MEETING NOTICE AND AGENDA

ENERGY WORKING GROUP
The Energy Working Group may take action on any item appearing on this agenda.

Thursday, November 16, 2006
11:30 a.m. to 2 p.m.
SANDAG, 7th Floor Conference Room
401 B Street, Suite 800
San Diego, CA  92101-4231

Staff Contact: Susan Freedman
(619) 699-7387
sfr@sandag.org

AGENDA HIGHLIGHTS

• POLICY SUBCOMMITTEE RECOMMENDATIONS FOR ENERGY WORKING GROUP (EWG) LEGISLATIVE EFFORTS
• 2007 REGIONAL TRANSPORTATION PLAN (RTP) WHITE PAPER ON ENERGY

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1. WELCOME AND INTRODUCTIONS

+2. SUMMARY FOR NOVEMBER 1, 2006, MEETING

Please review the attached meeting summary and provide any comments.

3. PUBLIC COMMENT AND COMMUNICATIONS

Anyone who would like to address the Energy Working Group (EWG) on a topic not on the agenda should do so at this time.

+4. EWG CONFLICT OF INTEREST INFORMATION

As follow-up to the November 1, 2006, meeting, staff will provide an update on SANDAG’s review of the EWG.

+5. EWG LEGISLATIVE FORUM WITH SENATOR KEHOE

The forum will take place on Wednesday, November 29, 2006, at SANDAG from 9 a.m. to 12 noon. Attached is the ‘Save the Date’ flier.

+6. POLICY SUBCOMMITTEE RECOMMENDATIONS FOR EWG LEGISLATIVE EFFORTS

The EWG Policy Subcommittee will present several legislative proposals to the EWG for discussion. The EWG is asked to provide input on these proposals and recommend items to be presented at the Energy Legislative Forum.

7. UPDATE ON EWG RECOMMENDATION ON THE SUNRISE POWERLINK TRANSMISSION PROJECT (SPL)

At its November 3, 2006, meeting, the SANDAG Regional Planning Committee approved the EWG recommendation to take no position on SPL at this time. The SANDAG Board will address this item at its November 17, 2006, meeting.

+8. 2007 REGIONAL TRANSPORTATION PLAN (RTP) WHITE PAPER ON ENERGY

A number of white papers are being developed for the 2007 comprehensive RTP. Staff will present the draft white paper for energy demand and infrastructure. The EWG is asked to provide comments on the attached white paper as part of the development of the 2007 RTP.
9. **2007 EWG MEETING CALENDAR**

   Please see attached calendar of regularly scheduled EWG meetings for 2007.

10. **SUGGESTED MEETING TOPICS FOR NEXT MEETING**

   EWG members should suggest items to be discussed at the next or future meetings.

11. **ADJOURN**

   The next EWG meeting is scheduled for January 25, 2007, from 11:30 a.m. to 2 p.m. The December EWG meeting (scheduled for December 21) has been cancelled.
AGENDA ITEM NO.: 2

Action Requested: APPROVE

MEETING SUMMARY FOR NOVEMBER 1, 2006, MEETING

File Number 3003000

AGENDA ITEM #1: WELCOME AND INTRODUCTIONS

Co-Chair Henry Abarbanel called the meeting to order.

SPECIAL ITEM: CONFLICT OF INTEREST

Julie Wiley, SANDAG Legal Counsel, began by stating that some voting members and some members of the public have a financial conflict of interest which is prohibited under California law. Members of the public may only speak once they have filled out a Request to Speak form or when one of the voting members of the EWG asks a direct question. Voting members must state the nature of their conflict of interest for the record and then leave the room. The only time they may speak afterwards is to exercise their First Amendment right as a member of the public. They must fill out a Request to Speak form, be called to speak, and leave the room afterwards.

Bill Reed, SDG&E, asked if there are any items in the EWG that SDG&E does not have a conflict of interest on, and should they leave the group entirely. Ms. Wiley stated no, they should only leave during items pertaining to SDG&E.

Mr. Reed, SDG&E, stated that these are regional energy issues and SDG&E is fundamentally involved in all of them so therefore, it seems there is no place for the organization on this committee. Ms. Wiley stated she would need to do a full evaluation based on the facts of all types of issues presented to the group. The present discussion does demonstrate a conflict of interest; therefore, they should leave the meeting.

Mr. Reed asked if there is any provision that allows for a waiver of conflict of interest. Ms. Wiley answered that the only time this is possible is in order to have a quorum, if too many members have been disqualified. A random selection would be held to meet a quorum to conduct business.

Paul O’Neal, NCEDC, stated he has two clients who could be impacted by these discussions so he will leave. Regarding the Sunrise Powerlink transmission project (SPL), Mr. O’Neal stated he made recommendations for the EWG as chairman of the EWG’s resources subcommittee. Susan Freedman, SANDAG, stated that Mr. O’Neal wrote the cover letter for today’s SPL agenda item, and that the subcommittee’s recommendation was discussed by the entire subcommittee, including Mr. O’Neal and SDG&E.
Steve Zolezzi asked why Ms. Wiley is just now bringing this up. Ms. Wiley stated that SANDAG has many committees and she just became aware of the issue.

Councilmember Donna Frye, City of San Diego, stated that the citizens have a right to have energy decisions made by people without a financial conflict of interest. She asked Ms. Wiley to complete a deeper analysis of what is allowed by law.

AGENDA ITEM #2: MEETING SUMMARY FOR THE SEPTEMBER 28, 2006, MEETING

Councilmember Abarbanel stated that any questions regarding the minutes be directed to Susan Freedman, SANDAG.

The EWG approved the meeting summary.

AGENDA ITEM #3: PUBLIC COMMENTS AND COMMUNICATIONS

There were no comments or communications related to items not on the agenda.

