

# MICHAEL J. McNELEY

- Active Somerville Member interested in leveraging my Development and Engineering expertise to help the Community
- An energy project developer focused on the sale, financing, and execution of renewable energy projects
- Active relationship builder concentrated on educating cleantech community about key levers to make projects successful

## RENEWABLE & SUSTAINABLE INFRASTRUCTURE EXPERIENCE

### Cambridge Water Board Member, Cambridge, MA, 2020 - Present

### City of Cambridge

The Cambridge Water Board is a five member board of Cambridge residents appointed by the City Manager. The Managing Director has full power to make all necessary repairs, extensions or improvements on the works, and to provide new supply pipes. All hydrants, standpipes and drinking fountains, established by the City, shall be constructed, and all repairs upon such hydrants, standpipes and drinking fountains made, and the streets repaired under authority of the Managing Director and Board.

### Senior Development Manager, Boston, MA, 2018 - Present

### Galehead Development, LLC

- Originated, designed, and developed Solar and Storage projects across the continental US
- Created locational marginal pricing and merchant modeling techniques to identify merchant solar and battery opportunities
- Continuing to develop revenue by launching new campaigns and project verticals to facilitate horizontal growth
- Working with communities in IL and NY to rewrite bylaws to protect land and stakeholders while streamlining development
- Created viewshed analysis to minimize the visual impact of development on historically significant views in IL

### Manager of Market Development, Woburn, MA, 2017 - 2018

### Vionx Energy, Corp.

- Delivered go-to market strategy to board and CEO for long duration flow battery & renewable deployment in North America
- Modeled different tariff, generation, and demand structures to re-prioritize technology objectives to win \$20MM in 2018

### Sustainability Analyst & Energy Engineer, Cambridge, MA, 2016 - Present

### Independent Consultant

- Consulted on Cuttyhunk Island solar + storage microgrid project currently displacing >50% of typical diesel consumption
- Providing analytics/business support for rulemaking in MA through Task Force for Energy Storage & Renewable Integration
- Helped home-level grid development in Senegal by advising on battery choice for best performance in application

#### Technology Review

- Executed review of storage tech.
- Developed biz. model by tech. life expectancy & typical failure modes
- Helped secure \$750k in funding
- Case study: Rural Senegal, Africa

#### Project Proposal

- Tailored statement of requirements (SOR) to fit customer needs
- Created implementation plan: risk analysis and project timelines
- Case study: Hurricane Island, ME

#### Project Development and Integration

- Designed for generation, storage, and power tech. for 10 year lifespan
- Synthesized engineering & vendor feedback for customer review
- Case study: Cuttyhunk Island, MA

## TECHNICAL EXPERIENCE

### Lead Engineer, Woburn, MA, 2015 - 2017

### Vionx Energy, Corp.

- Improved systems reliability to over 97%, by building in-house data science tools to predict early system failures
- Redesigned control systems to efficiently use pumps to maximize round trip efficiency without sacrificing performance
- Implemented field-to-design feedback loop and root-cause analysis, resulting in faster product improvement

### Engineer, Cambridge, MA, 2012 - 2015

### Ambri, Inc.

- Identified and helped bring in core competency of technology, the seal, by bringing in brazing equipment, developing CAD designs, and troubleshooting coating and surface modification processes which sped up learning cycles by over 200%

### Sr. Technical Associate, West Groton, MA, 2011 - 2012

### Hollingsworth & Vose Co.

- Developed materials for air and water purification to be used in municipal and private water treatment systems

## PATENTS & INVENTIONS

PCT/US2014/056367 "Unified structural and electrical interconnections for high temperature batteries"

PCT/US2014/060979 "Seals for high temperature reactive material devices"

PCT/US2014/061266 "Battery management systems for energy storage devices"

## EDUCATION

### B.S., Materials Engineering

Rutgers University, New Brunswick NJ, May 2011

Senior Thesis: Water Purification Studies using Molecular Dynamics