MEETING NOTICE
AND AGENDA

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

June 23, 2005
11:30 a.m. to 2 p.m.

SANDAG, 7th Floor Conference Room
401 B Street, Suite 800
San Diego, CA 92101-4231

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1. WELCOME AND INTRODUCTIONS

+2. MEETING SUMMARY FOR THE APRIL 28, 2005 AND MAY 26, 2005 MEETING

   Attached are the meeting summaries for the April 28, 2005 and May 26, 2005 EWG meetings. The EWG postponed approval of the April 28, 2005 meeting summary pending review of a memo distributed by Kurt Kammerer.

3. PUBLIC COMMENT AND COMMUNICATIONS

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

+4. ENERGY WORKING GROUP CHARTER

   SANDAG’s Executive Committee requires that every working group that reports and/or makes recommendations to the Board of Directors or one of its five Policy Advisory Committees prepare a charter that outlines the working group’s responsibilities, line of reporting, membership, meeting frequency and other information. The draft charter for the Energy Working Group is attached. The EWG should provide comments and consider approval of the charter.

5. CALIFORNIA DEPARTMENT OF ENERGY

   The Governor has proposed to create a new Department of Energy which would be headed by a cabinet level secretary. This would consolidate functions of the CEC, CPA, CERS, Electricity Oversight Board, and some of the existing functions of the CPUC under this department. Some of the existing functions of the CPUC and the CEC would be shifted to this new Department. Staff will provide an overview of this proposal and the status of the proposed changes.
6. REPORTS FROM EWG SUBCOMMITTEES

A) Public Policy Subcommittee
   Legislation: The Policy Subcommittee has been tracking relevant energy bills and will provide an update. Bills had to progress from their house of origin by June 2 to be considered for passage this year. The Subcommittee is also following development of the CEC Integrated Energy Policy Report (IEPR) and will provide an update and potential role for the EWG. The IEPR committee is to address IOU resource planning at a workshop scheduled for June 30, 2005 at the CEC.

B) Resources Subcommittee
   Rate Design Window – The Resources Subcommittee has proposed that the EWG submit comments in the Rate Design Window proceeding. The EWG will discuss this approach to participation in the proceeding and the types of comments that will be submitted.

7. CEC IEPR WORKSHOP ON IOU RESOURCE PLANS

The CEC has scheduled a workshop on June 30 to assess IOU long term resource plans and should release summary reports prior to the meeting. Pending release of the documents, staff will provide an update on the IEPR process, summary of the CEC reports, and recommended next steps for the EWG.

8. SUGGESTED MEETING TOPICS FOR NEXT MEETING

Energy Working Group members should suggest items to be discussed at the next or future meeting.

9. ADJOURN

The next EWG meeting is scheduled for July 28, 2005 from 11:30 a.m. to 2 p.m.
May 12, 2005

TO: Energy Working Group

FROM: SANDAG Staff

SUBJECT: April 28, 2005 Meeting Summary

Members in Attendance
Councilmember Henry Abarbanel, North County Coastal
Councilmember Donna Frye, City of San Diego (Alternate)
Councilmember Steve Castaneda, City of Chula Vista
Alan Ball, Qualcomm (Alternate)
Scott Anders, San Diego Regional Energy Office (Alternate)
Michael Shames, Utility Consumers’ Action Network
Jeff Grissom, County of San Diego
Dr. Alan Sweedler, San Diego State University Foundation
Steven Zolezzi, Food and Beverage Association
Patti Krebs, IEA
Martin Hunter, San Diego Labor Council
Dan Perkins, Sierra Club (Alternate)
Robb Anderson, San Diego Gas & Electric (Alternate)
Gary Matthews, UCSD

Others in Attendance
Nick Markos, University of San Diego
Jack Rasmuson, University of San Diego
Erik Otama, University of San Diego
Tom Blair, City of San Diego
Jan Van Lierop, SDG&E
D. Rick Van Schoik, SCERP
Nicole Lapretz, Councilmember Donna Frye
Kurt Kammerer, KJK&A
Alexandra Hart, IBEW Local 569
J.C. Thomas, San Diego Gas & Electric
Scott Crider, San Diego Gas & Electric
Rob Rundle, SANDAG
Bob Leiter, SANDAG
Beth Jarosz, SANDAG

1. Welcome and Introductions
Councilmember Henry Abarbanel, North County Coastal, welcomed everyone and began the meeting.
2. Meeting Summaries for the March 24 EWG Meeting and Transmission Workshop

The motion was made and carried to approve the Meeting Summaries for the Transmission Workshop (March 15, 2005) and the March 24, 2005 EWG Meeting.

3. Public Comment and Communications

There were no public comments or communications.

4. Upcoming Workshops Reminder

The schedule of planned Energy Working Group (EWG) sponsored workshops, as well as announcements for the EWG/Flex Your Power Summit being held on May 4 and Border Energy Workshop being held on May 18, were attached to the agenda packet.

Dr. Alan Sweedler, SDSU Foundation, asked if the EWG should consider making specific recommendations to Joe Desmond and other presenters at the May 4 summit. Councilmember Abarbanel’s response was that although the EWG hadn’t discussed doing so, if after a few more workshops members feel that it would be beneficial, they can work to develop them at that point. He went on to explained that the workshops will address a number of issues including those identified within the Long Term Resource Plan (LTRP), concerns about the summer of 2005, and broader issues such as border energy policy and programs.

The California Border Energy Workshop will be held May 18, 2005. Plans for the workshop were initiated by Tim Olsen of the C.E.C., who asked the EWG to co-sponsor the event.

5. SDG&E Rate Design Application

Jan Van Lierop, SDG&E, gave an overview of the Electric Rate Design Window application that was submitted to the California Public Utilities Commission (CPUC) in February of 2005. He distributed a handout of a power point presentation that outlined the application process and also gave a detailed description of rate components. Van Lierop began by explaining that the Electric Rate Design Window application has to be filed by the utility annually and that it provides the opportunity for both the utility and third party organizations to propose adjustments to the rate design and cost allocation. The proceedings are revenue neutral. Major goals of the filing included moving toward cost-based rates to eliminate cross-subsidies, progressively moving toward cost-based class allocations, and to make changes to the commodity rate. Van Lierop explained that SDG&E would like to make changes to the commodity rate to make them more reflective of costs. Change would occur in the ratio of on and off peak rates and would rebalance how costs are allocated. Van Lierop then addressed AB 1X, which was passed during the energy crisis and has distorted rates due to capping for residential customers. SDG&E believes that some of their rates are not sufficiently cost based including time of use, seasonal and the residential 5-tier inverted pricing. Those rates were established during the energy crisis and should be reconsidered.

Dr. Sweedler asked for clarification on the proposed changes for low usage residential customers. Van Lierop explained that the baseline for low use residential customers would not be eliminated, thus maintaining incentives for conservation.

Van Lierop presented data showing the differences between current and realistic costs, which is also detailed in the handout that was distributed by Van Lierop. SDG&E is proposing that certain
subsidies are phased out and that remaining subsidies be combined into one rate component, to be called the Total Rate Adjustment Component (TRAC), making those subsidies easier to identify. Steve Hoffman, SDRCC, asked if the rates were fully fundable. Van Lierop explained that they were, but that additional costs will be layered onto the rates presented in the handout. The rates detailed within the handout only reflect the costs of distribution, generation and transmission. Alan Ball, Qualcomm, asked if the proposed rate changes would fall under SDG&E’s commodity or distribution costs if they were to be unbundled. Van Lierop’s response was that current subsidies are on the generation/commodity side however, SDG&E is proposing to move them to the non-by-passable track as part of the un-bundled distribution. The rate is based on kilowatt hours rather than on commodity rates, meaning that all customers have to pay it. Hoffman asked what impact the changes would have on direct access customers. Van Lierop explained some of those impacts, and pointed to page 5 of the handout for further detail. Some customers might see a small increase in their rate, but any increases to the rate class as a whole will be offset by a decrease to the commodity rate. Van Lierop is expected to report back to the EWG regarding Hoffman’s question about the dollar value of the direct cost of the aggregated load. Michael Shames, UCAN, asked if SDG&E’s proposal would increase the proportion of fixed rates paid by commercial and industrial customers, Van Lierop’s response was that it would not.

Councilmember Abarbanel asked how different the rates would be if SDG&E had crafted them to encourage energy conservation. Van Lierop explained that very little would change because costs are simply being moved between customer classes. The rates expressed are class averages and show the impact of fixed charges for residential and small commercial. Volumetric pricing doesn’t play a large role, except for the commodity rate, which would be the same for everyone. Kurt Kammerer, KJK&A, felt that he could pose Abarbanel’s question in a new way, and asked if the rate structure was neutral, then how were customers being encouraged to lower their energy usage. Van Lierop explained that the rates were revenue neutral from the standpoint that a certain usage forecast had been applied, adding that the tables presented showed the collective rate class, and had not been broken down to the level that would show the changes that would be seen by an individual customer. Kammerer added that if the proposal was truly revenue neutral, why would revenue go down by 50% in the next ten years, Van Lierop explained that it wouldn’t actually be going down.

Councilmember Abarbanel asked if Van Lierop would be able to return to the EWG at a later date in order to give EWG members the opportunity to review the information he had provided them with. Abarbanel suggested that the resources subcommittee further analyze the rate change proposal and develop a detailed list of questions to ask Van Lierop when he returns. Van Lierop agreed to return to the EWG and summarized that page 10 of the handout details major components of the rate change including the commodity rates and changes to the ratio of on and off peak pricing changes. Dr. Sweedler asked if the EWG would be asked to support the proposed changes to the rate structure. Councilmember Abarbanel explained that the presentation was meant to be informational, but that the resources subcommittee will decide if the EWG should comment on the application after having reviewed the proposal. Formal testimony on the proposal, from any party, must be heard by June 24 and public hearings will be held in San Diego between July 18 and 22. Informal. The resources subcommittee will make recommendations on the issue at the next EWG meeting, to be held May 26, 2005. Steve Hoffman, SDRCC, asked Van Lierop if he would be available to attend the subcommittee’s next meeting, in order to clarify anything that might be discussed. Hoffman added that in his opinion, rate structures created by AB 1X don’t allow for the modified behavior of all rate classes and wondered if SDG&E would be capable of developing something that would do that for the current filing period. He asked how the EWG
would feel about that, as it would increase costs for customers that don’t change their usage patterns. Dr. Sweedler felt that it would be most appropriate for the subcommittee to determine how the proposed changes related to the Regional Energy Strategy (RES) and loading order, which emphasizes conservation.

