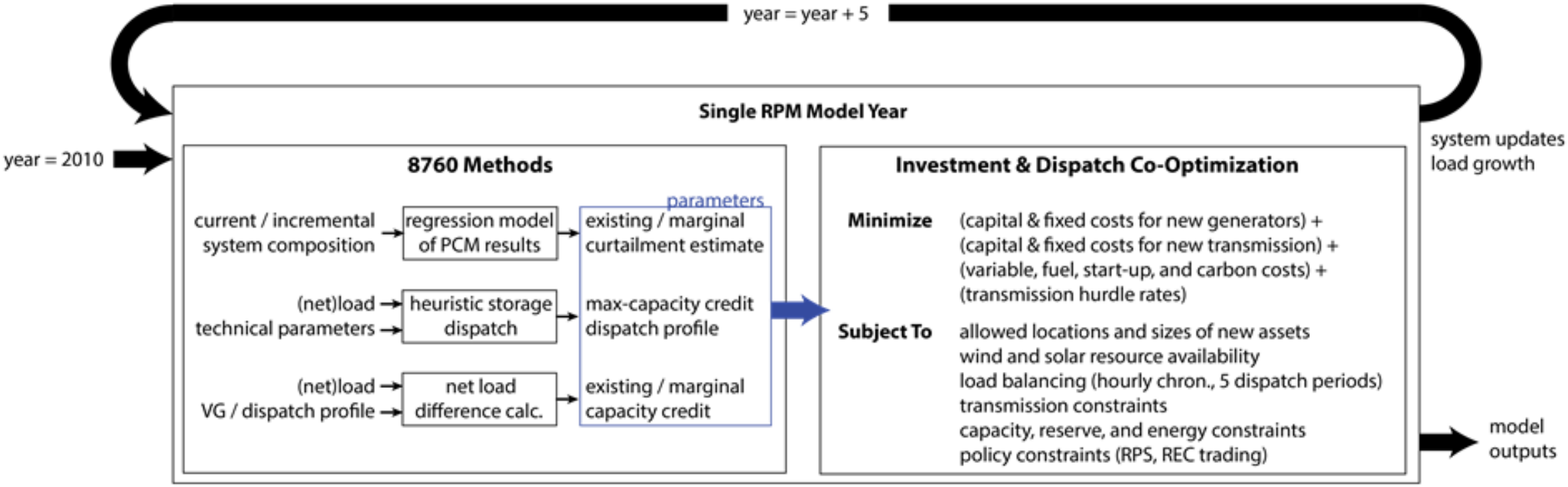
- Resource Planning Model (RPM)
  - Capacity Expansion Model
  - Incorporates transmission and generation
- dGen
  - Customer adoption model for distributed solar
  - Generation expansion on the demand side
- Distribution Modeling (DISCO)
  - Hosting capacity analysis

Resource Planning Model

https://www.nrel.gov/analysis/models-rpm.html

Nodal Representation Captures Intra-Regional Transmission Expansion

Co-Optimize Generation and Transmission Assets



LA 100

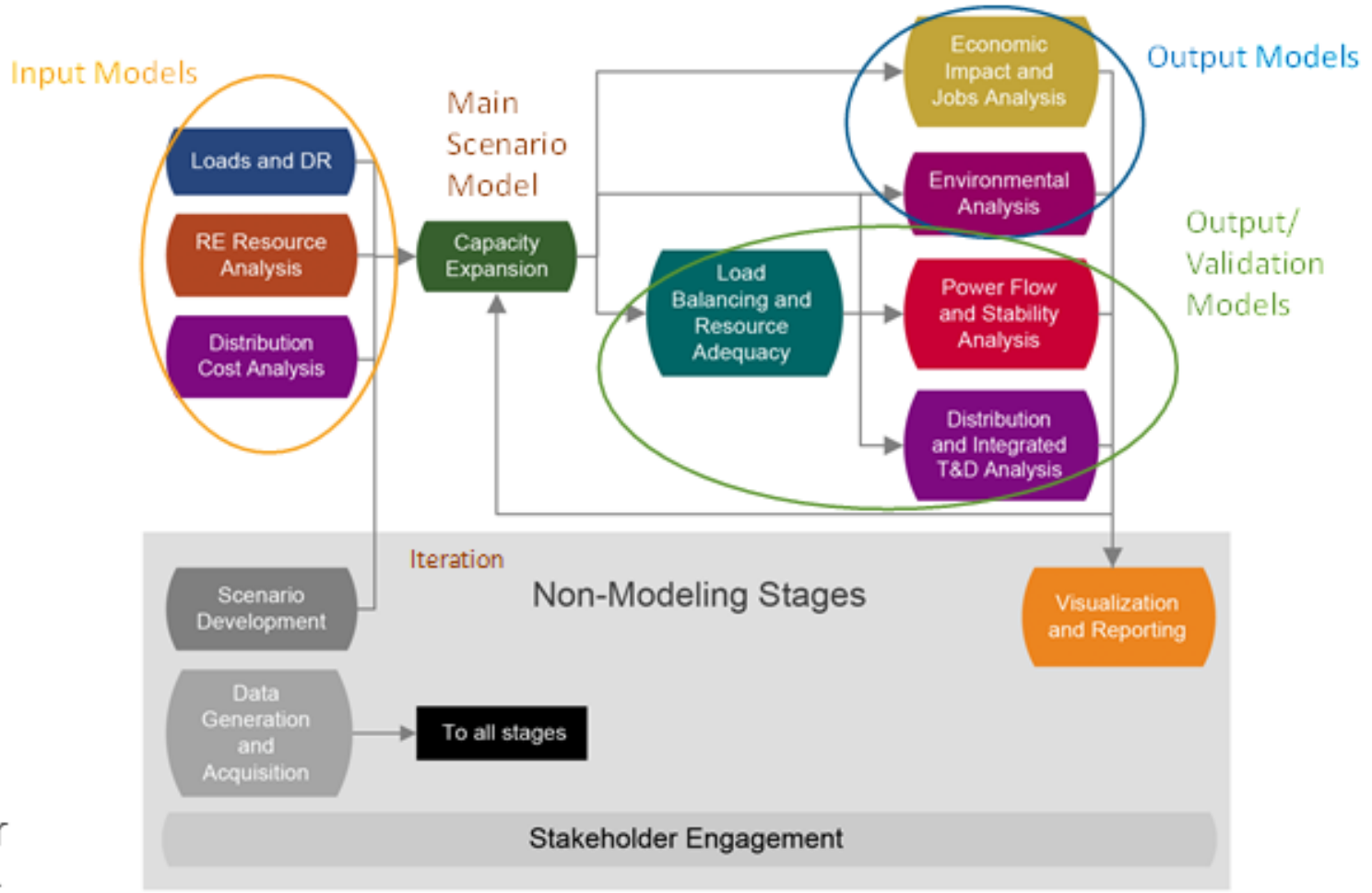
https://www.nrel.gov/analysis/los-angeles-100-percent-renewable-study.html

