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BEFORE THE ARIZONA POWER PLANT AND TRANSMISSION LINE SITING COMMITTEE

Arizona Corporation Commission DOCKETED

NOV 29 2006

DOCKETED BY [Signature]

IN THE MATTER OF THE APPLICATION OF SOUTHERN CALIFORNIA EDISON COMPANY AND ITS ASSIGNEES IN CONFORMANCE WITH THE REQUIREMENTS OF ARIZONA REVISED STATUTES SECTIONS 40-360.03 AND 40-360.06 FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AUTHORIZING CONSTRUCTION OF A 500kV ALTERNATING CURRENT TRANSMISSION LINE AND RELATED FACILITIES IN MARICOPA AND LA PAZ COUNTIES IN ARIZONA ORIGINATING AT THE HARQUAHALA GENERATING STATION SWITCHYARD IN WESTERN MARICOPA COUNTY AND TERMINATING AT THE DEVERS SUBSTATION IN RIVERSIDE COUNTY, CALIFORNIA

Docket No. L-00000A-06-0295-00130

Case No. 130

AZ CORP COMMISSION DOCUMENT CONTROL

2006 NOV 29 P 4: 37

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NOTICE OF FILING CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY FINDINGS OF FACT AND CLOSING STATEMENT

Southern California Edison Company ("SCE") is filing its proposed Certificate of Environmental Compatibility ("CEC"), Findings of Fact and Closing Statement pursuant to the direction of the Arizona Power Plant and Transmission Line Siting Committee ("Siting Committee"). The CEC contains 28 conditions, primarily environmental, but also includes SCE's revised version of the six conditions proposed by the Arizona

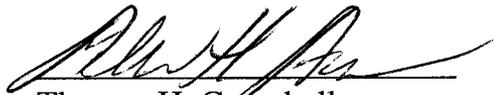
1 Corporation Commission ("ACC") Staff. See Conditions 23 thru 28. Some of these
2 revisions to the Staff conditions resulted from the meet and confer process on November
3 17, 2006.

4 The Findings of Fact contain citations to the record as requested by the Siting
5 Committee. These same findings, without the detailed record citation, are also found in
6 the proposed CEC.
7

8 The Closing Statement also contains some citations to the record. In addition to
9 this written closing, SCE would like to make an oral closing statement at the January 8,
10 2007 hearing.
11

12 RESPECTFULLY SUBMITTED this 29th day of November, 2006.

13 LEWIS AND ROCA LLP

14 

15 Thomas H. Campbell
16 Albert Acken
17 40 N. Central Avenue
18 Phoenix, Arizona 85007

19 Attorneys for Southern California Edison Company

20 ORIGINAL and twenty-five (25) copies
21 of the foregoing filed this 29th day
22 of November, 2006, with:

23 The Arizona Corporation Commission
24 Utilities Division – Docket Control
25 1200 W. Washington Street
26 Phoenix, Arizona 85007

1 COPY of the foregoing hand-delivered
2 this 29th day of November, 2006, to:

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1 DPV2 has been the subject of study and evaluation by a number of entities,
2 including the Arizona Power Plant and Transmission Line Siting Committee (the "Siting
3 Committee"), the California Public Utility Commission ("CPUC"), the California
4 Independent System Operator ("CAISO"), the Bureau of Land Management ("BLM"),
5 the United States Fish & Wildlife Service and various regional transmission planning
6 entities such as the Western Electricity Coordinating Council ("WECC"), the Southwest
7 Transmission Expansion Plan ("STEP") and Southwest Area Transmission ("SWAT").
8

9 As part of the Siting Committee hearings, there have been substantial testimony
10 and exhibits creating a robust record. There were also numerous questions from the
11 Siting Committee members that in general revolve around three issues:
12

13 First, why does California need DPV2?

14 Second, why should Arizona let a California utility build a transmission line in
15 Arizona?
16

17 Third, how will DPV2 impact Arizona both environmentally and economically?
18

18 **Why does California need DPV2?**

19 Southern California Edison Company ("SCE") is proposing to build DPV2 to
20 enhance California's portfolio of power supplies by strengthening its connection to
21 diverse, economical and reliable power sources in the southwest. DPV2 reduces the
22 congestion between California and Arizona and thereby allows California to diversify its
23 power supplies. As reflected in the record, DPV2 is one of a number of efforts California
24 is undertaking to meet its power needs, including building new power plants and
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1 transmission lines in California with a large renewable component.

2 **Why should Arizona let California build DPV2 in Arizona?**

3 Arizona should authorize DPV2 because it is good policy and because Arizona
4 benefits from DPV2. Sound public policy dictates that states cooperate in building
5 interconnecting, interstate infrastructures such as transmission lines, gasoline pipelines,
6 highways and the like. It is important that states not adopt a policy of isolation. This
7 policy of cooperation and mutual support has been recently reaffirmed by the Western
8 Governor's Association which confirmed the need for expanding the interstate
9 transmission grid. Exhibit A-8, Tab 1, Slide 8. Under Arizona law, the Siting Committee
10 can consider the needs of other states and the region. *Grand Canyon Trust v. A.C.C.*, 210
11 Ariz. 20 (App. 2005).
12
13

14 In addition to this important policy, there is a practical reason that DPV2 should
15 be approved. Arizona will benefit from DPV2. The evidence in this case delineates
16 those benefits, including enhanced reliability, increased power pooling, construction and
17 fiscal benefits, greater liquidity at the Palo Verde Hub, greater fuel and load diversity,
18 improvement in Arizona's generation investment climate, improved resource utilization,
19 including increased opportunities for Arizona utilities to make off-system sales, improved
20 access to renewable resources, and support of other Arizona initiated interstate
21 transmission projects. DPV2 will also help improve the efficiencies with which the
22 southwest uses its energy resources, decrease greenhouse gas emissions and enhance
23 interconnection opportunities for Arizona utilities. Arizona will receive these numerous
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benefits from a transmission line paid for by California utility customers.

How will DPV2 impact Arizona's environment and economy?

DPV2 will have positive economic benefits for Arizona with minimal environmental impact.

From an environmental standpoint, it is hard to imagine an interstate transmission line that would have less environmental impact. DPV2 will be adjacent to Devers to Palo Verde No. 1 ("DPV 1") and entirely in an existing utility corridor that property owners, government entities and the public have known about for years. The use of existing access roads will minimize greatly the impact of DPV2 construction and operation. The BLM, in its environmental impact report, has determined that this route is the environmentally superior/preferable alternative. Previously, the United States Fish & Wildlife Service issued a certificate of right-of-way compatibility to build DPV2 through the KOFA.

The overall economic impact to Arizona will be positive. While SCE's report to CAISO showed a small increase in Arizona utilities' production and purchase costs due to a modest potential increase on spot market prices at the Palo Verde Hub, this possible increase constitutes only approximately 0.2% of Arizona's total energy costs, which is more than offset by the economic benefits of the project conservatively estimated by SCE. In fact, SCE's evidence showed a net economic benefit to Arizona of \$268 million over the life of DPV2. See Exhibit A-14 (Slide 58a).

A related concern is whether DPV2 will consume Arizona power and gas supplies

1 to an extent that will harm Arizona utilities. The evidence demonstrated that the answer
2 is no. DPV2 will have minimal impact on Arizona during peak load periods because it
3 will primarily be used to purchase power from underutilized Arizona generation during
4 off-peak hours and seasons due to favorable pricing. DPV2 only increases power flows
5 from Arizona generation to California by around 30 to 50 MW during summer peak load
6 periods (approximately 0.25% of Arizona generation capacity). Exhibit A-8, Tab 1,
7 Slides 59-62. In the summer, when the Arizona generation is most needed for Arizona
8 utilities, it makes more sense for California to use its existing plants and purchase power
9 from the northwest. In fact, DPV2 will actually help Arizona utilities by creating an
10 investment climate beneficial to the development of the new generation resources
11 necessary for Arizona whether or not DPV2 exists. DPV2's use of natural gas supplies is
12 also minimal and far offset by already-planned natural gas infrastructure improvements in
13 Arizona. Exhibit A-8, Tab 1, Slides 64-65 and Exhibit A-22.

14
15
16 **What are the applicable legal standards?**

17
18 The question the Siting Committee must answer under state law is whether DPV2
19 is environmentally compatible. A.R.S. §40-360.06. The evidence overwhelming
20 supports a conclusion that DPV2 is environmentally compatible and SCE respectfully
21 requests that the Siting Committee grant a CEC.

