

The Synchrophasor Starter Kit version 0.1 (aka, the starter Starter Kit)

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Purpose

Maybe more companies would use or upgrade synchrophasor systems if it were easier to get your arms around the details.

- We've learned a lot about what to do and how to do it right over the last five years
- We should get all that information organized in one place.
- Let's ask the experts to share their expertise.

THIS IS A DRAFT IN PROGRESS!

Topics in the starter kit (pretty soon)

- 1) Synchrophasor background
- 2) Synchrophasor use cases
- 3) Essential synchrophasor applications
- 4) Synchrophasor value proposition
- 5) PMUs
- 6) PMU placement
- 7) Relevant technical standards
- 8) PMU installation cost factors
- 9) Hands-on PMU installation
- 10) PMU commissioning
- 11) Communications requirements
- 12) Identifying and naming PMUs
- 13) Cyber-security
- 14) Phasor data concentrator
- 15) Relevant NERC standards
- 16) Data classes & characteristics
- 17) Data quality
- 18) Data interpretation
- 19) Model validation
- 20) Integrating and institutionalizing synchrophasors
- 21) Debunking synchrophasor myths
- 22) Glossary, acronyms & definitions

What's covered in each topic

- More practical than theoretical
 - Basic explanation (text, lists, diagrams)
 - A few lessons learned and best practices
 - A few key references (technical standards, lists, links)
- What's not in the Starter Kit
 - Deep dives
 - Theoretical discussions
 - Extensive bibliography
 - Research material

Information sources

First pass material was provided by experts from the NASPI community; more is coming:

- Ritchie Carroll (GPA)
- Tony Johnson (SCE)
- Kevin Jones (DVP)
- Jim Kleitsch (ATC)
- Ken Martin (EPG)
- Sarma Nuthalapati (ERCOT)
- Ryan Quint (NERC)
- Farnoosh Rahmatian (NuGrid Power)
- Alison Silverstein (NASPI)
- Kyle Thomas (DVP)
- Frank Tuffner (PNNL)
- Marcus Young (ORNL)

What's next

- 1) Find the Synchrophasor Starter Kit on the NASPI website reference page

<https://www.naspi.org/documents>

- 2) Know that this is draft version 0.1 – there's still lots of work to do
- 3) Tell us what content basics we can add to make it better
- 4) Tell us if you've got great basic material you'd like to be considered for inclusion.
- 5) Suggestions and details to alisonsilverstein@mac.com, please