AGENDA ITEM #4: RESOURCES SUBCOMMITTEE RECOMMENDATIONS ON THE SPL PROJECT

- **Project Background**

  Susan Freedman, SANDAG, gave a presentation on the background of the SPL project. She stated that SPL is a 150-mile, 500KB transmission line from El Centro to San Diego. It would be the third electric transmission corridor into the region. SDG&E filed an application in August 2006, with the California Public Utilities Commission (CPUC), and they opened the reading in September. A needs assessment and development of Environmental Impact Recommendations are currently underway. Draft reports are anticipated during the second quarter of 2007. The SANDAG Board of Directors asked the EWG for a recommendation on SPL for their November 17 meeting. The EWG recommendation will first be presented to the SANDAG Regional Planning Committee on November 3.

  The goal of the Regional Energy Strategy (RES) is to “present a diverse mix of resources to meet our energy needs in San Diego.” This is broken down into specific priorities:

  - an emphasis on in-region generation
  - 15 percent renewable power by 2010 (state law now requires 20 percent renewable by 2010)
  - increased transmission capacity as needed

  In San Diego, 1000 megawatts of renewable energy is needed to meet this target. Currently 250 megawatts come from renewable sources. The Stirling Energy Systems solar project application would bring 300 megawatts imported to the region.
With SPL, it is unclear what total amount of renewable energy would be delivered by 2010. It is also unclear whether this project is the best choice to meet the RES goals following the Preferred Loading Order:

1. Energy efficiency and demand response
2. Renewable sources
3. Distribution generation
4. Conventional power plants
5. Transmission

The SPL could potentially fit into different places in this Loading Order. The California Energy Commission (CEC) is mainly concerned with transmission. They recognized the SPL as one of five near-term vital transmission projects. They were not specific about a route, simply about adding transmission in San Diego.

In October 2006, the CEC responded to a U.S. Department of Energy federal congestion study which identified Southern California as a “critical congestion area.” The CEC stated, “San Diego’s problems are acute and graphically illustrate the impact of adequate transmission.”

The Resources Subcommittee has two main concerns and unresolved questions.

1. Would the SPL in 2010 hinder other RES goals for in-region power? Does 1000 megawatts imported rule out the replacement of South Bay, Encina, or the ENPEX 750 megawatts plant in Sycamore Canyon?
2. Would the SPL address the RES goal of renewable energy?

The EWG had California ISO give a presentation in August 2006. ISO’s conclusion was that there is a need for SPL in the San Diego region. They came up with 24 scenarios but ruled them out for economic and other reasons. SANDAG has not received a copy of the economic assessments of those alternate scenarios yet.

There are some viable options for electric needs for 2010, but more information is needed to decide whether or not they address other needs, such as renewable energy as well. Councilmember Abarbanel and Ms. Freedman will be presenting this recommendation to the Regional Planning Commission (RPC) on November 3. They will continue to track the SPL regulatory proceedings and report back to the EWG and RPC. Ms. Freedman emphasized that the EWG needs to make a recommendation to the RPC on November 3.

**Discussion**

Alan Ball, Qualcomm (large business), asked about the uncertainty over associated costs with SPL. Ms. Freedman stated that she did not choose to discuss costs at this meeting because the comparisons would not be “apples to apples.” Cost of resource options was discussed at the resources subcommittee. SPL application states it will cost $1.3 billion, a different power line states a cost of $350 million, but some system upgrades would need to occur that add costs. A portion of these costs would be paid by SDG&E customers. The cost of power plants is borne by the plant owner.
Councilmember Abarbanel stated the work of the Resources Subcommittee was to find ways to satisfy the goals of the RES, including but not limited to SPL. The recommendation on page 14 of the agenda materials is the suggestion of the subcommittee to be adopted by the EWG today. It recognizes the possible need for transmission to address the following:

- delivery of renewable energy generated out of the region, into the region
- reliability
- cost to rate-payers

Councilmember Abarbanel stated the subcommittee did not review the ISO 24 scenarios. They focused on two possible scenarios: SPL and the Lake Elsinore Advance Pump Storage (Leaps) project, which brings energy from Riverside County, possibly a large wind facility and a solar facility in the Mojave Desert. These are the two main options. Neither is fully developed for the subcommittee to take any position. They need cost estimates, reliability, and access to renewables before making a decision. Councilmember Abarbanel stated the recommendation should be to take no position because it is premature.

Mr. Ball stated that he supports this recommendation but asked if Leaps is as certain to be completed as SPL. Councilmember Abarbanel responded that he does not know.

Councilmember Donna Frye, City of San Diego, asked if the EWG should press for ISO documentation in the recommendation. Councilmember Abarbanel responded no. Councilmember Frye asked if this could be discussed after the public comment session.

Scott Anders, EPIC, stated that the recommendation implies that there is a definite need for a transmission line and asked whether or not that is the intent. Other options should be considered such as no transmission line, or in-region generation. Laura Hunter, EHC, answered that this was not the intention. Recommendation items 3, 4, and 5 are Leaps, SPL, and other options. Mr. Anders stated that he is worried the recommendation could be interpreted as only having two options when that was not the intent of the subcommittee. The intent of the document is if there is a need for more energy, how can those needs be filled.

Councilmember Steve Castaneda, City of Chula Vista, asked about the theoretical renewable energy that would come from Leaps and/or SPL. If 300 megawatts comes from SPL, where would the other 450 megawatts needed to meet the RES goals come from? Councilmember Abarbanel stated that SDG&E had discussed up to 900 megawatts over time. Ms. Freedman explained that SDG&E has a small contract with a geothermal plant in the Imperial Valley that could come into San Diego through SPL. There is also the possibility for a larger geothermal facility to be built in the Imperial Valley. Any large-scale solar facilities would have to be constructed out of the region. However, overall, the subcommittee was not certain exactly what renewable energy will come in by 2010.