22
23 The Arizona Corporation Commission ("ACC") has a different standard for its
24 review. State law requires that the ACC balance the need for the project against the
25 environmental impacts. A.R.S. §40-360.07. In recent years, the Siting Committee has
26

1 allowed the parties to introduce evidence of need so that the ACC has an evidentiary
2 record to review to assist in its balancing analysis. In this case, one of the commissioners
3 has asked the Siting Committee to include factual findings related to need. Committee
4 Exhibit 1. SCE has provided proposed findings in its proposed CEC that it respectfully
5 requests the Siting Committee adopt.
6

7 **II. DPV2 IS ENVIRONMENTALLY COMPATIBLE**

8 **A. DPV2's environmental impact has been thoroughly studied.**

9 1. The Siting Committee and the ACC found the proposed route to be
10 environmentally compatible when they approved the DPV1 line in Line Siting Cases
11 Nos. 34 and 48. (Only the five mile segment between the Harquahala Junction and the
12 Harquahala Generating Station were not part of the approved DPV1 route.)

14 2. In the 1980's, when SCE originally filed an application for a CEC
15 for DPV2 in Arizona, detailed environmental analyses were done by SCE and by the
16 BLM. In both cases, the studies supported findings of environmental compatibility for
17 this route and, in fact, the BLM granted a right of way for DPV2 at that time.

18 3. Recent updated environmental studies confirmed the environmental
19 compatibility of this route. The Proponents' Environmental Assessment contained as
20 Exhibit B-2 of SCE's Application (Exhibit A-1) supports a finding of environmental
21 compatibility as does the testimony of Mr. Michael Siegel and Mr. Randall Palmer.
22

23 4. The BLM and CPUC recently issued a final environmental impact
24 report/environmental impact statement that finds that the proposed route is
25
26

1 environmentally superior and preferable to other alternatives, including a no project
2 alternative. Exhibit A-27, Section 1.2.

3 5. The Arizona State Land Department has indicated in its letter found
4 behind tab 3 of SCE's Supplemental Packet, Exhibit A-2, that it has been aware of the
5 Project for some time and does not anticipate any alignment conflicts with the proposed
6 route.
7

8 6. The Arizona Game and Fish Department has indicated in its letter
9 found behind tab 3 of SCE's Supplemental Packet, Exhibit A-2, that it does not anticipate
10 that the Project will result in significant impacts to wildlife and wildlife habitats.
11

12 7. In 1989, the U.S. Fish & Wildlife Service issued a certificate of
13 right-of-way compatibility for this line through the KOFA National Wildlife Refuge, *see*
14 Appendix C of Exhibit B-2 to Exhibit A-1.

15 8. As Mr. Siegel testified, when wilderness areas were established in
16 the KOFA and adjacent BLM lands, land was specifically set aside in this corridor to
17 construct an additional electric transmission line.
18

19 **B. Key Environmental Factors Support a Finding of Environmental**
20 **Compatibility.**

21 1. DPV2 will be in an existing utility corridor that already contains a
22 transmission line (DPV1) and, for a portion of the route, natural gas pipelines. The use of
23 the existing corridor, on which a substantial amount of right of way has already been
24 acquired from federal and private landowners, is the most environmentally compatible
25
26

1 option for DPV2.

2 2. During the construction and operation of DPV2, SCE will use
3 existing access roads. This will minimize land disturbances and impacts to wildlife and
4 wildlife habitats.

5 3. The visual impact will be mitigated because this line will be adjacent
6 to and matched in structure, spans, and size with the existing DPV1 line.
7

8 4. DPV2 poses no threat to endangered species, areas of biological
9 wealth, cultural or historic sites, recreational facilities or existing development plans.
10

11 5. DPV2 will not create any noise problems or interference with
12 communication signals.

13 6. The primary landowners' along the proposed route, the BLM and
14 Arizona State Land Department, have no objection to the proposed route.

15 7. No private landowners intervened to object to the proposed route
16 and, in fact, virtually all the rights of way on private land along the route have already
17 been purchased.
18

19 8. Use of existing double circuit structures in Copper Bottom Pass will
20 mitigate impacts in this area of rugged terrain. The use of these double circuit structures
21 is required by the amended BLM right-of-way grant for DPV1 and will minimize
22 unnecessary land disturbance. Exhibit A-10.
23
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1 **C. Environmental Issues Raised By Intervenors Have Been Answered by**
2 **SCE.**

3 **1. Air Emissions.**

4 Several intervenors point out that DPV2 will increase air emissions
5 because currently underutilized plants in Arizona will be able to sell more power once the
6 Arizona-California congestion is reduced. In response, SCE demonstrated that region-
7 wide, emissions, including greenhouse gases, will be reduced. This is a benefit to
8 Arizona. Certain air emissions (NOx) will increase a microscopic amount (0.05%) in
9 Arizona. This small increase is well within the air emission limits that the Siting
10 Committee, the ACC and the relevant county and state environmental agencies found
11 environmentally compatible when the generating plants were approved. DPV2 is
12 environmentally compatible with respect to air emissions.
13
14

15 **2. Common Corridor**

16 Staff is concerned about DPV2 being in a common corridor with
17 DPV1 separated by 130 feet, and about the use of the double circuit towers in Copper
18 Bottom Pass. Staff's concern with reliability of double circuit structures in the Copper
19 Bottom Pass and, more generally, with two 500kV lines in a common corridor is
20 overstated. The reliability risk of the line is minimal. Any disturbance to the double
21 circuit structures can be addressed, as extreme contingency studies have shown, and can
22 be repaired within a short period of time. SCE's double circuit towers have never failed.
23
24 In addition, a 130 foot separation between 500kV transmission lines in a common
25
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1 corridor has been used for other 500kV lines in Arizona with a history of safe, reliable
2 operation. Exhibit A-19.

3 More importantly for this CEC proceeding, movement of the DPV2
4 line further away from DPV1 and construction of a second set of towers in Copper
5 Bottom Pass will significantly increase environmental impact. It will have more visual
6 impact and will require the construction of new access roads, which will result in more
7 land disturbance. A different route might also traverse the Colorado River Indian Tribe
8 reservation and, therefore, could have greater cultural impacts. The DPV2 proposed
9 route is by far the most environmentally compatible route. Other routes have been
10 rejected by the BLM. *See* BLM EIR/EIS, Exhibit A-27. The certain adverse
11 environmental impact of a route outside the existing utility corridor far outweighs the
12 theoretical increased reliability risk of the double circuit structures or the common
13 corridor.
14
15

16 **3. Impact on the KOFA**

17 The Sierra Club argues that this line will have an unacceptable impact on
18 the KOFA. As Mr. Palmer's detailed visual analysis demonstrates, the visual impact of
19 DPV2 adjacent to DPV1 and the El Paso Natural Gas Pipelines in the KOFA is low to
20 moderate and the Project is environmentally compatible. Exhibit A-8, Tab 2. The Sierra
21 Club presented no detailed credible evidence to the contrary.
22
23

24 The Sierra Club further asserts that this line will have unacceptable impacts
25 to plants and wildlife. However, the testimony of EPG's Mr. Siegel, based on its
26

1 extensive expertise, research, and site-specific studies, demonstrates that the line will not
2 significantly impact biological resources. The Arizona Game and Fish Department also
3 has concluded that this line will not result in significant impact to wildlife and habitats.
4 Exhibit A-2, Tab 3. The BLM concluded that alternative routes outside the KOFA would
5 have substantially greater impact to big horn sheep and other biological resources.
6 Exhibit A-27, pp. 11-12. The Sierra Club presented no studies of this Project that
7 contradict the conclusions of EPG and land management agencies.
8

9 The evidence overwhelming supports the conclusion that DPV2 is an
10 environmentally compatible route that has been thoroughly and carefully studied over a
11 long period of time by a variety of entities.
12

13 **III. DPV2 IS NEEDED**

14 The Siting Committee has been asked by one commissioner to issue findings of
15 fact with respect to need. DPV2 is needed and SCE respectfully requests that the
16 Committee adopt the proposed findings provided by SCE. As in the case of
17 environmental compatibility, the need for DPV2 has been studied and acknowledged by a
18 number of groups. DPV2 is needed for the following reasons:
19

- 20 1. To reduce critical congestion on Path 49 between Arizona and
21 California.
- 22 2. To provide for a more robust transmission grid in the southwest that
23 will improve emergency interconnection and power pooling opportunities. A more
24 robust, less congested system will also complement other transmission projects in the
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26

1 southwest that are necessary to bring low cost and renewable resources into Arizona,
2 such as the TransWest Express Project and Project ZIA.