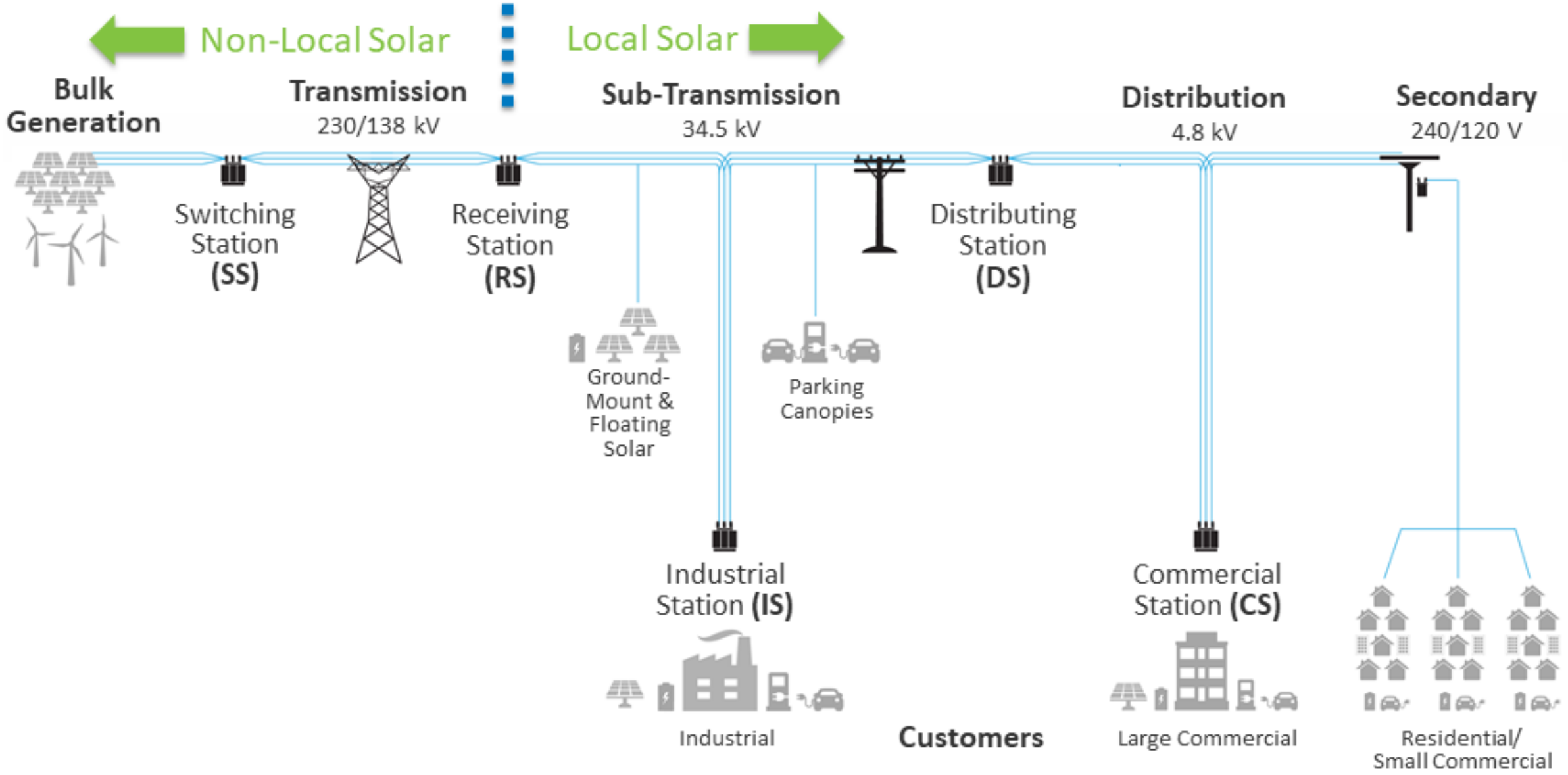
LA100 Integrated System Planning

Objective

Evaluate pathways and costs to achieve 100% RE* while maintaining the current high degree of reliability

