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April 10, 2008

BY EMAIL

Ms. Billie Blanchard California Public Utilities Commission

Ms. Lynda Kastoll United States Bureau of Land Management

B0006-5

Re: Comments on Draft Environmental Impact Report/Statement in Proceeding A.06-08-010

Dear Ms. Blanchard and Kastoll:

The Mussey Grade Road Alliance has reviewed the extensive DEIR produced by the Commission in this proceeding. We want to compliment the Commission, its consultant Aspen Environmental Group, and the BLM for the thorough work that has been done. We understand that the DEIR is one of the most comprehensive, if not the most comprehensive, written in the history of the Commission.

We truly appreciate the heroic effort that went into the making of this document; we believe that beautiful and biologically diverse San Diego County deserves no less than the fullest exploration of the issues involved in the proposed building of a massive transmission line through the county. We support the order of the environmentally superior recommendations - and particularly non-transmission recommendations Numbers 1 and 2.

Nevertheless, we would be remiss if we did not identify a key missing element in the document: namely, a thorough surveying of the landscape and species of San Diego County in the wake of the 2007 Firestorm. As we have reviewed the document, we see no indication that the Commission undertook a full investigation through field surveys and other tools at the Commission's disposal to assess the *changed conditions* of the natural world – in particular in the county's backcountry – following the catastrophic Witch and Harris fires.

Therefore, we believe that this work should be done and that the DEIR should be recirculated after the county has been reassessed. There is no doubt that things have

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changed in San Diego County's backcountry as a result of the fires and, specifically, along the proposed route and southern alternative route of the so-called "Sunrise Powerlink" project proposed by San Diego Gas & Electric (SDG&E).

The recirculated document should also contain more information regarding wildland fire; specifically an investigation into the nexus between Santa Ana wind conditions and wildland fire ignitions by power lines should be thoroughly reviewed and discussed. We cannot forget that three of the fires, including the largest fire – Witch Fire – of the 2007 Firestorm in October of last year were caused by power lines <sup>1</sup> and that there is a history of 230 kV power line fire ignitions in the short data collection period of SDG&E (2004 to present).

Finally, we are attaching to this email a copy of Appendix 2E of our Phase 2 Direct Testimony in this proceeding, which contains additional recommendations.

We do not recommend recirculation lightly. However, we realize that the Commission did not have adequate time between the October 2007 fires and the release of the DEIR on January 3, 2008 to do justice to the *changed conditions* of the environment of San Diego County. The Commission must not ignore these *changed conditions*. As you may know and appreciate, the Alliance understands the nature of changes in the environment following a catastrophic fire (Cedar Fire 2003) and the slow recovery following such an event.

Thank you for your consideration.

/S/ <u>Diane Conklin</u>

Diane Conklin

Spokesperson

Mussey Grade Road Alliance

Sincerely,

cc: Susan Lee, Aspen Environmental Group

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<sup>&</sup>lt;sup>1</sup> See Cal Fire News Release "October Fire Causes", November 16, 2007.

## Sunrise Powerlink Transmission Line Project Application No. 06-08-010 MGRA Phase 2 Direct Testimony, Appendix 2E

## APPENDIX 2E – DRAFT EIR/EIS

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## 2E-1. Draft EIR/EIS Overview and Commendation

The Draft EIR/EIS for the Sunrise Powerlink Proposal is a 7000 page document representing a tremendous expenditure of high quality talent and effort. Before delving into a critique of this document, it is important to emphasize what the preparers have done correctly. Its thoroughness, which as we understand it is unprecedented for projects of this type, should set a new and we think appropriate standard by which future projects should be analyzed. As this critique will make clear, the tremendous real and potential impacts that would arise from the construction of the Sunrise Powerlink or alternative transmission projects are such that even an EIR/EIS of this scope did not sufficiently address all of them. Some deficiencies were inevitable given the amazing circumstance of the October 2007 fires occurring so close to the deadline for the EIR/EIS submission. We hope that issues arising from the fires are being more closely scrutinized for inclusion in the final EIR/EIS, but we will note their omission in any case.

