

TWREP

RFI Response - Cuyahoga County Utility & Microgrids

Required Information

July 15th, 2022



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Dear Mike Foley,

Tenaska Power Services (Tenaska) in partnership with Wunderlich-Malec Engineering (WME) and Renew Energy Partners (RENEW) are pleased to submit its response to the Cuyahoga County Utility & Microgrids Request for Information ("RFI"). The Tenaska, WME and RENEW Team, known as "TWREP", is pleased to provide the following information for delivering sustainable microgrids to the Cuyahoga County Utility.

TWREP brings to the County Utility the expertise and services necessary to identify, design, finance, develop and operate the microgrid assets upon which the County Utility will be built. Individually, our companies are well established and highly regarded in our respective fields of practice. Over many years we each have proven our ability to develop, build, and operate microgrids for our customers and partners. Our strengths are combined in TWREP to be one responsible resource for the County Utility to support its development and growth.

We appreciate the opportunity to participate in this RFI and very much look forward to advancing this discussion with you. Please don't hesitate to reach out if you have any questions or need additional information. Thank you for your consideration of TWREP. We look forward to making a difference together!

Best Regards,

Vu Nguyen Director, Renewable Advisory Tenaska Power Services

1. Entity / Business Name, summary of services, and relevant experience.

TWR Energy Partners (TWREP) is an energy and technology collaborative whose mission is to deploy, own, operate, and optimize sustainable microgrid utilities and promote resiliency and sustainability for the communities served. TWREP brings together the best companies in energy management and optimization, engineering design and systems integration, and infrastructure private capital with a singular focus of accelerating the race to address the climate crisis.

- Tenaska Power Services Co. (TPS) provides around-the-clock operations, trading, energy management, and advisory services. TPS was the first U.S. power marketer to perform a merchant power function for an electric utility. TPS is the leading provider of energy management services for generation and demand-side customers in the U.S., offering municipalities, large industrial clients, and independent power producers a variety of optimization, risk management, power trading, and settlement services.
- Wunderlich-Malec Engineering, Inc. (WM) is an employee-owned engineering firm providing full-service engineering design and systems integration across multiple industries, including businesses focused on utility control systems design, start-up and commissioning. In addition, their mGrid business practice provides a suite of innovative strategies, tools, and software for microgrid operations and economic dispatch to achieve sustainability goals including high renewable content and net-zero goals and support building sustainable energy infrastructure delivering the low possible cost while maximizing sustainability goals.
- **RENEW Energy Partners (REP)** provides third-party capital and develops, builds, owns, operates, and maintains microgrid and decarbonization assets. REP is funded by Ares Infrastructure and Power's \$9 Billion Climate Infrastructure fund.

2. What role(s) from Section 3 would the respondent fulfill?

TWREP aims to be the full-service provider to The County. The companies of TWREP represent the best in the market and have partnered to provide similar solutions and the desired outcomes.

a. Please provide a brief description of relevant experience for each role.

Tenaska Power Services Co. (TPS), established in 1997, is a conservative marketing company focusing on energy management and the optimization of energy, both physically and financially. TPS is a leading expert in energy management in the U.S., providing a robust range of services to renewable generation and demand-side customers involving Community Choice Aggregation across AESO, CAISO, ERCOT, IESO, ISO-NE, MISO, NYISO, PJM, SERC, SPP, and WECC. TPS is also a leading provider of services to the renewables industry.

Wunderlich-Malec Engineering, Inc. (WM) is an employee-owned engineering firm that will provide the engineering design services, the systems integration design, installation and commissioning needed for the microgrid systems to become assets of the County Utility. In addition, WM's mGrid business will provide the expertise, management services and software tools for developing concepts, performing feasibility and prioritization, making the business case, and optimizing design and operation. This includes economic dispatch and operation of the County Utility microgrid assets to achieve sustainability goals and net-zero goals. See WM microgrid owner oversight case study.

RENEW Energy Partners (REP), provides third-party capital, and develops, builds, owns, operates, and maintains microgrid and decarbonization assets. RENEW is funded by Ares Infrastructure and Power's \$9 Billion Climate Infrastructure fund.

- b. Please provide any edits to the role's definition or responsibilities.
 - i. No edits at this time.

c. Structure of relationship:



3. Are there other roles not identified in Section 3 that the County should be aware of?

The TWREP team suggests that the County Utility consider creating (1) a Regulatory/Compliance Counsel and (2) an Advisory Board of stakeholders.

4. What challenges or barriers could you see for your role(s) as envisioned by the County and what might be ways for the County to address those challenges?

The TWREP team envisions potential barriers related to obtaining easements from other government authorities having jurisdiction and/or local utility provider(s), for Distribution and Transmission Interconnection Process, Right of Way and Utility Easements.

5. What's the typical timeline/cycle for the respondents proposed role(s)? (e.g. it takes X year(s) to find customers for a microgrid and build it.)

The typical development period for individual microgrids will range from 12 months to 36 months. Projects generally follow a development timeline similar to that outlined in the example Gantt chart below.

	Year	2023												2024												
Phase	Month	January	Februar	March	April	May	June	July	August	Septem	October	Novemi	Decemb	January	Februar	March	April	May	June	July	August	Septem	Octobe	Novemb	December	
Customer Requests Feasibility Ass	ement																									
Design Build Selection																										
Engineering and Design																										
System Installation																										
Commissioning																										
Fully Operational																										

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6. Would the respondent meet with the County and / or its representatives to present ideas and to answer follow up questions?

The TWREP team is ready and willing to meet with the County and its representatives to present our ideas for sustainable and resilient utility microgrids.

7. All respondents will be placed on a list for other respondents to consider for teaming and/or subcontracting. If your entity requires exclusion from this list, please state so.

The TWREP team is vendor and equipment agnostic. We look forward to potentially collaborating with other respondents. We do not require exclusions.