LETTER #A-45
COMMENTS

Comments on draft EIS — Southwest Intertie Project

To: Mr. Karl Simonson
Bureau of Land Management
Burley District Office

This EIS goes into considerable detail describing the impacts the SWIP would have on the areas it might run through. The differences in various impacts along the different proposed routes are also laid out in detail. However, little attention is given to mitigation of these impacts, except in a few specific cases such as through Pashranagat Wash. General mitigation measures, especially applying to construction activities, are described briefly in one table; but the benefits from these mitigation efforts are not evaluated with any care.

The impact of the powerline, as described in the EIS, will clearly be quite significant and evidently it will not or cannot be mitigated. Although the EIS makes a quick reference to the economic justification for this powerline, there is no credible attempt to balance the environmental impact against the alleged economic benefits. In fact, it appears that in one case where costs might be higher (the option of a route along existing corridors through Salt Lake City), that is the basic reason to exclude the route from further EIS consideration. Since arranging access rights along the route from other utilities and working out a suitable passage through Salt Lake City are hardly unsolvable problems, and since the

RESPONSES

A The impacts described in Chapter 4 of the SWIP DEIS/DPA are those remaining after applying the mitigation measures found in Tables 1-5 and 1-6 of this document. The process of considering mitigation for each specific impact location is described on page 4-2 of the SWIP DEIS/DPA. Additional information on the impact assessment/mitigation planning process is found in each of the technical reports (refer to Appendix H in the SWIP DEIS/DPA).

B Dropping the routing options through Salt Lake City from further consideration does not make the SWIP DEIS/DPA incomplete or flawed. On page 2-31 of the SWIP DEIS/DPA there is a discussion of the SWIP's need to be expanded from the Ely area to Dry Lake (northeast of Las Vegas). The first two paragraphs of page 2-10 of the SWIP DEIS/DPA discuss the elimination of the Salt Lake City alternate route. The additional length required by this route from Midpoint to Dry Lake has two effects: 1) the capacity drops significantly (to 600-800 MW) and 2) the cost increases proportionally. The result of these two effects makes the route uneconomical and unreasonable. There are also obvious impacts associated with routes through the Salt Lake City area (very significant land use and visual effects). Please refer to Chapter 1 of the SWIP DEIS/DPA and Chapter 3 of this document for more information on the Purpose and Need for the SWIP.
LETTER #A-45
COMMENTS

excluded route would have better met various environmental goals stated at the beginning of the report, I feel its exclusion is symptomatic of ways in which this EIS is incomplete and flawed.

The EIS claims that public policy should favor this project because it increases the opportunities for economic competition between utilities. Yet I should think the goal of an open marketplace in the grid system could be well achieved just by legally preventing other utilities from maintaining monopoly-like control over alternate routes. As it is, this project looks like a large contribution of public resources for the specific benefit of Idaho Power.

Maintaining them as public lands has been one of the few forces preserving what few remaining open spaces remain in the US. Every effort should be made to leave our few remaining pristine desert valleys in their current state. Yet the EIS seems to presume that public policy is to do just the opposite. In many cases the powerline could be run through already impacted lands such as those used for ranching, mining, by the military, or that are privately owned. Yet the EIS explicitly prefers to bypass such impacted routes and instead to consume more of the pristine public lands that are a rapidly disappearing national resource. The EIS never attempts to justify this bias, not as a rational public planning decision, nor on environmental grounds.

RESPONSES

C  The SWIP would not create a monopoly-like control in the utility industry. In fact, the converse is true. On page 1-11 of the SWIP DEIS/DPA it is stated that the SWIP is a "new concept where buyers, sellers, and wheeling utilities are part of a coordinated group that allows them to transact business with each other without burdensome wheeling charges, access policies or other barriers to trade."

D  On page 5-7 of the SWIP DEIS/DPA it is stated that during project scoping, the public voiced preference for alternative routes to cross public lands rather than private lands. Nevada is largely public lands managed by the BLM. The BLM attempted to avoid private lands where possible. However, for the most part, there was little choice but to cross either some public or private land on the various alternative routes. The impacted lands were not avoidable. In southern Idaho the alternative routes cross large parcels of private lands that are irrigated agricultural areas. In these areas the routes impact farming operations. Most of the alternative routes were routed along existing roads to minimize both ground disturbance and increased public access into remote areas. Many of the alternative routes also utilize designated utility corridors parallel to existing transmission lines (refer to the Land Use Map in the SWIP DEIS/DPA Map Volume).
More pernicious yet, however, are the cases where a route is justified based on misplaced "environmental" criteria. This is most particularly the case where so-called "visual impact" is considered. The "visual impact" criteria show no respect whatsoever for preservation of intact open spaces. Instead, the impact is said to be greater when the powerline is visible from areas already impacted by human activities, and less when the powerline is routed through previously pristine remote desert valleys where it would totally devastate existing visual qualities. This turns the concept of environmental impact on its head! There are precious few places one can travel nowadays, whether by vehicle or foot, where human impacts are not terribly evident.

