



**Making the Most of Michigan's Energy Future**

# **Phase 2 Advanced Planning Wrap-up**

Advanced Planning Stakeholder Meeting

March 2, 2020



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# 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. We will be requesting comments after all meetings. Comments will be posted to the webpage.
5. The presentations for all meetings are posted to the Advanced Planning webpage.
6. If you are having technical difficulty, please contact Kyle Daymon at [DaymonK@michigan.gov](mailto:DaymonK@michigan.gov).



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<b>Agenda Items</b>		
9:30 a.m.	Introduction	Jesse Harlow (MPSC)
9:35 a.m.	Environmental Justice Briefing	Regina Strong (EGLE)
10:20 a.m.	Review of U-20633 Feb 18 Commission Order	Jon DeCooman (MPSC)
10:35 a.m.	Break	
10:45 a.m.	Draft Recommendation Discussion	Naomi Simpson (MPSC)
12:00 p.m.	Closing	Jesse Harlow (MPSC)
	Adjourn	



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# **Regina Strong**

**Environmental Justice Public Advocate**

**Department of Environment, Great Lakes, and Energy**



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# **Review of February 18, 2021 Commission Order in U-20633 – Emissions Reporting updates**

Jon DeCooman

Public Utilities Engineer, Resource Optimization and Certification  
MPSC Staff



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# Timeline of Events Surrounding Commission's 2/18 Order

- 02/04/19: Gov. Whitmer issued ED 2019-12;
- 09/23/20: Gov. Whitmer issued ED 2020-10 and EO 2020-182;
- 10/21/20: Staff presented straw proposals to stakeholders during meeting;
- 10/29/20: Commission issued Order in Case No. U-20633;
- 11/06/20: Alternate compliance proposals presented by stakeholders during meeting;
- 11/30/20: Feedback from stakeholders on all proposals due to Staff;
- 12/15/20: Staff files report to docket for U-20633;
- 01/12/21: All stakeholder feedback on report due;
- 02/18/21: Commissioners issued order in U-20633;





# Background Actions Necessitate Dec. 15<sup>th</sup> Report

- ED 2019-12: Joins U.S. Climate Alliance, commits to goals established under Paris Accords, assigns duties under this directive to EGLE;
- ED 2020-10: Directs EGLE to develop a state climate action plan, MI Healthy Climate Plan due to Gov. by December 31, 2021;
- EO 2020-182: Established a Council on Climate Solutions, to provide support & guidance in the development of the MI Healthy Climate Plan;
- Commission's 10/29/20 Order in Case No. U-20633: Provided guidance around incorporating emissions standards into next IRP filing requirements & MIRPP update, incorporation into IRPs filed before this next update.

# December 15<sup>th</sup> Report Recommendations

- Two sets of recommendations (Near-term & Long-term);
- Near-term (pre-MIRPP update):
  - Option 1 – EP Scenario, 28% reduction in CO<sup>2</sup> from 2005 levels, 2% annual load growth;
  - Option 2 – EP Scenario, 32% reduction in CO<sup>2</sup> from 2005 levels, 2% annual load growth;
- Multi-state filings (Near-term):
  - Recommended proposal, reduction in emissions proportional to MI service territory;
  - Alternate proposal
- Long-term filings:
  - Necessitates updates to MIRPP (Phase III of Advanced Planning Processes);
  - Incorporate MI Healthy Climate Plan/specifics from EGLE;



# Final Directives in Commission's Order

- Near-term (pre-MIRPP update) IRP filings:
  - Perform 2 modeling runs, based on EP Scenario, with 1.5% load growth;
  - Run #1: 28% reduction in CO<sub>2</sub> from 2005 levels by 2025;
  - Run #2: 32% reduction in CO<sub>2</sub> from 2005 levels by 2025;
- Multi-state (pre-MIRPP update) IRP filings:
  - Perform 2 modeling runs, with emissions reduction proportional to MI portion of total utility load (Staff recommended);
  - Runs #1 & 2 same emissions reduction as near-term (proportional to MI portion of total utility load)

## Final Directives in Commission's Order cont.

- Quantify all carbon emissions to serve customers' loads plus internal use and losses
  - Owned generation, PPAs, market purchases and sales (can use MISO/PJM annual average)
- May provide the required emissions and modeling data as workpapers;
  - Accessible to Commission and EGLE staff;
  - Include annual projected emissions for CO<sub>2</sub>, NO<sub>x</sub>, SO<sub>x</sub>, Pb, and PPM for the preferred plan & scenario optimized plans.

