MEETING NOTICE
AND AGENDA

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

Thursday, February 28, 2008
11:30 a.m. to 2:00 p.m.
SANDAG, 7th Floor Board Room
401 B Street, Suite 800
San Diego, CA 92101-4231

Staff Contact: Brian Holland
(619) 699-6915
bho@sandag.org

AGENDA HIGHLIGHTS

- TRANSMISSION PROJECTS ANALYSIS

SANDAG offices are accessible by public transit.
Phone 1-800-COMMUTE or see www.sdcommute.com for route information.

In compliance with the Americans with Disabilities Act (ADA), SANDAG will accommodate persons who require assistance in order to participate in SANDAG meetings. If such assistance is required, please contact SANDAG at (619) 699-1900 at least 72 hours in advance of the meeting.

To request this document or related reports in an alternative format, please call (619) 699-1900, (619) 699-1904 (TTY), or fax (619) 699-1905.
<table>
<thead>
<tr>
<th>ITEM #</th>
<th>ACTION</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.</td>
<td>WELCOME AND INTRODUCTIONS</td>
</tr>
<tr>
<td>2.</td>
<td>SUMMARY OF JANUARY 24, 2008, MEETING APPROVE</td>
</tr>
<tr>
<td></td>
<td>The January 24, 2008, meeting summary is attached for Energy Working Group (EWG) review and approval.</td>
</tr>
<tr>
<td>3.</td>
<td>PUBLIC COMMENT AND COMMUNICATIONS COMMENT</td>
</tr>
<tr>
<td></td>
<td>Members of the public who would like to address the EWG on a topic not on the agenda should do so at this time. Speakers are limited to three minutes each.</td>
</tr>
<tr>
<td>4.</td>
<td>TRANSMISSION PROJECTS ANALYSIS RECOMMEND</td>
</tr>
<tr>
<td></td>
<td>The EWG is evaluating the Sunrise Powerlink and Talega-Escondido/Valley-Serrano transmission project proposals for their consistency with the Regional Energy Strategy 2030. Staff will present the staff recommendation and the EWG Policy and Resources Subcommittee evaluation. The EWG is requested to consider these recommendations and to take its final action on the transmission projects analysis to be presented to the Regional Planning Committee on March 7.</td>
</tr>
<tr>
<td>5.</td>
<td>SCHEDULING AGENDA ITEMS FOR FUTURE MEETINGS DISCUSSION</td>
</tr>
<tr>
<td></td>
<td>EWG members are invited to suggest topics for the upcoming March 27, 2008, meeting.</td>
</tr>
<tr>
<td>6.</td>
<td>ADJOURN</td>
</tr>
</tbody>
</table>

+ next to an item indicates an attachment
February 28, 2008

AGENDA ITEM NO.: 2

Action Requested: APPROVE

SUMMARY OF JANUARY 24, 2008, MEETING

AGENDA ITEM #1: WELCOME AND INTRODUCTIONS

Energy Working Group Co-Chair Art Madrid, City of La Mesa, called the meeting to order at 11:35 p.m. and welcomed the group noting the absence of Co-Chair Henry Abarbanel.

AGENDA ITEM #2: SUMMARY OF DECEMBER 20, 2007, MEETING

Mr. Madrid asked working group members to look over the meeting minutes and to contact Brian Holland if there were any changes that needed to be made. Carrie Downey, City of Coronado, stated that under Item 9, Renewables Tariff Discussion, she appears to say the same thing multiple times when, in fact she was trying to clarify on behalf of San Diego Gas & Electric (SDG&E) that the resolution asked for a tariff that applied to municipalities and not to non-profits as had been discussed in the legislation.

AGENDA ITEM #3: PUBLIC COMMENT AND COMMUNICATIONS

Public comments and communications were invited, but none were made.

AGENDA ITEM #4: SUBCOMMITTEE REPORTS ON SUNRISE POWERLINK AND TALEGA-ESCONDIDO/VALLEY-SERRANO LEAPS TRANSMISSION PROJECTS

The EWG Resources and Policy Subcommittee met on January 9 in the City of Del Mar to analyze proposed transmission projects to the region. Representatives from each project, as well as other members of the public gave testimony on the advantages of each project, as well as the impacts to certain communities. Subcommittee members evaluated the projects using the RES for the recommendation to the SANDAG Board, but considered all the information presented.

Paul O’Neal, North County Economic Development Council, noted that meeting was very well attended and the group heard from many members of the audience. As a result, most of the information discussed was very general; the next subcommittee meeting will get more in depth looking at how the projects fit in with the Regional Energy Strategy (RES). The subcommittee will come back with a summary of the proceedings and whatever recommendations the group formulates. Mr. O’Neal said he would not chair the meeting since he has worked with the Lake Elsinore Advanced Pumped Storage hydroelectric plant (LEAPS) proponents. The final report to the Board will be prepared based on the discussions of the subcommittee and by the full working group.
Mr. Madrid mentioned that it would fair to allow the minority a voice if there are members who disagree with the recommendation of the group; so that as the recommendation goes forward, it is clear that, everyone had a voice. Mr. O’Neal said he hoped that the summary included with the recommendation would include the range of diverse opinions expressed about the projects.

Steve Castaneda, City of Chula Vista, noted that the mandate of the group was to look at the project through the lens of the RES, not to look at the impacts of different routes, tower by tower. Laura Hunter, Environmental Health Coalition, said that although examining all the impacts may be beyond the scope of the group, the guiding principles of the RES might allow the group to consider the project’s overall environmental effects. Mr. Madrid said he feared the work of the group would be distorted if it tried to make a specific route recommendation, although aspects of route choice that would affect cost or reliability may creep into the discussion.