Finally, note that all proposed routes threaten desert tortoise habitat north of Las Vegas. This is an area that was devoted to providing safe desert tortoise habitat, having been traded for other areas in the immediate Las Vegas vicinity to allow continued development there. Consequently it now deserves more stringent protection. While the EIS notes how the proposed powerline would further threaten tortoises, it offers no effective mitigation measures at all, and no route alternatives are proposed to avoid this impact.

David G. Raich
2463 Scenic Avenue
Oakland, CA 94602
3 September 1992

Visual impacts were assessed using a model based on the criteria of the BLM's Visual Resource Management (VRM) System. The VRM System tends to focus on impacts to sensitive viewpoints. Although undisturbed natural landscapes of open desert valleys possess inherent scenic value, the scenic quality of these areas is considered "minimal" to "common" based on the definitions of scenic quality used in the VRM System. Scenic quality classes are determined in context with the regional landscape character. Open desert valley landscapes are characteristic and common to the project study area. The BLM will consider public concerns for scenic quality in its decision process. The BLM uses the VRM system to manage the visual resources of public lands. For a detailed explanation of the VRM System and the visual impact assessment model refer to the methods section under Visual Resources in Volume III - Human Environment Technical Report (refer to Appendix H of the DEIS/DPA for the locations where the technical reports can be reviewed).

Construction of the SWIP north of Las Vegas, Nevada will have some impact on desert tortoise habitat. However, judicious planning and careful monitoring during the pre-construction and construction phases of this project are expected to reduce impacts to desert tortoise to indiscernible levels. Soil disturbances resulting from activities at tower sites and other construction areas may actually enhance growth of spring annuals and increase the forage base for tortoises in the area of construction.
August 7, 1992

Mr. Jim Jensen
Daines & Moore Project Manager
for Environmental Studies
PO Box 1601
Boise ID 83701

Dear Mr. Jensen:

Please limit the strip transmission to areas whose natural beauty and scenic value will not be compromised by it.

Thank you.

Sincerely,

John Savorese
74 Mobile Ave.
Staten Island
NY 10305
Karl Simonson
Bureau of Land Management
Route 3 Box 1
Burley, Idaho 83318

Dear Mr. Simonson:

re: Southwest Intertie Project

With regard to the Southwest Intertie Project Draft Environmental Impact Statement/Draft Plan amendment, I would like to state that I am in favor of using a route away from Arrow Canyon. Arrow Canyon should be fully preserved for not only future generations but our generation as well.

Sincerely,

Terri Schilling
LETTER #A-48
COMMENTS

SEPTEMBER 6, 1992

KARL SIMONSON
BLM, BURLEY DISTRICT
Rt. 3, Box 1
BURLEY, ID 83312

SIR:

There are too many adverse and unnecessary impacts to views, tortoises, raptors, and the Great Basin National Park to permit another utility corridor or powerline from YANO TO CAS VEGAS VIA EASTERNEVADA.
"NO ACTION" IS THE RIGHT ALTERNATIVE REGARDING THIS PROJECT.

SINCERELY YOURS,

James E. Simmons

James E. Simmons
5036 Thatcher Drive
Martinez, CA 94553
Your comments are noted and will be considered in the BLM's decision process.

September 3, 1992

Karl Simonson
Bureau of Land Management
Route 3 Box 1
Burley, Idaho 83318

Dear Mr. Simonson:

re: Southwest Intertie Project

With regard to the Southwest Intertie Project Draft Environmental Impact Statement/Draft Plan amendment, I would like to state that I am in favor of using a route away from Arrow Canyon. Arrow Canyon should be fully preserved for not only future generations but our generation as well.

Sincerely,

[Signature]

Virginia Spencer
2235 Natalie Ave
Las Vegas, NV 89109
(702) 383-9217
LETTER #A-50
COMMENTS

850 E. Desert Inn #712
Las Vegas, NV 89109
September 17, 1992

Karl Simonson
Bureau of Land Management
Route 3 Box 1
Burley, Idaho 83318

Dear Mr. Simonson:

Re: Southwest Intertie Project.

With regard to the Southwest Intertie Project Draft Environmental Impact Statement/Draft Plan Amendment, I would like to state that I am in favor of using a route away from Arrow Canyon. Arrow Canyon should be fully preserved for not only future generations but our generation as well.

Sincerely;

Bruce Steurer
850 E. Desert Inn #712  
Las Vegas, NV 89109  
September 17, 1992

Karl Simonson  
Bureau of Land Management  
Route 3 Box 1  
Burley, Idaho 83318

Dear Mr. Simonson:  
Re: Southwest Intertie Project.

With regard to the Southwest Intertie Project Draft Environmental Impact Statement/Draft Plan Amendment, I would like to state that I am in favor of using a route away from Arrow Canyon. Arrow Canyon should be fully preserved for not only future generations but our generation as well.

Sincerely,

Jane Steurer
LETTER #A-52
COMMENTS

TO: MR. KARL SIMONSON
FROM: MARYS VALKASS
SUBJECT: POWER LINES ACROSS NEVADA
DATE: 9-16-92

GENTLEMEN:

IT IS MY UNDERSTANDING THAT THERE IS
A PROPOSAL TO BUILD A NEW POWER
LINE(S) FROM IDAHO TO LAS VEGAS, NV.

