

NRTC Update



February 11, 2019



Member driven. Technology focused.



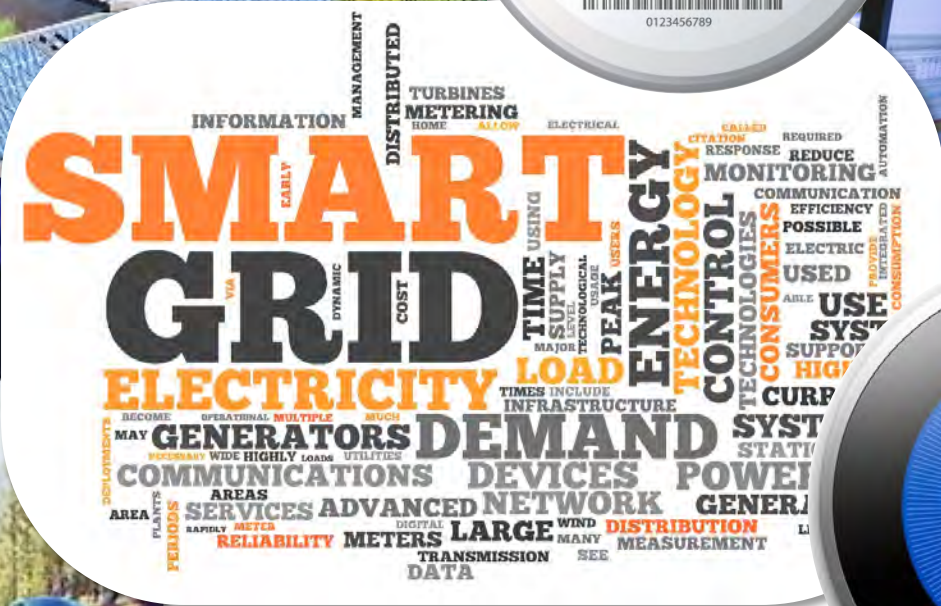
NRTC Board Member, District 7

Robert "Dale" Short

CEO/GM - Butler RECA
El Dorado, KS



Technology is rapidly changing our industry...



The lines are blurring ... Smart Grid Solutions and Broadband Solutions are both Network Solutions!