The draft EIR/EIS contains over 300 pages of analysis related to wildland fire and power lines, and conducts a fire and fuels analysis for every alternative to the project. This is an area that MGRA has offered testimony and argument in throughout these proceedings, and is therefore prepared to judge many aspects of EIR/EIS. We would like to especially commend the CPUC, BLM and preparers on the following aspects of the Draft EIR/EIS:

- Every alternative identified as part of the EIR/EIS was specifically analyzed with respect to wildland fire impacts.
- Field surveys were conducted along the SPL route and all alternatives in order to gauge the fuel load and fire hazard according to sound metrics.

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- Worst-case fire spread modeling was performed for each fireshed to determine the potentially impacted areas.
- B0006-6 cont.
- An analysis of the impact of the project on firefighting along the project route and alternative routes was performed.
- Class I immitigable impacts due to the potential for the transmission line to start fires were determined to be present in most firesheds traversed by the project or alternatives. These results concur with MGRA Phase 1 and Phase 2 direct testimony, which discuss the hazards from transmission lines in great detail.
- Class I immitigable impacts due to the impact of transmission lines on wildland firefighting were determined to be present in most firesheds traversed by the project or alternatives.
- Fire and Fuels Management impacts were used in the weighting that determined the environmentally superior transmission routes.
- Non-transmission alternatives were deemed by the EIR/EIS to be environmentally superior and preferable to additional transmission lines.
- Mitigation in the form of payments by the company to potentially affected homeowners to enable fire-protective measures.

We would like to emphasize that we regard none of these analyses as superfluous or out of scope for a project of this type. As we will show, all of it – and more – needs to be included in the final EIR/EIS.

### 2E-2. Draft EIR/EIS Material Factual Deficiencies

## 2E-2.1. Impacts of expansions are not adequately addressed

### 2E-2.1.1. EIR/EIS Sections Affected

Section ES3.1, p. ES-9; Section ES5.8, p. ES-31; Section A.1, p. A-4; Section B.2, p. B-5; Section B.2.7, p. B-23; Section C.5.8.25, p. C-138; Section D.1.2.3, p. D.1-3; Section D.15.3 (Future Transmission System Expansion), p. D.15-147; Section E.X.15.5 (Future Transmission System Expansion for Alternative X); others.

## 2E-2.1.2. Analysis Performed by the EIR/EIS

The EIR/EIS addresses primarily two expansion scenarios: 1) adding additional 230 kV circuits to the substations used to distribute power from the 500 kV SPL or alternative input and 2) additional 500 kV expansion to interconnect with other service areas. These

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possible expansions are mentioned in many places throughout the Draft EIR/EIS, and each project alternative discusses the potential for expansion and what its effect would be.

B0006-6 cont.

The topic of expansion of the proposed project has been addressed at the direction of the July 24, 2007 ruling by Commissioner Grueneich, in which she stated that "the Commission must thoughtfully consider how this potential future expansion should be analyzed in the EIR/EIS", and cites and quotes from the case *Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal.* (1998): "All phases of a project must be considered when evaluating its impact on the environment."

### 2E-2.1.3. Material Deficiencies of the EIR/EIS

There are two material deficiencies that arise in the analysis of system expansion. Additionally, there are two identifiable classes of system expansion, which are in fact identified as separate concepts in the Draft EIR/EIS: 230 kV expansion and 500 kV interconnection to other transmission networks.

The first material factual deficiency is that the expansion routes do not get the same class of analysis that is performed on the proposed SPL route or its alternatives. The standard analyses – burn probability modeling, fire behavior trend modeling, and wildfire containment conflict modeling – are not explicitly performed on the expansion routes. This does not allow the reader the ability to compare impacts between routes once their potential expansions are taken into account.