Michael Shames asked if critical peak pricing would be considered within the proposed rate changes. Van Lierop explained that it would be addressed, but that was not included in his presentation, as it is still going through proceedings at the state level. Shames explained that the rate design window case attempts to pit large and small customers against one another. In the past cases have been settled, but Shames feels this case will be different, as it will determine if conservation is encouraged. The case will also present the EWG with the opportunity to ask the PUC why commercial and industrial customers pay such high fixed costs regardless their energy usage. Shames explained that fixed costs actually discourage conservation and that if conservation is to be encouraged, price controls that charge based on usage will have to be set. Shames suggestion was that a different rate structure be created, where the demand charges are significantly less, he also suggested that the timing of rates be discussed and that customers should pay no fixed charges during critical peak pricing periods.

6. **Energy Policy Initiative Center**

Michael Shames, UCAN, explained that the University of San Diego was recently given an estimated 2.8 million dollars to develop an Energy Policy Initiative Center (EPIC). They are currently in the process of finding an Executive Director, once an Executive Director has been named the center will take on such tasks as teaching courses at USD, and providing the funding and knowledge necessary for the objective analysis of issues that the center feels are important for the region. Shames expects that the center will look to the EWG and other groups for help in determining what some of the region’s most important issues are and where objective and analytical input would be most helpful. Members of the EPIC include representatives from the District Attorney’s office and USD staff, among others. In response to a question from Councilmember Abarbanel, Shames suggested that the center’s Executive Director would be the best person to have involved with the EWG. Bob Lieter, SANDAG, asked if the center would be a potential resource for the EWG as they continue their work on the LTRP update with SDG&E. Shames would think that they would do that, but explained that the center has yet to develop an official agenda.

7. **SDG&E Long Range Plans**

J.C. Thomas, SDG&E, gave the EWG the presentation that SDG&E will be bringing to city councils throughout the region. The presentation addresses SDG&E’s long range plans including a summer 2005 update and information regarding major infrastructure projects. Thomas began his presentation with a video describing some of SDG&E’s current activities, however due to technical difficulties with the DVD, he proceeded with a power point presentation describing the challenges that the region is expected to face this summer. SDG&E reached the conclusion that transmission development and improvements were necessary, only after a careful analysis of its positive and negative effects on reliability, economics and renewables.

Dr. Sweedler asked if the new plants would allow for the consideration of greener alternatives to Encina and Southbay, Robb Anderson explained that the new plants would allow for that consideration because the new plants would increase in-basin generation to above the minimum standards for grid reliability. Sweedler also asked if consideration had been given to developing a
transmission line to connect the U.S. and Mexico, allowing increased access to renewable and generated power. Thomas’ response was that SDG&E has considered the option and that they are currently conducting a technical study with Mexico’s utility provider. Thomas added that developing transmission through Mexico is a concern because the line would connect at the already congested Miguel substation.

Steve Hoffman, SDRCC, stated that both the LTRP and RES call for 65% in-region resources. If the current capacity of the southwest power link, with current upgrades, is 1,900 MW and 65% would be coming from within the region, 1,700 MW would be left for imports, which seems to be met by the existing line. Hoffman asked why the region would need a new line if that was the case. Robb Anderson explained that it should be considered from a reliability standpoint, which would mean analyzing the system with the largest transmission line and power plant out of service. In that case, if the southwest power link were to go down, the region would not be adequately served. Dr. Sweedler pointed out that new transmission was not a resource issue then, but a reliability issue. Robb Anderson suggested that the subject be discussed by the resource subcommittee in order to make sure that calculations were correct and that it could be worked through.

Councilmember Donna Frye, City of San Diego, asked what was meant by transmission line capacity. Thomas explained that transmission lines can only hold a certain amount of electricity and that once the maximum is reached it becomes difficult for energy to pass over the line. Frye then asked if SDG&E looks at a community’s General Plan to determine what their capacity is and where additional transmission capacity will be needed in the future. Robb Anderson, SDG&E, explained that SDG&E looks at transmission in a number of ways, and that Thomas’s report discusses transmission on a larger scale. Frye clarified that it sounded as though SDG&E’s main concern is to provide the necessary transmission for growth that has already occurred rather than providing increased transmission in areas that are planned for future development, based on the analysis of community plans. Frye asked if SDG&E would be willing to help jurisdictions plan and develop energy resources for future development in their community. Thomas explained that although SDG&E usually gets involved when a developer applies for a permit, Frye’s suggestion sounds like something SDG&E would consider becoming involved in. Frye explained that it if jurisdiction’s had the opportunity to develop an energy element, energy infrastructure could be planned for in advance rather than being provided for after the fact. It would also encourage coordination with the RES.

8. Reports from EWG Subcommittees

A) Public Policy Subcommittee

Alan Ball, Qualcomm, presented on behalf of the Policy Subcommittee, gave a brief description of the Regional Energy Summit, held May 4, 2005, and then discussed SDG&E’s rate design window proposal, which the subcommittee had found to be very technical and requested that the Resource Subcommittee help them work through it. The Subcommittee has completed their analysis of priority policy issues from the LTRP and are currently reviewing all energy bills, before choosing between five and ten bills that could have a significant impact to track. The subcommittee has looked into model energy ordinances, policies and approaches, samples of which will be brought to the next meeting.
B) **Resources Subcommittee**

Steve Hoffman, SDRCC, presented on behalf of the resource subcommittee, and began by explaining that the subcommittee has established subcommittees of their own, to allow for improved analysis. Subcommittees were formed around the issues of transmission, conventional plans, renewables and energy efficiency. Councilmember Abarbanel is currently working to develop training sessions on transmission issues with SDG&E. The details of those sessions are still being worked out, however the EWG will be informed of the date and location of those sessions through SANDAG staff. The subcommittee has discussed the possibility of developing a template to look at groups of resources by category with Robb Anderson. A template would break down the costs associated with the development of specific types of resources, allowing the subcommittee to better analyze what the best proposals are. The subcommittee will be meeting the first Monday of each month as a rule.

Dr. Sweedler added that he is participating in a renewable energy study, that draft chapters are currently being developed, and suggested that the study might be incorporated into the renewable resources workshop. Councilmember Abarbanel suggested that Dr. Sweedler bring an informal draft of the study to the EWG in June.

9. **Energy Efficiency Pilot Project**

SANDAG staff summarized that the City of Carlsbad had been chosen for the Energy Efficiency Pilot Program, that the kick-off meeting has already taken place and that the energy audits are already underway. Once the audits are completed the City will look at their capital improvements program to identify any potential for savings in future construction. The program will also be presented to the city council in order to make them aware of existing potential, and also to discuss possible funding mechanisms. New construction and possible changes that would promote energy efficiency will also be looked into. A report will be developed and presented to the EWG, as well as, to other jurisdictions that are considering making energy efficiency a priority. The subcommittee will report back to the EWG regarding the amount of potential savings identified in Carlsbad, and also on the plans for implementation. Anders added that the pilot program was intended to develop program ideas and mechanisms for public agencies, but that those ideas can also be applied by other agencies.

10. **Suggested meeting topics for next meeting**

Scott Anders explained that there have been a number of questions regarding the costs of AB 1X, and specifically those associated with net metering. Anders developed and distributed tables that analyzed those costs. The tables were an attempt to put numbers down and show the cost of rate changes for customers in various rate categories. Councilmember Abarbanel felt that the tables presented important information and asked that Anders re-work the tables’ formatting and present them as an agenda item at the next meeting.

Michael Shames informed the EWG that the Advanced Metering initiative, which SDG&E referred to in their presentation, would be controversial and most likely require testimony, which could present an opportunity for the EWG’s involvement. Hearings will begin in either August or September. Shames suggested that anyone with comments should get them on the radar screen as soon as possible. Councilmember Abarbanel suggested that SDG&E be asked to attend the May EWG
meeting to discuss the issue, after having had the resource subcommittee evaluate and make recommendations of the proposal. Steve Hoffman asked Shames to clarify why the AMI issue was so important. Shames explained that SDG&E is proposing spending a significant amount of money to upgrade the system with real-time meters for residential and commercial customers and that one issue is the cost of those upgrades, another is the rate design itself, and a third will be to decide whether SDG&E’s proposal is the best way to solve the region’s energy problems.

Dr. Sweedler added that it is important to determine if SDG&E’s proposal is in line with the goals set out in the Regional Energy Strategy (RES). Shames explained that this is also important because it will be the largest upgrade to San Diego’s distribution system in generations, and may be the only one for decades to come. The issue deserves thoughtful consideration by all parties involved because it could be the last opportunity to upgrade the distribution system for quite some time.

Shames suggested that SDG&E considers the presentation given by J.C. Thomas to the EWG, as SDG&E having received community input. Councilmember Castaneda agreed with Shames, stating that the report was vague and that it did not allow for any input. He felt as though the presentation skimmed over any real issues associated with the development of renewables or transmission, which would be important to discuss. Castaneda encourages SDG&E to come back to the EWG with specific information that would enable the EWG to give some real input on their proposal. Councilmember Abarbanel explained that the resource subcommittee is working with SDG&E to address specific issues and concerns, and that the presentation given by Thomas was basically just a general overview that will be presented to area city councils. Abarbanel suggested that when those presentations are given, council members should raise questions. Castaneda expressed an interest in becoming involved with the resources subcommittee. Dr. Sweedler asked that the resource subcommittee develop a list of specific questions for SDG&E to answer when they return to the EWG.

Tom Blair, City of San Diego, recommended that the impact of the Otay Mesa power plant connection be discussed in relation to the transmission issue. Hoffman feels that it presents an important example of why numbers should be developed before decisions are made. The resources subcommittee will attempt to develop a template to analyze the cost benefit, allowing the subcommittee to have a working session with SDG&E that would shed light on the cost benefit of their Long Term Resource Plan.