* Some scenarios include nuclear and/or natural gas offset by RECs




Non-Local Solar
Local Solar
Bulk Generation
Transmission
230/138 kV
Sub-Transmission
34.5 kV
Distribution
4.8 kV
Secondary
240/120 V
Switching Station (SS)
Receiving Station (RS)
Distributing Station (DS)
Ground-Mount & Floating Solar
Parking Canopies
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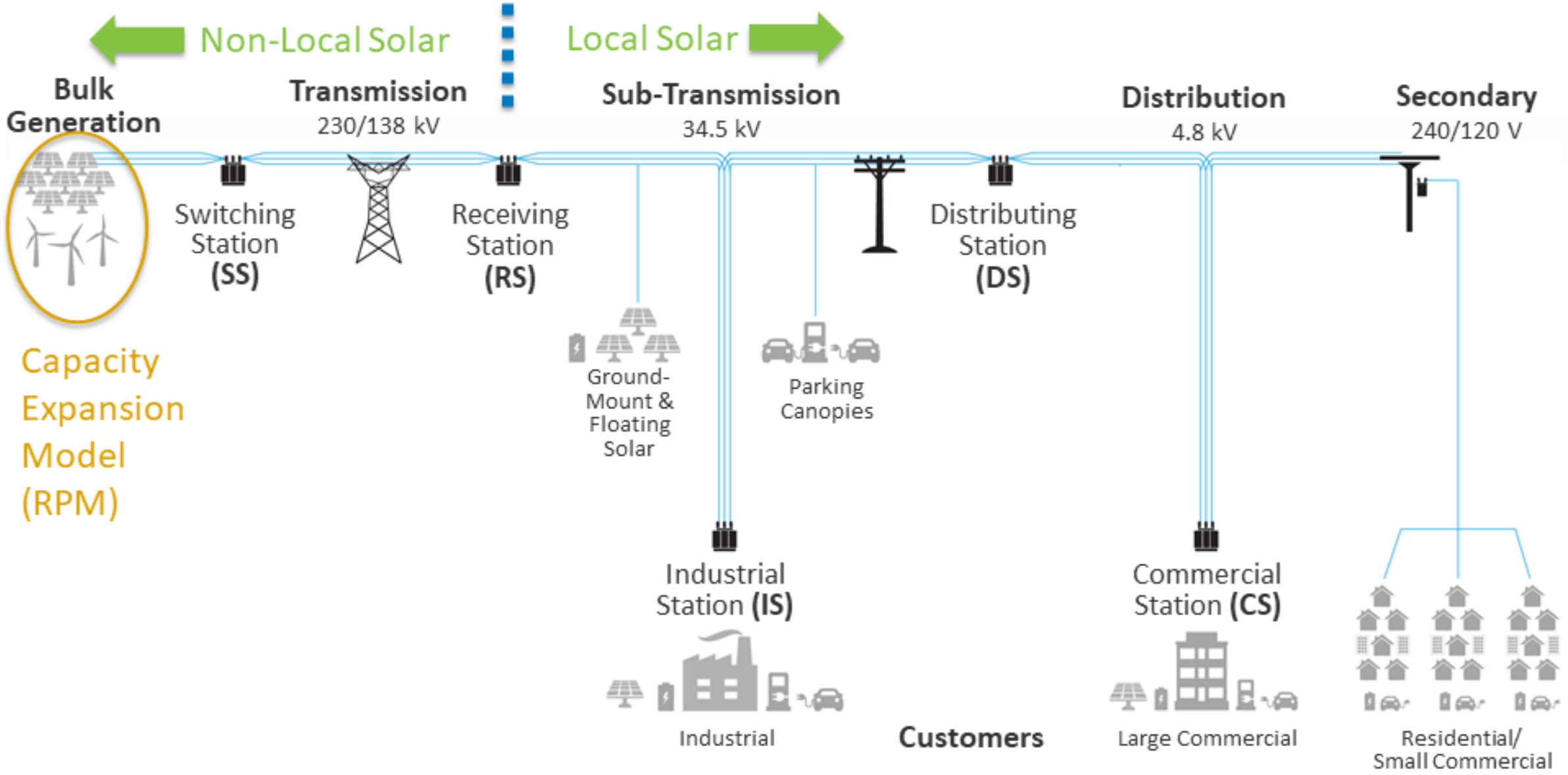