The second material factual deficiency is that when the expansion route is identical to the primary transmission route (as is the case in ESNA and the proposed SPL route), the impacts are simply classified as "Class I" and left at that. The problem with this approach is that there is no indication that a route having an expansion line added will have additional risk compared to a route having just the original line. Both are "Class I" before and after the expansion. A more quantitative approach should be adopted generally throughout the Draft EIR/EIS. This issue is discussed in another section.

The lack of full treatment in the Draft EIR/EIS is excused because "approval of the SRPL would not result in automatic approval of the potential future expansions to the SRPL and all future 230 or 500 kV lines would require new applications by SDG&E, followed by preparation of project-level environment documents and separate approvals

B0006-7

<sup>&</sup>lt;sup>1</sup> California Public Utilities Commission; Assigned Commissioner's Ruling Addressing Newly Disclosed Environmental Information; A.06-08-010; July 24, 2007; p. 6.

<sup>&</sup>lt;sup>2</sup> Laurel Heights Improvement Ass'n v. Regents of Univ. of Cal. (1988) 47 Cal.3d at 396; 14 Cal. Code Regs. Sec. 15126

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from the CPUC prior to permitting and construction." However, as per the citation by the Assigned Commissioner, this exemption is not true if any of these expansions can be considered another phase of the project.

B0006-7 cont.

As to the potential for 500 kV interconnection and 230 kV expansion, these should be studied and judged separately as to their relation to the project.

### 230 kV Expansion

For the 230 kV expansions in particular, there is a very strong case to be made that these expansions should be considered "full build-out" of the project and hence need to be fully analyzed within the scope of the EIR/EIS. The 500 kV transmission line that would form the backbone of the SPL transmission infrastructure has twice the capacity of the transmission line that would feed from it at the proposed Central Substation<sup>4</sup>. Adding additional circuits might be possible within 10 years after completion of the primary route. The routes for these additional circuits, if approved, would most likely follow the ROW already disturbed by construction of the SPL or other routes: "From a planning perspective, SDG&E would, to the extent possible, site additional lines in already disturbed corridors using existing ROWs. As a result, at least one or two additional circuits could follow segments of the proposed Sunrise Powerlink 230 kV transmission corridor..."

Fire would not be the only consideration. Visual impacts would be greater with 230 kV build-out, as would other potential impacts under CEQA/NEPA.

The 230 kV expansions are easily foreseeable expansions to the project or its alternatives, and would never themselves occur without the project being in place. Hence, they should be viewed as part of the project and fully analyzed.

### 500 kV Expansion

B0006-8

In Section B.2.7.2, the exact route for a northern 500 kV interconnection between the Central Substation and the SCE transmission network is laid out. This shows that this expansion is fairly advanced in its planning stage. Furthermore, it cannot occur without the interconnection to SPL at the Central Substation.

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<sup>&</sup>lt;sup>3</sup> Draft EIR/EIS; Section B.2; p. B-5.

<sup>&</sup>lt;sup>4</sup> Ibid. The 500 kV line can feed up to four 230 kV circuits. Only two are proposed for the SPL and for alternative routes.

<sup>&</sup>lt;sup>5</sup> Ibid; Sec. B.2.7.1; p. B-24.

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Should this expansion be considered yet another phase of the SPL "grand project" the impacts of this route should also be included in the EIR/EIS.

B0006-8 cont.

B0006-9

## 2E-2.2. Fire analyses do not allow quantitative route comparison

### 2E-2.2.1. EIR/EIS Sections Affected

Section D.15.X (Wildfire Model Results; many instances); Section E.X.15.Y (Wildfire Model Results; many instances); Appendix H (many places); others.

## 2E-2.2.2. Analysis Performed by the EIR/EIS

The Draft EIR/EIS performs three main modeling analyses for the proposed SPL route and for alternative routes: burn probability modeling, fire behavior trend modeling, and wildfire containment conflict modeling. All of these gauge different aspect of the hazard created by power lines. Two of them in particular – burn probability modeling and wildfire containment conflict modeling – are carried out along the studied route, sometimes based upon physical surveys of the route. A hazard metric is obtained, and the area affected is displayed graphically in a manner that displays the route map and the color-coded hazard metric in a corridor surrounding the proposed route.