EWG Co-Chair Art Madrid, Mayor of La Mesa, expressed that Leaps should make a presentation to the EWG. He also stated that there is another proposed line for SPL to the south. It is “ludicrous” to make a decision based on theoretical approaches.
Mr. Anders stated that if SDG&E does not meet the renewable energy goal by 2010, there is a five cent per kilowatt hour penalty, up to $25 million. Senate Bill 107 (SB107), the law that pushed the deadline to 2010, provides possible “off-ramps” for utilities, one is insufficient transmission. SB107 could provide mitigating language to soften the blow if SPL is not on-line by 2010.

Councilmember Castaneda expressed concern about the placement and language of the Loading Order in the subcommittee’s recommendation. Ms. Freedman stated that the priorities are efficiency and conservation, renewable energy, distribution generation, conventional power plants, and concurrently, transmission. SDG&E considers the statement on transmission to mean it should be concurrent with all tiers of the Loading Order, others consider it to mean that transmission is concurrent with conventional fossil-fuel based power plants, and some believe it to be the bottom of the Loading Order, as it is written and referred to last.

- **Public Comment**

Dick Hertzberg, ENPEX, stated that any recommendation to SANDAG should incorporate those things which government alone can regulate. Government should create incentives and a regulatory climate which requires the adoption of renewable energy sources. SANDAG should encourage the community to solve energy problems internally instead of waiting for SDG&E to do so.

Mr. Hertzberg then provided an update on the San Diego Community Power Project at Miramar Naval Air Station. The project would provide 750 megawatts, would complete SDG&E’s integration into the Sycamore substation, and is #8 on the ISO queue, ahead of SPL. The land for the project was obtained through an agreement with the Navy. All air rights to build the station have been obtained, and the Navy will enter into NEPA process required for the land transfer.

Don Wood, C-3, stated that the groups he represents have taken no position on SPL. The CPUC and ISO are debating the ISO’s refusal to recognize demand reductions that are projected because of utility demand response programs. The debate will be resolved within the next six months. SPL may undercut higher priority RES goals including meeting more future demand by local generation. Mr. Wood stated he does not know the potential impact of SPL on the Regional Multiple Species Conservation Program (MCSP) open space reserves. He explained there are too many unknowns and he agrees with the decision to take no position at this time.

Richard Caputo, public, stated that over 90 percent of renewable energy sources are in Imperial County. There is a potential for 4000 megawatts of solar energy within San Diego County. This could be combined with renewable sources in Imperial County to meet the 50/50 in-region goal.

Kelly Fuller, Sierra Club, explained that she is writing a report for the Desert Protective Council about Imperial County renewables focusing on land use. The largest, cheapest source of land is the U.S. Bureau of Land Management’s (BLM) 57,000 acres in Imperial County. There are no current wind-energy development applications and no permits to even test potential wind-energy. There is a potential application for another solar facility, but any applications will need public approval in Imperial County and will take some time.
Bill Powers, Border Power Plant Working Group, discussed the “Green Path North” option. The CEC created two study groups, one for each potential path. The CEC is a promoter for the project, but the Green Path North will be built because it is a municipal project.

Carrie Downey, Horton, Knox, Carter and Foote, and as a member of public, explained that the entire state needs renewable resources and Imperial County can help serve needs up the coast. For this reason, the 2000 megawatts Green Path North will not replace SPL because it will serve the Los Angeles region.

Councilmember Frye made a motion to adopt the Resources Subcommittee recommendation with the following changes:

- Government needs to commit to conservation, renewable energy sources, etc.
- Changing items 3 and 4 to 2 and 3 on the recommendation.
- Including concerns about the ISO not providing information on the other 24 scenarios, it should be requested by SANDAG.
- Adding the Loading Order wherever it should be.

Mr. Ball seconded the motion.

In discussion of the motion, Gregory Parks, Chamber of Commerce, stated that he disagreed with the position and that the Chamber voted to support SPL.

The group voted and the motion passed. Mayor Madrid asked Mr. Parks to submit a statement of the Chamber’s rationale for supporting SPL. That dissent position would be included with the EWG recommendation to the RPC.

AGENDA ITEM #5: EWG LEGISLATIVE FORUM WITH SENATOR KEHOE

Councilmember Abarbanel reminded the EWG that the energy legislative forum with Senator Kehoe will be held on November 29, 2006, at the SANDAG Board room. A “Save the Date” flier was included in their agenda packets and invitation letters were being mailed shortly.

AGENDA ITEM #6: SUGGESTED MEETING TOPICS FOR NEXT MEETING

The legislative priorities being developed in the EWG’s policy subcommittee would be the focus of the November 16 EWG meeting.

ADJOURN
ATTENDANCE
ENERGY WORKING GROUP MEETING - NOVEMBER 1, 2006

MEMBERS

Henry Abarbanel, Co-Chair, Councilmember, City of Del Mar, North County Coastal
Art Madrid, Co-Chair, Mayor, City of La Mesa, Eastern Suburban Communities
Steve Castaneda, Councilmember, City of Chula Vista, South County
Donna Frye, Councilmember, City of San Diego
Jose Cervantes, County of San Diego
Bill Reed*, SDG&E
Scott Anders, Energy Policy Initiative Center (EPIC)
Laura Hunter, Environmental Health Coalition (EHC)
Paul Blackburn, Sierra Club
Irene Stillings, San Diego Regional Energy Office (SDREO)
Greg Parks, San Diego Chamber of Commerce
Patti Krebs*, Industrial Environmental Association (IEA)
Jim McCollum, Industrial Environmental Association (IEA)
Paul O’Neal*, SDNEDC
David Carey*, Port of San Diego
Steve Zolezzi, Food and Beverage Association, Small Business
Alan Ball, Qualcomm, Large Business
Sharon Cooney, MTS

*Members that recused themselves from the EWG agenda item on SPL. Mr. McCollum served as Patti Krebs’ alternate representing IEA.