Dave Carey, Port of San Diego, said that the 2030 RES assumed an additional regional interconnect in the form of the Valley Rainbow project, which is similar to the current Talega-Escondido/Valley-Serrano (TE/VS) LEAPS project. Scott Anders, EPIC, clarified that although the Valley Rainbow project was discussed during the time, the RES did not assume that it would be in place.

Ms. Downey said that the group was not tasked to look at individual impacts in cities since the regional Board would not want to support impact in one city or another. The group should be looking at how the proposed projects affect the region’s energy supply as outlined in the RES.

Brain Holland, SANDAG, clarified that the 2030 RES is the official SANDAG policy adopted by the Board and affect should be used as the basis of analysis. He will keep the group apprised of any new policies in the updated RES and these may be referenced, but the group should focus on the adopted RES.

Steve Hoffman, NRG Energy, said that looking at routes was counterproductive since the group does not have the choice of routes. Different routes have different implications to cost, aesthetics, reliability, and access to resources. Mr. O’Neal noted that the group could consider broadly whether the interconnect would come from the north or the southeast, and could talk about the values of each without getting mired in the discussion of routes.

**AGENDA ITEM #5: CALIFORNIA ENERGY COMMISION (CEC) WORK PLAN UPDATE**

Brian Holland gave an update on the work being done under contract with the CEC. There were no current deliverables to be reviewed, but he gave an update on each task. SANDAG has renegotiated the schedule for producing RES Update and the Climate Action Plan to ensure there was enough time to do a thorough job. Before the end of the fiscal year on June 30, existing conditions and business-as-usual forecasts will be complete for energy use, transportation fuel, and greenhouse gas (GHG) emissions. SANDAG will also set emission reduction targets to meet the state goals set out under Assembly Bill (AB) 32 and to examine scenarios to reach these goals. After June 30, discussion that is more intensive will take place to determine the specific policies that will be adopted.

Jennifer Porter, California Center for Sustainable Energy (CCSE), said that the Sustainable Region Program would be kicking off soon with the cities of Poway and Solana Beach. The pilot program with the City of Carlsbad had been very successful. After a kickoff meeting to gather data and go
over the timeline, energy engineers from CCSE will work with the cities to complete energy audits for each city and make recommendations for upgrades. Jennifer will update the group throughout the course of the project, which should be complete by the end of the summer.

Mr. Madrid suggested that the City of Carlsbad should be involved so they can share their expertise with the cities who are currently undertaking the program. Ms. Hunter wondered if we had data on the results of the program in Carlsbad. Ms. Porter said that we had an initial report, but that follow-up could be performed with the city to analyze the long-term results. A best practices guide would also be included.

Mr. Holland said that other cities had expressed interest in the program and that SANDAG was working with SDG&E to develop a region-wide efficiency program. This will include a number of actions such as energy audits, efficiency upgrades, self-generation, as well as recommendations for code changes and building standard updates. This program would be separate from the one sponsored by the CEC, but shares the same goals and will coordinate process where possible.

Ms. Downey said she had attended the green building conference at CCSE. She said that while most of her city’s buildings meet current standards, there is no model for getting residents to do the same. Through this effort, the group should look at ways to get residents to reduce their energy use, not just cities.

Mayor Madrid mentioned that the Attorney General is interested in seeing regions address climate change issues in their general plans and through this project. Then we could be proactive in addressing the Attorney General’s concerns. Ms. Hunter said some cities have been successful in increasing efficiency in their own facilities, but private developers did not follow voluntary efficiency guidelines. Her staff has begun to compile a list of successful policies that cities have implemented to reduce GHG emissions, which she will share with the group. The successful cities are setting mandatory efficiency standards for commercial and residential construction, which can be tailored to each city and are not unreasonable to comply with.

The successful cities are setting mandatory efficiency standards for commercial and residential construction. Each city could then be tailored and it would not be unreasonable to comply with.

Andrew McAlister, CCSE, said that they are increasingly involved with a number of community groups that are struggling with how best to set standards that make a difference without being too cumbersome. The next step is to really get involved with the communities to ensure bottom-up, as well as top-down changes. It will be important to measure changes and highlight successes. We should educate the public since it is important to get public support in order to make the changes we want to do. Mr. Madrid mentioned that the Building Industry Association should participate if the group will discuss building standards.

Mr. Holland also updated the group on the last item under the CEC partnership, which is the development of an alternative fuels toolkit for local governments. An ad-hoc group has met to develop criteria for an alternative fuels infrastructure study. The final study should be completed in May. The agenda packet also includes a white paper on climate change activities, which will be presented to SANDAG Board of Directors at their next meeting.
AGENDA ITEM #6: RENEWABLES TARIFF DISCUSSION

Note: item taken out of order. JC Thomas, SDG&E, said that SDG&E is still committed to working with SANDAG and individual cities to develop a tariff that will allow cities to take advantage of renewables even if they do not have load onsite. The proceedings for AB 1969 have slowed down, but it will eventually allow water and wastewater agencies to install systems up to 1 megawatt (MW). SDG&E would not be opposed to allowing larger installations or expanding this tariff to all customers, but this is up to the Public Utilities Commission (PUC). There also is a new piece of legislation, AB 1807, which is a feed in tariff for renewables similar to Senators Kehoe’s bill last year with a limit of 20 MW. At that size, SDG&E would prefer to do a competitive procurement process to give energy providers a chance to offer the best value. Mr. Thomas suggested working with Mr. Holland to determine what the cities do and do not want to see in a tariff; under the current PUC proceedings for AB 1969, utilities would receive the Renewable Energy Credit for any new system.

