## Technical Assistance Request for Apolloware

We would leverage the national lab with product development, specifically hardware and software design, research and development, product testing, communications, manufacturing contacts, certifications, etc.

We have identified 3 distinct target markets; electric utilities, commercial/industrial customers and residential customers. Our product validation plan starts with identifying specific targeted users to participate in a user group to help refine the product appearance and prioritize the focus on functionality. Each user group will consist of between 5-7 participants whom would be willing to be beta testers of the products. Deployment of beta sites has already begun and the expectation is that by the end of the year, we will be ready to start the delivery of commercial products. We have already identified local utilities who have demonstrated an interest in the product. These first utilities will be given the technology to review and test for a 6-month period. It is very important that the product is validated and we gain national laboratories affirmation of the accuracy and value of the product.

For the residential and commercial/industrial market segments within the BEC service territory, BEC Solar will sell the Apolloware products as part of the BEC Solar solution. Outside of the BEC service territory Apolloware will be included in the BEC Solar/Storage solution to utilities under a "white label" approach or Apolloware can be licensed independently by utilities. In addition to the licensing of the software, we are going to market customizable solution that integrate with the existing utility software systems. Outside of Texas our focus will be on where there is a significant amount of solar already installed including California, Arizona, New Mexico and Nevada. We hope to establish a distribution partner who has the channel into these markets.

The Texas Retail Energy Providers market would be a 4th target market once product commerciality has been established. During 2020, we will be investigating all of the potential partners and markets to accelerate the market penetration of Apolloware.

The Texas Electric Cooperative Association will assist in the marketing and sales of this product to the cooperative and municipal electric markets throughout Texas.

The inverter and meter manufacturers all have the own individual solutions but none of them aggregate or provide the information relative to the electric market price. These are key differentiators from the current utility solutions providers and us. The key goal long term will be the ability for us to aggregate and control the inverter. At this point the Apolloware device becomes an IoT gateway for development of demand response programs. For us to establish a unique position in the market we would like to have a national laboratory assist us in the development of the product.

With more than 23,000 unregistered solar installation in Texas alone, we conservatively estimate that we will achieve about 8100 installations by 2027.

Column	Target	What	Where	Time	Success
Version 1	BEC	Hardware	Bandera	2019	Info to
	Members	and Software	Electric		Improve
		Developed.	Territory		Commercial
		Installed on			Offerings and
		25 BEC			Improve
		members.			Product
Version 2	Advisory	Deliver	PEC,	Q2 2020	Same as #1
	Group of 4	Improved	Bluebonnet,		improve
	Utilities	Apolloware	United Coop		Utility UI and
		Product and	Services,		product
		Silicate	HOTEC		
		Product			
		Feedback for			
		Utility			
		Feedback			
Version 3	Texas	UL Certified,	All Texas	2020 -2027	Commercially
	Electric	Cellular	Electric		viable
	Utilities	Modem	Utilities		product
		Version,			installed on
		Device			5000+ PV
		Controls			sites