SUNRISE POWERLINK

CHAPTER I

EXECUTIVE SUMMARY

SDGE

A Sempra Energy utility

Application No.: A.05-12-

Exhibit No.:

Date: December 14, 2005

Witness: James P. Avery

I.

EXECUTIVE SUMMARY

San Diego Gas and Electric Company ("SDG&E") presents to the Commission this report demonstrating the purpose and need for a 500 kilovolt ("kV") transmission line between the Imperial Valley and the SDG&E service area. This proposed project, known as the "Sunrise Powerlink", is the best and most comprehensive solution to meet the following three vital objectives:[1]

- Maintain Reliability: The project will enable the San Diego transmission system to satisfy the grid reliability requirements of the California Independent System Operator ("CAISO") starting in 2010, thereby allowing SDG&E and other Load Serving Entities ("LSEs") within the San Diego service area to reliably serve their customers during periods of unusually high energy demand.
- Promote Renewable Energy: The project will provide California consumers more economical access to remote areas with significant renewable resource potential and will encourage the development of such resources thereby diversifying the State's resource mix and reducing its reliance on fossil-fueled generation, consistent with Senate Bill ("SB") 1078 and the Energy Action Plan ("EAP").
- Reduce Energy Costs: This cost-effective project will pay for itself and could potentially provide up to $57 million per year in *net* energy savings for California electricity customers. These savings will come in the form of reduced energy costs resulting from increased access to lower cost sources of power in the desert Southwest and reduced reliance on older, less-efficient in-area generation.

[1] SDG&E's analyses and resulting benefits are viewed from the perspective of electricity consumers within the CAISO control area, unless otherwise expressly stated.

SDG&E submits that each of these benefits, on its own, is sufficient to support the need for the Sunrise Powerlink and, taken as a whole, overwhelmingly demonstrate that the proposed project is necessary and in the best interest of the public.

SDG&E has not yet completed route selection for the Sunrise Powerlink and is currently in the process of determining the best route and design for the project. This process includes an extensive outreach effort to gather input from potentially affected communities, elected officials, and other interested parties. As noted in this application, SDG&E proposes that the Commission consider the Sunrise Powerlink in two separate but overlapping phases (i.e., project need and route) in order to accommodate this public participation process without jeopardizing the needed in-service date for the project.

A. Public Involvement

For Sunrise, SDG&E has departed from the traditional practice used to site major transmission projects, whereby public comment from local communities and regional stakeholders is gathered *after* the applicant has selected the preferred and alternate route, and has completed preliminary engineering and environmental studies. Instead, SDG&E has initiated a comprehensive public outreach program designed to involve the public and project stakeholders, including residential and commercial customers, community and business leaders, environmental groups, and elected officials, early in the route selection process. This outreach effort has three primary objectives:

1) Engage a broad array of stakeholders in the route selection process to ensure that all interested parties have an opportunity to provide input on the project;
2) Identify key issues and possible community impacts associated with the project prior to making routing decisions; and

3) Maximize public awareness of the project.

SDG&E began its public education program for the Sunrise Powerlink in 2004 by meeting with customers and community leaders to hear their suggestions regarding how SDG&E should plan to meet expected load growth in the San Diego region, including the development of additional transmission infrastructure. In 2005, SDG&E initiated an education and outreach program to create public awareness of the project and provide local communities and customers with multiple forums to provide input and feedback on key issues and potential routing options for the project. Two types of public forums gather input for the project: "Community Working Groups" and "Open Houses".

The Community Working Group is designed to bring together a diverse group of community leaders and regional decision-makers for a series of open meetings to discuss issues related to the Sunrise Powerlink and give interested parities the opportunity to become involved in the route selection process.[2]

To date, SDG&E has hosted two phases of Community Working Group meetings in the City of San Diego and the community of Ramona. The first-phase meetings focused on an overview of energy infrastructure issues facing Southern California and a detailed description of the Sunrise Powerlink. Participants were also asked to provide input and rank the various environmental constraints that will be used as part of the route selection criteria. Ranking environmental constraints is just one example of how Community Working Groups participants actually shape the decision-making process for the route.

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[2] It should be noted that the Community Working Groups are not intended to build regional consensus on any particular route. It is unrealistic to believe that such a diverse group of individuals, each with their own specific issues, would agree on a single route. In fact, some may disagree with the final preferred route and alternate route for the project.