# Next Steps & Future Development

- Finalized MI Healthy Climate Plan – Q4 2021;
- MIRPP and IRP filing requirements update – MPG Advanced Planning Processes Phase III – 2022;
  - Finalize the long-term emissions reporting requirements;
  - Incorporate any findings from MI Healthy Climate Plan;



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## **Break**

Please mute your microphone and turn off your camera during break.



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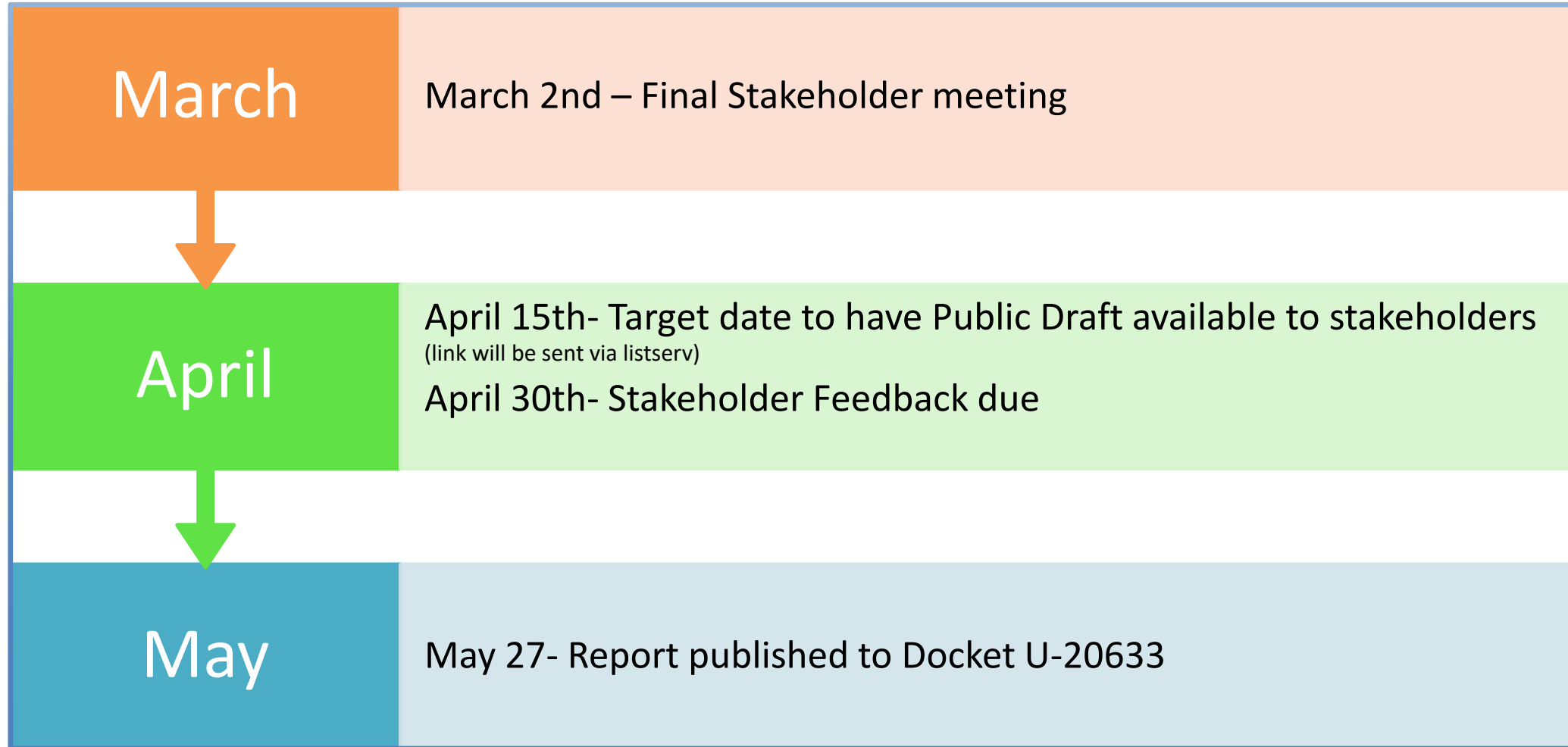
**Naomi Simpson**  
**MPSC**



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# Phase 2 Timeline



# Phase 3 Timeline





# Draft Forecasting Recommendations

- Internal Communication
  - Create/Improve communication between utility departments to ensure forecasting methodologies, data and assumptions are aligned across the utility organization.
- Forecast Consistency
  - Illustrate forecasting alignment and provide evidence that supports the Company's approach to maintaining consistency between forecast components across planning processes.

