



HAWAI'I  
2009  
WESTERN CONFERENCE OF  
PUBLIC SERVICE COMMISSIONERS



Mauna Lani Bay Hotel  
June 7-10, 2009  
Kohala Coast, Hawai'i

## GENERAL INFORMATION

### Registration and Information Desk Hours

Sunday, June 7, 2009	10:30 a.m. - 6:00 p.m.
Monday, June 8, 2009	6:30 a.m. - 5:00 p.m.
Tuesday, June 9, 2009	6:30 a.m. - 11:00 a.m.
Wednesday, June 10, 2009	6:30 a.m. - 7:00 a.m.

Conference staff wearing orange lei will be available to assist with questions or concerns.

### Badge Color Identifications

Blue:	Commissioners
Green:	Industry
Red:	Commission Staff
Brown:	Public Interest Groups, Consumer Groups, Federal-State Agencies (Non-Members)
Orange:	Guests
Black:	Sponsors

Please display your badge at all times during the conference. (Applicable events included on individual badges.) Guests need to display badges at all events.

### Cocktail Tickets

Two drink tickets (cocktail/soft drink) are included with the badge of each registrant and guest for each event. Additional drinks may be purchased at each event. Please note: **Blue tickets are for the Welcome Reception and orange tickets are for the Luau.**

### Conference Attire:

Business casual/Aloha.

NELHA & volcano tours: Casual wear with covered and comfortable shoes. Please don't forget the sunscreen.

### 'Oli

The 'Oli performed is a traditional Hawaiian chant recognizing and honoring the land, ancestors and the many elements and forms of God as well as welcoming the presence of the Western Conference guests.

Please *kokua* and turn off your cell phones and pagers before entering meeting rooms.

***Mahalo nui loa* to NELHA, Hawaii Coffee Company, Big Island Candies, Hula Supply, Aloha Island Lei, and the Mauna Lani Bay Hotel staff. Special *mahalo* to the panel coordinators Scott Hempling, David W. King, and James Bradford Ramsay.**



*Message from Governor Linda Lingle  
and  
Lt. Governor James R. "Duke" Aiona, Jr.  
presented to the*

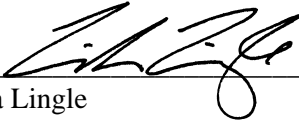
**WESTERN CONFERENCE OF PUBLIC SERVICE COMMISSIONERS  
JUNE 7-10, 2009**

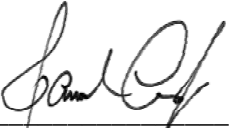
On behalf of the people of Hawai'i, we send our personal greetings of aloha to everyone participating in the annual Western Conference of Public Service Commissioners (WCPSC) at the Mauna Lani Bay Hotel on the Big Island of Hawai'i.

As regulatory utility commissioners and staff, you play a critical role in protecting the public's interest in your home states and countries. We are grateful Hawai'i has the opportunity to host this year's WCPSC conference and to share what we are doing locally with our federal and private sector partners as part of the Hawai'i Clean Energy Initiative, whose aim is for at least 70 percent of our power to come from clean energy by 2030. Hawai'i recently made another stride toward this ambitious goal with the selection of Science Applications International Corporation (SAIC) as the independent, third-party administrator of our main electric utility's energy efficiency programs. We are pleased that Major General Ray Starling of SAIC is one of many featured speakers during your conference, which includes discussions on regulatory issues and practices affecting public service areas ranging from renewable energy to telecommunications.

We hope you enjoy your time in our islands and come away with innovative ideas and strategies for improving the sustainability, delivery and cost-effectiveness of public services throughout the WCPSC region. Best wishes for an informative and productive conference.

Aloha,

  
\_\_\_\_\_  
Linda Lingle  
Governor, State of Hawai'i

  
\_\_\_\_\_  
James R. "Duke" Aiona, Jr.  
Lieutenant Governor, State of Hawai'i

Linda Lingle  
GOVERNOR



CARLITO P. CALIBOSO  
CHAIRMAN

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COMMISSIONER

Telephone: (808) 586-2020  
Facsimile: (808) 586-2066

e-mail: Hawaii.PUC@hawaii.gov

**STATE OF HAWAII**  
**PUBLIC UTILITIES COMMISSION**  
**DEPARTMENT OF BUDGET AND FINANCE**  
465 S. KING STREET, #103  
HONOLULU, HAWAII 96813

June 7, 2009



**2008-2009 EXECUTIVE COMMITTEE**

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Commissioner Carlito P. Caliboso  
Hawaii Public Utilities Commission

**VICE PRESIDENT**

Commissioner John Bohn  
California Public Utilities Commission

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Colorado Public Utilities Commission

Commissioner Ted Boyer  
Utah Public Service Commission

Commissioner Marsha H. Smith  
Idaho Public Utilities Commission

Aloha and welcome to the 2009 Western Conference of Public Service Commissioners annual meeting at the Mauna Lani Bay Hotel. Thank you for making the long journey to Hawai'i.

During these unprecedented times, in which there is an urgent need to significantly reduce fossil fuel use and increase renewable energy generation, and to address changing communications markets and technologies, all while trying to keep costs under control for consumers, it is more important than ever that we come together and share ideas and solutions for all of these issues .

I hope you will enjoy and benefit from the program we have planned for you. The discussions will feature experts in renewable energy and electricity, gas, telecommunications, and water issues. The moderators and panelists scheduled to speak have valuable information to share with us concerning topics that are of great importance, whether you are fellow commissioners and staff, interested government agencies, industry representatives, or other interested stakeholders.

I look forward to meeting with you during our conference. Let the conference begin.

Mahalo for your support.

Sincerely,

A handwritten signature in black ink that reads "Carlito P. Caliboso".

Carlito P. Caliboso  
Chairman, Hawai'i Public Utilities Commission, and  
President, Western Conference of Public Service Commissioners

MAHALO

PLATINUM SPONSORS:

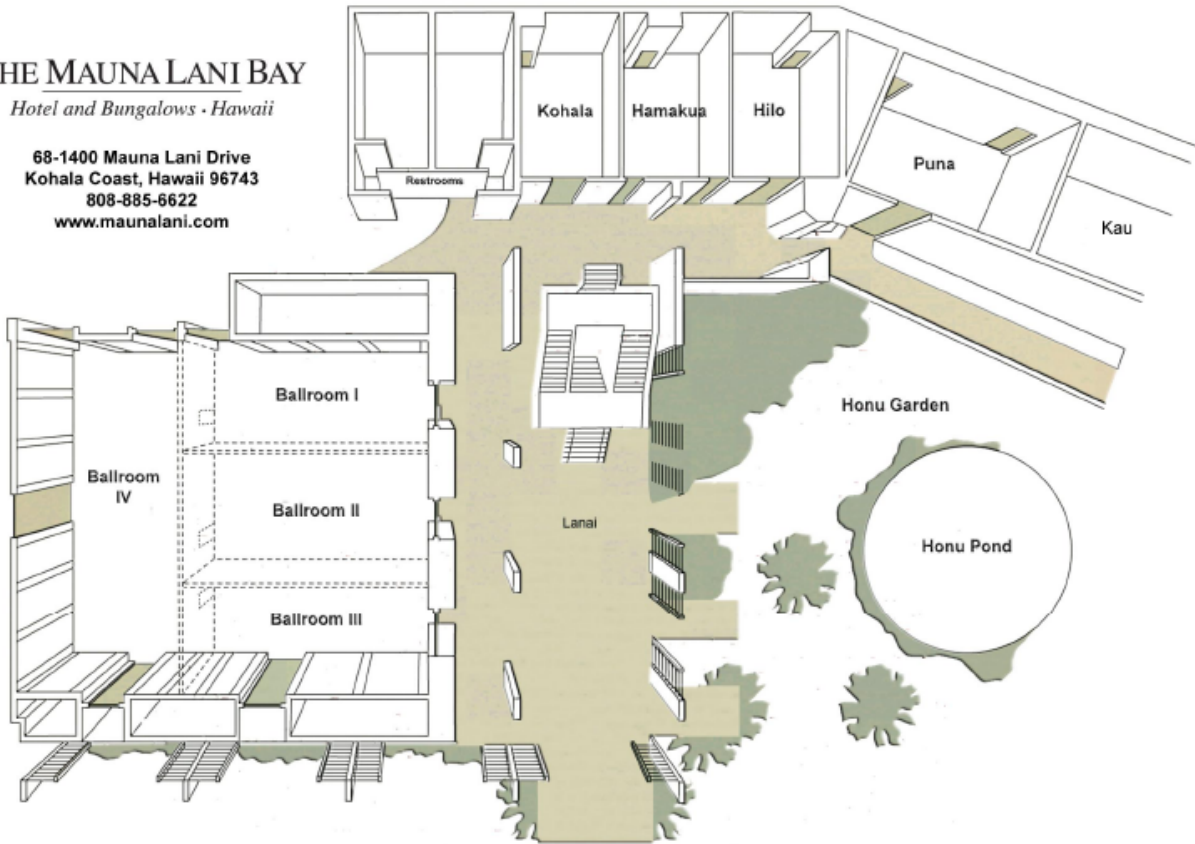


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## CONFERENCE AGENDA

Sunday

June 7, 2009

10:30 a.m. – 6:00 p.m. Registration Mauna Lani Lanai

11:45 a.m. – 12:45 p.m. **Lunch Presentation Sponsored by Mobile Future. The Future of Wireless Technology: Exploring What is Ahead for Consumers in an Increasingly Mobile World.** Ballrooms I - IV

Moderator: Kathleen Q. Abernathy  
Panelists: Ray Baum, Diane Smith,  
David Aylward

1:00 p.m. – 5:30 p.m. **The Ways of the West  
A Critical Infrastructure Protection  
Tabletop Exercise Sponsored by  
National Association of Regulatory  
Utility Commissioners (“NARUC”)** Ballrooms I - IV

6:00 p.m. – 8:30 p.m. Welcome Reception (blue drink tickets and badge required) Milo Tree Lawn

Monday

June 8, 2009

6:30 a.m. – 5:00 p.m. Registration Mauna Lani Lanai

7:00 a.m. – 8:00 a.m. Continental Breakfast Mauna Lani Lanai

8:00 a.m. – 8:30 a.m. **E Komo Mai (Welcome):** Ballrooms I – IV

**‘Oli:** *Kahu* Daniel Kahikina Akaka, Jr.,  
Director of Cultural Affairs, Mauna  
Lani Bay and Hotel

**Opening Remarks:**

Carlito P. Caliboso, President,  
WCPSC & Chairman, Hawai‘i Public  
Utilities Commission

Fredrick F. Butler, President, NARUC  
& Commissioner, New Jersey Board  
of Public Utilities

**Opening Presentation:**

Honorable Hermina Morita,  
Chairperson, Committee on Energy  
and Environmental Protection, Hawai‘i  
State Legislature, House of  
Representatives, District 14

CONFERENCE AGENDA  
(continued)