NRTC **GRID SOLUTIONS**

NRTC **BROADBAND SOLUTIONS**

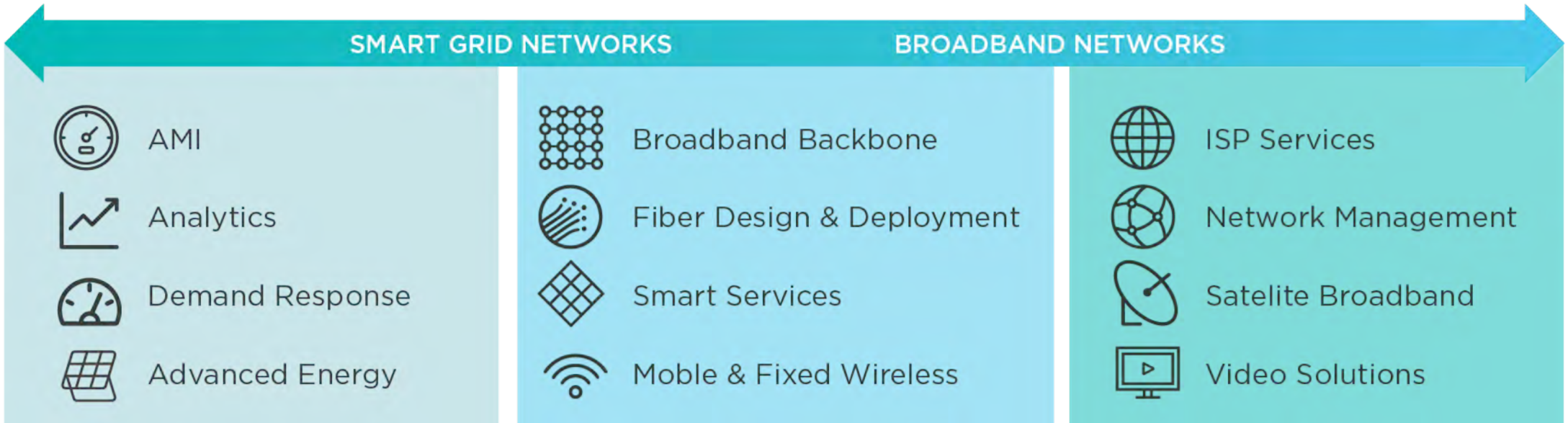


NRTC Provides Technology Solutions to Rural America



NRTC GRID SOLUTIONS

NRTC BROADBAND SOLUTIONS

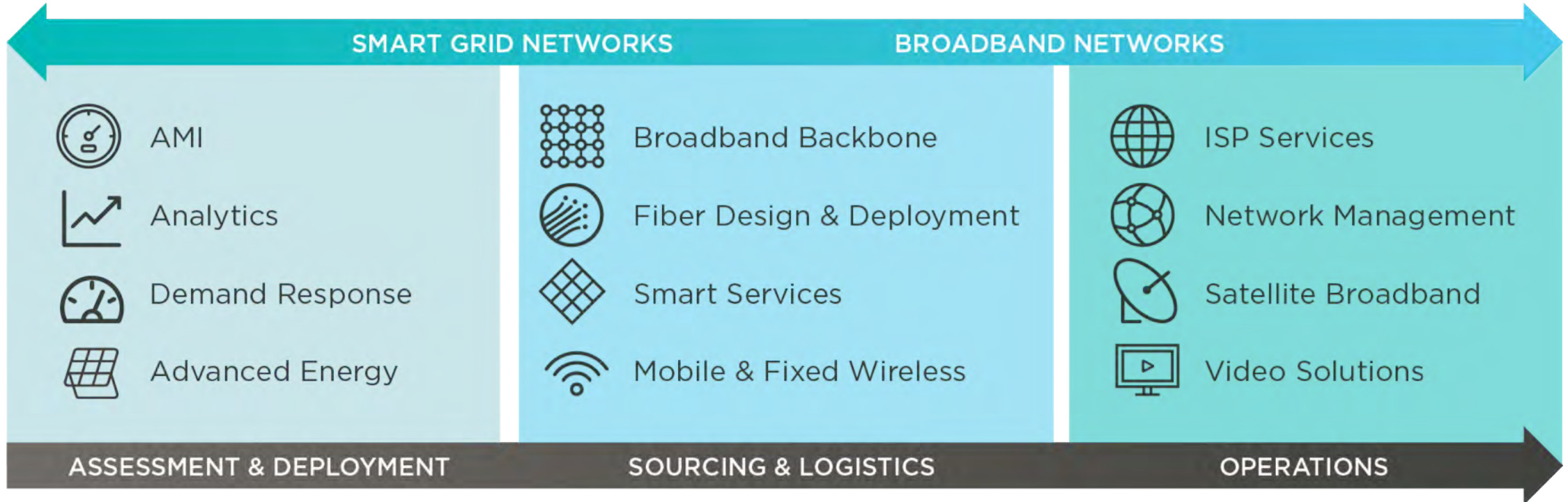


NRTC Provides Technology Solutions to Rural America



NRTC GRID SOLUTIONS

NRTC BROADBAND SOLUTIONS



Assessment



Project Management



Engineering Design



Vendor Management



Equipment Procurement



Distribution/Warehousing



Billing on Behalf



Consulting & Support



Customer Care



We are scaling our broadband business to respond to cooperative demand



140+

Employees



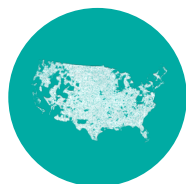
22

Total projects



25,550

miles of fiber/
FTTH plant



1,500+

Electric and telephone
cooperatives owners



\$727M

fiber and fixed wireless
infrastructure investment



267,135

homes and
businesses

Ken Johnson - SVP, Broadband Programs

- * Former CEO/GM Co-Mo EC in Missouri
- * Co-Mo EC was one of the first coops in America to bring FTTH to its members
- * Most recently held RUS Administrator position under President Trump
- * Serves our members with a wealth of knowledge in regard to building out networks and broadband to rural America





Next Generation Energy

Solar



- ENGIE purchased SoCore in March 2018
- Leveraging ENGIE’s extensive assets, buying power, and balance sheet to help members achieve their renewable goals

Energy Storage



- Residential: Testing Sonnen units
- Utility Scale: Significant interest in understanding use cases, costs, and operational issues
- G&T tagging of storage as generation is an issue

Microgrids & On-Site Power Generation



- Partnership with PowerSecure (a subsidiary of Southern Company) for leveraging latent gen sets especially at military bases served by co-ops

NRTC's Demand Management Solutions



NRTC/NEST Thermostat Program

- Great DR Option – a DR solution that reduces peaks without any truck-rolls
- A nationwide agreement with superior pricing and terms
- Device ordering through your website linked to the NRTC portal
- Offer members a valuable service while generating value for Coop







DVI
Enabling the Grid for Tomorrow.

