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