OTHERS

Rob Rundle, SANDAG
Susan Freedman, SANDAG
Jennifer Porter, SDREO
Richard Hertzberg, Enpex
L. Ellerton, Enpex
Don Wood, C-3/PEPC
Linda Wagner, City of Chula Vista
David Lawhead, CA Dept. of Parks & Recreation
Harvey Payne, Rancho Penasq. Concerned Citizens
J.C. Thomas, SDG&E
Scott Crider, SDG&E
Al Fiqueroa, Esolution Consulting
Julie Gelfat, IBEW 569
Alexandra Hart, IBEW 569
Bob Redly, Resley Consulting
Jaleh Firooz, Adv. Energy Solutions
Charlie Johnson

David Hicks, LS Power
Michael Calabrese, SD City Attorney
Rich Caputo
Kelly Fuller, Sierra Club
Carrie Downey, Horton, Knox, Carter and Foote
Bill Powers, Border Power Plant Working Group
Carmina Katigboak, SDSU City Planning
Brittany Croucher, SDSU City Planning
Matt Barker, SDSU City Planning
Robb Anderson, SDG&E
Michael Shames, UCAN
J. Naish, SDUSD
Mary Ann Kempxzenski, City of San Diego,
Councilmember Frye
Dave Downey, North County Times
Keith Davidson, DE Solutions
Sephra Ninow, SDREO
At the EWG’s last meeting, issues were raised with regard to conflicts of interest for some of the voting members. The SANDAG Office of General Counsel is conducting research on these issues and on procedures that can be implemented to ensure effective participation by all of the voting members for future matters. Proposals for changes to the Working Group’s Charter and protocols will be brought to the Working Group for discussion at its January 2007 meeting.

Key Staff Contact: Susan Freedman, (619) 699-7387, sfr@sandag.org
ENERGY WORKING GROUP (EWG) LEGISLATIVE FORUM
WITH SENATOR KEHOE

The 2006 Energy Legislative Forum will be held on November 29, 2006, at SANDAG from 9 a.m. to 12 noon. This forum will be attended by EWG members, elected officials, city managers and staff, community interests, and the general public. Please RSVP to Susan Freedman.

Attachment: 1. ‘Save the Date’ Flier

Key Staff Contact: Susan Freedman, (619) 699-7387, sfr@sandag.org
SAVE THE DATE

Legislative Forum on Energy with Senator Christine Kehoe

November 29, 2006, from 9 a.m. to 12 noon
SANDAG — Board of Directors Meeting Room (7th floor)
401 B Street, San Diego, CA  92101

The SANDAG Energy Working Group (EWG) is pleased to host this forum to discuss key regional energy issues with local elected officials, state legislators and their staff and to gain their perspective on energy policies for the 2007 legislative session. This workshop will be chaired by Senator Christine Kehoe, who has been named as Chair of the Senate Energy, Utilities and Communications Committee for 2007.

The overall goal of the event is to proactively develop legislative initiatives that support the region’s energy planning activities prior to the 2007 legislative session. Through the EWG, the San Diego region is actively engaged in determining its energy future by broad consultation and planning among all stakeholders. This workshop is one of many designed to encourage this planning and provide a firm, unified basis for conveying our goals to the legislature, the Governor, and the California Public Utilities and Energy Commissions.

The forum will include:

- Outcomes of the 2006 legislative session and perspectives on the 2007 legislative landscape from our state legislators,
- Outcomes stemming from the 2006 SANDAG EWG Legislative Forum,
- Policy initiatives proposed by the SANDAG EWG for 2007, and
- Discussion.

If you have any questions about the event, would like to suggest a topic for discussion, or to RSVP, please contact Susan Freedman at (619) 699-7387 or sfr@sandag.org. This event will be open to the general public, who also will have opportunity to provide comment.

Please save the date! We hope to see you there for this important regional event!
The EWG Policy Subcommittee is preparing for the 2006 Energy Legislative Forum to be held on November 29, 2006. The Subcommittee met on November 7, 2006, to evaluate possible legislative proposals to present at the forum. The Subcommittee will meet on December 5, 2006, to address next steps after the Energy Legislative Forum.

Additional information will be provided at the November 16 meeting.

The EWG is asked to review the attached legislative proposals and provide input at the meeting.

Attachment: 1. Policy Subcommittee Energy Proposals

Key Staff Contact: Susan Freedman, (619) 699-7387, sfr@sandag.org
Policy Subcommittee Recommendations for Energy Working Group (EWG)  
Legislative Efforts

Proposed Legislation for November 29, 2006, SANDAG EWG Legislative Forum

Priority #1 California Public Utilities Commission (CPUC) Ratebasing Policy Reform

This bill would direct the CPUC to refine its current investor owned utility (IOU) ratebasing policies to better reflect and support the California State Energy Action Plan’s (EAPs) Loading Order for new energy resources.

Request: Request the state legislature adopt new legislation directing the CPUC to open a new proceeding to review and refine its existing IOU infrastructure ratebasing policies to better align its policies with adopted state energy resource planning and procurement policy, as reflected in the 2005 EAP. The new legislation should direct the CPUC to develop appropriate new IOU shareholder penalties and revenue opportunities for failing, meeting, and/or exceeding EAP Loading Order goals and targets.

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<tr>
<th>CA Resource Loading Order</th>
<th>Proposed Change</th>
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<td>Energy Efficiency</td>
<td>Highest ROI</td>
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<tr>
<td>Demand Response</td>
<td>↑ Sliding Scale</td>
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<td>Renewables</td>
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<td>Distributed Generation</td>
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<td>Fossil-Fuel Power Plants and Related New Transmission</td>
<td>Lowest ROI</td>
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Background: Current CPUC IOU capital infrastructure project ratebasing policies provide IOU shareholder incentives for the bottom of the loading but offers no shareholder revenue earning opportunities for pursuing or procuring new energy resources listed at the top of the Loading Order. This runs counter to state energy priorities and needs to be assessed and revisited by the CPUC.