THE LINES WOULD BE BUILT IN AN UNSPOILED
AREA.

IT SHOULD BE BLM'S POLICY TO RESTRICT
OPENING OF NEW AREAS FOR ANY DEVELOPMENT
IF IT IS AT ALL POSSIBLE TO USE
EXISTING DEVELOPED AREAS OR RIGHTS OF
WAY. ROUTES SHOULD BE CONSIDERED
AFTER A COMPLETE ENVIRONMENTAL IMPACT
HAS BEEN STUDIED, AND CONSIDERATION
MUST PRIMARILY BE GIVEN TO ENVIRONMENTAL

RESPONSES

A The SWIP DEIS/DPA and this document address your concerns. Additional
information on the Purpose and Need of the SWIP is on page 3-1 in Chapter
3 of this document. Your comments are noted and will be considered in the
BLM's decision process.
AND SCENIC CONCERNS ARE OPPOSED TO ECONOMICS OR MONEY MAKING POSSIBILITIES.

AS I UNDERSTAND IT, THERE IS NO NEED FOR THIS NEW POWER LINE. ALL REQUIREMENTS CAN BE MET BY EXISTING FACILITIES.

PLEASE, DO NOT APPROVE IT.  

MAURIS VALKASS  
1728 VAN HOVE, W. REDONDO BEACH, CA 90278
Karl Simonson  
Bureau of Land Management  
Route 3 Box 1  
Burley, Idaho 83318  

Dear Mr. Simonson:

re: Southwest Intertie Project

With regard to the Southwest Intertie Project Draft Environmental Impact Statement/Draft Plan amendment, I would like to state that I am in favor of using a route away from Arrow Canyon. Arrow Canyon should be fully preserved for not only future generations but our generation as well.

Sincerely,

Clara Watson
4202 Talbot
L.V. N.V. 89117
Karl Simonson  
BLM  
Burley District Office  
Route 3 Box 1  
Burley, Idaho  

Dear Mr. Simonson:

Was alerted to the Southwest Intertie Project and the EIS put out for it by your Office.

Comment time for it is short so will use the following printed statements. They are similar to those my Sister and I used for a proposed intertie corridor here in Owens Valley, handled by the BLM Bishop Office of the BLM. As Avocational Archaeologists we deplore the opening up of large Archaeologically sensitive areas to Vandalism due to easy access from right-of-way maintenance roads.

- Support the "NO ACTION" Alternative. No powerline should be routed down our fast disappearing natural valleys unless things are really desperate. No justification is presented in this report which shows a compelling need for the line. In fact it is a redundant line to compete with another Utah to Las Vegas powerline. Neither will run anywhere near capacity.

- Support the use of existing already built-upon right-of-ways rather than any designation of new right-of-ways. The impact on a new area is FAR greater than expanding an already built-upon right-of-way. When more capacity is really needed let it be added to the existing routes in Utah. The study dismissed the Utah alternative prematurely based in part upon the assumption that the now discontinued Thousand Springs plant would be built.

- Mention the immense visual impact to now-open valleys. The existing criteria for judging the visual impact of powerlines is skewed against preservation of NON-BUILT upon areas. Under the formula an unspoiled valley where few people go is considered less important than the valley which already has a main truck route through it. The BLM should be defending the open public lands against new encroachments, not assisting in their destruction.

- Mention significant desert tortoise impact especially in the Pahranagat Wash area where power lines and highways compete for space with wildlife and wilderness study areas. Powerlines are favorite places for ravens to perch while seeking young tortoises as prey.

- Support the use of existing already built-upon right-of-ways rather than any designation of new right-of-ways. The impact on a new area is FAR greater than expanding an already built-upon right-of-way. When more capacity is really needed let it be added to the existing routes in Utah. The study dismissed the Utah alternative prematurely based in part upon the assumption that the now discontinued Thousand Springs plant would be built.

There would be significant visual impacts to the scenic natural landscapes of public lands. Visual impacts were assessed using a model based on the criteria of the BLM's Visual Resource Management (VRM) System. The VRM System tends to focus on impacts to sensitive viewpoints. Although undisturbed natural landscapes of open desert valleys possess inherent scenic value, the scenic quality of these areas is considered "minimal" to "common" based on the definitions of scenic quality used in the VRM System. Scenic quality classes are determined in context with the regional landscape character. Open desert valley landscapes are characteristic and common to the project study area. The BLM will consider public concerns for scenic quality in their decision process. The BLM uses the VRM System to manage the visual resources of public lands. For a detailed explanation of the VRM System and the visual impact assessment model refer to the methods section under Visual Resources in Volume III - Human Environment Technical Report (refer to Appendix H of the DEIS/DPA for the locations where the technical reports can be reviewed).

There would be impacts to desert tortoise, although mitigation measures taken during construction should be very effective in reducing or eliminating these adverse effects. The question of transmission line impacts on hatching tortoises is a subject of ongoing study. Raven predation on hatchlings in some portions of the Mojave Desert may be having a deleterious effect on tortoise population structure, and the presence of transmission lines (providing nesting sites and hunting perches for ravens) may be contributory. The phenomenon appears to be localized, however, and generalizations cannot be made at this time. Further, given the presence of an existing transmission line, it is not obvious that increased perch sites will result in increased raven numbers, or raven predation. It is unlikely that perch site availability is currently limiting the potential for raven predation in the project area.
LETTER #A-54
COMMENTS

C Mention significant hawk and raptor impacts. This powerline runs the same north-south route taken by one of the largest hawk migrations in North America. The Goshute Range is a concentration point for the birds as they travel south from Canada and the northwest in the Fall. Every year numbers of hawks and eagles are killed by high voltage power.