Commercial Station (CS)
Industrial
Customers
Large Commercial
Residential/ Small Commercial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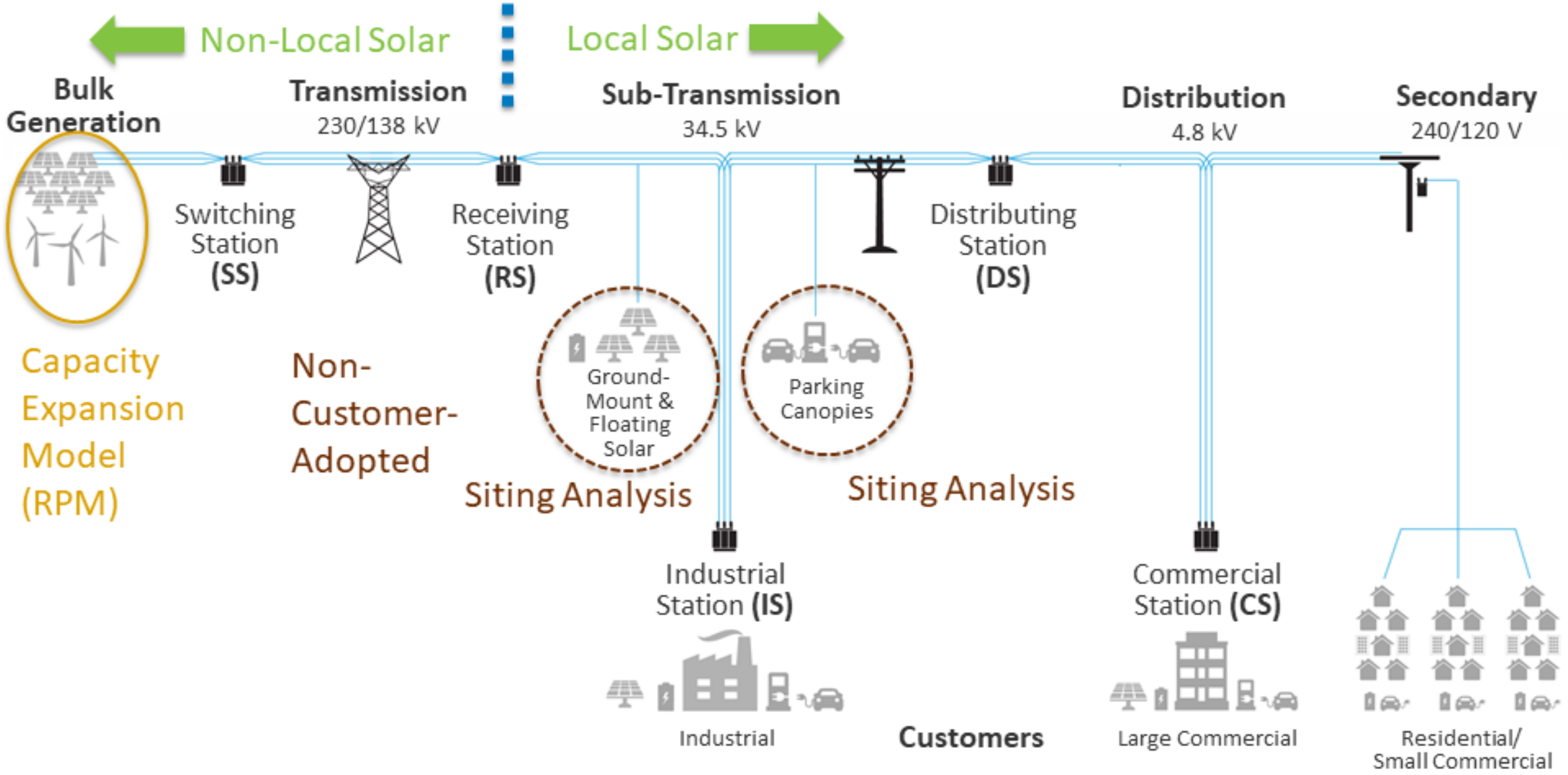
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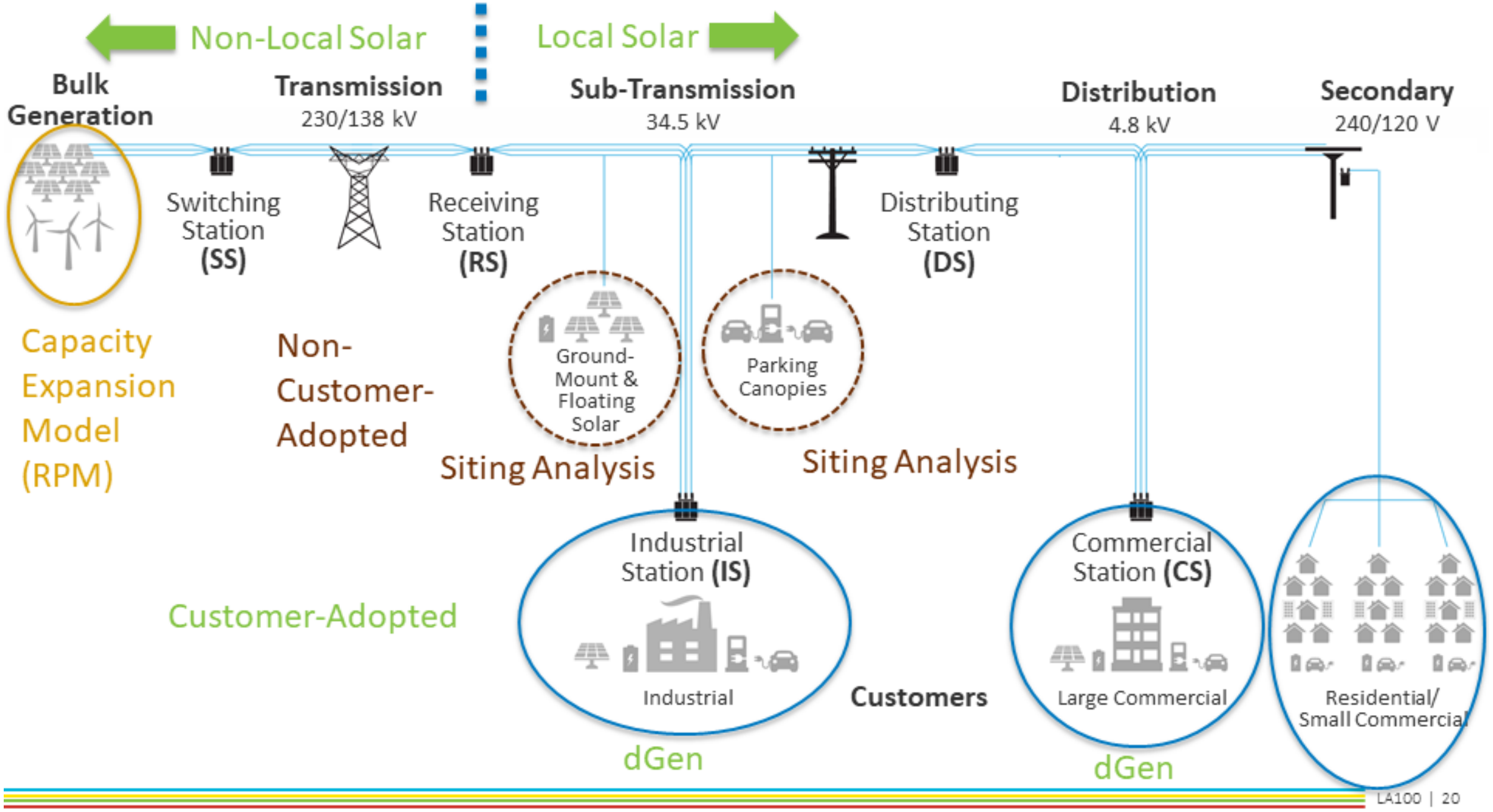
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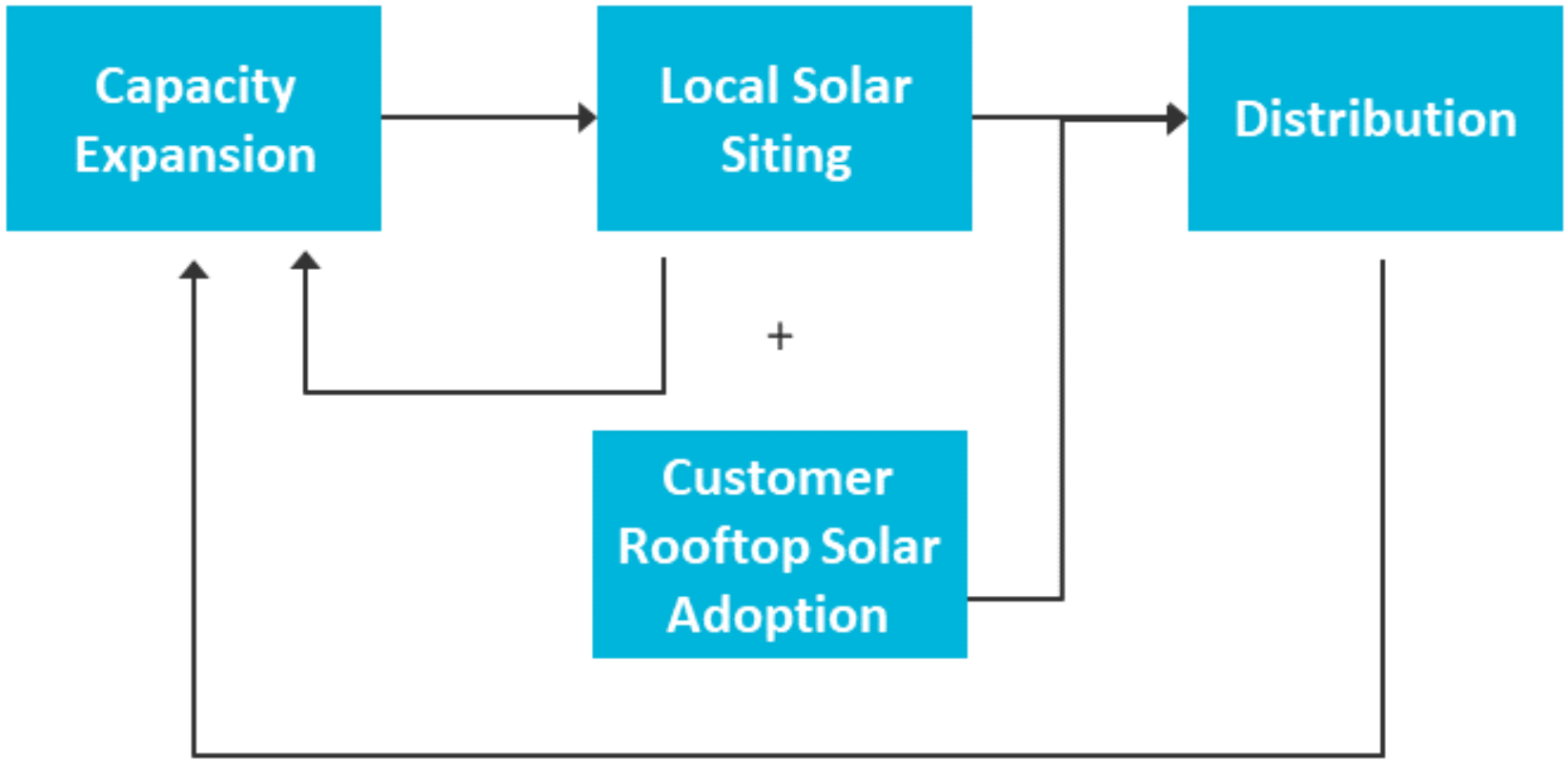
dGen
LA100 | 20