Hoffman suggested that the EWG needs additional resources to develop their own numbers and also to better understand and evaluate the information and data presented by SDG&E. An independent policy research organization has developed a study, which might be beneficial to the EWG and is being made available for a percentage of the studies overall cost. Councilmember Abarbanel clarified that Hoffman was asking the EWG to explore the quality of the study in order to see if it would meet the EWG’s needs, and if it did, the EWG would considering purchasing it. If the study were purchased the EWG would be getting a manual, software, a limited license for its use and training on how to use the program. Scott Anders added that the study is really a spreadsheet model that contains a lot of useful data. Dr. Sweedler and Councilmember Abarbanel will review the software and make a recommendation to the EWG. Councilmember Abarbanel suggested that SDG&E should be asked for their opinion on the software only after the EWG has formed theirs.
Kurt Kammerer, KJK&A, asked that his comments be reflected in the minutes verbatim, or as close to it as possible. He has looked at many of the minutes, made many comments and attended many meetings, but has seen very little, if any, of his comments reflected. He believes that he attended a meeting where there was extensive debate on public input at the time of the agenda item and believes that the EWG voted on that issue, and that it made sense, because the public may attend for the scheduled agenda item, and the public and Kurt himself feels very disrespected to be reminded that he is the last person between EWG members and the door. The EWG may receive more public input if people were respected out in the audience. Kammerer had raised his hand during the SDG&E matter, looked at the agenda - clearly we would be finishing on time - but he was put off. SDG&E and Councilmember Frye and other members of the audience are no longer present to hear his comments. Kammerer implores the EWG to reflect on his statements, and they might get some public, or see Kammerer back if he can comment when the EWG is fully engaged in that matter.

Kammerer's comments with respect to SDG&E's presentation, which he would like reflected in the minutes to allow SDG&E to be able to see in the minutes are as follows:

“I was encouraged that SDG&E is finally embracing renewables, once they've become mandated by law. I was dis-encouraged that SDG&E is pursuing solar and renewables so meagerly and talk about it in such glowing manners. I was an employee at SDG&E when we were looking at many of the projects that they are doing now and touting, 10 years ago. I will give you a few numbers, in the last five years we have seen 60 megawatts of solar either put in place or getting ready to be put in place. There is another 46 megawatts waiting in the que, these are the numbers, that's over 100 megawatts, which is bigger than the peaker power plant we are now putting in, are those numbers off, are those statewide numbers.” Anders clarified that the numbers Kammerer used were statewide, and that the region currently has 12.1 megawatts and 5 in que, 17 if they all get installed. Kammerer continued, “We have 12 megawatts, which is still a large number with relation to SDG&E just now putting in an RFP to put in 1 to 3 megawatts of solar on their own. SDG&E claims that they support what customers have been doing, but SDG&E themselves are doing only a ¼ of what the customers have already done, and I would guess there is probably two or three times that capacity in pent-up demand. Secondly, they just sited two 30 kilowatt projects on their distribution system, investigating the transmission and distribution attributes of deploying solar, something that we have been talking about for years, and that the industry has spent millions of dollars. I was personally involved in the RMD project 10 years ago, that we spent over a million dollars evaluating the distributed generation benefits to the distribution and transmission system. We are now just deploying 30 kilowatt toys on buildings thinking about this, and my point is this, if SDG&E is going to say that their Long Term Resources Plan is fully embracing the Regional Energy Strategy and infrastructure, it is not, it is not even close, and I will give you one last example, if you have been participating in the PAG, at the last PAG meeting, they talked about deploying a handful, five advanced homes that god-forbid will have solar thermal and electric. Well guess what, as Scott Anders knows, we were involved in a project five years ago with Shea Homes, 150 homes, full solar electric, full solar thermal, and another 150 with solar electric. SDG&E is finally getting around to playing with five homes, that have solar electric and thermal, and I am not trying to bash SDG&E, my hats off to them for finally embracing solar and renewables, but I will tell you, and I highly encourage this EWG, I know you take everything with a grain of salt, but these are meager numbers. The question was asked about the growth in downtown, 50 megawatts of growth, and I will quote Robb Anderson, and this is the company that is putting conservation, distributed generation and renewables first, Robb said, and I quote, ‘that’s exactly why we are building more
transmission to get more power into downtown.' Why did SDG&E not put out an RFP, not for a megawatt or two or three for their buildings, why did they put out an RFP for 50 megawatts in the next five years of distributed resource, 10 of which would be sold 20, why? They are embracing the city's 50 megawatts, is that 50 megawatts on city buildings in transmission constrained areas, who knows, I've asked that question many times and the utility dances around the question. They should be deploying much more solar in transmission constrained areas, and they should be doing it now, the EWG needs to be pushing that issue, not on one or two office buildings, San Diego city schools have a megawatt on their schools, you know that, who knows that? San Diego city schools are working to install a second megawatt of solar on their schools. The point is that if we adequately costed the value of solar, we would see countless amounts of solar being installed, and we don't. Utilities are up in Sacramento fighting against the solar roofs bill, which I have problems with as well. I really wanted to make these comments when SDG&E was here, and hope that they will be able to read those comments, I hope that you will more fully engage the public and experts in the audience. I apologize if I offended anyone, or got a little heated. My last comment is a question for Dr. Sweedler, in the renewable study that he mentioned, will they be looking off shore for potential renewables?” Dr. Sweedler was not sure if they would be looking off shore, but does not believe so, mainly due to the limited resources and funding for the study. Kammerer’s response was, “Well no, can we just make the recommendation and encourage you to look off-shore, and let me tell you why. In San Diego we mostly look east and north, we are starting to look south, we've always looked west for LNG, coming into our ports and offshore, by the way, we are starting a plant off-shore, off of Coronado Island, at possibilities for LNG and are even talking with the federal government about drilling off-shore for oil and natural gas. Has anyone in the room been offshore more than 10 miles in the middle of the day? Who’s been there? I have and it blows like crazy, an off-shore wind is the largest growing wind in the world, its being done in Europe, the technologies are there. Wind maps all cut off at the coast, and there has been very little discussion of off-shore winds, and if you look at the wind map off-shore and particularly in the mid-San Diego region, the resources are there.” Anders explained that off-shore winds have been looked into and discussed possibilities for off-shore wind power with a leading agency, who told them that the availability and usefulness of off-shore winds was directly correlated with ocean depths and the understanding was that the ocean depths off-shore of San Diego drop off precipitously not too far out. Kammerer suggested that “we look a little further, it’s called Bishop Rock.” Anders just wanted to explain that possibilities for off-shore winds have at least been discussed. Kammerer continued, “I'm not saying right off the coast, but there is Bishop Rock, and other areas with 100 foot water depths where it blows 25 knots 24 hours a day. You may have seen the recent articles about the surfing out around Bishop’s Rock. I am just bringing up the point that we should be looking off-shore, and that there is serious consideration for wave energy, and companies looking to sign something in California. I am not saying that I have done that assessment, although Asfaw Bayeen at SDSU did an extensive study for the CEC on wave energy, I just encourage the EWG to acknowledge that there is energy out there that is being ignored.”

11. Adjourn

The next EWG meeting is scheduled for May 26, 2005 from 11:30 a.m. to 2 p.m.
June 9, 2005

TO: Energy Working Group

FROM: SANDAG Staff

SUBJECT: May 26, 2005 Meeting Summary

Members in Attendance
Mayor Art Madrid, East Suburban Cities
Councilmember Henry Abarbanel, North County Coastal
Councilmember Steve Castaneda, City of Chula Vista
Mayor Pro Tem Bob Campbell, North Inland Cities
Scott Anders, San Diego Regional Energy Office (Alternate)
Robb Anderson, San Diego Gas & Electric (Alternate)
Alan Ball, Qualcomm (Alternate)
Skip Fralick, Sierra Club
Jeff Grissom, County of San Diego
Alexandra Hart, JA Consultants / IBEW 569
Steve Hoffman, San Diego Regional Chamber of Commerce
Marty Hunter, San Diego Labor Council
Patti Krebs, IEA
Gary Matthews, University of California San Diego
Michael Shames, UCAN
Ralph Torres, U.S. Navy / DOD
D. Rick Van Schoik, SDSU / SLERP (Alternate)

Others in Attendance
Anne Smith, SDG&E
Kurt Kammerer, KJK&A
Sharon Cooney, County of San Diego
Elizabeth Hull, City of Chula Vista
Andrew Zingale, California State Assembly Lori Saldana
Mary Ann Kempczenski, Councilmember Donna Frye
Paul O’Neal, California Power Partners, Inc.
Susan Freedman, SDREO
Jennifer Porter, SDRCC
Patrick Charles, SDG&E
Ted Reguly, SDG&E
Nancy Winter, SDG&E
Rob Schupp, Duke Energy
Ed Fong, SDG&E
Robert Hansen, SDG&E
J.C. Thomas, SDG&E
Shirley Vaine, “The Public”
Tom Blair, City of San Diego
1. Welcome and Introductions
Councilmember Henry Abarbanel, North County Coastal, welcomed everyone and began the meeting.

2. Meeting Summary for the April 28, 2005 EWG Meeting
Approval of the April 28, 2005 Meeting Summary was postponed for the next EWG meeting to give members the opportunity to review the clarifications distributed by Kurt Kammerer, KJK&A.

3. Public Comment and Communications
Shirley Vaine discussed the environmental impact of nuclear power plants, and specifically about the proposed replacement of four steam generators at the San Onofre Plant. Vaine mentioned a letter that she had submitted to the EWG over a year ago questioning how Edison planned to cut, remove and eventually transport waste materials due to upgrades, she has yet to receive any response from that letter. The CPUC has developed a proposed decision and recently put out the 2005 Environmental Impact Report (EIR) draft, Vaine distributed a summary of the document, which also outlines areas of the report which she feels, need additional attention. Vaine asked those in attendance to review the CPUC’s draft document, and to consider contacting the CPUC to ask if they might consider postponing making any final decision until a public forum is held on the issue. Mayor Art Madrid noted that Vaine’s concerns are extremely important, and suggested that the EWG or SANDAG Board pass a resolution to address the issue of nuclear power plants. Councilmember Abarbanel felt that Vaine’s suggestion for a public forum was a good one, and recommended that the topic be discussed at the next EWG meeting or Resources Subcommittee meeting. He also suggested that SDG&E, a stakeholder in San Onofre, be included in that discussion, which will address the questions raised by Vaine. Abarbanel added that the EWG will need additional information before taking any action on the issue. Steve Hoffman, SDRCC, suggested the Resource Subcommittee organize all interested parties and develop an objective and balanced discussion on the topic.