Ms. Downey said that a white paper would help to clarify SDG&E’s position on AB1969, but hoped it could also include AB1807, recognizing that the bill would undergo changes as it moves through the legislative process.

Tom Blair, City of San Diego, mentioned that the proceeding that covers the feed-in tariff is Rulemaking 0605-027 Decision 0707027 gives utilities specific guidance on how to implement the feed-in tariff. Under subsequent Resolution e4137, SDG&E was given the opportunity to expand the tariff to more uses and SDG&E opted against this and filled comments in opposition to the resolution. Mr. Blair recommended members familiarize themselves with these items.

AGENDA ITEM #7: CH2M HILL SOLAR MAPPING

Kevin Murphy, from CH2M Hill introduced his company and gave an overview of their solar mapping technology. CH2M is a full range architectural and engineering firm with a worldwide presence. Their GIS and mapping unit has developed a solar map tool that is in use in San Francisco and elsewhere. The complete presentation is accessible on the EWG Web site.

Users of the solar mapping tool can type in their address to a Web-based portal and are provided with information on the solar potential of their roof, based on area calculations, which consider a number of factors including obstructions and shadowing. The system is flexible and greatly expandable. It can be integrated with the utility billing system to give personalized estimates on power savings, as well as information on conservation programs and incentives.

CH2M Hill is also working under contract with the Department of Energy and the National Renewable Energy Laboratory to support the Solar Cities program. A solar implementation plan will be created with spatial data from CH2M Hill. As a secondary outcome of the solar mapping project, a 3D model of the city can be created and used in planning, emergency response, or asset management.

Tom Blair, City of San Diego, mentioned that the solar installation at the Alvarado Water Plant has recently surpassed 2 million kilowatt (KW) hours produced. This has translated into substantial savings in both electricity and demand charges. There are more than four acres of photo-voltaic (PV) panels, making it one of the largest installations in the region.
Mr. McAlister noted that the solar mapping project was a good technical tool, as well as a public education tool. Educating consumers about their rates is key for the solar initiative and other programs. Mr. Madrid asked if there were grants available for cities to get technical assistance on energy efficiency issues. Ms. Stillings said that CCSE was developing its plans for the upcoming fiscal year and, hopefully, funds would be available to that kind of assistance. She also would like to see the Solar Cities program expanded to the whole region if funding is available.

Mr. Anders said that it is an important part to take a regional look at energy. Photo-voltaic systems have an important role to play, but can only go so far in meeting our regional needs. We need to make sure that we also look at more basic things like energy efficiency and transportation. Solar installation is still too expensive for many people.

Mr. McAlister said it would be valuable to have an integrated, rational system to help people examine their energy use and make the best choices. Spatial analysis is very useful for examining solar potential, but may not be helpful for other kinds of programs. Net metering also is limited to 2.5 percent of peak load, so its application is limited. However, it provides most of its generation during peak hours, reducing the need to purchase the most expensive power.

Mr. Murphy said the system can integrate many of the ideas being discussed, including using parking lots of solar production. In San Francisco, there has been a broad vision of this project as a carbon portal, which also included things like locations of transit stops, car-sharing, and recycling operations. The system also can show how different brands of solar panels would work with different homes.

Mr. Anders mentioned that it was a great idea to integrate all the energy efficiency analysis and resources, although it could also create “big brother” scenarios. With spatial modeling and SDG&E energy use data, energy intensity could be calculated for every building, helping to target those facilities with the greatest need. Due to complex rate structures, there are many factors that can affect a systems payback, but this is a good first step. He also mentioned that the City of Berkeley is considering offering public financing through a property tax assessment district for solar. Ms. Downey said that she went through a lot of work to figure out what combination of solar and energy efficiency measures were best for her own home. Stephanie Stoppenhagen from CH2M Hill noted that privacy was protected, as individual addresses were not listed except for those people who chose to post a case study on their system. Utility use data is only available to customers through their own accounts with the utility company.

Denis Trafecanty of Santa Ysabel said that there would be a meeting on January 26 at Wynola Pizza to discuss solar installation. He said that installing solar was simply the right thing to do.

**AGENDA ITEM #8: SUGGESTED TOPICS FOR UPCOMING EWG MEETINGS**

Mr. Madrid noted that the discussion of the transmission projects would dominate the next month’s meeting, along with other items already discussed.