Finding the "optimal" amount of local solar



1. Estimate local solar needs by receiving station
2. Allocate local solar to individual sites
3. Simulate distribution impacts of local + rooftop solar
4. Iterate models

Aligning Interests

https://www.nrel.gov/docs/fy18osti/71042.pdf

Planning implications for distributed PV adoption

We used NREL's Resource Planning Model (RPM) and Distributed Generation Market Demand Model (dGen) along with the commercial tool PLEXOS to assess the **economic impacts** of errors in forecasting DPV adoption.

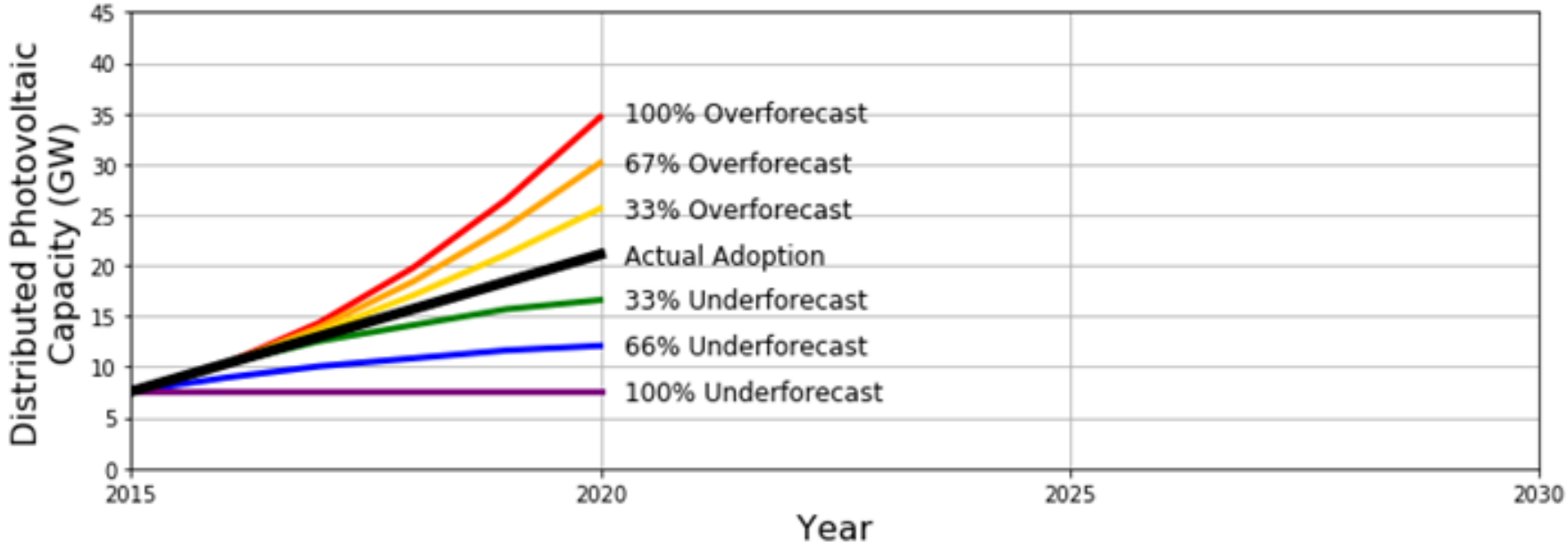


Figure from Gagnon et. al. 2018

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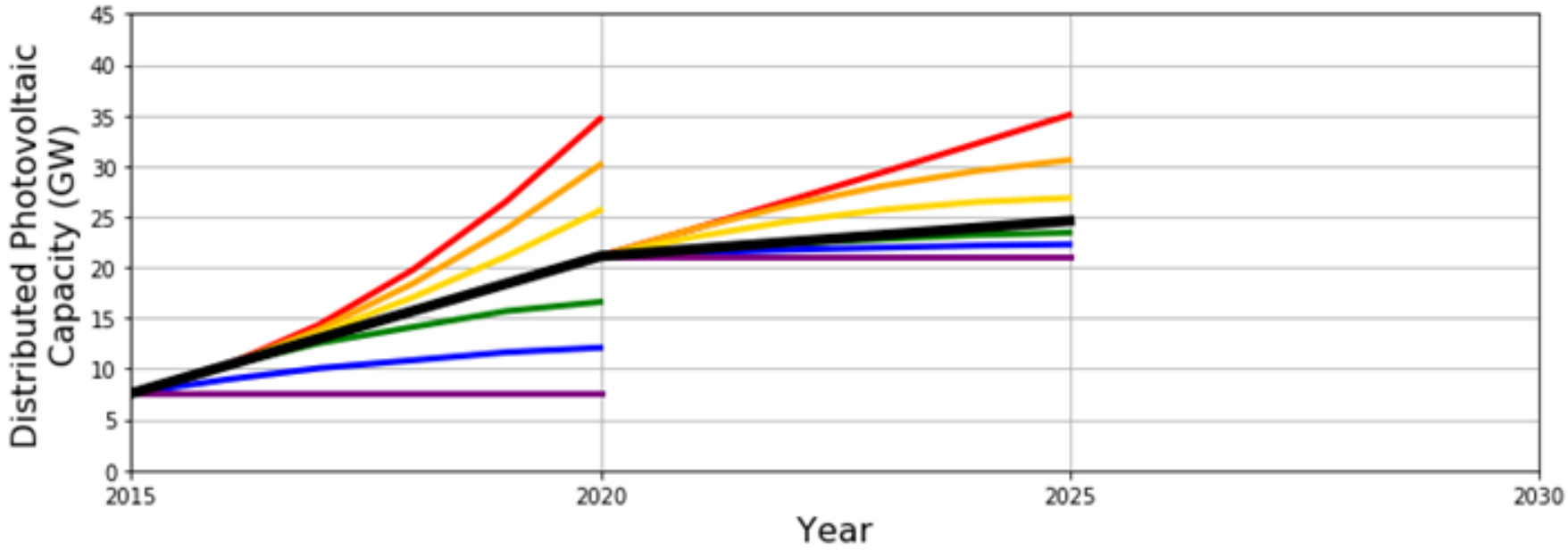

Figure from Gagnon et. al. 2018

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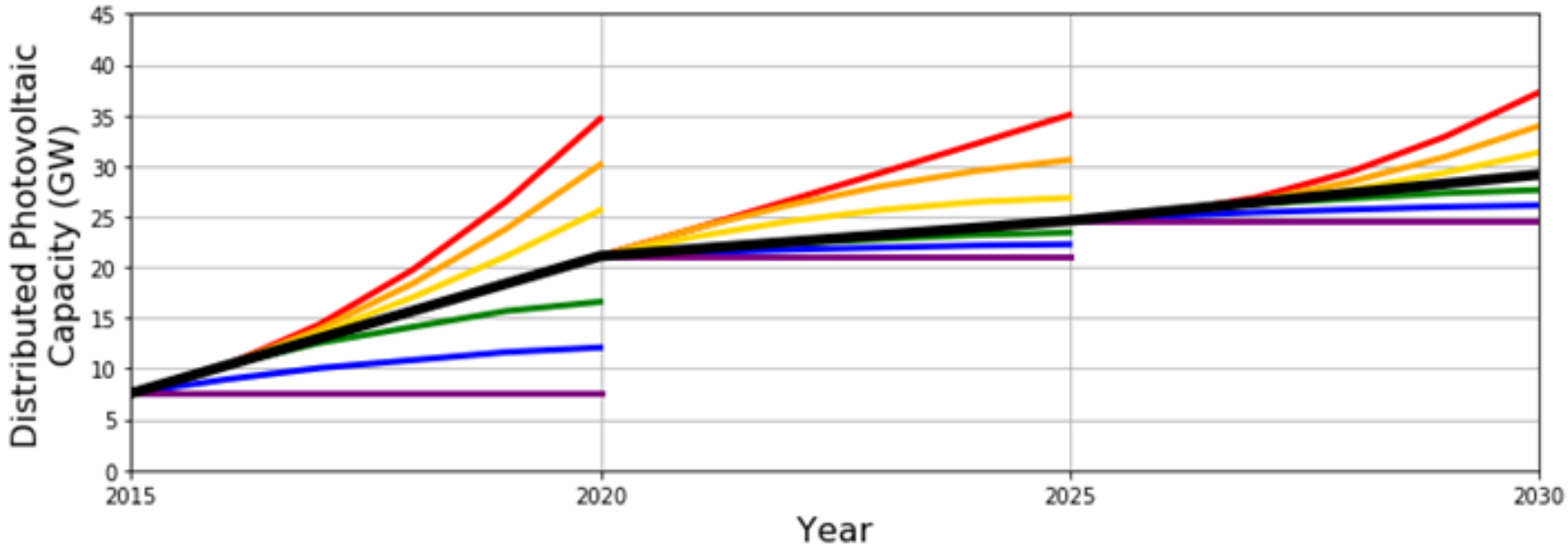


Figure from Gagnon et. al. 2018

Forecasting errors have opposite impacts on Capital and Operating Costs

Over-estimating DPV adoption leads to building less bulk power capacity, however it leads to a system that is more costly to operate