4. Workshop Summary
Scott Anders, SDREO, gave a brief overview of the May 4, 2005 Summer Outlook 2005 and May 18, 2005 Border Energy Workshops. The Summer Outlook workshop, co-hosted by the Flex Your Power Campaign, was attended by 240 people, representing a variety of agencies and interests. Highlights included the key note speaker, Joe Desmond, and the Flex Your Power Campaigns attempt to get pledges for the Governor’s Green Building Campaign. The Border Energy Workshop, co-hosted by the CEC, was also well attended, and focused on the development of a series of white papers. Panelists discussed issues such as energy supply and demand, transmission lines, and bi-national cooperation. The white papers are on the CEC's website for information.
5. Reports from the EWG Subcommittees

(A) Public Policy Subcommittee

Alan Ball, Qualcomm, mentioned the success of the workshop series and gave a brief summary of the events of the Summer Outlook 2005 workshop. It was recommended that the EWG section of the SANDAG website provide links to the Flex Your Power Campaign and San Diego Regional Energy Office (SDREO) websites to provide better access to those resources. Ball also discussed the work that the subcommittee is doing to identify legislative issues that the EWG may want to consider commenting on. The subcommittee organized bills into topical categories, a copy of which was provided in the agenda packet. The next step will be for the subcommittee to gather detailed information about each bill, which the EWG will use to determine whether or not they should comment. The next Policy Subcommittee meeting will be held on June 14, 2005, at SDREO from 11 a.m. to 1 p.m.

Councilmember Abarbanel suggested that the EWG address the proposed legislative issues at the Legislative Briefing Workshop being held in October. Senator Kehoe will be co-chairing the workshop. Abarbanel would like to see all Mayors, Council Members, and Supervisors invited to attend. Mayor Art Madrid asked if SB1 required the manufacturer’s of energy efficiency products to provide any incentives to the customer for using that technology, and suggested that a responsible flat rate be placed on manufacturers through SB1, Alan Ball agreed that the subcommittee should look into the issue further, and that the state was planning to solve the issue by basing incentives on output.

(B) Resources Subcommittee

Steve Hoffman, SDRCC, explained that the Regional Energy Strategy (RES) was discussed at the last subcommittee meeting, and that the information and guidance provided by Rob Anderson and SDG&E staff had been extremely useful. Hoffman explained that some of the assumptions made in the RES are no longer valid, and should be updated. The subcommittee determined that the data file model being considered for purchase will be helpful to the EWG and subcommittee in their current and future analysis of, and recommendations regarding, cost of resource decisions. Hoffman suggested that the EWG attempt to identify incremental funding from interested parties to allow for the purchase of the model.

Kurt Kammerer, KJK&A, has reviewed the model and isn’t sure it values DSM, DG and efficiency against resources, although it does do megawatt math, it won’t address all of the EWG’s concerns. Kammerer suggested the EWG list their objectives and look for additional models that would address more of their concerns. Hoffman explained that no model would meet the EWG’s needs in entirety and that this model would allow the EWG to layer assumptions, which would be beneficial. Hoffman added that pledges from other EWG Stakeholders would be discussed at the next subcommittee meeting.

Transmission was also discussed at the subcommittee meeting, which was added by the extensive information provided by SDG&E. Hoffman believes that the correct decision will be reached through continued cooperation and information sharing. Topics discussed included the determined need for a new transmission line based on the necessity for additional capacity to meet future needs. Hoffman added that the model will help to show
where those additional needs will be and how they fit into the larger vision. Concerns regarding Reliability-Must-Run (RMR) contracts, congestion and renewable resources were also discussed.

Hoffman inquired about additional capacity on the Southwest Power Link, if that would displace the need for an additional transmission line, and what the effect of additional transmission would be on RMR contracts. In-basin renewables and the region’s goal for developing those resources in-basin were also discussed. Hoffman noted that SDG&E will eventually ask the EWG and SANDAG for their support on the proposed Rate Design Window changes, but the EWG will have ample time to discuss and decide what their response should be. Mayor Art Madrid suggested that a new transmission line would receive more support if it were under-grounded. Councilmember Abarbanel added that although under-grounding would be preferable for a number of reasons, it is also a far more expensive option. It was also suggested that the need for a new transmission may have been over-estimated. Hoffman explained that load forecasting had been briefly discussed by the subcommittee and would be addressed with the help of Rob Anderson, SDG&E, at their next meeting. Kammerer explained that the energy growth is higher per capita than population growth, which is supported by the data sets developed for the Regional Energy Infrastructure Study (REIS). He then asked who had developed the model and if they would donate it. Hoffman explained that the model had been developed by MRW consulting at a significant expense to the firm, and that they were willing to sell it to the EWG for a small portion of that cost.

Hoffman then posed important questions regarding who would be responsible for funding infrastructure improvements like the under-grounding of transmission lines. He also discussed proposed changes to the Rate Design Window, which after an extensive public review period, will have to be approved by the CPUC. It was suggested that the EWG determine how the proposed changes would effect implementation of the Regional Energy Strategy (RES), and specifically price signals given to customers. Those price signals should motivate conservation and investment in renewable energy and DG. Hoffman explained that proposed changes would reduce subsidies between business and residential rates. The EWG will discuss the issue further, and will eventually file testimony with the CEC on behalf of SANDAG. The EWG will seek input from various consumers, and will host a large users meeting and discussion on June 7, 2005, at SDREO.

It was clarified that the EWG will have to submit written testimony to the CPUC by June 24, 2005, to be eligible to participate in the hearings be held in San Diego between July 18-22. Hoffman explained that an outline will be created for review and comment. From that document the written testimony will be drafted and circulated to any interested party for review prior to the deadline. The EWG will vote to approve the written testimony at the June 22 meeting. If the EWG doesn’t make the deadline for filing testimony, they would still have the opportunity to file comments. Hoffman stressed that the EWG make every effort to become involved in the hearings.

6. **Advanced Metering Infrastructure**

SANDAG staff presented and distributed questions that had been prepared by the Resources Subcommittee regarding the Rate Design Window (RDW) and Advanced Metering Infrastructure
(AMI), and encouraged additional discussion of those issues. The resource subcommittee will use
that discussion to develop the written testimony for submittal to the CPUC. SDG&E staff members
Bob Hansen and Anne Smith were introduced.

**Rate Design Window (RDW)**

(1), (2)

Bob Hansen, SDG&E, explained that SDG&E is moving towards cost-based rates and a reduction in
subsidies. The CEC establishes class allocations based on the cost of providing service. AB 1X distorts
that cost of service pricing by capping the rate for residential customers and sets a trend towards
subsidies. Hoffman suggested that other important criteria, such as social goals, be considered when
developing a rate structure. Hansen explained that stability, customer impact, and the low-income
customer have all been considered as rates are developed. Hansen suggested that social programs
could be incorporated in cost-based rates. Michael Shames, UCAN, added that defining costs is
difficult, and factors other than dollar amounts should be involved. Environmental, opportunity and
system reliability costs are all things that should be considered in the cost of service, but are not. In
the past agencies have agreed with SDG&E and the CPUC on what seemed to be an acceptable set
of numbers, however this proceeding is important, as it will determine what the region’s most
important needs are, and in what way they are met. Anne Smith, SDG&E, explained that SDG&E
establishes rates by looking at their cost, or revenue that needs to be collected. They then
determine the cost allocations, which customer class is most responsible for those costs. That is
where the utility has to make difficult decisions about which customer, residential, commercial, etc.,
requires the most attention and how their rate should be designed. Smith explained that the larger
issue might be if the rate design should be intended to reflect costs, incentivize behavior, or a
combination of both.

(3), (4), (5)

Hoffman suggested that operating a business in the San Diego region is already expensive, and that
if the region wants to encourage increased businesses development in San Diego, energy costs have
to send the appropriate price signals to businesses as well. AB 1X created the wrong price signals for
a large number of consumers, and would like to see it abolished. Hansen explained that SDG&E is
proposing that the CPUC interpret AB 1X differently, as it limits the utility’s ability to recover costs.
Shames expressed that the issue isn’t a priority for the EWG and that most people wouldn’t support
abolishing the legislation. Alan Ball asked if it made sense that moderate and higher income
residential customers were provided with the same price-cap as low-income customers due to AB
1X. Shames explained that AMI would encourage upper tier residential customers to conserve,
because they are able to do so, while recognizing that the low-income customer generally doesn’t
use much energy. Ralph Torres, DOD/NAVY, suggested that the EWG remain cognizant of, and
perhaps even review, the principles developed in the Regional Energy Strategy in order to make
sure that the EWG supports those objectives as they make decisions on these issues. Skip Fralick,
Sierra Club, suggested that either a per-month demand or cost-per-kilowatt hour charge be
established to emphasize demand/use price signals and encourage other forms of energy. Hansen
explained that SDG&E did propose a cost-based method of promoting energy efficiency and
demand reduction, which would mean that commercial and industrial customers would have higher
on-peak rates.
Hoffman believes that the region’s main problem is capacity, and explained that demand based rates reflect the capacity issue, as they bias costs to motivate behavior. Hoffman suggested that volumetric rates reduce the incentive to load shift, and that the current structure for the demand is counter-intuitive to distributed generation. Shames explained that FERC has control of a small portion of the transmission component on each utility customer’s bill, so FERC does have some influence on the approval and capture of those costs. Shames explained that the easiest way for SDG&E to get their revenue back is for them to avoid volumetric pricing.

Hansen suggested that with cost-based price signals and on-peak rates that reflected costs, one would want to provide the proper price incentives to encourage energy efficiency and distributed generation. Hansen clarified that if the rate design for generation were properly priced, you would also have the proper price signals to avoid generation cost / co-generation. The proposed rate design supports moving toward properly priced generation, which would mean higher on-peak rates and lower off-peak rates. Hoffman suggested that SDG&E’s proposal would discourage investment in co-generation. Hansen explained that the model refers only to generation costs and that it should not be otherwise applied.

Shames expressed that there are other rate structures that would be beneficial to discuss.

**Advanced Metering Infrastructure (AMI)**

Ed Fong, SDG&E, gave a brief summary of AMI and distributed handouts of a presentation on AMI.