3 3. To utilize stranded generation assets in Arizona, particularly during
4 the off peak periods. Currently, there are more generation assets in Arizona than Arizona
5 needs even during its summer peak season. These excess assets are underutilized due to
6 the congestion on Path 49. Even after Arizona's peak load "grows into" the current
7 generation assets, Arizona generation will continue to be underutilized in the off peak
8 periods when DPV2 will carry most of its Arizona-based generation. Because generation
9 must be developed in Arizona to meet the peak periods during the summer, there always
10 will be excess generation capacity during the off peak periods when that power can be
11 economically used in neighboring regions, such as southern California. The use of the
12 generating facilities during the off peak periods helps finance the additional facilities and
13 generation resources needed by Arizona thereby reducing the ultimate expense to
14 Arizona rate payers because a portion of that expense will be paid by California rate
15 payers. In essence, California rate payers will help finance the peak-demand generation
16 that Arizona will soon need with or without DPV2.
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20 4. California needs to strengthen its energy portfolio by access to
21 diverse generation resources in a way that is economically and environmentally effective.
22 DPV2 meets that need by allowing California to purchase economic excess energy
23 primarily during off peak times from the southwest and reduce the use of some older, less
24 efficient, less environmentally compatible plants in California.
25
26

1 **IV. DPV2 BENEFITS ARIZONA**

2 **A. The Report to CAISO shows minimal impact on Arizona's production**
3 **and purchase costs.**

4 In addition to the Siting Committee's legal requirement to find that this
5 project is environmentally compatible and the ACC's legal requirement to balance the
6 need for the project against its environmental impact, this case also involved extensive
7 discussion of the economic impact on Arizona. This interest largely focused on a chart in
8 a study that SCE prepared for the CAISO (the "Report"). The Report, using a particular
9 model and methodology adopted by CAISO, concluded that the change in production and
10 purchase costs of Arizona utilities may be increased slightly (0.2% of total Arizona
11 energy costs) as a result of DPV2. The Report is based on the assumption that all power
12 purchased is bought on the spot market and all future generation is built by merchant
13 generators, not Arizona utilities such as APS or SRP. Neither of these assumptions
14 accurately describes the Arizona market and regulatory environment. Changing these
15 assumptions, for instance, to assume one-half of future generation is built by Arizona
16 utilities, significantly reduces the already minimal impact on Arizona utility purchase and
17 production costs reflected in the Report. Exhibit A-14, Slide 58a. More importantly,
18 when looking at the impact on Arizona, Arizona utilities and rate payers, one must also
19 consider all the benefits, not just the results of the Report.
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24 **B. DPV2 Provides Significant Arizona Benefits.**

25 The benefits to Arizona for this project can be summarized as follows:
26

1 1. Enhanced reliability, especially in emergency situations. For
2 instance, in emergency situations at the Palo Verde Hub, DPV2, especially when
3 connected with the Harquahala Junction Switchyard, will allow Arizona to transmit
4 resources from other parts of the west, including California, into the Phoenix area.

5 2. Increased power pooling. DPV2 will encourage and increase
6 Arizona's capacity to access a diversity of resources, including low-cost renewable
7 resources, from Wyoming, New Mexico and California.

8 3. Economic and fiscal benefits. These benefits were described in the
9 study by Elliott Pollack (Tab J-3 to Exhibit A-1) and Mr. Pfeifenberger presentation slide
10 # 34 (Exhibit A-8, Tab 1).

11 4. Greater liquidity at the PV Hub resulting in reduced transaction costs
12 for Arizona utilities.

13 5. Greater fuel and load diversity.

14 6. Improved generation investment climate.

15 7. Improved resource utilization, including the increased opportunity
16 for Arizona utilities to make off-system sales, reducing rate pressure on their retail
17 customers.

18 8. Complement to Arizona interstate transmission projects such as
19 TransWest Express and Project Zia.

20 9. Enhanced interconnection options for Arizona entities.

21 10. Reduction in greenhouse gas emissions and more efficient use of the
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1 region's energy resources.

2 Many of these benefits were mentioned, but not quantified, in the SCE Report to
3 CAISO.

4 The evidence clearly supports the conclusion that Arizona rate payers and Arizona
5 utilities will be benefited, not hurt, by DPV2. Mr. Pfeifenberger's testimony provided
6 some quantification of these benefits, using conservative assumptions. The quantified
7 Arizona benefits exceed estimated Arizona costs over the life of DPV2 by \$268 million.
8 Exhibit A-14, Slide 58a.
9

10 **C. DPV2 Will Help, Not Hurt, Arizona Generation and Natural Gas**
11 **Supplies.**
12

13 DPV2 will help Arizona acquire the generation resources that will be needed in
14 the future by Arizona utilities. The evidence demonstrated the following:

15 1) Arizona utilities will need new generation resources perhaps
16 as early as 2011, with or without DPV2.
17

18 2) By primarily using Arizona generation at off peak times and
19 seasons, DPV2 does not increase Arizona's need for new generation for its peak load and,
20 in fact, helps Arizona develop the needed new resources because the costs of these
21 resources will be paid in part by California rate payers. Arizona will always be faced
22 with the situation that it must build or acquire generation resources to meet the peak
23 needs in the summer. That means that there will be excess resources during the winter.
24 To the extent that the congestion between Arizona and California can be reduced so that
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1 the excess generation in the off peak periods can be sold to southern California, it will
2 reduce the cost to Arizona utilities and their rate payers.

3 3) Regionally, natural gas use will decline because reducing
4 congestion will allow the use of more efficient generating resources. Moreover, planned
5 development of Arizona natural gas supply and storage facilities will more than offset a
6 minimal increase in Arizona natural gas usage resulting from DPV2.
7

8 **V. STAFF'S CONDITIONS**

9 Staff has asked the Siting Committee to use this CEC proceeding to adopt certain
10 conditions that relate to non-environmental issues – namely, to adopt conditions normally
11 the province of industry transmission planning groups and, in the case of interstate
12 transmission, the federal government. SCE respectfully suggests that the Siting
13 Committee's CEC process is not the appropriate forum to adopt such conditions.
14 Nevertheless, in the spirit of cooperation, SCE has tried to accommodate Staff in part by
15 agreeing to revised versions of some of the conditions. SCE cannot agree to other
16 conditions for the reasons explained below and in its rebuttal case.
17
18

19 **ACC Staff Condition No. 1**

20 SCE noted in its testimony that it has filed comments (in a CPUC proceeding)
21 supporting open access to gas storage in southern California. Staff Condition No. 1 is
22 consistent with SCE's position, but SCE has made two revisions. The first limits the
23 effective time of the Condition to the term of the CEC or ten (10) years, whichever is
24 less. The second is to limit required participation to California and federal proceedings
25
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1 and not proceedings in other states or the region. SCE should not have to make a
2 commitment in perpetuity or to participate in proceedings other than in California or at
3 the Federal Energy Regulatory Commission ("FERC"). SEC believes the Staff accepts
4 these changes.

5
6 **ACC Staff Condition No. 2**

7 Staff Condition No. 2 is acceptable with two changes. First, the concept of
8 "separate" towers must be eliminated because SCE should use the double circuit towers
9 in Copper Bottom Pass to reduce environmental impact and to be consistent with the
10 BLM right-of-way grant. Second, SCE should be able to use a special protection system
11 ("SPS") that will not affect load or generation in Arizona. SPS is consistent with WECC
12 Planning Criteria, NERC reliability standards, and general industry standards. The ACC
13 Staff should not seek unilaterally to impose different reliability standards than those
14 accepted by the industry and reliability regional oversight bodies, particularly in a CEC
15 proceeding. SCE has already modified its SPS to ensure that any load or generation
16 dropped will be in California, not in Arizona. This change was made in response to an
17 earlier Staff request. No further modification is necessary. The last two sentences of
18 Condition No. 2(b) are not necessary.
19
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21 **ACC Staff Condition No. 3**

22 Staff Condition No. 3 is acceptable with some minor word changes and the
23 addition of a paragraph that gives SCE the option of interconnecting at the Harquahala
24 Generating Station Switchyard if a Harquahala Junction Switchyard agreement is not
25
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1 completed by the end of 2007.