E Mention the impact on an estimated 200 to 400 archaeological and historical resource sites in the direct path of the powerlines. An estimated 50 to 125 of these are expected to have "significant value," however NO consistent inventory has been made.

Please adopt the NO ACTION Alternative and put a stop to this destruction of Public Lands.

Very truly yours,

[Signatures]

RESPONSES

C Given the structural configuration of 500kV transmission lines, the potential electrocution hazard to birds of prey is relatively minor. The 500kV transmission line proposed for the SWIP would utilize V-guyed steel lattice, self-supporting steel lattice, and tubular steel H-frame towers. The spacing between conductors on towers is sufficient to prevent phase-to-phase or phase-to-ground contact. Conductors are hung on towers in such a manner that they are 23 to 32 feet apart. Further, conductors are hung on insulating systems that will be 14 to 20 feet in length depending on tower design (refer to the SWIP DEIS/DPA pages 2-12 through 2-14). Because of the distance between conductors and the tower, other conductor bundles, static lines, and the ground, it is virtually impossible for even the largest species of raptor to be electrocuted as a result of alighting on conductors or the tower.

The BLM acknowledges that numbers of raptors are killed each year in the United States as a result of electrocution. Most such incidents occur, however, on lower voltage distribution lines.

Refer to Avian Collision Hazard on page 3-89 of this document.

D The proposed 230kV Corridor Route is approximately 2 miles north of Great Basin National Park and 4-5 miles north of Wheeler Peak. To further minimize visual impacts to travel routes leading into the park, several mitigation reroutes through Sacramento Pass have been evaluated (refer to Sacramento Pass Mitigation Reroute on page 3-39 of this document).

No significant visual impacts to viewpoints in Great Basin National Park would occur because of the distance of the alternative routes from these viewpoints. Non-specular conductors and steel H-frame towers across the highway would minimize other adverse visual effects of the SWIP.

E If one of the routes is approved by the BLM, there will be a cultural survey completed for any potentially disturbed areas, (e.g., rights-of-way, access routes, assembly yards) prior to any ground disturbing activities. Refer to mitigation measure #9 in Table 1-6 of this document. All Cultural resource impacts will be mitigated.
Karl Smaisonsn
BLM Burley Dist Office
Route 3, Box 1
Burley, Idaho 83318

Dear Mr. Smaisonsn,

I am a resident of Snake Valley Utah-Meadow area and also a farmer there. I have just heard about a 500 kv power line to be built through this valley along side a already existing 230 kv lines and I am in direct protest of this. I am probably the most
affected property owner in this area as there are at least 8 pole sites right through my fields already and not any word from a responsible party that another is planned.

Of all the room in this large realtively unpopulated area I would even like to know why by changing a fraction of degree the direction of existing line personal property could easily have been completely missed in the past.

I have to work daily under those lines and it is not just the fact that I cannot receive any radio waves under them but health
RESOURCES

LETTER A-55

COMMENTS

I understand that the alternative route is nearly impossible. Also, I don't know if this will be desirable. Please see the alternative route.

Wendy C. Wheeler
P.O. Box 10, Harrison, UT 84735

Sincerely,

LETTER A-55
7 September 1992

Mr. Karl Simonson
Burley District Office
Bureau of Land Management
Route 3, Box 1
Burley, ID 83318

Dear Mr. Simonson,

RE: Southwest Intertie Project EIS

I am opposed to the use of additional public land not now used as transmission corridor being used for subject project, particularly when the proposed right-of-way transits so close to Great Basin National Park and through so many other ecologically sensitive areas. To support my opposition, I would call your attention to the following:

1. The EIS fails to support the economic need for the powerline and therefore there is no justification for routing it through now-open Nevada valleys;

2. When the economic justification for new powerlines can be made, then construction of such should only be allowed within existing power-transmission corridors. Adversely impacting now-open valleys is indefensible, yet the EIS gives little weight to such;

3. Adverse desert tortoise impact can be expected, as powerlines are used by ravens as perches while seeking young tortises as prey. Furthermore, powerlines bring roads, roads bring ORV’s and smashed tortises are the result (I’ve seen plenty of it);

Reference to the expanded Purpose and Need section in Chapter 3 of this document. It is not possible to route the SWIP parallel to existing utilities for its entire length. The BLM has selected the alternative routes based on planning methodology to minimize impacts, and has subsequently studied the potential impacts of each route to select an alternative that minimizes impacts to the degree possible.

