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DATE: MAY 23, 2009

RE: SCOPING COMMENTS ON THE TANC TRANSMISSION PROJECT for NORTH SEGMENT: Oak Run, Round Mountain and Intermountain areas of Shasta County

TABLE OF CONTENTS:

Thank you for the opportunity to comment on this proposed substation and transmission corridor project. Our comments include several rather large and lengthy discussions. We appreciate your patience in taking time to review everything in detail as you move into the EIS/EIR process.

The included comments are addressed equally to the Western Area Power Administration (WAPA) lead federal agency for NEPA compliance, and Transmission Agency of Northern California (TANC) responsible for CEQA compliance for the State of California under joint powers agency authority.

A. Regarding the Scoping process:

Clarification is needed regarding the width of easements. An online article from Apr 29, 2009 (Lodi News-Sentinel - McClatchy-Tribune Information Services) http://www.individual.com/story.php?story=100275637 said “Thornton residents fear that each property owner would be required to provide a 1,000-foot easement, but TANC spokeswoman Pat Clarke said that only a 200-foot easement would be needed. However, the agency's studies would be 1,000 feet wide.”

At the TANC maps at Google, it says, “Proposed study areas are 1000 feet wide; if the project were to be constructed, typically a 200-foot-wide easement would be used.” However, this is not the same as a TANC/WAPA document stating that easements would be 200 feet wide.

Another statement attributed to TANC representatives says, “"If the (project) is ultimately constructed, TANC would seek to acquire an easement from landowners along the preferred route," Thomson said, "In the Cottonwood area, these landowners would include both private and public entities. Easement specifications and requirements are negotiated with landowners on a case by case basis, and in most cases, current land uses are not significantly impacted. Permanent structures, such as houses, barns, garages, or other outbuildings are not permitted within a transmission (right of way)." http://www.andersonvalleypost.com/news/2009/apr/21/power-line-planned/

Is there any official TANC document that specifies the size of easement that would be acquired for each type of line? This lack of clarity and uncertainty regarding the actual size of the easements is makes it difficult to complete effective Scoping comments. Do we bring up the environmental impacts of a 200 foot easement or regard the possible impacts as if the whole study area of 1000 feet were converted to transmission corridors? Size of the corridor easement would make a difference in the EIR.

B. Regarding the notification of landowners:

Numerous property owners (including myself) did not receive any notification that their homes are within or adjacent to the study corridor during the original scoping period that was supposed to end April 31. By accident I found out about the project in April and

emailed TANC that I had not received notification. I received written notification in early May.

Section 2324 of *CA Energy Commissions Regulations Pertaining to Designation of Transmission Corridors* states: "*no later than ten days after an application is determined to be complete or the commission on its own motion proposes to designate a corridor, the staff shall do the following: ... (2) notify all property owners who are within or adjacent to a proposed transmission corridor zone*"

Clearly, land owners were to be notified prior to initiating the Scoping period according to state regulations for the Transmission Designation process. Since notices are being received by Landowners in May, it would be appropriate to start the Scoping sequence over after all have been notified. Begin Scoping July 1 through July 31, 2009 and reschedule community meetings. This would create the transparency of government required by the NEPA/CEQA process and ultimately reduce project delays.

C. Regarding the Proposed Project:

A review of TANC's *Notice of Preparation* dated February 27, 2009 provided very general statements for the project purposes. No specific new renewable resources in northeastern California are identified as being 'enabled' by this project. Additionally, transmission of power by law cannot discriminate on the type of power carried. This is clearly a transmission expansion project and should be evaluated as such in the EIR.
NOP: http://www.wapa.gov/transmission/pdf/TTPNOP-Final.pdf

Establishing an entirely new and separate transmission system does not follow current federal and state guidelines to explore co-location of lines and services with existing corridors to reduce land conversion.

Notice of Preparation stated the project was needed to 'help' avoid intertie load curtailments and congestions but there was no indication of how this new duplicate system would 'help' or the environmental impacts of such 'help'. Nor does the Ravendale substation tie into any new or existing power generation sources. How does this proposal actually help avoid load curtailments and congestions?

Notice of Preparation mentions "provide electrical system redundancy' as an objective along with cost effective electrical service to rate payers with no indication of how this particular route and alternatives would be optimal or how much cost savings might be expected.

Hopefully, within the EIR, TANC will clearly show how this particular project and these particular alternatives will specifically meet the purposes outlined in the *Notice of Preparation* in significant detail: What specific renewable energy projects in northeastern California would be contracting for transmission with TANC TTP? How does this particular route provide redundancy? How will the project quantify the cost effectiveness for ratepayers? What exact operating constraints this project reduces? And so forth.

The substation location at Ravendale makes no business sense since there are no renewable energy generation projects with utility-grade power needing transmission being built now, nor are any projects explicitly identified for the future. Without a power generation facility with uncontracted electricity needing transport at the Ravendale end of this project it looks like a 600 mile powerline to nowhere.

In Northeastern California, building transmission to access renewables carries a very high risk that not enough generating projects will materialize to fully recover the costs of the new transmission. Is an undeclared, unidentified purpose of the project to tie into an existing or future California-Nevada transmission system to have something to 'transport'? TANC did not mention this possibility directly in the TTP Regional Planning Report. If an intertie is being considered, it would probably be in various utility expansion plans. Shouldn't such an intertie possibility be completely identified as a primary project objective in the Notice of Preparation and fully addressed in this NEPA/CEQA environmental analysis?

Based on the process irregularities to date, we respectfully request that this project be terminated.

D. Regarding Project Review

Locally, at least one individual in Round Mountain who owns a key parcel has received a purchase offer from TANC representatives before the scoping comment period has even closed, before the EIS/EIR is even drafted. A copy of that offer-to-purchase letter was presented to the TANC Board Meeting in Sacramento on April 22, 2009. Hasn't TANC negated the whole 'public processes' of the EIR/EIS? Are they in violation of NEPA/CEQA regulations? Shouldn't this stop the process 'clock' until these irregularities are examined?

Even the appearance of a conflict of interest should be avoided at a time when 'transparency in government' is a national demand. Does a conflict of interest arise when TANC/WAPA writes the draft EIR/EIS and then TANC/WAPA boards vote on the project? Wouldn't TANC receive a benefit from a 'yes' vote and no benefit from a 'no' vote? How do the TANC/WAPA Boards propose to avoid conflict of interest in evaluating this projects, particularly when using federal funds and exercising federal eminent domain powers to take private land from citizens? Please explain.

Description of Area of Concern: NORTH SEGMENT: Oak Run, Round Mountain and Intermountain areas of Shasta County

Shasta County is a rural county located at the northern end of the Sacramento Valley. The total population of the county is estimated at 186,360, with about half of the county's population living in Redding, Anderson, Shasta Lake City and Cottonwood. The rest of the population live in small cohesive unincorporated communities scattered among the mountains.

Shasta County lies at the headwaters of the State's largest watershed, the Sacramento River Basin. About 6.5 percent (5.8 million acre-feet) of all surface runoff in the State of California originates within Shasta County. This represents more than one-fourth of the total surface runoff within the Sacramento River system, the State's largest source of domestic and agricultural water supplies. Cow Creek Watershed forms a large part of this area.

Cow Creek is recognized and documented by the U.S. Fish & Wildlife Service (USFWS) as important spawning and rearing grounds for fall-run Chinook and steelhead. The Cow Creek Watershed drains approximately 275,000 acres, roughly the size of the state of Delaware, and encompasses 430 square miles. It collects drainage from the base and foothills of Mt. Lassen. Cow Creek is fed by multiple creeks, including Little Cow Creek, Oak Run Creek, Clover Creek, Old Cow Creek, and South Creek.
http://www.co.shasta.ca.us/Departments/Resourcemgmt/drm/pdf/66water.pdf

As in most rural areas, development follows transportation routes. Consequently there are small communities, homes and businesses along most county roadways. In the Cow Creek Watershed, Oak Run is a small unincorporated community 23 miles east of Redding. It has a store and a post office run by a family who lives in the town-famous "Oak Run House", just behind the store and post office. It also has an elementary school, a volunteer-run library, a church, a volunteer fire department and 765 people. Annual events revolve around the school, library and firehall.

Round Mountain and Montgomery Creek, also in the Cow Creek Watershed, are small unincorporated communities, with a store, coffee shop, post office, excellent community health clinic, several small roadside businesses, several organic farmers, and residents committed to protecting environmental values. Our communities find value in clean local-level renewable energy.

About 20 percent or more of homes in the intermountain region are powered off the grid or have grid tie systems. In Round Mountain, the Hill Country Health and Wellness Center has a solar photovoltaic system tied into the grid which is designed to generate enough energy to power the new building. http://www.hillcountryclinic.org/expansion.html

The TANC ‘study corridors’ cut across major local roads and impact every developed area in Oak Run, Round Mountain and Montgomery Creek in a very negative way. These intermountain communities, while small in population have their own histories, their own identities, and each community is highly valued by those that dwell there.

In the Oak Run area, the ridges run predominately east/west, as do the streams. The proposed corridors cross every watershed perpendicular to the streams, north to south, meaning the storm water runoff and sediment from corridors will drain into every stream in every watershed crossed. In Round Mountain the sheer concentration of corridors both existing and proposed create unacceptable levels of environmental degradation.

The TANC corridors would produce severe cumulative environmental impacts throughout the Cow Creek Watershed as well as severe impacts on individual properties should these transmission lines ever be built. None of the alternatives presented minimize this type of irreversible impact due to the layouts of the corridors.

The TANC TTP is not justifiable for reasons of environmental justice. There would be adversely disproportionate and irreversible impacts on low income population groups including a significant number of tribal peoples. The disintegration of the intermountain community cohesion and integrity would occur should any of the alternatives be selected. None of the alternatives minimize environmental impacts to the communities. All alternatives are unacceptable, as is the substation location.

Additionally, the TANC TTP does not appear to be a fiscally prudent means of meeting the stated project objectives. The costs to effectively mitigate environmental impacts will be very high through Shasta County. The failure to justify the economic need for this project calls for a halt to this process immediately.

SECTION 1: HOW WILL THIS PROJECT MEET TTP OBJECTIVES?
NORTH SEGMENT: Oak Run, Round Mountain and various Intermountain areas of Shasta County.

What follows are detailed scoping comments on environmental impacts of the project as it pertains to eastern Shasta County, and in particular the area of Oak Run, Round Mountain, Montgomery Creek within the Cow Creek Watershed.

If you are reviewing this document on a computer, you may wish to view illustrations at a higher percentage 'view' power to see details or go online to see the original source materials.

I realize that I've written a long SCOPING document, but it is a complex ecological region. Your patience and attention to detail is appreciated.

A. Does this project meet California Energy Plan objectives and goals for renewable energy?

1) What Existing need would this project meet?

TANC reported at the scoping meeting that their economic analysis indicates there is a need for new transmission lines. What need is the report referring to? Is it a general need i.e. "CA needs more power transmission lines" or a specifically identified need? Before this project moves forward into an EIR, any previous 'need' study must be made available to the public for review. And it must specify why each proposed corridor and substation locations currently proposed are considered essential.

2) Exactly what Renewable energy power generation projects in Northern California need transmission services now?

a. The Project Description states a primary need for this transmission project is to provide access to new renewable energy sources in Northern California. However, according to information provided by TANC at the April 13, 2009 meeting in Redding, California, there are no new power generation projects planned within reach of this consortiums proposed transmission lines that are not already committed by contract to other transmission line companies. Are there undisclosed renewable energy projects? How soon will they be operational?

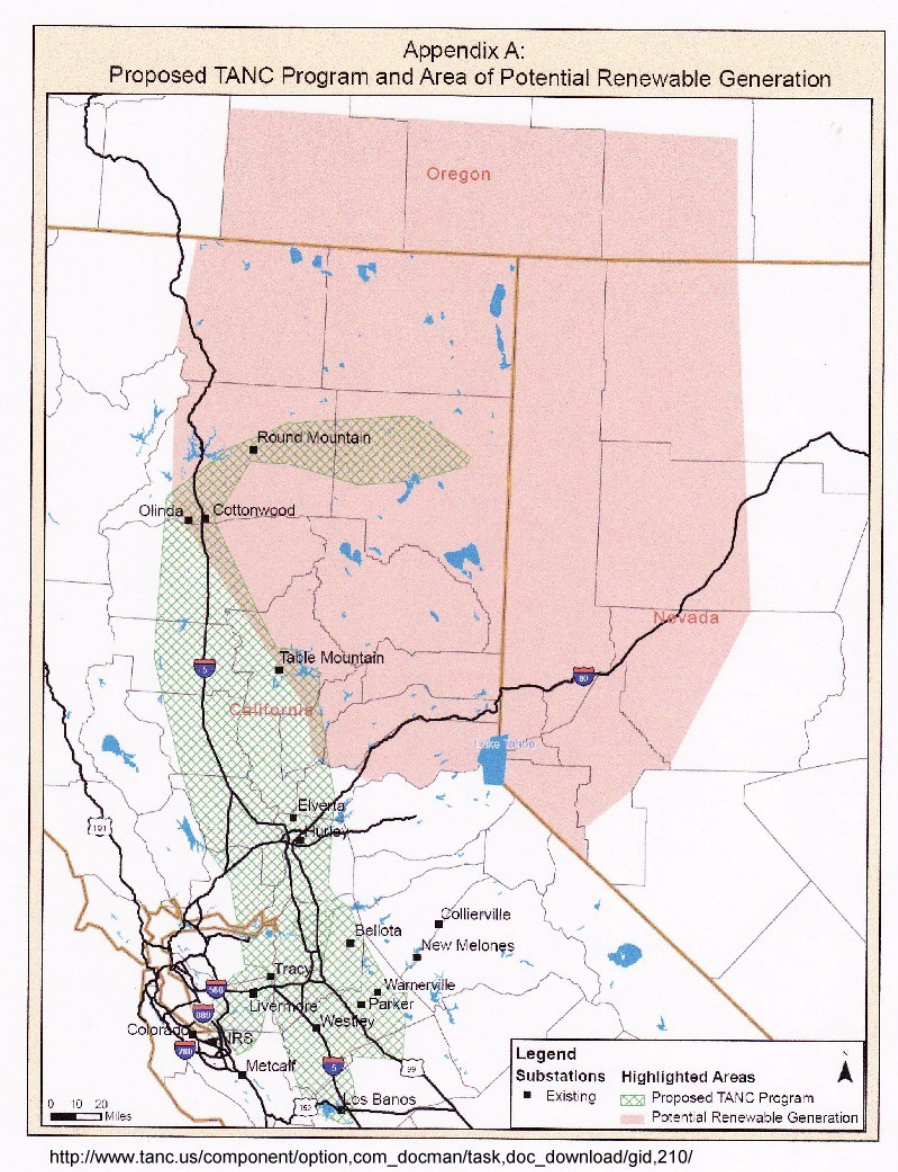
b. According to RETI Phase 1B Executive Summary dated January 7, 2009, online at [http://www.energy.ca.gov/reti/documents/index.html] describes California Renewable Energy Zones (CREZ) and on p.2, says

"*CREZs receiving lower (better) environmental ranking scores tend to have more energy potential than CREZs receiving higher scores. The criteria used by the EWG appear to favor larger and more energetic resource areas. ..Only eight CREZs would interconnect to the northern section of the California transmission grid; all have relatively high environmental scores; only two received relatively good economic scores. Thus it appears that a large majority of undeveloped California high-density renewable energy potential is in Southern California."*

The environmental impact for renewable energy in northeastern California is very high even by RETI standards. This is illustrated by the Phase 1 report map p.8-9 where CREZ areas Identified and mapped "black" and "yellow" is where generation development is precluded and restricted by law or policy.
[http://www.cpuc.ca.gov/NR/rdonlyres/3A68204A-AEB8-4E39-9E89-4DD3DCB5E9FE/0/081204RETIforEAPfinal.PPT]

When you compare the map TANC included in *TANC Transmission Program WECC Regional Planning Report,* Appendix A against the RETI maps of "prohibited, restricted and limited lands", it is clear that the 'potential' for renewable power generation is severely limited and not a viable justification for the TANC TTP. TANC map: http://www.tanc.us/component/option,com_docman/task,doc_download/gid,210/

The TTP presents serious environmental challenges, with only a low probability of renewable energy sources ever being developed. Aren't there better alternatives?

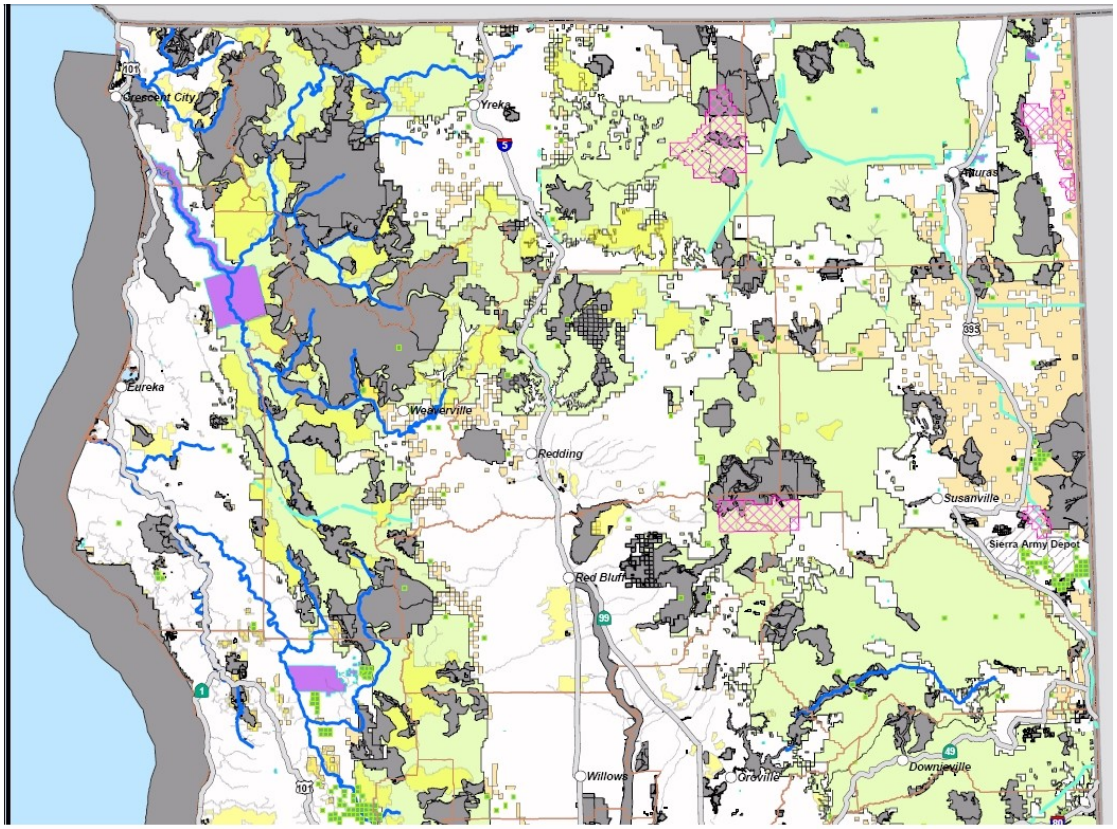


TANC shows the pinkish map area as potential renewable energy.

However, if you compare the map above with the RETI map on the next page, you'll clearly see that there are very few potential locations to site renewable energy projects to produce utility level energy output.

The white areas on the RETI map are the lands where renewable energy generation might actually occur. Colored areas are prohibited, restricted, or limited.

The 'renewable energy' sources in the proposed project area (and used as justification section of the *TANC Transmission Program WECC Regional Planning Report)* are identified by California Renewable Energy Transmission initiative (RETI) **as being limited in opportunity.**



RETI restricted lands map modified to show just Northern California – only white areas have potential. See larger map: http://www.energy.ca.gov/reti/steering/workgroups/environmental/maps/draft-EWG-maps/DRAFT_RETI_EWG_CA_Statewide_Rev5_Black_and_Yellow_combined.pdf

c. If 'renewable' power sources are in such high demand, then why is PG&E in the process of decommissioning the Kilarc power plant near Oak Run, and removing power production facilities farther north along the Klamath River in Siskiyou County? Why are existing renewable power generation capabilities being reduced?

d. All power generation sources in northeastern California, including renewable, are contractually committed to existing transmission lines. Any or all increases in power from theses sources could be compensated for by upgrading those existing transmission facilities, which is already being considered by PG&E. What power generation project is there within northern California that requires transmission services at this point in time? Exactly what new renewable energy projects are actually beyond very basic planning stages?

e. What specific renewable energy power projects are under TANC control and contractually ready to meet 20 percent or more of TANC's 'renewable' target energy goals by the time the lines are constructed?

According to "*Consultant Report: California's Electricity Generation and Transmission Interconnection Needs Under Alternative Scenarios*", prepared for: California Energy Commission in March 2004, p.21, "*Most renewable resources will be located in California. Therefore there will be no need to commit additional interstate transmission line capacity to meet this 20 percent mandate."* Is TANC committing additional interstate transmission line capacity to meet this 20-30 percent mandates since there is no renewable energy generated in northeastern California to transport?
http://www.energy.ca.gov/reports/2004-03-24_700-04-003.PDF

f. From a purely business standpoint, it seems speculative to spend more than a billion dollars for a marketing possibility that "if you build it, they will come."

g. How is building a completely new transmission system that duplicates an existing corridor system (which will be upgraded in the near future) justifiable if renewable energy power generation facilities won't exist for decades?

B. How probable is renewable power generation in northeastern CA?

1) Geothermal:

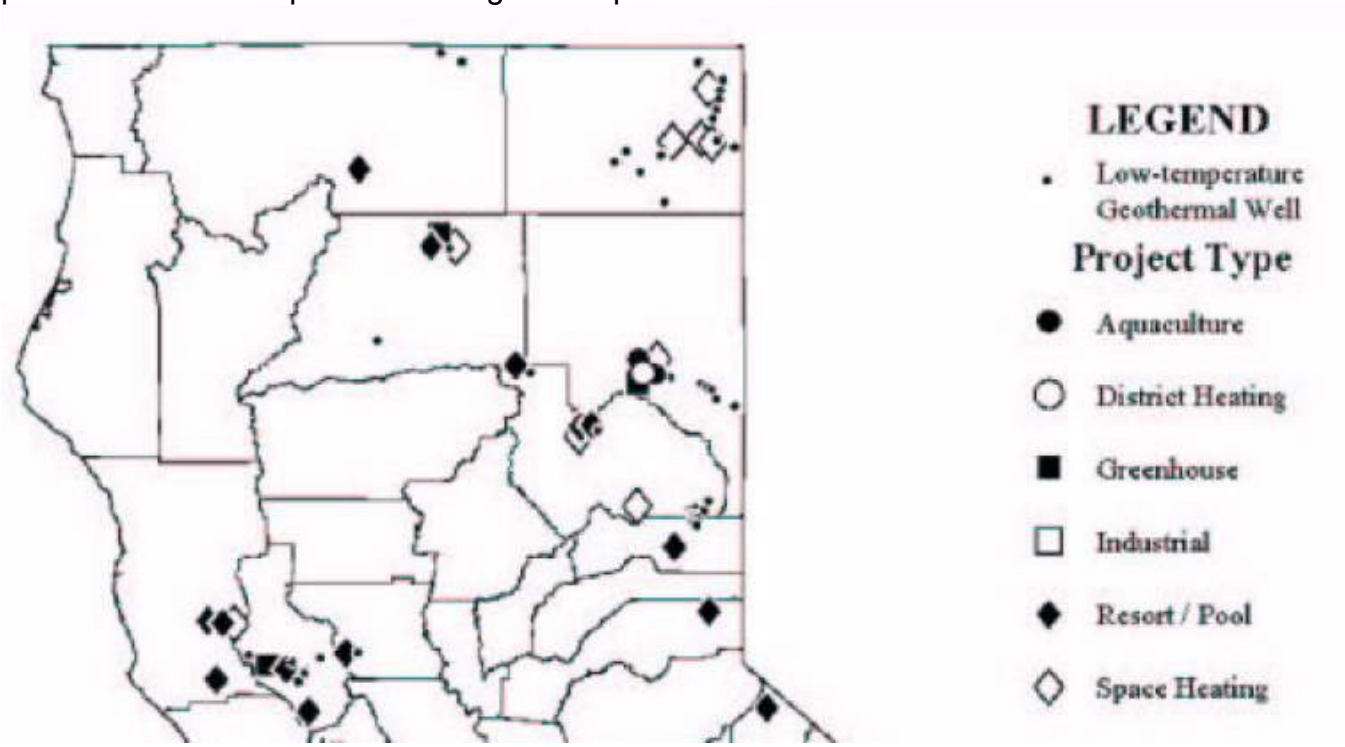
Based on published reports, court rulings and available documents, it is highly unlikely that any new power generation projects from geothermal or biomass will actually be built in northeastern California during the estimated 60 year economic lifespan of the transmission towers and lines generated from this proposal.
Economic lifespan of towers: http://www.jcmiras.net/surge/p151.htm

Fourmile Hill Geothermal Development Project, in BLM's Medicine Lakes region was halted in 2006 by a tribal lawsuit. 113 square miles of the area were designated as

eligible for the National Register of Historic Places as a Traditional Cultural Area from that court decision. It is unclear if that geothermal project or its companion project at Telephone Flat (which is equally enmeshed in litigation) will ever reach construction. In fact, it's unlikely in light of the court decision and subsequent bankruptcy of Calpine Corporation that any future geothermal projects will materialize in the Medicine Lake geothermal areas. The only Northern California geothermal projects, at Glass Mountain, are being litigated.

http://www.law.stanford.edu/news/pr/45/ Article on the court decisions on Medicine Lake project.
http://www.mountshastaecology.org/Save_Medicine_Lake.html
Save Medicine Lake: Mt Shasta Bioregional Ecology Center article. And BLM notes: http://www.blm.gov/pgdata/etc/medialib/blm/ca/pdf/caso/advisory_councils/nerac.Par.1253.File.dat/nerac_notes_feb09.doc.

A review of the geothermal drilling studies already done in northern California confirms that most locations are warm, not hot. The geothermal in northeastern California is most suitable for local use in home heating and water heating, not in utility-level power production which requires much higher temperatures.



Geothermal Map of California: adapted from: http://geoheat.oit.edu/bulletin/bull24-1/art1.pdf

The Geothermal Map of California shows Big Bend as an area of low to moderate temperatures, not enough for power generation, but suitable for house heating, bathing, etc.

Fort Bidwell Tribal house heating project: http://apps1.eere.energy.gov/tribalenergy/pdfs/fortbidwell05final.pdf shows that area has good temperature for home heating but not hot enough temperature for producing electricity.

Federal Map of geothermal resources for power production shows limited numbers of potential geothermal power sites in TANC's TTP area: http://www.geo-energy.org/information/developing/Map%20of%20Potential%20Geothermal%20Power%20Sites%20in%20the%20Western%20US.pdf

2) What about Biomass in Northeastern CA?

Renewable Electricity Standard and woody biomass: In the coming weeks the U.S. Congress, both the House and Senate, will be passing legislation that will impact the management of forests in the United States for decades. Woody biomass could be excluded from counting as "renewable energy" and efforts from some groups are already underway to accomplish this goal.