8:30 a.m. – 10:00 a.m.	<b>Meeting 1</b> <b>Integrating Renewables:</b> <b>“Planning, Operations and Law”</b> Moderator: Dian M. Grueneich Panelists: Shari Y. Ishikawa, Leon Roose, Scott Hempling, James K. Tarpey	Ballrooms I – IV
10:00 a.m. – 10:15 a.m.	Break	Mauna Lani Lanai
10:15 a.m. – 11:45 a.m.	<b>Meeting 2</b> <b>Telecommunications: “Telecom</b> <b>Update on States' Roles in the</b> <b>National Broadband Plan and</b> <b>Broadband Stimulus Package”</b> Moderator: James Bradford Ramsay Panelists: Kathleen Q. Abernathy, Andrew Barrett, Ray Baum, R. Steven Davis, Larry Irving, Ross LaJeunesse	Ballrooms I – IV
12:00 p.m. – 1:30 p.m.	<b>Western Conference Luncheon</b>  <b>Keynote Presentation:</b> H. Ray Starling, Energy Efficiency Program Manager – Hawai'i, Science Applications International Corp.	Hale Hoaloha Pavilion
1:45 p.m. – 3:15 p.m.	<b>Meeting 3</b> <b>Sustainable Water Supply: “What</b> <b>Best Practices will Keep the Tap</b> <b>Running?”</b> Moderator: David W. King Panelists: John A. Bohn, Paul G. Foran, Peter C. Nelson	Ballrooms I – IV
3:15 p.m. – 3:30 p.m.	Break	



CONFERENCE AGENDA  
(continued)

3:30 p.m. – 5:00 p.m.	<p><b>Meeting 4</b>  <b>Electric Vehicles: “What Regulatory Policies will Reduce Carbon Dependency at Reasonable Cost?”</b>  Moderator: Rachelle B. Chong  Panelists: Andrew Frank, William Parks, David G. Waller</p>	Ballrooms I – IV
5:00 p.m. – 6:00 p.m.	Reception hosted by Applied Materials	Mauna Lani Lanai
6:00 p.m. – 9:00 p.m.	Luau Dinner (orange drink tickets and badge required)	Poolside Lawn
<p>Tuesday  June 9, 2009</p>		
7:00 a.m. - 8:00 a.m.	Continental Breakfast	Ballrooms I – IV
7:00 a.m. – 7:50 a.m.	Commissioners Only Breakfast and Business Meeting	Puna Room
8:00 a.m. – 9:30 a.m.	<p><b>Meeting 5</b>  <b>Smart Grid: “What Regulatory Policies are Necessary to Ensure Cost Effectiveness?”</b>  Moderator: Ted Boyer  Panelists: Juan de Bedout, Shari Y. Ishikawa, Philip Mezey, Bruce Phillips</p>	Ballrooms I – IV
9:30 a.m. – 9:45 a.m.	Break	Mauna Lani Lanai
9:45 a.m. – 11:15 a.m.	<p><b>Meeting 6</b>  <b>Natural Gas: “A Stunning Year: The Effect of the Current and Anticipated Economic and Political Environment on the Natural Gas Industry”</b>  Moderator: Kathleen A. Lewis  Panelists: Brian Jeffries, Barrie L. McKay, Timothy A. Simon</p>	Ballrooms I – IV

CONFERENCE AGENDA  
(continued)

11:15 a.m. – 11:25 a.m.	<b>Natural Energy Laboratory of Hawai'i Authority ("NELHA")</b> (Attire: Casual wear with covered and comfortable shoes.)	Board bus at Main Lobby (Bus leaves promptly at 11:30 a.m.)
12:00 p.m. – 1:00 p.m.	Lunch at Gateway Energy Center (Outdoor under the Gateway photovoltaic space frame)	NELHA
1:15 p.m. – 2:15 p.m.	<b>NELHA Presentation at the Gateway Energy Center</b>	NELHA
2:15 p.m. – 4:40 p.m.	<b>NELHA Facility and Bus Tour</b>	NELHA
4:40 p.m. – 5:30 p.m.	Bus back to Mauna Lani Bay Hotel	
Wednesday June 10, 2009		
7:00 a.m. – 7:50 a.m.	Continental Breakfast	Mauna Lani Lanai
7:00 a.m. – 7:50 a.m.	Energy Efficiency Discussion Coordinated by Dian M. Grueneich	Puna Room
8:00 a.m. – 7:30 p.m.	<b>Meeting 8 Geothermal Presentation and Volcano Tour</b> (includes lunch) (Attire: Casual wear with covered and comfortable shoes.)	Board bus at Main Lobby (Bus leaves promptly at 8:00 a.m.)

**ALOHA AND MAHALO TO  
2009 WCPSC PARTICIPANTS**

**A HUI HOU**  
(UNTIL WE MEET AGAIN)

# MEETINGS AND PANELS

## MEETING 1

### **Integrating Renewable Energy: “Planning, Operations and Law”**

**Overview:** Most states have a generation mix based in fossil fuels and nuclear, along with much hydro for the northwestern states. Supporting that mix is a transmission system, operational procedures and legal processes. What are the challenges to the integration of renewable power into this mix? A discussion of planning challenges will focus on systematic processes for economically sizing and placing generation and transmission relative to load, adjustments to the traditional regulatory process to take into account long-term and regional needs, and the importance of accounting for non-jurisdictional entities. A utility speaker on operational challenges will discuss physical constraints, balancing and meshing of various generation types, and the need for new infrastructure and staffing. A legal discussion will address the sufficiency of current in-state legal processes to address regional needs, the challenges in meshing federal and state renewable energy legislation and the principles associated with cost allocation.

**Moderator: Dian M. Grueneich, Commissioner, California Public Utilities Commission**

#### **Planning Challenges:**

**James K. Tarpey, Commissioner, Colorado Public Utilities Commission**

What processes are the West using to (1) identify the load centers, (2) identify the best locations for renewable generation, and (3) the cost-effective means of connecting load with generation?

The current regulatory process generally looks at specific projects. Should it be expanded to look at the utility's long-term transmission and resource planning? Should the regulatory process also take into account renewable resources available in the region (including initiatives such as Western Renewable Energy Zones and Western Climate Initiative)?

What challenges arise from the existence of entities not jurisdictional to the Commission (e.g., coops, municipals, federal power marketing agencies)?

What changes to the legacy relationships among these entities are necessary to implement renewable energy policies cost-effectively?

#### **Operational Challenges:**

**Shari Y. Ishikawa, Operations Superintendent, System Operation, Hawaiian Electric Company, Inc. (“HECO”) and**

**Leon Roose, Manager, System Integration, HECO**

What physical constraints must grid operators address when integrating intermittent sources into the grid?

Balancing: How does location of renewable energy generation affect its value to the system? What complements are needed on the system for intermittent renewable generation to improve its value on the system (e.g., pumped storage, demand-side resources, peaking units)? What are the tradeoffs and synergies between renewable generation and demand side resources (both conservation and peak shedding)?

What new infrastructure and staffing are necessary?

#### **Legal Issues:**

**Scott Hempling, Esq., Executive Director, National Regulatory Research Institute**

Are current in-state legal processes adequate to accomplish the necessary integration? In what ways can individual states lawfully account for the benefits of cooperation with other states?

What might be the legal effect of federal renewable energy legislation?

What are the legally defensible ways to allocate costs and risks associated with implementation of renewable energy integration?

Looking at a multi-state region, through what legal mechanisms can we move from cooperation to commitments?

Cost allocation: Current FERC policy focuses on allocation based on economic and reliability benefits. When the purpose of building transmission is to support state-level preferences for renewable energy, are changes to FERC's allocation principles necessary? Does the Federal Power Act -- whose ratemaking provisions do not mention "renewables" -- allow FERC to allocate transmission costs based on "renewables" benefits?

## MEETING 2

**Telecommunications: "Telecom update on States' Roles in the National Broadband Plan and Broadband Stimulus Package"**

**Moderator: James Bradford Ramsay, General Counsel, NARUC**

**Kathleen Q. Abernathy, former FCC Commissioner; Partner, Wilkinson, Barker, Knauer, L.P.**

**Andrew Barrett, former FCC Commissioner**

**Ray Baum, Commissioner, Oregon Public Utilities Commission**

**R. Steven Davis, Senior Vice President, Public Policy and Government Relations, Qwest Communications**

**Larry Irving, former chief of the U.S. Commerce Department's National Telecommunications and Information Administration; President, Irving Group**

**Ross LaJeunesse, Head of State Policy, Western US, Google**

### MEETING 3

#### **Sustainable Water Supply: “What Best Practices will Keep the Tap Running?”**

**Overview:** Water is life and we cannot live without it. In a recent survey of water suppliers and other stakeholders by the American Water Works Association, source water supply and protection ranked number one in terms of criticality. The near depletion of the Atlanta, Georgia metro area’s primary drinking water reservoir in 2007 may have played a roll in respondents increasing concern about source water and sustainability of supply. The major component of source water concern remains the basic need to have adequate quantities of treatable water, especially in areas with high demand growth and/or unfavorable climate. Unfortunately, areas such as the West experience pressure from both demand growth and drought, compounding source water concerns. The state of aging water infrastructure, compliance with new regulations and factors relating to finances continue to also be dominant sources of concern. As we look to the future it is essential that we access what best practices will address these concerns and provide a sustainable water supply.

**Moderator: David W. King, Vice Chairman, New Mexico Public Utilities Commission**

**John A. Bohn, Commissioner, California Public Utilities Commission**

**Paul G. Foran, Vice President, Regulatory Programs, American Water Company**

**Peter C. Nelson, President and Chief Executive Officer, California Water Service Group**

### MEETING 4

#### **Electric Vehicles (“EV”): “What Regulatory Policies will Reduce Carbon Dependency at Reasonable Cost?”**

**Overview:** This panel will have an electric vehicles expert, a utility infrastructure expert and a Federal-Hawai’i government representative tasked with implementing an electric vehicles strategy. They will describe the technology, the necessary infrastructure and its cost drivers, and the effect on carbon emissions, as well as the regulatory policies most likely to ensure cost effective implementation.

**Moderator: Commissioner Rachelle B. Chong**

**Andrew Frank, Ph.D., Professor, Department of Mechanical Engineering, University of California, Davis**

What is the technology, the necessary infrastructure, the cost drivers and the cost projections? What is the carbon impact of moving to electric vehicles in Hawai’i and other Western states? What is the interplay of the Smart Grid and EVs?

**David Waller, Vice President, Customer Solutions, HECO**

What is the infrastructure, rate design and cost recovery path necessary to accommodate EVs? How does the prospect of V2G (Vehicle to Grid) energy sharing affect peak demand planning? What signals does the utility need from the commission or other government bodies?

**William Parks, Senior Advisor, USDOE, Office of Electricity Delivery and Energy Reliability, and Chief Engineer and Special Assistant, Strategic Industries Division, DBEDT, Hawai'i**

What are the government actions, from which government bodies (e.g., Legislature, utilities commission, executive branch, local government) that are necessary to evaluate and encourage this possibility? How do we define the goal, then integrate the government efforts so that the outcome is cost effective?

MEETING 5

**Smart Grid: "What Regulatory Policies are Necessary to Ensure Cost Effectiveness?"**

**Overview:** This panel will feature an operations expert, executives of firms supplying smart grid technologies, and a regulator. They will define "smart grid," describe the infrastructure necessary to support it, identify the potential benefits and the cost drivers (including the uncertainties surrounding its cost effectiveness), and then address the regulatory policies necessary to attract the necessary investment.

**Moderator: Ted Boyer, Chairman, Utah Public Service Commission**

**Shari Y. Ishikawa, Operations Superintendent, System Operation (HECO)**

What is "smart grid"? What aspects might increase efficiency of electricity, consumption, production and delivery? What are the cost drivers? What are the uncertainties about cost and effectiveness? What regulatory policies will most likely assist cost effective design and implementation?