2 **ACC Staff Condition No. 4**

3 Condition No. 4(a) is not acceptable because it requires SCE to get FERC
4 approval on behalf of all of the Palo Verde Hub interconnecting parties – a task outside of
5 SCE’s control. SCE cannot file rates at FERC on behalf of all Palo Verde Hub
6 interconnection parties because the rates, terms and conditions for transmission service
7 will have to be filed at FERC by each of the various transmission owners under Section
8 205 of the Federal Power Act. In addition, Conditions No. 4(a) and (b) as proposed by
9 the Staff are subject to federal jurisdiction and not appropriate conditions in a state siting
10 proceeding. Condition No. 4(b) is also dependent on agreement of the Palo Verde to TS5
11 line participants, which is out of SCE’s control. SCE believes that the alternative to
12 Condition No. 4 set forth in Exhibit A can help achieve the goal of ensuring that the
13 Harquahala Power Plant can schedule its full capacity from the new Harquahala Junction
14 Switchyard to the Hassayampa Switchyard.
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18 **Staff Condition No. 5**

19 Staff Condition No. 5, as explained by Mr. Jerry Smith during his testimony, is
20 acceptable to SCE. Changes have been made in the wording of Condition No. 5 to be
21 consistent with SCE’s understanding of Staff’s intention and to clarify what commitment
22 SCE is making.
23

24 **Staff Condition No. 6**

25 Staff Condition No. 6(a) is acceptable. Staff Condition No. 6(b) is not acceptable.
26

1 SCE must operate within the regulatory framework of the State of California and FERC
2 and Condition No. 6(b) requires that SCE enter an agreement and file a tariff inconsistent
3 with the California and FERC regulatory frameworks. The Committee should not impose
4 a condition that mandates a revision to the California and FERC regulatory frameworks.
5 CAISO should have control of DPV2 up to the Harquahala Junction Switchyard just as it
6 has control of the DPV1 and the North Gila lines up to their termination in the Palo
7 Verde Hub area. Staff admitted that there have been no particular problems with
8 CAISO's control of those other two lines. CAISO rates are comparable to Arizona utility
9 transmission rates. Staff has not presented a persuasive or compelling case that CAISO's
10 control over the DPV2 line will disadvantage Arizona. To the contrary, the testimony in
11 this case is that CAISO will treat parties for both California and Arizona fairly, equitably
12 and equally. CAISO also opposes Condition 6(b).
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16 **VI. CONCLUSION**

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18 SCE respectfully requests that the Committee grant SCE a CEC with findings in
19 the form filed with this closing statement.
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1 The following members and designees of members of the Committee were present
2 at one or more of the hearings for the evidentiary presentations and/or for the
3 deliberations:

4 Laurie Woodall	Chairman, Designee for Arizona Attorney General, Terry Goddard
5	
6 David L. Eberhart, P.E.	Designee for Chairman, Arizona Corporation Commission ("ACC")
7	
8 Ed Ranger	Designee for Director, Arizona Department of Environmental Quality
9	
10 Jim Arwood	Designee for Director, Energy Department, Arizona Department of Commerce
11	
12 Greg Houtz	Designee for Director, Arizona Department of Water Resources
13	
14 Jeff McGuire	Appointed Member
15	
16 Michael Palmer	Appointed Member
17	
18 Joy Rich	Appointed Member
19	
20 A. Wayne Smith	Appointed Member
21	
22 Margaret Trujillo	Appointed Member
23	
24 Michael Whalen	Appointed Member

25 The Applicant was represented by Thomas H. Campbell and Albert H. Acken of
26 Lewis and Roca LLP and Michael D. Mackness of the Southern California Edison
Company Law Department. The following parties were granted intervention pursuant to
A.R.S. § 40-360.05: ACC Staff, represented by Christopher Kempley and Keith Layton;

1 the Sierra Club – Grand Canyon Chapter, represented by Timothy Hogan; Harquahala
2 Valley Irrigation District, represented by William D. Baker; Walter Meek, Pro Se; the
3 Residential Utility Consumer Office (“RUCO”), represented by Scott Wakefield; Donald
4 G. Begalke, Pro Se; Central Arizona Water Conservation District (“CAWCD”),
5 represented by Thomas W. McCann; Harquahala Valley Power District, represented by
6 Jay I. Moyes and Steve Wene of Moyes Storey, Ltd.; Gila River Power LP, represented
7 by Patrick Black of Fennemore Craig P.C.; Tucson Electric Power Co., represented by
8 Michael W. Patten, J. Matthew Derstine and Laura Sixkiller of Roshka DeWulf & Patten,
9 PLC; Langley Properties, LLC, represented by Court S. Rich of Rose Law Group PC;
10 and Mohave Electric Cooperative, Inc., represented by Michael A. Curtis, Larry K. Udall
11 and William P. Sullivan of Curtis, Goodwin, Sullivan, Udall & Schwab, P.L.C.
12

13
14 At the conclusion of the hearings, the Committee, having received the Application,
15 the appearances of the parties, the evidence, testimony and exhibits presented at the
16 hearings, and being advised of the legal requirements of Arizona Revised Statutes §§ 40-
17 360 to 40-360.13 and the holding in *Grand Canyon Trust v. Arizona Corporation*
18 *Commission*, 210 Ariz. 30, 38, 107 P.3d. 356 (App. 2005), found that the Project is
19 environmentally compatible, and upon motion duly made and seconded, voted to grant
20 the Applicant a Certificate of Environmental Compatibility (Case No. 130) for authority
21 to construct the following facilities as requested in the Application: a 500kV alternating
22 current transmission line and related facilities in Maricopa and La Paz counties in
23 Arizona originating west of Phoenix, Arizona at either: (1) the Harquahala Junction
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1 Switchyard; or (2) the Harquahala Generating Station Switchyard; and terminating at the
2 Devers substation in Riverside County, California as indicated below and depicted on
3 Attachment A (the "Project"). The Project consists of approximately 102 miles of 500kV
4 transmission line in Arizona.

5 PROPOSED ROUTE

6
7 The Arizona portion of the Project originates at a new Harquahala Junction
8 Switchyard (Line Siting Case No. 128) to be located in the southwest quarter of Section
9 25, Township 2 North, Range 8 West. The entire Project will be located within a
10 nominal 130-foot-wide right-of-way on Federal land and state land and a nominal 160-
11 foot wide right-of-way on private land adjacent to the existing Devers to Palo Verde No.
12 1 500kV transmission line ("DPV1") (Line Siting Case Nos. 34 and 48) right-of-way.
13 The Project right-of-way will be to the west and south of the DPV1 right-of-way east of
14 Copper Bottom Pass (located in La Paz County, Section 20, Township 3 North, Range 20
15 West), and on the east and north side of the DPV1 right-of-way between the western end
16 of Copper Bottom Pass (Section 14, Township 3 North, Range 21 West) and the
17 Colorado River. The majority of the proposed route is located within Bureau of Land
18 Management ("BLM") designated utility corridors.
19
20

21 From the Harquahala Junction Switchyard, the route will head north and parallel
22 DPV1 for approximately 2.7 miles to Interstate 10 ("I-10"), where it will cross I-10 and
23 proceed to a point 1 mile northwest of Burnt Mountain.
24

25 The route will then turn west and generally parallel the I-10 and Central Arizona
26

1 Project ("CAP") Canal for approximately 20 miles through the Big Horn Mountains and
2 across the Harquahala Plain to a point 0.5 mile north of I-10. The route will then turn
3 southwest, crossing I-10, and proceed approximately 5 miles to intersect the El Paso
4 Natural Gas Company's existing pipeline just north of its Wenden Pump Station north of
5 the Eagletail Mountains.
6

7 The route will then roughly parallel the El Paso Natural Gas pipeline and parallel
8 the DPV1 line for approximately 56 miles, crossing the Ranegras Plain, through
9 approximately 25 miles of the Kofa National Wildlife Refuge (beginning at the east
10 boundary in Section 13, T2N R15W, and ending at the west boundary in Section 7, T2N
11 R18W), La Posa Plain, and Arizona State Highway 95, through the Dome Rock
12 Mountains to the summit of Copper Bottom Pass. The route will include the existing
13 double circuit transmission towers located along a three-mile segment in the Copper
14 Bottom Pass.
15

16 The route will then turn southwest away from the pipeline, descend the western
17 slope of the Dome Rock Mountains and proceed approximately 9 miles to a crossing of
18 the Colorado River in La Paz County, Section 5, Township 2 North, Range 22 West.
19

20 The Committee also approves an alternative interconnection option to originate the
21 line at the Harquahala Generating Station Switchyard (Line Siting Case No. 96). If this
22 interconnection option is used, the transmission line would exit the Harquahala
23 Generating Station Switchyard located in Maricopa County, Section 31, Township 2
24 North, Range 8 West, and parallel the existing Harquahala-Hassayampa 500kV line (Line
25
26

1 Siting Case No. 96) in an easterly direction for approximately 5 miles within a 1,000-
2 foot-wide corridor centered on the existing line.