Specifically, both legislative bodies will soon attempt to pass a *Renewable Electricity Standard* (RES). The RES should include woody biomass, but due to concerns about the 'sustainability' of biomass, there have been many efforts to limit the type of woody biomass that would count towards a renewable energy standard.

This definition excluded biomass from federal land and most natural forests, only allowing biomass from mill residuals or private land plantations to count towards the renewable fuels mandate. Numerous environmental groups have weighed-in with the Congress stating their concern for the 'sustainability' of woody biomass including concerns that federal or private forests could be deforested for renewable energy. http://www.norcalsaf.org/temparticles/Renewable_Energy_Woody_Biomass_Definition_09.pdf

Already, litigation is a severe stumbling block to biomass energy production using woody waste in northern California. The Weed plant : A 15 Megawatt Wood-Fired Power Plant, recently approved to be built at the base of Mount Shasta, in Weed, CA will burn the equivalent of 250 cords of wood per day. The article at http://www.cleanweed.org/lawsuit.html lists the community concerns, which is echoed across the north state. It is in litigation.

The Weed biomass power plant will need enough wood to heat 50 homes for a winter, every single day to produce a limited amount of power. That's using enough wood to heat 18,250 homes for the winter, each year. Is converting wood to electricity really meeting 'renewable energy' goals as identified by the voters?

One of the big stumbling blocks with Biomass for power production is the lack of a reliable and continuous supply of the raw materials, and the inability to produce clean, efficient power from waste wood. Biomass concerns also include environmental impacts

from harvesting activities including soil erosion, damage to remaining trees, sediments from roads, and changes in quality of wildlife habitat.

Woody biomass will not be available from federal lands. This is illustrated by the RETI environmental exclusion map at:
http://www.energy.ca.gov/reti/steering/workgroups/environmental/maps/draft-EWG-maps/DRAFT_RETI_EWG_CA_Statewide_Rev5_Black_and_Yellow_combined.pdf

Biomass power plants account for about 2 percent of the electricity generated in California. While about 5 million bone-dry tons of biomass is used for energy each year, much of this is from agricultural wastes and sawmill residues, not forest biomass. In Shasta County the existing sawmills already have cogeneration and what small amounts of power they produce beyond what they use in their own operations are already contractually obligated. Agriculture in Shasta and Lassen Counties focuses on rangelands not biomass crops.

Generating power from forest biomass is a very inefficient and expensive operation in conversion to electricity. One solution is to build smaller power plants at a scale that can power public buildings in small communities. These options are being explored in the intermountain regions, but these community-based efforts would not produce exportable power for transmission.

Cost of hauling is an important limitation on biomass energy production. The cost of transporting biomass to the power plant becomes unsustainable beyond about 50 miles. But the basic project killer is the lack of woody biomass. There's insufficient logging being done on private lands within northeastern California to provide the constant and reliable flow of woody biomass to make any appreciable amount of electricity to 'transport' on the TANC transmission lines.

It doesn't matter that there's lots of forest lands in northern California. Most forest lands are federal and every proposed federal logging sale is contested in court by the Natural Resources Defense Council or other environmental law group.

The federal government is not going to meet climate change objectives by cutting down federal forests to produce biomass power for TANC TTP. So while there is 'potential' power to be generated from biomass in northern California, the 'probability' of that actually occurring is very low. TANC TTP isn't justifiable using potential probability of biomass power.

According to the California Energy Commissions Draft Document "A Roadmap for the Development of Biomass in California" published in November 2006, it would be 2025 before there might be technological breakthroughs sufficient to make biomass power on a utility-level scale more widespread.
http://www.energy.ca.gov/2006publications/CEC-500-2006-095/CEC-500-2006-095-D.PDF

With utility-scale biomass power generation nearly 2 decades in the future, how does that effect the TANC TTP project intentions and the immediacy of the stated needs

should access to renewable energy take that long? How would the lack of 'renewables' in California affect the projections of TANC business operations goals and objectives? Would project priorities be guaranteed by TANC to be met within the next 10 years?

3) What about Wind:

In terms of new renewable power generation, the only renewable project that might actually get built in N.E. California is the Hatchet Ridge Wind Project. A bankruptcy declaration has been filed by its financier however it remains remotely possible that Hatchet Ridge Wind Project could continue with plans to build 43 windmills.

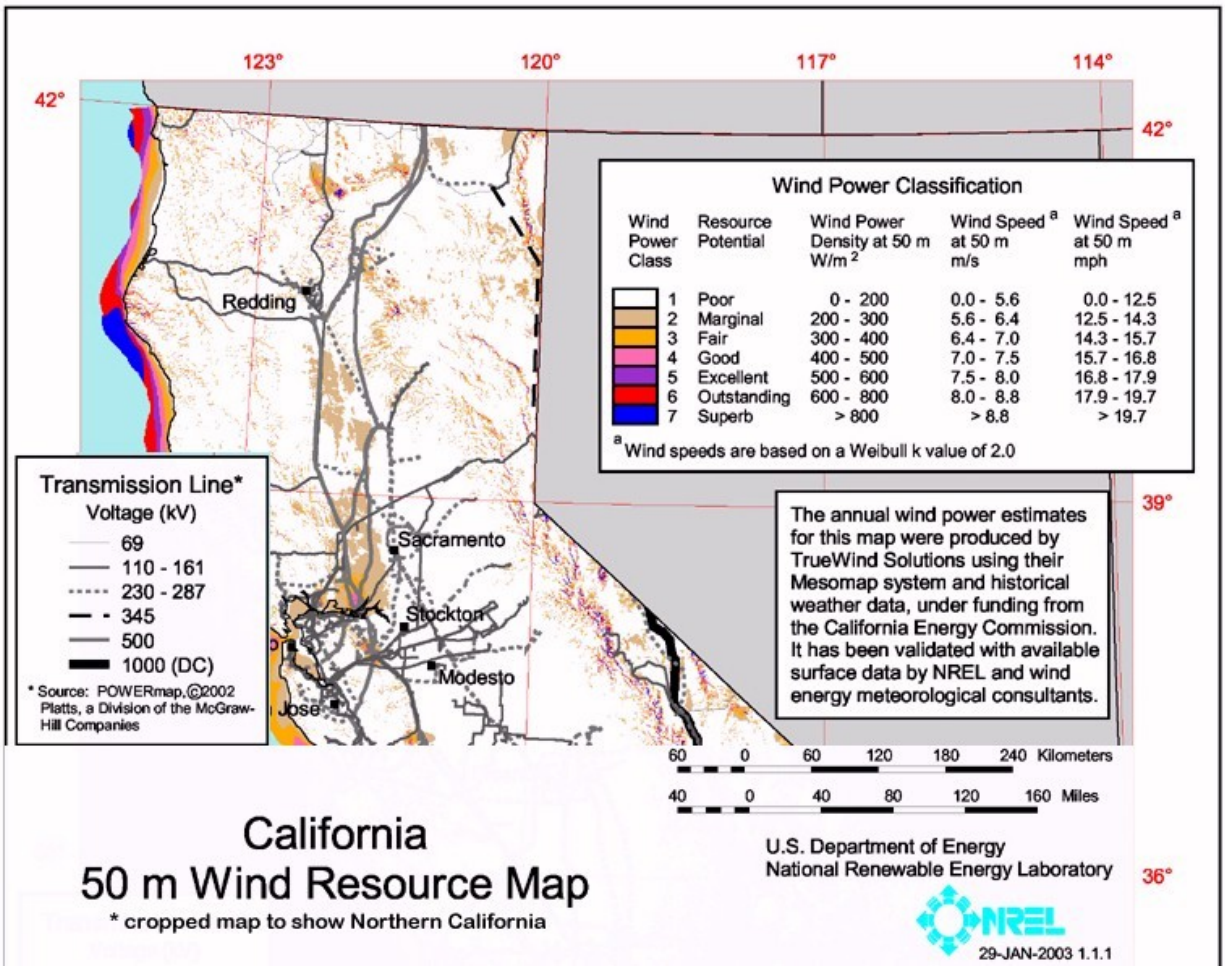
As of December 1, 2008 Pacific Gas and Electric Company (PG&E) announced they have entered into a long-term agreement with Hatchet Ridge Wind, LLC to purchase up to 103 megawatts (MW) of renewable wind energy. PG&E is not currently a member or partner of TANC.

According to the facts at: http://www.hatchetridgewind.com/facts.html
the electricity generated by the Hatchet Ridge Wind Project would be delivered to utility customers via the existing PG&E transmission line on Hatchet Ridge as well as other electric transmission and distribution lines. There is an existing transmission line (230Kv) which will be used to transmit energy produced at the project to the customer. According to the study and information published by the project, no new transmission lines would be needed for this project. It has no impact for TANC TTP.

Commercial scale wind refers to wind energy projects greater than 100 kW.
http://www.windustry.org/wind-basics/learn-about-wind-energy/wind-basics-know-your-options/know-your-options

Northeastern California simply is not a good wind resource according to the National Renewable Energy Lab. Additionally, peak demand for electricity occurs in summer when wind speeds are historically low in northeast California. Wind power generation might be feasible for local use, but it simply won't provide reliable energy generation in summer to offset peak load demands, which was one of TANC's project's objectives.

RETI maps actually show the Central Valley as a better wind resource area than Northeastern California. Shouldn't TANC concentrate on developing projects which offer significantly better prospects for wind power within their existing service-ratepayer areas thus lowering transmission lengths? Why choose to go outside their ratepayer areas clear to Ravendale for a substation when the whole Northeastern California region has a very, very low rating for economically viable utility-level wind power production?
http://www.energy.ca.gov/maps/wind/WIND_POWER_50M.PDF



Adapted from map at: http://www.windpoweringamerica.gov/maps_template.asp?stateab=ca

Is the possibility of one wind energy project being built at Hatchet Ridge, (particularly since that project already has transmission contracted with PG&E), sufficient economic justification for the TANC TTP? This seems fiscally unlikely.

4) What about Bringing in Renewable energy from Nevada?

In January and May of 2007, the California Energy Commission banned municipal and investor-owned utilities within the state from signing new contracts with out-of-state coal-fired power plants.

This move had an immense impact on the coal power industry, as California is a chronic power importer. Western Nevada has scaled back their power project plans since California by law will not purchase and import power from coal-fired fossil fueled sources until such generation meets stringent new climate guidelines – which may be decades away. http://ndep.nv.gov/bapc/graphics/power.pdf

Most of the current Nevada renewable power proposals are years away (if not decades away) from approval and construction and cannot be considered as justification for TANC TTP since they are outside of this state and California Public Utilities control.

What clean, renewable exportable energy is expected from Nevada and how is TANC securing the commitment from Nevada utilities to provide clean renewable energy electricity to TANC at a price that would guarantee the lower rates to TANC ratepayers which is part of TANC's project justification?

5) What about Solar and other renewable energy projects:

Northeastern California is simply too far north to make utility level solar projects viable. While there may be other possible power generation projects in the concept stage for parts of Northern California, none of these potential projects would break ground for decades even if they make it unopposed through the NEPA/CEQA approval process.

RETI map and CREZ discussion papers again indicate the lower value and higher cost of placing such renewable solar power projects in northeastern California. Clearly solar would not contribute enough pay-back to justify TANC's 600 mile transmission project. What specific kilowatt amount does TANC expect within the next decade from Solar produced in northern California?

6) Summary of Viability of Renewable Energy Sources for TANC TTP:

May 9, 2008 TANC has stated, "The feasibility of the new transmission lines is largely dependent on the amount of utilization the lines would get from renewable resources." In a document at: http://www.tanc.us/component/option,com_docman/task,doc_download/gid,210/

Building TANC TTP will not make renewable energy generation from N.E. California economically viable. The limited 'potential' and low rate of return for renewable power in N.E. California makes "amount of utilization the lines would get from renewable resources" extremely low, possibly none. Not enough generating projects will materialize to fully recover the costs of the new transmission system. TANC TTP isn't justifiable using potential probabilities. The project is clearly unfeasible.

Major renewable energy generation projects of all types have been discussed in Northern California since the mid-1960 and no utility-level power generation projects have come to fruition 6 decades later. In fact none proposed to date are economically viable at utility-levels without substantial federal subsidies which is a considerable factor in why none of these power generation facilities have been built in the last 60 years.

The problems facing utility-level renewable energy generation from northeastern California are not the lack of transmission lines. The barriers to renewable energy generation in Northeastern California are directly related to the technical problems intrinsic to the type of raw renewable source materials: no sustainable biomass sources,

too low of temperature in geothermal areas, variability of wind resources and degree of latitude north for solar.

Instead of utility-level renewable power generation facilities, residents of northern California have invested at the homeowner level with rooftop solar, off grid systems, wind power and geothermal household heating where possible and practical. The new health clinic expansion at Round Mountain included a solar photovoltaic system tied into the grid. It generates enough energy to power the new building.
http://www.hillcountryclinic.org/expansion.html

Existing lines and corridors/easements are owned predominately by PG&E. If any new renewable energy is generated in Northern California, there is a high probability that they'd contract with PG&E. Any transmission lines owned by another group (TANC) would be underutilized (by renewables) for a significant portion of the economic life of the system. Additionally, a number of existing lines and towers were built in the mid 1960's. PG&E is already working towards updating/upgrading that entire system.

Based on published reports, court rulings and available documents, it is highly unlikely that any new power generation projects from geothermal or biomass will actually be built during the expected economic lifespan of the transmission towers generated from this proposal.

There's no clear or compelling need for TANC TTP. After a close examination of available facts, this project won't help meet CA renewable energy goals because the project assumptions on renewable energy generation capabilities in Northeastern California are invalid.

If TANC promoted the same level of power conservation and commitment to local power generation among its ratepayers, instead of committing to a new transmission system outside their service area, their renewable energy targets as well as their business goals could be met from within their existing partnership.

TANC TTP is not a renewable energy project. A "no-project" decision should be rendered by the NEPA/CEQA process and confirmed by the California Public Utilities Commission (CPUC).

C. What About the Useful life of the proposed transmission system?

There is a real concern that the TANC TTP will be an underutilized system since there will not be any Northeastern California 'renewable' energy needing transmission to TANC customers for decades, if ever. It appears to be an unnecessary 'overflow' system designed to carry electricity at peak times when it is most expensive and profitable. It is not needed to supply energy flow on a daily basis. It certainly isn't needed to carry renewable energy that doesn't exist.

Economic lifespan of towers is typically estimated at 35-45 years but the physical lifespan of the overhead lines and towers vary depending on workload on the lines and

the annual variance in temperatures: http://www.jcmiras.net/surge/p151.htm and http://www.ct.gov/csc/lib/csc/lifecycle-1996.pdf

If the lines/corridors are built by 2014 as proposed, and there is no actual renewable power within northern California needing to be transported, won't such transmission lines require maintenance and repairs even if no power is being transported through them? How would such costs be covered by TANC? How would this impact the economic service life and profitability of the 600 mile system? Who would bear the cost of caring for the environmental degradation created by these lines – the end user cities or the individual landowners within their rural counties?

It seems much more likely that the transmission lines are to be used for transporting power from non-renewable sources for a significant number of years. How does that help California meet its renewable energy goals? Wouldn't that use conflict with the filed *Notice of Preparation*? Wouldn't such a use require evaluation as a separate project under NEPA?

Doesn't the fact that there is so little probability that the TANC TTP will ever transport renewable energy produced in Northeastern California for at least a third to one half of the lifespan of the towers create the legal need for a completely different NEPA/CEQA review? Even with a great deal of optimism, the 'renewable energy' aspect of the project is very questionable.

The California Public Utilities Commission (CPUC) is required to consider whether the project promotes the safety, health, comfort or convenience of the public. The TANC TTP fails on all counts.

a. All of the 'TANC TTP Notice of Preparation' items appear to relate to internal business profitability of TANC and its members, and to positioning themselves as a competitor for unknown future power generation projects.

b TANC cannot demonstrate how this project will be for the safety, health or convenience of some 7000 families project-wide who live in the proposed transmission corridors and who will be required to surrender their property rights and diminish their land values in order to improve profitability of power transmission companies.

c. TANC cannot demonstrate how this project will be for the safety, health or convenience of the additional 14,000 families project-wide who live adjacent to the proposed transmission corridors. Using census estimates of 2.5 persons per household, an estimated 50,000 people would either have a corridor on their property or be adjacent to one.

For the roughly 1200 plus people who live in the Round Mountain and Oak Run Communities and the 3500 hundred additional residents within their sphere of influence, the placement of the TANK TTP corridors are environmentally unjust.

Those who carry the environmental burden will not share in the economic benefit. TANC cannot demonstrate sufficient benefit versus the environmental justice, the costs to mitigate environmental impacts, and the permanent impacts of irreversible effects.

Therefore this project cannot meet any public benefit economic necessity justification and should not be built with taxpayer funds. Taxpayers are tired of taxpayer money being expended to benefit big business or select groups. A “no-project” decision should be rendered by the NEPA/CEQA process and confirmed by the California Public Utilities Commission (CPUC).

D. What about impacts of California and Federal legislation?

There is a major shift in economic thinking about investing in transporting power from far away locations to developing power in an energy web close to the end user.

April 13, 2009 the California Assembly Natural Resources Committee passed AB 2112, the Residential Buildings Zero Net Energy Bill. The bill, sponsored by Global Green USA and authored by Assembly Member Lori Saldaña (D- San Diego) will require all new residential buildings to be net zero energy beginning in the year 2020.
[http://www.globalgreen.org/press/climate/]

AB 2030 (Lieu/Saldana) - Energy Building Standards: Commercial Zero Net Energy Buildings [http://docs.cpuc.ca.gov/published/Report/82932.htm]. The bill would amend Public Resources Code 25402 to direct the California Energy Commission (CEC) to adopt building design and construction standards that would require new nonresidential construction commenced on or after January 1, 2030, to be a "zero net energy building."

In the Federal Energy Bill of 2007 signed Dec. 19, 2007, federal building energy efficiency performance standards require new and renovated federal buildings to be fossil fuel free by 2030. The law also establishes a *Net-Zero Energy Commercial Building Initiative* designed to establish a research, development, demonstration and deployment roadmap for the construction of net-zero energy buildings by 2030.

As more legislation passes, new homes would be extremely energy efficient and produce enough power to offset any electricity they draw from the grid. Completely distributed and infinitely redundant power generation will have profound repercussions in energy usage, allowing Californians to drastically reduce our impact on the environment. Fuel cell technology is making dramatic strides. Solar costs at the home owner levels and business building levels are coming down.

TANC TTP expects to be in service by 2014. There are no projected renewable energy sources likely to generate transmittable power before 2020-2030. If demand goes down due to net-zero housing and localized grid-tied power in cities, won’t this transmission system be completely unnecessary (and unprofitable) by the time it’s placed into service?

Aren't TANC-type transmission lines and corridors becoming obsolete technology in light of the strides in fuel cell power generation, rooftop solar, local wind power and grid tied systems within the end-service areas? Isn't the fact that there are no new large-scale traditional power generation projects being built a clear signal that there is no actual need for creating new transmission corridors, particularly in northern California with its high environmental impacts, extreme fire severity risks and low rate of return on investment for renewable energy systems?

Wouldn't it be more cost effective and return more for the invested dollar for TANC members and their end-use ratepayers to spend their funds to develop a partnership with PG&E and maximize transmission capabilities of existing lines on existing corridors to alleviate any current line overloads of power congestion rather than create the vast amount of disruption to the environment, families and communities through condemnation of new corridors?

E. What about TANC business considerations as a project intention?

Potentially 'reducing operating constraints', creating system redundancy, increasing operational flexibility, improving 'member-owned' cost effective transmission into San Francisco and Sacramento are purely business objectives to benefit a select group. Isn't this project proposal creating an environmental justice crisis?

The vague promise of a minor economic benefit to TANC's metropolitan customers in just 18 California cities is not a justifiable reason to environmentally harm dozens of small towns, communities and thousands of families who will never directly benefit from the power crossing their lands.

Before any new 600 mile long transmission project is considered, with the known high environmental costs and the known low economic benefit (as illustrated in the RETI EAP report), shouldn't TANC partners demonstrate they have exhausted ALL of their other options including local renewable energy development, and distributed generation, and partnerships before exercising eminent domain outside their service areas? TANC TTP has not documented that they can ONLY meet their goals and objectives by creating 600 miles of new transmission corridors across half the state.
Renewable Energy Transmission Initiative Final Report
http://www.energy.ca.gov/2008publications/RETI-1000-2008-003/RETI-1000-2008-003-F.PDF

There are business alternatives that don't require building 600 miles of new transmission corridors to achieve the business objectives stated in TANC's *Notice of Preparation*, such as those discussed in "Utilities Awaken to Distributed Generation" Article **http://tdworld.com/mag/power_utilities_awaken_distributed/**

In the '*Notice of Preparation* TANC mentions the operational needs to avoiding load curtailments and related congestion. Can't that need be handled more cost effectively by developing better management tools and developing cooperative partnerships which would utilize the existing transmission system? Is it a marketing need to create a

completely duplicate transmission system? How is subsidizing competition between major public agencies for market share in 18 cities in the best interest of the rest of Northern California?

The practicality and economic benefit of improving management instead of creating expensive infrastructure is illustrated by other states. Florida is investing in smarter energy conservation technology, incorporating grid tie systems and balancing the loads. Florida Power & Light is investing in a $200 million "smart grid" initiative will link homes and power plants and support expanding use of solar power and electric cars. Article: http://planetark.org/wen/52535

From a business standpoint, investing more than a billion dollars for TANC to duplicate the existing transmission system presumes that the energy business of the future will follow the same market pattern as the energy business model of the 20th century.

Clearly the 21st century business electrical business model is illustrated by the legislative trends towards renewable localized power generation. The advances in 'smart grid' technology, the advances in incorporating distributed energy into the utility system all confirm that expanding the corridor system for the reasons put forth by TANC TTP is a poor business investment.

The TANC TTP is an expensive and environmentally damaging business decision based on an increasingly outdated, outmoded business model. Carol A. Overland, a utility regulatory attorney and electrical consultant, states February 3, 2009, "The divergence between traditional "local load-serving need" and the desire of utilities to beef up need claims, to build generation and transmission at ratepayer expense, in order play the market…. Opportunity to play the market is not reasonable and prudent, so it's not a reason to build a transmission line -- utility desire to increase market transactions is not recognized as "need" in a Certificate of Need or Certificate of Public Convenience and Necessity proceeding."

Ms. Overland goes on to say, "Utilities have incentive to overstate "need" when they build for peaks. The higher the peak they build for (with peak occurring only several times annually), the deeper the off-peak valley and the more electricity they can sell on the market when generation is available but not 'needed.'"… "The massive transmission infrastructure expansion proposed is not "for renewables" because transmission may not discriminate by generation type…if renewable energy mandates were directly linked with shut down of fossil generation, and if renewable generators were thoughtfully sited, both the electricity market and transmission infrastructure would be open and available." http://www.allianceforresponsibleenergypolicy.com/Transmissionlies.pdf

TANC TTP is not economically justifiable as a 'public need' because those who bear the environmental burden of the transmission corridors don't experience any economic benefits. If you aren't a TANC ratepayer, you don't directly benefit from this project.

Vague statements like 'increased grid reliability' may be meaningful to utilities, but the intermountain population knows they will see no improvement in reliability of their household electricity by adding miles of duplicate pass-through transmission corridors next to their homes.

TANC utilities do not seem to have learned from the nation's auto manufacturers. Throwing lots of taxpayer money into automobiles that people didn't want to buy didn't save major players in the auto industry.

The voters know that TANC TTP does not meet the intentions of the recent legislation to increase California's use of renewable energy because transmission may not discriminate by generation type. Since there is no renewable energy to transport, these TANC transmission lines won't assist the utilities in meeting the state's renewable energy goals because they won't be used to transport renewable energy for decades, if ever. Building Transmission corridors that create severe adverse environmental impacts, which don't fulfill voter's intentions on 'renewable energy' won't justify the use of eminent domain.

TANK TTP is perceived to be a private-purpose infrastructure project using taxpayer dollars clearly won't be a viable business move for utilities. The project is perceived as throwing an irreversible environmental burden on rural counties and communities. It is perceived as throwing a huge financial burden on low income residents at a time families are already struggling with gigantic unemployment and loss of home equity. Clearly the taxpaying public along 600 miles of corridors feels the immediate, real financial cost of this project proposal is too high in light of the complete lack of tangible benefits for their communities and their counties.

A "no-project" decision should be rendered by the NEPA/CEQA Reviewers and confirmed by the California Public Utilities Commission (CPUC).

SECTION 2: SPECIFIC ENVIRONMENTAL IMPACTS

NORTH SEGMENT: Oak Run, Round Mountain and various Intermountain areas of Shasta County. For simplicity, our scoping comments follow the *Environmental Studies Scoping Information Handout* provided by TANC TTP.

After a review of the *2009 Record of Decision* for the West Wide Energy Corridors (WWEC) for BLM and USFS posted at http://corridoreis.anl.gov/ it is clear that all of the environmental issues addressed for public lands are equally important for private lands in California and must be covered in the same depth in the EIR/EIS for the TANC TTP.

Since TANK TTP would be crossing federal forest lands, they would be doing so under a forest plan modification made possible by that *Record of Decision* and are effectively already committed to meeting those standards. The draft EIR/EIS should reflect applicable findings, mitigation, standards and all optimal management practices for environmental impact mitigation contained in regional land management plans included in the *2009 Record of Decision* for the West Wide Energy Corridors.

Every underlying land owner where only an easement is purchased, should be entitled to have an equal or better standard of study, mitigation, monitoring and restoration included in their terms of easement as those terms described in (but not limited to) the recently published WWEC Record of Decision mentioned previously.

Therefore the following scoping comments include liberally paraphrased wording from those public and binding documents to create a list of concerns for the proposed TTP project. Many individual items have been added to address specific issues in the Oak Run, Round Mountain and Montgomery Creek in the TTP area identified as the NORTH SEGMENT. There may be additional concerns regarding specific points and property that may be brought to the attention of TANC at a later date.

It is especially important that the environmental issues identified below be specifically addressed in the EIR/EIS as they apply to the Cow Creek Watershed and the communities of Round Mountain, Montgomery Creek and Oak Run in Shasta County.

A detailed draft EIR/EIS response is requested.

A. AESTHETIC/VISUAL

In the existing transmission corridors, the most recent management practice is to clear all vegetation in the corridor. This has the visual effect of a 200 foot 70 miles long clear-cut in Shasta County. (There will be additional miles of forest clear cut through Lassen County.)

Existing 200 foot corridor cleared of oaks, near Round Mountain, May 2009

To help reviewers relate to the visual impact in Shasta County, a 200 foot wide corridor is 40 feet wider than a NFL football field (160 feet x 360 feet). There are 15 football fields per mile of line. 600 miles would be 8,800 football fields laid end to end. In Shasta County the project traverses 70 miles or 1050 football fields for this one line. There are already 8 Transmission line corridors in the Oak Run Area and that converts to roughly

8400 football fields in eastern Shasta County already devoted to transmission corridors. TANC TTP would add another 1050 football fields of visual impact.
Put this another way, there's 24 acres of land cleared per mile for a 200 foot wide corridor, times 70 miles = 1697 acres. Times 9 (the total number of corridors through Oak Run and eastern Shasta County = 15,273 acres or 24 square miles. While the figures may not be exact to the decimal point, it's pretty clear that transmission corridors, whether individual or cumulative have significant visual impacts in Shasta County. TANC TTP adds another 11% to corridor visual impacts.