Visual impacts were assessed using a model based on the criteria of the BLM’s Visual Resource Management (VRM) System. The VRM System tends to focus on impacts to sensitive viewpoints. Although undisturbed natural landscapes of open desert valleys possess inherent scenic value, the scenic quality of these areas is considered “minimal” to “common” based on the definitions of scenic quality used in the VRM System. Scenic quality classes are determined in context with the regional landscape character. Open desert valley landscapes are characteristic and common to the project study area. The BLM will consider public concerns for scenic quality in its decision process. The BLM uses the VRM System to manage the visual resources of public lands. For a detailed explanation of the VRM System and the visual impact assessment model refer to the methods section under Visual Resources in Volume III - Human Environment Technical Report (refer to Appendix H of the DEIS/DPA for the locations where the technical reports can be reviewed).

There would potentially be impacts to desert tortoise. However, the committed mitigation for desert tortoise will help to reduce adverse impacts.
4. Adverse raptor impact is inadequately addressed. The proposed route and area are both significant for migration and concentration.

I keep hoping and hoping that BLM will one day give wildlife, wilderness and preservation at least equal status with consumptive use of our public lands, but am continually disappointed. Is this going to be a repeat?

Sincerely,

[Signature]

The entire SWIP route is not an area of known raptor concentration or migration. However, there are portions of the route where raptor populations are known to be of significance. The BLM has identified habitat and nesting areas of species such as ferruginous hawk, golden eagle, bald eagle, and peregrine falcon as areas of concern. The presence of these species has influenced the route selection process over the entire suite of alternative routes and links considered.

The introduction of the SWIP transmission line into the habitat of these species is not likely to significantly affect the continued existence of any of them. On the contrary, concern has been expressed for other species (e.g., sage grouse) because construction of the line would provide more nesting and hunting sites for some raptor species (e.g., golden eagle) with a resulting adverse impact on sage grouse.
LETTER #A-57
COMMENTS

Connie Wilcox
1612 Justin Pl.
Hend. Nu. 89015
(702) 566-6738

September 3, 1992

Xarl Simonson
Bureau of Land Management
Route 2 Box 1
Burley, Idaho 83318

Dear Mr. Simonson:

re: Southwest Intertie Project

With regard to the Southwest Intertie Project Draft Environmental Impact Statement/Draft Plan amendment, I would like to state that I am in favor of using a route away from Arrow Canyon. Arrow Canyon should be fully preserved for not only future generations but our generation as well.

Sincerely,

Connie Wilcox

RESPONSES

A Your comments are noted and will be considered in the BLM's decision process.
Karl Simonson  
Bureau of Land Management  
Burley District Office  
Route 3 Box 1  
Burley, Idaho 83318

Dear Mr. Simonson:

The following comments apply to the Southwest Intertie Project (SWIP) Draft Environmental Impact Statement (DEIS), a copy of which you were kind enough recently to forward to me. My background for this response includes formal training in physics and systems engineering (at the master's and doctoral levels), as well as considerable professional experience in energy modeling and in other environmental quality areas.

While contemplating how to respond to this document, I encountered words from Mihaly Csikszentmihalyi which seemed particularly apropos, "The task is to learn how to enjoy everyday life without diminishing other people's chance to enjoy theirs". Unfortunately, philosophy at this level does not play much of a part in the current EIS process, despite how much better the public could be served thereby. The massive SWIP document set instead focuses on minutiae. With the exceptions noted below, it appears to deal with the finest details with authority.
LETTER #A-58
COMMENTS

However, the DEIS in its present form contains truly pivotal material that is grossly oversimplified in several very critical areas. The document is fatally flawed as a result. You will need, accordingly, to revise your time schedule for a final decision because of these sins of omission in the current publication. The situation regarding the SWIP is not merely a question (as it now presented) of where to build a transmission line, or of *how*, but also of whether this transmission project is justified at all.

Nevertheless, as one aware of EIS projects' normal progress, let me begin with the technical issues that need more specific attention. Where the numbers to back up the contention (pages 2-7 and 8) that DC (instead of AC) transmission is "too expensive"? In asking this, I am haunted by a mailing that I received some years ago from an electric utility (in this region) which asked me to join with them, as a CO-OP user, in opposing "too expensive" pollution controls. That set of controls, if installed at that time, would have spared the atmosphere thousands of tons of sulfur dioxide annually. When I got past very similar rhetoric to that found in the present DEIS and to the actual calculations used at that time to define "too expensive", that actual cost amounted to less than one one-hundredth of a cent per kilowatt hour. Hence, especially given the high transmission losses involved in long-distance transport of electrical energy (as is the case with the proposed SWIP), reviewers need to see the hard numbers used to define the term "too expensive". Next, those calculations need to be explicitly compared within the EIS to the cost savings that would come from the greater efficiency inherent in DC transport of power. This comparison, to be fair, needs to be made at the marginal cost of producing the power that would be lost in the AC option – including new, unsubsidized generation costs, and the associated pollution impacts – over the full lifetime of the project.

Related to that issue, why is the absolute magnitude of transmission B losses never given within the DEIS? Over the distances described, and at the intensity specified, they are sure to be quite significant. Power lost to the DEIS in its present form contains truly pivotal material that is grossly oversimplified in several very critical areas. The document is fatally flawed as a result. You will need, accordingly, to revise your time schedule for a final decision because of these sins of omission in the current publication. The situation regarding the SWIP is not merely a question (as it now presented) of where to build a transmission line, or of *how*, but also of whether this transmission project is justified at all.