**Juan de Bedout, Global Technology Leader, Power Conversion Systems, GE Global Research**

**Bruce Phillips, Group President, Aclara Technologies, an ESCO Technologies Company**

**Philip Mezey, Sr. Vice President and COO, Itron North America**

What do providers of smart grid technology and equipment wish to see in regulatory policy so that we attract the best technology at reasonable cost? What risks are they willing to take?

What do providers of smart grid technology and equipment wish to see in regulatory policy so that we attract the best technology at reasonable cost? What risks are they willing to take?

**Moderator: Ted Boyer**

What have we heard from these presentations that attracts us or gives us pause? What questions remain unanswered? What facts and demonstrations are necessary, in terms of concept, design, implementation and cost, to produce regulatory comfort with committing ratepayer dollars?

## MEETING 6

### **Natural Gas: “A Stunning Year: The Effect of the Current and Anticipated Economic and Political Environment on the Natural Gas Industry”**

**Overview:** Wyoming Public Service Commission Commissioner Kathleen A. Lewis will lead a discussion on how state commissions can address the challenges arising from the uncertainties affecting natural gas supply and demand. Panelists will describe the current major influences on gas demand and supply in the region, including the capital shortage, the stimulus law, greenhouse gas legislation and the region’s mandates for new renewable energy generation (which may need gas for firming). Following these presentations the panel, with audience participation, will identify the main decisions facing state commissions as a result of demand and supply changes, along with suggestions for effective solutions.

**Moderator: Kathleen A. Lewis, Commissioner, Wyoming Public Service Commission**

**Brian Jeffries, Executive Director, Wyoming Pipeline Authority**

**Barrie L. McKay, General Manager, State Regulatory Affairs, Questar Gas Company**

**Timothy A. Simon, Commissioner, California Public Utilities Commission**

## MEETING 7

### **NELHA**

This meeting will consist of an afternoon field trip to NELHA, with lunch, where you can “learn how NELHA and its tenants are using sunshine, seawater and ingenuity to bring economic development and diversity to the State of Hawai’i.”

NELHA is a state agency that operates a unique and innovative ocean science and technology park in Kailua-Kona on the island of Hawai’i. Strategically located at Keahole Point next to the Kona International Airport and adjacent to one of the steepest bathymetric offshore slopes in the Hawaiian Islands, NELHA offers an incredible combination of assets in one location.

NELHA's assets include office and laboratory facilities, infrastructure, pristine natural resources, and leasable open land for use by tenant research, education, and commercial projects. A dual-temperature seawater system that is the only one of its kind in the world sets NELHA apart from all other technology parks and creates a prime setting for innovation and new industry development in this island coastal setting.

NELHA aims to attract tenants who can use the unique complement of natural and logistical resources to engage in successful, productive research, education, and commercial activities that support sustainable industry development in Hawai'i. A public charter school was created at NELHA to take advantage of the many resources of this growing ocean science and technology community. A new federally funded facility, the NELHA Gateway project, will provide a setting for leading edge research and development in distributed energy resources and renewable energy technologies, and a new commercial Ocean Center development that will provide opportunities for new ocean-related businesses.

## **OTEC**

OTEC uses the difference in temperature between the warm surface of the ocean and the cold ocean depths.

The United States became involved in OTEC research in 1974 with the establishment of the NELHA. Almost all of the major U.S. OTEC experiments have taken place in Hawai'i and NELHA has been recognized as the world's foremost laboratory and test facility for OTEC and OTEC-related research. The facility has been funded by the State of Hawai'i with significant U.S. Department of Energy ("USDOE") and private sector participation.

Although there is no OTEC facility currently producing electricity at Keahole Point, cold seawater is being used directly to air condition (cool) the administration and laboratory buildings. The seawater provides about 50 tons of air conditioning, offsetting the equivalent of 200 kW of peak electrical demand. Using the cold seawater for air conditioning saves NELHA nearly \$4,000 per month in electricity costs.

## **SUNPOWER/KOYO PROJECT**

SunPower has installed a 700 kW photovoltaic system on the Koyo bottled water plant making this project the largest roof-mounted system on the Big Island and largest single user in the State. The system is comprised of Sanyo 3594 panels installed on Koyo's main building. Uniquely, SunPower was able to adapt to this less-than-optimal north facing roof angle with only a minimum of power loss. The entire Koyo operation could handle another 1.2 MW of panels that may soon be installed. Weekend power requirements are only 100 kW - so the excess power can be sent to the electric utility or consumed by other loads at NELHA. Koyo is the largest exporter in all the Hawai'i Islands and is famous for its MaHaLo Hawai'i Deep Sea® Water. This pristine water has all the natural building blocks of life gleaned from ancient glaciers and the mineral-rich channels of the sea. Koyo USA has created new technology to gently filter out the excess sea salt, while maintaining the essential minerals to produce this pure and exhilarating drinking water. The Deep Sea Water used for MaHaLo bottled drinking water is very old. It takes between 1,200 and 2,000 years for the water to travel from the North Atlantic Ocean through the freezing Arctic currents, under the vast glaciers of Greenland, where it gathers ancient minerals that leach down from the ice. Then it flows around and back down toward the deep channels of the Pacific Ocean. It is there, at the Water Rejuvenation Zone just off the coast of Kona, Hawai'i, that the water is at its very purest. This is why Koyo USA placed its processing and bottling plants on the island of Hawai'i.



## **SOPOGY/KEAHOLE SOLAR POWER, LLC**

Keahole Solar Power (“KSP”) is a Concentrated Solar Power (“CSP”) renewable energy farm located at the NELHA. KSP is SopoPowered by Sopogy's MicroCSP solar concentrating solar panels. These MicroCSP panels use reflectors and optics to harness and focus the energy from the sun to create clean, renewable power for the Big Island. Sopogy is a Hawai'i based company that began in Kona and is bringing its Hawaiian technology to the global marketplace. Sopogy specializes in MicroCSP solar technologies that bring the economics of large solar energy systems to the industrial, commercial and utility sectors in a smaller, robust and more cost effective package. MicroCSP technologies are used to create Process Heat, Solar Air Conditioning or Electrical Power. For more information please visit [keaholesolarpower.com](http://keaholesolarpower.com).

## **SOLFOCUS PROJECT**

SolFocus, Inc., of Mountain View, California, has one of its test sites for concentrating photovoltaic (CPV) solar panels at NELHA. SolFocus panels incorporate power units comprised of primary and secondary mirrors, and a triple-junction solar cell. The primary and secondary mirrors focus the sun's energy 500 times onto a high-efficiency solar cell that is more than twice as efficient as the average silicon solar cell. Using just 1/1000th the active material found in a standard solar panel, the balance of system is mostly aluminum and glass, both of which are the only components exposed to the elements and are easily sourced and formed worldwide. Concentrated light is maintained within the power unit, eliminating the safety concerns of open concentrators. The purpose of this 2.5 kW-rated test installation is to gain operational experience and reliability data for CPV technology in the tropical Hawaiian environment. Data collected will be used to evaluate this site and others in Hawai'i for future utility-scale solar installations. NELHA offers the highest annual solar insolation of any location in the coastal United States. Humid salt air and volcanic emissions add to the challenge for reliability tests. The system includes 12 205W SF1000 panels and a standard grid-tied photovoltaic inverter with battery backup. A two-axis tracker keeps the panels pointed at the sun at all times. Monitoring equipment tracks panel performance as well as weather and insolation conditions.

## MEETING 8

### **GEOHERMAL PRESENTATION AND VOLCANO TOUR**

This meeting will consist of a day trip around the island to visit the Hawai'i Volcanoes National Park, which is the site of Kilauea, one of the most active volcanoes on earth, and learn about the Puna Geothermal Venture (“PGV”) renewable energy plant in Hawai'i. Lunch will be served at 'Imiloa Astronomy Center, located in Hilo, and will include a presentation by PGV. Various sites of interest and other stops will be part of this field trip to the Hawai'i Volcanoes National Park.

### **'IMILOA**

'Imiloa Astronomy Center of Hawai'i tells dual stories of the renowned Maunakea volcano, with its world-famous astronomy and rich traditions of Hawaiian culture. 'Imiloa, which means “exploring new knowledge,” reflects both the Hawaiian voyages of discovery and the explorations of astronomy.

Located on a nine-acre campus above the University of Hawai'i-Hilo, with spectacular views of Hilo Bay, 'Imiloa Astronomy Center (formerly called Maunakea Astronomy Educational Center) provides a unique experience for visitors, students, and families seeking to explore the connections between Hawaiian cultural traditions and the science of astronomy.

'Imiloa is Hawai'i's premier facility for interpreting the deepest mysteries of the universe, being unraveled by the Maunakea observatories – the world's largest and most important collection of telescopes.

'Imiloa features interactive exhibits, planetarium shows, group tours, a wonderful store, a café, and a full schedule of events.

## **PGV**

At PGV, state-of-the-art technology generates power by tapping deep into the heart of the Big Island of Hawai'i—to the vast underground cauldron of Kilauea's volcanic heat—converting steam into electricity for Hawai'i Island residents.

PGV is the only commercial producer of geothermal energy in Hawai'i, quietly producing geothermal-generated electricity for Hawai'i Electric Light Company, Inc. working to be a good neighbor, and a steady supplier of power.

The Big Island of Hawai'i is located above a volcanically active “hot spot” in the earth's mantle and has the most potential of all the isles for electrical generation and the direct uses of heat. Despite being restricted to the Big Island of Hawai'i, geothermal produces about 31 percent of Hawai'i's renewable energy resources statewide. Its potential remains largely untapped.

The 30-megawatt PGV plant uses air-cooled condensers and noise reduction enclosures. It is a low-profile plant, 24 feet high, and has near zero emissions. One hundred percent of its geothermal fluid and gas is reinjected into the deep earth.

## **HAWAI'I VOLCANOES NATIONAL PARK**

Hawai'i Volcanoes National Park displays the results of 70 million years of volcanism, migration, and evolution -- processes that thrust a bare land from the sea and clothed it with unique ecosystems, and a distinct human culture. The park highlights two of the world's most active volcanoes, and offers insights on the birth of the Hawaiian Islands and views of dramatic volcanic landscapes.

Well-known for its volcanic significance, Hawai'i Volcanoes National Park is also one of the most fascinating biologic landscapes in the world. Located over 2,000 miles from the nearest continental land mass, the Hawaiian Archipelago is the most geographically isolated group of islands on Earth. The Park sits on the southeastern edge of the youngest and largest island at a latitude of 19°N. Stretching from the summit of Mauna Loa at 13,677 feet to sea level, the Park protects a wide diversity of ecosystems and habitat for numerous native Hawaiian species such as carnivorous caterpillars, happy face spiders and colorful Hawaiian honeycreepers.

This trip to Hawai'i Volcanoes National Park will include the Jaggar Museum, Thurston Lava Tube, Steam Bluffs, and the Fern Tree Jungle.