**AGENDA ITEM #9: ADJORN**

The meeting was adjourned at 1:21 p.m. The next meeting will be February 28, 2007.
<table>
<thead>
<tr>
<th>GEOGRAPHICAL AREA/ORGANIZATION</th>
<th>JURISDICTION</th>
<th>NAME</th>
<th>MEMBER/ALTERNATE</th>
<th>ATTENDING</th>
</tr>
</thead>
<tbody>
<tr>
<td>North County Coastal</td>
<td>City of Del Mar</td>
<td>Henry Abarbanel, Co-Chair</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td>North County Inland*</td>
<td>City of San Marcos</td>
<td>Rebecca Jones</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td>East County</td>
<td>City of La Mesa</td>
<td>Art Madrid, Co-Chair</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td>South County</td>
<td>City of Chula Vista</td>
<td>Steve Castaneda</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>City of Coronado</td>
<td>Carrie Downey</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>City of San Diego</td>
<td>----</td>
<td>Donna Frye</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>----</td>
<td>Vacant</td>
<td>Alternate</td>
<td></td>
</tr>
<tr>
<td>County of San Diego</td>
<td>----</td>
<td>Jose Cervantes</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>----</td>
<td>Pat Zeutonian</td>
<td>Alternate</td>
<td></td>
</tr>
<tr>
<td>Metropolitan Transit System</td>
<td>----</td>
<td>Sharon Cooney</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>----</td>
<td>Vacant</td>
<td>Alternate</td>
<td></td>
</tr>
<tr>
<td>San Diego Gas &amp; Electric</td>
<td>----</td>
<td>David Geier</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>J C Thomas</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ahmed Solomon</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>San Diego Regional Chamber of Commerce</td>
<td>Shell Trading/ Coral Power</td>
<td>Mike Evans</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Carmen Sandoval</td>
<td>Alternate</td>
<td>No</td>
</tr>
<tr>
<td>North County Economic Development Council</td>
<td>Paul L. O’Neal and Associates</td>
<td>Paul O’Neal</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td>Battle Strategies, LLC</td>
<td>Keith Battle</td>
<td>Alternate</td>
<td>No</td>
</tr>
<tr>
<td>South County Economic Development Council</td>
<td></td>
<td>Dan Biggs</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Alejandra Mier y Teran</td>
<td>Alternate</td>
<td>No</td>
</tr>
<tr>
<td>California Center for Sustainable Energy (Formerly San Diego)</td>
<td></td>
<td>Irene M. Stillings</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Andrew McAllister</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>GEOGRAPHICAL AREA/ORGANIZATION</td>
<td>JURISDICTION</td>
<td>NAME</td>
<td>MEMBER/ALTERNATE</td>
<td>ATTENDING</td>
</tr>
<tr>
<td>--------------------------------</td>
<td>--------------</td>
<td>--------------------</td>
<td>------------------</td>
<td>-----------</td>
</tr>
<tr>
<td>Regional Energy Office)</td>
<td></td>
<td>Jack Burke</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>Environmental Health Coalition</td>
<td></td>
<td>Laura Hunter</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Leo Miras</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>Large Business</td>
<td>Qualcomm</td>
<td>Alan Ball</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gail Welch</td>
<td>Alternate</td>
<td>No</td>
</tr>
<tr>
<td>Small Business</td>
<td>Food and Beverage Association</td>
<td>Steve Zolezzi</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td>Energy Policy Initiative Center (EPIC)</td>
<td></td>
<td>Vacant</td>
<td>Alternate</td>
<td></td>
</tr>
<tr>
<td>University of California San Diego (UCSD)</td>
<td></td>
<td>Scott Anders</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vacant</td>
<td>Alternate</td>
<td></td>
</tr>
<tr>
<td>San Diego State University (SDSU)</td>
<td></td>
<td>Gary Matthews</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dave Weil</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>Port of San Diego</td>
<td></td>
<td>Bill Hays</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Dave Carey</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>San Diego – Imperial Counties Labor Council</td>
<td></td>
<td>Marty Hunter</td>
<td>Member</td>
<td>Yes</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Vacant</td>
<td>Alternate</td>
<td></td>
</tr>
<tr>
<td>U.S. Navy</td>
<td></td>
<td>David Deiranieh</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Gary Simon</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>Sierra Club</td>
<td>Border Power Plants Working Group</td>
<td>Bill Powers</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>David Grubb</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>Industrial Environmental Association (IEA)</td>
<td></td>
<td>Patti Krebs</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td>Solar Turbines, Inc.</td>
<td>Jim McCollum</td>
<td>Alternate</td>
<td>Yes</td>
</tr>
<tr>
<td>San Diego Renewable Energy Society</td>
<td></td>
<td>Rich Caputo</td>
<td>Member</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Ted Stern</td>
<td>Alternate</td>
<td>No</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Jim Svedman</td>
<td>Alternate</td>
<td>No</td>
</tr>
<tr>
<td>Energy Producer</td>
<td>NRG Energy, Inc.</td>
<td>Steven Hoffman</td>
<td>Member</td>
<td>Yes</td>
</tr>
</tbody>
</table>
OTHERS

Linda Wagner - City of Chula Vista
Tom Blair - City of San Diego
Jack Key - San Diego County Grand Jury
Troy Robble
Dennis Trafecanty
David Hicks
Alexandra Hart - IBEW
Julie Gelfat - IBEW
Harvey Payne
Kurt Krammer
Sephra Ninow - CCSE
Jennifer Porter - CCSE
Tim Derrick - Helios Energy
Will Plaxico - Helios Energy
Kevin Murphy - CH2M Hill
Anthony Palizzi - CH2M Hill
Stephanie Stoppenhagen - CH2M Hill
Brian Holland - SANDAG
Kevin Wood - SANDAG
Statement of Task

The San Diego Association of Governments (SANDAG) Board of Directors has tasked the SANDAG Energy Working Group (EWG) with analysis of two proposed transmission projects that would import electricity to the San Diego region—the Sunrise Powerlink and the Talega-Escondido/Valley-Serrano (TE/VS) projects. The scope of the requested analysis is limited to determining whether the projects satisfy the goals, guiding principles, and implementation strategies of the Regional Energy Strategy (RES) 2030 and no findings are made on the relative merits of the two projects.

The San Diego Gas and Electric (SDG&E) Sunrise Powerlink proposal and the Nevada Hydro Company TE/VS transmission line proposals have been reviewed and analyzed by the SANDAG EWG from multiple perspectives, including transmission congestion scenarios, comparisons of import versus in-region resource options, and project-specific studies by the California Independent System Operator (CA ISO), California Public Utilities Commission (CPUC), and California Energy Commission. The EWG also reviewed the applications put forward by the two project proponents.