Nevertheless, as one aware of EIS projects' normal progress, let me begin with the technical issues that need more specific attention. Where the numbers to back up the contention (pages 2-7 and 8) that DC (instead of AC) transmission is "too expensive"? In asking this, I am haunted by a mailing that I received some years ago from an electric utility (in this region) which asked me to join with them, as a CO-OP user, in opposing "too expensive" pollution controls. That set of controls, if installed at that time, would have spared the atmosphere thousands of tons of sulfur dioxide annually. When I got past very similar rhetoric to that found in the present DEIS and to the actual calculations used at that time to define "too expensive", that actual cost amounted to less than one one-hundredth of a cent per kilowatt hour. Hence, especially given the high transmission losses involved in long-distance transport of electrical energy (as is the case with the proposed SWIP), reviewers need to see the hard numbers used to define the term "too expensive". Next, those calculations need to be explicitly compared within the EIS to the cost savings that would come from the greater efficiency inherent in DC transport of power. This comparison, to be fair, needs to be made at the marginal cost of producing the power that would be lost in the AC option – including new, unsubsidized generation costs, and the associated pollution impacts – over the full lifetime of the project.

Related to that issue, why is the absolute magnitude of transmission B losses never given within the DEIS? Over the distances described, and at the intensity specified, they are sure to be quite significant. Power lost
LETTER #A-58
COMMENTS

B during transmission is also sure to require considerable additional generation capacity to replace, with all the ancillary environmental and economic costs that that entails. Transmission losses are not a factor that should be wholly ignored, as they now are.

C Further related to such losses is the specification on page 2-13 of aluminum as the conductor of choice. The use of copper could nearly halve transmission losses (and many of the problems associated with corona discharge that were discussed within the DEIS in some detail). Let's see, accordingly, a full cost/benefit comparison of a copper conductor alternative. That also needs a thorough inclusion of all related costs of transmission losses over the life of the project.

D Following the discussion of copper versus aluminum, the issue of an underground placement will need to be revisited, since lower losses mean less heat generation, thus possibly negating the central objection to the underground option.

E Shifting to the issues of soils and vegetation, on page 4-89 the similarity of SWIP and the Kern River Gas Pipeline is mentioned. Why are the notable failures in revegetation, and the exacerbated soils disturbances, beyond those anticipated in that specifically-called similar project's EIS not explicitly mentioned, instead of merely hinted at? Many of these failures are currently involved in serious litigation, since the damage was so obviously done. Why are additional restraints on construction techniques not accordingly added to this DEIS, and then underlined? The current throw-away line that desert soils are difficult to revegetate is hardly sufficient!

F Under visual impacts, on page 4-39 and in Tables 4-1 and 4-2, "dulled metal" is suggested to mitigate disturbance (where bothered with at all) by the proposed powerline to the visual environment. In the closely-related case of what are actually less visually disruptive gas and petroleum wells, terrain-appropriate painting is now required, since it is well-proven to

RESPONSES

C The equivalent electrical copper conductor size to the proposed 1590 kcmil aluminum conductor is 1000 kcmil. The weight of this size of copper conductor is 3.1 lb/ft. versus 1.8 lb/ft. for the aluminum conductor. The cost of aluminum conductor is quoted as $0.80/lb and for copper conductors is $1.52/lb. Therefore, the copper conductor sells for $4.71 per foot versus $1.44 per foot for aluminum. Additionally, the copper conductor has a low strength to weight ratio which would necessitate additional and higher structures that would be required using the aluminum conductor. The project estimated conductor cost using aluminum is about $37.4 million versus $122.2 million for copper.

D The SWIP DEIS/DPA does not mention the most limiting technical restraint to transmitting AC power via underground cables. Voltage control along the cable can limit the distance AC power may be transmitted. The voltage control requirements of a 500kV underground cable are 20 times greater than a typical overhead line. For the SWIP project, this would require facilities spaced evenly (every 5 to 10 miles). The cost of the reactive facilities alone would exceed $220 million (15,000 Mvar). Also, copper is a component of most high voltage underground transmission cables which would further increase costs.

E If the SWIP is approved by the BLM, a specific revegetation and restoration plan will be developed as part of the Construction, Operation, and Maintenance (COM) Plan (refer to page 1-34 of this document). The reference on page 4-89 of the SWIP DEIS/DPA does not draw a similarity to the disturbances of the SWIP and the Kern River Gas Transmission Pipeline. It states instead that the Las Vegas Valley Water Development Project may cause similar disturbance to the Kern River Gas Transmission Pipeline. The discussion under Cumulative Effects in the SWIP DEIS/DPA refers to potential reasonably foreseeable future actions within southern Nevada. The ground disturbance caused by the SWIP would be much less significant than a pipeline project of this magnitude (also refer to Table 2-1 of the SWIP DEIS/DPA).

F "Terrain-appropriate painting" is not considered an appropriate mitigation for the treatment of transmission line towers in the landscapes that would be affected by the SWIP. First, painting towers would be very expensive and maintenance would be very labor-intensive. There are numerous examples of this type of tower painting in the West in a wide variety of landscapes. There
LETTER #A-58
COMMENTS

Dramatically reduce visual-line contrast. Why is a similar option of terrain-appropriate painting of transmission towers not discussed, and then, why is it not required as mitigation? It would seem feasible to satisfy the separate needs of the FAA and the on-ground-viewer by angle-specific tinting.

