Community microgrids kingston

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Project applicants can be community governments overseeing energy systems, local power companies, independent energy suppliers and community support organizations (such as Tribal governments) that provide energy services to remote, underserved and Indigenous communities. Not only will C-MAP help to alleviate the problems of individual communities struggling with energy costs and reliability, but it will also place these communities on the forefront of microgrid technology; lessons learned from C-MAP will be employed in projects throughout the country.

Dan Ton is Program Manager of Smart Grid R& D within the U.S. Department of Energy"s (DOE) Office of Electricity(OE).He is responsible for developing and implementing a multi-year R& D program plan for next-generation smart grid technologies to transform the electric grid in the United States, through public/private partnerships.

He has served as Acting Deputy Assistant Secretary of OE"s Power Systems Engineering Division - now known as the Advanced Grid R& D Division that capacity, he was responsible for managing the development of projects for "next generation" electricity delivery technologies and supporting activities to accelerate their introduction to the marketplace.Key activities in theDivision focused on smart grid research and development, energy storage, and cybersecurity for energy delivery systems, all in support of the OE"s mission to drive electric grid modernization and resiliency.

This is the moment for microgrids. As the decade comes to a close, record wildfires in California and other disasters across the country, combined with the new normal of Public Safety Power Shutoffs (PSPS), have catapulted microgrids into the spotlight. This is the moment the Clean Coalition has evolved for as we continue our groundbreaking work on Community Microgrids - a new way of designing and operating the electric grid.

Community Microgrids go beyond traditional microgrids by keeping critical community facilities online indefinitely, thereby serving entire communities. Importantly, Community Microgrids reduce dependence on long-distance transmission lines and thereby deliver an unparalleled trifecta of economic, environmental, and resilience benefits to communities.

The Clean Coalition’s showcase Community Microgrid project, the Goleta Load Pocket Community Microgrid (GLPCM), is being staged to bring renewables-driven resilience to the Goleta Load Pocket (GLP), a disaster-prone, transmission-vulnerable stretch of California coastline in Southern Santa Barbara County. This groundbreaking model for renewables-driven resilience will provide a blueprint that can be replicated in communities across the country and beyond.

2019 saw significant progress on the GLPCM. The Santa Barbara Unified School District unanimously

approved an ambitious initiative with the Clean Coalition and Sage Energy Consulting to stage solar-driven microgrids and electric vehicle charging infrastructure (EVCI) at schools throughout the District.

The northern portion of Santa Barbara County shares the GLP’s need for resilience - and also needs new generation sources to bolster the region for the impending closure of the Diablo Canyon Nuclear Power Plant in 2025. The Strauss Wind Energy Project (SWEP), which the Clean Coalition supports, will provide the backbone of the energy resilience needed in northern Santa Barbara County, reducing reliance on vulnerable long-distance transmission lines by introducing significant local energy resources.

Like Santa Barbara County, Northern California is facing pressing resilience needs. The City of Calistoga experienced a disruptive 48-hour PSPS event in 2018 and remains at constant risk of more, in addition to being embedded in an extreme wildfire-risk region. Early this year, the City engaged the Clean Coalition to conduct a feasibility assessment for a Community Microgrid at 6 sites, as a preemptive resilience measure. The Clean Coalition recently concluded an initial assessment, and the City is now considering next steps.

The technical solutions already exist for Community Microgrids like the ones the Clean Coalition is staging, but the lack of appropriate policies and market mechanisms is holding back their wide deployment. Hence, the Clean Coalition is working hard to promote the policies and market mechanisms necessary to proliferate Community Microgrids.

An important part of this effort is to establish a standardized Value of Resilience (VOR) methodology. While everyone understands the significant value of the indefinite renewables-driven backup power provided by Community Microgrids for critical community facilities, and provided by individual solar microgrids to any facility, there is not yet an agreed-upon methodology for quantifying VOR.