3 **FINDINGS OF FACT REGARDING THE NEED FOR THE PROJECT**

- 4
- 5 1. The Project reduces critical congestion on Path 49 between Arizona and
6 California. The need to reduce this congestion has been identified by the
7 Department of Energy, various regional planning groups, and Southern
8 California Edison (the Applicant). The regional planning groups and the
9 Applicant have confirmed that the Project will reduce this congestion.
10 Reducing this congestion strengthens the Southwestern transmission grid.
- 11 2. The Project will meet the need for underutilized power plants in Arizona to
12 sell additional power, particularly during the off-peak seasons and off-peak
13 hours. Currently, while there is excess generation in the Palo Verde area
14 year-round, Arizona utilities believe the current peak excess may be utilized
15 as soon as 2011. However, even at that time, there will continue to be
16 excess merchant and utility generation during the off-peak hours and
17 seasons. The ability to use the excess non-peak capacity also will
18 encourage investment in and help defray the costs of new resources that
19 will be needed to meet Arizona's growing peak loads.
- 20 3. The Project will also help meet California's need for diverse, cost effective
21 resources. Particularly in off-peak periods, the Project will allow California
22 access to excess lower cost resources from more efficient plants thereby
23 reducing costs to California consumers and providing a more diverse and
24 environmentally compatible portfolio of energy resources.
- 25 4. The Project will enhance grid and resource reliability, especially in
26 emergency situations.

- 1 5. The Project will increase power pooling.
- 2 6. The Project will result in significant economic and fiscal benefits from
- 3 construction and increased state and local taxes.
- 4 7. The Project will help maintain greater liquidity at the Palo Verde Hub and
- 5 thereby reduce transaction costs for Arizona utilities.
- 6 8. The Project will result in greater fuel and load diversity for Arizona and the
- 7 Southwest.
- 8 9. The Project will improve Arizona generation investment climate thereby
- 9 reducing the cost of building or procuring the additional generation supply
- 10 Arizona will need to serve its growing load.
- 11 10. The Project will improve Arizona's resource utilization, including the
- 12 increased opportunity for Arizona utilities to make off system sales so that
- 13 some of their costs will be paid by California customers resulting in lower
- 14 cost to Arizona customers.
- 15 11. The Project will improve Arizona's and the region's access to renewable
- 16 resources.
- 17 12. The Project complements Arizona interstate transmission projects such as
- 18 Trans-West Express and Project Zia.
- 19 13. The Project enhances interconnection opportunities (e.g., at Harquahala
- 20 Junction Switchyard).
- 21 14. Planned development of Arizona natural gas transmission and storage
- 22 facilities will more than offset an estimated increase in Arizona natural gas
- 23 usage resulting from increased utilization of generating facilities.
- 24 15. The estimated increase in Arizona utilities' production costs reported in the
- 25 Applicant report to California Independent System Operator (CAISO) is
- 26 minimal, less than 0.2% of the Arizona utilities' annual costs. Moreover,

1 this report is based on assumptions about Arizona utilities buying all energy
2 on the spot market and Arizona requiring that all future generation be built
3 by merchant companies, not Arizona utilities. If these two assumptions are
4 adjusted to comport with Arizona realities, the estimated production cost
5 increases will be even smaller if not entirely offset.

- 6 16. The increased Arizona production costs reflected in the Applicant report to
7 CAISO are more than offset by economic benefits to Arizona in general
8 and benefits to Arizona utilities in particular.
- 9 17. The Project reduces emissions regionally, including CO₂, a greenhouse gas
10 associated with global warming, because newer, cleaner, and more efficient
11 plants are being utilized more, and older and less efficient plants are used
12 less.
- 13 18. The estimated increases in Arizona NO_x emissions (0.05%) and water
14 usage (0.02%) resulting from increased generation from Arizona plants will
15 be well within the air emission and water use limits that the Siting
16 Committee, ACC and pertinent environmental agencies have determined
17 are environmentally compatible.
- 18 19. Numerous power plants have been built in California from 2001 to 2005
19 totaling over 13,000 MW of new generation. A significant number of new
20 generating plants are expected to be built in California in the near future.

21 **CONDITIONS**

22
23 This Certificate is granted upon the following conditions:

- 24 1. The Applicant shall obtain all required approvals and permits necessary to
25 construct the Project.
- 26 2. The Applicant shall comply with all existing applicable air and water

1 pollution control standards and regulations, and with all existing applicable
2 ordinances, master plans and regulations of the State of Arizona, the
3 County of Maricopa, the County of La Paz, the United States, and any other
4 governmental entities having jurisdiction.

- 5 3. This authorization to construct the Project shall expire 10 years from the
6 date the Certificate is approved by the ACC unless construction is
7 completed to the point that the Project is capable of operating by that time;
8 provided however that prior to such expiration the Applicant or its
9 assignees may request that the Commission extend this time limitation.
- 10 4. The Applicant shall make every reasonable effort to identify and correct, on
11 a case-specific basis, all complaints of interference with radio or television
12 signals from operation of the transmission line and related facilities
13 addressed in this Certificate. The Applicant shall maintain written records
14 for a period of five years from the date of any such complaints of radio or
15 television interference attributable to operation, together with the corrective
16 action taken in response to each complaint. All complaints shall be
17 recorded to include notations on the corrective action taken. Complaints not
18 leading to a specific action or for which there was no resolution shall be
19 noted and explained. The record shall be signed by the Applicant and also
20 the complainant, if possible, to indicate concurrence with the corrective
21 action or agreement with the justification for a lack of action.
- 22 5. The Project shall comply with applicable noise guidelines of the Federal
23 Department of Housing and Urban Development and the Environmental
24 Protection Agency.
- 25 6. If human remains and/or funerary objects are encountered during the course
26 of any ground disturbing activities relating to the development of the

1 subject property, Applicant shall cease work on the affected area of the
2 Project and notify the Director of the Arizona State Museum in accordance
3 with A.R.S. § 41-865.

4 7. Applicant shall consult an archeologist during construction activities in
5 applicable areas, as determined by the State Historic Preservation Office
6 (“SHPO”), to advise them in connection with any additional archeological
7 studies that may be required and any mitigation efforts for archeological
8 sites that may be affected by the construction of the Project.

9 8. After construction, the Applicant, in conjunction with any applicable land
10 managing agency, shall allow Arizona Site Stewards, a volunteer-staffed
11 SHPO program, to periodically inspect archeological sites within the
12 corridor for vandalism or other damage.

13 9. If any archaeological, paleontological or historical site or object that is at
14 least fifty years old is discovered on state, county or municipal land during
15 survey, excavation, construction or other like activity, the person in charge
16 shall promptly report the discovery to the Director of the Arizona State
17 Museum, and in consultation with the Director, shall immediately take all
18 reasonable steps to secure and maintain the preservation of the discovery
19 pursuant to A.R.S. §41-844.

20 10. The Applicant shall follow the Arizona State Land Department’s
21 instructions, if any, regarding the treatment of State Register of Historic
22 Places-eligible properties situated on Arizona State Land Department land
23 in consultation with SHPO.

24 11. In consultation with SHPO and the land-managing agency, the Applicant
25 will consider and assess potential direct and indirect impacts to eligible
26 properties related to new access roads or any existing access roads that

1 require blading.

2 12. Where practicable, the Applicant shall use existing roads for construction
3 and access. The Applicant shall minimize vegetation disturbance outside of
4 the transmission line right-of-way, particularly in drainage channels and
5 along stream banks.

6 13. The Applicant shall use non-specular conductor and dulled surfaces for
7 transmission line structures.

8 14. Within 45 days of: a) securing easement or right-of-way for the Project on
9 private property; or b) approval of the Certificate by the Commission,
10 whichever is later, the Applicant shall erect and maintain signs on such
11 private property providing public notice that the property is the site of a
12 future transmission line or switchyard site. Such signage shall be no
13 smaller than a normal roadway sign printed on materials of a color designed
14 to attract attention. The Applicant shall place signs such that the public is
15 notified along the full length of the transmission line until the transmission
16 structures are constructed.

17 15. In the event that the Project requires an extension of the term of this
18 Certificate prior to completion of construction, Applicant shall use
19 reasonable means to directly notify all landowners and residents within a
20 one-half mile radius of the Project facilities for which the extension is
21 sought. Such landowners and residents shall be notified of the time and
22 place of the proceeding in which the Commission shall consider such
23 request for extension.

24 16. Before construction on this Project may commence, the Applicant must file
25 a construction mitigation and reclamation plan with ACC Docket Control,
26 with copies to affected areas of jurisdiction. The Applicant shall, within one

1 year of completion of construction of the Project, re-vegetate any area of
2 native vegetation disturbed by construction of the Project outside of the
3 transmission line right-of-way, except for any road that may be necessary to
4 access the transmission lines or substation sites for maintenance and repair.