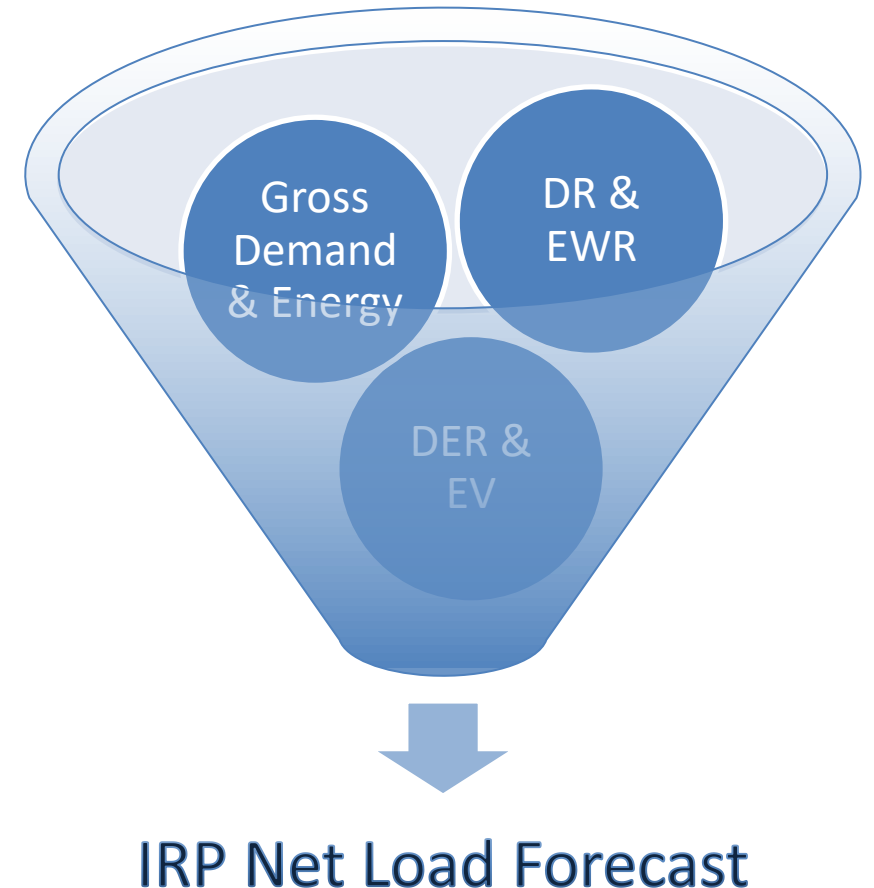


# Draft Forecasting Recommendations cont.

- External Transparency
  - Provide forecast methodologies for all forecast components.
  - Share public sources used when available.
  - Clearly document in the filing or workpapers how forecasts have been revised from one case to another across all cases filed at the Commission.

# Draft Forecasting Recommendations cont.

- Take a componentized approach to creating all forecasts used in the IRP model, clearly documenting the assumptions, data and methodology used for each component:
  - Gross demand and energy forecast
  - Gross load shape
  - EWR forecast and load shape
  - DR forecast and program shape
  - DER forecast and shape
  - Energy Storage forecast and shape
  - EV forecast and shape
  - Intermittent generation profiles
  - Commodity pricing
  - Technology pricing



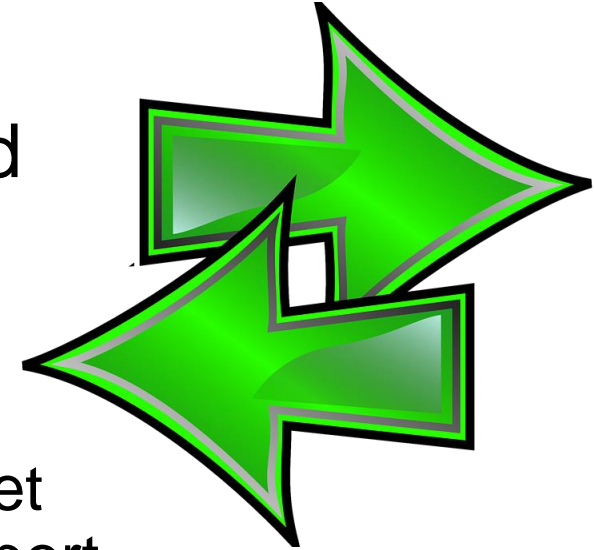
# Draft Forecasting Recommendations cont.

