



ILO Support for SECOs

Brad Trento

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Northeastern



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TUSKEGEE

Topics

- Benefits of the SECO to small businesses
- Role of ILO in supporting the SECO
- Personal experiences and lessons learned
- Wish list

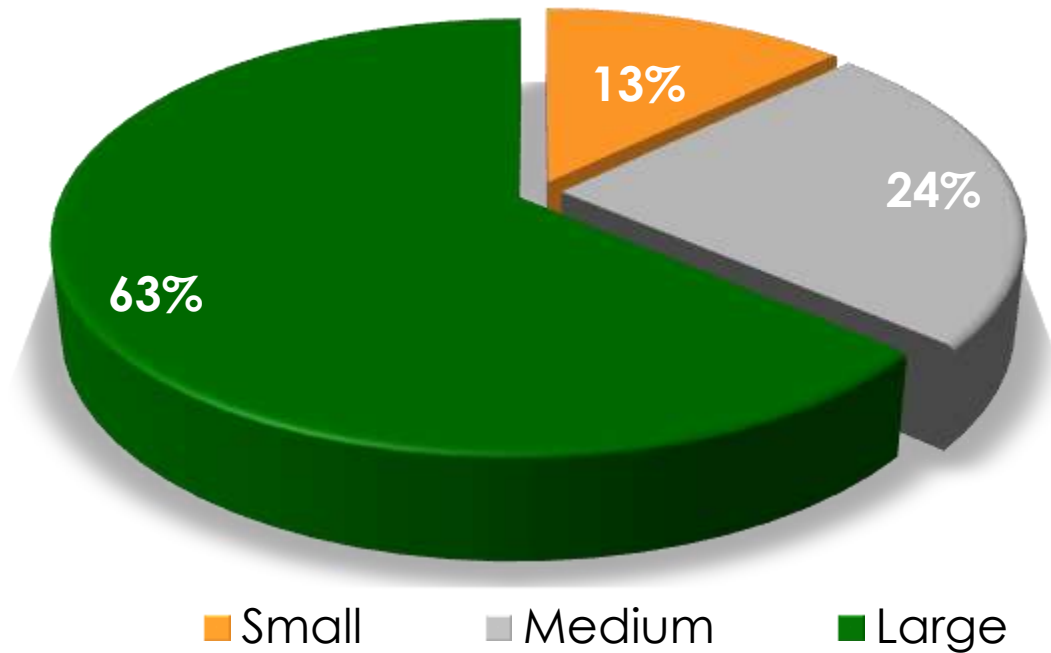
Benefits of SECO for Small Business Partners

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



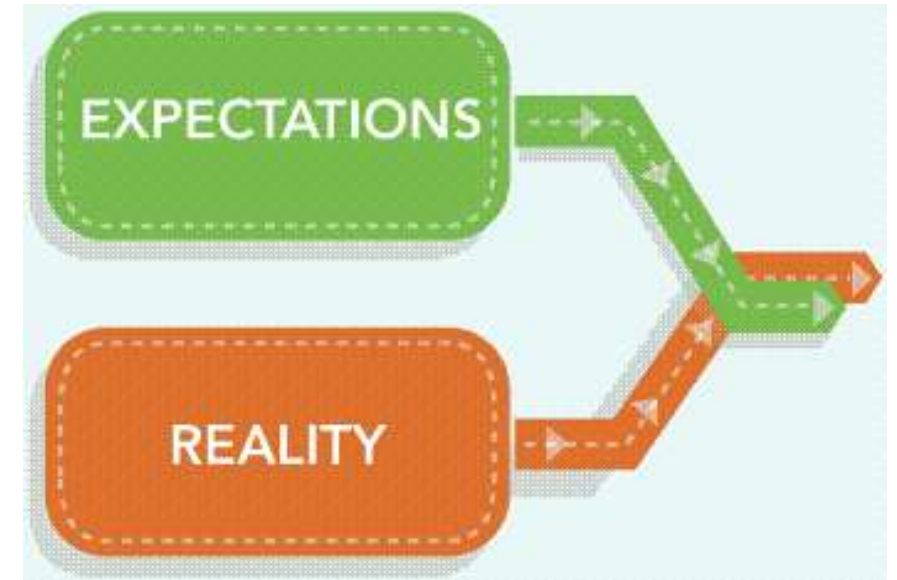
Recruiting Small Business Members



Some ERCs have more difficulty with small businesses. The SECO can be part of the value proposition to small members.