In mountain communities much of the value to the present home owner is in view-shed, in trees and landscape beauty, in the quiet, in the variety of wildlife that is outside the window. People live in these intermountain environments and do without the amenities common to cities – reliable electricity, good roads, and community services. In exchange we get beauty, clean air, and no noise. When those values are lost then a significant portion of the 'market value' is lost as well. Oak Run properties will suffer substantial loss of value. Round Mountain property values will be completely devastated. How will that be mitigated?

Based on past history and current practices by utilities within the intermountain area, the resulting corridors are barren of as much vegetation as possible, and there is no mitigation of visual impacts. This level of impact is unacceptable.

DURING PROJECT PLANNING: Aesthetic/Visual

1. There is a high concentration of transmission corridors converging through Oak Run over several mountain ridges into the communities of Round Mountain and Montgomery Creek. Will TANC identify and consider visual resource management (VRM) and scenery management (SMS) issues early in the design process to facilitate integration of VRM and scenery treatments into the overall site development program and construction documents?

2. Will visual/scenery management considerations include environmental analyses, mitigation planning, and design for private lands? Will planning, construction and management be equal in level with the requirements for federal land management agency visual/scenery management policies and procedures?

3. The vegetation patterns in Oak Run and Round Mountain are distinctly different from those near Cottonwood and Anderson. Will visual management plans be developed for each vegetation type, watershed, sub-watershed and ridge as the vegetation changes type?

4. Will TANC's project team include an appropriately trained specialist, such as a landscape architect with demonstrated VRM and/or scenery management system (SMS) experience? Will the VRM/SMS specialist coordinate appropriate visual or scenic inventory data, VRM management class delineations, Scenic Integrity Objectives

(SIOs), and landowner expectations for preparing project plans and mitigation strategies related to scenery and/or visual resources?

5. Will visual and scenic mitigation planning/design and analysis be performed through integrated field assessment, applied global positioning system (GPS) technology, field photo documentation, use of computer-aided design and development software, 3-D modeling GIS software, and visual simulation software, as appropriate? Will proposed activities, projects, and site development plans be analyzed and further developed using these technologies to meet visual and scenic objectives for the project area and surrounding areas sufficient to provide the full context of the view-shed?

6. Will visual simulations be prepared similar to those of public lands outlined in BLM Handbook H-8432-1 and USFS to create spatially accurate depictions of the appearance of proposed facilities, as reflected in the 3-D design models?

7. Will simulations depict proposed project appearance from sensitive/scenic locations as well as more typical viewing locations? Will transmission towers, roads, substations and other aboveground infrastructure be integrated aesthetically with the surrounding landscape in order to minimize contrast with the natural environment?

8. Will TANC commit to providing the same level of regard for private lands as they are required to do to get their project across public lands?

9. Will TANC develop adequate terrain mapping on a landscape/view-shed scale for site planning/design, visual impact analysis, visual impact mitigation planning/design, and for full assessment and mitigation of cumulative visual impacts through applied, state-of-the-art design practices using the cited software systems?

10. Will the landscape/view-shed scale mapping be geo-referenced and at the same Digital Elevation Model (DEM) resolution and contour interval within the margin of error suitable for engineered site design? This level of mapping should enable proper placement of proposed developments into the digital view-shed context. Will final plans be available for public review through the EIR/EIS?

11. Will the full range of visual and scenic Best Management Practices or other optimal environmental impact mitigation practices as is commonly used in USDA NRCS (Natural Resources Conservation Service) stewardship and conservation management plans be considered, particularly as the bulk of the transmission corridors go through private land? Will TANC plans incorporate all pertinent best management/optimal practices which will then be explained in detail in the EIR/EIS?

12. Will visual and scenic resource monitoring and compliance strategies be included as a part of the project mitigation plans?

13. Will TANC include a plan for maintaining the visual aesthetics of the Transmission corridor, including methods, timing, and conditions in the Draft EIR/EIS?

14. Numerous of the existing corridors are lacking gates, fencing or signs along county roads. Are there 'attractive nuisance' issues associated with locating new towers particularly of different design in the Round Mountain area? What about towers located where the corridors intersects with local roads? Will TANC fence, gate and post along county roadways?

B. AGRICULTURAL RESOURCES/FORESTRY: SHASTA COUNTY

In TANK TTP in the NORTH SEGMENT, much of the lower elevation of North A and North B corridors alternatives are in rangeland changing into oak woodlands as elevation increases. At Bullskin Ridge above Oak Run, the vegetation changes to forest woodlands, mixtures of conifers and black oaks. Closer to Round Mountain vegetation type shifts into conifer-dominant forest lands.

It is important to understand that agricultural land is easily degraded when converted to nonagricultural uses. It is a resource that cannot be easily replaced. It is a non-renewable resource and once lost or degraded, may never be restored to its original quality. The continued existence of agriculture in Shasta County provides important localized self-sufficiency in food production.

Approximately 93.4 percent of the County farms are operated by individuals or families. About 95.3 percent of all farms are operated by either full or part owners. Part-time or second income farming is a significant land use in Shasta County.

The Fall River and Pit River valleys contain highly productive agricultural lands. The value of these lands is reflected to some degree by their enrollment in Williamson Act contracts. According to the Shasta County General Plan, there are 57 ranches in the "Intermountain Area" which total 42,282 acres enrolled in contract. This represents approximately 25 percent of the lands enrolled in contract throughout the County. The current primary uses of these agricultural lands are field crops, strawberry nursery stock, and irrigated pasture.

The County's largest mountain meadows, located above the 3,000-foot elevation in the northeast region of the County, include the Goose, Cayton, Burney Creek, and Hat Creek Valleys. These meadows are irrigated and are used for grazing and growing crops. About half of these lands are under Williamson Act contracts. Several key meadows are impacted by TANC TTP.

A significant portion of the NORTH SEGMENT, route NORTH A and NORTH B corridors traverse agricultural range land that is either in Williamson Act or that is under conservation easements. Additionally, there are several organic farmers in Round Mountain, native plant nurseries, farmers along the NORTH A and NORTH B corridors who will be severely impacted by the corridors as mapped.

High voltage power lines and organic farming is not a compatible use. It takes years to certify land as 'organic' and the acreage that will be impacted represent a desirable economic investment that Shasta County cannot afford to lose.

Detailed Farm statistics: http://www.nass.usda.gov/Census/Pull_Data_Census

1) Each county that is traversed by this 600 mile corridor will experience different agricultural impacts. Will TANC TTP determine impact of each corridor alternative on agriculture within each County down to the watershed scale?

2) How will TANC mitigate for corridors crossing Williamson Act and land held in conservation easements? Does a transmission corridor impact or invalidate a dedicated conservation easement? What about conservation easements that were purchased with State monies under legislated conservation programs?

3) How will TANC TTP mitigate for corridor impact to conservation practices implemented by farmers and ranchers under Resource Conservation District landowner stewardship contracts and USDA NRCS programs such as EQIP, WHIP, and conservation stewardship for agriculture and rangelands?

4) Will USDA NRCS conservation practices also known as Best Management Practices be adopted for TANC TTP mitigation when crossing range or agricultural lands?

5) Will TANC work with UC Cooperative Extension program specialists to study, and then develop mitigation plans and methods that really work for rangelands crossed by TANC TTP. Will there be milestones for implementation, and meaningful ongoing monitoring?

6) Will farmers and ranchers be compensated for their present and future financial losses stemming from the conversion of use from agriculture to transmission easement?

OAK WOODLAND IMPACTS

As the most biologically diverse communities in the state, oak woodland losses represent a serious threat to the future of California wildlife. Oak trees also play a vital role in maintaining clean drinking water supplies, sustaining the productivity of rangelands, and providing amenity values for millions of Californians.

In 2009 the existing corridor transmission companies are removing thousands of oaks, including blue oak and black oak within their easements. Adding another 200 foot wide corridor will significantly add to the loss of oaks through conversion. If the easements are wider, the impacts will be greater.

NORTH A and NORTH B are not acceptable. Both routes will cause extensive damage that cannot be mitigated. The cumulative effect of multiple corridors and their vegetation removal policies is simply too great in oak woodlands.

1. Will TANC study the impacts and mitigate for oak woodland destruction and conversion? Who will be held responsible for mitigation for Oak Woodland destruction?

2. How exactly will TANC meet each county's policy on Oak Woodland retention and provide mitigation for the loss of oaks removed from the corridors?

FORESTRY IMPACTS

Land use within the corridors will be severely impacted by TANC TTP. Clear cutting a 200 foot wide corridor in forest land is not the same as building a corridor in a flat open field. The clear cut devastation is the same as a natural disaster. This is a disaster 200 feet wide by 600 miles long, 70 miles of which are in Shasta County, and it's manmade. How will that be mitigated?

The forested private land within the corridors NORTH 1, 2, 3 and NORTH A and B in Shasta County fall under the *1973 Forest Practice Act*. The Act requires any private landowner wishing to cut trees have a Timber Harvest Plan (THP) prepared by a certified forester. A permit to harvest trees is only granted if the THP indicates no unacceptable environmental consequences will result from the project. Compliance with the *Forest Practice Act* and Board rules apply to all commercial harvesting operations for landowners of small parcels, to ranchers owning hundreds of acres, and large timber companies with thousands of acres.

In Shasta County, TANC will be clear cutting approximately 3 square miles of forested lands creating a corridor approximately the size of a 12 lane freeway free of treed vegetation. If they seek a *Utility Exemption*, they won't have to file a *Timber Harvest Plan*, exempting them from following many Forest Practice rules. There will be thousands more acres of forest lands clear cut in Lassen County.

Unlike a clear cut on private lands which will be replanted and re-grown for the future, TANC TTP is a large scale permanent removal of trees of all types. It is a permanent large-scale conversion of land use. Forest land is often unsuited for any other commercial use due to topography and soil types.

There are no 'use' options for forest land underneath a transmission system once converted. It's does not become 'habitat' when trees and sheltering shrubs are removed. Removal of forest trees on this large of scale fragments habitats, seriously impacts fragile forest soils, and generates soil transport into streams and lakes.

Corridors take productive forest acreage and create a permanent 'use' barrier. You can't grow a forest under the lines. Transmission corridors are noisy and intrusive. You can't build a home or outbuildings under a transmission line. The transmission corridors in forest lands have no compatible uses.

The TANC TTP creates a permanent adverse environmental impact to forest lands in Shasta and Lassen Counties of monumental proportions.

Transmission Corridor 200 feet wide or more, looking towards Round Mountain – Dense forest. What about summer fire risk with wind? Flame height in wild land fires is often 3 or more times the height of the forest. Fire temperatures can cause trees to burst into flames.

1. In the photo above, which is typical of the dense forest lands in the Round Mountain/Oak Run/Burney areas, tree heights equal or exceed the height of the transmission towers. Fire presents the gravest and highest risk to transmission lines. Forests and transmission lines are not compatible. How does TANC plan to mitigate for this known threat? Wouldn't it be better to locate this transmission investment in safer terrain?

2. Does TANC TTP plan to ask for a 'utility exemption for the project? If TANC is exempt from *Forest Practice Act* as a 'public utility', will the underlying landowner also be equally exempt from meeting the *Forest Practice Act* regulations for the easement portion of their property? Will TANC negotiate a 'safe harbor' agreement for all affected landowners with Cal-Fire?

3. How does TANC plan to retain the utility exemption for the life of the corridors? Does TANC plan to meet the regulations of the *Forest Practice Act* where possible? Should any utility practice such as corridor maintenance cause the utility to be disqualified for an exemption (now or in the future) on a particular parcel, would TANC provide and pay for a Timber Harvest Plan (THP) be prepared by California licensed Registered Professional Forester?

4. What would the relationship be between the utility holding the easement and the underlying landowner and the state regulatory agency should the Forest Practice Rules change and the utility lose its exemption status?

5. If no Timber Harvest Plan is required will TANC still hire a registered professional forester to oversee the design and construction of the towers and corridors within timber lands to minimize impact to adjacent forest resources, including timber, on private lands?

6. Numerous questions regarding the impact to the forest landowner are raised by reviewing the *Right of Way Exemption* Document at:
http://www.calfire.net/resource_mgt/downloads/PublicAgency_PublicAndPrivateUtilityRightOfWayExemption12_2008.pdf

"Harvesting of trees in order to construct or maintain a right of way by a public agency, public or private utility that is exempt from the requirements to obtain a Timberland Conversion Permit or file a Timber Harvesting Plan. **This notice is not required nor should it be submitted if timber is not sold, bartered or traded for commercial purposes by the timber owner."**

What exactly is TANC planning to do with the timber, trees and brush cut down for the corridors? Will the cutting of timber in a TANC easement require the Timber owner to pay yield taxes for timber harvested? Who is the Timber Owner? Will it be TANC?

"Public Resources Code (PRC) Section 4628 and California Code of Regulations (CCR) Title 14 Section 1104.1(b) exempt public agencies from the requirement to file an application for timberland conversion (TLC) or a timber harvesting plan (THP) when they construct or maintain rights of way on their own property or that of another public agency. This exemption extends to easements over lands owned in fee by private parties. This exemption is not available for rights of way granted from one private landowner to another.

If the harvested trees are sold, bartered or traded for commercial purposes a timber operation has occurred per PRC Section 4527, and a notice of exemption is required to be filed by the timber owner. This is true if the timber is owned by the public agency, sold or given by the agency to another party, or the timber is owned by a private landowner subject to a public agency easement. A licensed timber operator is required in order to remove the harvested trees from the property. If the harvested trees are not sold, bartered or traded for commercial purposes, a notice of exemption is not required. The timber owner is responsible to pay all yield taxes for timber harvested. Timber yield tax information can be obtained from the State Board of Equalization, P.O. Box 94979, Sacramento, California 94279-0001."

7. Since by law the wood can't be sold, bartered, traded (or used for biomass) without a Timber Harvest Plan, just exactly what does TANC plan to do with all trees they cut

down for corridor clearance? How will TANC compensate the landowner for present and future loss since no trees of merchantable type or size will be allowed to grow within the corridor or sold for profit without a Timber Harvest Plan?

8. If large trees and woody debris is left lying within the corridor (because it can't be sold, bartered, traded), it presents a real risk of insect infestation that could then threaten the health of any surrounding forest lands. How does TANC plan to mitigate for the threat of insects in corridor debris to the non-corridor environment? Certainly this is a known problem in other corridors, how will TANC's management plan differ?

9. There are a number of requirements that the utility may be required to meet now, or at some future date to comply with the *Forest Practices Act* in regards to inventory of sensitive plant and animal species, habitat provisions, protection of archeology sites, etc. Will the TANC TTP draft EIR contain provisions to address that concern? Reference: CA Forest Practice Act: http://www.fire.ca.gov/resource_mgt/resource_mgt_forestpractice.php

10) Will USDA NRCS conservation practices also known as Best Management Practices be adopted for TANC TTP mitigation when crossing forest lands or rangeland in woodland areas? What about Cal-Fire forestry recommendations?

11) Will TANC TTP be working closely with UC Cooperative Extension Forestry specialists from the Redding Office to plan mitigation methods, milestones, and monitoring for corridors in forest lands, rangeland and oak woodland areas?

12) Will TANC TTP be working closely with Western Shasta Resource Conservation District and the Cow Creek Watershed Group to plan mitigation methods, milestones, and monitoring for corridors in forest lands, rangeland and oak woodland areas?

13) Will TANC work closely with Resource Conservation Districts and Watershed Groups in the other counties crossed by TANC TTP in planning, mitigation and monitoring?

14) TANC TTP corridors will involve clear cutting thousands of acres of forest lands. TANC needs to protect all forest assets. Will project area habitat features within the forest landscape (e.g., forest openings, rock outcrops, wetlands, vernal pools, and serpentine substrates), be mapped, mitigated and monitored?

15) The fact that TANC TTP will likely seek a 'utility exemption' from filing a Timber Harvest Plan, does not nullify the responsibility of TANC TTP to protect rare plants and endangered species within corridors. Will they study, identify, monitor and mitigate impacts to rare plants and endangered species for each property?

Will TANC TTP follow the guidelines in the document *"Conservation of Sensitive Native Plant Resources Within the Timber Harvest Review Process and During Timber Harvesting Operations"*? The document clearly states the guidelines are not mandatory, but is an

excellent guide to protecting sensitive plant species in forest lands and following such a guide might prevent project delays that could be caused by inadequate biological information.
http://www.dfg.ca.gov/biogeodata/cnddb/pdfs/THP_BotanicalGuidelines_July2005.pdf

C. AIR QUALITY

Air Quality impacts center primarily around the construction phase of TANC TTP. Dust and particulates created by soil disturbing activities are extremely irritating to the lungs of older residents and anyone with respiratory disorders. There may also be particulate issues of importance to California Air Resources Board.

Many people live in Shasta County specifically because the air quality is better at higher elevations allowing them to breathe easier. TANC TTP needs to address their concerns about dusts and particulates.

1. Shall dust abatement techniques (e.g., water spraying) be used by TANC on unpaved, unvegetated surfaces to minimize airborne dust? How will water for dust abatement be obtained and how will it be used by TANC under the appropriate state water use permitting system? Please confirm that used oil will not be used by TANC or any subcontractor for dust abatement on private lands.

2. Will advance notification be given to landowners so that precautions may be taken to protect our older residents from dust related health problems? How will they be notified and how far in advance of the event?

3. Will landowners receive information on how to contact the on-site project supervisor should an air quality problem arise?

4. If any PM-10 or other particulate issues occur will TANC comply with the California Air Resources Board for Shasta County? Who will acquire necessary permits? How will TANC TTP monitor Air Quality during construction? Will they obtain ‘safe-harbor’ agreements from the California Air Resources Board for land owners for air quality impacts during both construction and future corridor maintenance activities?

D. BIOLOGICAL RESOURCES

1. HABITAT IMPACTS

The sheer size and length of the TANC TTP raises numerous questions about impacts on biological resources. The project plans an overhead transmission corridor system running through California’s forests, range and agricultural lands involving the space equivalent to a 12 lane freeway. That’s a 600 mile low standard, 12 lane ‘roadway’ for power. Now multiply that space by the 8 existing 200 foot Transmission corridors in eastern Shasta County for cumulative impacts.

The TANC TTP traverses multi-source wildlife habitats. Maps are at:
http://www.frap.fire.ca.gov/data/frapgismaps/download.asp

It is clear from the maps for Shasta and Lassen Counties that detailed study will be needed for each wildlife habitat type. TANC TTP cannot be 'grandfathered' in – the impacts the TANC TTP need to be studied both in direct impacts and cumulative impacts with existing corridors.

By 1998, Shasta County's list of endangered and threatened species lists 20 animals and 3 plant species. Seven species are classified as endangered and another eight are classified as threatened. There are also 13 species in the County which the Department of Fish and Game (DFG) has designated as "Species of Special Concern". Six threatened or endangered species found in the Pit River Watershed are birds. These species include the greater sandhill crane, American peregrine falcon, bald eagle, Swainson's hawk, bank swallow, and northern spotted owl. In addition, one aquatic invertebrate—the Shasta crayfish—is state and federally listed as endangered.

Historically, two state threatened mammals have occurred in the various Shasta watersheds, the Sierra Nevada red fox and California wolverine. The current distribution of these species in California, however, is not well known because they are difficult to locate when they occur in low numbers.

The many rivers, creeks, and lakes in Shasta County provide habitat for numerous fish species. The Fall River and Pit River support large populations of rainbow and brown trout, as do Burney, Hat, and Lava Creeks, and Baum, Crystal, and Eastman Lakes. The Sacramento River is famous for its large salmon and steelhead fisheries, plus excellent trout fisheries. However, these anadromous fisheries have been the subject of significantly-reduced numbers during recent decades. Other important game fish species found in Shasta County waters include black bass, crappie, blue gill, and catfish.

The DFG's California Wildlife Habitat Relationships System (WHR) identified that 120 species find medium or high quality reproductive habitat in sierran mixed confer in Shasta County.

Important wildlife habitats in Shasta County include ten deer winter ranges which support migratory deer herds as well as other associated flora and fauna species; a key oak-woodland habitat in the Oak Run-Whitmore area; numerous riparian (streamside) communities; and wetland habitats associated with Big Lake, Fall River, and the Sacramento River corridor in the Sacramento Valley.

For supporting data, see various sections of Shasta County General Plan:
http://www.co.shasta.ca.us/departments/Resourcemgmt/drm/general_plan.htm

Critical wildlife resources are found in Shasta County. Bald eagles nest near Shasta Lake, Lake Britton, and along the Pit River. Shasta salamanders inhabit limestone formations in Shasta County. Several habitat areas for the Northern Spotted Owl are identified in timbered areas in Shasta County. Western Pond Turtles are often found in the Oak Run area. There are numerous locations of vernal pool areas in the Cow Creek watershed.

The Fall River-Big Lake Wetlands supports numerous springs which eventually give rise to Big Lake, Tule River, and Little Tule River, all of which converge to form Fall River. These waterways are lined with riparian vegetation intermixed with meadows and lowland marshes, creating an excellent fish and wildlife habitat.

The Fall River Valley itself is Shasta County's most important waterfowl nesting area, providing habitat for over 400 pair of ducks and 135 pair of Canadian Geese annually. Approximately 88 bird species and 67 mammalian species have been identified in this region, and the Fall River itself has been rated as one of the best trout rivers in California, primarily due to exceptional water quality conditions. This region is home to various fish, waterfowl, including ducks, osprey, pelicans, geese, eagles and many species of other birds, deer, elk, bear, mountain lions, fox, beaver, muskrats and many rodents. The Cassel area is particularly known for its beauty and serenity. Hat Creek is famous for fishing.

For supporting data see various sections of Shasta County General Plan:
http://www.co.shasta.ca.us/departments/Resourcemgmt/drm/pdf/67fish.pdf

TANC corridor will go directly over the Crystal Lake Fish Hatchery and hit the edge of Baum and Crystal Lake, which are among the most popular tourist sites and fishing sites in California. The Hatchery produces up to 200,000 Eagle Lake Trout. They are the only hatchery that services Eagle Lake (near Susanville), also a major tourist and fishing spot. It also produces Brook Trout and Pit River Rainbow Trout for major fishing areas in the intermountain area. The Hatchery, plus Baum and Crystal Lakes are a major tourist spot which affects the economy in Cassel, Burney, Fall River, and McArthur. This is already an economically distressed area and this project would put extra stress upon the businesses in the Intermountain area. This would cause an economical, ecological, and emotional hardship for the people in this area if this fisheries resource is destroyed.

The Cow Creek Watershed, which includes the Round Mountain and Oak Run areas, encompasses approximately 430 square miles and drains the base and foothills of Mt. Lassen in a southwest direction into the Sacramento River. The basin area is roughly bordered by Highway 299 to the north, Highway 44 to the south, and Highway 89 to the east. It provides habitat for the federally listed spring run Chinook salmon and steelhead trout, fall-run and late-fall-run Chinook salmon, and steelhead and other native fish. Currently water quality parameters are identified as being at levels of concern and should be monitored to identify more specific problems related to salmon fishery habitat. Some supporting documentation:

http://wwwsacriver.org/documents/watershed/**cowcreek**/mgmtplan/**Cow_Creek**_WSMngmtPlan_andAppndx_Mar05.pdf

Extensive federal, state and local funds have been expended in the Cow Creek Watershed as well as adjacent watershed for salmon fisheries restoration, wildlife, fire safety, forestry improvement, oak habitat management, soils and sediment management and other environmental issues that must be identified and protected by the EIR/EIS.

The Northeast Shasta Planning Area also supports populations of the Southern bald eagle and the American osprey. The osprey has been federally designated as a sensitive species. Large concentrations of osprey nests are located in the northeast region of the planning area surrounding Ahjumawi Lava Springs State Park. Wolverines have also been sighted in the vicinity of Pit River woodland and in the southwest corner of the planning area. Most of these areas will be impacted by one or more of the corridor alternatives.

Studies of wildlife movement have traditionally focused on long-distance travelers, such as migratory birds and fish. However, biologists are accumulating evidence which suggests that much of our remaining wildlife population is being trapped within what amounts to a collection of habitat islands, cut off from migration routes and historic range patterns by roads, fences, dams, buildings, agricultural fields, clear-cut, and other human activities.

Each additional TANC corridor increases the “island” effect. Recognition of this "island" effect is one of the principles used to define areas for migratory deer herds in the Shasta County General Plan. Avoidance of habitat fragmentation and isolation needs to be recognized and expanded to include other habitat planning efforts, as well. All of the TANC TTP corridors proposed and the vegetative management practices currently being used within utility corridors will greatly increase habitat fragmentation.
For supporting data see various sections of Shasta County General Plan:
http://www.co.shasta.ca.us/departments/Resourcemgmt/drm/pdf/67fish.pdf

Using available maps and online materials, (which do not give the depth of detail needed for an EIR), it’s still clear that the whole intermountain region is a valuable and vital state resource for wildlife and fisheries.

These vital biological resources will be severely impacted by the TANC TTP. It may be that the region is attractive to the utility consortium due to the relatively low human population. The resident human population makes special efforts to maintain wildlife habitat and recreational opportunities that form the economic basis for Shasta County.

In general, any disruption of watercourse ecosystems will reduce the habitat diversity of the surrounding region. Cumulative impacts such as those likely to be generated by the TANC TTP can have serious adverse impacts on water resources not only of Shasta County but of the entire Sacramento River basin as well. The trade-off between power to a limited number of metropolitan areas and water for millions is not an equal one.

According to *California Rivers Assessment* there are at least 15 special status species in Lower Cow Creek-Lower Clear Creek sub-watershed of the Sacramento Basin. There are 10 special status species in Upper Cow-Battle Creek. Within the sub-watersheds there are also 18 plants designated as 'rare' by Cal-flora. Supporting documentation: http://www.ice.ucdavis.edu/newcara/

While there is no exact agreement on how many rare, endangered, threatened or special status species there are in Shasta County, it is clear that the wildlife population and fisheries are placed at an increasing risk with each new transmission project. The cumulative impacts of large-scale transmission corridors are both predictable and preventable. To preserve species habitat and prevent irreversible impacts, halt the project.

DURING PLANNING: BIOLOGICAL RESOURCES ISSUES

1. Will TANC employ a wildlife biologist, a fisheries biologist, and a botanist to identify sensitive plants and animal species on each property within the corridor? If not on each parcel then on what scale will such a plant and animal inventory be performed? Will TANC work closely with and confer with all Wildlife Agencies in the project area?

2. What about timing of field studies? Spring is when the vernal pools show up, and a number of springs actually appear in late spring. Certain streams run above ground for large stretches, go under ground, then reappear above ground. Will time of year studies are done be considered important for mountain regions?

3. Will TANC have a full time biologist doing mitigation planning for all biological concerns?

4. Will TANC develop mitigation plans to handle disturbance to wildlife as well as damage to sensitive plants? What about habitat fragmentation? Will TANC work closely with and confer with the Army Corp in the project area regarding any streambed alterations that might occur?