Bob Campbell asked what the cost of AMI would be for the consumer. Shames explained that there are costs and benefits to AMI, in theory the benefits could off-set the initial cost of AMI to the extent that there would be no increase in customers’ rates. AMI would provide customers with updated technology that would enable them to make educated decisions about their power use, and could also provide more substantial service to all energy users. The debate is how to deal with the problems associated with AMI, while pursuing its full potential. Customers whose costs will increase as a result of AMI are those that use a significant amount of power on-peak. Campbell suggested that customers be given interactive tools that would work with AMI technology and allow them to change their energy use. Anne Smith explained that AMI encourages the vision of a “smart home,” where the customer would make smart individual decisions about energy usage. SDG&E’s initial proposal is a major step, but it will take between 4-5 years to fully establish the infrastructure, as a result, customers will see an initial increase in their rates. The future benefits of the system will however, out-weigh those initial costs. AMI technology will eventually allow customers to respond to signals from SDG&E that inform the customer when to limit their energy usage.

Councilmember Abarbanel suggested that SDG&E install the complete infrastructure at one time, making the customer happy, and providing the entire benefit of the system from the beginning. Shames added that customers may also be unhappy with the AMI, as it will force them to change energy usage patterns. Campbell added that SDG&E would be providing excellent customer service, and going the extra distance, if they found a way to install and provide the AMI through one
Mayor Art Madrid suggested that SDG&E develop a pilot program demonstrating the technology. Smith’s response was that SDG&E is working on a proposal for a test project, but that the first site may take between four and five years to develop.

Bob Campbell suggested that to encourage customer support, SDG&E leave the rate structure as it is until the details of AMI are worked out. Alan Ball added that a number of energy efficiency technologies can already be brought into the home that would assist in the further implementation of AMI.

Steve Hoffman suggested it would be difficult for the unsophisticated energy user to adjust to using AMI technology, and that it would be important to send the appropriate price signals to all customers. Smith added that the majority of peak energy users are residential customers. Shames recommended that when the technology is deployed, various rate structures should be provided to allow customers that would like to do so, the opportunity to change usage patterns. Shames would advocate a voluntary program when the technology is first implemented, to alleviate backlash. Ralph Torres stated that it would be important to educate customers on the technology. Smith agreed, and added that the success of AMI would demand on the customer’s reaction. She also suggested that it would be important for local, state and utility policies and proposals to be coordinated, especially due to the high cost of AMI’s initial installation. Fong added that the installation of AMI technologies in the home would be aided if the state were involved in encouraging vendors and utilities to provide that technology. The success of AMI will depend on the amount of statewide and vendor support received. Councilmember Abarbanel expressed that even a small example of AMI technology at work could have a significant positive impact on how customers view the technology. Abarbanel suggested the small community of Solana Beach for a pilot project, as it would incorporate all customer classes. Ball suggested that the challenge in San Diego will be to determine what the best way to introduce the technology will be. Scott Anders, SDREO, explained that the overall benefits of AMI are more than worthwhile, but that it would be difficult to overcome the initial costs of installation, and change the way people use energy.

Alexandra Hart, IBEW, asked if any other region had deployed AMI, Fong explained that no other region had. Shames added that the Puget Sound region is currently attempting to deploy the technology. D. Rick Van Schoik, SDSU/SLERP, expressed that the EWG should look into examples of other jurisdictions that deployed AMI and suggested that Shames develop additional questions regarding AMI for SDG&E to answer.

Another member inquired about the effects of AMI on those dependent on medical technologies using energy and those forced to remain indoors all day due to age, illness, and other factors, and if those customers would be exempt from participating in the AMI. Anne Smith suggested that those customers would still receive a meter and that there would be no special rate for those customers. Shames added that broad-band technology could be beneficial, not only to alleviating some of transmissions stranded costs, but also in providing those receiving care and forced to remain indoors with additional opportunities for communication.

Councilmember Abarbanel suggested that discussion of this topic will be continued at the next meeting. Kurt Kammerer, KJK&A, had additional comments on the item, which he will communicate at the next meeting.
7. California Department of Energy

Time did not allow for the discussion of this agenda item. It will be placed on the agenda for the next meeting.

8. Suggested Meeting Topics for Next Meeting

Mayor Art Madrid suggested that additional attention be given to the topic of nuclear power plants, and the related issues discussed by Shirley Vaine. Scott Anders and the Resources Subcommittee will work together to provide the EWG with additional information on the subject. Rob Anderson, SDG&E, clarified that SDG&E does not own the San Onofre plant, and are only shareholders. Patti Krebs, IEA, added that she is a member of an organization which deals with nuclear waste disposal and other issues similar to those brought up by Shirley Vaine, and suggested that she talk to the organization to see if they might work with, or provide information to, the EWG.

Councilmember Abarbanel recommended that the EWG form a consortium group to deal with and encourage photovoltaic vendors, which would also provide a customer base for the technology. He then reminded the group that the EWG will be holding their annual retreat at Powerhouse Park on September 7, 2005 from 10 a.m. to 3 p.m. Abarbanel also suggested that the outlook for future EWG funding was good, and that a memo addressing the issue would be distributed in the near future.

Steve Hoffman suggested that the EWG consider researching the Kyoto Protocol, and following the examples of a number of other cities, including L.A., embrace the document and work to support some of its goals. Hoffman specifically encouraged the EWG to support policy and practices that would reduce the region's Carbon Dioxide emissions. EWG members agreed that the suggestion was a good one, and requested additional information. SANDAG staff, Senator Kehoe's office, and Tom Blair, City of San Diego, are expected to play key roles in providing that information. Mayor Pro Tem Bob Campbell added that the Borders' Committee should be invited to, and included in, any discussion of the Kyoto Protocol.

9. Adjourn

The next EWG meeting is scheduled for June 23, 2005 from 11:30 a.m. to 2 p.m.
WORKING GROUP CHARTER
Energy Working Group

PURPOSE
The Energy Working Group advises the Regional Planning Committee and the SANDAG Board on issues related to the coordination and implementation of the Regional Energy Strategy, adopted by the SANDAG Board of Directors in July 2003. The EWG was formed based on the recommendation of the Energy Task Force, which had been established to advise the board on the best way to implement the RES. The Energy Task Force recommended that SANDAG would be the most appropriate agency to implement the RES and that an Energy Working Group, comprised of a diverse group of stakeholders, should be formed to advise the Regional Planning Committee and Board of Directors on energy issues.

LINE OF REPORTING
The EWG reports to the Regional Planning Committee (RPC), which reports directly to the SANDAG Board of Directors. In addition, the SANDAG Board recognized that the EWG recommends comments on many proceedings at the California Public Utilities Commission. Due to the time limitations on many of these proceedings, the Board approved an alternate reporting structure which would enable the EWG to report to the Executive Committee for input on issues with deadline constraints.

RESPONSIBILITIES
The EWG advises on the implementation of the Regional Energy Strategy, which was adopted by SANDAG in 2003. The EWG is part of the SANDAG decision making structure, and will be asked to make recommendations on a variety of energy issues to the RPC and Board of Directors. The EWG will operate at the policy planning and coordination level to develop consensus in the region on energy matters that go before State and Federal agencies. The EWG will also work with various stakeholders at the local level to reach consensus on the best ways to provide energy programs and services, and address energy facility issues as they relate to the implementation of the RES.

MEMBERSHIP
Established in 2004, the EWG has 20 voting members, which include a diverse group of regional stakeholders. Elected officials serving on the EWG have been appointed by the subregions they represent. Members of the RPC are able to appoint and recommend members to the EWG. Elected officials already on the EWG are also able to recommend additional considerations for membership to the RPC for approval.

MEETING TIME AND LOCATION
The Energy Working Group generally meets from 11:30 a.m. to 2:00 p.m. on the fourth Thursday of the month, and more often as needed. Meetings are normally held in the 7th floor conference room at SANDAG offices.
**SELECTION OF THE CHAIR**

The EWG’s chair is selected based on the recommendation and approval by vote of EWG members. In the case of the Energy Working Group, there are two co-chairs instead of a chair and vice-chair.

**DURATION OF EXISTENCE**

The EWG is currently funded through December 30, 2005, but is pursuing long-term funding that would enable the EWG to continue their work.
2005 Energy Legislation
Bill Summaries by Topic

Transmission

AB 974 (Nuñez) - Transmission Siting

Summary
This bill would require the CPUC, by July 1, 2006, to prepare and implement a comprehensive plan to streamline the transmission permitting and siting process to provide for the orderly, cost-effective construction or expansion of transmission facilities that may be necessary to integrate renewable generation, increase import capability, or accommodate load growth. The CPUC would be required to consult with the Energy Commission, the Independent System Operator, the Electricity Oversight Board, electrical corporations, appropriate federal, state, and local agencies, California Native American tribes, and the public in the preparation and implementation of the plan.

Status
Passed the Assembly on May 5 and sent to Senate. Referred to Com. on E., U. & C. on May 19.

Impact on Region
Goal 5 of the San Diego Regional Energy Strategy seeks to "increase the transmission system capacity to maintain required reliability and to promote better access to renewable resources and low-cost supply.” In its 2004 Long-Term Resource Plan, filed with the CPUC on July 9, 2005, SDG&E identified a need for new transmission capacity starting in 2010 to maintain grid reliability. In addition, to meet SDG&E’s renewable energy target of 20% by 2010, a new transmission line could be necessary to maintain reliability and to bring in significant renewable resources from outside the region. Some have argued that other measures could be taken, such as repowering the South Bay Power Plant, in the near term. Although transmission is a major issue for the San Diego region, it is unclear that this bill would lead to process changes that could affect a transmission project beginning the process in the next couple years.

Related Legislation
SB 1059 (Escutia) - see summary below.

In addition, Governor Schwarzenegger has proposed to create a consolidated Department of Energy. Under the proposal, transmission siting authority would be moved from the CPUC to the CEC. It is unclear how this proposal would affect AB 974.

