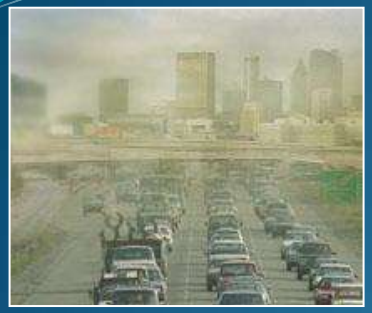

Session 2: Stationary and Infrastructure

Renewable Energy Generation to Support Electric Transportation

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Background

- Identified need for
  - Greater electrification as a future control strategy
  - In-basin clean distributed generation
- South Coast Air Basin has great potential for renewable energy sources such as solar, wind, geothermal, and biogas

Background (cont'd)

- In February 2011, the Board approved three goals and priorities
- Priority highlighted as important in achieving AQMD's mission and goals
  - Incentivize 5 MW of in-basin renewable distributed electricity generation and storage to support electric technology applications
- RFP #P2011-21 released May 6, 2011

Objectives

- Incentivize 5 MW or more of clean renewable energy and storage projects
- Support electric transportation technologies
- Assist commercial, institutional, large, and small residential facilities as well as power development partnerships
- Support a diversity of projects in terms of the eligible technologies

Solicitation

- Received 46 proposals July 1, 2011
  - 16 Solar PV
  - 15 Solar hybrid
  - 10 Fuel Cell biogas/ directed biogas
  - 1 Wind
  - 1 IC Engine biogas
  - 1 Ice thermal
  - 1 Waste to Energy
  - 1 Lithium-Ion Battery
- $201M AQMD Funding requested
- $460M total project cost
- $259M cost-share
- 94 Megawatts of total generation

Project Award Funding

- At January 2012 Board meeting 8 most competitive proposals awarded funding
- Overall project award funding was structured to achieve a diversity of projects in terms of the eligible technologies that qualify for the Self-Generation Incentive Program, California Solar Initiative Program and other sources of funding

Project Awards

Proposal	Technology	KW	Location	Total Project Cost	AQMD Funding
City of Industry	Solar PV/EV	2,000	City of Industry	$11,563,885	$2,000,000
CODA Energy LLC	Solar PV/ Battery/EV	1,550	Santa Monica	$3,496,570	$890,800
Siemens Industry	Solar PV/ SmartGrid	632	El Monte	$3,314,889	$402,500
Kinetic Traction Systems	Solar PV /Flywheel	1,000	Los Angeles	$3,130,974	$2,473,469

Project Awards

Proposal	Technology	KW	Location	Total Project Cost	AQMD Funding
UCR CE-CERT	Solar PV/ Battery/EV	4,000	Riverside	$13,158,765	$2,000,000
OHR Energy	Fuel Cell directed BG	1,400	Pasadena	$ 7,600,000	$2,500,000
Eastern Municipal Water District	Fuel Cell on-site BG	300	Perris	$ 3,005,000	$496,500
UTC Power	Fuel Cell directed BG	400	One location	$ 4,500,000	$1,600,000
TOTAL		11,282		$49,770,083	$12,363,269

Projects - Solar

City of Industry for the installation of up to 2MW solar PV carport, up to 28 Level 2 EV chargers and a fleet of EVs for car-sharing at the City of Industry's Metrolink train station.

Siemens Industry, Inc. for the installation of up to 632 kW solar based carports, with integrated electric charging stations and SmartGrid integration with El Monte Unified School District.

Projects – Solar Hybrid

CODA Energy LLC for the installation of up to 50kW solar PV rooftop system, a 1.5MW lithium-iron-phosphate battery energy storage system and installation of Level 2 EV chargers at their Santa Monica Facility.

Kinetic Traction Systems for the installation of up to 1 MW flywheel energy storage systems at LACMTA's Gold Line and 2kW of PV panels to power ancillary equipment.

Projects – Solar Hybrid

UCR CE-CERT for the installation of up to 2MW solar PV and up to 2 MWh lithium battery storage systems to support electrification of diesel trolley and EV charging stations.

Projects – Fuel Cell

OHR Energy for the installation of up to 1.4 MW renewable fuel cell energy, absorption chiller, EV chargers and potential energy storage at PCC.

Eastern Municipal Water District for the installation of up to 300kW fuel cell at its Perris Valley Water Reclamation Facility using digester gas from the treatment process from the Water District.

Projects – Fuel Cell

UTC Power for the installation of up to 400 kW renewable fuel cell energy, absorption chiller and up to six EV chargers at an Albertson's Supermarket