### 2E-2.2.3. Material Factual Deficiencies of the EIR/EIS

While we make no claim as to whether the metrics that were chosen are superior or inferior to other metrics that might have been applied, we do acknowledge that they are thorough, diverse in approach, and based upon field data. However, one thing that they lack is a quantitative approach to the result presentation, particularly for the burn probability modeling and wildfire containment conflict metrics. The results are sometimes presented in tabular form, for example in Table E.1.15-13 (Interestate 8 Alternative Burn Probability Route Summary) and other route summaries for alternatives, these results are presented as percentages, rather than absolute distances. Absolute distances should be presented as well, since these can be used for direct comparison between alternatives.

We have assumed in our Phase 1 and Phase 2 testimony that wildland fire risks are proportional to the length of line that is exposed to flammable vegetation. Hence, one would expect that the Draft EIR/EIS would allow a simple comparison of routes as to their degree of fire hazard. Instead, all are simply lumped into the "Class I" category for comparison in Section H, without quantitative data being presented in any quantitative way. This is a shame, because the approach taken by the preparers would lend itself very well to a comparison of line exposure for different types and severity of hazard. Without this, it becomes difficult for the Commission to correctly differentiate between hazards posed by the various alternatives. Such an analysis should be added to the final EIR/EIS.

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## 2E-2.3. "Type Conversion" is not adequately addressed

B0006-11

2E-2.3.1. EIR/EIS Sections Affected

Section D.15; Section D.2 (multiple); Section E.X.15; Section E.X.2.

2E-2.3.2. Analysis Performed by the EIR/EIS

The Draft EIR/EIS gives a detailed definition of type conversion and discusses the sensitivity of San Diego County wildlands to conversion due to fires that occur too frequently. It notes that if the project were to cause a fire, this could cause immitigable impacts to the affected vegetation communities.

### 2E-2.3.3. Material Factual Deficiencies of the EIR/EIS

Type conversion was noted as an effect in the MGRA Phase 1 Direct Testimony6, and in the MGRA Phase 1 Opening Brief, the MGRA requested that the EIR/EI EIS address the issue of type conversion thoroughly in Recommendations 14-16:

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- 14. A general study in the EIR/EIS of "type conversion" brought on by wildland fire should be conducted for the proposed route and all alternative routes. The Commission should consider the EIR/EIS acceptable and complete only if it contains a general study of the vulnerability of the environment to "type conversion" in the event of power line induced fire for all areas within ten miles of any proposed route.
- 15. A study should be undertaken for the EIR/EIS regarding the historical exposure of lands in San Diego County to "type conversion". The Commission should consider the EIR/EIS acceptable and complete only if it contains a study of the average historical exposure to lands in San Diego County to type conversion by looking at fire history throughout the county.
- 16. A probability study of the loss of multiple habitats due to a potential catastrophic fire event caused by the project should be required for the EIR/EIS and the costs of such an event should

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<sup>&</sup>lt;sup>6</sup> MG-1; Appendix H.

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be calculated and added to the cost of the project. The EIR/EIS should be deemed acceptable and complete only if it contains an estimate of the probability of loss of multiple habitats due to a large conflagration caused by the project, and that the potential cost impacts be weighted and included in the project's cost estimates."<sup>7</sup>

B0006-12 cont.

None of the analyses performed for the proposed SPL route or alternatives have conducted a type conversion study specific to that area. Instead, type conversion is treated as a general impact that could occur as a result of a powerline fire. There are certain areas of recent burn, however (such as the Witch Creek, Harris, Cedar and Paradise fire scars), that will be much more sensitive to type conversion effects for a significant fraction of the lifetime of the proposed or alternative projects. These should be treated specifically, rather than generally, as requested in the MGRA Phase 1 Opening Brief.

## 2E-2.4. Impacts of the October 2007 fires are not adequately addressed

B0006-13

2E-2.4.1. EIR/EIS Sections Affected

Section D.15; Section D.2; Section E.X.15; Section E.X.2.