The CPUC is currently pursuing a proceeding to consider restoring IOU energy efficiency program performance based shareholder penalties and rewards dropped by the Commission in 2002, but this proceeding is not considering any changes in current ratebasing policies, and would not address the other priorities listed in the EAP Loading Order.

The Commission is also pursuing a proceeding that is considering allowing the IOUs to ratebase “smart meters” installed under proposed IOU Automatic Metering Infrastructure programs, but again, this proceeding does not address the new renewables or distributed generation projects that which is called for in the EAP Loading Order.
The CPUC has not reviewed or refined its current IOU ratebasing policies since 2003, when it adopted the original State EAP. It is now time to commence that review and refine the Commission’s ratebasing policies to better reflect the new energy resource goals in the EAP.

The Commission should be directed to commence this policy review proceeding in January 2007, and adopt a final decision no later than December 31, 2007.

**Priority #2 Adding Smart Grid to California’s Preferred Loading Order**

The Smart Grid concept was developed in the Department of Energy’s (DOEs) Modern Grid Initiative. According to the DOE, the existing transmission and distribution system in the U.S. uses technologies and strategies that are many decades old and include limited use of digital communication and control technologies. To address this aging infrastructure and to create a power system that meets the growing and changing needs of customers, the Modern Grid Initiative seeks to create a modern or “smart” grid that uses advanced sensing communication and control technologies to generate and distribute electricity more effectively, economically, and securely.

- The Smart Grid concept encompasses advanced metering technology, multiple sources of generation throughout a region and an integrated system with ongoing communication between the California Independent System Operator (CAISO), end users of distributed generation resources, and the utilities. A Smart Grid analysis was conducted for the San Diego region by Science Applications International Corporation (SAIC) and the Energy Policy Initiative Center (EPIC) and was funded by the Utility Consumers Action Network (UCAN) and San Diego Gas and Electric (SDG&E). Key findings of the study in San Diego revealed that the economic, technological, and regulatory trends in the San Diego region will likely create a desirable climate for implementation of a Smart Grid.

- Goal #6 of the Regional Energy Strategy (RES) states, “Reduce per capita peak demand and per capita electricity consumption back to 1980 levels.” A way to reduce peak demand is to enable advanced metering technologies where ratepayers are aware of their electricity consumption at the time of use; this will enable them to appropriately adjust their consumption at peak hours.

- The CAISO has stated that California only reaches its peak load 4 percent of the year; however, utilities must procure enough generation to ensure the lights stay on during these peak times 100 percent of the year. The CAISO can use the Smart Grid to utilize demand response as an asset that can be counted on year-round. Overall load in California would be reduced, and utilities would not be required to procure as much electricity that, for 96 percent of the year, will not be needed (and is very costly).

**Priority #3 Continuation of SENATE BILL 1727 (SB 1727)(Introduced in 2006)**

Goal #4 of the RES states, “Increase the total contribution of clean distributed generation resources to 12 percent of peak demand by 2010, 18 percent by 2020, and 30 percent by 2030.”

Under existing law, the Public Utilities Commission has regulatory authority over public utilities, including electrical corporations. An electrical corporation is defined as including every corporation or person owning, controlling, operating, or managing any electric plant for compensation within this state, except where electricity is generated on or distributed
by the producer through property solely for its own use or the use of its tenants and not for
sale or transmission to others.

This bill would additionally create an exception from the definition of an “electrical
corporation,” where electricity is generated on private or public real property and
distributed across a highway, as defined, to an immediately adjacent private or public real
property owned or otherwise controlled by the corporation or person, solely for its own use
or the use of its tenants and not for sale or transmission to others.

Priority #4 Self Generation Incentive Program

In most parts of the U.S. and the world, Combined Heat and Power (CHP) is recognized as an
efficient and environmentally advantageous technology that, if adopted, can benefit
institutional and business adopters, the electricity grid, and society. Clean natural gas CHP:

- Achieves combined electric and thermal efficiencies from 60 to 90 percent.
- Avoids and or defers the need to build costly electric transmission and distribution
  infrastructure.
- Eliminates or reduces transmission and distribution losses, reduces or eliminates grid
  congestion.
- Significantly decreases greenhouse gas (GHG) emissions.
- Provides California businesses with an option to curb energy costs.
- Boosts power reliability for business adopters.
- Meets or exceeds the same air emission standards as modern natural gas central station
  combined cycle power plants.
- Provides ultra-high natural gas use efficiencies, conserving natural gas resources and
  enhancing utilization of California’s gas distribution system.

The RES states the need for additional distributed generation technologies in the region.
Goal #4 states, “Increase the total contribution of clean distributed generation resources
(non-renewable) to 12 percent of peak demand by 2010, 18 percent by 2020, and 30 percent
by 2030.” In looking at installed capacity in the region however, it is clear this goal has not
yet been met. It is imperative to continue incentivizing clean technologies that are clearly
delineated in the RES. The following graph shows the current levels of distributed
generation deployment in the region and projected goals for the duration of the RES
timeframe.
Senate Bill 1 (SB 1) established a robust incentive program for solar electric technologies beginning in January 2007. Assembly Bill 2778 (AB 2778) created a like program for fuel cells and wind technologies beginning in 2008. Upon signing AB 2778, Governor Schwarzenegger added the following note, “I look forward to working with the legislature to enact legislation that returns the most efficient and cost effective technologies (clean combustion technologies) to the program.”

Favorable policies and incentives for CHP are being adopted in the U.S. and internationally at an accelerating pace. Incentives are justified to motivate institutions and businesses to implement non-core energy investments that yield net positive benefits to the electricity system and to society.

In California, CHP has become an important element of California’s energy and environmental policy.