5 The goals of the Plan will be to:

- 6 ● Avoid impacts where practical;
- 7 ● Where impacts are unavoidable, minimize impacts; and
- 8 ● Focus on site preparation to facilitate natural processes of re-vegetation
9 and drainage

10 Other key elements of the Plan, when not inconsistent with the respective
11 land management agencies' or local owners' requirements, are to:

- 12 ● Emphasize final site preparation to encourage natural re-vegetation;
- 13 ● Avoid (*i.e.*, preserve), where practical, mature native trees;
- 14 ● Stipulate a maximum construction corridor width;
- 15 ● Reserve topsoil and native plant materials from right-of-way before
16 grading, and distribute over the right-of-way after construction is
17 complete;
- 18 ● Imprint the reclaimed right-of-way to provide indentations to catch seed
19 and water;
- 20 ● Implement best management practices to protect the soil;
- 21 ● Apply reclamation methods that have been proven effective in the desert
22 environment; and
- 23 ● Prevent, where applicable, the spread of noxious weeds or other
24 undesirable species.

- 25 17. On federal lands, Applicant shall comply with the environmental mitigation
26 measures and other conditions or requirements of the right-of-way grant and

1 Plan of Development on BLM lands, the Kofa National Wildlife Refuge
2 right-of-way grant, and the U.S. Army Yuma Proving Ground right-of-way
3 grant.

- 4 18. Applicant shall monitor all ground clearing/disturbance activities that could
5 affect sensitive species or habitat. Where warranted, Applicant shall retain
6 a qualified biologist to conduct pre-construction activities to minimize or
7 prevent impacts to sensitive species or habitat. Specifically, in areas
8 considered to comprise suitable Sonoran desert tortoise habitat, Applicant
9 shall conduct preconstruction surveys and/or monitor for desert tortoises. If
10 desert tortoises are encountered during construction, the Applicant shall
11 follow the Arizona Game & Fish Department's Guidelines for Handling
12 Sonoran Desert Tortoises.
- 13 19. Applicant shall salvage mesquite, ironwood, palo verde trees and saguaros
14 removed during project construction activities consistent with Arizona's
15 Native Plant Law and use the vegetation for reclamation in or near its
16 original location.
- 17 20. Applicant shall provide copies of this Certificate to La Paz County and
18 Maricopa County planning agencies, the county boards of supervisors, the
19 Arizona Department of Real Estate ("ADRE"), SHPO, AGFD and ASLD.
- 20 21. Prior to the date this transmission line is put into commercial service,
21 Applicant shall provide homebuilders and developers of record of land
22 parcels located within one mile of the center line of the certificated route
23 the identity, location and a pictorial depiction of the type of power line
24 being constructed, accompanied by a written description, and encourage the
25 developers and homebuilders to include this information in the developers'
26 and homebuilders' homeowners' disclosure statements.

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- 22. Applicant shall publish a copy of this Certificate and the attachments on Applicant's project website within 10 days of approval of the Commission.
- 23. Applicant agrees to make good faith efforts for the term of the Certificate, not to exceed ten years, to work within California and FERC proceedings to encourage regional access to natural gas storage facilities in California in a manner that addresses natural gas service reliability and efficiency in the region, including Arizona.
- 24. To ensure the Project does not adversely affect reliability of the Arizona Extra High Voltage (EHV) grid and power plants interconnected at the Palo Verde Hub, one of the following options must be adopted by Applicant for construction of the new line:

The line must be constructed on towers or monopoles for its entire length and have sufficient physical separation from the existing DPV1 line to assure a common mode outage frequency of less than one in thirty years (per NERC/WECC Planning Standards S-2) or that no cascading outages would occur for such a common mode outage (per NERC Category C.5)

OR

The WECC rated Path 49 shall not be operated above a level at which a NERC Category C.5 common mode outage of the two Devers to Palo Verde lines would cause cascading outages. Studies are to be performed annually to establish with WECC such a Path 49 Operational Transfer Capability (OTC) limit for the common mode outage of the two Devers to Palo Verde transmission lines.
- 25. The Project shall terminate at the new Harquahala Junction Switchyard

1 (Case 128) along with the existing Harquahala to Hassayampa 500kV line
2 in order to mitigate prevailing reliability risks associated with extreme
3 contingencies in the vicinity of the Palo Verde Hub. The Harquahala
4 Junction Switchyard is to be jointly owned by the Palo Verde to TS5
5 participants and Applicant. The Harquahala Junction Switchyard to
6 Hassayampa Switchyard line is to be jointly owned by Applicant and the
7 Palo Verde TS5 transmission participants.

8 If Harquahala Junction Switchyard (Switchyard) joint agreements,
9 Switchyard property acquisitions, and other necessary Switchyard joint
10 arrangements are not complete by December 31, 2007, Applicant may
11 terminate the Project at the Harquahala Generating Station Switchyard.

12 26. Applicant commits to work with APS so that the Harquahala Power Plant
13 can schedule its full capacity from Harquahala Junction Switchyard to
14 Hassayampa Switchyard.

15
16 27. The ACC Staff maintains that control area authority and associated
17 operational reliability obligations placed by the ACC upon power plants
18 originally interconnected at the Palo Verde Hub are to be maintained with
19 the new interconnection at Harquahala Junction and that such power plant
20 obligations can be transferred to the transmission control area to which
21 they are interconnected in the event that they desire to discontinue as a
22 generator-only control area operator. Applicant will not object to Staff's
23 position.

24 28. SCE shall support an Arizona based utility having operational control of
25 the Harquahala Junction Switchyard, the Harquahala Junction Switchyard
26

1 to Hassayampa Switchyard transmission line and the Harquahala Junction
2 Switchyard termination of the Project and the Harquahala Power Plant line.
3 SCE shall not have operational control of the above facilities.

4 GRANTED this ____ day of _____, 2007.

5
6 **THE ARIZONA POWER PLANT AND**
7 **TRANSMISSION LINE SITING COMMITTEE**

8 By: _____

9 Laurie A. Woodall, Chairman
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1 Applicant).² The regional planning groups and the Applicant have confirmed that the
2 Project will reduce this congestion.³ Reducing this congestion strengthens the
3 Southwestern transmission grid.⁴

4 2. The Project will meet the need for underutilized power plants in Arizona to
5 sell additional power, particularly during the off-peak seasons and off-peak hours.⁵
6
7 Currently, while there is excess generation in the Palo Verde area year-round, Arizona
8 utilities believe the current peak excess may be utilized as soon as 2011.⁶ However, even
9 at that time, there will continue to be excess merchant and utility generation during the
10 off-peak hours and seasons.⁷ The ability to use the excess non-peak capacity also will
11 encourage investment in and help defray the costs of new resources that will be needed to
12 meet Arizona's growing peak loads.⁸

15 ² See Ex. A-2, Slide KK; Ex. A-8, Tab 1, Slide 10; Ex. S-28, Slides 7-8; Ex. COM-2, Slides 31-42; Tr. vol.
16 4, 822:23-825:12 (Aug. 22, 2006); Tr. vol. 5, 967:25-968:4 (Sep. 11, 2006); Tr. vol. 8, 1613:11-1615:2
17 (Sep. 26, 2006); Tr. vol. 11, 2221:2-2223:1 (Oct. 16, 2006); Tr. vol. 13, 2699:21-25 (Oct. 30, 2006); Tr.
18 vol. 13, 2717:4-10 (Oct. 30, 2006).

18 ³ See Ex. A-2, Slide HH, LL; Tr. vol. 4, 825:2-3 (Aug. 22, 2006); Tr. vol. 4, 888:19-23 (Aug. 22, 2006);
19 Tr. vol. 4, 895:4-10 (Aug. 22, 2006); Tr. vol. 4, 895:15-18 (Aug. 22, 2006).

19 ⁴ See Ex. A-2, Slide MM, NN; Tr. vol. 1, 122:1-3 (June 26, 2006); Tr. vol. 4, 876:25-877:2 (Aug. 22,
20 2006); Tr. vol. 7, 1621:21-1626:23 (Sep. 25, 2006); Tr. vol. 10, 2020:9-18 (Oct. 4, 2006).

21 ⁵ See Ex. A-8, Tab 1, Slide 46; Tr. vol. 5, 1114:7-15 (Sep. 11, 2006); Tr. vol. 5, 1115:20-1116:24 (Sep.
22 11, 2006); Tr. vol. 5, 1123:23-1124:20 (Sep. 11, 2006); Tr. vol. 5, 1153:20-25 (Sep. 11, 2006); Tr. vol. 6,
23 1192:16-23 (Sep. 12, 2006); (Sep. 12, 2006); Tr. vol. 12, 2450:2-4 (Oct. 17, 2006).

