



April 16, 2004
Breakout Group Recommendations

Oil Production and Exploration

Session 1

- Assemble working group to develop best practices:
 - Promoting positive investment climate taking the environment into consideration
 - Environmental protection given business constraints
- Express interest in Alberta oil sands fuel, and pipeline & refinery development
- Explore enhanced “oil” workforce mobility; and regional cooperation on CO₂ emissions abatement with Canada
- Resolve to develop a transition strategy to a more sustainable transportation fuel and chemical feedstock economy
- Price things right:
 - Following the WGA’s Enlibra principle of balance, reinforce the idea that decisions to develop energy resources should be based on a full accounting of environmental and social impacts
- Investigate potential tax incentives to increase the use of hydrogen transportation fuels generated from renewable refining sources
- Support increased research spending for enhanced oil recovery

Petroleum Products: High Prices, Disruptions and Price Spikes

Session 2

Mitigating High Prices

Near-Term Options

- Reduce petroleum consumption to 15 percent below 2003 levels by 2020
 - Double CAFE standards
 - Increase penetration of hybrid fuel vehicles
 - Adopt tire efficiency standards
- Use more fuel efficient replacement tires with proper inflation
- Improve fuel economy in government fleets
- Improve private vehicle maintenance
- Create incentives for greater penetration of hybrid technology

Mid-Term Options

- Double the fuel efficiency of current model light-duty vehicles to 40 miles per gallon – CAFÉ
- Use natural gas-derived Fischer-Tropsch fuel as a 33-percent blending agent in diesel
- Initiate a high penetration information and education campaign

Long-Term Options

- Introduce light-duty fuel cell vehicles in 2012, increasing to 10 percent of new vehicle sales by 2020, and 20 percent by 2030
- Initiate a high penetration information and education campaign

What is needed to upgrade our petroleum pipeline system?

Consider developing utility corridors to reduce encroachment

- Continue and, when necessary, encourage the dialogue between the state and federal officials
- Federal level sets the standards (floor) but must leave flexibility for states that want to take additional steps to protect consumers and residents
- Maintain Communication and Cooperation with Industry
- Need to ensure that the infrastructure is adequately maintained and protected

How can the detrimental impacts of tight refining capacity be mitigated?

- Develop utility corridors to reduce encroachment and mitigate environmental justice issues that prevent refinery development.
- Implement the recommendations for improving fuel economy

Future of Natural Gas

Session 3

Western Governors should:

- Commit to utilizing an integrated planning approach to energy policy among the Western states, the U.S. government, and the state and national governments of Canada and Mexico
- Create more opportunities (like this Summit) for a representatively balanced group of natural gas producers, environmental stakeholders, consumers, regulators and politicians to exchange information and to do such things as (a) develop cost-benefit comparisons between natural gas and renewable energy alternatives and (b) allow stakeholders to define terms such as “energy efficiency standards” and “environmentally acceptable natural gas production”
- Develop policies and create incentives (e.g., tax incentives, heritage funds) to reduce dependency on non-renewable resources and promote renewable energy
- Today, actively promote and encourage energy conservation and energy efficiency (e.g., require higher energy efficiency in new construction)
- Develop comprehensive supply-side policies to ensure stable, reliable natural gas prices. These policies should (a) allow new production in an environmentally safe and economically viable manner, and (b) establish environmental guidelines and safety criteria

WHAT PRICE FOR NATURAL GAS?

SESSION 4

- Remove disincentives for expanded utility investments in cost-effective energy efficiency
- Upgrade building efficiency standards
- Mandate that the time it takes for federal drilling permits be no longer than 46 days.
- EA & EIS determinations should be done consistent with deadlines and procedures in existing regulations – insure all stakeholders are involved in the process & consultation is complete.
- Reduce environmental footprint by using best drilling methods – firm commitment by industry to use new technologies where economically & technically feasible.
- Infrastructure – low margins of excess capacity in pipeline infrastructure – improve the efficiency, quality, cooperation at the state, tribal & local levels of the permitting & siting process of natural gas infrastructure construction
- Increase regulatory funding for permitting & post-lease inspection & enforcement
- Governors should work for better coordination with FERC on siting projects including LNG terminals & pipelines.
- Improve federal government forecasting – Federal government forecasters should bracket uncertainty in natural gas production – how bad could it get or how good could it be in order to be able to frame policy around this. Provide unbiased forecasts. Policy isn't based on realistic projections.
- Encourage utilities to make more diverse investments in electricity resources considering gasified coal, advanced nuclear, solar, wind, geothermal, energy efficiency/conservation, industrial energy efficiency, natural gas, advanced refinery cogeneration.
- Support bi-partisan comprehensive energy legislation.

