

TECHNICAL WORKSHOP ON EFFICIENCY, RENEWABLES AND GRID MANAGEMENT

AUGUST 19–21, 2015

AGENDA



In partnership with

UC San Diego



Institute of
the Americas



SENER
SECRETARÍA DE ENERGÍA



UC Mexico Initiative
Energy Working Group

AUGUST 19, 2015 (DAY 1)

8:00 a.m.

Continental Breakfast sponsored by UC Mexico Initiative

8:30 a.m.

Introduction and Welcome Remarks

Emilio Camacho, California Energy Commission

Sandra Brown, UC San Diego

Jeremy Martin, Institute of the Americas

Gerardo Hiriart, Representing SENER

Horst Simon, UC Mexico Initiative

8:40 a.m.

Opening Comments

Chair Robert Weisenmiller, California Energy Commission

Emilio Camacho, California Energy Commission

César Contreras Guzmán, Secretaría de Energía (SENER)

9:15 a.m.

Plenary Presentation: The Future of Microgrids

James Avery, Chief Development Officer, SDG&E
*Operational experience from the CEC co-funded Borrego Springs
microgrid and recent job change to emphasize innovation*

10:00 a.m.

Panel 1: Policy and Programmatic Foundations

(This panel will present the current set of major policies and programs on clean and reliable electricity, climate change projections' impact on policies, and discuss synergies and opportunities for possible adoption. The panel will explore the programmatic solutions for expanding the portfolio of green electricity in Mexico's grid.)

Moderator: Hermann Tribukait Vasconcelos

César Contreras Guzmán, SENER

Doing Business in Mexico's New Energy Sector

Carlo Bonfante, Secretary of Economic Development at Baja California

Clean Generation in the Baja California's Grid

Emilio Camacho, California Energy Commission

*California's Energy Policies and Advancements Toward the
Renewable Energy Goals*

Guido Franco, California Energy Commission

*Regional Climate Change Science and Energy Implications to
California*

Adrian Fernandez, National Ecology Institute

Deep Decarbonization Pathways for Mexico

11:00 a.m.

Networking Break

11:20 a.m.

Panel 2: Clean and Advanced Electricity Generation at the Community and Customer Level: Distributed Generation and Demand Response Approaches for the Customer and the Grid

(This panel will discuss the technical and integration approaches for accelerating the deployment of distributed generation and demand side management to reduce the load and improve the grid operation.)

Moderator: Rizaldo Aldas

Jose Vivas & Dr. Vahid Salehi, Power Analytics Corporation
Military Microgrid: Insights from the Navy Bases in San Diego

Manal Yamout, Caliber Strategies
Demand Side Solutions for Grid Operation and Facilitation of Renewable Energy

Jack Moore, Energy + Environmental Economics
Renewable Futures Across California and Mexico

Luis Alfonso Cano, SENER
The Future of Distributed Generation in Mexico

12:30 p.m.

Lunch Break (Lunch will be provided)

Luncheon Keynote: Veerabhadran Ramanathan, Distinguished Professor of Climate Sciences, UCSD

1:30 p.m.

Panel 3: Improving the Integration and Operation of Utility Scale Clean Generation

(This panel will discuss strategies and tools available to improve integration and operation of large scale renewable energy generation.)

Moderator: Michael Sokol

Haresh Kamath, EPRI
Energy Storage Valuation and Modeling

Jeff Ressler, Clean Power Research
Forecasting tools

Jim Walker, EDF Renewable Energy
Integrating Wind Energy and other Clean Utility Scale Power Generation in Mexico

José Pablo Fernández, Grupo Dragón
Integrating Wind and Solar Energy In Mexico

Ali Yari, SEMPRA
Utility Perspective on Reliability, Integrating Utility Scale Renewable Generation, and Managing Grid Resource in California and Mexico

3:00 p.m.

Afternoon Break

3:10 p.m.

Panel 4: Water and Energy Efficiency and Demand Response

(This panel will showcase the efforts to address water, energy efficiency, and demand response issues, including technologies and strategies.)

Moderator: Laurie ten Hope

Virginia Lew, California Energy Commission
Increasing Water and Energy Efficiency to Meet Future Needs

Martha Brook, California Energy Commission
Overview of Efforts to Increase Building Energy Efficiency

Mary Ann Piette, LBNL-DRRC
Demand Response Solutions

G.P. Li, California Plug Load Research Center
Improving Energy Efficiency of Plug-Load Devices

Brenda Valdez, CONUEE
Overview of Energy Efficiency and Demand Response Programs and Policies in Mexico

4:30 p.m.

Open Discussion, Day 1 Conclusions and Next Steps

Comments from Participants

(Moderator: Jeremy Martin, Institute of the Americas)

Concluding Remarks and Key Takeaways

(Gerardo Hiriart, Representing SENER)

Concluding Remarks and Key Takeaways

(Representative from California Energy Commission, Emilio Camacho)

5:30 p.m.

Day 1 Workshop Concludes

6:00–7:30 p.m.

Dinner Reception sponsored by Mexico's Secretaría de Energía (SENER) at the Institute of the Americas Plaza

AUGUST 20, 2015 (DAY 2)
**TOUR AND DISCUSSION ON COMMUNITY RENEWABLE ENERGY, MICROGRID,
AND SDG&E INNOVATION CENTER**
SPONSORED BY UC SAN DIEGO AND SDG&E

9:00 a.m.

Shuttle Buses Will Pick Up at the Conference Hotels

9:30 a.m.

Tour of On-Campus Microgrid and Renewable Energy

11:30 a.m.

Commute to SDG&E Innovation Center

12:00 p.m.

Lunch provided by SDG&E at SDG&E Innovation Center

4760 Clairemont Mesa Blvd.

San Diego, CA 92117

(800) 613-8970

1:15 p.m.

Presentation on Workforce Development and Tour of SDG&E Energy Innovation Center

2:30 p.m.

Presentation on Carlsbad Desalination Plant

Graham Beatty

4:45 p.m.

Day 2 Concludes

Dinner (on your own)

AUGUST 21, 2015 (DAY 3)

OPTIONAL

ALL DAY TOUR

Tour and Discussion on Community Scale Renewable Energy and Microgrid: Borrego Springs Microgrid

Advisory – All Guests and Employees Need:

Hard Hat, Eye Protection, 100% Cotton Long Sleeve Shirt and Pants, Close-Toed Shoes

* SDG&E will supply Hard Hats and Eye Protection

It will be extremely hot in Borrego at this time of the year (+110–115 degrees F); it is recommended for guests to bring a cooler change of clothes

7:45 a.m.

Meet at the Tour Bus Meeting Place for Introduction and Orientation

8:00 a.m.

Tour Bus Departs for Borrego Springs

10:00 a.m.

Tour of Borrego Springs Microgrid Project

12:00 p.m.

Lunch

1:00 p.m.

Continuation of Borrego Springs Tour

2:00 p.m.

Tour Bus Departs to San Diego

4:00 p.m.

Day 3 and Workshop Concludes

MORNING TOUR

Tour of Scripps Institution of Oceanography

Meet outside Birch Aquarium at 2300 Expedition Way, La Jolla, CA 92037. Parking is free.

10:00 a.m.

Tour of Birch Aquarium

10:45 a.m.

Scripps Institution of Oceanography, and Climate Research Talk

Participants will drive to Scripps Institution of Oceanography at 8610 Kennel Way, La Jolla, CA 92037

Limited parking spots will be reserved for participants. Car-pooling is strongly encouraged.

12:00 p.m.

Day 3 and Workshop Concludes