What Companies Need to Understand Going In

- 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

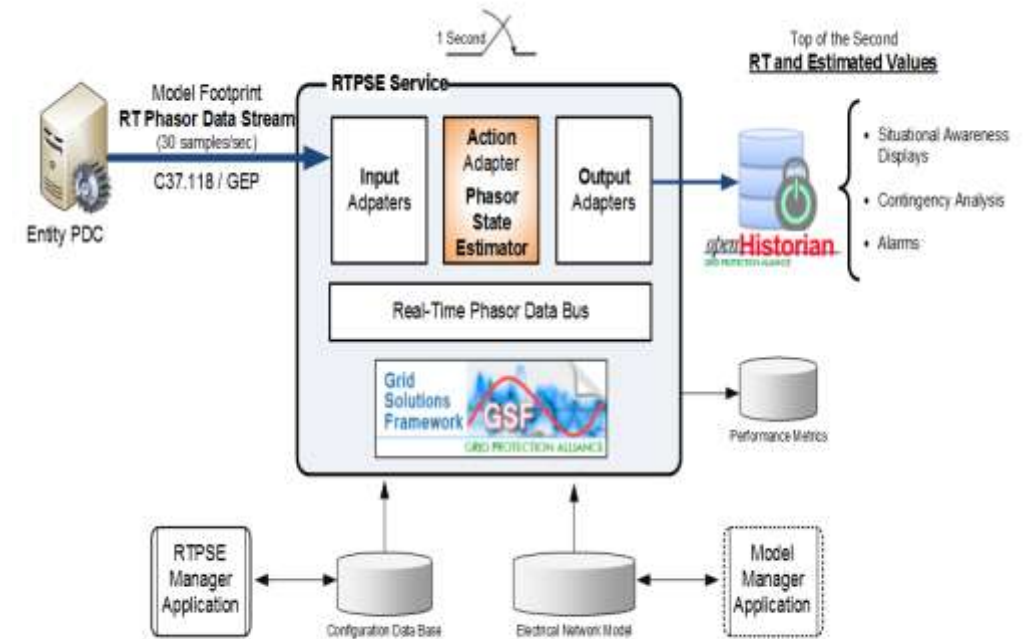
Note: *Given the time frame of the SECO, you need to have a plan in place with a company before the announcement is released.*

CURRENT SECO

Real-time Phasor State Estimator (RTP-SE)

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

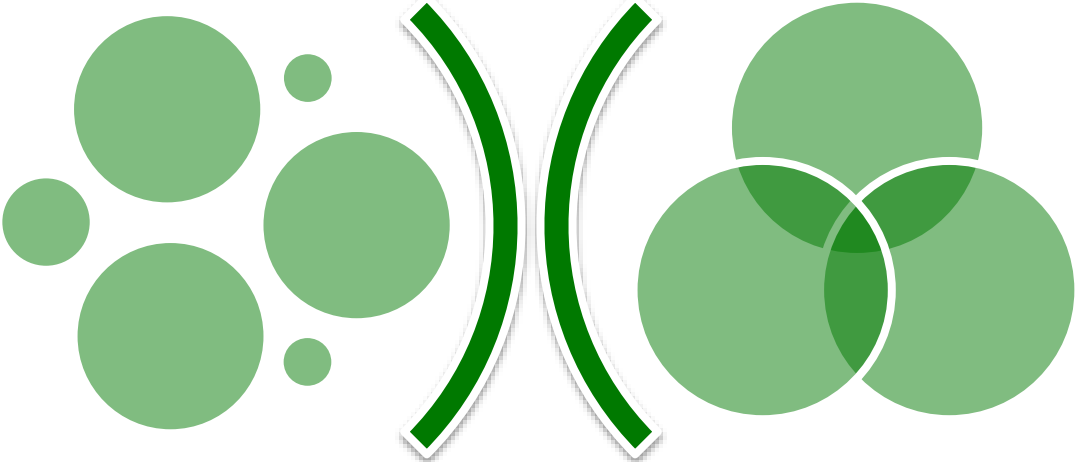


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Planned for completion next year. PMU data is being provided by NYISO and ISO-NE