During the second-phase meetings held in these same areas, SDG&E unveiled transmission "macro-corridors" for the Sunrise Powerlink that will be further studied. Community Working Group participants were asked to comment on these possible routes. These comments are being used as part of the route selection process.

All of the Community Working Group meetings are open to the general public and additional meetings will be held in early 2006 to review and discuss the final preferred and alternate alignment for the Sunrise Powerlink.

SDG&E has also hosted nine project Open Houses in the communities of Scripps Ranch, Valley Center, Ramona, Julian and Borrego Springs and four additional Open Houses will be hosted in early 2006. These Open Houses provide the public with an opportunity to discuss the project with SDG&E officials and provide input on key issues such as possible routes. All comments received are tracked in a project database and will be considered prior to making any determination on a preferred route and alternate route.

To maximize public awareness of the Open Houses, SDG&E: 1) advertised the meetings in 21 local newspapers; 2) sent invitations to over 75,000 property owners; 3) directly notified elected officials, local community groups and other interested parties; 4) posted meeting announcements in highly public areas such as community centers, libraries and post offices; and 5) notified the broadcast media. In addition to these public meetings, interested parties may provide input via phone, email,[3] or the project website, www.sdge.com/sunrisepowerlink, where they can download fact sheets, frequently asked questions, maps and other project information. A section of the website provides the public an opportunity to submit comments that will be used in the route selection process.

[3] By calling the project hotline number (877)-775-6818 or sending an email to sunrisepowerlink@sdge.com.

This route selection and public involvement process will culminate in the Proponent's Environmental Assessment ("PEA") to be submitted by mid-2006. In the instant application, SDG&E proposes a recommended scope for the project and also provides an estimate of the range of costs associated with this scope in order to inform the Commission's determination of need for the Sunrise Powerlink. This scope was the result of another public stakeholder process performed as part of the regional planning meetings of the Southwest Transmission Expansion Plan ("STEP")[4] and the collaborative work done as part of the Imperial Valley Study Group ("IVSG").[5]

B. Project Description

The Sunrise Powerlink is a proposed 500 kV alternating current transmission line that would be constructed and placed in service by the year 2010. The project will connect the existing Imperial Valley substation near El Centro, California to a new "Central" substation to be located somewhere in central San Diego County. SDG&E will also build two new 230 kV lines connecting the Central substation to the existing Sycamore Canyon substation and one new 230 kV line between the Sycamore Canyon substation and the Peñasquitos substation.[6]

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[4] STEP was formed in November 2002. It is an ad hoc voluntary organization whose membership is open to all interested stakeholders. STEP provides a forum for participating in the planning, coordination, and implementation of transmission systems between the Arizona, Nevada, Mexico and southern California areas. Its goal is to facilitate the development of transmission capable of supporting a competitive, efficient, and seamless wholesale electricity market while meeting established reliability standards.

[5] See, Report of the Imperial Valley Study Group (September 30, 2005), filed by SDG&E with the Commission on October 4, 2005. The IVSG was formed in response to D.04-06-010 (2004). It adopted the mission of specifying a phased development plan for the construction of transmission upgrades capable of exporting 2,200 MW of renewable power from the Imperial Valley. The IVSG is a voluntary planning collaborative made up of regional stakeholders. Participants include the Commission, all regional Transmission Owners, the CAISO, CEC, generation developers, local, state and federal agencies, environmental and consumer groups and other interested parties. Its work has been led by IID, SDG&E and SCE, and is fully supported by LADWP.

[6] The proposed scope of the Sunrise Powerlink is discussed more fully in Chapter II, Scope and Cost.

Although the specific route of the Sunrise Powerlink is not known at this time, the total length of the 500 kV portion of the project is estimated to be between 75 and 105 miles. The cost of constructing the project, including the new 230 kV lines west of the Central substation and other project elements described herein is estimated to be between $1.015 billion on the low side and $1.437 billion on the high side.[7] These estimated costs are provided for the Commission's information in order to support its determination that the Sunrise Powerlink is needed and in the public's interest. As noted above, SDG&E will provide refined engineering cost estimates based on a specific project route as detailed in the PEA to be submitted in 2006.[8]

C. Background

SDG&E currently provides electric utility service to approximately 1.3 million customers in a service area that includes all of San Diego County and the southern part of Orange County. Demand in this area is served by a combination of internal capacity and imported power delivered through only two points of interconnection—a 500 kV line at SDG&E's Miguel substation[9] that accesses power from the east and south, and a series of 230 kV lines connecting through the San Onofre Nuclear Generating Station ("SONGS") switchyard to the north.[10] Neither of these paths is capable of serving the full peak-load requirements of the SDG&E local reliability area if the other is out of service.