23 ⁶ See Ex. COM-1; Tr. vol. 5, 1120:5-7 (Sep. 11, 2006).

24 ⁷ See Ex. A-8, Tab 1, Slides 60-62; Tr. vol. 5, 1058:18-25 (Sep. 11, 2006); Tr. vol. 5, 1115:20-22 (Sep.
25 11, 2006); Tr. vol. 14, 2797:25-2798:5 (Oct. 31, 2006).

25 ⁸ See Ex. A-8, Tab 1, Slides 43-44; Tr. vol. 5, 999:18-1000:4 (Sep. 11, 2006); Tr. vol. 5, 1044:25-1045:1
26 (Sep. 11, 2006); Tr. vol. 5, 1114:2-1115:1 (Sep. 11, 2006); Tr. vol. 5, 1115:25-1116:5 (Sep. 11, 2006); Tr.
vol. 5, 1116:8-24 (Sep. 11, 2006); Tr. vol. 5, 1118:2-6 (Sep. 11, 2006); Tr. vol. 5, 1151:12-23 (Sep. 11,

1 3. The Project will also help meet California's need for diverse, cost effective
2 resources.⁹ Particularly in off-peak periods, the Project will allow California access to
3 excess lower cost resources from more efficient plants thereby reducing costs to
4 California consumers and providing a more diverse and environmentally compatible
5 portfolio of energy resources.¹⁰
6

7 4. The Project will enhance grid and resource reliability, especially in
8 emergency situations.¹¹

9 5. The Project will increase power pooling.¹²

10 6. The Project will result in significant economic and fiscal benefits from
11 construction and increased state and local taxes.¹³
12

13
14 2006); Tr. vol. 13, 2723:17-2724:9 (Oct. 30, 2006).

15 ⁹ See Ex. A-2, Slide 24; Tr. vol. 1, 121:23-122:3 (June 26, 2006); Tr. vol. 4, 855:1-8 (Aug. 22, 2006); Tr.
16 vol. 6, 1354:1-13 (Sep. 12, 2006); Tr. vol. 12, 2461:3-2461:17 (Oct. 17, 2006).

17 ¹⁰ See *Id.*; Tr. vol. 5, 1109:15-16 (Sep. 11, 2006).

18 ¹¹ See Ex. A-2, Slides 59, MM, NN; Ex. A-3, p. A-9; Ex. A-8, Tab 1, Slides 29-32; Ex. A-27, p. A-9; Tr.
19 vol. 4, 813:6-9 (Aug. 22, 2006); Tr. vol. 4, 853:13-19 (Aug. 22, 2006); Tr. vol. 4, 862:2-20 (Aug. 22,
20 2006); Tr., vol. 4, 876:25-877:7 (Aug. 22, 2006); Tr. vol. 4, 879:5-12 (Aug. 22, 2006); Tr. vol. 5, 968:17-
21 19 (Sep. 11, 2006); Tr. vol. 5, 999:13-1000:4 (Sep. 11, 2006); Tr. vol. 5, 1044:15-25 (Sep. 11, 2006); Tr.
22 vol. 5, 1048:3-1053:23 (Sep. 11, 2006); Tr. vol. 5, 1054:25-1055:13 (Sep. 11, 2006); Tr. vol. 5, 1109:23-
1110:3 (Sep. 11, 2006); Tr. vol. 5, 1112:16-19 (Sep. 11, 2006); Tr. vol. 5, 1165:4-11 (Sep. 11, 2006); Tr.
vol. 6, 1192:4-11 (Sep. 12, 2006); Tr. vol. 6, 1211:1-13 (Sep. 12, 2006); Tr. vol. 6, 1263:16-19 (Sep. 12,
2006); Tr. vol. 6, 1263:24-1264:8 (Sep. 12, 2006); Tr. vol. 6, 1291:1-14 (Sep. 12, 2006); Tr. vol. 6,
1293:7-12 (Sep. 12, 2006); Tr. vol. 8, 1751:9-12 (Sep. 26, 2006); Tr. vol. 10, 2020:22-2021:4 (Oct. 4,
2006); Tr. vol. 13, 2731:14-2732:16 (Oct. 30, 2006).

23 ¹² See Ex. A-2, Slide 59; Tr. vol. 4, 853:13-19 (Aug. 22, 2006); Tr. vol. 4, 853:23-854:13 (Aug. 22,
2006); Tr. vol. 4, 854:16-855:8 (Aug. 22, 2006); Tr. vol. 13, 2731:18-2732:5 (Oct. 30, 2006).

24 ¹³ See Ex. A-1, Ex. J-3; Ex. A-8, Tab 1, Slide 34; Tr. vol. 5, 999:18-1000:4 (Sep. 11, 2006); Tr. vol. 5,
25 1057:23-1059:17 (Sep. 11, 2006); Tr. vol. 5, 1061:6-1062:9 (Sep. 11, 2006); Tr. vol. 5, 1062:12-25 (Sep.
26 11, 2006); Tr. vol. 5, 1064:24-1065:14 (Sep. 11, 2006).

1 7. The Project will help maintain greater liquidity at the Palo Verde Hub and
2 thereby reduce transaction costs for Arizona utilities.¹⁴

3 8. The Project will result in greater fuel and load diversity for Arizona and the
4 Southwest.¹⁵

5 9. The Project will improve Arizona generation investment climate thereby
6 reducing the cost of building or procuring the additional generation supply Arizona will
7 need to serve its growing load.¹⁶

8 10. The Project will improve Arizona's resource utilization, including the
9 increased opportunity for Arizona utilities to make off system sales so that some of their
10 costs will be paid by California customers resulting in lower cost to Arizona customers.¹⁷

11 11. The Project will improve Arizona's and the region's access to renewable
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17 ¹⁴ See Ex. A-8, Tab 1, Slides 36-39; Tr. vol. 5, 999:20-1000:4 (Sep. 11, 2006); Tr. vol. 5, 1044:15-
18 1045:11 (Sep. 11, 2006); Tr. vol. 5, 1088:19-1096:4 (Sep. 11, 2006); Tr. vol. 5, 1105:22-1106:9 (Sep. 11,
2006); Tr. vol. 5, 1165:12-17 (Sep. 11, 2006); Tr. vol. 6, 1290:22-25 (Sep. 12, 2006); Tr. vol. 8, 1758:8-
11 (Sep 26, 2006).

19 ¹⁵ See Ex. A-8, Tab 1, Slide 41; Tr. vol. 5, 1000:5 (Sep. 11, 2006); Tr. vol. 5, 1002:14-25 (Sep. 11, 2006);
20 Tr. vol. 5, 1044:15-25 (Sep. 11, 2006); Tr. vol. 5, 1108:6-1110:15 (Sep. 11, 2006); Tr. vol. 5, 1165:18-24
(Sep. 11, 2006); Tr. vol. 6, 1290:17-21 (Sep. 12, 2006); Tr. vol. 10, 2017:21-25 (Oct. 4, 2006).

21 ¹⁶ See Ex. A-8, Tab 1, Slides 43-44; Tr. vol. 5, 999:13-1000:4 (Sep. 11, 2006); Tr. vol. 5, 1044:15-1045:2
22 (Sep. 11, 2006); Tr. vol. 5, 1114:2-1115:1 (Sep. 11, 2006); Tr. vol. 5, 1115:25-1116:24 (Sep. 11, 2006);
23 Tr. vol. 5, 1119:25-1121:22 (Sep. 11, 2006); Tr. vol. 5, 1165:12-17 (Sep. 11, 2006); Tr. vol. 5, 1174:18-
25 25 (Sep. 11, 2006); Tr. vol. 6, 1285:21-24 (Sep. 12, 2006); Tr. vol. 13, 2723:17-2724:9 (Oct. 30, 2006).