Luncheon Keynote Speaker  
Hawai'i's Energy Efficiency Program Public Benefits Fee Administrator  
H. Ray Starling  
Energy Efficiency Program Manager - Hawai'i  
Science Applications International Corporation ("SAIC")

Our speaker for today is H. Ray Starling, Energy Efficiency Program Manager – Hawai'i, who will lead the SAIC team recently awarded the contract to administer the new Hawai'i Energy Efficiency Program and Public Benefits Fund as of July 1, 2009. Ray will address the ongoing transition from the current utility DSM rebate program to a new comprehensive Energy Efficiency Program which will provide a critical enabling component of Hawai'i's Clean Energy Initiative to reduce Hawai'i's dependence on fossil fuel. He will explain how the new Efficiency Program will incorporate significantly more public awareness of energy issues, emphasize personal responsibility for energy conservation and stimulate behavioral changes that reduce energy waste, while providing enhanced financial incentives for adopting energy efficient measures.

Ray is an attorney-engineer-businessman with more than 25 years of diverse experience in the regulatory, legal, technical, supply and demand functions of the energy business. In addition to having held executive and legal positions at two electric utilities, Hawaiian Electric and Carolina Power and Light, he has run his own renewable energy development and energy consulting firms for the last 11 years, engaging in energy projects and public energy issues facing Hawai'i. His development firms have designed, built and operated a number of renewable and demand side projects, including a hydroelectric power plant in West Maui and eight large ice-energy storage projects on Oahu. In his "*spare*" time, Ray is a citizen-soldier, serving as a Major General in the Air National Guard where he is due to retire from at the end of June 2009 after more than 37 years of commissioned service in the Active, Reserve and Guard.

## OTHER MEETINGS

### **THE FUTURE OF WIRELESS TECHNOLOGY: EXPLORING WHAT IS AHEAD FOR CONSUMERS IN AN INCREASINGLY MOBILE WORLD (Sunday, June 7, 2009, 11:45 a.m. – 12:15 p.m.)**

Overview: With new wireless services and products emerging every day, tremendous innovation and investment in the wireless space offer exciting opportunities for consumers. Mobile Future, a coalition of leading-edge companies, non-profit organizations and consumers who support an environment in which innovations are enabled and encouraged, invites you to attend a luncheon forum to explore what's ahead for consumers in an increasingly mobile world.

Moderator: Kathleen Q. Abernathy

Ray Baum, Commissioner, Oregon Public Utility Commission  
Diane Smith, Co-Founder, Avail Media  
David Aylward, Director, COMCARE

### **THE WAYS OF THE WEST A CRITICAL INFRASTRUCTURE PROTECTION TABLETOP EXERCISE (Sunday, June 7, 2009, 1:00 p.m. – 5:30 p.m.)**

This tabletop exercise will explore a number of pressing issues relating to critical infrastructure protection ("CIP"). The unique tabletop format will allow participants to react to a set of hypothetical scenarios in order to gain a better understanding of the commission's role in CIP, utility interdependencies, regional coordination issues, and state/federal jurisdictional boundaries among other topics. The scenarios presented will be particular to the West and will address a number of threats ranging from man-made attacks to natural disasters. Additionally, NARUC will provide participants with an overview of the key ingredients for designing, planning, and facilitating a tabletop exercise. Participants will be given the resources to conduct such an exercise on their own, in their own state.

### **ENERGY EFFICIENCY UPDATE DISCUSSION COORDINATED BY DIANE GRUENEICH (Wednesday, June 10, 2009, 7:00 a.m. – 7:50 a.m.)**

An update on energy efficiency activities, including federal stimulus funds, in the Western states will be discussed over breakfast. This is an informal discussion of Western Commissioners on energy efficiency, that will focus on two topics: strategies in the states to coordinate federal stimulus EE money (ARRA) administered by state energy offices, and LIHEAP/WAP state agencies with state commission funded EE programs energy efficiency activities in Western states.

SPEAKER BIOS  
(Alpha Order)

**KATHLEEN Q. ABERNATHY**

**Former Federal Communications Commission (“FCC”) Commissioner; Partner, Wilkinson, Barker, Knauer, L.L.P.**

Kathleen Q. Abernathy is a Partner at Wilkinson Barker Knauer, LLP in Washington, D.C., where she advises clients on a wide variety of policy and regulatory issues related to the telecommunications and media fields. Previously, she served as Commissioner at the FCC. Nominated by President Bush, Ms. Abernathy was responsible for representing the public interest in each of the policy areas under the FCC's jurisdiction, including wireless; domestic and international telecommunications; satellite; broadcast; cable; communications equipment manufacturers; and broadband, IP and other advanced communications technologies. In addition, she chaired the Federal-State Joint Board on Universal Service and participated in numerous international bilateral and multilateral negotiations, including the 2002 International Telecommunication Union (“ITU”) Plenipotentiary Conference and the 2003 ITU World Radiocommunications Conference. Ms. Abernathy was appointed by the ITU to chair the 2004 ITU Global Symposium for Regulators. Before joining the FCC, she served as Vice President, Public Policy at BroadBand Office Communications, as Vice President, Regulatory Affairs at US West and as Vice President, Federal Regulatory at AirTouch Communications (a predecessor company to Cingular Wireless). Earlier in her career, Ms. Abernathy served as a legal advisor to two FCC commissioners and as a special assistant to the agency's general counsel. Employment History: 2008 - present, Partner, Wilkinson, Barker, Knauer, L.L.P.; 2006 – 2008, Partner, Akin Gump Strauss Hauer & Feld LLP; 2001 – 2005, Commissioner, Federal Communications Commission.

**ANDREW BARRETT**

**Former FCC Commissioner**

Andrew C. Barrett is a former FCC commissioner. He was nominated, twice, as a presidential nominee and confirmed by the U.S. Senate to serve as a member of the FCC. He also served as a commissioner of the Illinois Commerce Commission (ICC). In Illinois he was deeply involved in the regulation of the telecommunications, electricity, natural gas and water industries. During his regulatory career, Mr. Barrett was a member of the NARUC executive committee, the NARUC Committee on Telecommunications, as Chair of the NARUC Committee on Water and the NARUC Research and Education Foundation. He also served as the assistant director of the Illinois Department of Business and Economic Development; an assistant professor at the City Colleges of Chicago. He serves on the boards of the Chicago Urban League, the Breast Cancer Resource Committee and on three corporate boards. Barrett graduated with a B.A. and M.A. from Loyola University of Chicago and a J.D. from DePaul University's School of Law. He is a member of the National Bar Association.

**RAY BAUM**

**Commissioner, Oregon Public Utility Commission (“OPUC”)**

Ray Baum was appointed to the OPUC in August of 2003. His second term ends August 31, 2011. He received his B.S. in Financial and Estate Planning with a minor in Agricultural Economics in 1980 from Brigham Young University and his J.D. in 1983 from Willamette University Law School in Salem, Oregon. Prior to his appointment to the OPUC he was a Country Lawyer for 20 years. During his years of law practice he served 8 years in the Oregon legislature. He served as Chair of the Joint Committee on Trade and Economic Development, Chair of the House Natural Resources Committee and was the House Majority Leader. Before his appointment to the OPUC he served 5 years as an Oregon Liquor Control Commissioner.

He currently serves as a member of the NARUC Board of Directors, the NARUC Telecommunications Committee, the NARUC Task Force on Telecommunications Act Rewrite and the NARUC Washington Action Committee. He is a member of the NARUC Subcommittee on Clean Coal and Carbon Sequestration. He is currently serving as State Chair of the Federal–State Joint Board on Universal Service. He was Chairman of the NARUC Task Force on Intercarrier Compensation from which was produced the industry supported Missoula Plan. In March of 2006 he testified before the Senate Commerce Committee on intercarrier compensation reform. In December of 2006 he testified before FERC on ring fencing and cross-subsidies protections under Oregon’s merger/acquisition and financing laws.

### **JOHN A. BOHN**

#### **Commissioner, California Public Utilities Commission (“CPUC”)**

Ambassador John A. Bohn currently serves as a Commissioner of the CPUC. He was appointed by Governor Schwarzenegger in May 2005 for a six year term. The Commission’s focus for the State of California is on climate change, energy, and water issues, as well as developments in clean technology solutions. In addition to his duties at the CPUC, Commissioner Bohn serves as a Director of the National Endowment for Democracy in Washington, D.C., and is on the Advisory Board of the Yale Institute for Corporate Governance and Performance. He is a member of the Center for Capital Markets Competitiveness chartered by the U.S. Chamber of Commerce to advise on the reform capital markets for the 21st Century. Commissioner Bohn is a principal in GlobalNet Partners, N.A., LLC, a global advisory and consulting firm. Prior to his present position, Commissioner Bohn was a co-founder and Executive Chairman of CheMatch.com (now Chemconnect), an Internet based trading exchange for petrochemicals. He spent 1-1/2 years at Burson-Marsteller, where he served as Managing Director, focusing on international markets, and economic resources issues, and was special advisor to the Government of Korea during the Asian financial crisis. From 1989-1996, Commissioner Bohn served as President and Chief Executive Officer of Moody’s Investors Service. In 1981, Commissioner Bohn joined the President Reagan Administration as Special Assistant to Treasury Secretary Don Regan, and was subsequently appointed by President Reagan as U.S. Ambassador and Executive Director of the Asian Development Bank. In 1984, President Reagan appointed Commissioner Bohn to the post of Vice Chairman of the Export Import Bank of the United States, and later as chairman and CEO. Commissioner Bohn began his career practicing law in California and the Pacific, and subsequently spent 13 years as an international banker with Wells Fargo, which included 4-1/2 years in Tokyo, with responsibility for the bank’s Asian activities. Later he served as Division Manager for Trade Finance, private banking, and multinational banking. A graduate with honors from Stanford University, Commissioner Bohn attended the London School of Economics as a Fulbright scholar, and received his J.D. from the Harvard Law School. He is a member of the California State Bar and the Bar of the Supreme Court of the United States.

### **TED BOYER**

#### **Chairman, Utah Public Service Commission**

Ted Boyer was appointed as a commissioner of the Utah Public Service Commission on June 20, 2003 and as Chair on May 2, 2007. He was re-appointed as Commission Chairman on March 12, 2009. His term expires March 1, 2015. Commissioner Boyer is a member of NARUC and serves on the Energy, Resources and the Environment Committee and International Committee, the Regional Oversight Committee, the Utah Privatization Policy Board, the Utah Telecommunications Advisory Council, the Steering Committee of the Western Renewable Energy Zones Project of the Western Governor’s Association and is a past president of the Western Conference of Public Service Commissioners. Prior to his

appointment, Commissioner Boyer served as Executive Director of the Utah Department of Commerce and before that as Director of the Utah Real Estate Division. After receiving his B.S. and M.S. degrees from Brigham Young University, he earned his J. D. from the University of Utah and practiced law in Salt Lake City for over 20 years. He has also worked in the steel industry, row-crop farming and taught at Murray State University.

### **FREDERICK F. BUTLER**

#### **President, NARUC and Commissioner, New Jersey Board of Public Utilities**

Commissioner Butler is a member of the New Jersey Board of Public Utilities currently serving in his second term. He was first appointed in 1999 for a four year term and was re-appointed in 2003 to a full six year term. He currently represents New Jersey on the Board of the Organization of PJM States. He is former-President of the Mid Atlantic Conference of Regulatory Utility Commissioners and is an active member of NARUC. He has served as Chairman of NARUC's International Relations Committee, Committee on Water, and Ad Hoc Committee on Climate Change. He currently serves as NARUC's President and also serves on the advisory board of the Michigan State University Institute of Public Utilities, the New Mexico State University Center for Public Utilities' Advisory Council and the advisory council to the University of Florida's Public Utilities Research Center. His previous recent work experience includes: Executive Director of the New Jersey General Assembly Democratic office, Deputy Director of the New Jersey Department of Treasury's Commission on Capital Budgeting & Planning, and Research Faculty Member of the Eagleton Institute of Politics' Center for Legislative Research and Service at Rutgers, the State University. He received a Bachelor's degree in Modern Languages and Political Science from Villanova University in 1968, and earned a Master's degree in International Relations from the Johns Hopkins University School of Advanced International Studies in 1973. He participated in the Ph.D. program at Rutgers, the State University from 1973-1979.