5. Will TANC obtain 'Safe Harbor' agreements in advance of the project with federal and state resource agencies to protect the underlying landowner from fines or penalties for species impairment or accidental 'take' resulting from the TANC project?

SAFE HARBOR is an important issue since certain California resources regulatory agencies are now considering penalties against underlying land owners within Shasta County for problems relating to utility corridor maintenance over which the landowner has no direct control. Please address this concern in the EIR/EIS. The only means we know of mitigating for this concern is either some sort of 'safe harbor' agreement or a Memorandum of Understanding spelling things out.

6. The new corridor(s) will significantly fragment habitat with roads, brush and habitat removal through watersheds that drain into the Sacramento River. Will TANC do a comprehensive biological study to indicate exactly where, what type and what pressures there are on sensitive species, including the cumulative effects? Such a study should include precise locations, counts, and be biologically defensible.

7. Will they develop a mitigation plan from such studies that include measurable goals and objectives for the life of the corridor system? Will TANC work closely with and confer with the NRCS office in each region of the project area?

8. Will TANC TTP be working closely with UC Cooperative Extension Forestry specialists from the Redding Office to plan mitigation methods, milestones, and monitoring for corridors to protect biological assets within Shasta County?

9. Will TANC TTP be working closely with Western Shasta Resource Conservation District and the Cow Creek Watershed Group and other watershed groups or CRMPs to plan mitigation methods, milestones, and monitoring for corridors to protect biological assets within Cow Creek Watershed and any other watershed within their project area?

10. How will raptors using the towers for hunting be protected? Bald eagles also have used local towers for nesting. Additionally, raptors using cleared corridors for hunting can put unexpectedly high hunting pressure on sensitive prey species like garter snakes, Shasta salamanders, as the wide cleared corridors make it hard for certain species to find enough cover to cross the cleared area to safer habitat.

11. The corridor width and habitat fragmentation may cut some species off from customary water supplies, again causing predators to take a higher amount of prey than in the past. How does TANC propose to address, study, mitigate and monitor this shift of balance between predator and prey?

12. Cow Creek Watershed Group has extensive conservation projects both completed and planned within the watershed. How the TANC TTP will prevent impacting these ongoing, planned or completed projects?

DURING CONSTRUCTION: BIOLOGICAL RESOURCES ISSUES

1. Will TANC review existing information regarding plant and animal species and their habitats in the vicinity of the project area and identify potential impacts to the applicable agencies? How will mitigation effectiveness be measured? How often will impacts be monitored?

2. Depending on what types of brush removal is planned for corridor construction and maintenance, each corridor, both existing and future, may represent an actual threat to wildlife populations and health through vegetation management planned for the corridor.

How will TANC mitigate for the cumulative wildlife impacts to which their project will contribute?

3. Will TANC Project staff, contractors and subcontractors, avoid harassment or disturbance of wildlife, especially during reproductive courtship, migratory, and nesting seasons? Who will monitor this? Will there be a means to report repercussions of construction activities?

4. How will TANC handle potential wildlife problems, including wildlife mortality during construction? Who will monitor?

5. What about risk to personnel? Throughout Oak Run and Round Mountain there is a history of mountain lion problems and bear problems in human interaction. Will TANC train their workforce on how to handle encounters with wildlife, particularly large predators?

6. What about rattle snakes? Construction activities force snakes to move. Since there are homes and families living in the corridor zones, what methodology will TANC employ to reduce the movement of snakes from the construction zone into human habitation areas? This does represent a serious threat to the people living here. Snake disturbance is not a good thing. Plus there is the risk to construction personnel. Will they be instructed as to safety requirements of working in rattlesnake snake habitat? Will there be emergency procedures for both TANC staff and adjacent residents?
See: http://www.ipm.ucdavis.edu/PMG/PESTNOTES/pn74119.html

7. There is a very real concern that construction of the corridors and the associated vegetation clearance will shift large mammal predators from their normal living patterns into more confrontations with local residents. In particular, bears and mountain lions may begin to kill livestock, pets and stalk children and older residents similar to what happens after wild fires. How will TANC mitigate for this possibility?

8. Invasive species: Nonnative flora and fauna can cause significant changes to ecosystems, upset the ecological balance, and cause economic harm. Those plant species that are likely to harm the environment, human health, or economy are of particular concern.

Transmission corridors provide opportunities for the movement of invasive species through the landscape. Invasive plant or animal species can move on utility maintenance vehicles and in the loads they carry. Invasive plants can be moved from site to site during spraying and mowing operations of corridor maintenance. Weed seed can be inadvertently introduced into the corridor during construction on equipment and through the use of mulch, imported soil or gravel, and sod. Some invasive plant species might be deliberately planted in erosion control, landscape, or wildflower projects.

Concerns are illustrated in legislation:
Executive Order 13112 on Invasive Species

http://www.fhwa.dot.gov/environment/020399em.htm
National Invasive Species management Plan
http://www.invasivespecies.gov/council/nmp.shtml
Noxious Weed Control and Eradication Act
http://frwebgate.access.gpo.gov/cgi-bin/getdoc.cgi?dbname=108_cong_public_laws&docid=f:publ412.108.pdf

Will TANC prepare a comprehensive invasive weed management plan for each vegetation type within the length of the corridor? Will TANC implement a weed management plan during construction and maintain a measurable level of effort to keep the corridor free of invasive plant species during maintenance activities. How might the effectiveness of a weed management plan be measured?

9. Will TANC have a full time biologist doing construction monitoring of all biological concerns?

10. Woody debris, downed and dead trees are prime sources for insect outbreaks such as bark beetles that harm forest resources. How will TANC prevent such an outbreak? There is often an incidental buildup or rodents in woody debris. How will this impact be mitigated and monitored?

POST CONSTRUCTION

1. Will TANC develop an ongoing maintenance plan that minimizes aforementioned biological impacts that regular maintenance of the substation/corridor system might exacerbate?

2. Will they include ways and means of controlling undesirable invasive plants for the long term? Who and how would that be monitored? What would be considered effective?

3. Will TANC mitigation plans be adapted over time? How will the effectiveness of biological resource mitigation be measured and by whom?

4. Will TANC have a full time biologist doing post construction monitoring of all biological concerns?

E. CULTURAL RESOURCES

There are serious tribal concerns regarding the potential impacts of TANC TTP on cultural and land resources of Tribes within the project area. TANC representatives are encouraged to meet with all tribal councils within the general area of their project proposal.

Utility projects crossing tribal lands produce inter-government treaty issues. The process of easement acquisition is entirely different than dealing with federal, state or county governments. Make no assumptions. Each tribe governs independently from any other. TANC TTP may find it exceedingly difficult to use eminent domain to gain easements on tribal land.

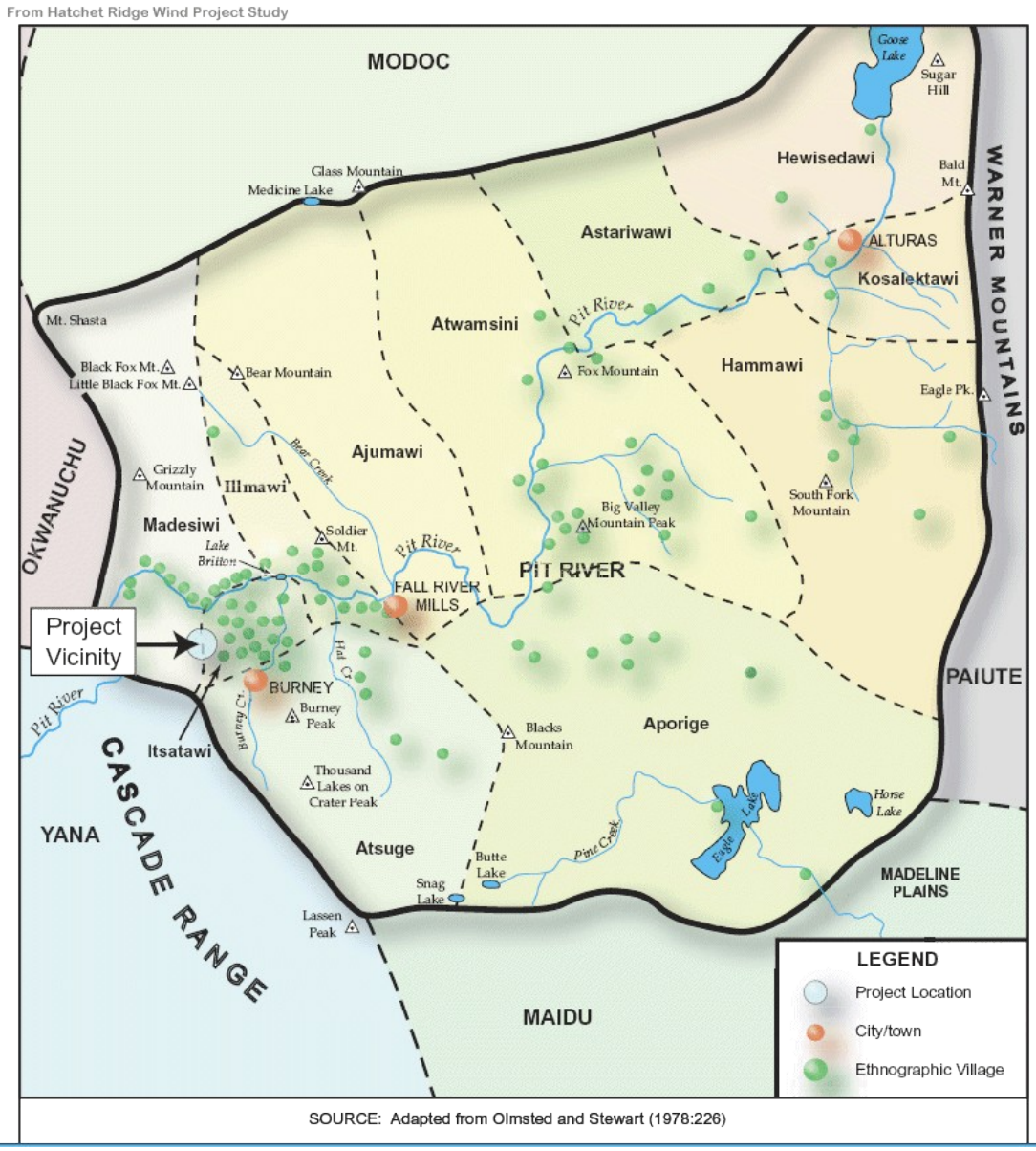
TANC TTP and various agency reviewers may also be unfamiliar with the tribal land allotment system because it is less common outside of California. In addition to multiple tribal governments within each county, there also exists a patchwork of public domain allotments of variable size. The allotment system within California is a 'held in trust' situation with the Bureau of Indian Affairs. It is extremely time consuming (as in years) for a utility to acquire an easement on 'public domain allotments' and the mitigation requirements can be stiff. TANC may want to re-locate any corridor that crosses such properties.

It may be extremely difficult to obtain consent for an easement from all the legal owners of any for individual tribal allotment. Allotments held 'in trust' are unlikely to be subject to eminent domain proceedings as they are federal in nature and involve treaty considerations. Certainly identifying all allotments in the route paths should be done very early in the Draft EIR/EIS process.

Sacred land sites are often matters of tribal secrecy. It may be difficult for TANC to learn where sacred sites actually are in order to develop any sort of mitigation plan. On private land, property owners may be equally loathe to disclose any historic Indian sites to protect such sites from casual digging for pots or artifacts.

"The Cow Creek Basin has a rich cultural history. The region was used extensively by indigenous peoples, most recently the Yana tribes, up to the late 1880s (Allen 1979, 1984). European-American settlers, attracted by the gold extraction activities based in various parts of Shasta County, established the first community in the Millville area of Cow Creek in 1853. The mid-elevation reaches of South Cow Creek were settled as early as 1855 (SWRB 1965). By 1863 the settlement called Tamarack (now called Whitmore in honor of one of its founders) was established and steadily grew into a small trade center."
http://www.fws.gov/stockton/afrp/documents/cowcrkrpt.pdf

There are numerous undocumented archeology sites on private lands throughout the Oak Run and Round Mountain geographic areas. Nearly every stream has one or more artifact locations.



An illustration of the tribal complexities of Pit River from the Hatchet Ridge Wind Project Study

1. Will TANC TTP be willing to move routes to meet tribal objectives and concerns? Will they have a Tribal representative from each impacted tribal group for study, planning, mitigation and monitoring? Will they have a protocol for dealing with archeological sites discovered on private lands during construction?

PALEONTOLOGY

There may be paleontological resources on both public lands and private lands within the TANC TTP planned corridors. Public lands would be covered by federal land management plans and procedures. A similar level of attention to detail is justified on private lands, since TANC will have to agree to federal requirements in order to cross public lands.

1. Will TANC conduct an initial scoping assessment to determine whether construction activities would disturb formations that may contain important paleontological resources on private lands? Potential impacts to significant paleontological resources should be avoided by moving or rerouting the site of construction or removing or reducing the need for surface disturbance. When avoidance is not possible, will mitigation plans be prepared to identify physical and administrative protective measures and protocols such as halting work, to be implemented in the event of fossil discoveries? Will the scoping assessment and mitigation plan be conducted in accordance with the California's fossil management practices and policies?

2. If significant paleontological resources are known to be present in the project area, or if areas with a high potential to contain paleontological material have been identified during route surveys, then is TANC prepared to execute a paleontological resources management and mitigation plan? If adverse impacts to paleontological resources cannot be avoided or mitigated within the designated corridors, will TANC consider alternative development routes to avoid, minimize, or mitigate adverse effects?

3. Has a protocol for unexpected discoveries of significant paleontological resources been developed?

F. ELECTRIC AND MAGENTIC FIELDS

There is a high probability of a substantial increase in Electric and Magnetic Field impacts with the addition of a second substation in Round Mountain and 3 more high voltage transmission corridors. The cumulative impact of 12 high voltage corridors surrounding such a small geographic community could be significant.

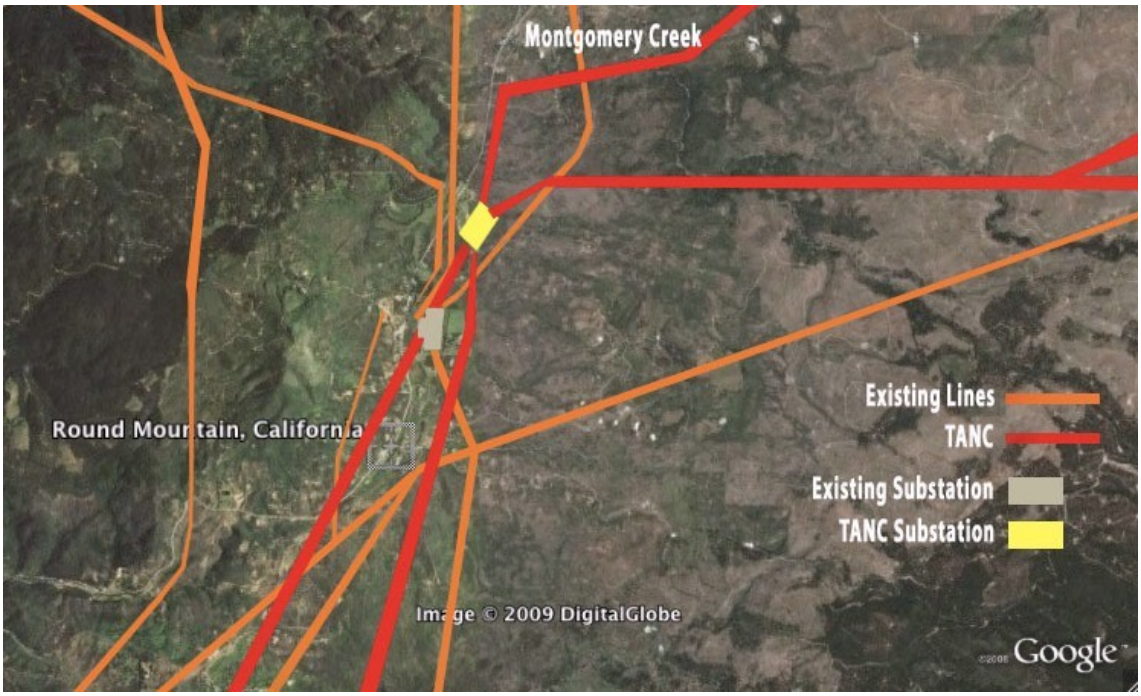
Scientific data is not definitive, but it is suggestive regarding the risk of high voltage EMF. There are enough substantive studies to legitimize the public's concern about EMF, particularly in Round Mountain where the concentration of corridors is so high.

Resident with children living on or adjacent to corridors and substations are naturally concerned about the following information from:
http://www.physorg.com/news107180850.html

A study in the Internal Medicine Journal stated, "Researchers from the University of Tasmania and Britain's Bristol University looked at a database of 850 patients in Tasmania diagnosed with lymphatic and bone marrow cancers between 1972 and 1980, and found that living for a prolonged period near high-voltage power lines may increase the risk of leukemia, lymphoma and related conditions later in life."

"Those who lived within 328 yards of a power line up to age 5 were five times more likely to develop cancer, while those who lived that close to a power line at any point during their first 15 years were three times more likely to develop cancer as an adult, the newspaper said."

While the evidence of detrimental long-term health effects isn't considered conclusive, the guidelines for limiting exposure to EMF are based on possible short-term effects rather than longer-term disease risks such as cancer.



Composite using Google maps illustrating existing and proposed TANC transmission systems

The question becomes whether locating the TANC substation in Round Mountain is really worth the health risk to the local population. Surely there are other possible alternative substation locations that should be examined in the DEIS. Round Mountain cannot be the only possible substation location for a project 600 miles long.

It's a fact that the closer you get to Round Mountain, the more concentrated and overlapping of the magnetic fields. It raises the question of whether TANC will be using the highest technology, building techniques and materials that are known to minimize EMF.

1. Do they propose to minimize EMF? Should an increase in EMF be determined will they develop mitigation measures to protect public health?

2. What studies does TANC plan to do in Round Mountain to monitor the cumulative effects of the combination of the high voltage lines and 2 substations? Will TANC work with the other Transmission line utilities to do a combined study?

3. What about the cumulative impact of adding even more transmission lines and facilities in the future? PG&E has announced plans to upgrade their entire transmission system to a higher voltage line. The EMF load that currently exists may be significantly increased if both projects are built. Yet it is likely that each power project will only

identify their own proposal's EMF as though none other were present. This is not in the public's best interest. Will the cumulative effects be considered in the TANC TTP draft EIR/EIS?

4. Will TANC be using the most current technology to prevent EMF leakage throughout the system?

G. ENVIRONMENTAL JUSTICE

Environmental Justice Impacts was a topic noticeably absent from the scoping meeting presentations and discussions. However, the families living in the intermountain communities, those with homes and businesses within the study corridors consider this to be a priority issue.

"Environmental Justice is the fair treatment and meaningful involvement of all people regardless of race, color, national origin, or income with respect to the development, implementation, and enforcement of environmental laws, regulations, and policies. EPA has this goal for all communities and persons across this Nation. It will be achieved when everyone enjoys the same degree of protection from environmental and health hazards and equal access to the decision-making process to have a healthy environment in which to live, learn, and work."
http://www.epa.gov/oecaerth/environmentaljustice/

Environmental Justice raises a significant number of critical questions that need to be addressed in the Draft EIR/EIS. TANC TTP representatives have told the Round Mountain and Oak Run community members who have attended scoping meetings in other areas that the project will absolutely be built, that there are no alternatives to building a substation in Round Mountain, and that they have no options except to submit. If Round Mountain has no options then neither does Oak Run. How will TANC address this lack of options and mitigate the adverse impacts on the communities?

1. Environmental Justice for Oak Run and Round Mountain?

The scale with which impacts must be measured in a community should be relevant to the population density. Many of the intermountain communities are Census Designated Places (CPD). A CDP is delineated for each decennial census as the statistical counterparts of an incorporated community. CDP's are communities that lack separate municipal government, but which otherwise physically resemble incorporated places. CDP's are delineated to provide data for settled concentrations of population that are identifiable by name.

In Shasta County, the town of Round Mountain is Census Designated Place (CDP). It is an intermountain community with a current population of approximately 400 residents. The average income is around $22,272. According to the most recent statistics, their Median household income is significantly below state average. Unemployed

percentages are significantly above state average. The median age is above state average.

TANC TTP imposes disproportionately high adverse effects upon several of the intermountain communities, but the impact on Round Mountain is surely the highest.

About 28% of the Round Mountain population is below the poverty level or about twice the state average. About 84% of the residents are Caucasian, 13% American Indian, and a small percentage are Hispanic. This represents a significant population of tribal people within this small community.

The Oak Run community is statistically similar to Round Mountain as are the other intermountain communities like Burney and Cassel.
http://www.city-data.com/poverty/poverty-Round-Mountain-California.html

Residents of Round Mountain, Montgomery Creek and Oak Run, may be poor in worldly goods, and but they are strong of character and care deeply about our environment. Our families and friends are our wealth. Our environment is our 'wealth' in the intermountain area and great efforts are made to preserve and protect it.

In the Oak Run and Round Mountain areas of Shasta County, many of our mountain homes are off-grid and create power for residential use by solar, wind and generator. These communities value renewable energy and self-sufficiency. Residents also value the visual beauty, the abundant wildlife, the streams and springs, our vernal pool areas, the solitude and the remoteness.

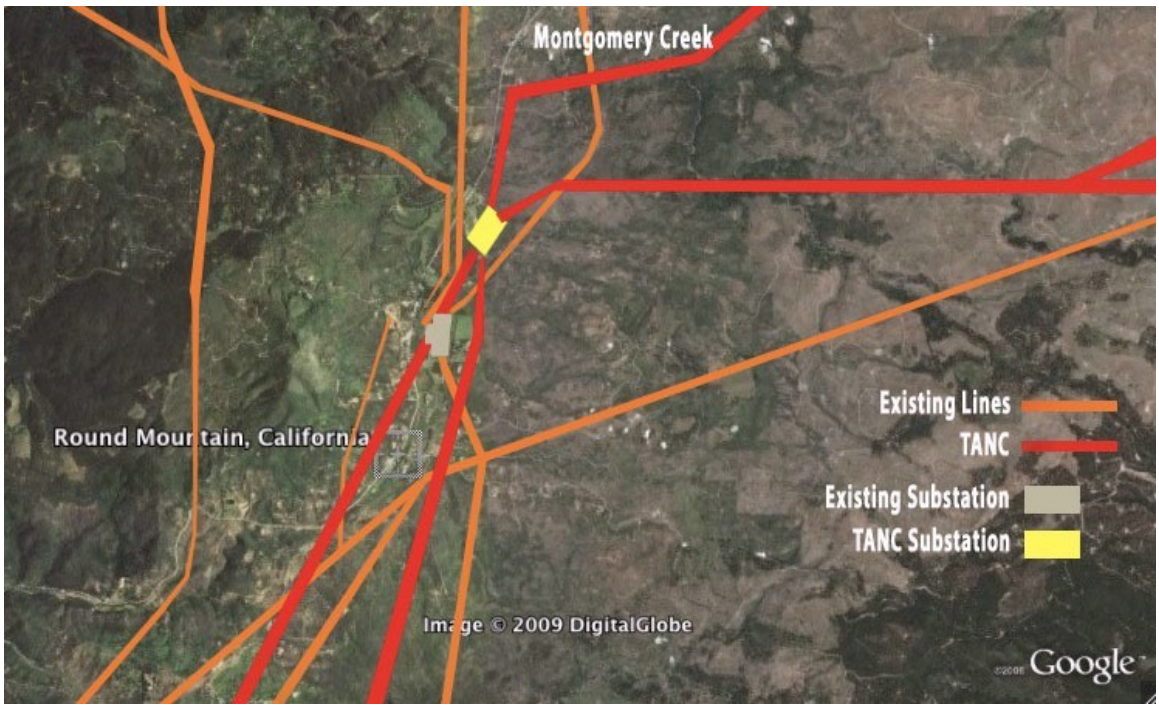
Estimated location of existing transmission lines and 1000'study corridors near Oak Run
Composite using TANC Google maps

Roughly 25 percent of the population of Oak Run has a corridor running across their property. Add another corridor and that increase to at least 35 percent. Based on local information, if you count the adjacent home owners as 'impacted', an estimated 45 percent (or more) of Oak Run residents either have a corridor crossing some portion of their property or live next to one. These are not inflated numbers. This is the level of impact based upon the recent TANC-mailed notifications and local polls.

In Round Mountain and neighboring Montgomery Creek, the cumulative impacts of the transmission corridor system are even greater. An estimated 50 percent of the residents already have a high voltage transmission corridor crossing their property.

Adding one new corridor from Round Mountain to Oak Run and possibly two new corridors from Burney to Round Mountain will increase the homeowners impacted to 80 percent or higher within each community. Additional impact is felt by residents living near each community.

If TANC TTP is constructed, nearly everyone living in Round Mountain will either have a corridor crossing their land or live next to one. Again, these are not inflated numbers. This is the level of impact based on local polls. Impacting nearly all of a community, even if it is 'unincorporated' is simply an unacceptable level of adverse impact. Round Mountain cannot survive any more corridors or substations. Oak Run would be severely and adversely impacted as well. Other Shasta County communities such as Cassel and Hat creek would experience similar adverse environmental impacts.



Composite using Google maps showing existing transmission lines and TANC TTP

This project creates a huge environmental inequity. The EIR/EIS review team must consider the severe cumulative impacts a new transmission corridor system imposes and the impacts additional power projects may have on these communities.

Statistics about income averages and demographics don't describe the close-knit daily life of communities like Round Mountain, Oak Run and the intermountain network of little pockets of people.

The wealth of Shasta County is its people. Think of the mountains as a human habitat. Certain types of people are attracted to the solitude, the isolation, the lack of services, and need to coexist with wildlife. These permanent residents are conservationists and stewards of the land they dwell upon. They are themselves a valuable resource worth protection. In a real sense they are an 'endangered' species'.

Visitors to Shasta County seeks the same qualities - the solitude, the isolation, the small town lifestyles and they play in flowing streams, see tall trees, photograph all sorts of wildlife. Shasta County is a valuable 'open space' resource for the rest of California. Our lakes, rivers, streams, our salmon, trout, bass, our forests, bald eagles, deer and elk all are valuable to visitors from other parts of California and the world.

Mountain communities are tied to the land even more than the wildlife they so value. The love the land, they need the attributes of rural life to survive. They don't do well in cities. That's why they are here. To disrupt the lives of the families of the intermountain area is the same as disrupting the lives of any other endangered species. Society really cannot afford to lose these people. People who live in such close connection to the land are an extremely valuable resource in an era where most of our population has limited experience in frugal living, working with the land, or living in close proximity to wildlife.

Residents in these communities are deeply connected. In emergencies they rally around one another. They may be isolated geographically but they, like all intermountain communities maintain strong neighbor-to-neighbor connections. Volunteerism is how they get things done in areas where there are no counterparts to community services commonly available in cities.