- Recommend further discussion in future distribution planning workgroups to align forecasting.
  - Ensure 5-year Distribution plan forecasts are accurate.
  - Ensure that a distribution needs assessment is considered when planning for resources in IRP and visa versa.
  - Electrification impacts on a granular level are aligned across planning.
  - Stakeholder communication is aligned between resource and distribution planning.
  - DER forecasting from resource planning and distribution planning are aligned and feeding into each other.
  - Distribution forecasting scenarios align with IRP scenarios.

# Draft Transmission Analysis Recommendations

- Enhanced Communication

- Facilitate information sharing between utilities and transmission owners with a minimum of biannual meetings.
  - Allows continual bidirectional information flow.
  - Investigate distribution system needs and expected fleet changes where transmission investment may best support these changes and needs.
  - Investigate transmission system needs and potential non-transmission alternatives. Are there ways in which the distribution system and resource placement can support the transmission system?



# Draft Transmission Planning Recommendations cont.

- Information Transparency

- Use information from the most recent RTO reliability planning models when possible.
- Work collaboratively with the TO and evaluate and provide results about:
  - The PCA's impact on the transmission system.
  - The reliability, cost and resource diversity benefits of applicable transmission alternatives.
  - Where new resources can interconnect to the transmission system with minimal investment.
  - The cost of upgrades that would increase local CIL/CEL and associated impacts to LCR.
  - Where transmission and non-transmission alternatives are likely to facilitate DER's.
- Include transmission related reports in filing to the extent possible.

# Draft Transmission Planning Recommendations cont.

- Stakeholder Participation in Existing Transmission Planning Processes.
  - MISO and PJM planning processes are well established and inclusive.
  - Stakeholders should participate in MISO and PJM transmission planning processes to the extent practical.
  - Participation in RTO processes will increase awareness of regional initiatives, regional reliability, and broad impacts of fleet changes.





# Draft Value of Generation Diversity Recommendations

## Risk Assessment

- Stochastic risk assessment for each plan
  - Tests resource portfolios optimized for a single future against a wide range of alternative future conditions
  - More accurately values risk mitigation
- Propose deterministic scenarios to evaluate specific futures.
- Utilities can still conduct their own deterministic analyses in addition to stochastic and prescriptive deterministic scenarios.
- Box and Whisker Plots
  - Each plan run through each scenario to produce box and whisker plots of the projected costs for each plan across the different scenarios.
  - Box and whisker plots succinctly illustrate the risk for each plan and allow for comparison between plans

# Draft Value of Generation Diversity Recommendations

## Generation Diversity Indices

- Internally track state-wide generation diversity
  - Current, 5-year, 10-year, 15-year
  - Multiple indices
  - Current updated annually, projected updated with IRPs
- Continued collaboration with stakeholders to further develop staff's understanding of generation diversity and risk assessment

