

19 JUNE 2018

# MADRI Guide on Integrated Distribution Planning (IDP)

## Mid-Atlantic Distributed Resources Initiative

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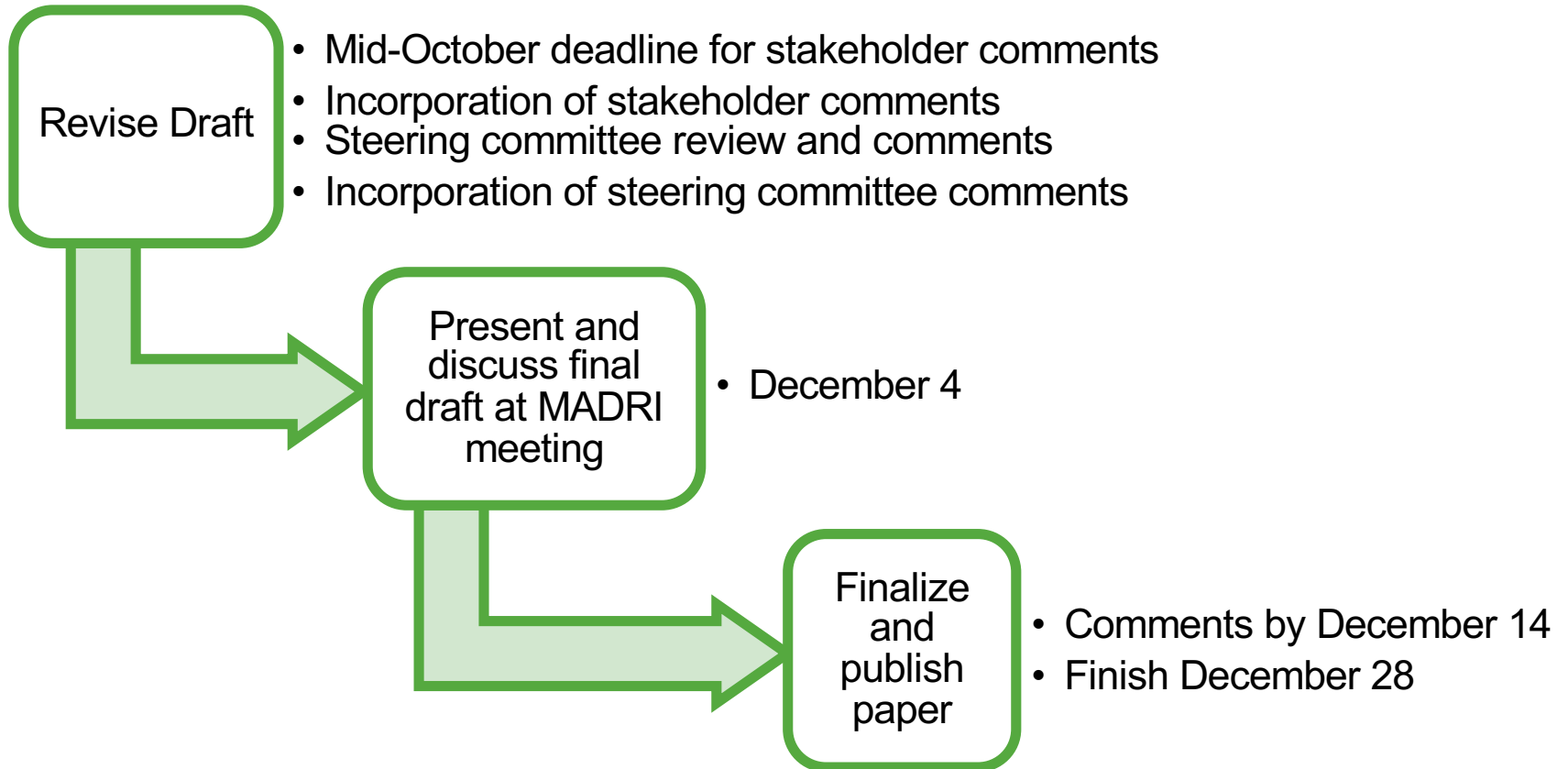
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# Proposed Timeline/Milestones



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# Proposed Timeline (continued)



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# Your Contributions are Needed!

- Drafters
- Suggested Reference Documents
- Technical Experts:
  - Suggestions for who we should interview
  - Offers to be interviewed
- Peer Reviewers



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# Paper Outline – High Level

## Executive Summary

- I. Purpose and Scope
- II. Process Options
- III. Content of an IDP: What Information Does the Commission Need?
- IV. Barriers to Implementing ID
- V. Content of a Commission Order
- VI. Conclusions and Recommendations

## Appendix

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# Content of an IDP/ Information Needs

- A. Review of how the distribution system is currently planned, and how challenges are currently handled (contrast similarities and differences across states in a table) **2-3 pages**
- B. Load forecasts, including different scenarios and a description of load forecast methodology – **3 pages**

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# Content of an IDP/ Information Needs (continued)

- C.** Engineering assessment of distribution capacity on various parts of the system – 10 pages
1. Hosting capacity analysis
  2. Identification of weaknesses on the distribution grid
  3. Identification of constraints on the grid
  4. Criteria for prioritization of grid upgrades
  5. Identification of where DERs can be most useful on the system.
  6. Least cost options for the transition from one-way to two-way power flows
  7. Recommendations/plan for increased system resiliency

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# Content of an IDP/ Information Needs (continued)

- D. Timeline for grid upgrades and the potential for avoiding them with non-wires alternatives - 1-2 pages



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# Content of an IDP/ Information Needs (continued)

## E. Identification of Technical Considerations to be discussed in an IDP – 10 pages

1. Ability to integrate new services and products
2. Interoperability
3. System resiliency
4. Activities to improve system efficiency
5. Efforts to manage assets cost-effectively
6. Security measures to protect against cyber attacks
7. System performance and grid optimization to integrate DERs
8. Environmental Management/Environmental Compliance Issues
9. Submission of most recent Cost of Service Study, including information on any cost-shifting associated with DERs
10. Critical infrastructure and resilience

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# Content of an IDP/ Information Needs (continued)

- F.** Identification of communications equipment needed for transactive energy - **3-4 pages**
  - 1. Transparency protocols
  - 2. Data requirements
  - 3. Access to data and privacy
- G.** Identification of technological needs – **1 page**
- H.** Review of interconnection procedures – **1 page**
- I.** Discussion of state of coordination with resource and transmission planning (PJM) – **2 pages**

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# Content of an IDP/ Information Needs (continued)

- J. Policy drivers, looking ahead at what is shaping the growth of DERs in the short and long term in the utility's service territory – 1 page
- K. Challenges that alternative ratemaking could address and recommendations – 2 pages

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# Further Discussion of IDP Guide Content

- Policy drivers shaping the growth of DERs in the short and long term
- How to account for DERs in integrated distribution planning
- How to address the topics discussed by today's speakers (how utilities are addressing IDP, and the state of coordination with wholesale markets)

# About RAP

The Regulatory Assistance Project (RAP)<sup>®</sup> is an independent, non-partisan, non-governmental organization dedicated to accelerating the transition to a clean, reliable, and efficient energy future.

Learn more about our work at [raponline.org](https://raponline.org)



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