For example, when we experience wild land fire, anyone with a scanner starts alerting their friends and neighbors who don't have scanners. They make sure that their elderly have evacuation plans. They feel responsible to help each other in times of need. This is exactly why the locally organized meeting of residents turned out 175 people in Round Mountain on May 3, to discuss the latest information on the TANC TTP. Those attendees then went home and talked to everyone they knew. The communities view TANC TTP a threat in exactly the same as they would view a damaging wild land fire. Our communities and people feel endangered. Note: TANC had refused the community a meeting because Round Mountain is not an incorporated city. We met anyway.

Our mountain communities are both impacted and imperiled by TANC TTP. To deprive residents of their environmental quality of life, risk their family's health and safety in addition their already low income and high unemployment rates will make everyone truly poor. Environmental discrimination is not the business our government should be funding.

Since TANC TTP was discovered there has been a huge increase in stress among residents within this low-income community. Already the fear level is very high because so many families will either have a new corridor on their property or will now live next to one. There is despair from having no options, and the perpetually changing maps.

Many senior citizens in Oak Run and Round Mountain will not live long enough to recover from the financial impacts of this corridor project. How will TANC mitigate such impacts for lower income residents such as seniors, those on fixed incomes, etc?

For many Americans their home and equity in that property is all they have to carry them through retirement and their so-called golden years. These Transmission Lines will create a significant reduction in property values of seniors, dramatically changing people's lives. How will they manage to survive until their end days? How will we?

The ratepayers who are beneficiaries of TANC TTP are not the people whose lives, living environment and property values will be disrupted by this project. Who will mitigate for these long-term costs for our communities? Will TANC?

Environmental Justice involves reviewing a project's significant individual or cumulative impacts on human health or the environment, including interrelated social and economic effects, which may include, but are not limited to:

a) Will there be an increase of risk of illness for families living in such close proximity to so many high voltage power lines?

b) Is there a high risk of water pollution and soil contamination from the corridor system, particularly within a three mile radius of the proposed substation site?

c) Will there be unmitigatable disruption of natural resources from increased cumulative impacts of multiple transmission corridors and the increased number of substations?

d) How will a cumulative destruction or diminution of aesthetic values be addressed?

e) How will the serious destruction or disruption of community cohesion and destruction of the community's economic vitality be addressed and mitigated?

f) Will the adverse impacts on local fire fighting resources and other of public services be addressed and mitigated?

g) It is expected that no new jobs would be created for Round Mountain residents. Will the adverse employment effects be addressed?

h) If TANC TTP creates an irremediable displacement of families, small businesses, farms, within Round Mountain, it will devastate the whole community. How will TANC address the adverse impacts and mitigate?

i) TANC TTP imposes disproportionately high and adverse effects predominately borne by Round Mountain's low-income residents and their sizeable minority population of Native American tribal peoples. How does TANC plan to address this inequity?

j) How can TANC justify this project, which by their own scoping information is clearly purposed to lower TANC power affiliate operating costs and lower only their own rate payer electric bills? How can TANC justify the project when the California Renewable Energy Transmission Initiative clearly identifies the intermountain area as being very high in environmental costs and low in benefits? How will TANC mitigate for the impact to 45 percent of Oak Run residents and 80 percent or more of Round Mountain residents?

k) In the approximately 30 miles of TANC TTP that runs through Montgomery Creek, Round Mountain and Oak Run to Cottonwood, shouldn't it be a priority to avoid the homes of the families who live there? Shouldn't TANC avoid the homes of a population whose average annual incomes are substantially lower than the average income of any of the cities served? Alameda's annual average income is $55,946 yet in Shasta County homeowners earning substantially less income are being asked to give up their land so that Alameda TANC ratepayers can have less expensive electricity. Is this just? How can this be in the public's best interest? Which public?

Improving TANC's profitability is not an equitable, fair or environmentally just reason to build TANC TTP and leave the irreversible environmental impacts in the laps of economically strapped counties and the equally strapped impacted families.

While Round Mountain, Montgomery Creek and Oak Run are mentioned in detail in this comment paper, the other intermountain communities along the TANC TTP are equally impacted. Burney, Fall River, and Cassel have equally harsh statistics. They all have a higher than the state average in number of residents below the poverty line. They all have higher than the state average in number of residents unemployed.

Government has a duty to ensure that any of their respective programs, policies or activities that will have a disproportionately high and adverse effect on populations protected by Title VI ('protected populations') will only be carried out if:

1) A substantial overall need for the program, policy, or activity exists, based on the overall public interest, and

2) alternatives that would have less adverse effects on protected populations (and that still satisfy the need identified in paragraph 1) above, either (i) would have other adverse social, economic, environmental or human health impacts that are more severe, or (ii) would involve increased costs of extraordinary magnitude.

3) Currently only five of TANC's fifteen member utilities are signatories to the project. What does this mean – that the project is only benefiting five TANC members? How can the public interpret this appearance of limited commitment by TANC members to a 600 mile project?

4) No alternatives have been presented at TANC TTP presentations or in their published materials to date that justify the corridors going into Round Mountain and straight through Oak Run properties having homes. The corridors could be routed through undeveloped properties but this is not presented as an alternative. Why not?

5) There is no indication that selecting a non-Round Mountain substation location or re-designing the corridor routes to minimize impact on intermountain residents of Oak Run, Round Mountain, Montgomery Creek, Hat Creek, Burney, or Cassel would substantially increase project costs or even be difficult to engineer. A review of the Google maps clearly shows there are several suitable route options which should be equal or lower in construction costs. Why is the substation placed at Round Mountain and why aren't more homes avoided? Why place any substation at Ravendale?

6) If the total impact of the TANC TTP on Round Mountain and the other intermountain communities is examined fairly by impartial reviewers, it is clear that the project is in violation of Executive Order 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations". If WAPA and TANC are both drafting the EIR and making the decisions as to whether to do the project, how will there be an unbiased, impartial review? Please explain.

This Executive Order requires that each Federal agency shall, to the greatest extent practicable and permitted by law, "make achieving environmental justice part of its mission by identifying and addressing, as appropriate, disproportionately high and adverse human health or environmental effects of its programs, policies, and activities on minority populations and low-income populations."

7) We do not believe that there is a substantive need for the TANC TTP. We do not believe that constructing the project will make California's electrical grid more 'green', safer or reliable. We do not believe that the objectives put forward in the *Notice of Preparation* for the TANC TTP are justifiable or defendable as a project that will benefit a 'public interest' so substantially that Shasta County communities must be sacrificed.

TANC TTP is an environmentally unjust project imposing a great hardship on small communities in Shasta County. A 'no project' decision should be made by the reviewing agencies.

2. Fair Compensation for Oak Run and Round Mountain?

The question of 'fair compensation' doesn't seem to be addressed in the scoping materials, but families facing eminent domain are raising questions about the inequities of the whole process at a time when home and land values are decreased because of national events beyond local control.

TANC does not plan to acquire land, just easements. This deprives the landowner of both use of his property and the value of the underlying land asset. For example, in Shasta County, a resident who owns forest lands loses the existing forest, all future forest production, all aesthetic values, all habitat values, and is left with a seriously depreciated asset. The overall value of the property is severely lowered, by TANC acquiring an easement.

America is in a financial depression of an unprecedented scale. The whole idea of 'fair market value', particularly in easement acquisition instead of fee purchase, using eminent domain condemnation during a world-scale depression becomes entirely unfair, unjust for the families involved. It is unequaled in potential for governmental abuse of power to condemn.

Traditionally, state regulations governing the acquisition of power easements favored the power company because of the perceived benefits to the local community such as the extension of power throughout the community to individual parcels. However, in the case of Oak Run, Round Mountain, and Montgomery Creek there is no actual benefit from any of the corridors or substation(s) to the communities. Only TANC utility companies and TANC utility ratepayers actually benefit.

To address the inequity in compensation, TANC member utilities need to take a hard look at what they are asking of people. Our home is our nest egg. We've worked all our lives for this. We want to live here until we died. This IS our retirement home. At our ages, 65 and 60, we know won't be able to recoup the loss in appreciation that will be caused by a new power corridor. How will that be mitigated? How will TANC restore our future?

1) Those that bear the burden should share in the benefits. Where benefits equal in value are not shared, then an ongoing compensation model should be developed similar to the royalty program offered to landowners who host wind power facilities. Those wind power land owners get a large lump sum payment for the lease or easement and get a royalty each year for as long as the project remains on their property. Shouldn't something similar be considered by utilities seeking very large corridors over land far distant from their ratepayers benefiting from the electricity? Will TANC consider ongoing compensation to easement grantors?

2) TANC appraisers will determine the 'fair market value' during a depreciated property market. Already just the threat of a new corridor has lowering property values. The title cloud created by the study corridor has affecting the sales potential and value of homes

within the zone since the announcement of the TANK TTP proposal. How will TANC appraiser actually determine 'fair market value' of an 'easement' in such a volatile and confusing market?

3) Additionally, we are seeing a national crisis in the housing market. In Shasta County it has caused an estimated 21% drop in property values since March 2008. http://www.redding.com/news/2009/apr/23/plumetting-home-values-fuel-rise-in-sales/

A comprehensive fiscal impact analysis should be required that accounts for the loss of property values broken down into more localized areas, not a project-wide analysis. Loss or property value will vary depending on county and land use type. Will TANC provide a fiscal analysis specifically for Oak Run and Round Mountain?

4) Value of 'loss of use' is a priority concern for landowners of forested properties, rangelands, and agricultural lands. In particular, forest lands, once converted to transmission corridors can be put to no other use. The economic value of any forested acreage is completely eliminated because it is unsuitable for any other economic purpose. How will compensation for such acreage be fairly determined? Will an appraiser with experience in valuing timber property be used to determine compensation?

3. How will TANC compensate Oak Run and Round Mountain for the lack of concrete benefits to our residents and communities despite the multitude of adverse environmental and economic impacts?

1) Will any neutral agency review CEQA/NEPA impacts such as these?

- There will be no long-term creation of new jobs, since typically specially trained crews are needed to install transmission towers and lines and these crews follow the lines. Shasta County ranks 9th highest in the nation in unemployment as of April 2009. This TANC TTP project will do nothing to improve the jobs situation in our communities. Construction of the TANK TTP system is specialized work and employees that are hired will follow the lines. Any employment of the local population will be temporary. The environmental degradation will be the lasting legacy of TANC.

- There will be no increase in tax base since TANC doesn't pay taxes as a non-profit. There will be no increase in property values since transmission corridors decrease both land use and land value from the moment a project is known to exist, even as early as the scoping stage.

- There will be no reduction in local electrical bills since none of the power will be used for outlying areas like Oak Run or Round Mountain.

- There certainly are no health benefits.

- There are no known benefits of any type for our people, our community or our county. What concrete benefits are there for us?

2) Most of the 600 miles of new TANC corridors would be in counties whose local utilities receive no substantial electrical power from TANC. The counties through which theses lines would be built would see serious devaluation of miles of private land and a lowering of their tax base.

3) How will TANC offset the loss of property tax base to local schools and community services? Certainly TANC expects community services like fire protection. Exactly how will they compensate the community since they don't pay taxes on the property/easements used?

4) Who will compensate families in Oak Run, Round Mountain and Montgomery Creek for the years of hard labor that we've put into our homes and land making them 'fire safe'? Who will compensate us for the loss of sleep, the endless hours of worry this TTP causes? Who will compensate us for the severe stress?

5) How do you mitigate grief and the death of a dream? Who among the agencies or TANC cares about us? Why are the families of Oak Run and Round Mountain suddenly considered less important than a nebulous potential for profit to utility companies? Is this equitable? Should public funds be invested in such an unequal benefit situation? How does TANC plan to mitigate this?

6) Americans who prefer the time-honored traditions of small communities, farms and mountain life are disproportionately harmed by giant utility-scale remote projects. Homes will be taken, health is being put at risk, water, land and skies are being damaged, and lifestyles are being threatened by unsustainable, unhealthy policies of an outdated grid system. How will building 'more' of the same type of electrical grids solve the problems such projects create for rural America?

7) Why should TANC be permitted to build this unnecessary corridor to nowhere? This is the worst sort of Environmental injustice to come along in a long time!

H. GEOLOGY AND SOILS

"*Cow Creek and its tributaries carve into diverse layers of geologic features. The eastern high elevation reaches are the result of relatively recent volcanic activity, ranging from 12 million years ago to the present; the last eruption series occurred from 1915-1917 (Alt and Hyndman 1975). Encrusted lava rocks along with loose volcanic debris were deposited over more ancient (Cretaceous) marine sandstone and shale formations. Over time the Cow Creek tributaries have sliced through the blanket of volcanic deposits and eroded into the underlying sandstone and shale producing extensive alluvial deposits (Alt and Hyndman 1975). Gradient-transition points*
(i.e., head-cuts or knick-points) are evident in all 5 tributaries at approximately 1000 feet

elevation, forming spectacular waterfalls. These erosional deposits are the source of rich, well draining soils that support lush forests and more recent agricultural development."
http://www.fws.gov/stockton/afrp/documents/cowcrkrpt.pdf

TANC TTP presents serious threats for increased annual environmental degradation through soil erosion entering streams within the entire Cow Creek Watershed. The proposed TANC TTP design cuts across every ridge within the Cow Creek Watershed. The Cow Creek Watershed is a critical land feature of the Upper Sacramento River headwaters which sources drinking water to millions of Californians in the Sacramento Valley region.

Construction of the TANC TTP will involve creation of a major low standard road system that poses significant and unacceptably high risks for soil erosion. California Rivers Assessment provides the following information on road impacts within a watershed.
http://www.ice.ucdavis.edu/newcara/roadsone.htm

"*With fewer people living in rural areas, the pollution caused by heavy traffic and is not a pressing concern. Instead, it is small dirt roads which provide access for logging, grazing, agriculture and other rural uses that cause the most significant damage to watersheds.*

The impacts from these roads depend on factors such as the density of roads, steepness of the area, stability of the slopes and the erodibility of the soils. The loose soils are eroded away quickly, but as tractors and trucks pass over these roads, the soils are compacted, and water cannot infiltrate them. This increases runoff, and changes patterns of flow. Runoff from logging sites contains large amounts of sediments because the surrounding areas are being cleared of trees and other vegetation that stabilize the soils.

Building techniques that reduce steepness and channel water away from roads can help to minimize sedimentation problems. When these techniques are overlooked, the roads can eventually become small streams, moving sediments directly into natural creeks and drainages. The combined sediment load from road building and timber harvesting deposit fine particles into gravel beds downstream, destroying salmon spawning habitat, and these increased sedimentation rates last as long as the roads exist.

Landslides increase in frequency when there are roads built on steep or unstable slopes. Landslides introduce large amounts of sediments into rivers as well. Areas downstream from slides often aggrade and the morphology of the channel changes. Erosion and sedimentation continue for years after a landslide."

Similar projects involving transmission corridor access road construction have stated that building new access roads would disturb soil areas from 20 to fifty feet wide depending on grade and slope.
http://www.co.siskiyou.ca.us/telephoneflat/pdf-files/volume-1/Exhibits.Exhibit%204.Chapter%202.2-47%20-%202.57.pdf

Within the Cow Creek Watershed soil types, even with waterbars, dips and culverts, there will be an unmitigated amount of soil erosion during construction and serious levels of ongoing erosion from the corridors into each creek crossed by either NORTH A or NORTH B.

Current erosion control practices within existing corridors are clearly inadequate, unmitigated, unmonitored, and ignored by the utility companies holding those easements. State Water Resources Control Board has recently begun to take more of an interest into the erosion problems generated by transmission corridors, each corridor being as wide as a 12 lane freeway.

Transmission Corridor access road, erosion filling drainage ditch and flowing onto county road, May 2009, Oak Run.

Transmission Corridor access road, erosion flowing onto county road, May 2009, Oak Run.

The images were taken in the Oak Run area (Cow Creek Watershed) in May 2009 and clearly show the 'road standard' maintained within existing transmission corridors. Silt flows from off those corridors completely fill the road side ditches and have spread onto the county roadway. There are a total of eight existing corridors within Cow Creek Watershed and crossing Bullskin Ridge. TANC TTP would make a ninth corridor.

Streams and creeks in the Cow Creek Watershed are listed as impaired under Section 303(d) (Clean Water Act). Any additional soil erosion and soil transport into streams may simply be too much for this impaired drinking water source for the Sacramento Valley metropolitan areas.

Outside of Cow Creek Watershed, Fall River, east of Burney, is currently on the Section 303(d) list of water quality limited segments under the Clean Water Act with sedimentation and siltation included as a S*tressor/Pollutant,* with agriculture-grazing, silviculture, and highway/road/bridge construction" included as *Potential Sources.* Meadow management is considered crucial.

Section 303(d) lists, Central Valley Region Water Quality Control Board:
http://www.swrcb.ca.gov/rwqcb5/water_issues/tmdl/impaired_waters_list/index.shtml

TANC TTP corridors, particularly those traversing the ridges of NORTH A and NORTH B create a permanent source of soil erosion. Unlike a timber harvest where the roads are put to bed after the timber is removed so that the land can heal, a majority of the

road system in the TANC corridor would create a new permanent source of annual erosion and soil transport into streams.

Due to the design of the NORTH A and NORTH B routes, there will be extensive and irreversible degradation to this critical watershed and all sub-watersheds both during construction from the roads, the excavation needed to build the system, and the damage from annual runoff from the corridor system after vegetation management exposes the soils. It may not be apparent from the Google aerial maps, but the water runs directly downhill into streams through out the Oak Run and Round Mountain regions. An examination of topography maps would show the scale of the problem.

The soil transport into streams and rivers within Cow Creek watershed creates severe problems for critical salmon habitat. The state has spent millions of dollars in habitat restoration. Past present and planned future projects to improve fisheries can be imperiled. Major projects that produce erosion over multiple streams could jeopardize that taxpayer investment in habitat restoration.

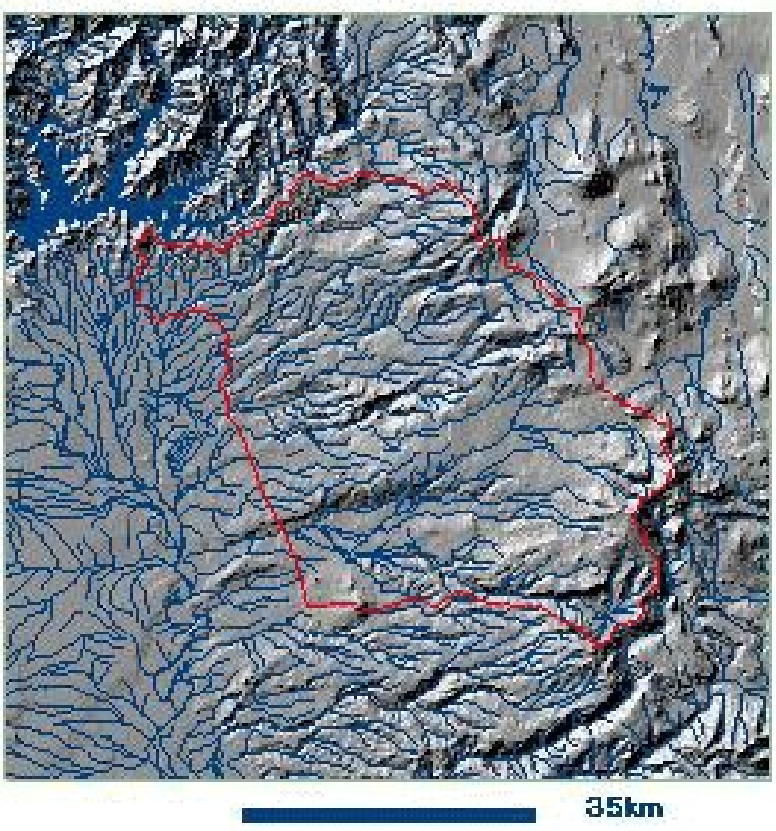
The route layout design itself is the flaw. The only sensible mitigation is to change the route completely following topography instead of cutting up and down across the ridgelines. There is no way to mitigate the corridors as proposed for an above-ground system.

The best solution is to change the route or stop the project as too expensive to mitigation. Soil is not a replaceable resource. Soil transport into streams is definitely not an option. The route effectively crosses each ridge within the watershed and across each stream under the current proposal.

NORTH A, particularly between Bullskin Ridge Rd. and Old Stage Road has additional soils problems. There are a number of known slides and slumps on the private lands between those two roads. Large known compression ridges also found there provide evidence of older slides of massive proportions. Placing any transmission tower on the head wall or toe of any slide between those roads would certainly increase the probability of triggering a major slide and endanger homes and property. This known slide/slump tendency is believed to be why the existing corridors avoided this area. NORTH B has similar soils issues.

The Soils Survey for Shasta County identifies the soils of Bullskin Ridge and Buzzard Roost as suitable for woodlands, forest and wildlife which is why the area is a Habitat Protection Zone. This area is not suitable for transmission corridors.

Erosion and soil transport into streams and a high probability of triggering additional slides or slumps on NORTH A or NORTH B between the community of Oak Run and Round Mountain means additional route alternatives must be searched out. The current alternatives appear to have been selected by aerial photos, not an examination of the routes on the ground.



http://www.ice.ucdavis.edu/newcara/basin.asp?cara_id=27
UPPER COW-BATTLE CREEK BASIN

There are serious impact concerns regarding soil stability and compaction under the weight of both towers and lines due to the variable soils types within the watershed. In the Round Mountain area there are towers requiring stabilization due to earth movement. Each year Highway 299 illustrates the soil movement problem by slipping away. Landslides can be triggered by simple construction of a tower and from access roads.

The soils around Round Mountain are unstable for the sheer number of towers spread over the landscape. The slopes of the hills contain abundant active, dormant, and potential landslides. Many of the access roads to existing transmission towers have continual problems with landslides. This type of tower slippage failure is already occurring in Round Mountain. Adding additional towers increases the risk of soil failure and slides. This complication should be taken very seriously in route planning and during construction.

Additionally, California is experiencing a severe drought. If field studies and surveys are done in such a dry year, will TANC's survey data be adequate to plan for installations on ground that may be unstable when wet? We are seeing severe slippage in the Round mountain area in very dry years. What will happen in wet years?

Transmission Tower slide near Round Mountain April 2009

The threat is not just to TANC corridors. Slides triggered within a corridor can severely impact adjacent lands and homes. TANC TTP as proposed creates an unacceptably high physical hazard to the local residents and to grid security.
http://soildatamart.nrcs.usda.gov/manuscripts/CA607/0/shasta.pdf

SOILS AND SPRINGS

Soil conditions in the intermountain region are also tied to spring water sources. (Note: There will be more discussion on springs in several environmental concerns sections as the issue of drinking water resources overlaps several areas.)

A spring is essentially a physical location where the water table intersects with slope, surfacing and creating a 'spring'. Ground disturbances and soil compression caused by new transmission towers could have serious impacts on springs relied upon by the local population for drinking water. Such source water damage is difficult to quantify and in many cases is impossible to mitigate once damage occurs.

The project impact on soils and springs is a high priority environmental issue as well as an environmental justice concern. Many residents in the intermountain area rely on freshwater springs for their household drinking water. There is no reliable alternative

source for drinking water within much of the region. Well water is spotty in location, and often loaded with iron, arsenic or even warm water.

Most intermountain residents cannot afford the expense of a well system, even if such water were available and potable. Any disturbance to a residential water spring system is often irreversible, irremediable, non-mitigatable, and definitely represents both a serious environmental impact and an economic hardship to mountain families.

Springs sensitivity to soil disturbance is a very serious project environmental concern. Since there are no public water systems for most of the intermountain region, the issue of water springs must be addressed property by property within Shasta County. TANC TTP cannot justify depriving any resident of their water supply.

1. Soils in Cow Creek are highly erodable, which is why there are numerous project to halt soil transport into critical salmon habitat restoration within the watershed. How does TANC TTP propose to prevent soil transport and keep sediment out of streams for the lifespan of the project? How will they control erosion and measure mitigation effectiveness in streams? Will TANC work closely with and confer with the local NRCS on soils issues and Fish and Wildlife offices on habitat issues to develop truly effective mitigation measures? What will TANC do if NRCS/F&W determines there's a problem with either corridor location during planning, or later during maintenance of the project? How adaptable is TANC's ability to respond to an environmental problem along the corridors once the system is built?

2. Will TANC work with NRCS (in addition to their own project engineering staff) to establish suitability of each tower site? Will TANC be attempting to site towers on known slides and unstable soils in Oak Run or Round Mountain? How will TANC stabilize the soils in geologically unstable areas to protect towers from shifting if they decide to site a tower on unstable soil? What happens if a tower triggers a slide that damages homes and property outside of the easement? How will TANC minimize impacts to the underlying land owner and to adjacent properties if a slide is triggered from any cause? Who will be responsible for repairs? What if such damage is not repairable?

3. If a slide occurs, disturbing a transmission tower, are there automatic shut offs to stop the power flow on the line? How much risk is involved to residents in a tower tilt, collapse or slippage?

4. From examining other transmission corridors in the region, it's clear that soil transport has not been an issue of concern during regular maintenance for various transmission companies on their easements. Water bars are failing, road erosion is widespread, and in general soil transport is definitely on the increase even though these are drought years. Does TANC plan to implement better standard of maintenance practice that actually reduces soil transport and erosion? If so, how and when would those practices be monitored, and by whom?

5. How will the landowner or average person be able to contact TANC to notify them of an erosion or tower slippage problem and what type of response would be initiated by TANC. Will TANC be working with the State Water Resources Control Board on erosion issues or with some other state or federal agency?

6. Will TANC identify spring water sources of all types whether developed or undeveloped during the actual route survey? Will this be done by field verification?

7. The quality of water in underground basins and water-bearing soils is considered generally good throughout most of Shasta County. As these basins or soils are the primary sources of water in the rural upland areas of the County, it is very important to prevent contamination. What steps will TANC TTP take to prevent source water contamination throughout the Cow Creek Watershed?

8. What steps will be taken by TANC to protect private source water springs and private wells during construction?

9. What specific methods and mitigation steps will be taken to protect private source water springs and private wells over the life of the corridor during corridor maintenance or any other site work?

I. HAZARDS AND HAZARDOUS MATERIALS

A major environmental risk for the intermountain areas of corridors NORTH 1, 2, 3 and NORTH A and NORTH B are the hazards presented to residents, wildlife and fisheries by the possible use of pesticides and herbicides during construction and regular maintenance of all TANC TTP facilities and corridors.

There are the hazards and risks of unspecified chemicals that may be used in tower/transmission construction components and at the substation.

1. Will TANC develop a comprehensive pesticide/herbicide management plan that will avoid impacts to sensitive receptors including schools, residences, and the environment? Such a plan would have to include monitoring, mitigation and penalties. To be effective such monitoring should be done through a public resources agency and paid for by TANC, and be binding on TANC for the lifetime of the corridor. There must be some public entity designated to evaluate the mitigation and to monitor, and that entity must be made accessible to residents within the TANC TTP areas.

2. Pesticide and herbicide use near homes and livestock is extremely undesirable to landowners living adjacent to power line corridors. If pesticides and herbicides are used, how will TANC TTP ensure that such applications meet an integrated vegetation management plan conducted within the framework of federal and state agency policies and entail only the use of EPA-registered products that are applied in a manner consistent with label directions and state regulations? For example, will pesticide use shall be limited to non persistent immobile pesticides and be applied only in accordance

with label and application permit directions and stipulations for terrestrial and aquatic applications? Will this be spelled out in the EIR/EIS?