AB 1059 (Escutia) Transmission Corridors

Summary
This bill would authorize the CEC to designate land corridors for future construction of high-voltage transmission. The bill would:

- Provide that the designation of a transmission corridor shall serve to identify a feasible corridor in which can be built a future transmission line that is consistent with the state's needs and objectives.
- Prescribe procedures for the designation of a transmission corridor, including publication of the request for designation and request for comments, coordination with federal agencies and California Native American governments, informational hearings, and requirements for a proposed decision.
- Require the CEC to identify transmission corridor zones in its subsequent strategic plans and to regularly review and revise its designated transmission corridor zones as necessary, but not less than once every 6 years.
• Require a city or county, within 12 months after receiving a notice from the CEC of a transmission corridor zone, to amend its general plan consistent with the commission’s designation or revision.
• Require a city or county, within 10 days of accepting as complete an application for a development project within a designated transmission corridor zone that the city or county determines would threaten the potential to construct a high-voltage electric transmission line, to notify the commission of the proposed development project.
• Require the CEC, upon making a specified finding regarding the proposed development project, to provide written comments to the city or county and would require the city or county to consider the commission's comments.

Status
The Assembly passed the bill on June 1. The bill is now in the Senate awaiting committee assignment.

Impact on Region
In addition to the impacts described above for AB 974, several other issues arise from SB 1059 for the San Diego region. A significant portion of San Diego County is owned by state and federal government entities; therefore, it could be difficult under any circumstances to find an appropriate transmission route. Additionally, the amount of undeveloped land in San Diego County is dwindling, thus increasing the difficulty in finding an appropriate path for a transmission expansion. The proposed Valley-Rainbow transmission upgrade was not approved in part due to siting issues.

This bill gives the CEC authority to preempt local land use authority via the designation of a transmission corridor zones. For this reason, the League of California Cities opposes this bill.

In addition, Governor Schwarzenegger has proposed to create a consolidated Department of Energy. Under the proposal, transmission siting authority would be moved from the CPUC to the CEC. It is unclear how this proposal would affect AB 974.

Related Legislation
AB 974 (Nuñez) - see summary above.

Resource Adequacy

AB 380 (Nuñez) Resource Adequacy

Summary
This bill would require the PUC, in consultation with the Independent System Operator (ISO), to establish, implement and enforce resource adequacy requirements (RAR) on all electrical load serving entities (LSEs) to ensure that adequate physical generating capacity, dedicated to serving all load requirements, is available to meet peak demand plus requisite planning and operating reserves. Requires all LSEs, including nonutility electric service providers and community choice aggregators (CCAs), to be subject to the same requirements as the requirements for investor-owned utilities (IOUs), including resource adequacy, resource diversity, cost-effective energy efficiency, and the renewables portfolio standard. It would require the PUC to impose a penalty upon any LSE that fails to procure adequate generational resources. It would require all electrical LSEs to report information to the PUC and CEC on anticipated load, actual load, and measures undertaken by the load serving entity to ensure resource adequacy. The Energy Commission would be required to utilize the information supplied by the commission in its biennial integrated energy policy reports.

It is unclear if the CPUC has the authority or jurisdiction to enforce RAR on all LSEs. A statewide entity like the CA-ISO has been suggested by SDG&E as an alternative statewide entity for monitoring and enforcement.
Status
Last amended 5/2/05. Referred to Senate Committee on Energy, Utilities, and Communications 5/26/05. Passed full Assembly 5/19/05. Passed Assembly Committee on Utilities and Commerce with amendments 4/25. Passed the Appropriations Committee with amendments 5/12.

Impact on Region
Resource adequacy requirements (RAR) for all load serving entities could serve as a safeguard for both regional and statewide supply of electricity. A top priority in the Governor’s energy policy, RAR could provide assurances that adequate power supply is available going forward.

Related Legislation
None.

AB 1576 (Nuñez) Repowering Power Plants
Summary
This bill would require the Energy Commission to consider any reasonable contracts regarding repowering projects as part of an electrical corporation’s procurement plan, requiring that the costs of that contract be recoverable in rates from all customers who benefit, taking into account any collateral requirements and debt equivalence associated with the contract. The generation facilities must meet specific criteria for a repower facility, including a requirement that they must replace an older, less-efficient facility, must be located on an optimal site close to customers, and can use the existing infrastructure. This bill may provide investors a greater level of certainty, thus reducing risk and resultant costs of capital, which are ultimately passed on to ratepayers. In addition, it may encourage the recycling of older inefficient facilities utilizing existing infrastructure.

Status

Impact on Region
Goal 2 of the Regional Energy Strategy is to "achieve and maintain capacity to generate 65% of summer peak demand with in-county generation by 2010 and 75% by 2020." Opportunities for further action include working with existing power plant owners to encourage the repowering, retirement, or replacement of existing older, inefficient regional power plants. Repowering of older, less efficient power plants was also identified as having a potential positive net impact on air quality for the county.

Related Legislation
None.

Advanced Metering

SB 441 (Soto) Advanced Metering
Summary
This bill would prohibit the CPUC from requiring installation of advanced metering infrastructure (AMI) for any building constructed prior to January 1, 2006 and with an average annual consumption of less than 1,000 kWh/month. The bill would also prohibit the CPUC to place these same customers on a default time-differentiated rate schedule or other rate schedule using advanced metering infrastructure, without the customer's affirmative written consent.

Status
The Senate passed the bill and sent it the Assembly 5-26-05.
Impact on Region

SDG&E has filed an application with the CPUC to install advanced metering infrastructure on all customer accounts by 2009. This is consistent with their stated desire to see electricity rates be designed on a cost basis; that is, the cost customers pay for electricity more closely aligned with the costs to provide energy. If SB 441 passes and the remaining customer classes have advanced meters and time-differentiated rates schedules, a significant portion of the current sales would not be affected. Currently, the average residential consumption is 512 kilowatt-hours (kWh) a month; therefore, a significant percentage of residential consumption would not be affected by time-differentiated rates. The average small commercial customer consumes about 1495 kWh per month, but it is unclear how much is below 1000 kWh per month. Opponents of time-differentiated rates argue that residential and small businesses have little ability to significantly shift consumption. To the extent that time-differentiated rates would lead to an increase in electricity costs, passage of SB 411 would help keep rates more stable for customers with consumption under 1,000 kWh/month.

Related Legislation

AB 1009, which failed in Committee, would have required the CPUC to develop time-of-use electricity pricing tariffs and real-time metering for all bundled-service customers of an electrical corporation.


AB 1723 (La Malfa) - IEPR Load Forecasts

Summary

This bill would require each IOU and muni to provide the CEC with its load forecast, as part of each integrated energy policy report. They must include the amount of forecast load that may be lost to community choice aggregation, acquisition of territory by an existing local publicly owned electric utility, or creation of a new publicly owned utility, and the amount of load that will be served by an energy service provider. Provides venue for public disclosure of IOU’s load forecasts to determine whether the IOUs have pre-purchased electricity on behalf of exiting or departing customers. The bill would allow a third-party assessment of the number of customers for whom the IOU should procure resources.

Status

Last amended 4/26/05. Referred to Senate Energy, Utilities, and Communications Committee on 5/26/05. Passed Assembly with urgency clause added on 5/19/05. Previously passed Assembly Committees on Utilities and Commerce and Appropriations.

Impact on Region

A guiding principle of the Regional Energy Strategy states that energy planning process should be open and inclusive. This bill would provide a 3rd party assessment of previously confidential information to better ensure that electric resource needs are being planned for appropriately. Some cities have expressed interest in CCA and concerns with IOU load planning. A 3rd party assessment could provide assurance to cities and other stakeholders that feasibility to become CCA or muni remains an option and IOUs do not over procure resources.

Related Legislation

None.
Renewable Portfolio Standard (RPS)

AB 1585 (Blakeslee) RPS Goal Acceleration Study

Summary
Requires the California Energy Commission to review the feasibility of increasing the renewable portfolio standard (RPS) target to 33% by 2017 and to report the results of this review to the Legislature and the Governor by July 1, 2007. The study shall include: a) Deliverability of electricity from eligible renewable energy resources to end users and any needed additions or upgrades to the transmission grid system. (b) Dispatchability of electricity from eligible renewable energy resources and the consequences for the reliability of the electrical system. (c) Long-term planning requirements identified in the 2006 procurement plans for electrical corporations approved by the PUC. (d) Potential impacts upon the rates of electrical corporations and whether or not a renewable energy public goods charge is necessary to fund the above-market costs of electricity generated from eligible renewable energy resources. (e) The progress made by electrical corporations toward meeting the goal of procuring 20 percent of the electricity sold to retail customers per year by the year 2010, and the results of electrical corporation bid solicitations pursuant to a renewable energy procurement plan approved by the PUC. (f) The progress made by all load serving entities other than electrical corporations, including the progress made by local publicly owned electric utilities toward meeting the goal of procuring 20 percent of the electricity sold to retail customers per year by the year 2010.

Status
Hearing scheduled for 6/21/2005. Last amended 4/20/05. In Senate Energy, Utilities and Communications Committee 6/2/05. Passed full Assembly 5/23/05 (77-1) and unanimously passed Assembly Committees on Utilities and Commerce, Natural Resources and Appropriations.

Impact on Region
Goal 3 of the Regional Energy Strategy calls for the increase in total electricity supply from renewable resources to 15% by 2010 (~740 MW), 25% by 2020 (~1,520 MW) and 40% by 2030 (~2,965 MW).

Related Legislation
AB 1362 and SB 107

SB 107 (Simitian) RPS Goal Acceleration

Summary
This bill would make several changes to the CA renewable portfolio standard, including: (i) advancing the date by which utilities are required to provide 20% renewable energy from 2017 to 2010, (ii) requiring the CEC to develop tracking, accounting, verification, and enforcement mechanisms for the program renewable energy credits, as defined, (iii) require that deliveries of electricity from an eligible renewable energy resource under any electricity purchase contract with a retail seller executed before January 1, 2006, be tracked and included in the baseline quantity of eligible renewable energy resources of the purchasing retail seller, (iv) require that electricity generated pursuant to a prescribed federal act and pursuant to a purchased contract executed on or after January 1, 2006, count towards the RPS requirements of the retail seller, (v) provide for the tracking of deliveries under these purchase contracts through a prescribed accounting system, (vi) require the CEC to certify, and would specify criteria for, the eligibility of electricity delivered to a local publicly owned electric utility by an eligible renewable energy resource, for purposes of compliance with the RPS by a retail seller, (vii) require the CEC to review include in the IEPR to be adopted November 1, 2007, an assessment of the feasibility of increasing the target for the amount of electricity to be procured from eligible renewable energy resources to 33% by the year 2020, and to recommend how to induce local publicly owned electric utilities (munis) to implement and enforce an RPS utilizing eligible renewable energy resources, and (viii) require that the governing board of a local publicly owned electric utility annually report the utility’s status in implementing an RPS and progress toward attaining the standard to its customers and to report to the CEC the information that
the governing board is required to annually report to their customers. These additional reporting requirements would thereby impose a state-mandated local program.