EWG Subcommittee Evaluation

On February 12, 2008, the EWG Policy and Resources Subcommittee discussed the transmission projects and evaluated their consistency with the RES. As in past EWG discussions on the topic, there was significant disagreement on the appropriate action to take. Two motions were considered—one that found both projects consistent with the RES by meeting Goal 5 (to increase transmission capacity), and another that found both inconsistent due to their negative effects on other RES goals, such as in-region generation and in-region renewables. The first motion to find the projects consistent with the RES passed with a majority.

Staff Recommendation

The remainder of this report comprises the staff recommendation. The EWG should consider whether or not it wishes to recommend this staff evaluation to the Regional Planning Committee.

In summary, staff finds that the Sunrise Powerlink and TE-VS proposals are consistent with the RES, despite a mixed impact on the goals of the RES. Each project increases transmission capacity to the region. Each proposed project also provides an opportunity to increase the import of renewable sources of electricity to the region, although the import of those renewables cannot be guaranteed.
However, since both projects are proposed to import renewable resources, they may result in a disincentive to meet the RES goal of producing 50 percent of its renewables in-region. By increasing import capacity, the projects also may prevent the region from meeting its in-region generation goal for 2020.

Staff also wishes to make note of two observations about the transmission projects evaluation process. First, EWG members are of very different opinions on project consistency with the RES, with many members believing that the projects are inconsistent. Second, the EWG was requested to analyze the projects for their consistency with the RES, but the RES does not provide a complete framework for decision-making on energy projects. In-depth analysis of the relative merits of these projects was necessarily omitted from the evaluation because many of these issues were not specifically addressed in the goals and strategies of the RES. These considerations may factor in to SANDAG decision-making on an appropriate course of action with regards to the Sunrise Powerlink and TE/VS projects.

**Sunrise Powerlink Project Description**

The Sunrise Powerlink transmission line proposal is for a 150-mile high-voltage transmission line that will run from the existing Imperial Valley substation in the east to the Rancho Peñasquitos substation in San Diego in the west. The project will be capable of importing 1,000 megawatts (MW) of electricity into San Diego County. The program’s application includes substation upgrades. SDG&E cites the following as project objectives:

1. Maintain reliability of service
2. Provide transmission capability for renewable resources
3. Reduce energy costs in the San Diego region

SDG&E filed an Application for Certificate of Public Convenience and Necessity with the CPUC for the Sunrise project in December 2005. An amended application was filed by SDG&E with the CPUC on August 4, 2006. In July 2007, evidentiary hearings commenced. The purpose of these hearings was to receive information from the proponents of the proposal for vetting by stakeholders and interested parties. These proceedings were completed, but discovery hearings via telephone have continued to date.

The hearings for the second component of the application are currently underway, with data requests and responses being produced on a daily basis by proceeding interveners, SDG&E, the CA ISO and others. A final decision by the CPUC on the application is anticipated for fall 2008.

**DRAFT ENVIRONMENTAL IMPACT REPORT (DEIR)**

The CPUC released its DEIR for the Sunrise Powerlink project on January 3, 2008. The DEIR evaluates and describes the potential environmental impacts associated with the construction and operation of the proposed project, and evaluates 27 alternatives to the project that are feasible and would largely meet the project objectives.
The DEIR found that the Sunrise Powerlink project would present 50 significant, unmitigable impacts. The project is the greatest overall length of all alternatives studied and the DEIR found numerous impacts within Anza-Borrego Desert State Park, including de-designation of state wilderness, degradation of views and recreational opportunities, and impacts on Traditional Cultural Properties.

The DEIR found five alternatives environmentally preferable to the project, including in-region generation, the Lake Elsinore Advanced Pumped Storage hydroelectric plant (LEAPS) transmission project, and northern and southern route alternatives.

**Talega-Escondido/Valley-Serrano (TE/VS) Project Description**

The TE/VS transmission interconnection is a 500 kilovolt (kV) line, approximately 30 miles in length and would connect Southern California Edison’s (SCE’s) existing Valley Serrano 500 kV transmission line in western Riverside County with SDG&E’s existing 230 kV Talega-Escondido transmission line in northern San Diego County. The project includes the construction and operation of new electrical substations and upgrades to both the SCE and SDG&E systems.

The Nevada Hydro Company cites the following project objectives:

1. Provide a transmission interconnection from the LEAPS to the transmission systems of SCE and SDG&E
2. Interconnect the SCE and SDG&E transmission systems and facilitate wholesale diverse bulk power transfers between those systems and from neighboring areas to those systems.
3. Provide transmission capabilities for the transport of renewable energy resources from the Tehachapi region and the Imperial Valley to assist in meeting or exceeding California Renewable Portfolio Standard goals.

An Application for Certificate of Public Convenience and Necessity was filed by Nevada Hydro Company on October 17, 2007, and upon successful submission of a Proponents Environmental Assessment, a proceeding will begin with the CPUC. Because the TE/VS transmission proposal was introduced with a large-scale pumped storage project, federal licensure for the project was required as well. An application for license of the LEAPS was filed with the Federal Energy Regulatory Commission (FERC) on September 15, 2000. On January 30, 2007, FERC and the United States Forestry Service (USFS) Environmental Impact Statement was published, marking the approval of the application. The applicant is currently awaiting water permits from California prior to the granting of the project’s federal license. The Nevada Hydro Company states that it plans to go forward with permitting and construction of the TE/VS project even if the LEAPS project does not receive FERC approval.

**Regional Energy Strategy 2030**

The RES has served as the region’s energy policy document since it was approved by the SANDAG Board of Directors in 2003.
GOALS AND IMPLEMENTATION STRATEGIES

The following is a listing of the RES goals related to energy infrastructure:

Goal 2: In-region peak load generation capacity. Achieve and maintain capacity to generate 65 percent of summer peak demand with in-county generation by 2010 and 75 percent by 2020.