Using Energy More Efficiently

Session 5

- Executive Branch Leadership is Critical (government directives, “lead by example”)
- Public Information, Education and Outreach Must Continue and Intensify
- Revise/Enhance Current Utility Regulatory Structure and Rate-Making Design
- Adopt Incentives to Encourage Increased Market Penetration of EE Technologies

Capitalizing on North America's Renewable Energy Resources

Session 6

- Issue a Best Practices document on interconnection, net metering, and transmission of renewable resources using best-in-class policies already in place in individual WGA states.
- Support actions by individual states adopting Renewable Portfolio Standards (RPS) and propose a western regional RPS tailored specifically to the region's considerable resource base.
- Develop a western regional approach to harmonize renewable energy policies

similarly across western states, including a consideration of tax incentives, subsidies, level playing fields, research and development, and training.

- Convene a stakeholders meeting of all involved parties, including project developers, financiers, policy-makers, and tribes (CERT) to develop a actionable plan for the development of 1000 MW of concentrated solar power (CSP) in the Southwest by 2010.

Providing a 21st Century Future for Coal

Session 7

Coal Is And Will Continue To Be Major Energy Source

Major Agreement: Work Towards Zero Emissions

- Need to pursue advanced coal technologies as swiftly as possible while in parallel pursuing short-term solutions.
- Work collaboratively with PUCs and DOE to incentivize and evaluate regulatory, economic and technology risk.
- Influence the policy framework, in particular transition policy, and pursue goal vs. technology-based incentives.
- Pursue up-front collaborative planning efforts.
 - Consider risk
 - Consider financial impacts to consumers.

Hedging Against Climate Change

Session 8

- Governors should pursue net reductions in GHG emissions through action at the state, regional, federal, tribal and international levels.
 - Reduce net GHG emissions through cap and trading system
 - Accelerate zero-emission technologies in energy sector
 - Reduce carbon emissions in transportation sector
- Establish regional cap & trading system to lead way toward national and international systems
 - specific targets and timetables
 - flexible mechanisms to allow industry to find cost-effective solutions
 - create common currency for GHG emissions
- Initiate registry to provide verifiable accounting
 - Promote participation in 1605(b) voluntary national registry; harmonize with states
- Similar to California/Northwest governors, Northeast Regional Greenhouse Gas Initiative and New England Governors/Canadian Premiers
- 20% RPS by 2020 at state and federal levels
 - Consider zero-emission tech. standard
- Create incentives for zero-emission technologies
 - IGCC, hydro, sequestration, nuclear, fusion, other
 - extend and expand PTC; USDA incentives; residential loans and grants

- Adopt appropriate permitting and regulatory schemes
 - IGCC as BACT; permitting for sequestration; PUCs incorporate climate hedging value for ZETs; build renewable energy infrastructure; reduce and/or capture coal mine methane; avoid EPA restricting state permitting authority
- Increase R&D for ZETs
 - Renewables, sequestration partnerships, Future Gen, other ZETs
 - Participate in DOE strategic plan dialog
- Improve building sector efficiency
 - Work with housing agencies; mandatory Energy Star in new buildings; CA appliance standards
- Increase public awareness and overcome institutional cultural barriers
- States adopt vehicle carbon emission standards (e.g. CA)
- Enact state and federal tax incentives (fees/rebates) for improving fuel efficiency
- Raise federal CAFÉ standards and close SUV CAFÉ and tax loopholes
- Adopt renewable fuels standards
- Sponsor public awareness campaigns

Providing a Reliable and Efficient Western Electricity Grid

Session 9

Governors should:

- Support mandatory reliability standards (that would address, for example, right-of-way maintenance, certification of system operators)
- Create a formal regional state entity
 - Work with FERC to address competitive western wholesale markets, while states retain decisions on retail access
 - Ensure regional coordination on transmission planning/expansion
 - Address financing of new transmission
- Support the review and reform, if needed, of state transmission certification/siting laws
 - Process should determine need first
 - WGA Protocol is a good start on interstate coordination
- Support a phased approach to meeting the objectives of an independent system operator/regional transmission organizations
- Support the development of vibrant and secure regional electricity markets that include a diverse mix of supply (including renewables) and demand resources (e.g., demand response)
- Support efforts to stimulate the deployment of new transmission technologies
- Support funding for corridor designation work on federal lands
- Support expanded funding for training of electric system engineers (e.g., via universities) and thereby expand the supply of engineers
- Recognize that Attorneys General need to be involved

Fuel Choice and Transmission

Session 10

Themes:

- Without transmission, fuel & generation choices are limited
 - Lower cost and cleaner options don't get consideration
- Transmission policy is needed: National & Regional, but not State
- Uncertain legitimacy of transmission planning venues
- All power supply options must be considered: remote & at load
- Renewables have a place

Recommendations

- Advocate the formulation & adoption of Transmission Policy
 - Level the playing field between generation & power supply options
 - Full utilization of existing transmission capacity, before building new
 - Elimination of discriminatory practices: rate pancaking, renewables
 - Proper cost allocation: beneficiaries & grid reliability
- Legitimize the regional transmission planning venues within the WGA footprint
 - Stakeholder Input: governmental, tribal, public, and industry
 - Consideration of power supply & generation options: remote & at load
 - Proactive: lead time for transmission is longer than for generation
- Incentives for renewables (PTC) & improved environmental performance

Regulation of the Electric Power Industry in the 21st Century

Session 11

- Establish reasonable expectations for energy rates for customers. Without communications default expectation is that prices will return to pre-western power crisis levels.
- Realign regulatory incentives so that procurement processes encourage acquisition of new generation in a competitive manner.
- Establish a formal region wide policy group to assess issues and make recommendations to state decision makers on regional energy issues with a public funding commitment from each state, compositions might include existing state commissions.
- Revise certain regulations to bring greater certainty in support of utility financing for new growth.
- Develop structural and financial regulations at the state level that provide for adequate oversight of utility financing, non-utility acquisitions, affiliate transactions, and holding company structures.

Ways in Which Public Power Contributes to Meeting North American Energy Goals

Session 12

As the western governors seek to promote public power as a means of achieving a cleaner and more efficient energy supply, we recommend that governors:

- Encourage and support the efforts of public power to foster independent and coordinated operation of the western grid but not pursuant to standard market design.
 - Encourage and support the efforts of public power to improve the efficiency transparency and availability of energy trading in the Western power grid
 - Transmission using an integrated process including non-wires solutions.
- Governors should energetically work to expand the benefits of public power such as:
 - Through reauthorizing the Renewable Energy Production Incentive (REPI), authorizing tradable tax credits for renewables, and increasing BPA borrowing authority; and
 - To protect public power from multiple threats (such as privatization, requiring power sales at “market rates” rather than “at cost”, repealing Public Utility Holding Company Act, improving FERC protection of “reasonable” wholesale rates, emerging international trade rules on energy.
- Recognize regional differences and embrace different approaches to the same goal — a more efficient, cost-effective competitive wholesale marketplace. Western governors should actively support the WesTTrans.net initiative. The WGA should also continue its efforts to improve western planning and effectively monitor western markets. WGA should work to reduce barriers to the development of clean, self-built generation options.
- Utilize development dollars, tax credits and other policy mechanisms to help public utilities (including rural cooperatives, native utilities and consumer owned utilities) serve their customers better through improved access and reliability tied to new, renewable and energy efficient technologies;
- Use their unique “bully pulpits” to ensure that the will of the consumers is felt in RECs and F&T’s boardrooms as necessary.

Panel on Achieving Needed International Collaboration

Session 13

Increase international collaboration with all relevant entities participating as full partners beginning in the early planning stage. Stakeholders include national, state, provincial, local and tribal governments and First Nations, as well as non-governmental entities. Regional collaboration models include the Joint Advisory Committee (JAC) on the Mexico-US border and the International Joint Commission (IJC) on the Canada-US border. One avenue for stakeholder participation is the North American Energy Working Group (NAEWG).

- Collaborate on R & D and educational exchange programs to promote clean energy technology, renewable energy and energy efficiency.
- Establish a North American cap and trade emissions regime.

- Work to harmonize regulations and standards, including emission standards of new energy projects.
- Establish transboundary electric reliability provisions.
- Increase motor vehicle fuel efficiency standards.