24 ¹⁷ See Ex. A-8, Tab 1, Slide 46; Ex. COM-1, Davis letter; Tr. vol. 4, 855:1-8 (Aug. 22, 2006); Tr. vol. 5,
25 999:13-1000:4 (Sep. 11, 2006); Tr. vol. 5, 1032:13-1033:5 (Sep. 11, 2006); Tr. vol. 5, 1058:18-1059:17
(Sep. 11, 2006); Tr. vol. 5, 1123:23-1124:12 (Sep. 11, 2006); Tr. vol. 5, 1165:12-17 (Sep. 11, 2006); Tr.
26 vol. 6, 1192:16-23 (Sep. 12, 2006); Tr. vol. 6, 1288:19-1289:15 (Sep. 12, 2006); Tr. vol. 6, 1290:12-16
(Sep. 12, 2006); Tr. vol. 6, 1292:20-1293:6 (Sep. 12, 2006).

resources.¹⁸

12. The Project complements Arizona interstate transmission projects such as Trans-West Express and Project Zia.¹⁹

13. The Project enhances interconnection opportunities (e.g., at Harquahala Junction Switchyard).²⁰

14. Planned development of Arizona natural gas transmission and storage facilities will more than offset an estimated increase in Arizona natural gas usage resulting from increased utilization of generating facilities.²¹

15. The estimated increase in Arizona utilities' production costs reported in the Applicant report to California Independent System Operator (CAISO) is minimal, less than 0.2% of the Arizona utilities' annual costs.²² Moreover, this report is based on

¹⁸ See Ex. A-8, Tab 1, Slides 53-56; Tr. vol. 4, 848:3-10 (Aug. 22, 2006); Tr. vol. 4, 854:16-25 (Aug. 22, 2006); Tr. vol. 4, 877:8-11 (Aug. 22, 2006); Tr. vol. 5, 1000:5-11 (Sep. 11, 2006); Tr. vol. 5, 1045:4-7 (Sep. 11, 2006); Tr. vol. 5, 1113:1-7 (Sep. 11, 2006); Tr. vol. 5, 1132:21-1137:20 (Sep. 11, 2006); Tr. vol. 5, 1165:18-1166:1 (Sep. 11, 2006); Tr. vol. 6, 1202:22-1203:4 (Sep. 12, 2006); Tr. vol. 6, 1285:23-24 (Sep. 12, 2006); Tr. vol. 6, 1290:6-11 (Sep. 12, 2006); Tr. vol. 13, 2720:25-2721:13 (Oct. 30, 2006).

¹⁹ See Ex. A-2, Slides 59, OO; Ex. COM-1, Davis letter; Ex. A-8, Tab 1, Slides 48-51; Tr. vol. 4, 853:13-19 (Aug. 22, 2006); Tr. vol. 4, 864:18-865:3 (Aug. 22, 2006); Tr. vol. 4, 879:5-880:2 (Aug. 22, 2006); Tr. vol. 5, 1000:5-11 (Sep. 11, 2006); Tr. vol. 5, 1045:2-11 (Sep. 11, 2006); Tr. vol. 5, 1125:2-1129:9 (Sep. 11, 2006); Tr. vol. 5, 1133:9-1134:11 (Sep. 11, 2006); Tr. vol. 5, 1139:9-15 (Sep. 11, 2006); Tr. vol. 6, 1187:17-1189:3 (Sep. 12, 2006); Tr. vol. 6, 1200:1-7 (Sep. 12, 2006); Tr. vol. 6, 1285:17-20 (Sep. 12, 2006); Tr. vol. 6, 1320:14-19 (Sep. 12, 2006); Tr. vol. 10, 2017:15-19 (Oct. 4, 2006); Tr. vol. 13, 2699:18-21 (Oct. 30, 2006); Tr. vol. 13, 2731:18-24 (Oct. 30, 2006).

²⁰ See Tr. vol. 4, 862:2-20 (Aug. 22, 2006); Tr. vol. 5, 1054:25-1055:13 (Sep. 11, 2006); Tr. vol. 13, 2709:10-16 (Oct. 30, 2006).

²¹ See Ex. A-8, Tab 1, Slides 64-65; Ex. A-22; Tr. vol. 5, 1162:2-1164:24 (Sep. 11, 2006); Tr. vol. 14, 2800:2-2803:10 (Oct. 31, 2006).

²² See Ex. A-8, Tab 1, Slide 20; Tr. vol. 5, 1038:19-1039:5 (Sep. 11, 2006); Tr. vol. 5, 1043:3-21 (Sep. 11, 2006); Tr. vol. 14, 2787:10-17 (Oct. 31, 2006).

1 assumptions about Arizona utilities buying all energy on the spot market and Arizona
2 requiring that all future generation be built by merchant companies, not Arizona
3 utilities.²³ If these two assumptions are adjusted to comport with Arizona realities, the
4 estimated production cost increases will be even smaller if not entirely offset.²⁴
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6 16. The increased Arizona production costs reflected in the Applicant report to
7 CAISO are more than offset by economic benefits to Arizona in general and benefits to
8 Arizona utilities in particular.²⁵

9 17. The Project reduces emissions regionally, including CO₂, a greenhouse gas
10 associated with global warming, because newer, cleaner, and more efficient plants are
11 being utilized more, and older and less efficient plants are used less.²⁶
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13 18. The estimated increases in Arizona NO_x emissions (0.05%) and water
14 usage (0.02%) resulting from increased generation from Arizona plants will be well
15 within the air emission and water use limits that the Siting Committee, ACC and
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19 ²³ See Ex. A-8, Tab 1, Slides 20-23; Tr. vol. 5, 1023:7-1026:14 (Sep. 11, 2006); Tr. vol. 5, 1039:6-
20 1043:21 (Sep. 11, 2006); Tr. vol. 5, 1140:4-22 (Sep. 11, 2006); Tr. vol. 5, 1145:24-1146:16 (Sep. 11,
2006); Tr. vol. 6, 1329:22-1330:11 (Sep. 12, 2006); Tr. vol. 14, 2787:11-2788:6 (Oct. 31, 2006).

21 ²⁴ See *Id.*; Ex. S-28, Slide 8; Tr. vol. 11, 2263:16-2264:16 (Oct. 16, 2006).

22 ²⁵ See Ex. A-8, Tab 1, Slide 58; Ex. A-14; Tr. vol. 5, 1043:25-1045:11 (Sep. 11, 2006); Tr. vol. 5, 1140:4-
23 22 (Sep. 11, 2006); Tr. vol. 5, 1145:24-1146:16 (Sep. 11, 2006); Tr. vol. 5, 1166:14-25 (Sep. 11, 2006);
Tr. vol. 13, 2705:20-2707:21 (Oct. 30, 2006) Tr. vol. 14, 2787:10-2788:6 (Oct. 31, 2006).

24 ²⁶ See Tr. vol. 4, 787:14-788:2 (Aug. 22, 2006); Tr. vol. 5, 1109:15-16 (Sep. 11, 2006); Tr. vol. 5,
25 1141:7-17 (Sep. 11, 2006); Tr. vol. 5, 1143:24-1144:13 (Sep. 11, 2006); Tr. vol. 5, 1162:17-1163:6 (Sep.
26 11, 2006); Tr. vol. 5, 1167:19-1168:8 (Sep. 11, 2006); Tr. vol. 6, 1313:17-25 (Sep. 12, 2006); Tr. vol. 14,
2814:23-2815:25 (Oct. 31, 2006); Tr. vol. 14, 2849:14-22 (Oct. 31, 2006).

1 pertinent environmental agencies have determined are environmentally compatible.²⁷

2 19. Numerous power plants have been built in California from 2001 to 2005
3 totaling over 13,000 MW of new generation.²⁸ A significant number of new generating
4 plants are expected to be built in California in the near future.²⁹
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20 ²⁷ See Tr. vol. 4, 787:14-788:2 (Aug. 22, 2006); Tr. vol. 5, 1167:9-1168:8 (Sep. 11, 2006); Tr. vol. 14,
21 2814:23-2815:25 (Oct. 31, 2006); Tr. Vol. 14, 2816:6-18-2817:18 (Oct. 31, 2006); Tr. vol. 14, 2849:14-
22 22 (Oct. 31, 2006).

23 ²⁸ See Ex. A-2, Slide G; Ex. A-15; Ex. A-18; Tr. vol. 1, 96:18-97:14 (June 26, 2006); Tr. vol. 5, 1017:15-
24 22 (Sep. 11, 2006); Tr. vol. 6, 1282:1-18 (Sep. 12, 2006); Tr. vol. 6, 1342:9-25 (Sep. 12, 2006); Tr. vol. 6,
25 1343:2-15 (Sep. 12, 2006); Tr. vol. 13, 2688:18-2689:12 (Oct. 30, 2006).

26 ²⁹ See Ex. A-2, Slide G; Ex. S-9; Ex. S-19; Tr. vol. 1, 97:6-14 (June 26, 2006); Tr. vol. 5, 1017:15-22
(Sep. 11, 2006); Tr. vol. 6, 1347:1-5 (Sep. 12, 2006); Tr. vol. 6, 1348:3-8 (Sep. 12, 2006); Tr. vol. 6,
1350:19-1351:2 (Sep. 12, 2006); Tr. vol. 6, 1355:23-1356:14 (Sep. 12, 2006); Tr. vol. 13, 2691:8-25 (Oct.
30, 2006).