Energy Efficiency
Increase energy delivery efficiency up to 4% without requiring customer behavioral changes or lifestyle impact

PowerSecure's Platform has Unique Proven Value

1,700+ Employees	Microgrid Installations: 1.8GWs+	Interconnected systems behind Over 250 utility systems across the US
Saving our Customers Over \$71M Annually in Energy Market Participation	National presence	
	Integrated development and delivery platform	
Managed over 75,000 DR program events and over 8,000 back-up power events	2017 Revenue - \$530M 2018 Revenue Est. at \$1B	
Over \$800M invested in onsite power systems	Solutions based provider focused on economic value creation	

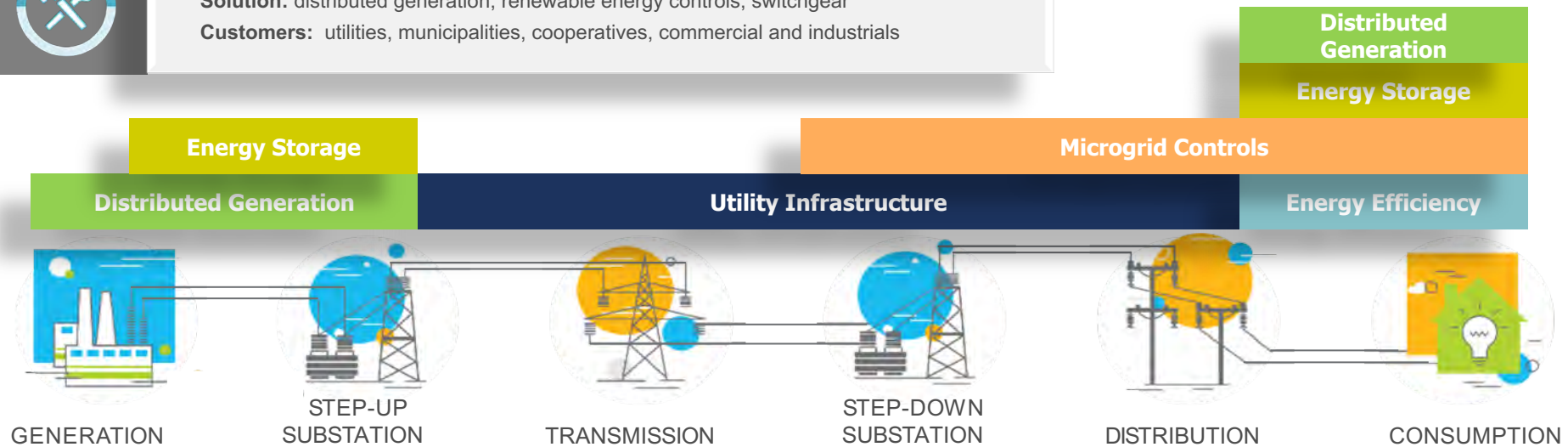
Solutions Across The Grid

	<p>Distributed Infrastructure</p> <p>Solution: onsite generation, switchgear, microgrid, energy storage, fuel cells, and solar solutions</p> <p>Customers: data centers, healthcare, military and national accounts</p>
	<p>Energy Efficiency & Lighting</p> <p>Solution: highly engineered solutions for maximizing energy efficiency</p> <p>Customers: ESCOs, government, "big box" retailers, department stores, high-end retailers, utilities, and grocery/drug/convenience stores</p>
	<p>Utility Infrastructure</p> <p>Solution: T&D, substation, engineering & design, energy services consulting</p> <p>Customers: utilities, municipalities, cooperatives, commercial and industrials</p>
	<p>Distributed Energy Resource Services</p> <p>Solution: distributed generation, renewable energy controls, switchgear</p> <p>Customers: utilities, municipalities, cooperatives, commercial and industrials</p>























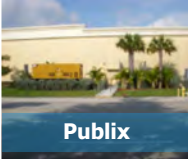





Value Proposition:

