

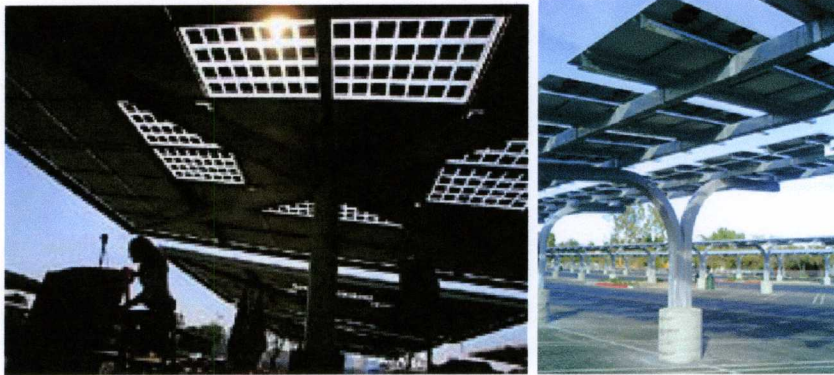


Photovoltaic parking lot

Alternative 3, Local sustainable generation:

Apparently the overwhelming majority of meeting attendees supported local solar and wind, along with natural gas generation facilities for the city of San Diego; something that could have been a proven and accepted technology well over 20 years ago in California. No doubt underground DC, photovoltaics and wind generation are a compatible combination that can continue distributing more sustainable electrical generation capacity. No doubt solar or wind facilities could be located offshore, above farms or above urban parking lots, or architecturally integrated into newer and perhaps some older structures around San Diego County, possibly clustered for more convenient maintenance purposes. Other efforts as the completely energy independent solar city that Arup Urban Design of London designed for Dongtan China near Shanghai, could demonstrate the case, which incidentally China considers essential to accommodate 300 million additional urban residents, without causing further environmental degradation.⁵

⁵ Arup's decentralized energy independent solar city on Dongtan Island in China:
<http://news.independent.co.uk/environment/article361911.ece>
<http://www.arup.com/arup/newsitem.cfm?pageid=7571>



Kyocera and Cal State Northridge parking lots

Apparently photovoltaic technology has now been sufficiently tested worldwide so that a 100 megawatt solar power station is being built in Dunhuang City for \$765 million in northwest China; also a 62 megawatt solar station is underway in Moura Portugal; and 50 megawatts of photovoltaics designed by Sun Edison of Baltimore is being built in Ontario Canada. Local solar parking lot examples in Southern California include: the Los Angeles Department of Water and Power headquarters across from the Dorothy Chandler Pavilion, also Cal State Northridge in the West Valley area of Los Angeles which generates \$50,000 worth of electricity each year, and Kyocera's San Diego headquarters at Balboa Avenue and state Route 163.

Conclusions:

1. Overhead high-voltage AC lines are far too damaging to our projects, and too environmentally destructive countywide. However we do not oppose underground DC lines under or along highways.
2. Underground high-voltage DC apparently is the only viable alternative to overhead AC lines and may be considerably less costly. Please compare the

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total of all costs, property replacement and the restoration of environmental damages in detail.

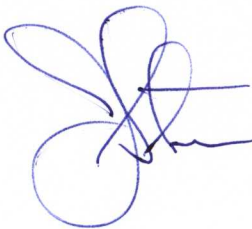
3. Local sustainable photovoltaic and other economical solar generation could be developed to support peak daytime loads within San Diego County. Large scale solar and wind capabilities are being successfully developed on a worldwide basis and need to be technically reviewed and publicly disclosed.
4. Local sustainable wind power, offshore and in San Diego County, should be developed to maintain evening uses, and supplemented as needed with local natural gas generation or long distance renewable sources.
5. If overhead high-power lines proceed through our property by San Diego Gas and Electric or by contractors as described in the figure 8 option, the consequences would be disastrous to our purposes, intent and projects, and so will require that we relocate to continue with our purposes and efforts at an equivalent site in the region, which provides the same or similar characteristics including accessibility, acreage, intact habitat and native species, viewshed, highway frontage, artifacts, water, geologic formations and without suffering from damages to habitat, which may be restorable at not less than twenty dollars per square foot for large areas, in addition to decades of subsequent labor, delivery of water, maintenance, related facilities and protection required; nor is habitat equivalency resolved by an arbitrary acreage exchange; nor is equivalent land in San Diego County with similar resources readily available, and could take years to locate or considerable time to estimate a proposed acquisition process, plus account for costs of existing related facilities, labor, materials and legal expenses; however it could provide SDG&E the resources it may want along this route, with any remainder being transferred to an agency for maintenance and cemetery purposes. Actions taken related to high-power line construction across our property will

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constitute the acknowledgement of a legal contract as specified herein to provide for and pay all related acquisition costs at not less than thirty-five thousand dollars per acre times not less than eight-hundred acres, plus any increased difference in estimated acquisition costs for an equivalent site and facilities, regardless of when we choose to conclude the acquisition or any related purpose, which we may initiate for our habitat protection efforts and nonprofit purposes.