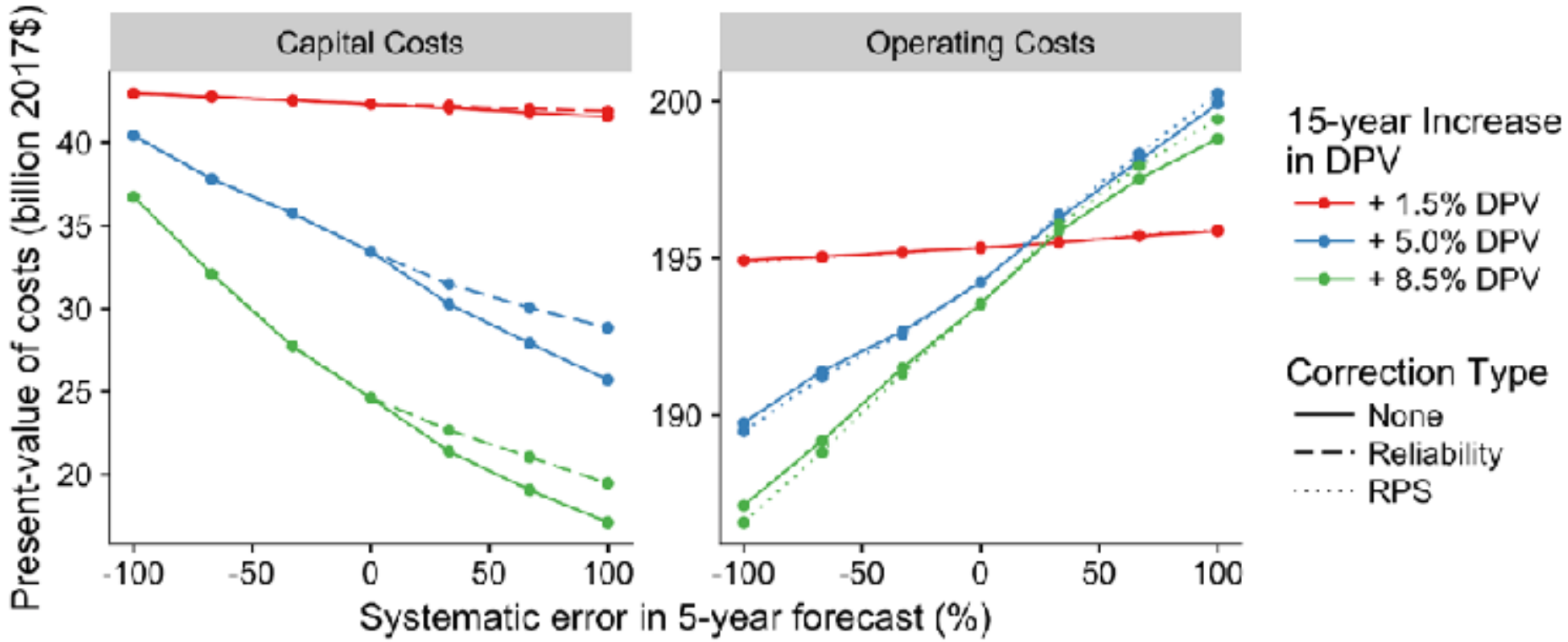
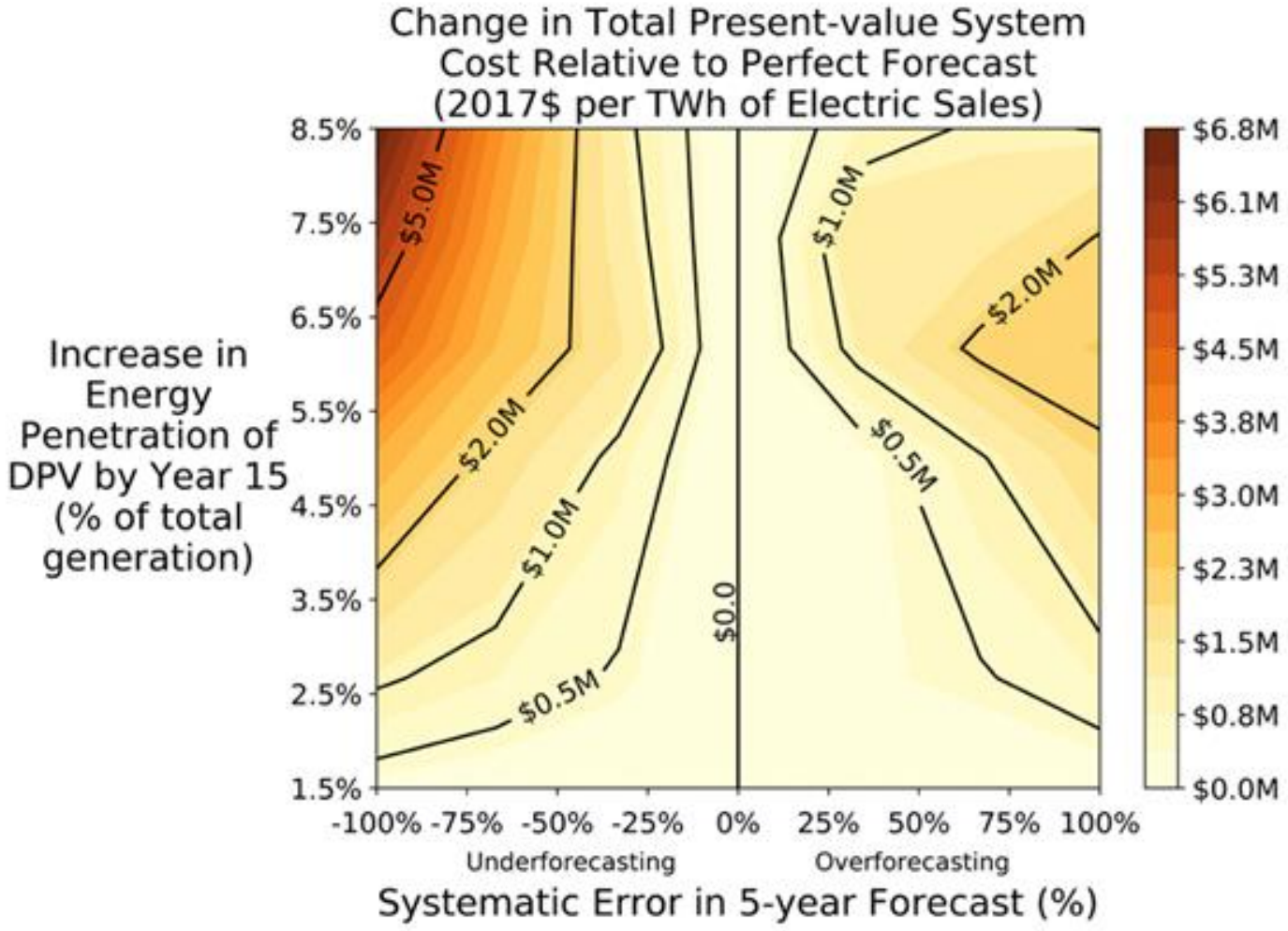


Figure from Gagnon et. al. 2018

The Results: Impacts on Present Value System Cost



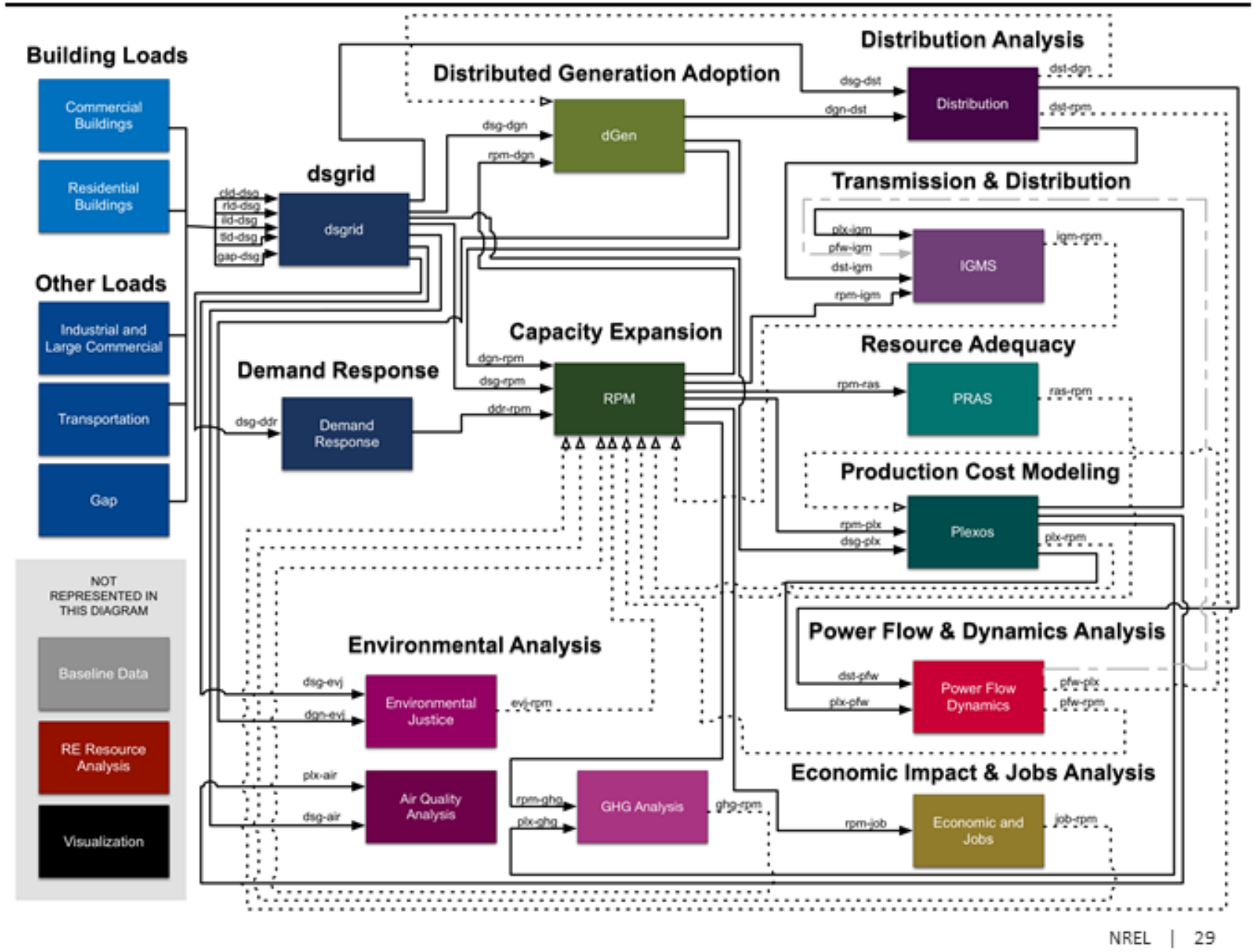
Errors in forecasting DPV has the **greatest impact** on present value system costs when either **DPV penetrations are high**, or **DPV adoption trends are severely incorrectly forecasted**

Figure from Gagnon et. al. 2018

Aligning Planning Processes

Steps to move towards alignment

Detailed Modeling Framework Of LA100 Data Handoffs Between Models



Questions for alignment

- How do models incorporate different types of data?
- How would data be transferred between models?
- What key information is missing in any particular model?
- How would that information be provided by another model?