Innovation in Supply of Energy

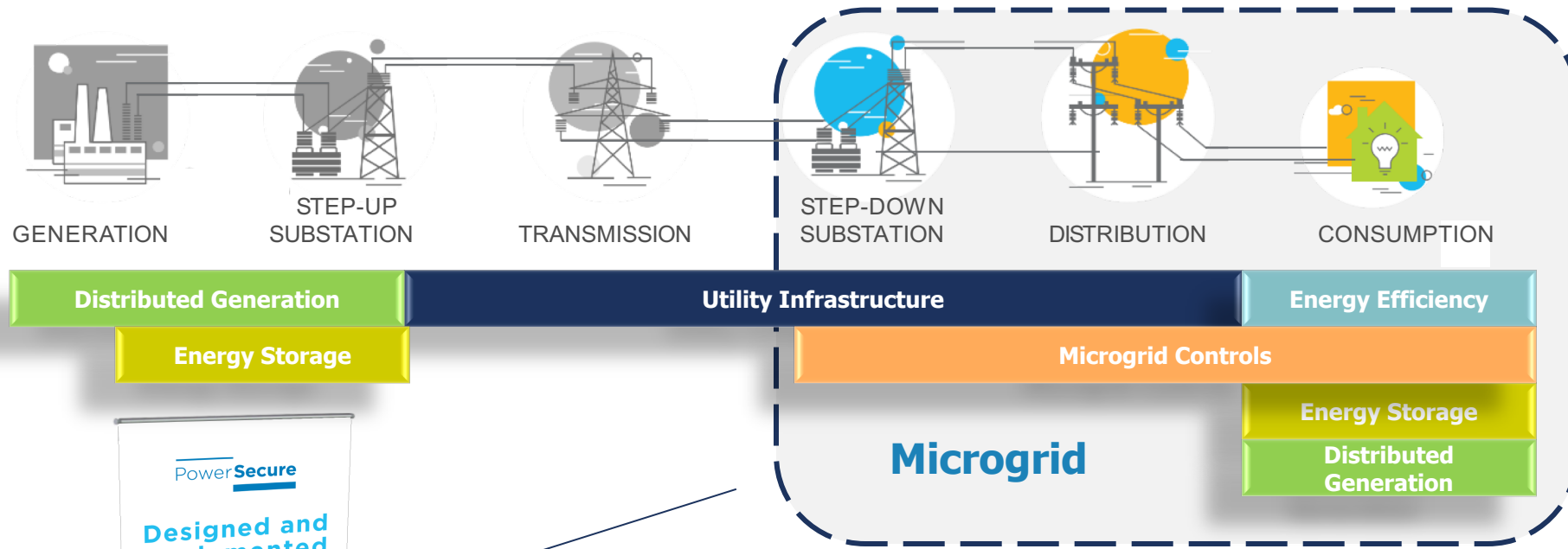
PowerSecure believes everyone should have access to reliable, resilient and sustainable supply of energy at an ever improving economic value.



Onsite Distributed Energy Resources – Customers

Data Centers	 Bytegrid	 Data Chambers	 Peak 10	 Aligned	 CoreSite	 Hyperscale DC	 Equinix
Healthcare	 Mt. Sinai, FL	 HealthSouth	 Lee Memorial, FL	 York, PA	 Florida Hospital	 Wesley Chapel	 Phoebe Americus, GA
Military	 MCAS Yuma, AZ	 Fort Bragg	 Altus Air Force Base	 Fort Myer	 Fort Belvoir	 Fort McNair	 MCLB Albany, GA
Retail	 Walmart	 Publix	 Food Lion	 Harris Teeter (Kroger)	 Big Y	 Whole Foods	 Foot Locker

Microgrid Solution



PowerSecure
Designed and Implemented
85%
OF ALL U.S. MICROGRIDS

PowerSecure is leading the evolution for reliable, resilient and sustainable supply of energy with innovative solutions!

GRID INFRASTRUCTURE

DISTRIBUTED ENERGY RESOURCES

FACILITY ENERGY OPTIMIZATION

Military Microgrid

- Design and turnkey installation of a 25MW Microgrid to serve 100% of the Standby Power needs for the Marine Corp Air Station in Yuma AZ
- Provides Arizona Public Service (APS) with Autonomous Frequency Control and Peak Load Management
- PowerSecure provides 24/7 Monitoring and all Preventive Maintenance on the Microgrid
- This project was Phase 1 of a planned Microgrid that will also include Solar PV and Battery Storage in the future.



NRTC is your technology cooperative



nrtc

Member driven. Technology focused.

Our Mission:

NRTC provides solutions that help our telecommunications and electric members bring all of the advantages of today's evolving technology to rural America

Our Vision:

NRTC will be our members' most trusted technology partner

- **NRTC is a member-owned coop**
 - > 1,500+ electric and telephone cooperatives
- **30 Year History**
- **Extensive technology resources**
 - > 450+ employees
 - > Technology, R&D, IT, Project Management Vendor Management, and Support across four entities
 - NRTC Corporate, Pulse, NeoNova, and Telispire
- **Financially Strong**
 - > \$133 million in Revenue in 2017
 - > No debt and \$160+ million of capital to invest in technology for the benefit of our member

Thank You

For more information, please contact:

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