Further, given the ubiquity of additional development activity over time, why is the "out-of-(current)-sight, out-of-mind" mentality preserved in this DEIS, and why are not all, rather than just some, towers required to be minimally intrusive in their visual design?

Relatedly, and introduced on page 4-37, the various photo-simulations of visual impact do not take into consideration the contrast actually perceived by area users who wear contrast-enhancing glasses. This is not a trivial point, since in this bright desert, near-desert, and/or higher altitude environment, the use of dark glasses, including polarizing and similar filters (e.g., haze-cutters such as Corning's trade-marked 'Serengeti Drivers'), will be in fact more common than not. Therefore, in the photo-simulations, the towers need to be darkened by a factor of at least two, and their boundaries sharpened. The towers are virtually certain to be more noticeable visually than they have been represented in the figures presented (even if one cynically adds in the air-quality degradation that will result from the additional electrical energy use and generation that would be occasioned by this project, through its losses, and if the lower prices it promises come about).

This brings us to the more general issues which have been avoided in the DEIS. Primary among these is the downward spiral in environmental quality that consistently has been brought on by lowering either economic or local environmental apparent energy costs to end-point users. In studies which seem to have been conveniently overlooked within this DEIS (as it now stands), immediately lower out-of-pocket cost are well proven to encourage additional electricity use, and to decrease attention to conservation or to real productivity. As population and other demands

RESPONSES

are few cases that demonstrate that this technique would be more successful in mitigating visual impacts than dulled towers, especially considering the substantial cost and the potential for additional environmental impacts associated with frequent access to towers and spillage of paint, thinners, and other chemicals.

The visual assessment does not use an "out-of-(current)-sight, out-of-mind mentality". First, we have considered future land uses wherever possible. Second, the visual model assesses impacts to the scenic quality of landscapes irrespective of how it is seen. For more information refer to Volume III - Human Environment Technical Report for the full methodology and results of the visual assessment (refer to Appendix H of the DEIS/DPA for the locations where the technical reports can be reviewed).

It is unlikely that the majority of viewers would be wearing "Serengeti Drivers". The photo-simulations were prepared to depict typical viewing conditions without correcting for weather, atmospheric conditions, or other circumstances that might alter the perception of the landscapes viewed.

The requirements for least cost resource acquisition by the utilities which become partners in the SWIP would ensure that the SWIP would not be developed as an alternative to conservation. Rather, the SWIP would be evaluated by potential partners in the project as part of a strategy for meeting load growth at lowest cost using conservation programs and the sharing of existing regional resources. At some time in the future when new regional generating resources are needed, transmission systems, such as the SWIP, would make more resource options available, and should help minimize costs and environmental impacts.

Long-term costs, not immediate out-of-pocket costs, are used by utilities and regulatory agencies to measure the costs of alternative resource options. Participation in the SWIP would be evaluated on this basis by the utilities considering partnership in the project. Also refer to response J below.
LETTER #A-58
COMMENTS

grow, this strategy eventually and inevitably increases, rather than
I decreases, the kinds of problems that are listed as primary justification for
the SWIP.

This consideration, which is not covered within the DEIS, is especially
important because long distance transmission of electricity is even explicitly
noted to allow the related degradation that results from of local action to be
transferred elsewhere. Similar past projects have already permitted Los
Angeles and Las Vegas to ship pollution that they themselves could not
allow to Arizona (e.g. the Page plant that is now being painfully at least
partially housebroken), to New Mexico (at the Four Corners plant, whose
airborne effluent was literally visible from the moon), and to Utah (the
carefully hidden from the public Intermountain facility that is to be tied into
SWIP). The second-to-the-last comment on page 2-11 in the DEIS seems the
very essence of the underlying operating philosophy, which could be more
simply expressed by an Anglo-Saxon containing analogy: my backyard, as a
result of my activities, is getting stinky; therefore it’s now time to start
pissing over my neighbor’s fence so that I can do even more of what created
the waste in the first place, without bothering to consider its consequences.
Accordingly, the opening quote of this letter needs explicit inclusion and
discussion within the cumulative impacts section of the SWIP-EIS, since it is
precisely SWIP’s long-distance transmission ties that allow such placing of
ones’ electricity-use effluent in someone else’s backyard.

Somewhat less sarcastically, perhaps, but no less importantly, on
page 2-2 and following, how can a complete document discuss the costs and
potential of conservation without even mentioning the name of Amory
Lovins, or quoting his group’s, and so many others (including Southern
California Edison’s), much more encouraging figures? This omission is clear
proof that considerably more work needs to be done before a fully-informed
decision on SWIP’s justification can be made.

RESPONSES

J Conservation and demand-side management are integral parts of the resource
strategy of every utility considering partnership in the SWIP. Federal and
state regulatory requirements dictate that supply-side and demand-side
resource options be considered on an equal basis in a utility’s plan to acquire
lowest cost resources. Conservation and other demand-side management
programs are expected to reduce, but not to eliminate, the region’s need for
new generating resources.