3. It appears to be a common practice for transmission maintenance to include stump poisoning. How might this practice affect an adjacent forest? How much risk is there to livestock and wildlife? Does the underlying landowner have any say in whether such hazardous materials are used within the easement?

4. Will pesticide and herbicide use be strictly avoided in the vicinity of sole source aquifer areas, springs, wells and all habitation water sources and any ponds or facilities used to provide water for livestock or wildlife? How will TANC ensure treated soils from within the corridors won't leach chemicals into source water? Will there be some sort of monitoring mechanism? Will there be reparations made if drinking water sources are impacted by chemicals used in TANC operations leaching into soils?

5. What plan will TANC have to minimize potential risks that corridor/substation soils would leach damaging chemicals into any water sources, or that soils could be contaminated by spills or leaks of chemicals used in the project construction or future maintenance? How would that be monitored?

6. Hazards such as fire are covered in detail under section K. PUBLIC SERVICES. We believe this is an extremely hazardous project due to its physical location in an extremely high risk fire area with a history of bad fires. We believe this is a hazardous project due to the location in a region with a history of high snow loads and annual power outages. Aren't there better alternatives to for TANC that don't involve the vast environmental damage this project would cause? Aren't there less hazardous alternatives?

J. HYDROLOGY AND WATER QUALITY

"Shasta County lies at the headwaters of the State's largest watershed, the Sacramento River Basin. About 6.5 percent (5.8 million acre-feet) of all surface runoff in the State of California originates within Shasta County. This represents more than one-fourth of the total surface runoff within the Sacramento River system, the State's largest source of domestic and agricultural water supplies."
http://www.co.shasta.ca.us/departments/Resourcemgmt/drm/pdf/66water.pdf

The majority of the water supply in Shasta County comes from surface flows and is collected in the mountainous regions of the County. Streams, creeks, and rivers carry these surface waters to lower elevations, where a portion is eventually stored in lakes, reservoirs, and groundwater basins. Two major groundwater basins within the County, the Redding and Fall River Valley basins, have been identified as significant sources of groundwater. In addition, volcanic and alluvial soils that contain groundwater, known as water bearing soils, are located in the Northeast, Lassen, Eastern Forest, and portions of the Eastern Upland as defined by the County General Plan.

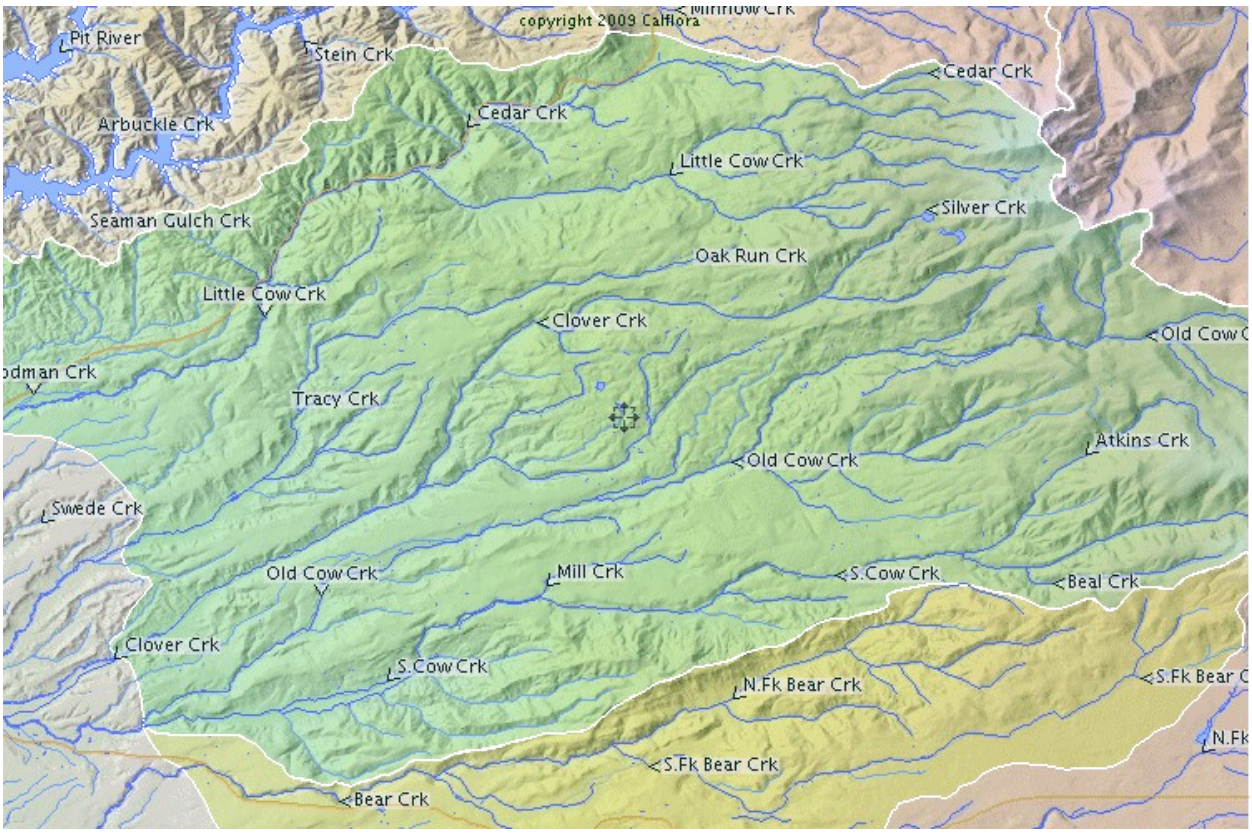
Groundwater basins and water-bearing soils are recharged (replenished) by the natural process of percolation. Natural features are essential to groundwater recharge, particularly floodplains and streams that pass over gravel or other porous materials. The flat agricultural lands of the Sacramento River Valley and the Fall River Valley are the most significant areas for this process in Shasta County.

It is important that these types of features are protected so that water transfer to ground basins is maintained. Preservation of natural recharge systems is particularly important for Shasta County as there are no human processes to augment them.

Potential hazards to surface water quality include nonpoint pollution problems such as high turbidity from sediment resulting from erosion of improperly graded construction projects. TANC TTP will need to provide extensive oversight during any and all construction phases as well as continual monitoring of the corridors during maintenance routines.

COW CREEK WATERSHED IMPACTS: The 275,000-acre Cow Creek Watershed is a large, generally uncontrolled tributary to the Sacramento River, located in Shasta County on the eastern side of the Sacramento River, downstream of Shasta Lake. The watershed is unique in that land ownership is almost evenly divided between commercial forestland, commercial agriculture, and small rural property owners, with minimum government ownership.

Cow Creek and its principal tributaries, Old Cow Creek, Little Cow Creek, Oak Run Creek, Clover Creek, and South Cow Creek are vital to salmon restoration. Cow Creek is recognized and documented by the U.S. Fish & Wildlife Service (USFWS) as important spawning and rearing grounds for fall-run Chinook and steelhead. Past water quality data and reports from water users in the basin have raised concerns regarding deteriorating water quality. Excessive soil erosion and bank failure in some tributaries is believed to contribute to increase stream turbidity.
http://www.fws.gov/stockton/afrp/documents/cowcrkrpt.pdf



Cow Creek Watershed Map (green area) shown at http://www.calflora.org/

The streams run east west and the corridors run north south. http://www.calflora.org/

Oak Run and Round Mountain communities are a part of the Cow Creek Watershed. The study corridor locations clearly present a potential threat for creating sediment load, and storm water runoff impacts into every creek in the watershed because the corridors will cut perpendicular across the ridges and streams. The routes simply create unacceptable risk of stream and water quality damage for the lifetime of the project. North A and North B routes are clearly unacceptable.

1. A significant number of the streams within the Cow Creek Watershed are listed as impaired under Section 303(d) of the Clean Water Act (33 USC Chapter 26). Laying transmission corridors perpendicular to impaired streams will further degrade water quality within those streams. How does TANC TTP plan to monitor, and mitigate for the life of the corridor when clearly the route itself is the source of the problem? What about monitoring above and below the corridor(s) as they cross each stream? Will TANC work closely with and confer with the Regional Water Quality Control Boards in the project area?

2. Due to the environmental degradation that a corridor experiences during vegetation management, will TANC provide annual monitoring of streams that are crossed by maintained corridors for sediment load and storm water run off? Will TANC work closely

with and confer with the Army Corp in the project area regarding any streambed alteration?

3. Will TANC work with local Resource Conservation Districts within each county and incorporate optimum or best management practices to minimize damage to water quality and habitat? Will TANC work closely with and confer with the NRCS office in each region of the project area?

GROUNDWATER AND SPRINGS IMPACTS

In addition to the soils issues covered under the geological sections, the hydrological issues relating to drinking water within the intermountain area is a critical resource issue. Additionally, the surface waters of the region are part of the drinking water system of the Sacramento River, impacting millions downstream.

1. Will TANC identify and delineate all sole source aquifers, springs and private household water sources for each land owner in the Oak Run, Round Mountain, Fall River project study area and design the project to avoid disturbing water sources and to minimize potential risks that the water sources could be contaminated by spills or leaks of chemicals used in the projects? What about the rest of Shasta County?

2. In instances where a project within an energy corridor crosses sole source aquifers, will TANC notify the affected landowner as early as practicable in the planning process and compensate or mitigate for impact on the landowner? Section 1424(e) of the Safe Drinking Water Act (42 USC Chapter 6A) and other relevant laws and policies pertinent to the corridors that cross sole sources or drinking water should apply.

3. Many of the residences within the project study area corridors are using springs for household water. There is no public water source, and well construction is not a guarantee of a drinkable water supply. How will TANC mitigate for any potential disruption or contamination of an individual landowner's drinking water supply? What about disturbances during construction and during maintenance to ponds and livestock water sources?

4. If spring flow is disturbed or altered by TANC TTP will there be some process for redress for landowners or adjacent property owners that may be impacted? This problem arose during a buried communications project in the oak Run area. Some residents saw their spring flow completely altered by the project. What mechanism will be in place for residents and land owners to make sure their drinking water is protected?

SURFACE WATER CONCERNS AND ISSUES

1. The most critical period for surface water quality is following a rainstorm. Storms produce significant amounts of drainage runoff into streams at low flow, resulting in poor dilution of contaminates in the low flowing stream. Such conditions are most frequent

during the fall at the beginning of the rainy season when stream flows are near their lowest annual levels. Besides the greases, oils, pesticides, litter, and organic matter associated with such runoff, heavy metals such as copper, zinc, and cadmium can cause considerable harm to aquatic organisms when introduced to streams in low flow conditions. Will TANC TTP plan their construction schedule to avoid working during rainstorms?

2. Will TANC identify all streams and feeder/ephemeral streams in the vicinity of the proposed project and proposed corridors and design the project to avoid or mitigate the disturbance to the streams and their drainages even during the dry season?

3. Within the draft EIR will TANC clearly identify all streams in the vicinity of proposed project sites that are listed as impaired under Section 303(d) of the Clean Water Act (33 USC Chapter 26) and provide a management plan, monitoring, and mitigate to avoid or minimize adverse impacts on those specific streams? Will there be regular review and oversight and would management plans be modified or adjusted if new problems occurred?

DOWNSTREAM IMPACTS

As stated earlier, Cow Creek Watershed which includes Round Mountain, Montgomery Creek, and Oak Run is a significant component of the headwaters of the Sacramento River system. This system supplies drinking water to millions. TANC TTP completely underestimates both the importance of the headwaters region and the cumulative impact of their corridor system.

The current corridor layout, no matter what alternative was chosen from Round Mountain, will enable literally miles of 200 foot wide direct routes of storm water erosion runoff to enter streams. The TANC TTP corridors will affect the drinking water of millions. TANC TTP contains a huge environmental cost to the whole Sacramento Valley region.

The cumulative impact of adding another corridor system is unacceptable. State Water Resources is already concerned about the sediment loads the existing corridors are creating. Public utilities must concede that protecting their Constituent's water supply is as great a need as for power.

Clearly the proposed substation location in Round Mountain and both North A, and North B routes through Cow Creek Watershed represent an unacceptable amount of cumulative environmental damage to an irreplaceable necessary resource: potable drinking water for millions.

A 'no project' decision should be made on the basis of severe irreversible impacts to the headwaters of the Sacramento River.

K. LAND USE AND RECREATION

In Shasta County the General Plan governs land use. The low density spacing of population has a very high value in a county that covers a significant portion of the headwaters of the Sacramento River. One important value in all that open space is clean water for cities farther south.

It is apparent by the number of listed impaired streams that the environmental security of open space is deceptive and easily impacted. A great deal of environmental damage has already occurred within the watershed and the Shasta County General Plan takes great care with new projects to prevent added environmental harms.

Numerous watershed groups, CRMPs and government resource agencies have extensive financial investments in resources projects within Shasta County aimed at restoring and protecting the fragile environment. Significant investments of government funds have been made in the Cow Creek Watershed with more projects planned. Western Shasta RCD, UC Cooperative Extension, Cal-Fire, various watershed groups, local land trusts all have a shareholder stake in Shasta County land use.

Recreational activities form the economic backbone of much of the county. The addition of more large power corridors is a seriously damaging to the recreation industry of Shasta County as the corridors destroy the illusion of large amounts of unbroken open space. Yes, there are existing transmission corridors. Adding more won't improve the view.

Many resource management activities, such as clear cutting on timberlands or brush burning for grazing land improvement purposes, create temporary adverse visual impacts along scenic highways and county roads. Considering the "life" of such visual routes, these impacts are minimal; clear cut areas are reseeded and fire-blackened acreage quickly return to their natural states.

TANC TTP corridors will be permanent features on a landscape scale. They represent an undesirable land use within Shasta County, particularly since intermountain residents do not directly benefit from the TANC project. The TANC TTP is an unwanted conversion of land use under proposed layout.

TANC proposes 'conversion of use' corridors running through California's forests, range and agricultural lands equivalent in width to a freeway 12 to 14 lanes wide (using 12 feet per lane). The cumulative use conversion impact of the 8 existing 200 foot wide transmission corridors in eastern Shasta County is enormous.

TANC has not conclusively determined corridor size. If the corridor is actually wider the corresponding environmental impacts would be incrementally greater.

TANC TTP represents a very, very large scale land use conversion. The impact is particularly harsh in forest lands, but the fiscal impact is felt no matter what the current

land use. TANC corridors create a non-use land type that isn't even visually attractive. TANC corridors certainly do not enhance the natural environment. It is counter to the County General Plan, and it takes productive forest, agricultural and range land out of use. All the route alternatives diminish the usability and appreciable value of developed properties. The land's productive value to the environment is considerably greater by continuing its present use than converting it to a power 'freeway'. None of the proposed alternatives are acceptable.

"The focus of a design element in rural community and residential areas should center on blending commercial and residential development with natural landscape features afforded by these rural settings. The overall objective of enhancing the natural environment within the context of rural development can be achieved by encouraging development which is as unobtrusive to the natural setting as possible. Design review issues in rural areas generally will involve the use of appropriate building color, fencing and screening, maintenance of view-sheds, use of natural vegetation and terrain when integrating development, and the appropriate mixing of uses in rural centers and private recreational areas."
http://www.co.shasta.ca.us/departments/Resourcemgmt/drm/pdf/76desg.pdf

TANC TTP is not unobtrusive and will never blend into the landscape. In fact, with recent changes in vegetation management all the transmission corridors are as glaringly ugly as the clear cuts of the 1980's that roused such collective public disgust that they effectively killed the logging industry on public lands within Northern California.

Yes, there are existing transmission corridors within the region. Adding another is one too many. It is completely out of character with the Shasta County General plan and zoning. Major open space resources of Shasta County are its rivers and creeks and their associated riparian corridors and floodplains and critical wildlife habitats. The value and importance of these regional resources cannot be overemphasized. The TANC TTP represents an unwarranted encroachment on these resources which are vital to the whole Sacramento Valley.

Most of the area in the Oak Run/Round Mountain is designated Habitat Protection District zone in the Shasta County General Plan. There are existing transmission line corridors going through Oak Run to Round Mountain. These corridors were built before the zoning laws went into effect in the late 1970's. Just because there are transmission corridors that are 'grandfathered in" does not suggest in any way that new ones should be encouraged or allowed. Each corridor, both existing and proposed, fragments the habitat.

Individual landowner use of their property will be severely impacted in the oak Run/Round Mountain region. 200 foot wide clear-cut corridors are not compatible with the forested land use and recreational activities of the individual landowner. This project impacts thousands of acres in eastern Shasta County. How does TANC plan to mitigate for this dramatic change in land use and the cumulative corridor effect?

There really is nothing recreation-wise that you can safely do around 500kV transmission lines. It's a conversion of use from recreation to pure utility. Even walking near the lines is noisy and unpleasant. It can make the hair on your arms and the back of your neck actually stand up. How does TANC plan to mitigate for this non-recreational use?

In various advertising and industry magazines utility corridors are often described as adding recreational values. There certainly are none to be seen in Oak Run. The current vegetation management methods for high severity fire zones exclude any recreational values for a cleared corridor.

TANC TTP goals and objectives are totally unrelated to any land use values held by the residents and taxpayers of Shasta County. The whole project is a violation of local values and land use ethics. It contradicts all the hard lessons learned in intermountain communities about soil conservation and good planning.

The TANC TTP is unwanted by most Shasta County residents and unnecessary to Shasta County. It brings nothing to the bargaining table that Shasta County residents want or need.

TANC TTP easement acquisition process will be a 'taking' similar to a 'taking' of an endangered species. For the rural communities, there is no real way to mitigate for the corridor project since TANC wants to build an above ground Transmission system through the county. TANC TTP and WAPA should be prepared for lot of eminent domain actions in Shasta County to obtain easements if this project is approved as property owners are prepared to defend their environment and their values. The values involved are far beyond simple monetary considerations.

A. TTP CONFLICTS WITH ZONING

a) When the existing corridor system currently used by PG&E lines were constructed about 50 years ago in the Round Mountain/Oak Run areas, there was substantially less residential development in the corridor area and no zoning laws. The proposed TANC TTP corridors North A and B go right through the 'new development' in all the rural communities and are inappropriate in location according to current Shasta County zoning regulations and the General Plan.

Clearly, the TANC corridor(s), if ever built, should be placed as much as possible on public lands or on existing right of ways to reduce the impact on private homeowners. Where that isn't possible, then the corridors should be planned for the most appropriately zoned locations and sparse population areas. Density patterns and community development in rural areas are distinctly different than metropolitan patterns of development because of the topography and natural hazards.

In Shasta County the TPD (Timber Protection District) specifically allows power corridors and facilities as permitted uses under section 17.08.030 (D) "Uses requiring

use permit" includes electrical facilities. Habitat Protection Districts do not list a utility use.

HPZ: http://www.co.shasta.ca.us/departments/resourcemgmt/drm/Zoning_Plan_PDF/1714.pdf
TPZ: http://www.co.shasta.ca.us/departments/resourcemgmt/drm/Zoning_Plan_PDF/1714.pdf
Shasta County Zoning:
http://www.co.shasta.ca.us/departments/resourcemgmt/drm/zoning%20toc.htm

TANC TTP has proposed new corridors between the existing PGE lines. These new corridor(s) would run though wildlife Habitat Protection Districts (HP), Rural Residential Districts, developed residential areas, too close to the Oak Run Elementary School. This is not desirable under the County General Plan or Zoning Plan.

TANC's corridors through Oak Run, negates the whole General Plan concept of Habitat Protection. Corridors convert habitat to non-use. Corridors convert forest to barren strips. Corridors prevent any use. TANC has already stated at scoping meetings that a landowner won't be able to have a structure of any type within the corridor.

Furthermore, the vegetation management used in corridors doesn't create any kind of habitat, forest or woodland. It prevents ponds, wetland use, spring water development, residential housing, barns or any type of use that would ordinarily occur in a Habitat Protection zone.

A serious effort could and should be made to bring the corridor(s) through less populated timber-zoned lands or public lands. Are buried gas line corridors that approximate TANC route objectives being looked at for co-location?

b) Siting high powered transmission corridors between existing corridors and near homes and developed communities in the dense timberlands of Shasta and Lassen Counties substantially increases the risks of a single natural catastrophe such as wild land fire wiping out the entire grid (not just TANC) and the communities, too. This type of 'too close, yet too far apart' type of spaced siting seriously compromises the safety of local residents during emergency evacuations for fire and other dangerous events. NORTH A and NORTH B should either adjoin the existing corridor easements or be placed several miles apart, not less than a mile. In the event of a large-scale wind driven fire, there would simply not be enough time for fire fighters to reach the physical location fast enough to save the grid system as was clearly demonstrated during the 1992 Fountain Fire.

A better alternative would be for TANC to co-locate their transmission grid on the same towers as the existing transmission system by cooperative partnership with the current utility easement companies. This would be similar to sharing telecommunications towers as is common in the cell phone industry. Partnership development is definitely preferred over eminent domain.

Certainly in the Oak Run area the proposed routes do not represent viable alternatives. It was clear at the Redding scoping meeting that TANC's choice would be North A on

the west side of Oak Run, between the existing PG&E transmission corridors. North B originally ran right over the Oak Run elementary school but was later adjusted slightly to the east on the Google Scoping maps. No one wants these corridors near any schools.

Studying the aerial views it's clear that neither 'NORTH A' nor 'NORTH B' alternatives are acceptable for Oak Run since both corridors go through existing housing and developed properties. It appears the alternatives proposed were selected based on cost of construction rather than topography or avoidance of communities and homes. The proposed routing may be cost effective for TANC and it's ratepayers in terms of construction, but it is absolutely unacceptable to private landowners and rural communities severely impacted by the routes proposed. If this proposal represents the only choices, then the project should be abandoned as the cost to benefit ratio is environmentally unjust.

c) The community of Round Mountain in Shasta County (where PG&E has a substation), is so heavily impacted by existing power lines that adding more corridors to that area simply kills the community. Nobody will want to live there. Why is another substation needed at this location? How can creating an additional substation and adding 3 new corridors be mitigated in a community of 400? Why wasn't the substation located in an undeveloped area well away from any intermountain community? How can this be compatible with community planning or zoning?

Our land use in Oak Run will be severely impacted by a new corridor. Clear cutting a 200 foot wide corridor in forest land in a Habitat Protection Zone is not the same as building a corridor in a flat open field. The devastation caused by a corridor in a Habitat Protection District is the same as a natural disaster. The cumulative effect of adding yet another corridor to the area has to be considered in relation to the existing habitat damage and the recurring maintenance damage for transmission corridors already in use. This is an environmental disaster 200 feet wide by 600 miles long, and it's manmade.

This is an unacceptable conflict of zoning providing no benefits for residents of Shasta County. There must be a better alternative.

B. PRIVATE LAND IMPACTS: EASEMENTS

Construction of new transmission power corridors on easements rather than land purchased in fee means that the underlying landowner may be held responsible for a number of environmental impacts over which the landowner has absolutely no control. This raises a number of significant property-by-property issues because of the huge variation in bioregion and vegetation types covered by the project.

Land owners should be compensated at a fair market value. However, we are in a significantly depressed housing market of unprecedented scale and there will be no time for home values to return to a 'normal' level before TANC TTP seeks to acquire properties. In the case of easements, the price paid for the easement will be negligible

considering the conversion of use, but the economic impact on the landowner and the environmental impacts to the property will last forever.

Should the landowner resist the sale of his 'easement' or land, then eminent domain proceedings will be used. This has already been stated by TANC and the agencies at the scoping meetings. Just exactly how is the whole process of acquiring the property or easements from unwilling sellers during a national depression supposed to be fair? Mitigate that.

C. WITHIN THE EASEMENT AGREEMENTS:

1. 600 miles of corridor impacts across a bewildering variety of land types and land uses can hardly be addressed by a single blanket assessment of impact. Will TANC address the environmental impacts on private land property by property? Tower by tower? By the watershed? By the mile?

2. TANC crosses 5 sub-watersheds in the Cow Creek Watershed which covers Round Mountain and Oak Run. Will TANC ensure that studies are made and if unavoidable environmental harms occur will they assume all mitigation responsibilities for stream impacts, fisheries impacts, and storm water runoff stemming from the transmission corridor for each individual property? How will they mitigate on each property? Who would pay any penalties generated by state determination of water resource violations?

3. Will TANC ensure that studies are made and if unavoidable environmental harms occur will they assume all mitigation responsibilities for TMDL and sediment load stemming from the transmission corridor on individual properties as the lines traverse watersheds?

4. Will TANC ensure that studies are made and if unavoidable risks occur will they assume all mitigation responsibilities for wild land fire stemming from any transmission line incidents on a specific property? Won't the fire safety priorities be to protect the line not the people? Who pays? Who bears responsibility for the increased risk that comes with a large transmission line corridor?

5. Water: Many properties within the Round Mountain/Oak Run study corridors rely on a spring water systems for household water use. There is no public water supply system. Will TANC ensure that studies are made and if unavoidable risks occur will they assume all mitigation responsibilities for springs/private water system disruption and make sure properties have functional, potable water systems AFTER the lines are built?

6. Will TANC assume all responsibility and mitigate for any damage to individual spring water supply sources and mitigate any damage caused to neighboring homeowners by road construction, tower construction or maintenance activities for the corridors on individual properties for the life of the system?

7. How does TANC plan to maintain the corridor clearances through woodland and timbered areas for each property? Will the line maintenance be manual? Is herbicide spraying of brush and vegetation planned? Will TANC ensure that studies are made and if unavoidable risks occur will they assume all mitigation responsibilities for preventing herbicides from entering streams, springs and water supplies?

8. Acreage that is not in Timber Production Zoning still qualifies as Non-industrial Forest Land. Habitat Protection zone acreage can qualify as this type of forest land. How will the property owner be compensated for the loss of present and future value of both timber production and non-industrial forest land types?

9. What if the vegetation management plan is altered, as is happening on the other area corridors? How will TANC modify and adjust the vegetation maintenance plan to mitigate for new consequences? Who monitors?

10. Will TANC ensure that if unavoidable risks occur will they assume all mitigation responsibilities for fisheries impact within every sub-watershed corridors cross and for long-term maintenance activities for each corridor property?

11: It's clear from numerous meetings with State Water Resources people that private landowners are being held to a very high standard in regards to water quality, sediment loading problems, stream quality and water runoff on existing corridors. TANC corridors will generally cause many miles of new unpaved road construction. How will future responsibilities caused by unexpected changes in environmental laws be handled in the easement agreements?

12. Landowners in the Oak Run and Round Mountain areas will experience severe aesthetic damage, loss of present and future use, loss of biological resources, EMF damage, soil and watershed damage, reduction in property values, and no known positive benefits. Will TANC ensure that this issue is addressed and if unavoidable risks occur will they assume all mitigation responsibilities?

Are we expected as landowners to surrender our property rights for the corridor project but remain legally responsible for any environmental damages or consequences caused by the construction and or continuing maintenance of these corridors?

13. TANC states that in property taxing jurisdictions there would be a tax revenue benefit. However there is no taxation of easements. Where there is no ownership, there is no benefit. There is no tax on easements. Furthermore, TANC representatives stated at a scoping meeting that as a nonprofit they paid no taxes. What exactly is the tax situation as it pertains to the landowner who has had to surrender an easement?

