NYSERDA's RPS Customer Sited Tier Fuel Cell Program





NYSERDA Programs to Support Fuel Cells

- Power Systems Research, Technology and Product Development Program
 - Experimental Fuel Cell Systems
 - Lab Scale
 - Early Stage Prototypes
- Manufacturing Technology Development and On-Site Power Applications Program
 - Early Stage Commercially Available Systems
 - Certified Fuel Cells



NYSERDA Programs to Install Fuel Cells

- Increase Customer Awareness
 - Distributed Generation as Combined Heat and Power
 - Risk Sharing
 - Early Stage Commercially Available Systems
 - Renewable Portfolio Standard (RPS) Customer Sited Tier (CST)Fuel Cell Program
 - Resource Acquisition
 - Certified Fuel Cell Systems



Rationale for Including Fuel Cells in NY State RPS Customer Sited Tier (CST) Program

- Efficient Means of Electric Generation (~40-50%)
- Very Low Emissions
- Continuous and Dispatchable Power
- Can be Sited in Sizeable Quantities in Load Pocket Areas
- Provides Some Geographic Balance



New York's RPS CST Fuel Cell Program

- PON 2157 available at <u>www.nyserda.org</u>
- Program Details
 - \$21.6 Million through 2015
 - Programs for Large and Small Continuous Duty Fuel Cells
 - 25 kW or less is considered a small fuel cell
 - ANSI Certified Fuel Cell Systems
 - Appendix E: List of Eligible Fuel Cell Systems
 - Appendix F: Request to Added to the List of Eligible Systems
 - Commercial Warranty (3 Year Minimum)
 - Sites Must Pay the RPS Surcharge
 - Continuous Enrollment



CST Large Fuel Cell Program

- \$1 Million Funding Cap for Systems Larger than 25kW
- Capacity Incentives
 - \$1,000 per kW
 - Up to \$200,000 per Project Site
- <u>Bonus Capacity Incentive for Sites of Essential Public</u>
 <u>Service</u>
 - \$500 per kW
 - Up to \$100,000 per Project Site
- <u>Performance Incentives (3 Annual Payments)</u>
 - Annual Capacity Factor Must be Greater than or Equal to 50%
 - \$0.15 per net kWh
 - Up to \$300,000 per Year per Project Site



NYSERDA Fuel Cell Program Essential Public Services

- Emergency Services
 - Fire
 - Police
 - Ambulance/Emergency Medical Services
- Health Care Services
 - Hospitals
- Communication Services
- Food Distribution/Retail
- Fuel Distribution/Retail



CST Small Fuel Cell Program

- \$50K Funding Cap for Systems 25kW or Less
- Performance Incentives Only (3 Annual Payments)
 - Annual Capacity Factor Must be Greater than or Equal to 50%
 - \$0.15 per net kWh
 - Up to \$20,000 per Year per Project Site



RPS CST Regional Program

- PON 2156
- \$150 Million Available thru 2015
- Renewable Biogas Fueled Systems
 - Includes, but is not Limited to Fuel Cells
 - Pipeline Directed
 - Locally Sourced
- NYISO Zones G,H, I and J (Hudson Valley and NYC region)
- Contact Paul Vainauskas (518) 862-1090 ext. 3554



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