2E-2.4.2. Analysis Performed by the EIR/EIS

Section D.15 of the Draft EIR/EIS discusses the Witch Fire in a number of places, giving the total size. It also determines what fraction of each fireshed was burned by the Witch Fire. For the Santa Ysabel fireshed, it describes the likely effect of the fire on the local environment: "A large portion (64%) of this fireshed burned during the 2003 Cedar Fire, and the scar was recovering, but the disturbance of the recent Witch Fire is likely to further contribute to a dominant vegetation community of non-native grasses. Table D.15-10 summarizes the vegetation communities present in the Santa Ysabel Fireshed just prior to the fires of 2007."

### 2E-2.4.3. Material Factual Deficiencies of the EIR/EIS

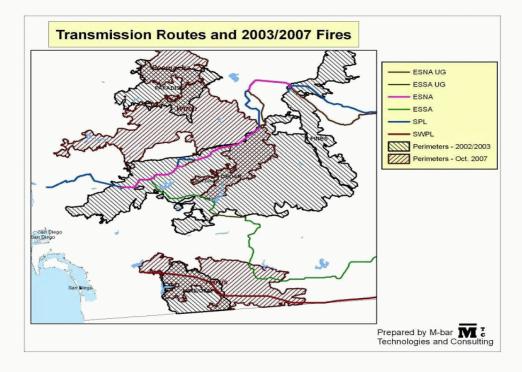
The statement above regarding the Santa Ysabel fireshed is the only mention made of the potential impact on the October 2007 fires on the biota of any region under study for the SPL route by the Draft EIR/EIS. There is likewise a mention of the size of the

<sup>&</sup>lt;sup>7</sup> MGRA; Phase 1 Opening Brief; A.06-08-010; p. 8.

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Harris fire in Section E.4.15<sup>8</sup>. There is no mention whatsoever of either the Harris or Witch Creek fires in the biological sections of either the SPL route analysis or of any of the alternative routes. Yet, for significant portions of the line, the October 2007 fires may be the determining factor of the ecology of the areas along the route for the coming years – and perhaps permanently. The effect of the October 2007 fires on the proposed and alternative routes is shown in the figure below:

B0006-13 cont.



**Figure 2E-1** – This figure shows the scars of the October 2007 and October 2003 fires superimposed on the proposed and alternative transmission line routes. The Pines fire from 2002 is also included.

As can be seen above, the proposed and alternative routes pass through large areas burned in either the 2003 or 2007 fires – or both. Areas burned by only one fire are especially prone to type conversion – a process discussed in Appendix H of the Phase 1 testimony and in Appendix 2A of the Phase 2 MGRA testimony, as well as in some detail in the Draft EIR/EIS itself. These areas are highly sensitive to future fires and other types of disturbance, and if their native vegetation is lost this may be a irrevocable loss of California habitat. Those regions burned in both fires are in an even more dire situation,

<sup>&</sup>lt;sup>8</sup> Draft EIR/EIS; Section E.4.15; pp. 2, 7.

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likely to lose their native vegetation forever, and that which remains in a most precarious state. None of this is addressed in the biological studies performed for the Draft EIR/EIS.

B0006-13 cont.

The main reason for this material factual deficiency is likely to be time, or lack thereof. The 2007 fires occurred at the end of October 2007, and the Draft EIR/EIS faced a hard deadline put in place by the Commission in January, 2008. However, it makes no sense whatsoever to accept a biological study that does not address current biological reality for significant areas of the routes under study.

Clearly, the only alternative is to conduct additional biological studies of the areas burned in the October 2007 fires and revise the EIR/EIS with this additional information.

Another major issue that should be noted in Figure 2E-1 is the significant extent of the fires. The Witch Creek Fire, asserted by Cal Fire to have been started by a powerline, carried its damage far to the west, re-burning areas burned in the 2003 Paradise Fire and possibly dooming the native ecology in these areas. Clearly, the biological and human impact of power lines can extend far beyond the corridor under study.