1. Repower, retire, or replace existing older, inefficient regional power plants. Replacement or re-powered plants should employ state-of-the-art technologies (such as dry-cooling) to minimize impacts on the environment, water resources, and public health.
2. Construct sufficient new efficient, clean power plant(s) that employ state-of-the-art technologies (such as dry-cooling) to minimize impacts on the environment, water resources, and public health.
3. Develop a process to identify and, if necessary, zone appropriate land for future energy infrastructure.
4. To the greatest extent possible, utilize local workers, contractors, training programs and manufacturers to support building a sustainable local energy economy.
5. Partner with existing training programs and community outreach groups to train the next generation of the region’s energy workforce and energy decision makers for future energy infrastructure construction.

Goal 3A: Increase use of renewable resources/Goal 3B: 50 percent of renewables from in-region sources. Increase the total electricity supply from renewable resources to 15 percent by 2010 (~740 MW), 25 percent by 2020 (~1,520 MW), and 40 percent by 2030 (~2,965 MW). Of these renewable resources, achieve 50 percent of total renewable resources from resources located within the county (~370 MW by 2010, ~760 MW by 2020, and ~1,483 MW by 2030).

1. Develop a regional renewable energy development initiative to assist and promote the availability of renewable energy systems for public agencies, commercial and industrial customers, and residential consumers.
2. Create a coalition of community-based organizations to jointly fund a regional penetration, feasibility, and placement study for renewables in the region.
3. Evaluate opportunities for public-private ventures to develop large-scale renewable projects within the region to serve the needs of the region’s renewable energy supply goals.
4. Develop remaining opportunities to tap local landfill gas resources.
5. Organize a corporate pledge program to support a strong commitment to regional renewables development and use.
6. Develop financing mechanisms to address the upfront capital costs of energy supply systems, such as solar electric systems.
7. Support changes to the newly enacted Renewable Portfolio Standard to allow accelerated credit for onsite renewable energy generation.
8. Support the removal of the current cap on the total capacity of renewable energy systems that can take advantage of net metering (0.5 percent of peak demand or 18.7 MW).
9. Promote quality jobs for workers employed in the energy sector through the invigoration of the local renewable energy industries.
10. Develop incentives for increased levels of research and development in the region for new emerging technologies.
11. Develop a binational renewable energy development plan with Baja California to develop the sizable potential of solar, wind, and geothermal energy generation in Northern Baja.

**Goal 4: Increase percentage of peak demand met with distributed generation.** Increase the total contribution of clean distributed generation resources (non-renewable) to 12 percent of peak demand by 2010 (~590 MW), 18 percent by 2020 (~1,100 MW), and 30 percent (~2,225 MW) by 2030.

1. Support regulatory changes that permit customers to use excess power production by distributed generation to offset energy usage of other accounts (wheeling).
2. Support the removal of regulatory barriers to self-generation, such as standby charges and exit fees.
3. Develop programs and processes to promote the use of distributed generation resources. In particular, support the continuation of the Self-Generation Incentive Program with funding for all categories of distributed generation technologies.
4. Develop and implement standardized and streamlined permitting processes for all distributed generation technologies in all regional permitting agencies.
5. Develop a distributed generation economic development program to attract producers and suppliers of distributed generation.
6. Develop a regional distributed generation education campaign.
7. Maximize use of state-funded and authorized incentive and financing programs.
8. Aggregate distributed generation equipment purchases where feasible.
9. Encourage statewide working groups to develop a long-term deployment strategy for distributed generation technologies.
10. Encourage a regional or statewide aggregate level dispatchable power program and/or market that rewards participants while offering greater system reliability.
11. Promote innovative research and development of energy technologies that would improve energy, environmental performance, fuel diversity, and the local economy.

**Goal 5: Increase transmission capacity.** Increase the transmission system capacity as necessary to maintain required reliability and to promote better access to renewable resources and low-cost supply.

1. Pursue viable options for an additional high-voltage transmission interconnection to the region to improve reliability. Identify a project as soon as possible and complete construction by 2008.
2. Complete the necessary upgrades to the transmission system to improve reliability and access to new generation in Baja California, as well as interconnections with renewable energy development in Imperial County and Eastern San Diego County.
3. Actively participate in established regulatory forums to encourage an energy infrastructure planning process that is transparent and more accessible to the public.
4. Conduct specific transmission infrastructure studies to evaluate, improve, and ensure system reliability.
5. Continue to work with the CA ISO, SDG&E, and surrounding states (including Baja California) to evaluate all alternatives for improving transmission supply into the region.
6. Complete a long-term study to evaluate the need for and identify potential sites and corridors for future energy infrastructure projects with an emphasis on transmission that would enable better access to renewable generation sites.

7. Develop a process to identify and, if necessary, zone appropriate land for future energy infrastructure to avoid conflict of needed energy infrastructure with future development.

GUIDING PRINCIPLES

The following guiding principles inform the policies contained in the RES:

- The supply portfolio will be diversified, cost-efficient, environmentally sound, self-sustaining, secure, and reliable.

- The planning process will be open and inclusive.

- Energy projects, programs, and policies will protect the interests of the vulnerable and disadvantaged communities in the San Diego region and Mexico.

- The region will have adequate indigenous resources to ensure reliability and stabilize prices.

- Energy efficiency and demand management programs will be preferred over the development of new fossil-fueled generation resources.

- Future development and land use planning decisions will reflect progressive standards for energy efficiency and responsible energy supply.

- Energy programs and policies will support economic development activities and the creation of new jobs in the San Diego region.