Models for Sustainable Energy Development

Session 14

Main Recommendations for Action by WGA

- Require consultation with ALL stakeholders and experts earlier in project planning and development discussions
 - Resource experts (native and non-native)
 - Residents
 - Local, state and federal government representatives
 - Project implementers
- Initiate development of North American Energy Strategy
 - Understand and embrace sustainable development as intended by 1992 and 2002 Earth Summits
 - Take a position on sustainable development that will promote its implementation by the extractive industries
- Spotlight best practices of sustainable energy development on public lands
Recommendations for Steps Along the Path to a Hydrogen Economy- Session 16

Technology:

- Transportation and the hydrogen fuel cell car are the preferred entry points to the hydrogen economy.
 - Distributed power generation seems to lack markets...
 - ...while clean performance vehicles appeal to customers.
- Assure that the research and development program is not fragmented.
 - States should focus on a coordinated adoption of the federal research and deployment program.
- The fuel cell car must avoid premature introduction and the associated bad experience and negative press.
 - Allow a complete incubation process for the hydrogen fuel cell car.
 - Research and development must precede the development of policies and incentives for market introduction.

Recommendations for Steps Along the Path to a Hydrogen Economy- Session 16

Political:

- States are encouraged to work with existing multi-state organizations to communicate and adopt best-practice business models.
 - Economic development.
 - Business models.
 - Involvement of institutional investors.
 - Development of codes and standards.

Create an Hydrogen Information Clearing House.

- States' governments and their organizations must actively participate in marketing the societal benefits in the context of

- The environment (global and local)
- Energy security
- Economic competitiveness.

Recommendations for Steps Along the Path to a Hydrogen Economy- Session 16

Financial:

- The long-horizon payback of the technology requires to engage and attract new sources of development capital
 - institutional investors with a public benefit missions (e.g. Calpers, university endowments, or pension funds)
 - public-private partnerships
 - social responsible venture capital funds
- Taxation
 - Do not tax hydrogen fuel.

The Role of Nuclear Power

Session 17

- There are strong concerns from native nations about environmental and cultural impacts of mining on native lands, and if those nations were to ban uranium mining would the federal government honor the action, and take actions to level the playing field with groups of color in high poverty areas.
- There has to be serious discussion of how we can achieve an increased amount of non-emitting electricity. Specifically, addressing the CO2 problem was urged to be a focus.
- When comparisons are made, use similar assumptions for such factors as subsidies, regulation, cost of competing energy sources, and technology maturity. State leadership in market-based greenhouse gas controls extended over the Western region—also Mexico and Canada—might start a trend.
- There was consensus that an open dialogue on the role of nuclear power must continue and should include public education on the energy-environment connection. Peer reviewed, science-based evaluations should underlie decisions.
- Be aware that the final answers may not be available until the technologies are tested, so endorsing or condemning an approach too early would not be wise.
- Whenever energy technologies are developed, it is wise to seek efficiency increases at generation and at point of use, and to assure capabilities to manage intermittent loads to allow solar and wind to flourish
- There are large government subsidies promoting Generation IV technology vs. efficiency and renewables
- New nuclear plants are not currently economical; however, a ban on nuclear in North America will significantly impact the West
- There needs to be a more equitable distribution of waste disposal responsibility so that it doesn't all fall on the West
- A look at what other nations are doing and considering differences in their regulatory and financial structures shows that we have much to learn and the book must be kept open

Security of the North American Infrastructure

Session 18

- Form a working group of federal, state, and provincial homeland security officials to bring together data from the public and private sectors, actively facilitating trust building. Federal, state, and provincial protocols for data collection must be standardized and government officials must take responsibility for protection of data. (e.g., preemption from FOIA)
- Utilizing the Alberta model, develop a simple approach to assessing interdependencies. This effort by state homeland security officials (in coordination with federal officials) can draw on university and national laboratory, as well as industry, input to create a hierarchy of critical interdependencies. This effort should ultimately define an approach to address interdependencies which includes preemptive energy policy elements like renewables, efficiency, and distributed generation
- To assure longer-term energy security, steps must be taken immediately to foster a public-private partnership for strategic investment in infrastructure, assure an adequate workforce educated in engineering sciences and, internationally, promote the transfer of energy technology as it develops.

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