### **RACHELLE B. CHONG**

#### **Commissioner, CPUC**

Commissioner Rachele Chong was appointed to the CPUC by Governor Schwarzenegger in January 2006. In December 2008, Governor Schwarzenegger reappointed Ms. Chong to the CPUC for a six-year term. She has been a career communications regulatory attorney, practicing before both the FCC as well as the CPUC with the law firms of Kadison, Pfaelzer, Woodard, Quinn & Rossi and Graham & James. In May 1994, President Clinton nominated Commissioner Chong to the FCC. She distinguished herself as an advocate of simple pragmatic regulation, competitive communications markets, and First Amendment rights. The FCC implemented the historic Telecommunications Act of 1996 during her tenure. In November 1997, Commissioner Chong returned to private practice as a partner with Coudert Brothers, representing Internet and communications clients. In 2000, she became General Counsel and Vice President, Government Affairs for BroadBand Office, Inc. In August 2001, she became an entrepreneur, operating a retail shop and ecommerce website for five years. She is proud to be the first Asian American to serve as a Commissioner of the FCC and the CPUC. She is a graduate of U.C. Berkeley and U.C. Hastings College of the Law.

### **R. STEVEN DAVIS**

#### **Senior Vice President, Public Policy and Government Relations, QWest**

Steve Davis heads Qwest's Public Policy and Government Relations organization, responsible for the development and advocacy of the company's policies in regulatory, legislative and other governmental forums. The Qwest Public Policy and Government Relations organization includes the Qwest state presidents located in Qwest's 14-state residential service area, the

Qwest government relations office in Washington, D.C., and Qwest's Corporate Social Responsibility group, which is responsible for Qwest's philanthropic activities throughout the U.S. Mr. Davis joined Qwest in January 2000 as senior vice president and assistant general counsel of policy and law. He has more than 28 years of experience in telecommunications law, with particular emphasis in local, state and federal regulatory law. Prior to joining Qwest, Mr. Davis held various legal and regulatory positions with AT&T, where, from 1996 to 2000, he was responsible for representing AT&T's interests in all state and local governmental matters. Mr. Davis attended the University of Kansas, where he received both his B.S. degree and his J.D. degree. Mr. Davis serves on the board of directors of the Qwest Foundation, Rocky Mountain Junior Achievement, Mile High United Way, and the Western Governors University National Advisory Board. He is also a member of Colorado Governor Bill Ritter's Task Force on Broadband.

### **JUAN DE BEDOUT**

#### **Global Technology Leader, Power Conversion Systems, GE Global Research**

Juan is the Global Technology Leader for the Power Conversion Systems organization at GE's Global Research Center. This group is devoted to developing advanced electric machines, power electronics, and power systems technologies for GE's Infrastructure businesses. The Power Conversion Systems global technology organization consists of seven labs distributed across all four of GE's R&D centers. Prior to becoming GTL, Juan was Manager of the Electric Power and Propulsion Systems laboratory. The group is a power systems engineering resource for GE, serving the energy business, as well as businesses with mobile electric power system content such as aviation and rail. Focus areas for the Energy business include integration of energy resources into the grid, such as wind, solar, DG and storage, as well as support for the formulation of advanced energy management and power system architecture concepts. Focus areas for mobile power include the design of high power density and high energy density power system concepts. Juan was born in Medellin, Colombia, South America. Juan holds B.S., M.S., and Ph.D. degrees in mechanical engineering from Purdue University in Indiana.

### **CARLITO P. CALIBOSO**

#### **Chairman, Hawaii Public Utilities Commission ("HPUC") and President, Western Conference of Public Service Commissioners**

Carlito Caliboso was appointed to the HPUC and named Chairman of the Commission by Governor Linda Lingle on April 30, 2003. In 2004, he was reappointed to the Commission for a term to expire on June 30, 2010. Prior to his appointment, Chairman Caliboso was engaged in private law practice since 1991. In 2004, he was appointed as a member of the FCC's Intergovernmental Advisory Committee, which provides advice to the FCC on a broad range of telecommunications issues of interest to state, local, and tribal governments. In October 2007, Chairman Caliboso was named to serve a second term on the FCC Intergovernmental Advisory Committee as the Vice Chair of the committee. He is also a member of NARUC, and serves on NARUC's Board of Directors, the Committee on Telecommunications, the Ad Hoc Committee on National Wireless Protection Standards, the Committee on International Relations, and the Committee on Critical Infrastructure Protection. He is currently the President of the Western Conference of Public Service Commissioners. In addition, he serves on the State Energy Emergency Preparedness Advisory Committee. Chairman Caliboso earned a B.B.A. degree from the College of Business Administration at the University of Hawai'i with a double major in Finance and in Management in 1984, a J.D. degree from the William S. Richardson School of Law at the University of Hawai'i in 1991, and an Executive M.B.A. degree from the Shidler College of Business at the University of Hawai'i in 2009.



### **PAUL G. FORAN**

#### **Vice President, Regulatory Programs, American Water**

Mr. Foran is Vice President of Regulatory Programs for American Water, having assumed that position in November, 1999. Founded in 1886, American Water is the largest investor-owned U.S. water and wastewater utility company. Prior to joining American Water, Paul was a partner in an Illinois law firm where he represented telecommunications companies, municipalities and large industrial energy and water users and was active in restructuring the electric industry in Illinois. From 1986 to mid-1993, Paul served as a Commissioner of the Illinois Commerce Commission. He was Chair of the NARUC Water Committee and Director of the Annual NARUC Water Committee Rate Schools. By USEPA appointment, he served as a member of the National Drinking Water Advisory Council and the negotiating committee for development of the disinfection and disinfection by-products rulemaking pursuant to the Safe Drinking Water Act. He was also a member of the Public Council on Water Supply Research of the American Water Works Association Research Foundation. He has served as Chair of the Rates & Regulatory Law Committee of the National Association of Water Companies, and is a member of the Advisory Board of the Institute for Public Utilities at Michigan State University and the Advisory Board of the Center for Regulatory Studies at New Mexico State University. Paul is a graduate of the University of Illinois School of Law.

### **ANDREW A. FRANK**

#### **Professor, Department of Mechanical Engineering, University of California, Davis**

Andrew Frank, Ph.D., is the inventor of the modern Plug-In Hybrid Electric Vehicle (PHEV). His seminal work at U.C. Davis is the direct source of the worldwide movement to Plug-In Hybrids. He is Founder and CTO of Efficient Drivetrains Inc, in partnership with the University of California. PHEVs deliver energy independence, and dramatic clean air and CO2 benefits. The IEEE voted the PHEV "The Number-One Electric Power 21<sup>st</sup> Century Holy Grail Winner: The Smart Hybrid—A Big Technology Product That Will Make a Difference ... A High Tech Dream That Will Come True in Your Lifetime." Dr. Frank is author (and subject) of over 100 technical papers and many feature articles and media, including Scientific American, Newsweek, USA Today, Christian Science Monitor, Business Week, NYT, WSJ, The Economist, LA Times, NOVA, and more, and is an invited presenter at Congressional hearings, and national and international PHEV conferences. Dr. Frank's graduates are high-value engineers and managers at many major OEMs and Tier 1 suppliers.

### **DIAN M. GRUENEICH**

#### **Commissioner, CPUC**

Dian M. Grueneich was appointed to the CPUC by Governor Arnold Schwarzenegger in January 2005 and unanimously confirmed by the State Senate in May for a six year term. Commissioner Grueneich is a nationally recognized expert in energy and environmental issues, with over 30 years experience. At the CPUC, she focuses on transmission planning and permitting, energy efficiency, climate change, renewable energy resources, and low income consumer issues. Commissioner Grueneich is the lead Commissioner on transmission issues at the CPUC, overseeing the permitting of several significant transmission lines during her tenure, including the first three phases of the Tehachapi Renewable Transmission Project to deliver 4,500 MW of renewable energy to California load centers. She has focused on raising state and region-wide awareness on the significance of transmission issues. In this capacity, she has been a leader in establishing both the California Renewable Energy Transmission Initiative and the parallel Western Renewable Energy Zone Initiative. She also serves on the U.S. Department of Energy's Electricity Advisory Committee and the Transmission Expansion Planning Policy Committee of the Western Electricity Coordinating Council.

## **SCOTT HEMPLING**

### **Executive Director, National Regulatory Research Institute (“NRRI”)**

Scott Hempling is the Executive Director of NRRI. He has provided legal and policy advice to public and private sector clients involved in regulated industries. His research emphases include mergers and acquisitions, the introduction of competition into formerly monopolistic markets, corporate restructuring, ratemaking, utility investments in nonutility businesses, and State-federal jurisdictional issues. Prior to joining NRRI in October 2006, he was the founder and principal of a national law practice emphasizing state regulation of public utilities. Mr. Hempling received a B.A. cum laude in (1) Economics and Political Science and (2) Music from Yale University, where he was a recipient of a Continental Grain Fellowship and Patterson research grant. He received a J.D. magna cum laude from Georgetown University Law Center, where he was a recipient of an American Jurisprudence award for Constitutional Law. He has appeared numerous times before committees of the U. S. Senate and U. S. House of Representatives; and before state legislative committees in Arkansas, California, Maryland, Minnesota, Nevada, North Carolina, South Carolina, Vermont, and Virginia. Mr. Hempling’s articles publications include “Corporate Structure Events Involving Regulated Utilities: The Need for a Multidisciplinary, Multijurisdictional Approach,” *The Electricity Journal* (Aug./Sept. 2006); "Reassessing Retail Competition: A Chance to Modify the Mix," *The Electricity Journal* (Jan./Feb. 2002); *The Renewables Portfolio Standard: A Practical Guide*, NARUC (with Nancy Rader) (Feb. 2001); *Promoting Competitive Electricity Markets Through Community Purchasing: The Role of Municipal Aggregation*, American Public Power Association (with Nancy Rader) (Jan. 2000); *Is Competition Here? An Evaluation of Defects in the Market for Generation* (National Independent Energy Producers, Jan. 1995) (co-author); *The Regulatory Treatment of Embedded Costs Exceeding Market Prices: Transition to a Competitive Electric Generation Market* (Nov. 1994) (co-author); “Depolarizing the Debate: Can Retail Wheeling Coexist with Integrated Resource Planning?,” *The Electricity Journal* (Apr. 1994); and “Making Competition Work,” *The Electricity Journal* (June 1993). In 1997, Mr. Hempling began a series of annual seminars, at the introductory and advanced levels, for students of electricity law.