14. SAFE HARBOR: Unless TANC TTP purchases corridors outright, the underlying landowner remains vulnerable to rules, regulations, fines and penalties from state and federal natural resource agencies over environmental degradations and impacts caused by TANC corridors. How does TANC plan to mitigate for that?

Will TANC secure 'Safe Harbor" agreements for federal and state environmental and resource regulatory agencies for each land owner underlying a TANC easement? Thousands of private landowners will want to see that in the EIS/EIR.

15. At some date in the future the corridor may be decommissioned or abandoned. Will a reversion clause be included in the easement agreements for all rights to revert back to the landowner of record at the time of any decommissioning or abandonment? How would such a clause be made effective if TANC ceased to exist?

D. PRIVATE LAND IMPACTS: CORRIDOR LOCATIONS

There is a great deal of uncertainty during the scoping period regarding exactly which properties are in each one thousand foot wide study corridor and the location of the planned substation. Equally unknown is the width of the easements TANC plans to take.

The maps posted by TANC at Google seem to have shifted the proposed locations of both the corridors NORTH A and NORTH B, and the SUBSTATION locations at Round Mountain several times within the last few weeks. We have seen substantial shifts regarding our own property in NORTH A and in the corridor location of NORTH B in relation to the Oak Run Elementary School. Are the routes maps being continuously modified during the scoping period? At what point in the EIR process will residents know exactly where the study corridors are?

A significant number of property owners did not receive any kind of notification prior to the start of the scoping period. As a result of that failure to notify, TANC/WAPA extended the scoping period an additional 30 days. However, many people who think they are within the study corridors as they have appeared on the interactive maps (http://www.aspengooglemaps.com/TTP/Final/ttpadd1.php) still have not been notified as of May 9, 2009.

We learned of the TANC TTP by accident. Once alerted, we checked the Google maps and notified TANC TTP by email that we had not been notified that our home was in a study corridor. We finally received written notification on May 6, 2009, after the original scoping period was supposed to close. This seems to be highly irregular for a NEPA/CEQA process.

Other scoping route alternatives outside of Shasta County may also have seen shifts. This moving around of route locations makes it extremely difficult for the private citizen to see how their own family might be impacted. While it's very nice to be able to review the routes online, it would be even more helpful if the routes didn't keep changing on a weekly basis, or at least if the map notes indicated the routes had been modified since a particular date.

Another area of very serious concern is how close the Transmission lines will come to existing houses. Initially, during scoping meetings, TANC TTP representatives stated that the transmission lines would not go any closer to existing homes than 300 feet.

Then in individual conversations with TANK TTP representatives, other numbers were mentioned, naming distances from the corridor to a house as low as 30 feet. Siting high voltage a transmission tower within 30 feet of any residence is entirely unacceptable in a landscape composed of hundreds of thousands of acres of undeveloped land.

Clearly residents with dwellings in the study corridors need to know exactly how close a Transmission tower and lines may be placed in relation to their house. Will such setbacks be clearly spelled out in the draft EIR/EIS? How firmly will TANC TTP stick to those setbacks? Will TANC TTP shift the corridor to provide more clearance from homes?

Transmission corridor next to house in Oak Run, May 2009

Alternatives NORTH A and NORTH B proffered by TANC TTP go right through developed ownerships in Oak Run, Bullskin Ridge and Buzzard Roost Ridge, instead of through less developed lands located to the west or east. Therefore, exactly how will

TANC TTP mitigate the corridor encroachment on these family residences? Shouldn't the planned route avoid homes since it is entirely feasible to do so?

E. CHANGE OF EASEMENT USE or SALE OF EASEMENT RIGHTS

1. In the event of a future change of business plan for TANC how would a sale of the transmission line corridor easement affect the underlying land owner? Would they be entitled to renegotiate the easement agreement?

2. It has become a much more common practice that Utilities view the easements they acquire as entitling them to re-sell space on 'their' easement to other parties such as buried gas lines. Some utilities even feel they are entitled to mineral rights or other ownership entitlements more commonly ascribed to the fee ownership, far beyond traditional easement usage.

Will TANC be able to sell, exchange, or sub-lease the easement to third party for any use beyond above ground transmission tower corridors without renegotiating such an expanded use with the current underlying land owner?

L. NOISE

Three types of noise are often associated with transmission lines once operational, including noise from the transmission lines and towers, noise from activities for routine inspection and maintenance of the new facilities, and noise from new substation facilities. The noise generated by routine maintenance is generally negligible, while the noise generated by a substation may affect the area immediately adjacent to the substation. Transmission line noise, which includes *corona, insulator,* and *Aeolian noise,* can be generated throughout the transmission line route and is therefore more likely to be more impacting to people, pets, wildlife and electronic equipment.

Power-line noise can interfere with radio communications and broadcasting. Essentially, the power lines or associated hardware generate unwanted radio signals that override or compete with desired radio signals. Power-line noise can impact radio and TV reception, including cable TV head-end pick-up and Internet service.

Disruption of radio communications, such as amateur radio, can also occur. In rural Shasta County, loss of critical communications, such as police, fire, military and other similar users of the radio spectrum, can result in even more serious consequences during local emergencies.

1. Once the transmission lines are placed in service, they generate a seriously annoying hum. While Transmission line information tends to dismiss noise as an issue, it is a very serious issue in intermountain communities where silence is highly valued. How will the noise be minimized?

2. In nearly all of Shasta County rural residents monitor scanners for wild land fire information from about May through November – fire season. How will TANC TTP mitigate for the increased interference in vital rural emergency communications?

3. Any disruption of TV reception, satellite internet and radio is a serious issue since there are no alternatives for residents. Though common in metropolitan areas, cable TV is not available in the majority of Shasta County. How does TANC plan to mitigate for this problem?

4. There is considerable disruption to wildlife caused by noise. Certainly anyone standing near a transmission corridor finds the 'hum' annoying. And different corridors seem to leak different levels of noise. Consequently during construction and for the life of the project will TANC TTP ensure that all equipment installed on the towers, lines and at the substation that create noise, has the most effective sound-dampening devices possible? Will they use such noise-lowering technology throughout the entire system to minimize habitat disruption for animals, human beings and household electronics?

M. PUBLIC SERVICES AND UTILITIES

WILDLAND FIRE

TANC scoping presentation did not discuss the increase in wild land fire hazard and risk issues that the selected TANC corridor and substation locations would create in Shasta County. Presenters were very unclear as they stated that 'closer spacing' was desirable for some regions and 'farther apart' spacing was desirable in other locations. The corridor alternatives for Shasta County are completely inadequate locations for fire protection purposes.

Existing corridors within the oak woodlands, forest woodlands and forest lands clearly show the high degree of risk every transmission line faces in this region.

Wild land fire protection operates on 3 levels in Shasta County. The U.S. Forest Service (USFS) is responsible for wild land fire control on Forest Service administered lands and adjacent private lands through an agreement with the CDF. National Park Service (NPS). The NPS provides protection for Lassen National Park. Cal-Fire provides protection for state responsibility areas, 4 fire districts serve eastern Shasta County and the smaller communities have volunteer fire departments. With recent budget cuts, fire services are grossly understaffed.

Existing corridor near Oak Run, May 2009
Keep in mind that fire flame height is often 3 times fuel height or greater

While distribution structure failures are infrequent. Tower placement in corridors in close proximity to trees and other tall vegetation pose risks that they may be pushed down in storms by wind blown trees. Assisted by high winds, power line ignitions have caused four of the 20 largest wildfires (measured by acreage burned) in California's history from 1932 to 2007 (CAL FIRE, 2006, 2008). These fires were the Witch (2007), Laguna (1970), Campbell Complex (1990), and Clampitt (1970) fires. Power lines have been responsible for four of the State's 20 largest wildfires measured by the number of structures destroyed, including the Witch, City of Berkeley (1923), Laguna, and Rice fires.

In the area above Oak Run on Bullskin Ridge and Buzzard Roost ridges residents commonly experience 65 mile per hour winds in spring and fall. Such a wind event combined with a fire event would travel fast, burn hard. It is probable that all 8 of the transmission lines would be damaged or destroyed and completely out of commission before any type of fire response could get to the area. Oak Run has no paid fire fighters. The volunteer fire department there is down to 3 volunteers. Shasta County is cutting staffing on fire stations to save the county budget. We are all at risk, not just TANC.

While the loss of homes in a major event would be less than the southern California fires, the damage to the transmission system would be more concentrated and harder to repair due to the geographic location.

On a different transmission project (SD&G Sunrise Powerlink Project) identified the following fire risks while examining a just a 4 mile stretch of their project alternatives:

- Fire affecting both lines
- One tower falling into another line
- Conductor from one line being dragged into another Line
- Lightning strikes
- Natural disasters
- Flashover to vegetation

All of these transmission company identified risks are equally important on the 70 plus miles of forested lands leading into and out of Round Mountain and Oak Run, plus additional unspecified substation hazards.
http://www.cpuc.ca.gov/environment/info/aspen/sunrise/

In Shasta County, (and Lassen County as well), all of these Utility identified hazards for transmission systems pose high risks for fire hazards that simply cannot be mitigated.

Between 1992 and 2003, there was an average of 333 wild land fires per year in Shasta County. The majority of these wild land fires occurred in the upland areas of Shasta County, where fire hazards are extreme due to an abundance of highly flammable vegetation and long, dry summers. (Source: Shasta County General Plan: http://www.co.shasta.ca.us/Departments/Resourcemgmt/drm/general_plan.htm

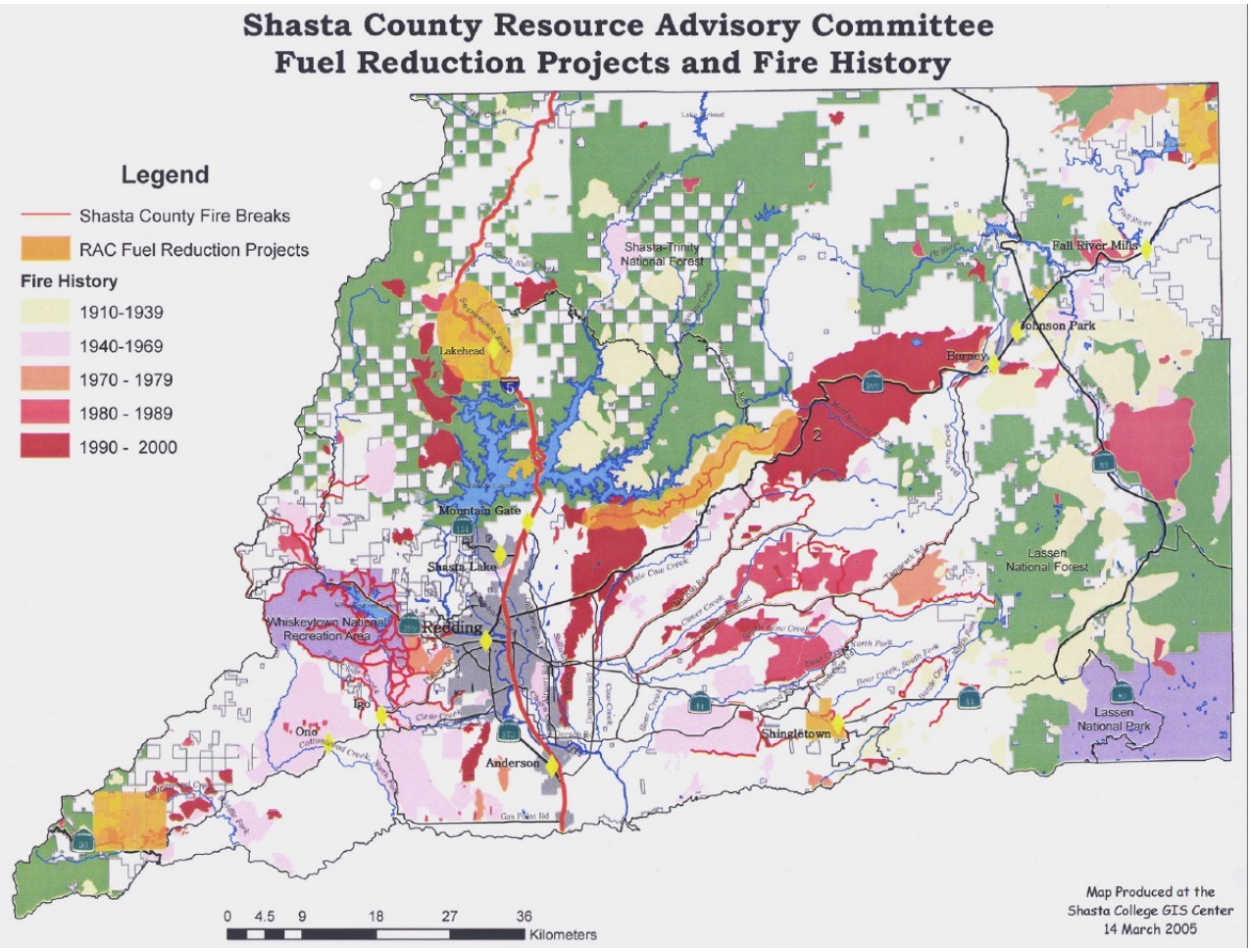
The influence of topography on fire hazard increases with slope, as steep slopes cause fires to burn faster and increase travel time for emergency equipment. Thus, as slope increases, the ability to control fire decreases. Wild land fires in developed areas are difficult to control even when adequate equipment and personnel are available. Nearly all of the TANC TTP corridors are located in steep mountainous terrain in Shasta County.

But fire, mountainous areas with massive vegetation and transmission corridors do not mix. An electrical industry news service, (http://tdworld.com/customer_service/california-fires-electricity-industry/) wrote of fires causing a transmission system breakdown in 2007, " *…when fires began in seven Southern California counties, more than two dozen different transmission lines have been out of service at one time or another—including the 500-kV Southwest Powerlink, the Pacific DC Intertie, and numerous other lines at the 230 and 138kV levels. On Wednesday, the San Diego area was hanging onto the western grid by only one 230kV line. Over one 24-hour period, several 230kV lines that link Southern California Edison and San Diego Gas & Electric at the San Onofre power plant tripped in and out of service at least 25 times. Despite the numerous transmission line outages—some lasting almost four days —the California ISO operators worked around-the-clock to re-route power and dispatch generation to compensate for the loss of transmission.*" Shasta County would pose the same level of risk as described in the aforementioned event.

TANC TTP proposes to put a second substation and 3 new corridors in the exact same area (Round Mountain) that saw 64,000 acres and 600 homes burn to the ground in 1992. That's 100 square miles of unstoppable conflagration. Twenty years later the whole intermountain region is overdue for another catastrophic fire event. This is not my opinion; it is the opinion of fire experts from Cal-Fire and is illustrated in various fire maps.

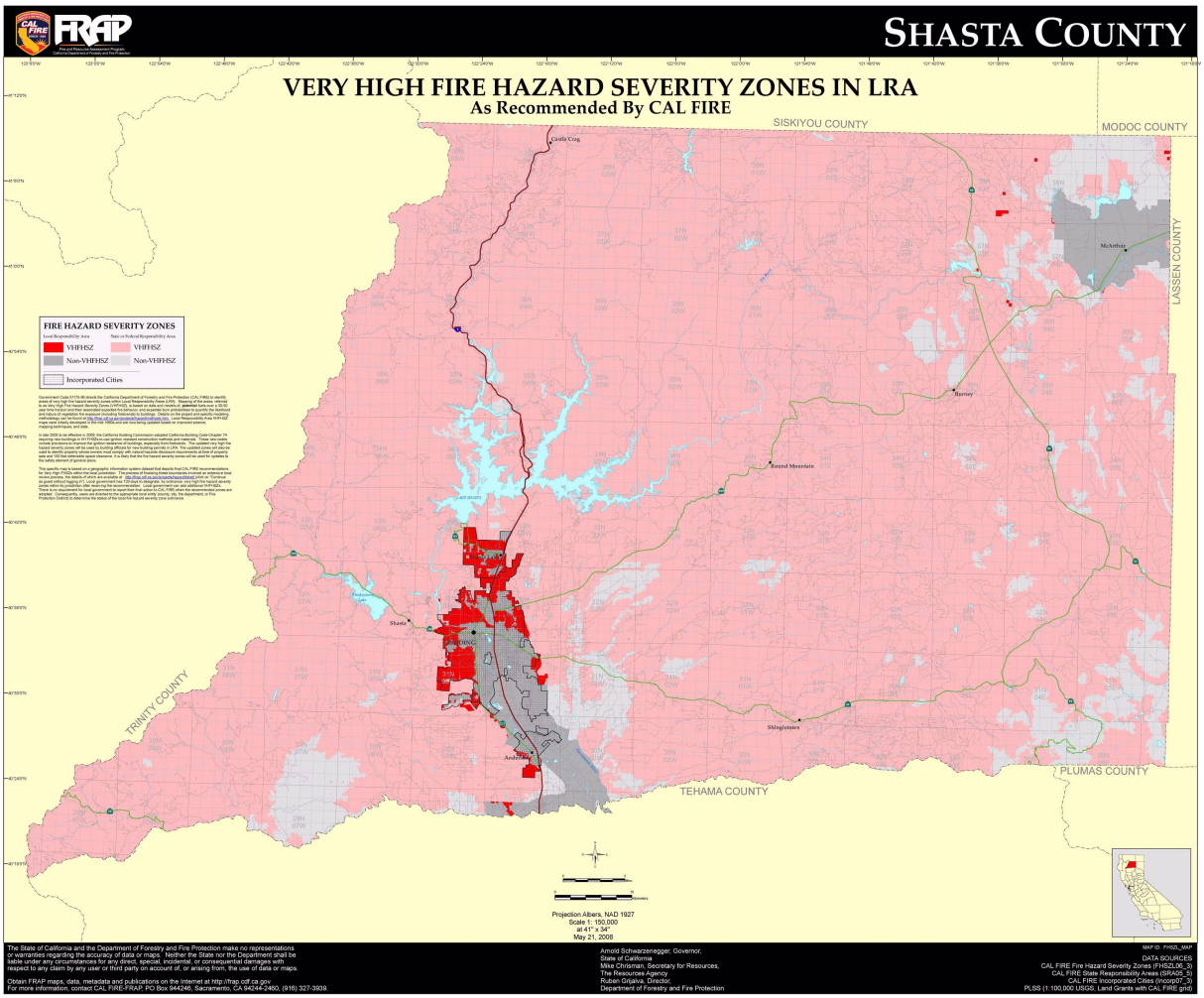
FIRE AFFECTING MORE THAN ONE LINE: Round Mountain currently hosts 8 major high voltage transmission corridors going into a single substation that connects 6 states and serves an estimated 100 million people. Adding several more corridors and another substation substantially increases the risk levels both for the system itself and the local residents. And it's already burned in 1992.

Please note the following fire history map dates from 2005 and does not include the 2008 fires that ravaged Shasta County.



Shasta County Fire History Map from:
http://www.fs.fed.us/r5/shastatrinity/home-page/st-main/rac-forms/shasta-fuel-map.pdf

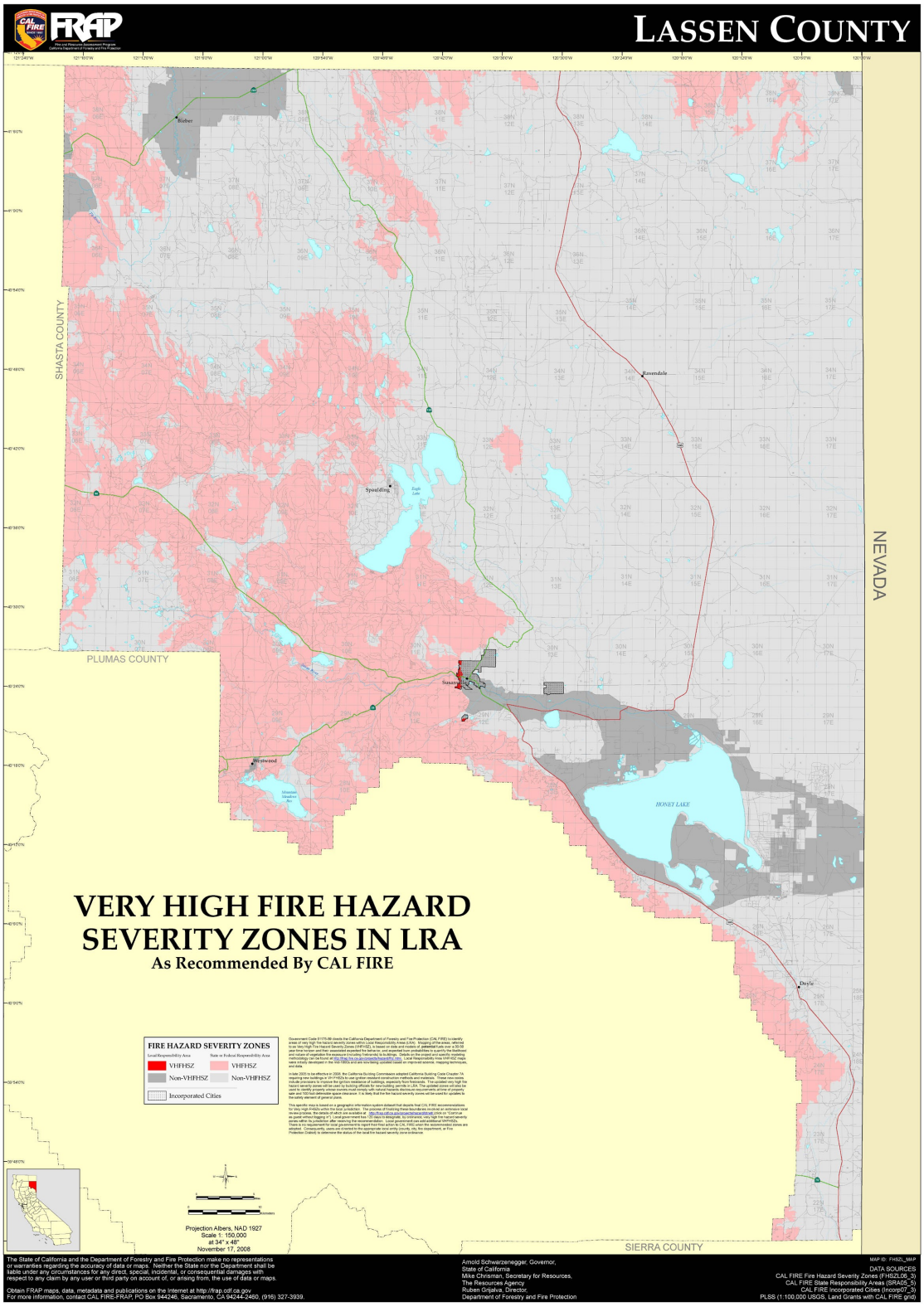
It is absolutely astonishing that TANC TTP is even considering placing more valuable assets in an area that has always been historically high in flammable fuels, is classed as an extreme high fire danger area, that has already experienced a major fire, and that has extremely limited manpower resources with which to combat any fire emergency.



Shasta County FRAP Fire Severity Map: http://frap.cdf.ca.gov/webdata/maps/shasta/fhszl_map.45.pdf

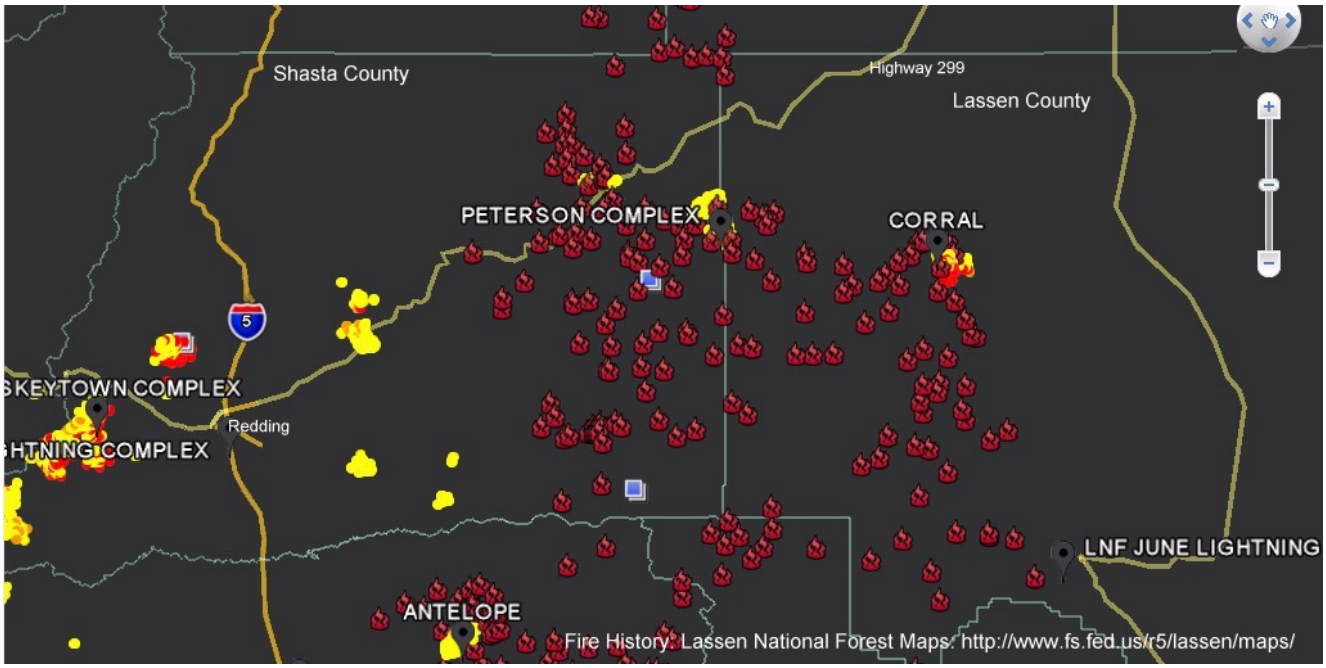
LIGHTNING: In June 2008 there were 150 fires started due to lightening and there were 135 response teams. Many fires were let burn due to understaffed fire crews. Fortunately there was little wind at that particular moment in time.

Lassen County fire risk levels are also extraordinarily high.



http://frap.cdf.ca.gov/webdata/maps/lassen/fhszs_map.18.pdf

Please note in the PDF file map that the federal responsibility areas may exercise a 'let-it-burn' policy to reduce fuels within national forest lands.



Fire History for recent years: Shasta and Lassen Counties from: http://www.fs.fed.us/r5/lassen/maps/

FLASHOVER TO VEGETATION: TANC has suggested at Scoping meetings that the corridors as proposed will keep the lines far enough apart to prevent fire problems like flashovers. For the Sunrise Project, SDG&E suggested contact or proximity of vegetation and overhead ungrounded supply conductors could result in ignition of vegetation, causing fire and potentially outages and therefore would reduce reliability, but they were discussing vegetation in a desert area that seldom grows above 5 feet in height. Shasta County has an abundance of fast growing, highly flammable vegetation of all sizes. Even if all vegetation within each corridor was completely eliminated, the vegetation outside each corridor creates a high-hazard risk for fire and other line problems.