Thank you for your efforts to help create an environmentally and technologically considerate solution in order to minimize damages; in addition to the Sierra Club Center for Biological Diversity who filed a motion with the California Public Utilities Commission's Administrative Law Judge Weissman, who provided the opportunity to extend the process of consideration for these significant issues. We are in the process of scanning some of our project and wilderness preserve images from film and would have preferred to include some of those images here; however the images can be obtained when they're scanned, from our web site for this issue at: power-lines.tripod.com. Please let us know if any work is pursued to compare the costs of overhead AC versus underground DC cables, and contact us at any time regarding any project updates or if any additional information could be of assistance.

Sincerely,

A handwritten signature in blue ink, consisting of several overlapping loops and a final horizontal stroke.

C B H
P O Box 1032
Hemet, California 92546
e-m@mail.com

:sunrise-alternatives

Underground High Voltage DC References:

It's time to connect, introduction to HVDC:

[http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/38E7A4D4ABFD675DC1257125002AF7E8/\\$File/It%20is%20time%20to%20connect%20rev%20%20febr%202006%20web.pdf](http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/38E7A4D4ABFD675DC1257125002AF7E8/$File/It%20is%20time%20to%20connect%20rev%20%20febr%202006%20web.pdf)

Touching Tomorrow, High Voltage DC Introduction (Medium definition video):

[http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/DC7A21C94EBE6BD0C12570F30031AA83/\\$File/Touching%20Tomorrow512K.wmv](http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/DC7A21C94EBE6BD0C12570F30031AA83/$File/Touching%20Tomorrow512K.wmv)

Gotland HVDC installation movie, 3.3 MB (low definition version):

[http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/E12F672A294488FEC1256FDA004DECD0/\\$File/Gotland%20English%2056K.wmv](http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/E12F672A294488FEC1256FDA004DECD0/$File/Gotland%20English%2056K.wmv)

Invisible Power (introductory information), 300 kV Underground Cables delivering over 1000 megawatts.

[http://library.abb.com/GLOBAL/SCOT/SCOT245.NSF/VerityDisplay/B6C3A03E59B10119C12570270059BFFF/\\$File/Invisible%20Power.pdf](http://library.abb.com/GLOBAL/SCOT/SCOT245.NSF/VerityDisplay/B6C3A03E59B10119C12570270059BFFF/$File/Invisible%20Power.pdf)

XLPE Underground Cable System Users Guide; Brian Scott ABB Sales, 919-856-3832, 940 Main Campus Dr Suite 300, Raleigh NC 27606

[http://library.abb.com/GLOBAL/SCOT/SCOT245.NSF/VerityDisplay/62523D62797878ABC125720A00285E3A/\\$File/XLPE%20Cable%20Systems%20Users%20Guide%20-%20US.pdf](http://library.abb.com/GLOBAL/SCOT/SCOT245.NSF/VerityDisplay/62523D62797878ABC125720A00285E3A/$File/XLPE%20Cable%20Systems%20Users%20Guide%20-%20US.pdf)

HVDC underground power links:

[http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/E7150A7C9AFEFAADC12572730029ADD1/\\$File/One%20pager%20underground%20POW-0045.pdf](http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/E7150A7C9AFEFAADC12572730029ADD1/$File/One%20pager%20underground%20POW-0045.pdf)

HVDC connected offshore wind farms:

[http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/F910DE34AC9E9C17C125727300296D49/\\$File/One%20pager,%20wind%20farms%20POW-0044.pdf](http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/F910DE34AC9E9C17C125727300296D49/$File/One%20pager,%20wind%20farms%20POW-0044.pdf)

HVDC city center in-feed:

[http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/35835DA0F4C0626EC1256FDA004C8CD2/\\$File/City%20centre%20in-feed%20web.pdf](http://library.abb.com/GLOBAL/SCOT/scot221.nsf/VerityDisplay/35835DA0F4C0626EC1256FDA004C8CD2/$File/City%20centre%20in-feed%20web.pdf)

Bulk Power Transmission, Overhead 800 kV DC, Lars Weimers, ABB Power Technologies:

<http://search.abb.com/library/ABBLibrary.asp?DocumentID=9AKK101130D1625&LanguageCode=en&DocumentPartID=&Action=Launch>