

San Diego Association of Governments
BOARD OF DIRECTORS

June 22, 2001

AGENDA REPORT No.: 01-6- **5**

Action Requested: APPROVE

ENERGY ISSUES: INTERIM SAN DIEGO REGIONAL
ENERGY STRATEGY

Introduction

The San Diego Regional Energy Plan (REP) was last updated and adopted by the SANDAG Board of Directors in December 1994. The REP analyzes overall energy supply and consumption in the San Diego region and recommends actions to support adequate, affordable, and environmentally sound energy supplies, to improve efficiency and to promote sound alternatives. The San Diego Regional Energy Office (SDREO) was formed in 1996, and became fully operational in 1998 with the mission to maintain and implement the energy policy and planning recommendations contained in Regional Energy Plan. Additionally, SDREO serves the region as an independent clearinghouse and resource for energy information, resources and solutions.

SDREO reconvened the Regional Energy Advisory Committee in October 2000 under contract with SANDAG to update the Plan and develop the capabilities to fully implement its recommendations. After several meetings of REAC and technical subcommittees, SDREO has developed an Interim Regional Energy Strategy (attached) containing short-term actions which respond to the critical electricity supply issues facing the region this summer.

SDREO will continue to work with the REAC to develop a more comprehensive strategy that will address the longer-term challenges. The final Regional Energy Strategy, which will update the Regional Energy Plan, is expected to be complete for Board action in early 2002. It is my

RECOMMENDATION

that the Board of Directors approve the draft Interim Regional Energy Strategy as proposed by SDREO and the REAC, and continue to support the development of the longer-term Regional Energy Strategy, which will update the Regional Energy Plan.

BOB PARROTT
Interim Executive Director

Attachment

Key Staff Contacts: Steve Sachs, SANDAG Staff (619) 595-5346; ssa@sandag.org
Kurt Kammerer, Executive Director, SDREO, (619) 595-5630;
kkam@sdenergy.org



Interim San Diego Regional Energy Strategy 2001

-An Interim Strategy to Promote Sound Energy Alternatives and a Regional Planning Framework for a More Secure Energy Future for the San Diego Region-

Background

The San Diego region is projected to spend approximately \$5 billion more in 2001 for electricity and natural gas than it spent in 1999. While electricity demand in San Diego increased by over 29% between 1990 and 2000, the growth in supply has lagged significantly with a 5% growth in generation and a 14% growth in transmission.

Energy is truly the lifeblood of the region's economy. When energy is plentiful and inexpensive-economies thrive and prosper, but shortages and dysfunctional markets can drive significant economic dislocation and loss of jobs.

Much has changed since the region developed and adopted the last Regional Energy Plan in the early 1990's. At that time, California and San Diego enjoyed an excess of energy supply, relatively low prices, high reliability and a predictable regulatory environment. The state's attempt to restructure the electric industry with the enactment of AB 1890 in 1998, triggered a series of regulatory and market changes that have resulted in the current energy crisis.

Other western states are facing similar shortages, resulting in a scarcity of resources to import. So San Diego must strive to balance:

- Energy requirements of the region,
- Environmental impacts of in-area generation and energy consumption,
- Consequences of over reliance on import of out of region and out of state generation,
- Increased supply versus decreased consumption, and
- Increased reliance on natural gas versus diversifying through the use of alternatives, such as renewables.

Regional Energy Strategy Goal

The Interim San Diego Regional Energy Strategy (RES) is a short-term, interim strategy that provides a sound planning process and a framework that can achieve consensus about how to meet our region's energy needs. It will establish the foundation for the update of the longer-term Regional Energy Strategy (RES) that will be completed by early 2002. The final Strategy will outline a series of short, medium and long-term measures necessary to secure San Diego's future prosperity through cost effective measures that ensure energy sufficiency consistent with our high degree of environmental quality.

Objectives

The objectives of the RES support achieving the overall desired goal of achieving energy sufficiency. These objectives are as follows:

- ❑ To achieve energy security and minimize the negative impacts of shortages on consumers, businesses, governments and the economy.
- ❑ To increase the diversity of the region's energy resources, particularly high-efficiency combined heat and power distributed generation and renewable resources.
- ❑ To significantly increase energy efficiency in the region through both immediate and sustained energy efficiency measures.
- ❑ To minimize the adverse environmental impacts of the region's energy use.
- ❑ To increase public awareness of energy-related issues in the region so consumers can play a more active role in future energy planning and decision-making.