B0006-14

## 2E-2.5. Vegetation clearance is not sufficient mitigation for structure defense

## 2E-2.5.1. EIR/EIS Sections Affected

Section D.15 (multiple); Section E.X.15 (multiple). Mitigation measure F1-e - defensible space grants fund.

### 2E-2.5.2. Analysis Performed by the EIR/EIS

The Draft EIR/EIS has suggested, as mitigation measure F1-e, the defensible space grants fund, the novel idea that SDG&E pay into a pool of funds that could be used by homeowners in the potentially affected area (determined by the fire behavior modeling study). This payment of \$2,000 per year would be used by affected homeowners to create "defensible space" around their homes.

Adequate vegetation clearance is an essential part of structure survivability during wildland fires. Therefore, a program such as this would be expected to save structures – even from the more numerous fires *not* started by power lines. Hence from a probability standpoint, this measure could create a situation where the probability of the power line fire burning a structure is less than the probability that a structure would be saved from a wildland fire by the mitigation, thus creating a net societal benefit.

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### 2E-2.5.3. Material Factual Deficiencies of the EIR/EIS

B0006-14 cont.

Unfortunately, this mitigation measure would not shield SDG&E, its ratepayers, the public, or the environment from the effects of wildland fires. Additionally, the type of protection offered is too narrow to offer adequate protection against wildland fires for those homeowners who would be eligible for the program.

The primary problem with a program such as this one is the tremendous size of catastrophic wildland fires. Take for instance, the extent of the Witch Fire of 2007, shown in Figure 2E-1. The distance from the origin of the fire east of Ramona to its western terminus near Del Mar is roughly 29 miles. Along its north/south axis, its maximum extent is 23 miles. This perimeter is much larger than those considered in the Draft EIR/EIS, and contains a substantial number of homes that would not be considered for mitigation. Clearly, it is not possible to protect all homeowners in the areas potentially affected by power line fires.

Citizens who lose their homes or businesses in fires started by powerlines, as well as insurers, can seek to gain redress from the utility if it is shown to be at fault. This process is already underway in the Witch Fire. Hence, even if the utility were to make payments to a mitigation fund that ended up saving more homes overall than were lost in the fire, it could still be liable for property damage due to the fire.

Furthermore, the type of mitigation being offered – payment into a "defensible space" fund – is not adequate to protect homes and could lead to a false sense of security. While adequate vegetation clearance is necessary to protect structures from radiant heat and flame, several scientific studies have shown that it is only one factor in structure survival during wildland fires<sup>9,10,11</sup>. These show that the mass transport of embers during catastrophic fires and their penetration into structures is responsible for the majority of home losses in catastrophic wildland fires. Because embers (firebrands) are transported great distances by strong winds, "defensible space" is not an adequate solution. Only measures that prevent ember (or firebrand) ignitions are effective in protecting homes<sup>12,13,14</sup>. Excessive reliance on "defensible space" may lead to a false sense of security on the part of homeowners.

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<sup>&</sup>lt;sup>9</sup> Ramsay, G.C., McArthur, N.A. & Dowling, V.P.; Preliminary results from an examination of house survival in the 16 February 1983 bushfires in Australia; Fire and Materials, 11 (1987) 49.

FOOTE, E.I.D.; 1994; Structure survival on the 1990 Santa Barbara "Paint" fire: A retrospective study of urban-wildland interface fire hazard mitigation factors. MS thesis, University of California at Berkeley.

<sup>&</sup>lt;sup>11</sup> Cohen, Jack D. 2000. Preventing disaster: home ignitability in the wildland-urban interface. Journal of Forestry 98(3): 15-21.

<sup>&</sup>lt;sup>12</sup> Mitchell, Joseph W.; Wind-enabled ember dousing; Fire Safety Journal; Volume 41, Issue 6, September 2006, Pages 444-458.

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An improvement to the suggested mitigation measure would allow homeowners to use the fund not only for vegetation management, but also for structural modifications or other protective measures that would reduce the risk of firebrand ignitions in the event of a wildland fire.