- Public awareness and education programs will promote responsible energy decisions by the public.

- San Diego and Baja California, Mexico is an inseparable economic and environmental region, requiring close coordination of energy planning and action. Recognizing this union of economy and environment, energy generated in Mexico for use in the San Diego region should be encouraged to comply with both California and United States environmental and labor laws. Likewise, energy projects located in San Diego should take into account potential environmental effects in nearby Baja California.

- Markets and regulation must be designed and adapted as necessary to maximize the benefits of competition in wholesale markets while protecting the public from inappropriate pricing practices in retail markets.

- All energy usage affects the environment. Any energy policy or program must balance benefits and costs against the impact on the environment.
Energy is an essential social need. All energy policies and programs must consider environmental justice impacts by ensuring the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income.

Project Evaluation

The following table summarizes the conclusions reached in the staff evaluation.

<table>
<thead>
<tr>
<th>Goal</th>
<th>Sunrise Powerlink</th>
<th>TE-VS</th>
</tr>
</thead>
<tbody>
<tr>
<td>Goal 2: In-County Peak Load Generation Capacity</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Goal 3A: Increase of Renewable Resources</td>
<td>+</td>
<td>+</td>
</tr>
<tr>
<td>Goal 3B: 50% Renewables from In-County</td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>Goal 4: Increase DG % of Peak Demand</td>
<td>0</td>
<td>0</td>
</tr>
</tbody>
</table>

Key

++  Contributes to goal  
+   May contribute to goal  
0   No effect or unknown effect on goal  
-   May conflict with goal  
- -  Conflicts with goal

The following passages describe the analysis of each transmission project relative to RES goals.

Goal 2: In-region peak load generation capacity

Both the Sunrise Powerlink Proposal and the TE/VS proposal would effectively result in a decrease in the in-region generating capacity serving the region over time. This is because reliability must-run (RMR) contracts that currently mandate that the generating facilities stay online would no longer be needed and would most likely be removed. The projects are consistent with the goal for 2010, as 65 percent of in-region generation would be maintained even if the RMR contracts were removed and Encina and South Bay Power Plants were not included in the region’s generation mix. However, by 2015, the in-region generation resources would not follow the upward trajectory necessary to meet the in-region generation goal for 2020.
Goal 3A: Increase use of renewable resources

The Sunrise Powerlink plan includes the potential to import renewable resources, including solar thermal resources under contract from the Imperial Valley. However, serious questions remain as to whether development of these renewable projects is financially and technologically feasible, and no assurances can be made about the mix of power that will be imported into the region over the Sunrise line. Therefore, the project may contribute to the goal of increasing the use of renewable resources, but that result is not certain.

Similarly, the TE/VS project connects the region to renewable resource areas, but there are no guarantees that the project will carry predominately renewable-sourced electricity. However, because TE/VS connects with an extensive grid, it is more likely that renewables from such sources as the Tehachapi Mountains wind projects could be imported.

Goal 3B: Obtain 50 percent of renewables from in-region sources

Either project could impede the goal of obtaining 50 percent of renewables from in-region sources. If the project facilitates compliance with the Renewable Portfolio Standard through out-of-region resources, there will be less of an incentive to develop in-region renewable resources.

Goal 4: Increase percentage of peak demand met with distributed generation

The projects do not necessarily promote or discourage distributed generation, and they may have mixed impacts on the goal. On one hand, increasing import capacity of centralized generation may disincentivize the addition of new distributed generation. With or without new high-voltage transmission, however, in-region distributed generation can be used to offset existing load or to serve new load by organizations throughout the region. Indeed, it is potentially beneficial to construct the lines to allow increased dispatchability of distributed generation resources should they not be needed on a full-time basis in-region.

Goal 5: Increase transmission capacity

Each of the projects contributes to the goal of increasing transmission into the region. The Sunrise project also is consistent with Implementation Strategy 2 of the goal, which is to provide access to renewable resources in Imperial County. TE/VS is potentially consistent with that Implementation Strategy, depending on future interconnections with Imperial Irrigation District transmission lines.

Attachment: EWG Policy and Resources Subcommittee Meeting Notes, February 12, 2008

Key Staff Contact: Brian Holland, (619) 699-6915, bho@sandag.org
Energy Working Group Subcommittee meeting report 2-12-08

Recommendation
The SANDAG EWG Policy and Resources Subcommittee recommends continued processing by the CPUC of both projects (TE-VS and Sunrise Powerlink), since they are both consistent with the Regional Energy Strategy Goal 5, which is to “increase the transmission system capacity as necessary to maintain required reliability and to promote better access to renewable resources and low-cost supply”.  
*Introduced by Steve Zolezzi, Food and Beverage Association*  
*Seconded by Mike Evans, SD Regional Chamber of Commerce*  
*Passed (4 support, 3 oppose, 1 abstention)*

Meeting notes
The EWG subcommittee heard public comments from Ziad Alaywan, Diane Conklin, Kurt Dowds, Dan Perkins, and Dennis Trafacante.

Chair Alan Ball asked each member present to discuss their position on the TE-VS and Sunrise Powerlink proposals

Mike Evans
- There are fire concerns w/ transmission, we should address issues surrounding redundancy.  The Chamber is primarily concerned with reliability and with compliance with state goals such as the RPS.