Guiding Principles

1. The region's energy needs should be met with a diverse portfolio of resources.
2. The region should develop indigenous resources to the greatest extent possible to protect from over reliance on resources from outside the region.
3. The region should improve energy efficiency and reduce peak demand to reduce dependence on imported energy, which would be generally less expensive and more expedient than building new power supply infrastructure.
4. The cost effectiveness of all alternatives should be evaluated and when evaluating options, all costs and impacts should be considered.
5. Efficient energy supply, distribution, and use should be factored into land-use planning and development decisions.
6. Local public agencies should take a lead role in implementing cost-effective energy efficiency and energy supply measures in public facilities.
7. Public awareness and education is an important mechanism to empower consumer choice and widespread implementation of energy efficiency.

Proposed Interim Energy Strategies

Legislative and Regulatory

1. Adopt a set of legislative and regulatory Guiding Principles that protect the interests of the region. (SANDAG's Executive Committee approved initial guiding principles in April 2001.)
2. Continue to engage in the appropriate legislative and regulatory processes to ensure the interests of the region are met as outlined in the Guiding Principles, SANDAG's Legislative Program, and the Regional Energy Strategy.

Supply: Electricity

3. Place a high priority on the deployment of small-scale, environmentally friendly self-generation technology applications, in particular high-efficiency combined heat and power and renewables that can be quickly placed on line.
4. Upgrade the regional and state transmission infrastructure (e.g. the proposed Valley-Rainbow Transmission and expanded transmission capability to Baja, California) to eliminate constraints in the system that limit the development of robust markets and distort market behavior.

5. Owners of existing power plants should be strongly encouraged to expedite re-powering (e.g., South Bay and Encina Power Plants) to increase output of in-region generation capacity, reduce their environmental impacts, and create emission offsets to provide the means to develop other generation projects throughout the region.
6. Local public agencies should evaluate the feasibility and benefit of public power purchasing strategies; in particular, partnerships with generation developers to overcome barriers to development, aggregation of consumers and securing long-term contracts for reasonably priced electricity and natural gas.
7. Support the building of new power plants throughout the region that achieve high levels of emission control and other mitigation for environmental impacts.
8. Evaluate the use and cost effectiveness of technologies to increase the efficiency and utilization of existing transmission and distribution infrastructure.

Supply: Natural Gas

9. Expand pipeline capacity into the region to achieve and maintain adequate supply margins to eliminate the possibility of gas curtailments.
10. Evaluate the potential benefits of natural gas storage and liquefied natural gas infrastructure to insulate the region from future supply disruptions.

Demand: Electricity and Natural Gas

11. Place a high priority on the retrofit of all existing buildings to the current standards of efficiency as called for in California Title 24 (Energy Code).
12. Place a high priority on encouraging the purchase of energy efficiency appliances and to permanently remove older, inefficient appliances from service (rather than move them to alternative uses).
13. Place a high priority on efficient site and building design and construction to ensure that all new buildings incorporate the highest levels of efficiency as practical.
14. Place a high priority on the deployment of interval (real-time) meters to allow consumers to modify usage in response to market conditions.
15. Adopt policies that support the use of energy efficient practices, such as casual dress code in business environments.
16. Place a high priority on the development of programs to reduce the demand of natural gas, such as the use of high-efficiency on-demand water heating systems, and the deployment of solar hot water heating for domestic hot water and pool heating.
17. Place a high priority on incorporating into land-use elements of General Plans strategies that reduce urban heat island effects and reduce energy consumption (e.g. optimizing building orientations, increased urban vegetation, narrower street widths, light-colored surfaces).

Economic Development and Other

18. Place a high priority on fostering the development of energy technologies, products and services as an important job creating and economic development opportunity.

19. Provide public agencies' lead on developing and implementing aggressive energy action plans that encourage the support of the goals and objectives of the RES throughout their respective communities.
20. Pursue an aggressive education and outreach program to better inform consumers and business on the benefits of more efficient energy use.

For More Information

For more information on the RES, please see the SDREO website at <http://www.sdenergy.org>, email at sdreo@sdenergy.org or call (619) 595-5630.