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[7] Nominal dollars including Allowance for Funds Used During Construction ("AFUDC").

[8] These estimated costs may change due to such factors as: permitting and environmental requirements; final design criteria; changes in project schedule; inflation and deflation factors; and unforeseen events.

[9] The SDG&E electric transmission system is also interconnected with Comision Federal de Electricidad ("CFE") in Mexico through two 230 kV transmission lines (Path 45), one at the Imperial Valley substation and the other at the Miguel substation. However, this interconnection provides no net import capability to the San Diego transmission area.

[10] SONGS, while geographically located within SDG&E's service area, is connected to SCE from a system perspective and, from an electric reliability perspective, is outside the San Diego local reliability area.

San Diego is the nation's seventh largest city and the nation's sixth largest county with an economy in excess of $70 billion of goods and services per year.[11] Yet the San Diego service area lies within an electrical cul-de-sac, relying on only a single 500 kV line and a small set of 230 kV lines tied to the larger transmission network (or "grid") outside the region to obtain the electricity imports needed to support its economy. Among the large electric service areas in the State, only San Diego is so underserved.

SDG&E's sole 500 kV interconnection to the grid is the Southwest Powerlink ("SWPL"), a 500 kV transmission line connecting the Palo Verde Nuclear Generating Station ("PVNGS") in Arizona and SDG&E's Miguel substation in California.[12] The SWPL was constructed primarily to import cost-effective energy from the desert Southwest into California. As a result of growing loads in Southern California and the addition of new generation in the desert Southwest, including new generation located in Mexico that is connected directly to the existing Imperial Valley substation, the import capability into the San Diego area is often fully utilized. The SWPL is owned jointly by SDG&E, Arizona Public Service Company ("APS"), and the Imperial Irrigation District ("IID").[13] Of the co-owners, only SDG&E has turned over its share of the SWPL to the operational control of the CAISO, and thus only SDG&E's share of the line is subject to the comparability and non-discrimination requirements of the CAISO tariff on file with the Federal Energy Regulatory Commission ("FERC").

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[11] Does not include that part of southern Orange County where SDG&E provides electricity service.

[12] See, *In re Application of SDG&E for Certificate to Construct and Operate a 500 kV Transmission Line*, D.93785, 7 CPUC 2d 301 (1981).

[13] Pursuant to contracts executed in 1981 and 1983, SDG&E transferred specified undivided interests in portions of SWPL to APS and IID, respectively. As a result, SWPL is owned jointly by SDG&E, APS, and IID in ownership shares that vary among the segments of the line. The Palo Verde to North Gila segment is owned by SDG&E, APS and IID in shares of 76.22%, 11%, and 12.78%, respectively. The North Gila to Imperial Valley segment is owned by SDG&E and IID in shares of 85.64% and 14.36%, respectively. The Imperial Valley to Miguel segment is wholly owned by SDG&E.

As a participating transmission owner ("PTO") under the CAISO FERC tariff, SDG&E must comply with CAISO's statewide grid planning standards which consist of:

- Western Electricity Coordinating Council ("WECC") Reliability Criteria for Transmission System Planning;
- North American Electric Reliability Council ("NERC") Planning Standards;
- Criteria pertaining to the Diablo Canyon and SONGS nuclear plants; and
- CAISO requirements that utilities plan their systems so that, for a single transmission circuit outage with the largest generator already out of service, there will be no interruption of customer load in the event of a *subsequent* outage during adverse weather conditions.

This last item is referred to as the CAISO's "G-1/N-1" reliability criterion. For purposes of capacity planning for the San Diego area, this criterion requires that there be sufficient in-area resources and transmission import capability to serve the full adverse peak demand forecast during the worst G-1/N-1 event. Specifically, the ability to import power from SONGS and other off-system generation is defined by two import constraints: (1) the application of the CAISO's G-1/N-1 reliability criteria; and (2) the application of the WECC/NERC N-0 reliability criteria, as applied to the San Diego transmission system. These import capabilities are a critical factor in analyzing and determining grid reliability, siting future generation resources, and/or expanding the transmission system to provide for the economic import of electricity from renewable and conventional generation resources.