Types of alignment

- Direct simulation
  - Expand models to incorporate more types of planning processes
  - RPM for generation and transmission
  - Inclusion of dGen results directly in RPM
- Iteration
  - Pass prices between models
  - Pass capacities between models
  - Incorporation of distribution costs in RPM based on RPM capacities built in prior run

Scenario Analysis

Dealing with uncertainty

What is scenario analysis?

Utilization of multiple potential categorizations of the future to analyze relevant pathways that may define future grid needs or development

These may include a range of cost trajectories, potential policy decisions, technology improvements, load projections, and other potential influential and unknown future impacts

What we can learn from scenario analysis?

- Understand the impact of uncertain forecasts on model predictions
- Identify range of likely results
- Identify potential common pathways amongst all scenarios
- Manage uncertainty in future forecasts

LA 100 Scenarios

		LA100 Scenarios								
		Moderate Load Electrification				High Load Electrification (Load Modernization)				High Load Stress
		SB100	LA-Leads, Emissions Free (No Biofuels)	Transmission Renaissance	High Distributed Energy Future	SB100	LA-Leads, Emissions Free (No Biofuels)	Transmission Renaissance	High Distributed Energy Future	SB100
	RE Target in 2030 with RECs	60%	100%	100%	100%	60%	100%	100%	100%	60%
	Compliance Year for 100% RE	2045	2035	2045	2045	2045	2035	2045	2045	2045
Technologies that do not vary in eligibility across scenarios	Solid Biomass	N	N	N	N	N	N	N	N	N
	Fuel Cells	Y	Y	Y	Y	Y	Y	Y	Y	Y
	RE-derived Hydrogen Combustion	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Hydro - Existing	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Hydro - New	N	N	N	N	N	N	N	N	N
	Hydro - Upgrades	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Nuclear - New	N	N	N	N	N	N	N	N	N
	Wind, Solar, Geothermal	Y	Y	Y	Y	Y	Y	Y	Y	Y
	Storage	Y	Y	Y	Y	Y	Y	Y	Y	Y
Technologies that do vary	Biofuel Combustion	Y	No	Y	Y	Y	No	Y	Y	Y
	Natural Gas	Y	No	No	No	Y	No	No	No	Y
	Nuclear - Existing	Y	Y	No	No	Y	Y	No	No	Y
Repowering OTC	Haynes, Scattergood, Harbor	N	N	N	N	N	N	N	N	N
RECS	Financial Mechanisms (RECS/Allowances)	Yes	N	N	N	Yes	N	N	N	Yes
DG	Distributed Adoption	Moderate	High	Moderate	High	Moderate	High	Moderate	High	Moderate
Load	Energy Efficiency	Moderate	Moderate	Moderate	Moderate	High	High	High	High	Reference
	Demand Response	Moderate	Moderate	Moderate	Moderate	High	High	High	High	Reference
	Electrification	Moderate	Moderate	Moderate	Moderate	High	High	High	High	High
Transmission	New or Upgraded Transmission Allowed?	Only Along Existing or Planned Corridors	Only Along Existing or Planned Corridors	New Corridors Allowed	No New Transmission	Only Along Existing or Planned Corridors	Only Along Existing or Planned Corridors	New Corridors Allowed	No New Transmission	Only Along Existing or Planned Corridors
WECC	WECC VRE Penetration	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate	Moderate

The reference case is the 2017 IRP "Recommended Case," which allows comparison of cost and reliability to business as usual.

Sensitivities on Present Value Cost Impacts

Many other factors also influence the net impacts of DPV forecasting errors, including load growth, natural gas prices, and availability of RECs

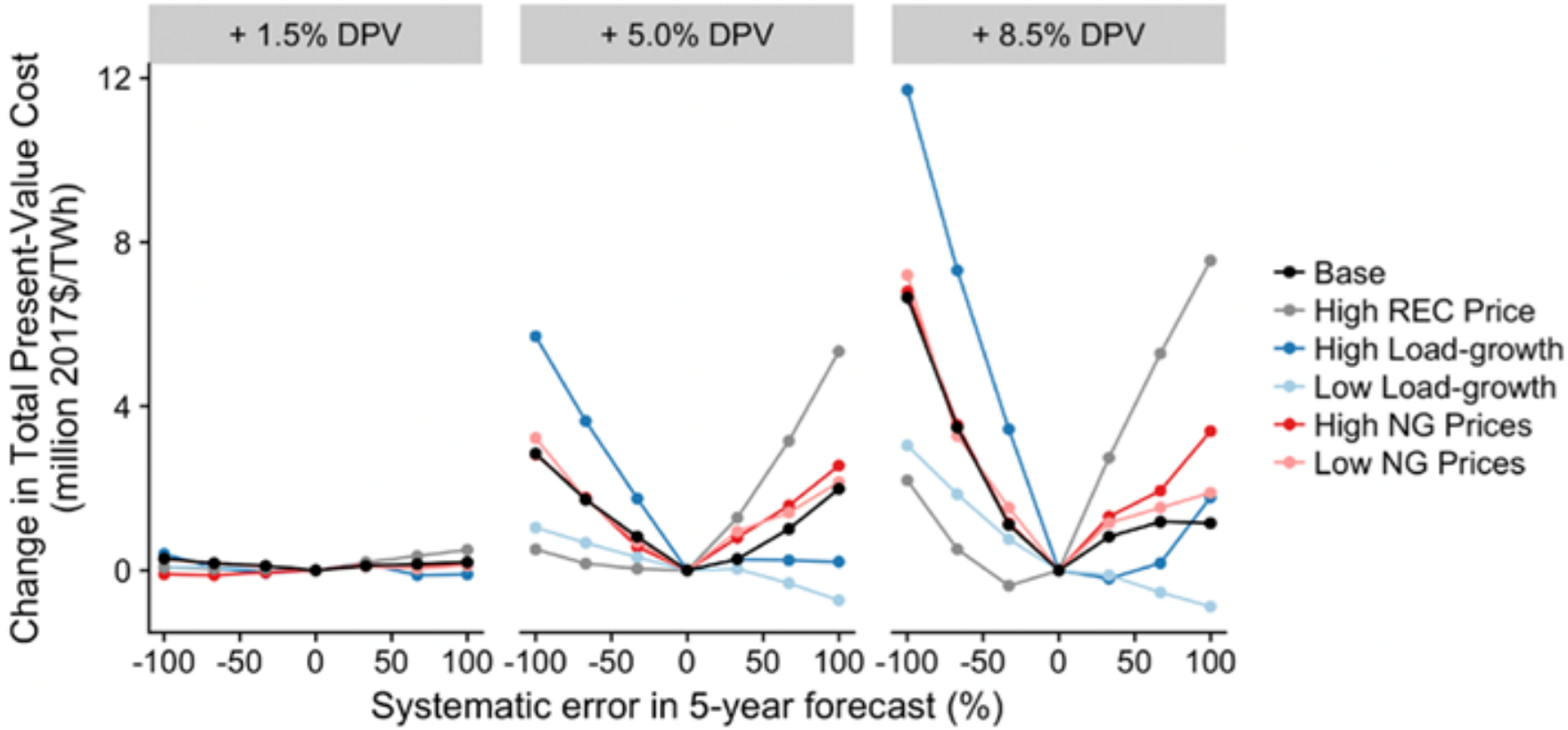
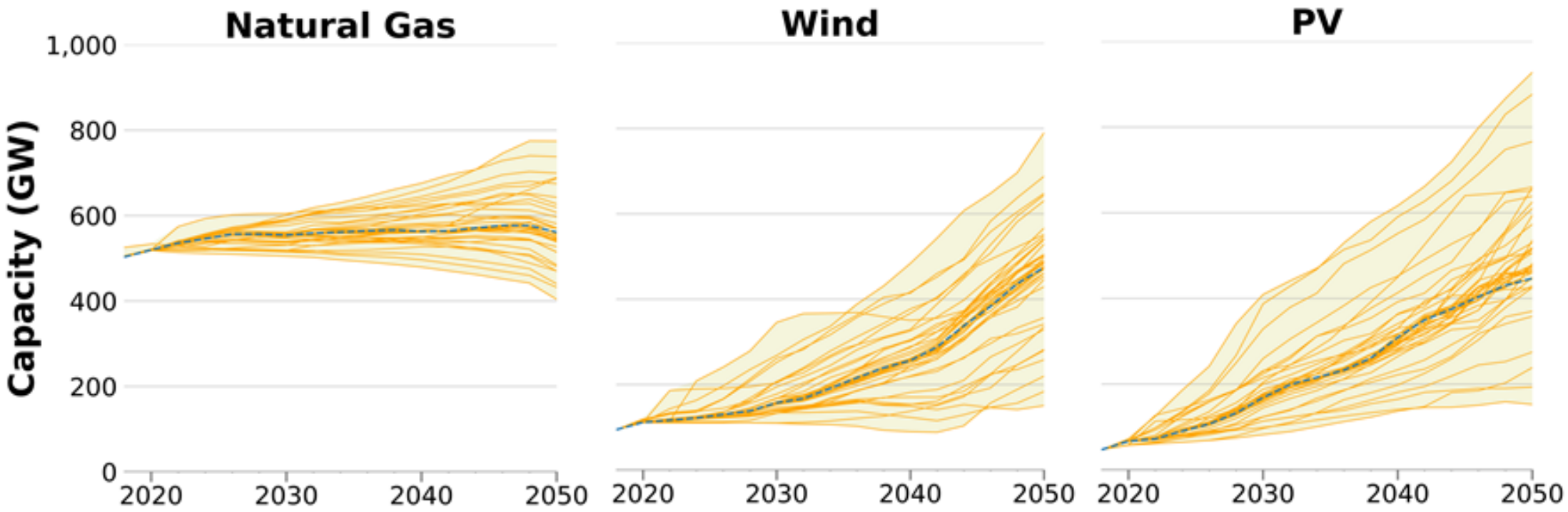