Status

Impact on Region
Goal 3 of the Regional Energy Strategy calls for the increase in total electricity supply from renewable resources to 15% by 2010 (~740 MW), 25% by 2020 (~1,520 MW) and 40% by 2030 (~2,965 MW).

Related Legislation
AB 1362 and AB 1585.

AB 1362 (Levine) RPS Goal Acceleration
Summary
This bill would make changes to the CA renewable portfolio standard (RPS) including (i) advancing the target date for meeting 20% renewable procurement from 2017 to 2010, (ii) requiring the CPUC to adopt rules that authorize the use of renewable energy credits to satisfy annual procurement targets for renewable energy resources, (iii) authorizing an electrical corporation to meet its renewable procurement obligations either by procuring a minimum quantity of electricity generated by eligible renewable energy resources, or an equivalent quantity of renewable energy credits, (iv) requiring the Energy Commission to design and implement an accounting system to certify, track, and verify renewable energy credits, and (v) prohibiting the Energy Commission from certifying or awarding tradable renewable energy credits for electricity generated pursuant to specified electricity purchase contracts unless certain conditions are met.

Status
Last amended 5/26/05. In Senate Rules 6/2/05. Passed Assembly 6/1/05 (13-5). Passed Appropriations Committee 5/26/05 amended. Passed Committee on Natural Resources on 4/19/05.

Impact on Region
Goal 3 of the Regional Energy Strategy calls for the increase in total electricity supply from renewable resources to 15% by 2010 (~740 MW), 25% by 2020 (~1,520 MW) and 40% by 2030 (~2,965 MW).

Related Legislation
AB 1585 and SB 107.

Solar

SB1 (Murray) - Million Solar Roofs Initiative
Summary
This bill would establish the Million Solar Roofs Initiative, a program to provide incentives for the installation of photovoltaics. The program goals are to (i) install 1,000,000 solar energy systems or 3,000 MW on new and existing residential and commercial customer sites, (ii) establish a self-sufficient solar industry in 10 years, and (iii) place solar energy systems on 50% of new home developments in 13 years.

The bill would:

- Require the PUC to adopt the program no later than January 1, 2007.
- Allow recovery of the costs of the program through the distribution revenue requirements of electrical corporations.
• Provide incentives that decline no less than 7% annually.
• Require that eligible systems be installed by contractor with a C-10 license
• Require the CEC to conduct random audits
• Discontinue the solar incentive portion of the CPUC Self-Generation Incentive Program and transfer funds for that program into the Million Solar Roofs Initiative Trust Fund.
• Prohibit the CPUC from establishing any other program to encourage installation of residential and commercial systems.
• Require the CPUC to develop time-variant pricing structure for customers with photovoltaics.
• Expand the availability of net energy metering to 2% of the electric service provider’s aggregate custom peak demand.
• Further expand the net metering limit to 5% of peak demand after a time-variant rate structure is developed.
• Require production home sellers to offer solar energy as an option beginning January 1, 2010.
• Require the CEC to develop a program to allow builders to offset requirements on one project with solar installed at another.
• Require the CEC to, by July 1, 2009, investigate requiring solar energy systems on all new residential and nonresidential buildings.

**Status**

Passed the Senate and sent to Assembly on 6-1-05. Last amended 5-31-05.

**Impact on Region**

Implementing SB1 would likely cost $3B statewide. This would mean that approximately $300M would be paid by regional ratepayers over about 10 years. In addition to the cost of the Million Solar Roofs Initiative, some argue that there are other costs to ratepayers, including those associated with net metering. Others argue that photovoltaics provide system benefits that offset net metering and other ancillary costs. If SB1 is fully implemented, approximately 300 MW of photovoltaics would be installed in the region.

**Related Legislation**

AB 1547 (Levine) is almost identical to SB1. Additionally, SB1 contains provisions on net metering and solar tax credits that overlap SB 816, SB 1017, and AB 1099.

**SB 816 (Kehoe) - Net Metering**

**Summary**

This bill would establish for the San Diego Gas and Electric Company a separate net metering limit of 50 megawatts.

**Status**

The Senate passed the bill and sent it to the Assembly on 5-2-05. The bill was sent to Comm.on U&C on 5-31-05. Last amended 4-13-05.

**Impact on Region**

The current net metering limit is 20 MW for the SDG&E territory. The current installed net metering capacity is 12 MW, with 5 MW pending. The region is anticipated to reach its 20 MW cap in approximately 1 year. Passage of SB 816 would more than double the current limit, therefore extending the favorable treatment of photovoltaics installations. Failure to pass SB 816 would mean that once the limit is reached no further capacity could be net metered. Residential grid-connected installations would be cost prohibitive. Commercial systems would be required to pay standby fee. Certain commercial systems would still be cost effective.

**Related Legislation**
SB1 would increase the net metering limit to 5% of peak demand (200 MW). AB 1547 would increase the limit to 1.5% of peak demand (60 MW)

AB 1547 (Levine) - Solar Incentive Program

Summary
This bill would enact the Solar Energy Peak Procurement Act, a state program for the installed cost of grid-connected solar energy systems.

The bill would:

- Require the Energy Commission, not later than July 1, 2006, to award rebates, subject to a prescribed declining schedule terminating as of January 1, 2015.
- The bill would require the Energy Commission to ensure proportional program support for affordable housing units.
- The bill would require the CPUC to open a proceeding to examine the relative costs and benefits between solar rebate programs and commission-administered interruptible demand reduction programs.
- Require production home builders to offer solar energy systems as an option by January 1, 2010.
- Expand the current net metering limit to 1.5% of aggregate system peak demand.
- Require the CPUC to develop optional time-variant tariffs for all customer not subject to mandatory time-variant pricing.

Status
The Assembly passed the bill and sent it to the Senate on 6-1-05. Last amended on 5-27-05.

Impact on Region
AB 1547 is very similar to SB1 and likely would have a similar impact on the region, although AB 1547 does not specify a target for installed capacity. AB 1547 also expresses intent to limit annual statewide funding for this program to $100,000,000, which could create a smaller cost impact than SB1.

Related Legislation
SB1 contains many of the same provisions as AB 1547.

Energy Efficiency

SB 1037 (Kehoe) Energy Efficiency

Summary
This bill would codify the “energy efficiency first” principle of the California Energy Action Plan and recent CPUC decisions. The bill would require the commission to require a gas and/or electrical corporation to first acquire all available energy efficiency and demand reduction resources that are cost effective and feasible. The bill would require the commission, in consultation with the Energy Commission, to establish savings targets based on an evaluation of all achievable cost-effective savings potential.

In addition, the bill would:

- Require the commission, in considering an application for a certificate of public convenience and necessity for an electric transmission or distribution facility, to consider all cost effective alternatives to transmission and distribution facilities that meet the need for an efficient, reliable, and affordable supply of electricity, including specified demand reduction resources.
- Repeal the existing law that prohibits energy efficiency funds from being used to provide incentives for the purchase of new energy-efficient refrigerators.
Status
The Senate passed the bill and sent it to the Assembly on 6-2-05. Last amended 5-31-05.

Impact on Region
The San Diego Regional Energy Strategy emphasizes energy efficiency. Goal 6 seeks to "reduce per capita demand and per capita energy consumption back to 1980 levels." Overall, SB 1037 supports regional goals and has no significant negative impacts on the region.

Related Legislation
Language in SB 1037 regarding transmission project approval could be in conflict with SB 1059 (Escutia), which authorizes the CEC to designate transmission corridor zones (see summary above).
### Schedule for the 2005 Energy Report
(Workshops to be held in Sacramento and start at 9 a.m., unless otherwise noted)

<table>
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<tr>
<th>Date</th>
<th>Event</th>
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<tr>
<td>June 20 (Mon.)</td>
<td>Petroleum Infrastructure Environmental Performance Report</td>
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<td>June 21 (Tues.)</td>
<td>Water/Energy</td>
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<td>June 23 (Thurs.)</td>
<td>Proximity to load centers, aggregated distributed generation, strategic value analysis results</td>
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<tr>
<td>June 27 &amp; 28 (Mon., Tues.)</td>
<td>Electricity Environmental Performance Report plus appendices: avian mortality issues; once-through cooling; potential changes in hydro power production due to climate change</td>
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<td>June 29 (Wed.)</td>
<td>Electricity demand forecast</td>
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<td>June 30 (Thurs.)</td>
<td>CalEPA Coastal Room 1001 I Street</td>
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<td>Investor owned utility resource plan summaries</td>
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<td>July 6 (Wed.)</td>
<td>Transportation strategies &amp; options</td>
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<td>July 11 (Mon.)</td>
<td>Global Climate Change Advisory Committee meeting</td>
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<td>July 12 (Tues.)</td>
<td>Energy Report Committee hearing on climate change</td>
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<td>July 14 (Thurs.)</td>
<td>Natural gas market assessment</td>
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<td>July 15 (Fri.) SANDAG 401 B Street</td>
<td>Border energy</td>
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<td>July 25 (Mon.)</td>
<td>Loading order</td>
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<td>July 28 (Thurs.)</td>
<td>Transmission staff report</td>
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<td>August 15 (Mon.)</td>
<td>Nuclear topics</td>
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<td>August 16 (Tues.)</td>
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### Still to Be Scheduled
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<td>July</td>
<td>Efficiency Workshop</td>
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<td>TBD</td>
<td>Community choice aggregation</td>
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<td>September</td>
<td>Publication of draft 2005 Energy Report</td>
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<td>Late September/Early October</td>
<td>Committee workshops / hearings on draft 2005 Energy Report</td>
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<td>Early November</td>
<td>Commission adoption hearing</td>
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<td>November</td>
<td>Transmit 2005 Energy Report to Governor and Legislature</td>
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[www.energy.ca.gov/2005_energypolicy](http://www.energy.ca.gov/2005_energypolicy)
*Sorted by Topic*