D. <u>Resource Procurement Policy</u>

The overarching goal of the EAP is for California's energy to be adequate, affordable, technologically advanced and environmentally sound. The State is taking

important steps to achieve this objective. California has established the most aggressive, long-term energy efficiency goals in the nation and has adopted specific programs to begin achieving these goals. Additionally, the State is increasing its emphasis on demand response and developing various programs that will effectively reduce electric demand during peak load conditions. California has also established a goal of procuring 20% of its electricity requirements from renewable resources by the year 2010 and is considering a goal of 33% by the year 2020.[14] The CPUC is also reviewing a number of transmission projects that will meet the goals articulated in the EAP.[15]

As recognized by California's loading order and the EAP, all of these resource elements are essential to achieving a properly balanced portfolio of energy resources and infrastructure. The EAP emphasizes the critical need for transmission as follows:

> Significant capital investments are needed to augment existing facilities, replace aging infrastructure, and ensure that California's electrical supplies will meet current and future needs at reasonable prices and without over-reliance on a single fuel source….
>
> An expanded, robust electric transmission system is required to access cleaner and more competitively priced energy, mitigate grid congestion, increase grid reliability, permit the retirement of aging plants, and bring new renewable and conventional power plants on line. Streamlined, open and fair transmission planning and permitting processes must move projects through planning and into construction in a timely manner. The state agencies must work closely with the CAISO to achieve objectives and to benefit from its expertise in grid operation and planning….[16]

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[14] The EAP, adopted by the Commission and the CEC in May 2003, accelerated the completion date for increasing the share of renewable energy in energy sales from 20% of sales by 2017 to 20% by 2010. On June 1, 2005 the Governor signed Executive Order S-3-05 accelerating the renewable energy goals to 33% of energy sales by 2020. See *Strategies Underway in California That Reduce Greenhouse Gas Emissions* at http://www.climatechange.ca.gov/climate_action_team/factsheets/2005-06_GHG_STRATEGIES_FS.PDF

[15] See I.05-06-041, I.05-09-005, A.04-12-007, A.04-12-008, and A.05-04-015.

[16] Section II.4 of the October, 2005 *Energy Action Plan II* an "implementation roadmap for energy policies", as adopted by the Commission and the CEC.

The importance of transmission was also addressed by the CEC in its recently adopted Strategic Transmission Investment Plan,[17] which clearly identified the need for certain major transmission projects, and specifically found that the Sunrise Powerlink would provide significant benefits to the State:

> **Sunrise Powerlink 500 kV Project** - The proposed 500 kV Sunrise Powerlink Project would provide significant near-term system reliability benefits to California, reduce system congestion and its resultant costs, and provide an interconnection to both renewable resources located in the Imperial Valley and lower-cost out-of-state generation. Without this proposed project, it is unlikely that SDG&E will be able to meet the state's RPS goals, ensure system reliability, or reduce RMR and congestion costs. The Energy Commission therefore believes that the proposed project offers significant benefits and recommends that it move forward expeditiously so that the residents of San Diego and all of California can begin to realize these benefits by 2010 (Report at 6).
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> In summary, the proposed 500 kV Sunrise Powerlink Project would provide significant near-term system reliability benefits to California, reduce system congestion and resultant congestion costs, and provide an interconnection to renewable resources located in the Imperial Valley and lower-cost out-of-state generation. Without the proposed project, it is unlikely that SDG&E will be able to meet the state's RPS goals, ensure system reliability, or reduce RMR and congestion costs. Therefore, the Energy Commission believes the proposed project offers significant benefits and recommends that the project be moved forward expeditiously so that the residents of San Diego and all of California can begin realizing these benefits by 2010 (Report at 65).

E. Resource Planning

Energy demand in the SDG&E service area is steadily increasing as a result of the area's growth. The electric load served by the SDG&E transmission system is expected to grow by over 750 megawatts ("MW") over the next ten years (2006 through 2015). This is an increase of 19% and includes an expected reduction of 595 MW due to rather

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[17] Strategic Transmission Investment Plan, Prepared in Support of the 2005 Integrated Energy Policy Report Proceeding (04-IEP-1K), Final Committee Report, adopted November 21, 2005.

significant incremental energy efficiency savings and other demand-side measures that are assumed to occur over this period.[18]