Example Pathway for SECO

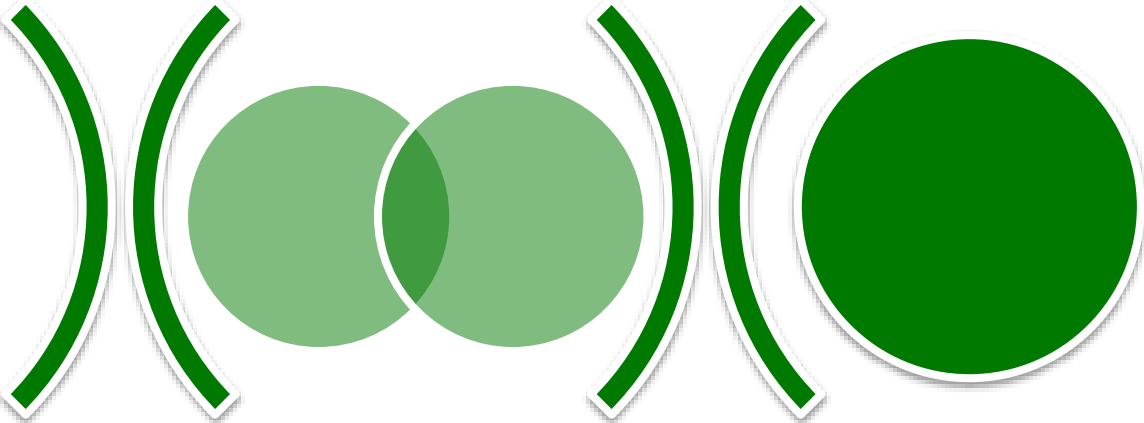


University research

Commercial software development



SECO



Utility sandbox demonstration

Integrated in EMS Control center



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



Wish List Continued

- It's difficult to find previously funded SECOs on the NSF website

Home | Funding

Engineering Education and Centers

Small-Business/ ERC Collaborative Opportunity (SECO)

This program has been archived.

CONTACTS

Name	Email	Phone	Room
Deborah J. Jackson	djackson@nsf.gov	(703) 292-7489	
Corrie Londono	clondono@nsf.gov	(703) 292-7053	
Murukharan S. Nair	mns@nsf.gov	(703) 292-7059	

Please contact the above individuals only for further information about this opportunity. When using FastLane, call the FastLane Help Desk at 1-800-673-6188 or e-mail fastlane@nsf.gov for user support. The FastLane Help Desk answers general technical questions related to the use of the FastLane system.

PROGRAM GUIDELINES

Solicitation: 13-501

Important Information for Proposers

A revised version of the *NSF Proposal & Award Policies & Procedures Guide (PAPPG)* (NSF 16-1) is effective for proposals submitted, or due, on or after January 25, 2016. Please be advised that, depending on the specified due date, the guidelines contained in NSF 16-1 may apply to proposals submitted in response to this funding opportunity.

DUE DATES

Archived

SYNOPSIS

This opportunity aims to facilitate the translation of NSF's technology investments in Engineering Research Centers (ERC) and in Small Business Innovation Research (SBR) and Small Business Technology Transfer (STTR) projects into the market place. Furthermore, in instances where an ERC is funded with a mission to support the public good through the implementation of critical public engineering systems (the infrastructure), this includes facilitating implementations that realize the intended public benefit.

The specific goals of this opportunity are to:

1. Speed the translation of ERC-generated research and technology advances to the marketplace or its implementation into critical public engineered systems and engage undergraduate and graduate students more directly in the innovation process through collaboration between an ERC and a small business concern, (OPTION 1); and
2. Strengthen the research capacity of active NSF SBR/STTR Phase II awardees to speed the entry of their innovations into the marketplace and broaden its portfolio of marketable products through collaboration with an ERC (OPTION 2).

REVISIONS AND UPDATES

THIS PROGRAM IS PART OF

What Has Been Funded (Recent Awards Made Through This Program, with Abstracts)

Map of Recent Awards Made Through This Program