B0006-14 cont.

B0006-15

## 2E-2.6. There is no treatment of wind conditions

2E-2.6.1. EIR/EIS Sections Affected

Section D.15.

2E-2.6.2. Analysis Performed by the EIR/EIS

Wind and its relation to fire growth is discussed as part of the Fire & Fuels segment.

2E-2.6.3. Material Factual Deficiencies of the EIR/EIS

In the MGRA brief, recommendations 11 to 13 deal with the necessity of handling wind and its relation to wildland fire<sup>15</sup>. In particular, it requested that Santa Ana conditions be analyzed for the area under study using both best-available weather modeling and also the data from local weather stations.

None of this analysis was performed. Only SDG&E, in its response to MGRA data request number  $\sin^{16}$ , provides any weather analysis data at all. This has effectively gone unchallenged and unexamined by the Commission, but it is of critical importance for the safety of the public.

As has been pointed out explicitly in the MGRA Phase 1 testimony, winds are a critical element in the creation of power line faults and the rapid growth of catastrophic wildland fires. Local topology is one key factor that affects the wind intensity. This makes it a crucial part of the Draft EIR/EIS Fuels Management study. A wind analysis

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<sup>&</sup>lt;sup>13</sup> Mitchell, Joseph W. and Oren Patashnik; Firebrand Protection as the Key Design Element for Structure Survival during Catastrophic Wildland Fires; Fire and Materials 2007, San Francisco, Jan. 2007. Available at: http://www.mbartek.com/FM07 FirebrandsWildfires 1.1F.pdf

<sup>&</sup>lt;sup>14</sup> Mitchell, Joseph W.; Brand Dilution; Wildfire Magazine, March, 2005. Available at: http://wildfiremag.com/wui/brand\_dilution/

<sup>&</sup>lt;sup>15</sup> MGRA Phase 1 Opening Brief; pp. 7-8.

<sup>&</sup>lt;sup>16</sup> SDG&E; Response to MGRA Data Request #6. http://www.sdge.com/sunrisepowerlink/discovery.shtml

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that takes into account local conditions, using both modeling and local weather station data, should be performed as part of the final EIR/EIS.

B0006-15 cont.

B0006-16

### 2E-3. Draft EIR/EIS Material Factual Inaccuracies

## 2E-3.1. Ignitions due to component failure or wind are discounted

2E-3.1.1. EIR/EIS Sections Affected

Section D.15

2E-3.1.2. Analysis Performed by the EIR/EIS

An overview of power line fires is given in which it is stated that: "There is a public perception that all power lines can be a direct cause of wildfire ignitions, but power line-caused fires are much more prevalent for distribution and lower-voltage transmission lines compared with higher-voltage transmission lines such as the Proposed Project." Also, "The primary ignition threats associated with higher-voltage transmission lines like the Proposed Project are indirect, consisting of human-caused accidents during construction and maintenance activities and as a result of increased access to wildlands." 18

### 2E-3.1.3. Material Factual Inaccuracy of the EIR/EIS

The testimony given in Appendix 2D of this testimony contradicts this claim, which is based upon the supposedly superior engineering characteristics of high voltage transmission lines, rather than in any quantitative study of fire rates. The problem with the approach taken by the Draft EIR/EIS (and by SDG&E in their equivalent statements regarding the line) is that it ignores the fact the defects in design, engineering, manufacturing, construction, or due to improper or inadequate maintenance can cause failures. The SDG&E network is tremendously large and complex, and consists of a huge number of individual components, many of which could be the cause of a fire were they to fail mechanically or electrically.

Automatic fault detection and shut-off requires that the fault occur before the shut-off can take place, which can take between 1/60 and 3/60 of a second. A 900 MVA transmission line that was fully discharged could deliver 15 to 45 MJoules of energy in

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<sup>&</sup>lt;sup>17</sup> Draft EIR/EIS; Section D.15; p. 15-3.

<sup>18</sup> Ibid.; p. 15-4.