Figure from Gagnon et. al. 2018

ReEDS Standard Scenarios



Captures range of technology cost, fuel cost, technology advancement, policy decisions, and demand growth assumptions as well as model parameters settings

2019 **Standard Scenarios** Report: A U.S. Electricity Sector Outlook, Golden, CO: National Renewable Energy Laboratory. NREL/TP-6A20-74110.

Thank you

www.nrel.gov

brady.cowiestoll@nrel.gov

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MI POWER GRID

Making the Most of Michigan's Energy Future

Staff Presentation

Sarah Mullkoff

MPSC

Michigan Public Service Commission

MI POWER GRID

Making the Most of Michigan's Energy Future

MPSC and Environmental Justice

Staff Presentation by
Sarah Mullkoff

MPSC
Michigan Public Service Commission

Executive Order 2019-06

- Established the Office of the Environmental Justice (EJ) Public Advocate
  - Named Regina Strong as Environmental Justice Public Advocate
  - Leads the Office of the Environmental Justice Public Advocate
  - Implements processes and reporting of environmental justice complaints, assists with resolution
  - Leads state's Interagency Environmental Justice Response Team

Interagency Environmental Justice Response Team ("Response Team")

- Comprised of Department Directors of multiple state government agencies.
- Assists EGLE in development a statewide EJ plan
- Makes recommendations to address discriminatory public health or environmental effects of state laws, regulations, policies and examines disproportionate impacts
- Four advisory work groups:

Working Definition

- Environmental Justice is the equitable treatment and meaningful involvement of all people regardless of race, color, national origin, ability, or income and is critical to the development and application of laws, regulations, and policies that affect the environment, as well as the places people live, work, play, worship, and learn.
- Equitable treatment means:
  - No group of people bears a disproportionate share of the negative consequences resulting from governmental, industrial, or commercial operations and policies
  - All people benefit from the application of environmental laws and regulations
  - Eliminating barriers such as access and poverty, as well as repairing systemic injustices
- Meaningful involvement means:
  - People have an opportunity to participate in decisions that affect their environment and/or health
  - Decision makers seek out and facilitate the involvement of those potentially affects
  - People's concerns are considered in decision-making processes
  - People can influence state agency decisions.

Michigan Advisory Council for Environmental Justice
("MAC EJ")

- 21 appointees representing various sectors

Academic	Business	Non-profits	Coalitions
Foundations	Labor	Tribal	County Health
Community representatives		City Sustainability	

- Provides public and community input for the directors appointed to the Response Team
- For most of this year, has had bi-weekly meetings
- Engage in discussing emerging EJ related issues

Research & Data Workgroup

- Environmental Justice Work Group Report (March 2018) Recommendation:

  "Develop an environmental justice screening tool in Michigan and include cumulative impacts in the decision- making processes"

- Develop a Michigan specific tool
- Identify communities where additional resources should be prioritized
- Assess cumulative factors (environmental, socioeconomic, health) that communities in Michigan may face
- Develop a tool that can help inform decisions, allocate resources, and address community specific issues/concerns
- Develop a tool that can be used by multiple stakeholders

Direction on Coordination with EGLE

- In future proceedings, the Commission expects to coordinate with EGLE on the inclusion of public health and environmental justice consideration as part of the environmental information EGLE shares with the Commission under Section 6t. (U-20471, Feb. 20 Order)
  - Accordingly, in the order, the Commission directed Staff to coordinate with ELGE on the inclusion of appropriate public health and environmental justice considerations in future IRP cases (U-20633 Oct. 29 Order)

- Executive Order 2020-10 "MI Healthy Climate Plan"

> The Department [EGLE] must expand its environmental advisory opinion filed by the Department in the Michigan Public Service Commission's ("Commission") Integrated Resource Plan (IRP) process under MCL sections 460.6t and also file environmental advisory opinions in IRPs filed under MCL 460.6s. The Department must evaluate the potential impacts of proposed energy generation resources and alternatives to those resources, and also evaluate whether the IRPs filed by the utilities are consistent with the emission reduction goals included in this Directive. For advisory opinions relating to IRPs under both MCL 460.6s and MCL 460.6t, the Department must include considerations of environmental justice and health impacts under the Michigan Environmental Protection Act. The Commission's analysis of that evidence must be conducted in accordance with the standards of the IRP statute and the filing requirements and planning parameters established thereto.(ED 2020-10, p 2-3)

MPSC and EGLE Discussions

Ongoing conversations have taken place with the EJ Task Force and Data and Research work group about applying an EJ lens

Topics Covered

- Review and presentation of IRP process from MPSC and timing
- Review and reflection of EGLE's advisory opinion process
- Preliminary discussion on Michigan Environmental Protection Act (MEPA)
  - Part 17 of NREPA, MCL 324.1701-.1706
  - In administrative, licensing, or other proceedings, and in any judicial review of such a proceeding, the alleged pollution, impairment, or destruction of the air, water, or other natural , resources, or the public trust in these resources, shall be determined, and conduct shall not be authorized or approved that has or is likely to have such an effect if there is a feasible and prudent alternative consistent with the reasonable requirements of the public health, safety, and welfare.

Discussion Topics

- Determine how to provide EJ information in proceeding, possibly through advisory opinion
- Discuss MEPA and its application in IRPs
- Utility's quantification of air emission associated with the proposed IRP
- Consider impacts from environmental pollutants disproportionately impacting communities
- Existing or expected non-attainment and the impact of the IRP on non-attainment status

Next Steps

MPSC will continue to work with EGLE to determine data needs that allow for revisions to the advisory opinion process, aiming to implement for the next round of IRPs

As we learn more about EGLE's process, we will share with stakeholders any opportunities for comment.

EJ Screening Tool is targeted to be available for public next year

MI POWER GRID

Making the Most of Michigan's Energy Future

Closing

Naomi Simpson

MI POWER GRID

Making the Most of Michigan's Energy Future

Thank You

Upcoming Advanced Planning Stakeholder Meetings
December 16

MPSC
Michigan Public Service Commission