SDG&E carefully plans and implements measures to meet these increasing energy needs in the long-term. SDG&E accomplishes this for its bundled service customers, in part, through its long-term resource plan ("LTRP"). SDG&E's LTRP is a balanced resource strategy that emphasizes the need for a diverse portfolio of supply- and demand-side options. Consistent with the EAP and loading order, the LTRP includes energy efficiency, demand response, renewable resources, distributed and conventional generation and new transmission. As a necessary part of its portfolio, SDG&E determined that a new 500 kV interconnection would be needed to address a grid reliability shortfall by 2010. This was addressed by the Commission in its Electric Resource Planning OIR, R.04-04-003 as follows:

> While we do not approve SDG&E's 500 kV transmission line here, we do acknowledge the lengthy process needed to plan, license and construct transmission, and thus encourage SDG&E to continue its planning efforts and move forward with evaluating these transmission alternatives for meeting a local resource deficiency by 2010.[19]

F. Project Criteria and Benefits

Consistent with the State's EAP, the CEC's Strategic Transmission Investment Plan, and the Commission's direction in D.04-12-048, SDG&E has evaluated the need for new transmission using the following three key criteria:

- *How to best maintain reliable service;*

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[18] This compares SDG&E's peak demand of 4,058 MW recorded in 2005 to its expected peak demand of 4,813 MW in 2015, based on SDG&E's "50/50" peak demand forecast which has a 50% probability of being exceeded in any given year. It should be noted that 342 MW of energy efficiency demand reductions represent *future* savings and do not reflect the significant contribution of past energy efficiency achievements which are essentially embedded in the forecast.

[19] D. 04-12-048 at p.228, Finding of Fact 9; see also *id.* at p.45.

- *How to effectively access more renewable energy; and*
- *How to mitigate high energy costs.*

These three objectives best define the purpose of the Sunrise Powerlink. As detailed in this testimony, SDG&E believes that the Sunrise Powerlink best meets these three key objectives and is the next logical step to be taken by SDG&E in its efforts to meet the State's energy goals. The benefits in these three areas are as follows.

1. Reliability

The Sunrise Powerlink will enable the San Diego transmission system to satisfy the CAISO's G-1/N-1 adverse weather reliability requirement which, absent the needed grid upgrade, will most likely be violated beginning in 2010. The proposed project will allow SDG&E and LSEs within the San Diego area to reliably serve their customers during periods of unusually high energy demand. The project will also allow increased flexibility in operating California's transmission grid and provide additional import capability that may be urgently needed during a major outage or emergency event.

Since the SWPL was built over 20 years ago, loads in the SDG&E service area have continued to grow.[20] SDG&E now projects that beginning as early as 2010, there could be overlapping transmission and generation contingencies, as defined by the CAISO, under which the sum of available in-area generation and existing import capability could not meet load in the SDG&E service area during adverse weather conditions. Increasing the ability to import power from the desert Southwest will ensure that, if these overlapping contingencies occur during nearly any plausible adverse weather condition, all loads in the SDG&E service area could still be served. The

[20] In 1983, when the SWPL was built, the peak demand in the SDG&E service area was about 2070 MW. In 2004, the SDG&E service area recorded a peak demand of 4,065 MW.

Sunrise Powerlink will also allow for the future retirement of older, less-efficient gas-fired generating units located in the San Diego area. If just the South Bay generating station retires as expected in late-2009, SDG&E will not be able to satisfy the CAISO's G-1/N-1 reliability requirement beginning in 2010, even with the needed addition of significant new in-basin generating capacity to be provided by the Palomar and Otay Mesa generating plants.

2. Renewable Energy

The Sunrise Powerlink will provide more economical access to remote areas with the potential for significant development of renewable energy sources and will encourage the development of new renewable generation thereby diversifying the state's resource mix and reducing California's reliance on fossil fuels.

SB1078 requires California's investor owned utilities to procure 20% of their electric retail sales from eligible renewable resources by the year 2017. SB1078 also requires retail sellers of electricity, including SDG&E, to increase their procurement of renewable energy by 1% per year. The EAP strives to attain the 20% goal by 2010 rather than 2017. The Commission has adopted this accelerated goal and is considering the feasibility of achieving a goal of 33% by 2020.[21] The Commission is also requiring LSEs to supply 20% of their energy needs from renewable energy resources by 2010.[22]

SDG&E is moving aggressively to meet the 2010 goal of supplying 20% of SDG&E's bundled customer energy requirements with renewable energy sources. While some economically viable renewable resource potential appears to exist within the San Diego basin, principally wind generation on the eastern edge of SDG&E's service area

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[21] See I.05-09-005 (2005).