Transmission facilities can contribute in several important ways to the task of
the region’s utilities to meet future load growth in the most efficient manner
possible and with the smallest amount of new generating capacity. First, it is
important to recognize the seasonal diversity of loads within the region.
Transmission would allow existing resources to be used to serve seasonal load
requirements in one part of the region while also meeting new load growth
requirements in another part of the region. Therefore, total regional resource
requirements (e.g., generation) can be reduced by using transmission. Then,
when new regional generating resources are needed, transmission, such as the
SWIP, would make more resource options available, and should help
minimize costs and environmental impacts.

The SWIP participants are expected to include only utilities which have found
through their least cost planning that the transmission capacity provided by
the SWIP would be a cost effective strategy to acquire the new resources
needed to serve load growth.

Also refer to expanded discussion of Purpose and Need in Chapter 3 of this
document.

K Refer to Response J above.
LETTER #A-58
COMMENTS

As a sub-point here, on page 2-5 in the DEIS, how was the stated conclusion reached that conservation has only a local impact? As an unsupported opinion, as it now stands, it seems both specious and inadequate, especially when the basic decision of whether or not to build is so directly related to it, and so much literature exists to suggest quite the opposite conclusion. Another issue also should be included as a portion of these discussions. A primary form of increased productivity is increased efficiency, and the very definition of increased efficiency is the use of less energy. America's economic competitors, particularly in Europe and Japan, have learned this lesson well; why is this factor ignored here?

Hence, why are the real costs and more complete benefits of conservation not more directly compared to those of the proposed project? (It is curious in this regard that even immediate economic cost of the SWIP is never mentioned.) This a special key to the overall point. Many of the utilities that are indicated to be partners in SWIP have explicit legal requirements to realize conservation alternatives as their first choice for action, not just, as stated in the DEIS, when they are the immediate lowest cost option. Why is this requirement not mentioned in the DEIS? What happens when these companies start to take their legal mandate more seriously? What happens if the rest start to take into more consideration the needs of the rest of planet, or if the rest of the planet starts to make them aware of that need? In direct counterpoint to the statement made on page 4-90, there is more solid evidence available that all conservation directly, absolutely, and repeatably reduces global warming. These are just two among many reasons for a more thorough re-evaluation of this alternative.

Finally, why (on page 1-5) are utility projections of future demand presented as if they are gospel truth (to two significant figures, no less, and without indicating a margin of error!)? Should not the not-so-distant past failures of these same sources' real-world accuracy, and the massive financial results of those failures in prediction validity (e.g., the $5 billion lost with WPSS), be mentioned alongside the estimates now presented?

RESPONSES

L Refer to Response I above.

M Current utility forecasts of resource requirements recognize the fact that the future is uncertain and take steps to reduce the risks resulting from that uncertainty. For the same reasons that investors diversify investment portfolios to minimize the risks associated with individual stocks, utilities seek to diversify their system resources to minimize the risks associated with individual resource options. To reduce the risks associated with load growth uncertainty, utility planning favors resource options which can be developed in the shortest possible length of time. Reducing the "lead time" of resource options allows the actual commitment to construct a resource to be made at a point when forecasting uncertainty has been reduced as much as possible. By increasing the number of resource options available to a utility, the SWIP would serve as a tool for reducing the risk of over-building or under-building generating resources as a result of load and resource uncertainties.
Relatedly, on page 1-7, is not California, especially Southern California, now experiencing a decline in population growth rates, which may soon turn into a net out-migration, rather than continued growth as indicated?

Certainly, neighboring, and more distant, areas are reporting an influx of California businesses and their employees. Why is this possibility not mentioned, along with the very real possibility that neither electric demand nor immediate area population demand will occur as claimed, and why are not these points discussed in more detail?

It seems amazing, in conclusion, that the recent dismissal of the closely-related proposal for the Thousand Springs Project in Utah is mentioned just in passing in the SWIP DEIS, and quite inappropriately without examining the very valid reasons why that project was set aside. The SWIP project seems, by reflecting upon what it now leaves unsaid, to deserve a similar oblivion.

To achieve its rightful place, however, whatever that fate may be, the SWIP EIS needs a more complete document regarding its key environmental and economic relationships, rather than just concentrating on deep coverage of its ancillary details (no matter now important these may be). As it now stands, the SWIP DEIS reminds me of a dog that is designing a very carefully constructed and comfortable bed, but without noticing that he was doing so in the middle of a passing lane of a major highway.

Yours sincerely,

Terence P. Yorks, Ph.D.
Mason Valley at sunrise, looking south at the Laguna Mountains. Teddy bear cholla, agave and ocotillo, which dominate the foreground here, are found in abundance in this valley, Anza-Borrego Desert State Park.

Photo: Paul R. Johnson

RE: Southwest Interchange Project

It is important to use existing right-of-ways for power lines. The visual impact on open valleys of new power lines would be horrendous. It would not be protecting resources for future generations. An undisturbed valley is an important legacy and is emotionally satisfying to many people. Isn't the BLM supposed to manage public resources? Keep the visual impact minimized by protecting open valley