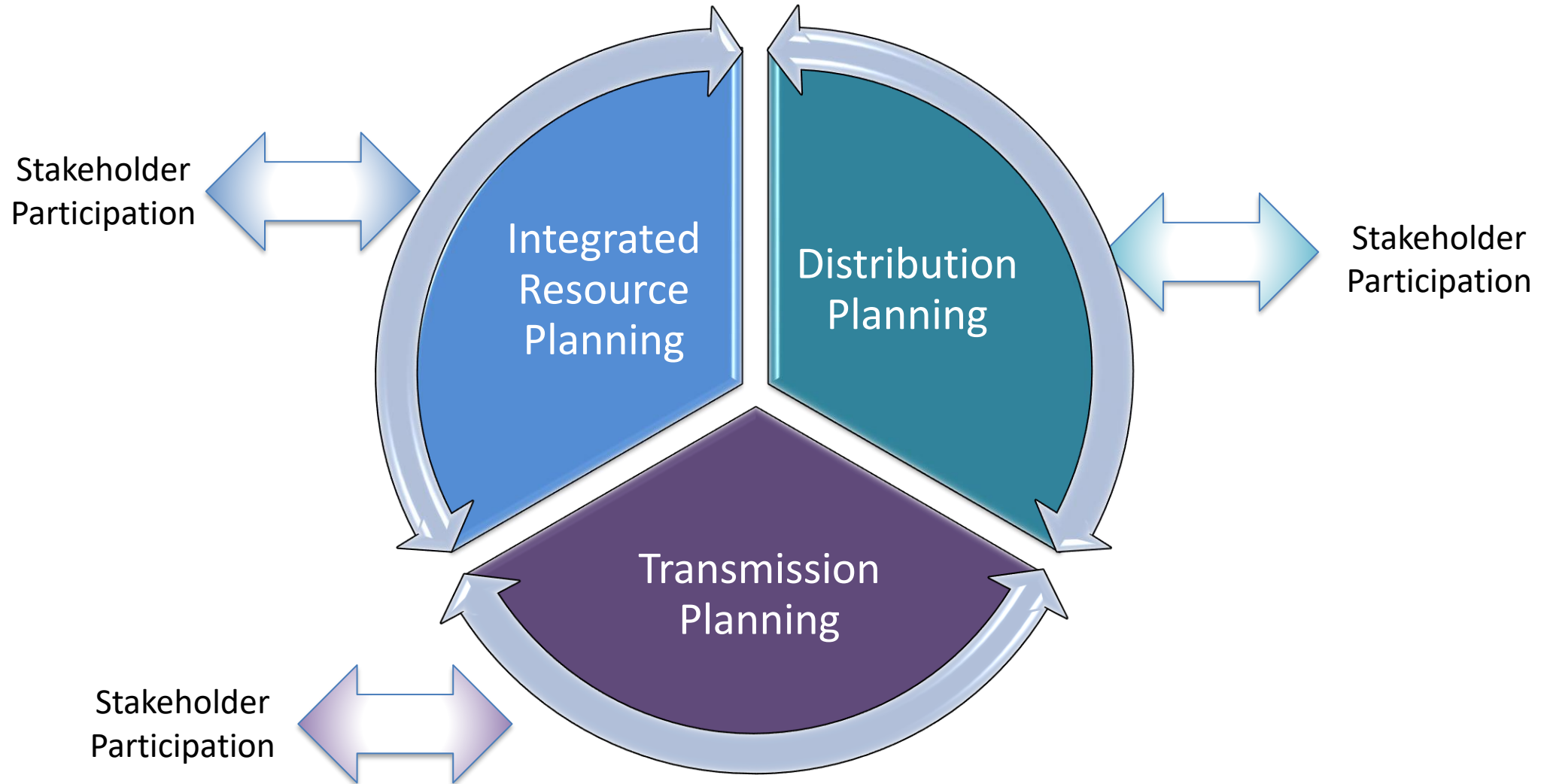
# Draft Planning Alignment Recommendations

- Increase consistency between Distribution Plans and Integrated Resource Plans
  - Forecasting assumptions and modeling scenarios.
  - Results clearly feed from one plan to another and visa versa.
  - Timing between DP and IRP are coordinated to increase transparency.
- Increase communication between all interested parties
  - Between utilities and stakeholders through stakeholder outreach and technical meetings before, between and during cases.
  - Between transmission, distribution, and resource planning organizations. Include evidence of these discussions in cases.
- Utilities should consider aligned organizational structure.

# Draft Planning Alignment Recommendations, cont.

- Planning should not only align, but iteratively feed into one another:
  - Distribution Planning should include a needs assessment that supports certain IRP resources such as identifying:
    - Where there is high circuit loading.
    - Opportunity for NWA investment to be more economical.
    - Where there are high DER penetration.
    - Where there is likely high EV penetration or other increasing grid electrification.
  - Resources selected in an IRP that can provide benefit to a distribution grid should be tied back to locational distribution needs in the distribution plan.
  - Transmission planning should clearly align with **both** resource and distribution planning.

# The Ultimate Plan Alignment





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# Closing

Naomi Simpson



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## **Thank You**

This meeting concludes our stakeholder process.  
Stay tuned for the Draft Report and please join us again in Phase 3!



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