[22] See D.05-11-025, Ordering Paragraph 1, at p.27.

and concentrating solar power in the Borrego Springs area, far greater quantities have been identified outside of the SDG&E service area. As clearly documented in both the IVSG report[23] and the San Diego Regional Renewable Energy Study Group Report,[24] the Imperial Valley and eastern San Diego County areas have significant geothermal, solar, and wind resource potential. Increasing the ability to import power from the Imperial Valley will allow SDG&E to meet the renewable resource goals at a cost that will not be burdened by high levels of congestion.

SDG&E has been negotiating with a number of developers to procure renewable energy resources in the Imperial Valley. The Sunrise Powerlink will ultimately be essential to delivering this renewable power to the San Diego area.[25]

Through its negotiations, SDG&E has already taken significant steps to meet its renewable energy goals in 2010. SDG&E has signed a contract with Stirling Energy, a solar thermal developer, to purchase the output of a 300 MW facility to be located in the Imperial Valley. Commercial operation of this facility must begin no later than 2010. Two subsequent phases of the project could add another 600 MW of solar thermal power capability. Commission approval of the contract for its first two phases is expected to be issued in December 2005. The contract delivery point for all three phases of the project is dependent on the timing of SDG&E's construction of the Sunrise Powerlink.

Should the in-service date of the Sunrise Powerlink be delayed past June 2010, Stirling Energy would make contract deliveries to SDG&E at the existing Imperial Valley

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[23] See *Development Plan for the Phased Expansion of Transmission to Access Renewable Resources in the Imperial Valley,* September 30, 2005, at http://www.energy.ca.gov/ivsg/documents/2005-09-30_IVSG_REPORT.PDF ; and *Potential for Renewable Energy in the San Diego Region,* August 2005, at: http://www.renewablesg.org/docs/Web/Ch1_ExSummary.pdf

[24] Potential for Renewable Energy in the San Diego Region, dated August 2005 (http://renewablesg.org).

[25] Additional information regarding the outcome of these negotiations may be available at a later date.

substation. If the Sunrise Powerlink is placed in-service by the end of June 2010, the contract delivery point will be that established by the interconnection agreement between Stirling, SDG&E and the CAISO. SDG&E anticipates that the point of interconnection between the Stirling project and the CAISO grid will be at either the Imperial Valley substation; or at a new 500/230 kV substation that may be built along the Sunrise Powerlink at a point that is on the edge of the Imperial Valley, due west of the southern tip of the Salton Sea. Either way, the Sunrise Powerlink, along with other existing transmission connections between the Imperial Valley and the San Diego basin, will deliver a significant portion of the output of the Stirling project to the San Diego area.

3. Economics

Through the analysis presented in this application, SDG&E concludes that the Sunrise Powerlink is cost effective for California electricity customers and will produce net energy savings of up to $57 million per year over the life of the project. These savings will result from reduced congestion and Reliability-Must-Run ("RMR")[26] costs and increased access to lower-cost sources of power in the desert Southwest. SDG&E projects that the total energy savings provided by the project to all CAISO consumers, before accounting for the project's fixed costs, are $210 million per year on a levelized basis. This includes $96 million per year in savings as a result of reduced congestion and higher grid dispatch efficiency throughout the CAISO control area, and $114 million per year from reduced RMR contract costs in the San Diego service area.[27]