- In the California Energy Commission (CEC) 2005 Integrated Energy Policy Report, CHP was deemed the most cost-effective form of distributed generation, providing cost, efficiency, environmental, and reliability benefits.
- California’s Energy Action Plan lists CHP as an important energy resource for California and ranks it high in the Loading Order.
- California’s Climate Action Team Report targets CHP for 5 million metric tons CO2 equivalent reduction or 2.4 percent of the State’s 2020 GHG reduction goal. This is about one-half the target for stationary energy efficiency and is 46 percent greater than the target for the California Solar Initiative.
Furthermore, a notable endorsement of CHP recently came from the Sierra Club who recommended CHP as a preferred resource for the transition to a Clean Energy Future\(^1\). According to the Sierra Club, CHP along with other preferred resources (wind, solar, and low-temperature geothermal), “have the greatest potential to decrease GHG emissions, contribute to a stronger economy, and reduce environmental damage and harm to human health.”

Like energy efficiency measures, incentives for CHP are important to accelerate market implementation, to bridge the gap between business financial hurdle rates for non-core investments and utility investment criteria, to ameliorate the many institutional and utility obstacles that are still present, and to help support industry investment in low emission technology unique to California. A 2005 CEC assessment of CHP\(^2\) concluded that continuation of Smart Growth Incentive Program (SGIP) would increase CHP by more than 40 percent over the next 15-year period with gas engines and turbines accounting for an overwhelming share of the new capacity additions.

Extension of the SGIP will provide critical incentives that will spur widespread adoption of the cleanest and most efficient distributed technologies. In addition, it will provide important environmental, security and reliability benefits to Californians. To extend the incentive for natural gas fueled CHP would enable California’s quest for power adequacy and a clean environment, consistent with State policy.

- Direct the CPUC in consultation with the Energy Commission to administer a self-generating incentive program for ultra-clean and low-emission fossil-fuel combined heat and power (CHP) technologies and waste gas fueled generation.
- The incentive program shall commence on January 1, 2008, and continue to January 1, 2012.
- The bill would apply to all eligible technologies, as determined by the CPUC, except customer-side photovoltaic, solar thermal electric, wind and fuel cell projects as continuation incentive program legislation has already been signed into law (SB 1 and AB 2778) for these technologies.
- Eligibility of fossil-fueled CHP for the incentive would be subject to the same efficiency and emission criteria as stated in Section 379.6 of the Public Utilities Code for calendar year 2007:
  - Minimum efficiency of 60 percent.
  - NOx emissions no greater than 0.07 lbs/MWh.
  - A thermal credit one MWh for each 3.4 million BTUs of heat recovered is allowed to be added to the total energy production at the facility for purposes of calculating the effective NOx emission level.
- In order to maximize CHP implementation and benefits, the eligible size range should be increased to 20 MW.
  - The PUC should partition the funding to ensure adequate funding for all size classes.

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\(^1\) 2006 Energy Resources Policy, Sierra Club, Adopted September 16, 2006

\(^2\) Assessment of California Combined Heat and Power Market and Policy Options for Increased Penetration, November 2005
Establish tiered funding levels by size that take into account capital cost and economic tipping points.

- Include other eligibility criteria for waste gas currently contained in Section 379.6 of the Public Utilities Code.
- Amend the Public Utilities Code as appropriate.

**Priority #5 Appeals Process for CEC Power Plant Siting Decisions**

Information on this item will be provided at the EWG meeting or via e-mail prior to the meeting date.
2007 REGIONAL TRANSPORTATION PLAN (RTP) WHITE PAPER
ON ENERGY

File Number 3003000

Introduction
SANDAG has identified several key components to be developed for the 2007 RTP. For each of these areas, staff is preparing a white paper to generate discussion and gather input from SANDAG’s technical committees and working groups. The energy white paper identifies energy effects of the RTP, alternative fuel and vehicle considerations, and outlines potential energy-saving and emission reducing measures. Issues identified in the 2007 RTP will be addressed further through an update of the Regional Energy Strategy (RES) (adopted in 2003).

Discussion
This white paper identifies energy issues related to the use of transportation fuels and transportation activities. Focal areas include alternative fuel and alternative vehicle program options, ways to reduce fuel demand and associated emissions through integrated land use and transportation planning, and recognition of climate change effects from transportation and mitigation options.

The paper recommends that the RTP 2007 showcase plan components that inherently save energy and reduce emissions such as smart growth, congestion reduction measures, and demand reduction measures. It further recommends that the plan identify existing alternative fuel and alternative vehicle measures and propose suitable programs for the San Diego region.

Subsequent to the adoption of MOBILITY 2030, California has undergone significant changes in law and mandate regarding climate change. The white paper recommends that the 2007 RTP include greenhouse gas emission impacts and reductions from various travel choices and from smart growth efforts, enhance the energy component of the plan’s Environmental Impact Report to recognize and explain the projected effects of greenhouse gases, and identify an action plan and possible funding sources to further address climate change effects of transportation activities.

Potential barriers like infrastructure needs and implementation costs are to be addressed for each energy issue area. These challenges can lead to opportunities to work with policy makers to advance transportation projects with the goal of making more efficient use of our transportation system and reducing pollutants that degrade the quality of life in the region. Input from technical committees and working groups will be shared with SANDAG’s policy committees to develop strategies for inclusion in the 2007 RTP.

Attachment: 1. Energy White Paper for the 2007 RTP
Key Staff Contact: Susan Freedman, (619) 699-7387; sfr@sandag.org
INTRODUCTION

The update of the Regional Transportation Plan (RTP) should recognize energy affects of the transportation system, identify appropriate measures to reduce the rate of fuel consumption, and highlight plan components that yield energy-saving results. RTP aspects that inherently save energy and reduce emissions include smart growth, congestion management, and demand management through added travel choices like mass-transit and carpooling.

Subsequent to the adoption of MOBILITY 2030, California has undergone significant changes in law and mandate regarding climate change. In 2005, Governor Schwarzenegger established Executive Order S-3-05 calling for statewide greenhouse gas (GHG) emission reductions. In September 2006, the California Global Warming Solutions Act of 2006 was signed into law, which creates a statewide GHG emission limit that will reduce emissions by 25 percent by 2020. The law will first require mandatory GHG emission reporting and reductions from the electricity sector. It also requires all state agencies to consider and implement GHG emission reporting and reduction strategies.