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</table>
| DG    | California’s Market Potential for CHP and Distributed Generation | 2 white papers 4 presentations | 1. Assessment of California CHP Market and Policy Options for Increased Penetration (pdf)  
2. Air Quality Impacts of Distributed Generation (pdf - 15MB)  
4. Operational impacts from large penetrations of CHP/DG (pdf)  
5. Policy Analysis of CHP/DG (pdf)  
| DG    | California’s Distribution Planning Process and the Role of Distributed Generation and Demand Response | 2 white papers 7 presentations | 1. Shaping a California Distributed Energy Resources Procurement (pdf)  
2. Optimal Portfolio Methodology for Assessing Distributed Energy Resources Benefits for the Energy net (pdf)  
3. DTE’s Distributed Generation Experience (pdf)  
4. DG Benefits Assessment Methodology (pdf)  
5. Typical Approach (pdf)  
6. Shaping a California DER Procurement Through Stakeholder Collaboration (pdf)  
7. Value of Distributed Energy Resources In Distribution Infrastructure (pdf)  
8. Optimal Portfolio Methodology for Assessing Distributed Energy Resources Benefits for the Energynet™ (pdf)  
9. Integrating Customer Operated Distributed Generation Into Distribution Planning (pdf) | 4/29/05 |
| ENV   | Electricity Environmental Performance Report | 12 white papers 8 comments | 1. Introduction Environmental Performance Report (pdf)  
2. Overview of California’s Electricity Generation System (pdf)  
3. Air Emissions and Issues (pdf)  
4. Environmental Justice (pdf)  
5. Once Through Cooling at Coastal Power Plants (pdf)  
6. Hydropower (pdf)  
7. Water Quality and Water Use (pdf)  
8. Biological Resources and Avian Issues (pdf)  
9. Land Use (pdf)  
10. Introduction to Forms and Instructions for Environmental Data Submittals (pdf) | 11/15/04 |
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<td>11- Staff Proposal on Forms and Instructions for Environmental Data Submittals (pdf)</td>
<td>12- Forms and Instructions for Environmental Data Submittals (pdf)</td>
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<td>13- Comments of the Department of Fish and Game (pdf)</td>
<td>14- Comments of Santa Monica Baykeeper (pdf)</td>
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<td>15- Comments of West Coast Power LLC (pdf)</td>
<td>16- Comments of California Hydropower Reform Coalition (pdf)</td>
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<td>17- Comments of Independent Energy Producers (pdf)</td>
<td>18- Comments of League of Women’s Voters (pdf)</td>
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<td>19- Comments of the National Resources Defense Council (pdf)</td>
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<td>2- Policy Options for Reducing Emissions From Power Imports (pdf)</td>
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<td>3- Today’s Meeting Expectations (pdf)</td>
<td>4- U.S. Cement Industry’s Voluntary Climate Change Program (pdf)</td>
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<td>5- Policy Options for Reducing Emissions from Power Imports (pdf)</td>
<td>6- Policy Options for Reducing CO2 Emissions from CA Cement (pdf)</td>
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<td>7- Methane Mitigation from Dairy Digesters in California: Reduction Potential, Barriers and Regulatory Options (pdf)</td>
<td>8- Transportation Options Reducing California Greenhouse Gas Emissions (pdf)</td>
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<td>9- The Plug-In HEV to reduce Climate Change by LDV sector (pdf)</td>
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<td>4- Energy-Water Connections in the California Water Plan (pdf)</td>
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<td>5- Water-Energy Relationships (pdf)</td>
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<td>7- The Potential for Electric Generation in Existing Water Systems (pdf)</td>
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<td>8- Energy Flow in the Water Sector, A New Spaghetti Chart (pdf)</td>
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<td>1. Metropolitan Water District: Water and Power Resources Management (pdf)</td>
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<td>2. Agricultural Water Energy Requirements and ITRC programs on conservation, efficiency and peak-load reduction. (ppt)</td>
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<td>4. Semitropic Water Storage District: Activities and Programs,</td>
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Prepared by SDREO for SANDAG EWG
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<td>including groundwater banking program for area wholesale customers \ (ppt- 11 MB)</td>
<td>5. Inland Empire Utilities Association (IEAU) energy management activities, barriers and hurdles to attaining energy self sufficiency, and the significance of the water-energy nexus for IEUA’s water, wastewater and recycled water operations. \ (ppt- 17 MB)</td>
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<td>6. Water Agency Demand Response Potential \ (pdf)</td>
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<td>7. Global Warming Emissions from Water and Wastewater Systems in Sonoma County \ (ppt)</td>
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<td>8. CEC 2005 Energy Report Committee Second Workshop on the Water-Energy Relationship \ (ppt) \ [white paper]</td>
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<td>NG</td>
<td>Modeling Tools, Approach and Methodology Used in the Natural Gas Market Analysis</td>
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<td>11- LNG Gas Quality Issues (ppt)</td>
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<td>4- Biomass Resource Assessment in California (pdf)</td>
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<td>5- Renewable Energy and Electric Transmission Strategic Integration and Planning: Interstate Generation and Delivery of Renewable Resources Into California From Western Electricity Coordinating Council States (pdf)</td>
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<td>6- California Small Hydropower and Ocean Wave Energy Resources (pdf)</td>
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<td>3- WECC Low Voltage Ride Through Standard (pdf)</td>
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<td>4- Wind Generation Forecasting: Status and Prospect for Improving System Integration (pdf)</td>
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<td>1- California Load Serving Entities Retail Electricity Price Outlook 2003-2015 (pdf)</td>
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<td>2- California Load Serving Entities Retail Electricity Price Outlook 2003-2015 (pdf)</td>
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<td>3- Committee workshop on the Electricity Demand and Retail Price Data Requirements (pdf)</td>
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<td>4- Staff Presentation on Staff Draft Electricity Demand Forecast Forms and Instructions (pdf)</td>
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<td>5- SCE’s public comments (pdf)</td>
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<td>6- Public comments of Alliance for Retail Energy Markets (pdf)</td>
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<td>7- SDG&amp;E’s public comments (pdf)</td>
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<td>1- California Electricity Planning and Procurement Process: A Proposal (pdf) [white paper] 2- Electricity and Natural Gas Analysis in Support of the 2005 IEPR (pdf) 3- Staff Proposal for Transmission Planning Data Submittals [Hesters] (pdf) 4- Staff Proposal for Transmission Planning Data Submittals [Videver] (pdf) 5- Proposed Electricity Resource and Bulk Transmission Data Requests (pdf) [white paper]</td>
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<td>Competition in California’s Petroleum Industry</td>
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<td>1- Plug-in Hybrid Vehicles for Future of California. Transportation Energy Use UC Davis HEV Center (pdf) 2- Securing Our Transportation Energy Future: The Time is Now (pdf) 3- Making The Case For Propane Motor Fuel (pdf) 4- Natural Gas Vehicle Role in Fuel Diversity for California (pdf) 5- California Renewable Fuels Partnership, California Ethanol Update (pdf) 6- Electric Transportation Technologies and Equipment (pdf)</td>
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<td>7- Building A Multi-State Coalition to Improve Federal CAFE Standards (pdf)</td>
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<td>Transportation Energy Demand Forecasts and Options to Reduce Petroleum Fuel Use</td>
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<td>1- Propane Infrastructure (pdf) 2- Diesel Light-duty Vehicles: Potential in the US Market (pdf) 3- California Energy Resources and Development Commission. (pdf) 4- Options to Reduce Petroleum Fuel Use. (pdf) [presentation] 5- Forecasts of California Transportation Energy Demand 2005-2025 (pdf) 6- Retail Prices and Competition in the Gasoline Industry (pdf) 7- Effect of Land-Use Choices on Transportation Fuel Demand (pdf) 8- Alternative Fuels Commercialization (pdf) 9- Options to Reduce Petroleum Fuel Use (pdf) [white paper] 10- ADDENDUM TO: Options to Reduce Petroleum Fuel Use (pdf)</td>
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<td>Developing a Web-based Decision Tool for Siting Transmission Lines (pdf)</td>
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<td>Potential Transmission and Resource Evaluation Criteria (pdf)</td>
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<td>Stakeholder-Proposed Criteria for Evaluation of Resources from the California State Perspective (pdf)</td>
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<td>Bureau of Land Management, USDI Forest Service, USDA (pdf)</td>
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<td>Transmission Constraints To Geothermal Resource Development</td>
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<td>1- Geothermal Resources Available to California Markets (pdf)</td>
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<td>2- Facilitating Geothermal RPS Supplies (pdf)</td>
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<td>3- Imperial Valley Study Group, Transmission Planning Collaborative (pdf)</td>
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<td>3- Assessment of Reliability and Operational Issues for Integration of Renewable Generation (pdf)</td>
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<td>4- Assessment Of Reliability and Operational Issues for Integration of Renewable Generation (pdf) [white paper]</td>
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<td>4 presentations</td>
<td>2- ISO Comments on the CEC Proposal to Assess Electricity Supply, Resource and Bulk Transmission Planning Data (pdf)</td>
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<td>3- Overview of 2005 Energy Report Framework (pdf)</td>
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<td>4- Staff Proposal for Electricity Supply and Transmission Planning (pdf)</td>
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| TX- RE | Renewables Transmission Planning | 5 white papers | 1- Renewables Transmission Planning (pdf)
 | | | 2- Renewables Transmission Planning Workshop (pdf)
 | | | 3- Renewable DG Assessment Methodology and Approach (pdf)
 | | | 4- Mini-Grid in the Chino Basin (pdf)
 | | | 5- Distributed Generation Applications of the Model (pdf) | 9/14/04 |

### TOPIC ABBREVIATIONS

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<tr>
<th>AM</th>
<th>Advanced Metering</th>
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<tr>
<td>DG</td>
<td>Distributed Generation (non-renewable)</td>
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<td>ENV</td>
<td>Environment</td>
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<td>GHG</td>
<td>Greenhouse Gas (Climate Change)</td>
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<td>H2O</td>
<td>Energy-Water</td>
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<td>IEPR</td>
<td>Integrated Energy Policy Report</td>
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<td>LNG</td>
<td>Liquefied Natural Gas</td>
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<td>MEX</td>
<td>California-Mexico Border Issues</td>
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<td>Market Design</td>
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<td>Research &amp; Development</td>
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