## **LARRY IRVING**

### **President and CEO, Irving Information Group**

Larry Irving is the President and CEO of the Irving Information Group, a consulting firm providing strategic advice and assistance to international telecommunications and technology companies, technology and media startups and foundations and non-profit organizations. Prior to founding the Irving Information Group, Mr. Irving served for almost seven years as Assistant Secretary of Commerce for Communications and Information and Administrator of the National Telecommunications and Information Administration, where he was a principal advisor to the President, Vice President and Secretary of Commerce on domestic and international telecommunications and information technology issues. During his tenure as Assistant Secretary, the focus of Mr. Irving’s work was opening domestic and foreign telecommunications markets to competition, ensuring consumer choice, and spurring development of advanced telecommunications and information infrastructures in rural and under served areas. Mr. Irving was one of the principal architects and advocates of the Clinton Administration’s telecommunications and Internet policies, and was a point person in the Clinton Administration’s successful efforts to reform the United States telecommunications laws. Those efforts resulted in passage of the Telecommunications Act of 1996, the most sweeping change in America’s telecommunications laws in 60 years. Similarly, in international fora, Irving was an ardent advocate of regulatory reform on behalf of the Clinton Administration. He represented the United States Government as Sherpa (lead coordinator for the U.S. Government) at the G-7’s first Ministerial meeting on the Global Information Society in Brussels, and at the Information

Society and Development Conference in South Africa, the first Ministerial meeting between developing countries and developed countries to discuss the Global Information Infrastructure. Mr. Irving was also a key member of the United States team that negotiated the World Trade Organization agreement on basic telecommunication services. On behalf of the Clinton Administration, Mr. Irving led or participated in trade missions and global conferences in all corners of the world to promote principles of competition, liberalization, and privatization of telecommunications and information technology sectors. Mr. Irving also has been an ardent advocate of regulatory forbearance with regard to new information technologies, particularly the Internet, and helped establish domestic and international policies regarding the emerging Electronic Commerce marketplace. Mr. Irving is widely credited with coining the term the digital divide and sparking global interest in the growing problem it represents. He initiated and was the principal author of the landmark Federal survey, Falling Through the Net, which tracked access to telecommunications and information technologies, including telephones, computers and the Internet, across racial, economic, and geographic lines. In large part due to his work to promote policies and develop programs to ensure access to advanced telecommunications and information technologies, Mr. Irving was named one of the fifty most influential persons in the 'Year of the Internet' by Newsweek Magazine. He received a B.A. degree from Northwestern University in 1976, and is a recipient of the University's Alumni Merit Award for distinguished professional achievement. He is also a graduate of Stanford University School of Law, where he was President of the Class of 1979.

### **SHARI Y. ISHIKAWA**

#### **Operations Superintendent, HECO**

Shari Y. Ishikawa received a B.S. in Electrical Engineering from the Illinois Institute of Technology and an M.B.A. from the University of Hawai'i, Manoa. She is currently the Operations Superintendent at HECO which is responsible for the operation of the electrical grid for the island of Oahu. She started her career at Hawaiian Electric in August 1997, and has been with the company for eleven years, holding positions in the Generation and Transmission Planning Divisions and as the Director of the New Dispatch Project responsible for installing the New Dispatch Center, the Energy Management System and the Outage Management System. Prior to joining Hawaiian Electric, she worked as a Tech Staff Engineer at Will County Station in Romeoville, Illinois, and in the Distribution Design Division for Commonwealth Edison's Southern Division in Joliet, Illinois. Shari is a licensed professional engineer in the state of Hawai'i.

### **BRIAN JEFFRIES**

#### **Executive Director, Wyoming Pipeline Authority ("WPA")**

Brian Jeffries is the Executive Director of the WPA. The WPA is tasked by the State of Wyoming with the analysis, encouragement, development and financing of infrastructure that would support the production and delivery of Wyoming's natural gas, crude oil and related products to higher valued markets. Prior to joining the WPA, Jeffries was the Vice President of Marketing for Western Gas Resources, Inc. a Denver, Colorado, based production, gathering, processing and marketing company. Prior to his tenure at Western Gas Resources, Jeffries was the Vice President of Marketing and Supply for an interstate natural gas pipeline company based in Houston, Texas. Jeffries has presented on behalf of the energy industry in numerous state and federal regulatory proceedings, university sponsored educational forums and to members of congress. Mr. Jeffries has a B.S. in Civil Engineering from the University of Colorado and is a Professional Engineer in Colorado.

## **DAVID W. KING**

### **Vice-Chairman, District 2, New Mexico Public Regulations Commission**

David W. King is a third-generation New Mexican farmer and rancher and a long time leader in State, Federal and Municipal governments. Mr. King was Valedictorian of his Moriarty High School class, and went on to receive the Distinguished Alumni Award from New Mexico State University, where he received his Bachelors and Masters Degrees in Agricultural Economics with an emphasis in Government Finance. During his twenty-plus years of government service, Mr. King has served in the Planning, General Services and Finance Secretary agencies of three gubernatorial cabinets. He has also served as Deputy State Treasurer and State Treasurer for New Mexico, and as the Chief Financial Officer for the NMSU-Alamogordo Branch. His many honors, board memberships and civic activities have included winning the Outstanding State Citizenship Award, serving on the Public Employees Retirement and New Mexico Osteopathic Foundation Board, Sangre de Oro (Hemophilia Organization), First Vice President of Baptist Convention of New Mexico, Executive Board of the National Southern Baptist Convention representing New Mexico, and Chairman and 30-year member of Edgewood Soil & Water Conservation Board.

## **ROSS LAJEUNESSE**

### **Head of State Policy, Western US, Google**

Ross LaJeunesse is Head of State Policy for the Western United States at Google Inc. He oversees the company's relationships with governors, state legislators and other officials and policymakers in the western region of the country, and advises Google on data security, child safety, internet privacy and numerous other issues affecting the company's operations and products. Before joining Google, LaJeunesse served as Deputy Chief of Staff and Senior Advisor to California Governor Arnold Schwarzenegger. He developed and executed the Governor's ambitious policy agenda, overseeing a broad range of issues from infrastructure investment to education reform and economic development, as well as numerous environmental initiatives. He authored the Governor's anti-gang policy, subsequently enacted into law, which was widely applauded by law enforcement, educators, violence prevention experts and local government leaders as the first comprehensive, balanced approach to combating gang violence in the nation. He was also responsible for advising the Governor on key personnel decisions, including the appointment of California's first cabinet-level Chief Information Officer. Prior to his appointment in the Schwarzenegger administration, LaJeunesse was Chief of Staff to California Controller Steve Westly, the state's chief financial officer. He oversaw all aspects of the Controller's operations, including a strategic redirection of the agency's 1,100 staff and \$150 million annual budget to improve efficiency and innovation. LaJeunesse directed all policy matters, including development of the office's first full legislative agenda. He supervised the Controller's representation on 76 state boards and commissions, including the Franchise Tax Board, the State Lands Commission, and the boards of CalPERS and CalSTRS, two of the largest pension funds in the nation with \$400 billion in combined assets. LaJeunesse previously served as Chief of Staff to CPUC Commissioner Susan Kennedy, where he was responsible for advancing key reforms to the state's regulation of its \$70 billion telecommunications, energy and transportation industries. At that time, LaJeunesse directed the most comprehensive analysis of California's broadband infrastructure in the state's history and co-authored the Commission's Report to the Governor and Legislature on increasing broadband deployment. Before his appointment to state service, LaJeunesse was Vice President and General Counsel at Avasta, Inc., a privately-held technology infrastructure company based in San Francisco. LaJeunesse also served as an attorney at Pacific Gas & Electric Company, where he advised the company on energy market design and regulation. LaJeunesse began his career as an assistant to United States Senate Majority Leader George J. Mitchell. He went on to serve as a Policy

Analyst to Senator Edward M. Kennedy. He was Senator Kennedy's chief advisor on reinventing government, and national and community service issues. LaJeunesse serves on the Board of Directors of the California Emerging Technology Fund, a non-profit organization that has committed \$60 million to increasing broadband deployment in underserved communities and populations. LaJeunesse received his law degree with honors from the Harvard Law School. He graduated magna cum laude and Phi Beta Kappa from Dartmouth College with a degree in Middle East Studies, and studied advanced Arabic at the American University in Cairo. He resides in San Francisco and was raised in Arundel, Maine.

**KATHLEEN A. "CINDY" LEWIS**

**Commissioner, Wyoming Public Service Commission ("WPSC")**

Commissioner Lewis earned her law degree from the University of Wyoming in 1984, after graduating cum laude from the State University of New York at Buffalo in 1981. She has practiced law for over 20 years. Just prior to her June 2004 appointment to the WPSC, she served as executive director of the Wyoming Board of Parole. She was a senior staff attorney for Legal Services for Southeastern Wyoming, assistant bar counsel for the Wyoming State Bar, executive secretary and legal counsel for the State Board of Equalization and clerk for Wyoming Supreme Court Justice Marilyn S. Kite. In August 2005 she was elected Deputy Chairman by her fellow Commissioners and in March 2006 she became the first woman to be elected to the position of Chairman since the Commission's inception in 1915. Commissioner Lewis was a member of the NARUC Electricity Committee from 2005 – 2007 during which time she was a member of the FERC's West Region Joint Board on Economic Dispatch, and co-chaired the NARUC Electricity Committee's working group on EPACT 05 modifications of the Public Utility Regulatory Policies Act. Commissioner Lewis was also Chairman of the Western Conference of Public Service Commissioners Electricity Committee from 2005-2006 and is currently serving on the Western Governor's Association's Western Renewable Energy Zones Steering Committee. Commissioner Lewis was also a member of the NARUC Committee on Telecommunications from 2007 to 2008, and is currently a member of the NARUC Committee on Gas and the Subcommittee on Clean Coal and Carbon Sequestration. Term Expires March 1, 2011.

**BARRIE L. MCKAY**

**General Manager, State Regulatory Affairs, Questar Gas Company**

Mr. Barrie L. McKay currently serves as General Manager of State Regulatory Affairs for Questar Gas Company. Mr. McKay has the responsibility of managing the state regulatory activities in Utah and Wyoming and also the energy-efficiency activities in Utah. He has been involved with the American Gas Association (AGA) and is a member of the AGA Rate Committee and past Chairman of the AGA Rates and Strategic Issues Committee. Mr. McKay also serves on the board of the Utah Manufacturers Association. Prior to joining Questar Gas in 1993, Mr. McKay worked 10 years in the electric industry for Utah Power/PacifiCorp. He has a B.S. Degree in Accounting from Brigham Young University and a M.B.A. Degree from Brigham Young University. He is a Certified Public Accountant in the State of Utah and belongs to the Utah Association of Certified Public Accountants.

## **PHILIP MEZEY**

### **Sr. Vice President and COO, Itron North America**

Philip Mezey became Senior Vice President and Chief Operating Officer for Itron North America in April, 2007. He has served the company in several capacities: as Group Vice President and General Manager, Software Solutions, in January 2004 and as Sr. Vice President, Software Solutions in January 2005. Mezey joined Itron in March 2003 as Managing Director of Software Development for Itron's Energy Management Solutions group upon Itron's acquisition of Silicon Energy. He joined Silicon Energy in 2000 as Vice President, Software Development. Prior to joining Silicon Energy, Mezey was a founding member of Indus, a leading provider of integrated asset and customer management software, and was with Indus for 12 years with various responsibilities for product development and services for utility solutions. Mezey holds an A.B. degree in History from University of California, Berkeley.