Bill Powers
- TE-VS does not prevent in-region capacity, however only 40 percent will be in region by 2015, this is in conflict w/ goal #2
- SANDAG’s draft analysis says there is a conflict with goal #3B, he agrees (in-region renewables may not be met either, 50% of total mix)
- Goal #4 will not be met (DG) 700 MW will not come to fruition
- UCAN analysis shows that EE will prompt no growth in demand, contrary to SDG&E’s analysis which shows increase each year in demand
- Each transmission proposal will be in conflict with goals 2, 3B, 4
- Hope is that goals of RES will be met, does not have to be a conflict between goals, they can work together
- There is an obligation to meet goals of RES
- After this is done, if a case is made that a non-controversial reinforcement to existing Transmission is needed, we can entertain reinforcing lines, and then look to additional capacity as needed

Laura Hunter
- Believes that Mike Evans, Chamber of Commerce, has a conflict of interest and should recuse himself.  Chair Alan Ball does not concur.
- Subcommittee has not been tasked with “How do we make the Transmission proposals consistent with RES Goal #5?”  We have been tasked with “Are these proposals consistent w/ the RES?”
- These projects both clearly undermine and frustrate meeting the other goals of the RES, directly contrary to goals
- Both lines should be determined to be “inconsistent”
- Wants all Guiding Principles included within the matrix
- Should not be a + which means “may” +’s should be changed to ’s

Jim McCollum
- Task was to consider two projects and determine if they are consistent with RES and if they add reliability
- Both add transmission capacity, both have been planned for years, we’re being tasked to say whether the projects will add reliability as proposed
- It’s challenging to look at RES goals all at once to determine if projects meet all parts of it, each component contributes to reliability of region, and both of these projects help achieve that reliability

Irene Stillings
- CCSE will not vote on issue; corporate policy precludes this
- As an author and contributor of RES, she believes she has a good perspective on the intent of the document
- Goals are “stretch” goals to pursue and drive more policy
- RES 2030 is a policy document, not intended to be a deciding factor for project approval or rejection
- Transmission was discussed at length during planning meetings, urgency of need for more transmission
- More transmission needs to be reconciled with environmental and visual blight concerns
- Everyone at table in those RES discussions felt that new transmission was needed, the question is “Where?”

Richard Caputo
- Grid stability and reliability need to be improved
- Both lines satisfy reliability issue, one is 30 miles away (costs less), other is 150 miles away (costs more)
- TE-VS has fewer mitigation issues than Sunrise and is more cost effective
- Loading order preference will push fossil resources off grid, and renewables will be used as available more than fossil resources

Steve Zolezzi
- RES 2030 includes many points, all germane to discussion, one should not be regarded w/o consideration of the others
- Can’t satisfy all goals of RES at once
- Need to take a position, may not be unanimous, one way or another
- Charge from SANDAG is to come up with response on two transmission projects, not on generation or other infrastructure issues
- Not adequate transmission in region, need multiple ways to import power into SD
- Need to make a decision, not wait forever to hear all sides of story, because it will not happen
- Both projects are viable, both should be supported to the EWG, and to the BOD

Jennifer Porter presented the staff analysis via PowerPoint slides

Comment on staff analysis by Bill Powers
- Report should be amended to include forecast for capacity to at least 2015 (not end at 2010), which will necessarily change the matrix
Alan Ball

- Businesses need power; when power is out, business doesn’t work
- We are not addressing all infrastructure proposals today, only the two transmission proposals
- The proposals before us are not ideal, transmission will upset the need for in-region generation, however large scale in-region renewables are not possible for cost/permitting issues. The only way large scale renewables would be viable is out of region renewables being imported
- AB 32 addresses GHG emission reductions and these projects do not reduce demand which would mitigate GHG emissions; not sure that these projects are best choice for region’s future

Bill Powers noted that EIR recommendations should be included in report; Sunrise was second to last choice for region (of seven). There are conflicts between these projects and RES, and we should not whitewash this recommendation for BOD

Steve Zolezzi mentioned that infrastructure projects take a long time to permit; we need to act on project proposals as they come along, not wait for the perfect solution

Laura Hunter noted that both proposals would work from with one substation; undermines security argument for lines. She also mentioned that Goal #5 states transmission to be used “as necessary”. Finally, she mentioned that simply b/c the proposals were made to us first doesn’t mean that we have to approve them.

Mike Evans and Bill Powers discussed import capacity of the region and agreed that while it might be technically possible to import 100% of our electricity demand as stated in Mr. Powers’ report, it would not happen because from a grid stability standpoint, it was not allowed or possible. Mr. Powers reiterated that he wanted to make the point that it was physically possible.

Multiple parties discussed the cost issue; it was agreed by some members that a long transmission line would be more costly; Jim McCollum clarified that there is no guarantee that the TE-VS would import only to SD-it may cost less, but it is not only for SDG&E territory. We should not make a choice about one line or other on the basis of cost, but should support both lines as consistent with RES.

Two motions were presented by EWG members and discussion and revision of the motions ensued. In the end the following motions were voted on by the EWG subcommittee:

Steve Zolezzi: The SANDAG EWG Policy and Resources Subcommittee recommends continued processing by the CPUC of both projects (TE-VS and Sunrise Powerlink), since they are both consistent with the Regional Energy Strategy Goal 5, which is to “increase the transmission system capacity as necessary to maintain required reliability and to promote better access to renewable resources and low-cost supply”.
Seconded by Mike Evans
Passed (4 support, 3 oppose, 1 abstention)

Laura Hunter: SANDAG EWG subcommittee recommends that both proposals are inconsistent with the overall goals of Regional Energy Strategy 2030; they are not necessary, undermine some goals, and the Board of Directors should oppose the proposals.
Seconded by Bill Powers
Failed (2 support, 4 oppose, 2 abstention)

*Laura Hunter reiterated her perspective that one vote (Mike Evans, San Diego Regional Chamber of Commerce) should not be counted as there is a conflict of interest.