Any wild land fire burning under or very close to the power line can increase the distance that an electricity arc can jump. Flashovers are potentially life threatening to a person standing in the near vicinity of the flashover (much like when lightning strikes the ground near a person). Flashovers can also cause damage to nearby equipment and the transmission line, and can cause possible interruptions to power supply to homes and industry. This could be a serious impact particularly with TANC TTP being the ninth such line in the Oak Run area.

Simply put, Shasta County, Cal-Fire/CDF and our understaffed local volunteer fire departments do not have the fire response resources to protect any of the transmission corridors within a timeframe that would enable the transmission lines and substation to be saved. They weren't saved in 1992 and they couldn't be saved in any major fire situation even today.

1. Rural residents are all out creating firesafe areas around their homes, but we can't protect TANC TTP, too. If TANC chooses to proceed with the project, how does TANC propose to minimize increase in risk to Oak Run families that stem from adding another corridor? What about the increase in risk levels of adding a new substation and 3 new corridors to Round Mountain? What about the increase in risk to the residents of Burney, Fall River and Cassell?

2. How does TANC propose to provide increased fire protection for their substation and their transmission corridors? Shasta County is cutting staff in every public service area due to the state budget cuts. There is definitely no extra fire protection available for the extra burden TANC TTP creates.

3. Land owners in Shasta County burn excess vegetation each year to make their property firesafe. If due to flashover concerns, land owners under, around or near transmission corridors are no longer able to burn vegetation, brush and other wild fire fuels, then who will pay for alternate means of creating fire safe areas around homes?

4. If under burning, stacking and burning brush represent a threat to the transmission lines as well as people, then how will eastern Shasta County meet fire safety guidelines as required by Cal-Fire?

5. Will TANC agree to pay for mechanical vegetation-fuels management of the properties and homes trapped between the power line corridors? Who will be liable for any fire event?

Additionally, the routes planned go through areas of high snow load so there is additional risk of major transmission outages during the winter months. It's been long known that electrical route 66 has snow load problems resulting in outages. It is likely that TANC TTP will experience similar difficulties.

During the summer time peak for electrical demand TANC runs the risk of a major transmission outage from wild fire. During the winter TANC runs the risk of a major transmission outage due to snow and wild weather. Which bring us to ask the question of why bring TANC TTP through the highest risk natural resource areas possible to find. Surely there are better, safer, less environmentally impacting alternates that ought to be examined during the draft EIR/EIS.

USFS MODIS Map: from June 23, 2008
http://www.firefighterblog.blogspot.com/2008/07/shu-lightning-complex-potential-mega.html

GRID SAFETY

If the electrical grid is capable of doing without the Round Mountain station during such unplanned natural catastrophe emergencies as fire and snow, then clearly the tie across from Raven to Round Mountain is not a grid necessity. If the electrical grid is able to do without Round Mountain through a 'work-around, then it's the 'work-around' that needs to be beefed up, not the route with the highest risk of unplanned outages.

1. Shouldn't an expensive overhead transmission system be built in safer geographic location? Shasta County's intermountain region with its history of severe fires is not a safe place to invest a billion plus taxpayer dollars. Shouldn't TANC find a better route?

2. What level of risk does the location of the corridor pose to residents during a fire event? What about escape routes? Will transmission corridors block escape routes if lines melt or break during a fire?

3. What's the disaster mitigation plan? Does TANC have a disaster mitigation plan that goes beyond a simple restoration of transmission service? Do they have any responsibility to the safety of the communities, residents and fire fighters?

4. If there is a mitigation plan, how would TANC implement it? Will TANC's disaster plan include protecting this portion of power grid from disruption from any type of catastrophes including terrorism threats?

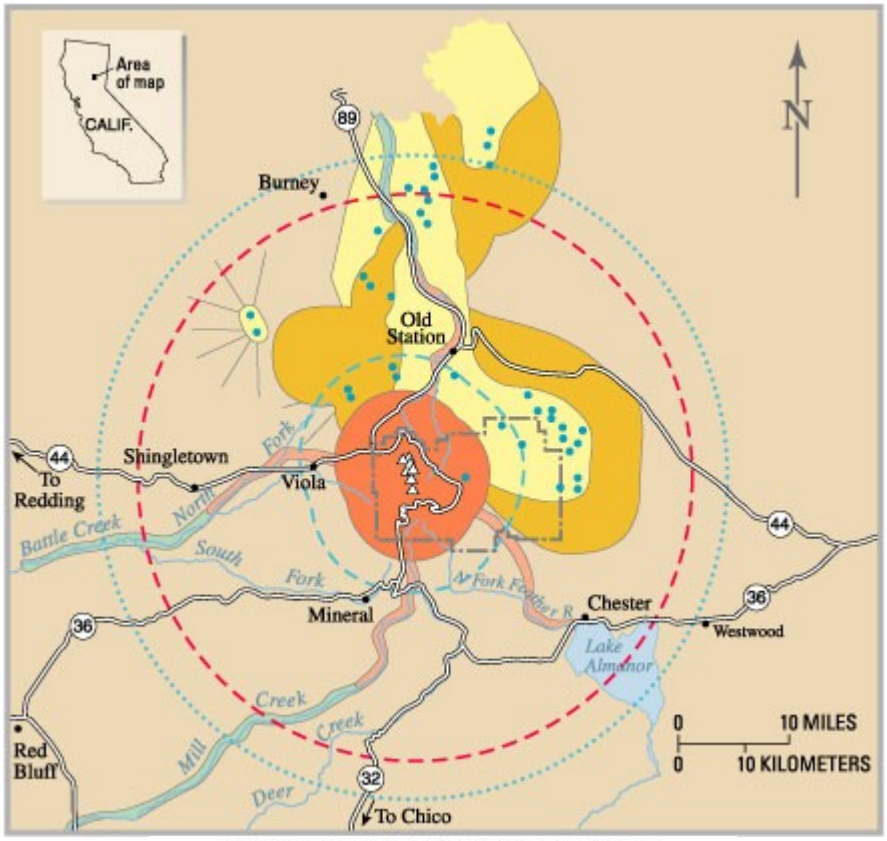
VOLCANIC RISK ZONE

From 1915-17 Mount Lassen was a very active volcano. When it may erupt again is not predictable. It does however, represent a known risk.

TANC's corridor alternative NORTH 1, 2, 3 go directly through the volcano hazard zone, as identified by USGS at: http://pubs.usgs.gov/fs/2000/fs022-00/
On the USGS map, it would be the area between Old Station and Burney.

1. For some unknown reason, the route alternatives go through the community and avoid the lava rock areas. Is there a particular reason for that decision?

2. How does TANC plan to mitigate for volcanic hazards?



Hazards from Low-Silica (Mainly Basalt) Volcanism

- Vents—Sites of low-silica eruptions known or estimated to have occurred during the past 50,000 years.
- Lava-Flow Hazard Zone—Areas potentially subject to lava flows from nearby vents.
- Ash-Fall Hazard Zone—Areas potentially subject to ash fall from mildly explosive eruptions of nearby vents.

Hazards from High-Silica (Mainly Dacite) Volcanism

- Vents—Sites of high-silica eruptions during the past 50,000 years.
- Combined Hazard Zone—Areas adjacent to potentially explosive volcanoes or vents, capable of producing ash fall; high-speed avalanches of hot rock fragments, ash, and gas (pyroclastic flows); lava domes and flows; and mudflows (lahars).
- Pyroclastic-Flow Hazard Zone—Maximum outer limit of area potentially subject to high-speed avalanches of hot rock fragments, ash, and gas; limit based on record of pyroclastic flows in the past 10,000 years at Mt. Mazama (Crater Lake National Park), because no large events of this type have occurred at Lassen in the past 50,000 years.
- Heavy Ash-Fall Zone—General outer limit of area potentially subject to 8 inches or more of ash fall.
- Moderate Ash-Fall Zone—General outer limit of area potentially subject to 2 inches or more of ash fall.
- Volcanic Mudflow (Lahar) Hazard Zone—Valleys potentially subject to mudflows.
- Flood Hazard Zone—Valleys beyond the extent of Mudflow Hazard Zones that are potentially subject to floods caused by volcanic activity.

Graphic sources: http://pubs.usgs.gov/fs/2000/fs022-00/

Lava flow areas from 1915 eruption of Mount Lassen are in pink.
Picture is a composite from TANC Google maps

SEISMIC ACTIVITY

There are a number of known faults in the Burney/Hat Creek area that are crossed by all the corridor alternatives. The whole area from Medicine Lake to the north and below Lassen in the south is seismically active.

1. Will TANC be taking seismic activity into account in their planning and construction? See map: http://quake.wr.usgs.gov/recenteqs/FaultMaps/122-41.htm

2. How does TANC plan to mitigate for seismic hazards?

N. SOCIOECONOMICS

In order for socioeconomic information to have any value within the TANC TTP analysis process, data must be gathered for each county within the project length and preferably on a more localized community scale. Please review the earlier Section G. 'Environmental Justice', in combination with this section for a more complete picture of the socioeconomics of the project area within Shasta County. The TANC TTP is a transmission corridor system approximately 600 miles long. The socioeconomic impact of the project is substantial and widespread.

Shasta County has a low population per acre, if one chooses to look at demographics in that manner. Population (and housing) in the intermountain areas is clustered in valleys, and along transportation routes. TANC TTP cuts right through the center of many of our smallest communities and through the poorest populations of the county.

In Shasta County, the current economic situation is dire. The unemployment rate tops 17 percent as of April 2009 which ranks 9th worst in the whole nation. Even in ordinary times Shasta County's unemployment rate was above the state average. The number of children living in poverty has always been above the state average, and the situation has worsened since 2007.

Persons employed by TANC TTP during construction would be specially trained personnel that follow the transmission corridor construction rather than permanent residents of Shasta County. Any local jobs created by TANC TTP would be temporary and limited in duration. Such jobs would contribute very little to the overall economic life of the county or its residents.

Tourism is a significant element of the economic life of Shasta County. Anything that detracts from regional tourism, anything that impacts the recreational business sector, seriously impacts the economic base of Shasta County. The corridor alternatives roll over fish hatcheries, fishing streams, hiking trails, forests and homes. TANC TTP provides no benefit to Shasta County economics.

Tax-wise, TANC TTP representatives have stated at the scoping meetings that their utilities pay no taxes as nonprofits. Furthermore, the easements they obtain for the project devalues each property crossed which may show as reduced property tax assessment values. Additionally the county may incur significant regulatory penalties related to cumulative environmental impacts originating from the TANC corridors.

TANC TTP will contribute no financial benefit to the county in the way of property taxes, school fees, or payments for community services like fire protection. It seems very unlikely, given their business structure, that Shasta County will experience any financial benefit from TANC TTP directly or indirectly.

In Shasta County the highest and best use of a property, its value, is based on forest productivity and range lands, habitat for wildlife, hunting, fishing, and recreational aesthetics as well as residences. TANC's economic impact on Shasta County property values will be measurably higher by diminishing land productivity. The economic impact will certainly be felt by current owner who has no course of redress from unwanted transmission corridors taken by condemnation action during the biggest financial depression America has seen since 1930.

The conversion of thousands of acres from forest to several square miles of clear cut has a high impact within Shasta County. This is a rural county. Agriculture and Forest economic uses that are converted to non-use utility corridors have a major economic impact.

Land used to be valued for what it could produce. In recent decades land is seen as more of a commodity as we have seen large scale loss of agricultural production capabilities in the US. Land in Shasta County is still vitally valuable for what it can produce in the way of agricultural and forest products, for recreational opportunities, for wildlife habitat, clean water, fisheries, and for visual beauty of forest and range lands.

The conversion of thousands of acres for the single purpose of a transmission corridor, one that serves none of the people whom it impacts, is a significant clash of values. The people of California have made it abundantly clear through legislation that that the environment has values taxpayers are willing to protect. On the basis of land use conversion and severe socioeconomic impacts, TANC TTP is an unacceptable project.

O. TRANSPORTATION AND TRAFFIC

It takes only a few moments to review any USFS environmental impact analysis of logging to know that low standard roads have the highest runoff impacts within watersheds. Road standards will be important in terms of environmental impact.

1. What road building standards will TANC TTP adopt? How will they mitigate through road design, water barring, etc. What about ongoing maintenance? What about a problem – who does the landowner call for mitigation?

2. Will TANC ensure that road studies are made and if unavoidable risks occur will they assume all mitigation responsibilities for corridor system roads and access roads through the easement agreements?

3. How will road standards, use and access be addressed in the easement agreements?

4. Erosion from existing non-TANC corridors is flowing from the roads/trails used by power companies for maintenance. How will TANC improve on the current methodologies? Will they be responsible for the perpetual maintenance of water bars,

and erosion mitigation or will the underlying landowner be held accountable by state and federal agencies? Who controls this issue? Who pays the costs?

P. OTHER ISSUES

1. CUMMULATIVE IMPACTS

For impact from utilities, will TANC TTP quantify all of the impacts described in this document and multiply those impacts by the 8 other transmission corridors already running through Oak Run, Round Mountain and Montgomery Creek? Will the draft EIR/EIS add to that estimation the potential impacts from future TANC system expansion which TANC representatives have already mentioned as possibility? Will the draft EIR/EIS include the PG&E projects that are nearing the scoping stages, and any other projects of which CPUC, the California Energy Commission, California ISO are aware?

Will the draft EIR/EIS include repeated additive effects of transmission corridors on the environmental resources in Cow Creek Watershed from this project? What about stressors from a single project that have interactive net effect on a resource? TANC crosses many streams that outflow into the Sacramento River.

Will the Draft EIR/EIS cover additive effects on a resource arising from multiple sources (projects, point sources, or general effects associated with development)? What about impacts to past, present and future environmental restoration projects? Will TANC identify, correlate, and evaluate how their proposed substation and corridor system will interact with other power projects both existing and proposed?

Will the draft EIR/EIS address landowner concerns? According to a review of studies done on property value impacts, it takes upwards of 15 years for properties to recover some of the value lost by a new transmission corridor. In some regions property value never recovers. Many senior citizens in Oak Run and Round Mountain will not live long enough to recover from the financial impacts of this corridor project. How will TANC mitigate such impacts for lower income residents such as seniors, those on fixed incomes, etc?

Will the Draft EIR/EIS review the combined risk factors to both their project and the subject population from known hazards, from multiple sources, that would be interactive?

Will TANC clearly state how wide the corridors will actually be and where? It has been very difficult to evaluate the project during scoping as the online maps keep changing.

Will TANC TTP provide to the public the necessary information for project determination of decision such as aerial maps and photos marked with the existing transmission line corridors easements (PG&E and any other power company easements of record) as

well as the proposed corridor routes in order to evaluate cumulative impacts of the Transmission lines? TANC needs to identify the existing power grid system. Without those facts any decision to go forward with the project would be based on an incomplete assessment of the total impacts of the project and/or the need/justification of the project.

We recognize that a number of documents and maps do exist that have bearing on these issues, but they are not readily obtainable by the public without hours of online searching.

For the sake of a through and complete public review of the TANC TTP please locate, identify, and at least publish a web page of consolidated links of such existing documents on both the TANC, WAPA and California Energy web sites so that the public and affected land owners may determine what gaps in knowledge, studies and maps exist. The EIR/EIS process will be incomplete without such correlation of documents.

After an analysis of cumulative effects, there may very well be no adequate measures such as biological monitoring to ensure impacts stay within designated limits, habitat restoration, and habitat creation. For a significant number of environmental impacts brought forward as scoping issues history has shown on the other 8 corridors that there are no adequate methods that would be reliable implemented that can be used to avoid, minimize, or mitigate these impacts.

The known fire risks in relation to transmission corridors is so pronounced based on historical evidence that the ‘no build’ option is the most sensible decision for TANC TTP based on that issue alone.

Cumulative impact analysis of the whole range of scoping issues requires careful understanding of reasonably foreseeable future actions. Based on initial review of cumulative impact considerations, the ‘no build’ option is absolutely the most sensible decision for TANC TTP.

2. MITIGATION COST COMPARISONS

Different types of mitigation methodology to offset environmental damage may have widely different cost values.

a) What means will be used to fairly compare mitigations in both dollar values and environmental protection values?

b) Will there be a range of comparisons for each environmental impact?

c) Will the lowest cost mitigation be selected or the most effective mitigation method?

d) What about comparison cost of ongoing mitigation for corridor maintenance?

3. PROJECT DECOMMISSIONING

If the trend in California legislation continues and if cities invest in localized power generation, smart grid technology and utilities move into effective distributed power modes, it is entirely possible that the TANC TTP would be decommissioned at some future date.

On federal lands, there is a detailed decommissioning process that utilities must agree to perform in order to be granted an easement across public lands. The private landowner must be assured by contractual agreement that their land will be decommissioned and restored in a manner equal to that of public lands.

Public land use by utilities is by agreement between government agencies while the acquiring of easements is essentially a taking of private land rights from unwilling land owners. Will easements acquired by utilities for TANC TTP be restored to the current property owner in entirety should the corridors cease to be used for its original purpose?

a. Is a DECOMMISSIONING PLAN for private lands to be a part of the DEIS similar to that described in the Decision of Record for BLM "*Final Programmatic Environmental Impact Statement, Designation of Energy Corridors on Federal Land in the 11 Western States (DOE/EIS-0386)* (DOE and DOI 2008)" and USDA Forest Service Record of Decision for "Designation of Section 368 Energy Corridors on National Forest System Land in 10 Western States Decision by Secretary of Agriculture To Amend Land Management Plans Described as the Environmentally Preferred Alternative January 14, 2009"?

b. If this project is ever decommissioned, will TANC apply the same decommissioning standards to private lands as required on public lands as per the Decision of Record for BLM "*Final Programmatic Environmental Impact Statement, Designation of Energy Corridors on Federal Land in the 11 Western States (DOE/EIS-0386)* (DOE and DOI 2008)" and USDA Forest Service Record of Decision for "Designation of Section 368 Energy Corridors on National Forest System Land in 10 Western States Decision by Secretary of Agriculture To Amend Land Management Plans Described as the Environmentally Preferred Alternative January 14, 2009"?

c. Will such a decommissioning plan include a site reclamation plan for each property, a monitoring program and shall it be coordinated with land owners? Will a reversion clause be in each easement to dissolve the easement?

d. Will TANC establish a escrow fund at the start of construction with sufficient monies to cover the eventuality of decommissioning so that there will be adequate funds to remove towers and lines from private lands, and restore the land similarly to what is required and agreed for public lands?

Since TANC is essentially a voluntary alliance of public utilities and since not all alliance members are a party to this particular TANC project, it is only reasonable to expect

some sort of fund be established to cover a future decommissioning since there is no governmental authority to guarantee restoration of lands should TANC dissolve it's alliance and the lines be abandoned.

4. PUBLIC INFORMATION PROCESS

It's vital and necessary to have highly specific aerial maps and photos marked with the existing transmission line corridors easements (PG&E and any other power company easements of record), watersheds, residences, homes, businesses, environmental areas, roads & highways, topographical features, etc as well as the proposed corridor routes in order to evaluate cumulative impacts of the Transmission lines. Will TANC include this level of information in the EIR/EIS?

Even now, using available maps and online materials it's clear that the whole region is a vital environmental resource under siege from utility projects simply because it has a low human population.

We request that TANC put all maps from studies done to address local concerns for this project be in a format of GIS layers that is an acceptable format as well as in electronic form and publish on the web ALL studies including every iteration. This is essential for the public review process as well as transparency of the EIR/EIS process.

SECTION 3: SCOPING SUMMARY

Shasta County citizens are committed to renewable energy as illustrated by the significant numbers of residents using renewable energy at the 'home' scale. They do understand both the energy issues and the environmental concerns.

However, based on the environmental concerns identified in scoping, and the difficulty in study, mitigation, monitoring and restoration of the environmental impacts for the TANK TTP should the system be built, none of the alternatives presented by TANC are suitable for development in Shasta County. We request that a 'no project' decision be made.

MEETING RENEWABLE ENERGY GOALS: The problems facing utility-level renewable energy generation from northeastern California are not the lack of transmission lines. The barriers to renewable energy generation in Northeastern California are directly related to the technical problems intrinsic to the type of raw renewable source materials: no sustainable biomass sources, too low of temperature in geothermal areas, variability of wind resources and degree of latitude north for solar.

MEETING BUSINESS GOALS: There are business alternatives that don't require building 600 miles of new transmission corridors to achieve the business objectives stated in TANC's *Notice of Preparation*. The desire of TANC to build substation and transmission facilities at taxpayer expense, in order improve marketing capabilities is

not a goal shared by taxpayers. It is perceived as an irreversible environmental burden on rural counties and communities.

AESTHETIC/VISUAL: The visual effect of a 200 foot 70 miles long clear-cut in Shasta County is not an asset.

AGRICULTURE: It is a non-renewable resource and once lost or degraded, may never be restored to its original quality.

OAK WOODLANDS: the existing corridor transmission companies are removing thousands of oaks, including blue oak and black oak within their easements. Adding another 200 foot wide corridor will significantly add to the loss of oaks through conversion.

FORESTS: Under a utility exemption, TANC is allowed to create a 200 foot wide clear cut (or greater width) for each corridor. That has the environmental impact of a low standard 12-lane freeway through the woods. What exactly will be done with the millions of trees cut down for this project during construction? Does this meet the intentions of the Forest Practice Act's utility exemption? Does this meet the intentions of NEPA/CEQA for environmental protection? What about the potential for insect infestations from downed woody debris left in the corridors?

BIOLOGICAL RESOURCES: the habitat and wildlife population including fisheries, rare, endangered and sensitive species of concern are placed at an increasing risk with each new transmission project. The cumulative impacts of large-scale transmission corridors are both predictable and preventable. Either mitigate corridor impacts to wildlife habitat by improving existing transmission lines or halt the project.

CULTURAL ISSUES: Will TANC TTP be willing to move routes to meet tribal objectives and concerns?

EMF: The question becomes whether locating the TANC substation in Round Mountain is really worth the health risk to the local population. Surely there are other possible alternative substation locations that should be examined in the DEIS. Round Mountain cannot be the only possible substation location for a project 600 miles long.

ENVIRONMENTAL JUSTICE: Our intermountain communities are both impacted and imperiled by TANC TTP. To deprive residents of their environmental quality of life, risk their family's health and safety in addition their already low income and high unemployment rates will make everyone truly poor. TANC did not hold scoping meetings in these communities though they held meetings in other unincorporated communities. TANC TTP creates a disproportionately high and adverse human health and environmental impact on low-income and minority populations in Shasta County, particularly in Round Mountain. TANC TTP is environmentally unjust to the communities of Round Mountain, Oak Run, Cassel and other small but vital communities in Shasta

County. Environmental discrimination is not the business our government should be funding.

GEOLOGY AND SOILS: TANC TTP presents serious threats for increased annual environmental degradation through soil erosion entering streams within the entire Cow Creek Watershed from the transmission corridor(s) and draining into the Sacramento River, a source of drinking water for millions of Californians. The project also imperils drinking source water for numerous intermountain residents. Erosion impairs fisheries, and seriously endangers the fragile salmon habitat. Soil transport into streams and roadways is not acceptable. Soil is not a renewable resource. Neither is potable water.

HAZARDS: Hazards to residents, livestock, wildlife and fisheries are presented by the possible use of pesticides and herbicides during construction and regular maintenance of all TANC TTP facilities and corridors. These known risks must be avoided.

HYDROLOGY AND WATER QUALITY: the proposed substation location in Round Mountain and both North A, and North B routes through Cow Creek Watershed represent an unacceptable amount of cumulative environmental damage to an irreplaceable necessary resource: potable drinking water for millions. A ‘no project’ decision should be made on the basis of severe irreversible impacts to the headwaters of the Sacramento River. The risk to residential drinking water springs, ponds, wells, is equally severe.

LAND USE AND RECREATION: Eastern Shasta County has already seen upwards of 25 square miles converted from agriculture, wildlife habitat, oak woodlands and forests into transmission corridors. That’s 25 miles of perpetual environmental degradation that will never be restored. This continued conversion of productive lands into environmentally detrimental no-value utility corridor use is unacceptable.

NOISE: The lines are noisy and annoying to both people and wildlife, and increasingly hard to avoid.

PUBLIC SERVICES: The known risks of high severity wild land fire for all of the TANC TTP corridor and facilities alternatives within Shasta County make only one option possible: make a finding of ‘no project’. As Cal-Fire will tell anyone who asks, it’s not “if a wild fire will occur in Shasta County, but ‘when’. It’s no place to put a billion dollars of infrastructure. We can’t protect the infrastructure that is already here as demonstrated in the Fountain Fire of 1992. Why repeat the expensive lesson?

SOCIOECONIMICS: TANC TTP will contribute no financial benefit to the Shasta County in the way of property taxes, school fees, or payments for community services like fire protection. It won’t create any new jobs for the long term. It seems very unlikely, given their business structure, that Shasta County will experience any financial benefit from TANC TTP directly or indirectly.

TRANSPORTATION AND TRAFFIC: The low standard access roads associated with building TANC TTP and the endless problems maintaining such roads create permanent, irreversible environmental degradation for soils.

OTHER ISSUES: The cumulative impacts of TANC TTP cannot be overstated. The environmental burdens placed on Shasta County will be increased substantially. The economic burdens and impacts on the intermountain communities are off the scale.

Transmission corridors must be planned, located and mitigated in a manner that protects the region's treasured wildlife, forests and agricultural productivity, clean water, fisheries, air resources and zoning.

We believe that the TANK TTP alternatives as mapped for scoping are entirely misplaced in location and contain no reasonable mitigation options to protect resources in Shasta or Lassen Counties. The environmental damage that would occur from the new corridors and substation locations should the project be constructed is entirely too severe. The permanent recurring environmental problems that corridors create are too costly for the landowner, the counties, and ultimately the state of California.

The project as currently designed will cause too much environmental degradation and have too many environmental impacts that are simply cannot be mitigated to an acceptable level. We see only one choice: halt the project until environmental better alternative routes are identified.

We believe the best way for TANC member-utilities to meet their need for renewable power can be accomplished most cost effectively and with the least environmental impact by ensuring that their energy demand is first met by maximizing investments in energy efficiency, distributed generation sources, and roof-top rooftop solar within their own service area.

If TANC spent a billion plus dollars within the 18 cities they serve to install grid tied renewable energy sources, to increase energy efficiency and to utilize local "distributed" generation sources, we think they'd reach state mandated objectives. Such an investment in their own ratepayers would simultaneously eliminate the land conversion to transmission corridors and substations between Raven and Cottonwood. TANC utilities and their ratepayers could be hometown heroes with such a world-class decision. Think globally, invest locally.

This concludes our comments on the project to date. We may submit additional comments by the end of the comment period.

We would like to thank the review team for their time and attention to detail and look forward to them addressing in writing our numerous concerns regarding this project. We request that all signatories of this comment letter be kept informed during each step of the process by email, mail and print.

We furthermore each request a print copy of the draft EIR when published, for study and review. We further request that TANC publish on the web ALL studies including all iterations as a means of encouraging public involvement and transparency of the NEPA/CEQA process.

Respectfully submitted,

Jean L. Saffell

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I support the comments in Jean Saffell's TANC TTP Scoping letter dated 5/23/2009. We each ask to be notified during every step of the TANC TTP EIR/EIS process by first class mail. And we each request a print copy of the draft EIR/EIS as interested persons when it is made available to the public for review and comments.

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