ILO Support for SECOs

Brad Trento

August 3, 2016
Knoxville, Tennessee
Topics

• Benefits of the SECO to small businesses
• Role of ILO in supporting the SECO
• Personal experiences and lessons learned
• Wish list
Benefits of SECO for Small Business Partners

Some of the benefits of the SECO program to small business members

• Only ERCs are eligible - much smaller competition pool than normal SBIRs
• Funding amount is substantial for SBIR
• Small businesses get to leverage large funding investment from NSF in the ERC program
• Work with larger members for commercialization
Recruiting Small Business Members

Some ERCs have more difficulty with small businesses. The SECO can be part of the value proposition to small members.
• Even with a higher chance of success, ILOs must still make sure that we manage expectations vs. reality. There is still no guarantee that the proposal will be funded.
• Small businesses have to use resources to write the proposal, fill out paper work, etc. Make sure that the company understands this upfront
• Eligible – Make sure the company meet all the requirements, especially the financial ones.
ILO’s Role in Supporting SECO

• Make ERC faculty aware of upcoming solicitations
• Make sure that the company is eligible before starting and understands the process
• Decide funding and workload distribution
• ILO could have a role in the writing part
• Make sure the company understands how to get setup in FastLane and understands how to submit when finished

Note: Given the time frame of the SECO, you need to have a plan in place with a company before the announcement is released.
The RTP-SE developed by RPI and GPA has the capability to:

- Calculate “pseudo” PMU measurements at unmeasured buses and lines
- Correlate PMU data across a network, allowing data quality enhancement and filling in missing data
- Enable interface flow calculation even though not all flows are directly measured with PMUs
- Monitor generator (fossil and wind turbine) active and reactive power outputs without implementing a PMU at the generator substation
- High-sampling-rate allows dynamic visibility of disturbances (voltages and power flows), disturbance propagation, frequency response, and oscillations
- Establish real-time models to determine stability margins

Planned for completion next year. PMU data is being provided by NYISO and ISO-NE
Example Pathway for SECO

University research

Commercial software development

Utility sandbox demonstration

Integrated in EMS Control center

SECO

Next steps
Wish List

• More opportunities

Use part of the ERC annual funding to create a pool for funding SECOs.
  • Years 1-4 - $100k
  • Year 5-8 - $50k
  • Years 8-10 - $0
Wish List Continued

• A more regular schedule for release dates would be nice
• Alternate phase I and II in a regular schedule. This way ILO knows beforehand what is coming
• It’s difficult to find previously funded SECOs on the NSF website