Energy implications of the transportation sector are receiving greater scrutiny. Transportation is the largest source of climate change emissions in California. The California legislature has recognized that “passenger vehicles and light-duty trucks are responsible for 40 percent of the total GHG pollution in the state.” In March 2006, the California Attorney General filed comments on the Orange County Transportation Authority (OCTA) Draft Environmental Impact Report (EIR) for its long-range transportation plan. The draft EIR was considered inadequate because it did not recognize or address GHG emissions. The Attorney General’s Office called for improvements in the OCTA final EIR to avoid legal challenges; OCTA complied and made these changes.

The 2007 RTP can meet state mandates and regional needs through the inclusion of measures like an alternative fuel vehicles program, enhanced linkages among smart growth, energy and sustainability, and a strategy for the region to address climate change. These aspects identified in the RTP can be further realized through an update of the Regional Energy Strategy (RES) (adopted by SANDAG in 2003).

Objectives for 2007 RTP

- Identify existing alternative fuel and alternative vehicle programs at state and national levels and propose suitable program(s) for the San Diego region.

- Include energy and GHG emissions, impacts, and reductions from various travel choices and from smart growth efforts.

- Enhance the energy component of the plan’s EIR to recognize and explain the importance of climate change.
  - Recognize and explain the projected impacts of GHGs. Include reference to these emissions in both the air quality and energy sections of the EIR.
Identify an action plan and possible funding sources for SANDAG to inventory GHG emissions, develop a course of action, and implement measures to address climate change in the RTP.

**Background**

Alternative Transportation Fuels and Vehicles

The use of alternative fuels can reduce dependence on foreign oil, provide economic development opportunities, and reduce emissions of GHG’s, criteria pollutants, and toxic air contaminants. Moving toward a more diversified approach to fuels and supporting the advancement of higher efficiency vehicles is one of the state’s goals. The California Energy Commission (CEC) and California Air Resources Board (CARB) set a goal that 20 percent of all transportation energy used in 2020 comes from alternative fuels (current alternative fuel use in 2005 is 6 percent). If California successfully meets this goal, about 4.8 billion gallons of gasoline and diesel will be displaced annually by alternative fuels.

According to a 2005 CEC report, the state’s demand for transportation fuels has increased 53 percent in the last 20 years and in the next 20 years, gasoline and diesel demand will increase another 36 percent. California refineries rely increasingly on imported petroleum products to meet this demand. This growing demand and the increasing challenge faced by refineries in meeting this demand will lead to more frequent price volatility and potential economic dislocation. In 2003, the CEC and CARB adopted a two-pronged strategy to reduce petroleum demand: promoting improved vehicle efficiency, and increasing the use of alternative fuels.

California law defines alternative fuel as “…a nonpetroleum fuel, including electricity, ethanol, biodiesel, hydrogen, methanol, or natural gas that, when used in vehicles, has demonstrated, to the satisfaction of the air resources board, to have the ability to meet applicable vehicular emission standards.” Alternative fuel also may include petroleum fuel blended with nonpetroleum constituents, such as E85 or B20.

In September 2005, Governor Schwarzenegger signed into law Assembly Bill 1007 (AB 1007) requiring the CEC to prepare a state plan no later that June 30, 2007, to increase the use of alternative fuels in California. This plan is underway along with other alternative transportation efforts. San Diego Gas & Electric (SDG&E) has restarted an electric vehicle program, Miramar College has a hydrogen highway program, and the CEC has a truck-stop electrification program and a heavy-duty advanced technology development program.

**Climate Change**

The state has declared that global warming poses a serious threat to the economic well-being, public health, natural resources, and the environment of California. The potential adverse affects of global warming include the exacerbation of air quality problems, a reduction in the quality and supply of water to the state from the Sierra snow-pack, a rise in sea levels resulting in the displacement of thousands of coastal businesses and residences, damage to marine ecosystems, and the natural environment, and an increase in the incidences of infectious diseases, asthma, and other human health-related problems.
• On June 15, 2005, Governor Schwarzenegger established Executive Order S-3-05. Executive Order S-3-05 established the following GHG emission reduction targets for California: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce GHG emissions to 1990 levels; by 2050, reduce GHG emissions to 80 percent below 1990 levels.

• On March 30, 2006, the California Attorney General filed comments on the OCTA Draft EIR for its long-range transportation plan. The comments collectively stated that the OCTA RTP and Draft Plan EIR were not acceptable because they did not adequately address climate change impacts.

• California Global Warming Solutions Act of 2006 (AB 32) was signed into law on September 27, 2006. This law calls for statewide GHG emission limits equivalent to the statewide GHG emission levels in 1990 to be achieved by 2020. It requires all state agencies to consider and implement GHG emission reduction strategies.

Current Conditions
The current RTP, MOBILITY 2030, does not address energy impacts directly; energy is addressed in the EIR. The 2030 RTP EIR acknowledges the potential benefit of the alternative fuels program on the region. In general terms, the EIR makes the correlation between optimized public transportation and reduced energy consumption. These more generalized impacts could be addressed in greater detail for the 2007 RTP update.

MOBILITY 2030 states how the region can grow smarter, including an air quality assessment. There is no mention of climate change and the regional impacts of GHGs resulting from the plan. The 2007 RTP could enhance the air quality sections to address GHG emissions, or provide reference to the energy section for GHG impacts. SANDAG air quality and energy staff could collaborate to identify additional ways to address climate change in the update.