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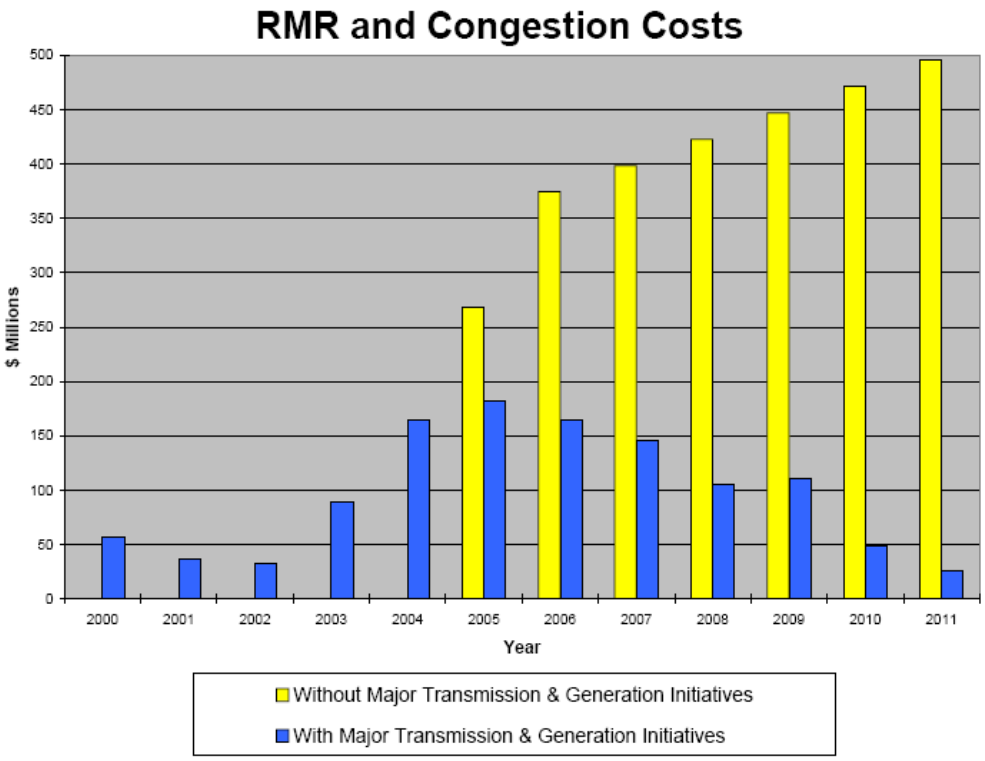
[26] RMR describes contracts between the CAISO and generators in certain constrained areas that require such generators to be available and run at the CAISO's direction. The costs of RMR contracts are borne by the customers within the constrained area. This is addressed more thoroughly in Chapter V, Economic Benefits.

[27] The project will also provide about $1 million per year savings as a result of reduced line losses.

Increasing RMR costs have been a significant issue for San Diego area customers. The following chart illustrates the projected increase in these costs over the next few years. This chart also shows the significant savings that will be provided by the major transmission and generation initiatives being aggressively pursued in the San Diego area.[28] The Sunrise Powerlink will further reduce RMR costs and secure greater energy savings for San Diego customers, particularly if the project is expeditiously completed and not unnecessarily delayed.



[28] The chart reflects the combined effect of such measures as the Mission-Miguel transmission upgrade, and the future addition of major generation assets, most notably the Palomar plant (541 MW in 2006) and the Otay Mesa plant (561 MW in 2008). RMR as currently structured may not continue in the long-term. However, the fundamental nature of local reliability demands and the cost of meeting such demand must continue in one form or another.

The Sunrise Powerlink will also augment existing transfer capability between the desert Southwest and California load centers and accommodate the retirement of aging and inefficient, gas-fired generation in the San Diego area by providing an increased ability to access capacity sources. By reducing congestion costs and losses, CAISO consumers[29] will be able to access low cost sources of power in the desert Southwest at reasonable prices and, at the same time, the improved access offers developers of conventional power plants an incentive to build new, efficient, generating capacity. The project will also enhance competition among the generating companies that supply power to California, putting downward pressure on energy costs.

G. Conclusion

For all of these reasons, SDG&E believes that construction and operation of the Sunrise Powerlink is in the best interest of California and electricity customers. These significant and diverse benefits—maintaining reliability, promoting renewable energy, and reducing energy costs—are best achieved through this proposed transmission project. Accordingly, SDG&E requests that the Commission approve the proposed scope of facilities and find that the Sunrise Powerlink is necessary and in the public interest given its intended purpose and resulting benefits. SDG&E fully documents and supports this purpose and need in the following testimony, which is organized as follows:

- Chapter II – Describes the potential scope and cost of the facilities that SDG&E is considering as part of the Sunrise Powerlink;
- Chapter III – Indicates how the project will enhance SDG&E's ability to reliably serve its customers, consistent with the reliability requirements of the CAISO;

[29] As noted previously, these benefits will accrue to ratepayers who receive transmission service from facilities that are under the operational control of the CAISO.

- Chapter IV – Describes how the Sunrise Powerlink will substantially increase SDG&E's and California's access to renewable energy;
- Chapter V – Details how the project will provide significant economic benefits to all CAISO ratepayers;
- Chapter VI – Addresses the various transmission and non-transmission alternatives to the Sunrise Powerlink and explains why these alternatives are not feasible and/or are inferior to the proposed project.

This concludes this chapter.