## **HERMINA MORITA**

### **14<sup>th</sup> Representative District, Hawai'i State Legislature, Chairperson, House Committee on Energy and Environmental Protection**

Hermína Morita is a full time legislator and has represented the 14<sup>th</sup> Representative District of Kauai, which includes Hanalei, Anahola, Kealia, Kapaa, and Waipouli, since 1996. She is the Chairperson of the House Committee on Energy and the Environment and a member of the Committees on Consumer Protection & Commerce; Housing; Judiciary; and Water, Land, & Ocean Resources. She served on the Kauai County Planning Commission from 1990 to 1993 and the Kauai Police Commission from 1993 to 1996. She is a volunteer interpreter with the Kilauea Point National Wildlife Refuge; is volunteer and advisory board member of the Kauai Children's Discovery Museum; and is a board member of the Hanalei Community Association. In 1998, she received the Arthur S. Flemming Fellow award. She is a graduate of Kamehameha Schools and attended the University of Hawai'i and George Washington University.

## **PETER C. NELSON**

### **President and Chief Executive Officer, California Water Service Group ("Cal Water")**

Peter C. Nelson is President and CEO of Cal Water and its six subsidiaries. Cal Water is the largest investor-owned water utility in the western states, and the third-largest in the United States. A \$400 million revenue company, it provides drinking water to 2 million people in California, Washington, New Mexico and Hawai'i. Recently, it added wastewater operations which it owns and operates in all four states. Nelson is a graduate of the University of California, Davis, where he received a B.S. in Mechanical Engineering; and the University of Massachusetts, Amherst, where he earned an M.B.A. Nelson is a director of the California Chamber of Commerce and chairs their Water Committee, representing business interests in water supply statewide. He is also a director of the California Foundation on the Environment and the Economy and a senior fellow of the American Leadership Forum. His past affiliations include: director of the National Association of Water Companies (the water industry trade association) where he was President in 2005-2006 and represented the water industry nationwide. He also has a long history of leadership in community and business organizations including director of the Bay Area Water Supply and Conservation Agency, founding director of the Joint Venture: Silicon Valley Network, director of the Silicon Valley Leadership Group, founding trustee of the Silicon Valley Capital Club, director of the Tech Museum of Innovation, director of the Private Industry Council and trustee of the United Way. Prior to his current position, Nelson served as Vice President, Division Operations, at Pacific Gas and Electric Company. In this role he managed a 9,000 person organization which included all PG&E Customer Service and Electric and Gas Operations in Northern and Central California. At PG&E he held a range of positions in construction, engineering, marketing, corporate planning, finance and operations.

## **WILLIAM PARKS**

### **Senior Advisor, USDOE, Office of Electricity Delivery and Energy Reliability, and Chief Engineer and Special Assistant, Strategic Industries Division, DBEDT, Hawai'i**

Mr. William Parks is a senior career executive with the US Dept of Energy currently on special assignment to the State of Hawai'i. Since October 2006, under an Intergovernmental Personnel Act agreement with the USDOE, Parks is on assignment as Chief Engineer and Special Assistant, Strategic Industries Division, DBEDT, Hawai'i. Parks is serving as a senior energy advisor to the State and the Principle Federal lead on the Hawai'i Clean Energy Initiative. He has been instrumental in fostering increased coordination and collaboration between USDOE and Hawai'i by and organizing strategic partnerships with the energy industry, federal agencies and private sector organizations. Mr. Parks has over 30 years experience in the energy field including; 11 years in corporate R&D, 3 years in a new business venture, 19 years in the Department of Energy. Parks is the former Deputy Assistant Secretary, Research and Development, Office of Electricity Delivery and Energy Reliability, Associate Deputy Assistant Secretary for Power Technologies in charge of DOE renewable development programs, and Principle DOE lead in several national level public-private technology roadmaps including electricity and hydrogen. In 2006, William Parks was the recipient of a lifetime achievement award for the development of distributed energy resources by US industry.

## **BRUCE PHILLIPS**

### **Group President, Aclara**

A seasoned energy executive with over 30 years in the energy industry, Bruce Phillips is the Group President of Aclara,<sup>TM</sup> the utility solutions group of ESCO Technologies Inc., overseeing the Aclara companies focusing in AMI, demand response and SmartGrid technology and solutions for the electric, gas and water utility industries. The Aclara Group includes Aclara Power-line Systems with TWACS<sup>®</sup> technology, Aclara RF Systems with STAR<sup>®</sup> Network technology and Aclara Software with MDMS technology collectively known as the Aclara Technologies of ESCO. Further information on Aclara is available at [www.Aclara.com](http://www.Aclara.com). Bruce's career has included the major energy companies including Exxon Chemical, Sun Oil Company, Tenneco Oil Company, Enron, and Koch Industries. With extensive international experience including executive positions with two British companies, Advantica PLC (formerly British Gas) and Invensys-APV where Bruce was corporate EVP with worldwide responsibilities. Bruce holds a Bachelors of Science in Chemical Engineering from the University of Texas in 1975 and is licensed with the Texas State Board of Registration for Professional Engineers since 1980.

## **JAMES BRADFORD RAMSAY**

### **General Counsel, NARUC**

Mr. Ramsay is General Counsel for NARUC. NARUC is composed of the agencies of fifty states and several U.S. Territories that oversee telecommunications services among other areas of regulated utilities. During his 18 years at the association, he has represented NARUC's interests before the Administration, the FCC, FTC, NTIA, US Department of Justice, the Office of the US Trade Representative, other agencies, in the courts, and in discussions with, the European Community, and various industry associations. He is staff to the FCC Separations and Universal Service Federal-State Joint Boards, and the Section 706 Federal State Joint Conference. Mr. Ramsay also has testified before Congress and State legislatures - and participated briefly in one round of US-Japan Trade talks - on telecommunications issues. Mr. Ramsay is also NARUC's designee to the International Telecommunications Union. Prior to joining NARUC, Mr. Ramsay acquired significant experience in administrative law and appellate practice as an associate with the Washington, D.C. law firm of Grove, Jaskiewicz, Gilliam and Colbert. Prior to private practice, Mr. Ramsay was employed by the Federal Energy Regulatory Commission for three years as a rates attorney. Mr. Ramsay received his B.S. in Chemistry in 1978 from Mississippi College and his J.D. in 1985 from Louisiana State University.

## **LEON ROOSE**

### **Manager, System Integration, HECO**

Leon manages the System Integration Department at HECO. His responsibilities include the oversight of distribution planning for HECO, and generation planning, transmission planning, renewable energy planning and integration, and system protection functions for HECO (Oahu), and its subsidiaries, Maui Electric Company, Ltd. (Maui, Lanai, and Molokai) and Hawai'i Electric Light Company, Inc. (Big Island). In this capacity, Leon is responsible for the development of generation and transmission resource plans for these islands, focusing on the expansion of renewable energy resources, and the development of the distribution system and system protection schemes to safely and reliably meet changing customer needs. Leon also oversees major projects across all three companies, including its advanced meter infrastructure and smart grid initiatives, and HECO's commitment to integrate large-scale wind energy resources located on the islands of Lanai and Molokai via a proposed undersea cable system to Oahu.

## **TIMOTHY ALAN SIMON**

### **Commissioner, CPUC**

Timothy Alan Simon was appointed to the CPUC by Governor Arnold Schwarzenegger on February 15, 2007, and confirmed by the California State Senate on February 28, 2008. Commissioner Simon is a securities and banking lawyer and law professor. He uses his background to facilitate balanced public policy in utility regulation. Commissioner Simon firmly supports investment in California's utility infrastructure as being critical to California's economic future. He is active in NARUC as Co-Vice-Chair of the Natural Gas Committee, and member of: the Critical Infrastructure Committee; the Consumer Affairs Committee; the Liquefied Natural Gas Subcommittee; the Gas Speculation Task Force; and the Wireless Task Force. Prior to joining the CPUC, Commissioner Simon was an appointment secretary to Governor Arnold Schwarzenegger, and was the first African American in California history to hold the post. Previously, Commissioner Simon served as a legal advisor on complex financial products, and has held positions at Global Crown Capital, LLC, PreferredTrade, Inc., Robertson Stephens Investment Banker, Bank of America, and Wells Fargo. As an active member of the Bay Area community, Commissioner Simon serves on several non-profit boards including Catholic Charities/CYO of the San Francisco Bay Area, the Megan Furth Academy, Junior Achievement, and California ALL (Aspire-Learn-Lead). He works to actively promote and encourage workplace, procurement, and educational diversity. Commissioner Simon received his Bachelor's degree in Economics from the University of San Francisco, and his law degree from the Hastings College of the Law, University of California. Currently, Commissioner Simon is an adjunct professor of Securities Regulations at Golden Gate University School of Law, as well as an advisor on international securities in the U.S. Legal Studies Program.

## **JAMES K. TARPEY**

### **Commissioner, Colorado Public Utilities Commission ("Colorado PUC")**

Jim Tarpey was appointed as a Commissioner of the Colorado PUC by Gov. Bill Ritter, Jr., and began serving on January 2, 2008. As an attorney, Jim has extensive experience with utility matters. He has participated in numerous regulatory proceedings involving alternative forms of regulation (e.g., incentive ratemaking, performance-based pricing, indexing, and discounted rated structures); rate related issues (e.g., revenue requirements, cost allocation, rate design, adjustment clauses, prudence reviews); territorial, and certificate disputes; and issues related to local telecommunication markets and the 1996 Telecommunications Act. Jim appeared often before the Colorado PUC, the WPSC, and the Federal Energy Regulatory Commission litigating complex utility issues and negotiating settlements of multi-million dollar disputes. In 2006 the Colorado Legislature created a 15-member Task Force on Reliable Electricity Infrastructure. Jim was appointed to the Task Force with the mutual consent of the Governor, the Speaker of the House and the President of the Senate. The Task Force issued its report on