Identification of Problems
Alternative Transportation Fuels and Alternative Vehicles

The identification and status of a variety of transportation efficiency, alternative fuel, and alternative vehicle programs is unclear. The state is to complete an alternative transportation fuels plan of action in June 2007. Many existing alternative vehicle programs at the CEC are unstaffed. Regarding the availability of alternative fuels in the region, there is only one alternative fueling station in San Diego (located on El Cajon Boulevard in the mid-city area of the City of San Diego) that sells ethanol, CNG, and LPG. It is difficult for drivers in the region to switch to alternative fuels when only one station can accommodate their needs in Southern California.

Although the use of alternative fuels can reduce dependence on foreign oil, provide economic development opportunities, and reduce emissions of GHGs, criteria pollutants, and toxic air contaminants; these same fuels may result in an overall increase of certain criteria pollutants that raise public health concerns and constrain the state’s ability to meet its State Implementation Plan requirements. The AB 1007 process is to address potential air quality conflicts to ensure a harmonizing of transportation energy and air quality policies and objectives.
Climate Change

After the Attorney General’s Office filed comments with OCTA regarding its 2006 Long-Range Transportation Plan Draft Program Environmental Impact Report, OCTA took the following steps to avoid possible legal challenges to its RTP EIR on this issue.

OCTA expressed a commitment to develop a plan, through a public process, which consists of:

- Inventory of GHG emissions from RTP activities, both direct and indirect, and including nontransportation sources.
- Broad GHG reduction goals targeted to the Governor’s Climate Action Team goals.
- Specific actions to meet specific reduction goals.
- Identification of public and private funding sources to implement actions.
- A monitoring and public information plan.

Anticipated problems for SANDAG in this regard will include determining the appropriate scope of a GHG plan, securing adequate resources to develop and implement such a plan, as well as developing an educational component to inform local stakeholders and securing their participation. Some stakeholders in the region view climate change as a problem to be addressed at the global and national level, and question whether it can be effectively addressed at the local and regional level.

DISCUSSION

Potential Solutions/Alternatives

Reducing Fuel Demand Through Integrated Land Use and Transportation Planning

The 2007 RTP could showcase aspects of the plan that inherently save energy and reduce emissions. These components include: smart growth, congestion management, and other systems management measures, and demand management through added travel choices like mass transit and carpooling. If finalized by the CEC in time for the RTP, the PLACE3S model can be used to further identify energy affects of various land use and transportation scenarios.

Alternative Transportation Fuels and Vehicles

SANDAG could research and identify existing alternative fuel and alternative vehicle programs in the region and nationally. The RTP could include possible programs to identify barriers and solutions for additional alternative fueling stations to be located in the region. SANDAG also could participate in the CEC development of an alternative transportation fuels plan to ensure it meets the needs of the region. SANDAG also can identify the rate that diesel buses in the regional transit fleet are being converted to Compressed Natural Gas (CNG) vehicles.

The 2007 RTP can provide an outline of these activities, with the intention that implementation measures be identified in the update of the RES. The RES will include transportation, land use planning, and climate change in its update.
Climate Change

The RTP can identify current measures in existence or under development to address climate change. Organizations can include the California Climate Action Registry and ICLEI (Local Governments for Sustainability). A regional action plan can be further developed through the update of the RES.

SANDAG also could encourage member governments to develop local climate action plans. ICLEI has developed a local climate action plan template and tools that governments around the world have adopted. More than 159 U.S. local governments participate in the ICLEI Cities for Climate Protection Campaign (CPC). Locally, the Cities of Chula Vista and San Diego have developed city action plans. Future government protocols will be developed by the state to complement existing plans. A Local Climate Action Plan Includes:

1. A jurisdiction’s GHG emissions data (baseline emissions inventory, emissions forecast, and emissions reduction target).

2. GHG reduction measures (existing measures that will continue, new or proposed measures, quantified emissions reductions resulting from each measure).

3. Implementation strategies (costs, responsibilities, schedules, and funding sources for implementing each measure and procedures for monitoring the progress of all reduction measures).

The California Climate Action Registry, in cooperation with the California Energy Commission, ICLEI, and California Climate Action Team, are to develop protocols for local governments to address climate change. This activity is underway at the state level.

Additionally, AB 32 states that on or before June 30, 2007, the state air resources board shall publish and make available to the public, a list of discrete early action GHG emission reduction measures that can be implemented prior to the measures and limits adopted pursuant to Section 38562.

RECOMMENDATIONS

The RTP should include acknowledgement of inherent energy-saving measures in the plan.

For the RTP Update

- Identify existing alternative fuel and alternative vehicle measures at state and national levels and propose suitable program(s) for the San Diego region.

- Include energy and GHG emissions impacts and reductions from various travel choices and from smart growth efforts.

- Enhance the energy component of the plan’s EIR to recognize and explain the importance of climate change.

  o Recognize and explain the projected effects of GHGs. Include reference to these emissions in both the air quality and energy sections of the EIR.
Identify an action plan and possible funding sources for SANDAG to inventory GHG emissions, develop a course of action, and implement climate change mitigation measures in its transportation plan.

- Recommend that the RES be updated so as to integrate transportation, land use, and climate change in the long-term energy plan for the San Diego region.

**For Future Analysis**

SANDAG could engage the Climate Action Team in the development of local government GHG protocols to ensure that the needs of local governments are best served.

SANDAG should continue work with the CEC on the PLACE3S model so that land use, transportation, and energy modeling are integrated into a robust regional planning model.

**BIBLIOGRAPHY**


March 2006 California Climate Action Team Report to Governor Schwarzenegger and the California Legislature

June 2005 Executive Order S-3-05


2007 WORKING GROUP MEETING CALENDAR

Meeting Dates:

- January 25
- February 22
- March 22
- April 26
- May 24
- June 28
- July 26
- August 23
- September 27
- October 25
- November 15
- December 20

Meeting Location: SANDAG, 7th Floor Conference Room
401 B Street, Suite 800
San Diego, CA 92101

Meeting Time: 11:30 a.m. to 2 p.m.

Key Staff Contact: Susan Freedman, (619) 699-7387, sfr@sandag.org

File Number 3003000