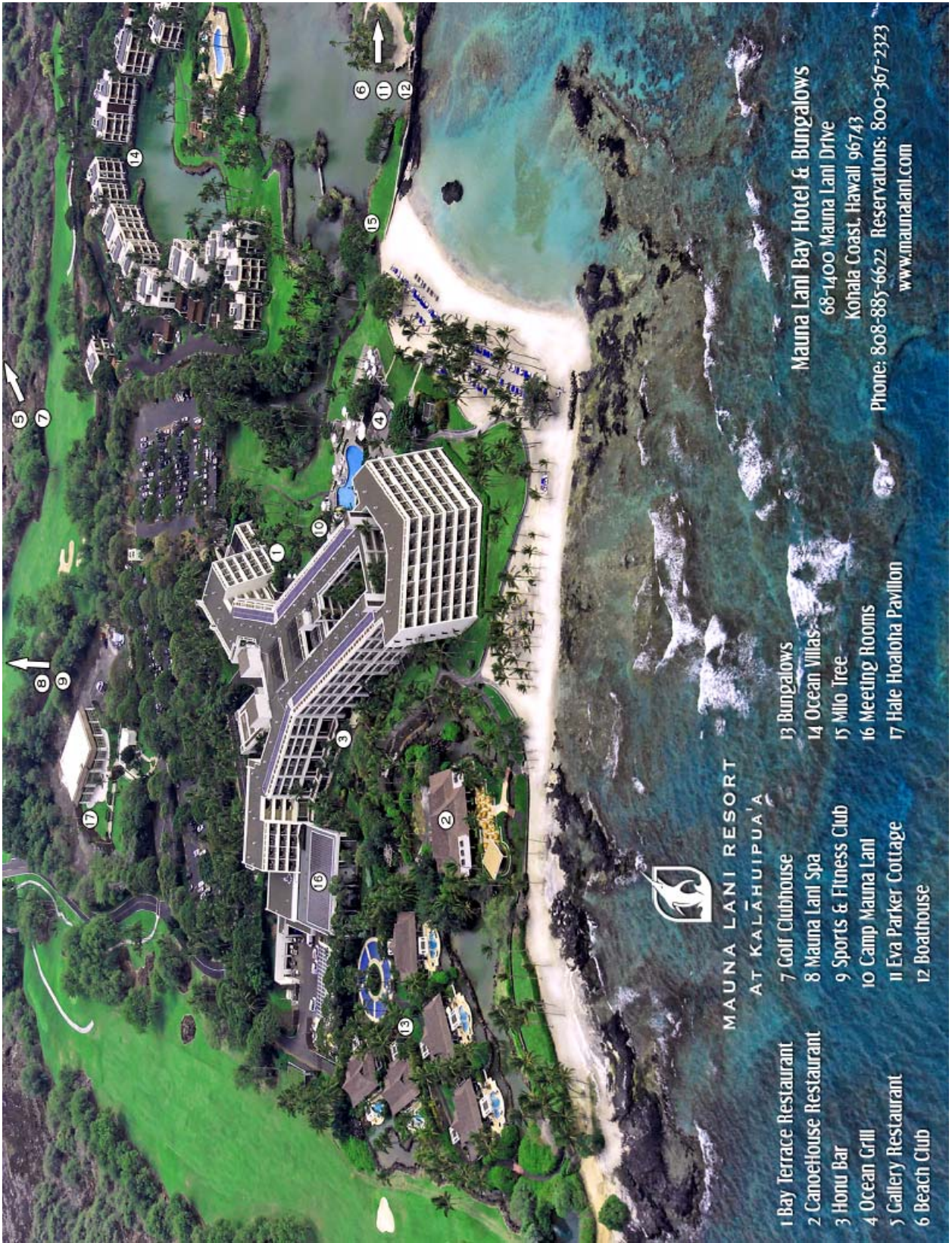
November 1, 2006. In 2004 Jim was appointed by Wyoming Governor Dave Freudenthal to the Wyoming Infrastructure Authority, a state instrumentality with funding authority whose goals include improving the state's electric transmission system, facilitating the increased utilization of Wyoming's coal and wind resources, and coordinating with other states in the western system power grid to address transmission constraints. From 2001 through 2007, Jim was in private practice and generally represented energy consumers in utility proceedings. From 1996 through 2000, he was a business executive involved in regulatory matters. From 1977 through 1996, he was in private practice and represented various utilities. Prior to private practice, he was an Administrative Law Judge for the Colorado PUC and an Assistant Attorney General representing the Colorado PUC. From 1968 through 1972 he was a Special Agent with the FBI. Jim received a bachelor's degree in Business Administration from Saint John's University in 1965 and a law degree from Fordham University in 1968.

**DAVID G. WALLER**

**Vice President, Customer Solutions, HECO**

Mr. Waller came to HECO from Pacific Resources, Inc. He first joined HECO in 1989 as Director, Fuel Resources. In 1992, he joined the Marketing Department as Director, Technical Services and was named Manager of the Energy Services Department in 1999. Dave holds a Bachelors degree in Chemical Engineering from Rose-Hulman Institute of Technology and a Masters in Business Administration from the University of Hawai'i. Prior to joining HECO, Mr. Waller held technical and managerial positions with Amoco Oil Company, Petro-Canada, and Pacific Resources. While serving in the U.S. Air Force, he worked as a Russian Linguist. Dave is a member of the Board of Directors for the Armed Services YMCA, the Community Board of the American Heart Association, and the University of Hawai'i Sea Grant Advisory Council.

# NOTES



**MAUNA LANI RESORT  
AT KALAHUIPUA 'A**

- 1 Bay Terrace Restaurant
- 2 CanoeHouse Restaurant
- 3 Honu Bar
- 4 Ocean Grill
- 5 Gallery Restaurant
- 6 Beach Club

- 7 Golf Clubhouse
- 8 Mauna Lani Spa
- 9 Sports & Fitness Club
- 10 Camp Mauna Lani
- 11 Eva Parker Cottage
- 12 Boathouse

- 13 Bungalows
- 14 Ocean Villas
- 15 Milo Tree
- 16 Meeting Rooms
- 17 Hale Hoaloa Pavilion

**Mauna Lani Bay Hotel & Bungalows**  
 68-1400 Mauna Lani Drive  
 Kohala Coast, Hawaii 96743

Phone: 808-885-6622 Reservations: 800-367-2323  
[www.maunalani.com](http://www.maunalani.com)

## CONFERENCE AGENDA AT A GLANCE

### Sunday, June 7, 2009

10:30 a.m. – 6:00 p.m.	Registration	Mauna Lani Lanai
11:45 a.m. – 12:45 p.m.	Lunch Presentation Sponsored by Mobile Future: (See email invite for more info.)	Ballrooms I - IV
1:00 p.m. – 5:30 p.m.	The Ways of the West A Critical Infrastructure Protection Tabletop Exercise Sponsored by NARUC	Ballrooms I - IV
6:00 p.m. – 8:30 p.m.	Welcome Reception	Milo Tree Lawn

### Monday, June 8, 2009

6:30 a.m. – 5:00 p.m.	Registration	Mauna Lani Lanai
7:00 a.m. – 8:00 a.m.	Continental Breakfast	Mauna Lani Lanai
8:00 a.m. – 8:30 a.m.	<i>E Komo Mai</i> (Welcome): ‘Oli, Opening Remarks, Opening Presentation	Ballrooms I – IV
8:30 a.m. – 10:00 a.m.	Meeting 1, Integrating Renewables: “Planning, Operations and Law”	Ballrooms I – IV
10:00 a.m. – 10:15 a.m.	Break	Mauna Lani Lanai
10:15 a.m. – 11:45 a.m.	Meeting 2, Telecommunications: “Telecom update on States’ Roles in the National Broadband Plan and Broadband Stimulus Package”	Ballrooms I – IV
12:00 p.m. – 1:30 p.m.	Western Conference Luncheon Keynote Presentation	Hale Hoaloha Pavilion
1:45 p.m. – 3:15 p.m.	Meeting 3 Sustainable Water Supply: “What Best Practices Will Keep the Tap Running?”	Ballrooms I – IV
3:15 p.m. – 3:30 p.m.	Break	
3:30 p.m. – 5:00 p.m.	Meeting 4, Electric Vehicles: “What Regulatory Policies Will Reduce Carbon Dependency at Reasonable Cost?”	Ballrooms I – IV
5:00 p.m.– 6:00 p.m.	Reception hosted by Applied Materials	Mauna Lani Lanai
6:00 p.m. – 9:00 p.m.	Luau Dinner	Poolside Lawn

### Tuesday, June 9, 2009

7:00 a.m. - 8:00 a.m.	Continental Breakfast	Ballrooms I – IV
7:00 a.m. – 7:50 a.m.	Commissioners Only Breakfast and Business Meeting	Puna Room
8:00 a.m. – 9:30 a.m.	Meeting 5, Smart Grid: “What Regulatory Policies are Necessary to Ensure Cost Effectiveness?”	Ballrooms I – IV
9:30 a.m. – 9:45 a.m.	Break	Mauna Lani Lanai
9:45 a.m. – 11:15 a.m.	Meeting 6, Natural Gas: “A Stunning Year: The Effect of the Current and Anticipated Economic and Political Environment on the Natural Gas Industry”	Ballrooms I – IV
11:15 a.m. – 11:25 a.m.	Natural Energy Laboratory of Hawai’i Authority	Board bus at Main Lobby (Bus leaves promptly at 11:30 a.m.)
12:00 p.m. – 1:00 p.m.	Lunch	NELHA
1:15 p.m. – 4:40 p.m.	Meeting 7, NELHA presentation and tour	NELHA
4:40 p.m. – 5:30 p.m.	Bus back to Mauna Lani Bay Hotel	

### Wednesday, June 10, 2009

7:00 a.m. – 7:50 a.m.	Continental Breakfast	Mauna Lani Lanai
7:00 a.m. – 7:50 a.m.	Energy Efficiency Discussion Coordinated by Dian M. Grueneich	Puna Room
8:00 a.m. – 7:30 p.m.	Meeting 8, Geothermal Presentation and Volcano Tour	Board bus at Main Lobby (Bus leaves promptly at 8:00 a.m.)





## **2009 WCPSC MEETINGS FINAL PROGRAM ADDENDUM**

### **OPENING REMARKS**

Marsha Smith, Idaho Commissioner and immediate past President of NARUC replaces Frederick Butler, President of NARUC.

### **MEETING 4**

Pete Cooper replaces Andrew Frank as a panelist.

### **MEETING 8**

The bus is scheduled to return to the Mauna Lani at 7:00 p.m.  
(rather than 7:30 p.m.)

### **SPEAKER BIOS**

(ALPHA ORDER)

#### **PETE COOPER**

##### **Managing Director, Better Place Hawai'i**

Pete Cooper is a member of the global development team for Better Place, an electric vehicle services company that is building electric vehicle recharge networks around the world. He is responsible for building the business in Hawaii and also supports business development activities in North America and Asia-Pacific regions. This activity includes: business planning and business management, CEO search, stakeholder communications/PR, infrastructure deployment planning, Hawaii operating company financing/fund raising, local, state and federal policy strategy/tactics, establishing and growing the interaction with the utility, and development of a broad array of partner relationships. Prior to joining Better Place, Pete spent over 20 years managing various technology development and manufacturing organizations in the high frequency communications industry. He has an extensive background in technology, project and business management, as well as product/process development, scaling and validation. In his last position before joining Better Place, Pete was the Director of Engineering Services at REMEC Defense and Space, where he managed all of the mechanical aspects of: product development, new product introduction, production support, technology validation and business development. Pete's focus on renewable energy is directly related to sustainable transportation and the possibility to end our addiction to fossil fuels. Pete received his B.S. in Mechanical Engineering from Carnegie-Mellon University and a MBA from Standard University Graduate School of Business.

**MARSHA H. SMITH**

**Commissioner, Idaho Public Utilities Commission, immediate past president NARUC**

Marsha H. Smith is serving her fourth term on the commission. Her current term expires in January 2015. Smith served as commission president from November 1991 to April 1995. Commissioner Smith is the immediate past president of NARUC, serves on the NARUC Board and Executive Committee and is a past chair of NARUC's Electricity Committee. She is an elected director of the Western Electricity Coordinating Council Board of Directors, co-chair of the National Action Plan for Energy Efficiency and co-chair of the Steering Committee of the Northern Tier Transmission Group. She represents Idaho on the Western Interconnection Regional Advisory Body and chaired the Western Interstate Energy Board's Committee for Regional Electric Power Cooperation from October 1999 to October 2005. She is a member of the National Council on Electricity Policy Steering Committee, the Harvard Electricity Policy Group, the Executive Committee of the Western Conference of Public Service Commissioners, the Idaho State Bar and board vice president of the Log Cabin Literary Center. Smith received a B.S. in biology/education from Idaho State University, a master of library science degree from Brigham Young University and her law degree from the University of Washington. Before her appointment to the commission, Commissioner Smith served as deputy attorney general in the business regulation/consumer affairs division of the Office of the Idaho Attorney General and as deputy attorney general for the Idaho Public Utilities Commission. She was the commission's director of Policy and External Affairs and chair of the NARUC Staff Subcommittee on Telecommunications.